Appendix A. System Check Plots

(Pls see Appendix A)

Appendix B. MEASUREMENT SCANS

(Pls see Appendix B)

AppendixC RELEVANT PAGES FROM PROBE CALIBRATION REPORT(S)

(Pls see Appendix C)

Appendix D. RELEVANT PAGES FROM DAE&DIPOLE VALIDATION KIT REPORT(S)

(Pls see Appendix D)

APPENDIX A: SYSTEM CHECKING SCANS

SystemPerformanceCheck-D750 for Head

Date: 2018.09.05.

Medium: HSL750

Communication System: CW; Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.84 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.73, 9.73, 9.73); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Head/Dipole750 2/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 49.533 V/m; Power Drift = -0.07 dB

Fast SAR: SAR(1 g) = 2.06 mW/g; SAR(10 g) = 1.37 mW/g

Maximum value of SAR (interpolated) = 2.22 W/kg

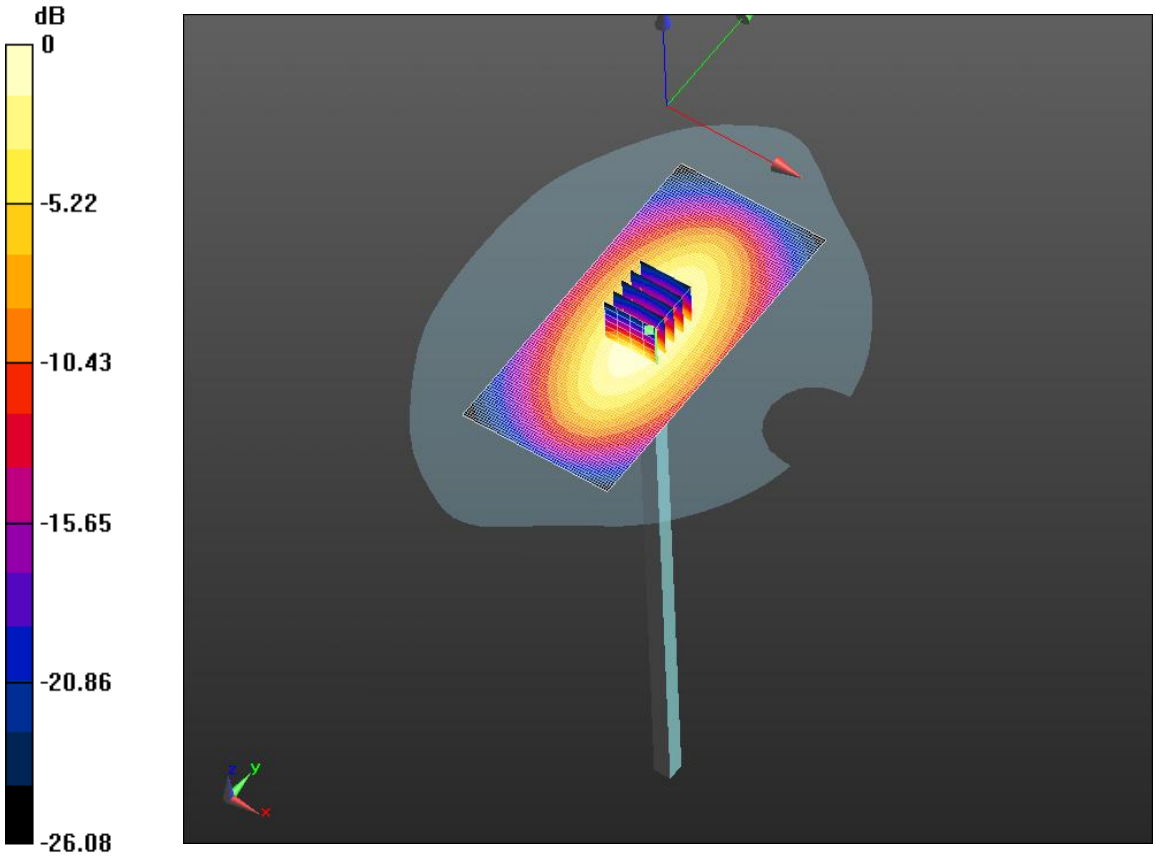
Head/Dipole750 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 49.533 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.017 mW/g

SAR(1 g) = 2.04 mW/g; SAR(10 g) = 1.34 mW/g

Maximum value of SAR (measured) = 2.20 W/kg



0 dB = 2.22 W/kg = 6.94 dB W/kg

SystemPerformanceCheck-D750 for Body

Date: 2018.09.05.

Medium: MSL750

Communication System: CW; Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.93 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.73, 9.73, 9.73); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Body/Dipole835 6/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 48.689 V/m; Power Drift = 0.01 dB

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

Maximum value of SAR (interpolated) = 2.28 W/kg

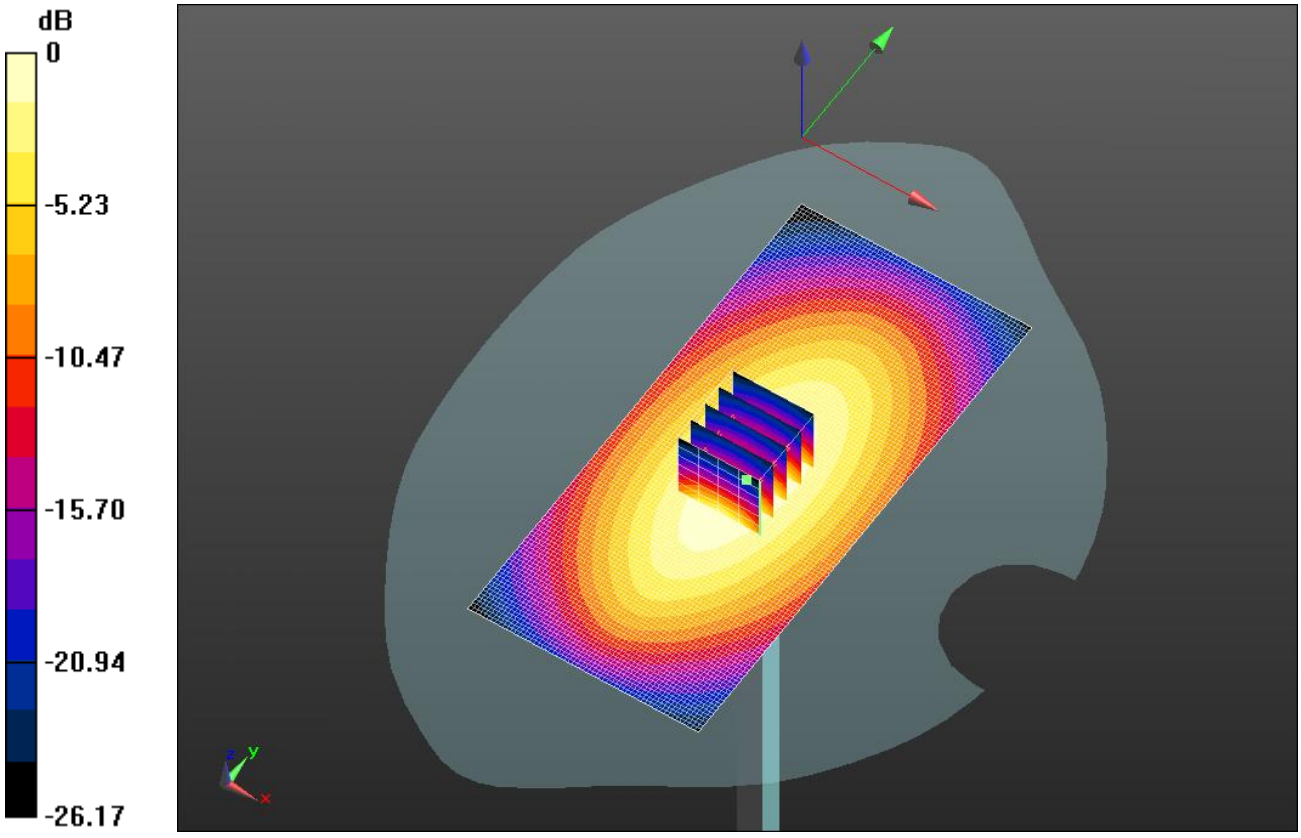
Body/Dipole835 6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.689 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.865 mW/g

SAR(1 g) = 2.14 mW/g; SAR(10 g) = 1.53 mW/g

Maximum value of SAR (measured) = 2.28 W/kg



0 dB = 2.28 W/kg = 7.14 dB W/kg

SystemPerformanceCheck-D835 for Head

Date: 2018.09.06.

Medium: HSL835

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

Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.47, 9.47, 9.47); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

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

Reference Value = 54.453 V/m; Power Drift = -0.11 dB

Fast SAR: SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (interpolated) = 2.61 W/kg

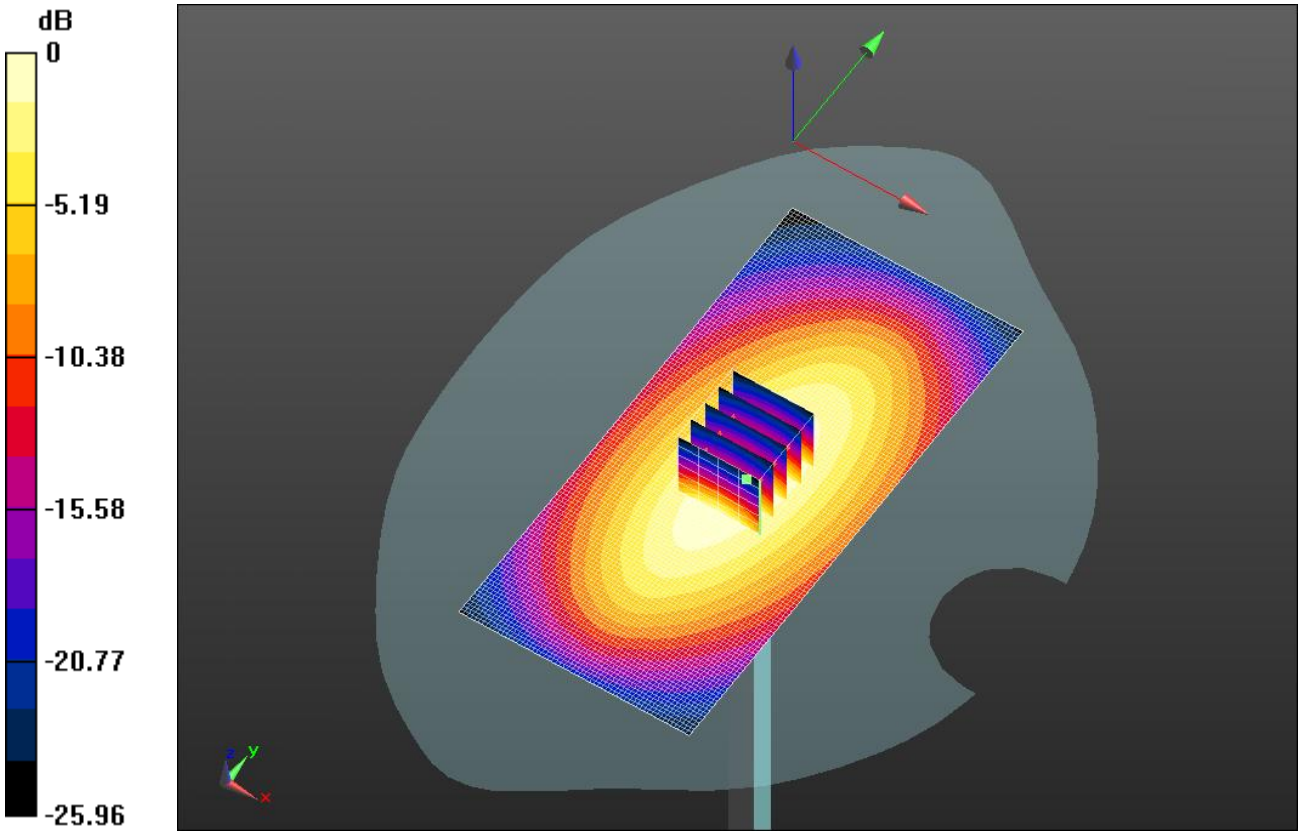
Head/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.453 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.753 mW/g

SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.58 mW/g

Maximum value of SAR (measured) = 2.64 W/kg



0 dB = 2.61 W/kg = 8.33 dB W/kg

SystemPerformanceCheck-D835 for Body

Date: 2018.09.06.

Medium: MSL835

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

Medium parameters used: f = 835 MHz; σ = 0.96 mho/m; ε_r = 55.87; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.57, 9.57, 9.57); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

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

Reference Value = 48.690 V/m; Power Drift = -0.11 dB

Fast SAR: SAR(1 g) = 2.19 mW/g; SAR(10 g) = 1.5 mW/g

Maximum value of SAR (interpolated) = 2.24 W/kg

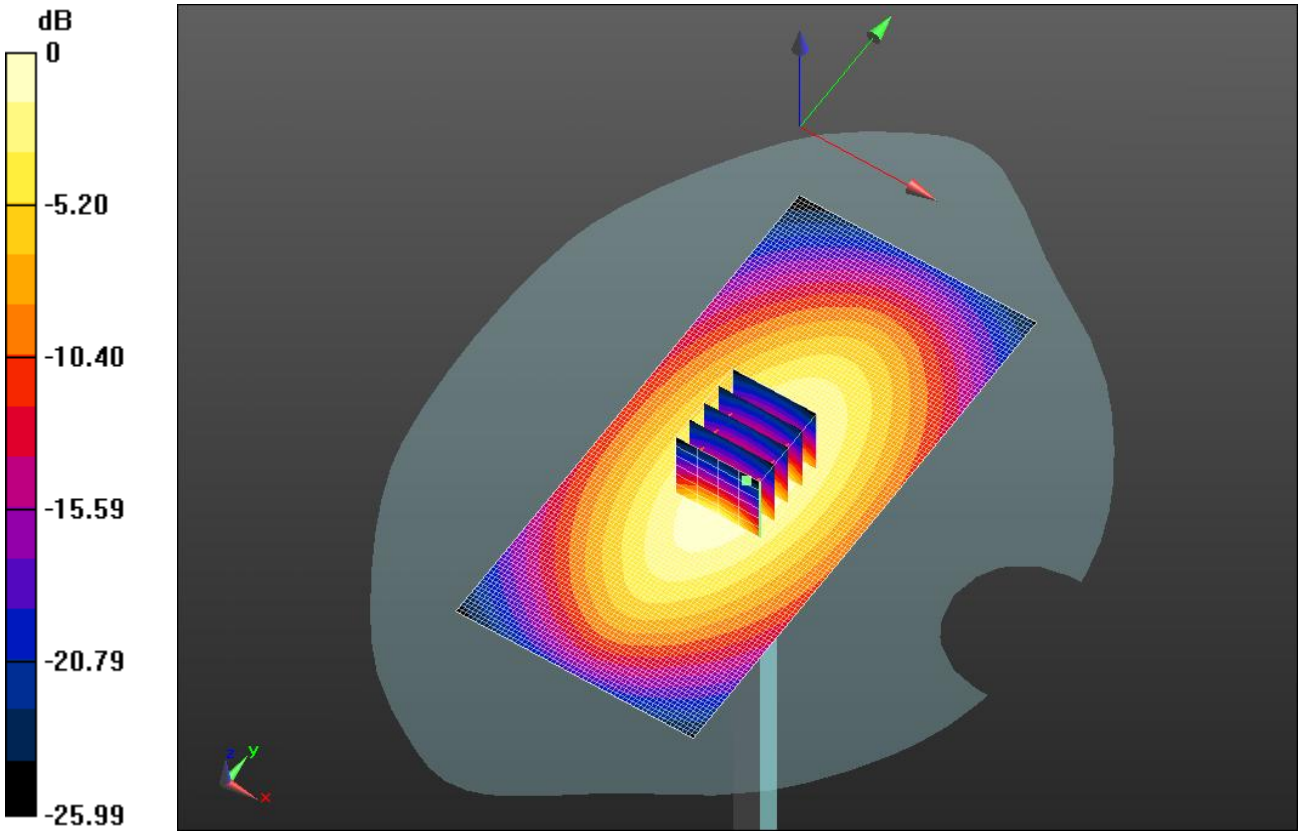
Body/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.690 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.789 mW/g

SAR(1 g) = 2.18 mW/g; SAR(10 g) = 1.59 mW/g

Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.24 W/kg = 7.01 dB W/kg

SystemPerformanceCheck-D1900 for Head

Date: 2018.09.07.

Medium: HSL1900

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

Medium parameters used: f = 1900 MHz; σ = 1.45 mho/m; ε_r = 39.75; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(7.92, 7.92, 7.92); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Head/Dipole1900/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 88.035 V/m; Power Drift = -0.07 dB

Fast SAR: SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.45 mW/g

Maximum value of SAR (interpolated) = 11.6 W/kg

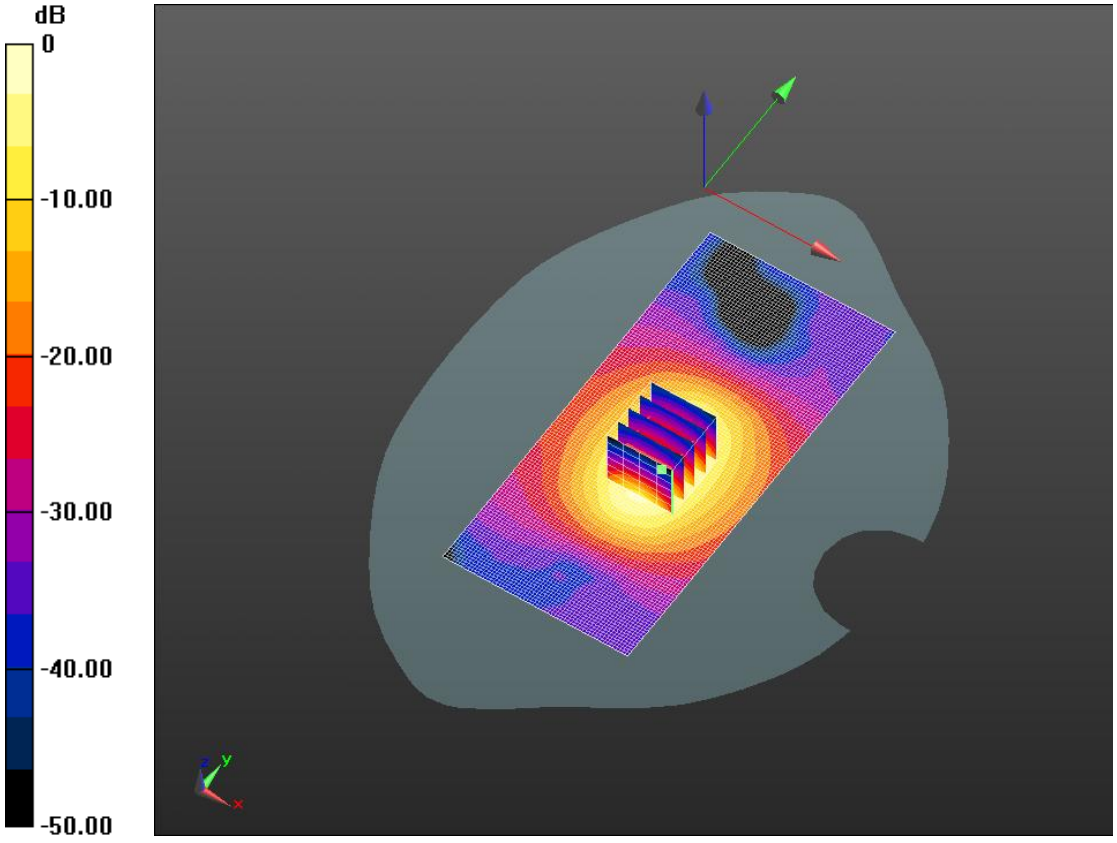
Head/Dipole1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.035 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 18.284 mW/g

SAR(1 g) = 9.89 mW/g; SAR(10 g) = 5.17 mW/g

Maximum value of SAR (measured) = 11.0 W/kg



0 dB = 11.6 W/kg = 21.29 dB W/kg

SystemPerformanceCheck-D1900 for Body

Date: 2018.09.07.

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; σ = 1.54 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(7.64, 7.64, 7.64); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Body/Dipole1900/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 88.213 V/m; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 10.23 mW/g; SAR(10 g) = 5.49 mW/g

Maximum value of SAR (interpolated) = 11.6 W/kg

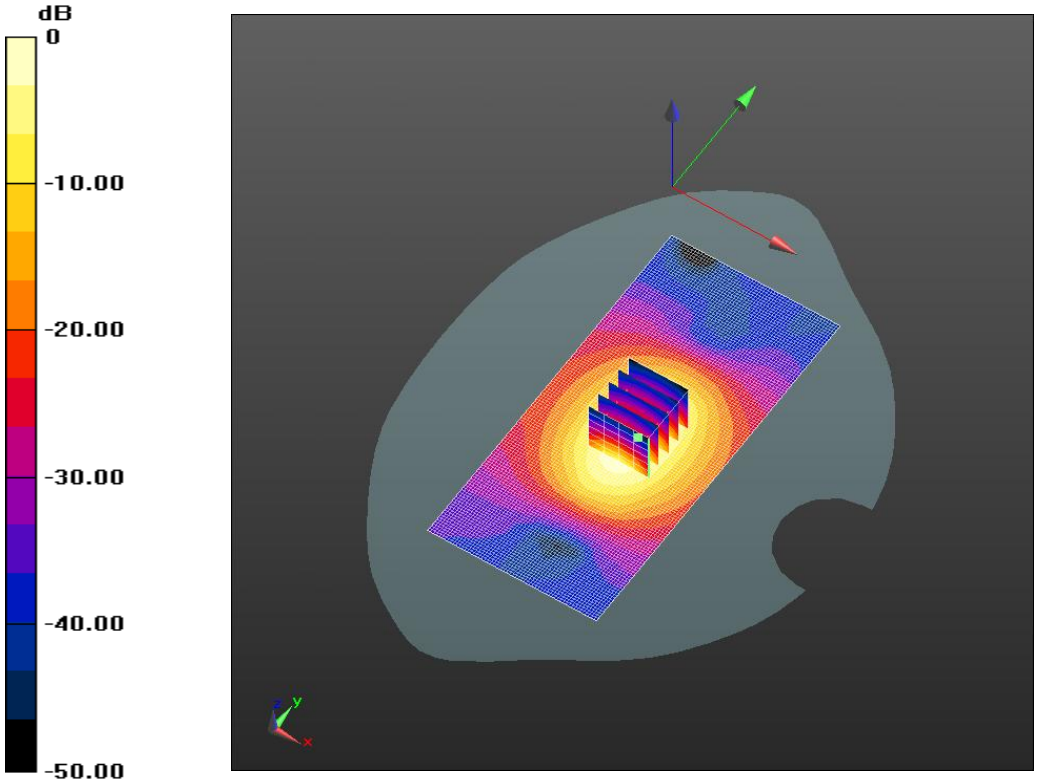
Body/Dipole1900 /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.213 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.814 mW/g

SAR(1 g) = 10.21 mW/g; SAR(10 g) = 5.32 mW/g

Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.7 W/kg = 21.37 dB W/kg

SystemPerformanceCheck-D750 for Body

Date: 2018.11.01.

Medium: MSL750

Communication System: CW; Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.93 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.73, 9.73, 9.73); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Body/Dipole835 6/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 47.611 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 2.10 mW/g; SAR(10 g) = 1.41 mW/g

Maximum value of SAR (interpolated) = 2.24 W/kg

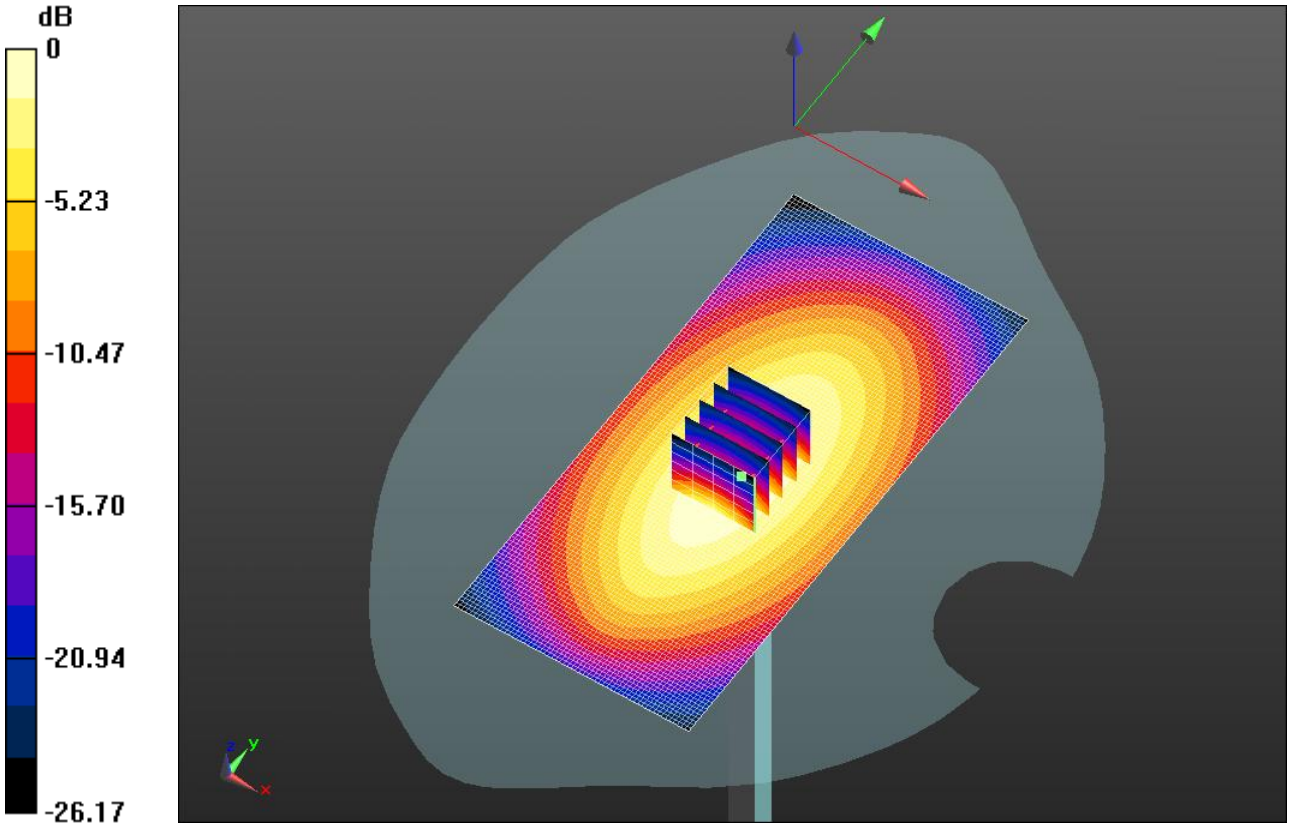
Body/Dipole835 6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.611 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.865 mW/g

SAR(1 g) = 2.16 mW/g; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (measured) = 2.24 W/kg



0 dB = 2.24 W/kg = 7.11 dB W/kg

SystemPerformanceCheck-D835 for Body

Date: 2018.11.01.

Medium: MSL835

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

Medium parameters used: f = 835 MHz; σ = 0.92 mho/m; ε_r = 55.81; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(9.57, 9.57, 9.57); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

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

Reference Value = 48.330 V/m; Power Drift = -0.11 dB

Fast SAR: SAR(1 g) = 2.11 mW/g; SAR(10 g) = 1.44 mW/g

Maximum value of SAR (interpolated) = 2.21 W/kg

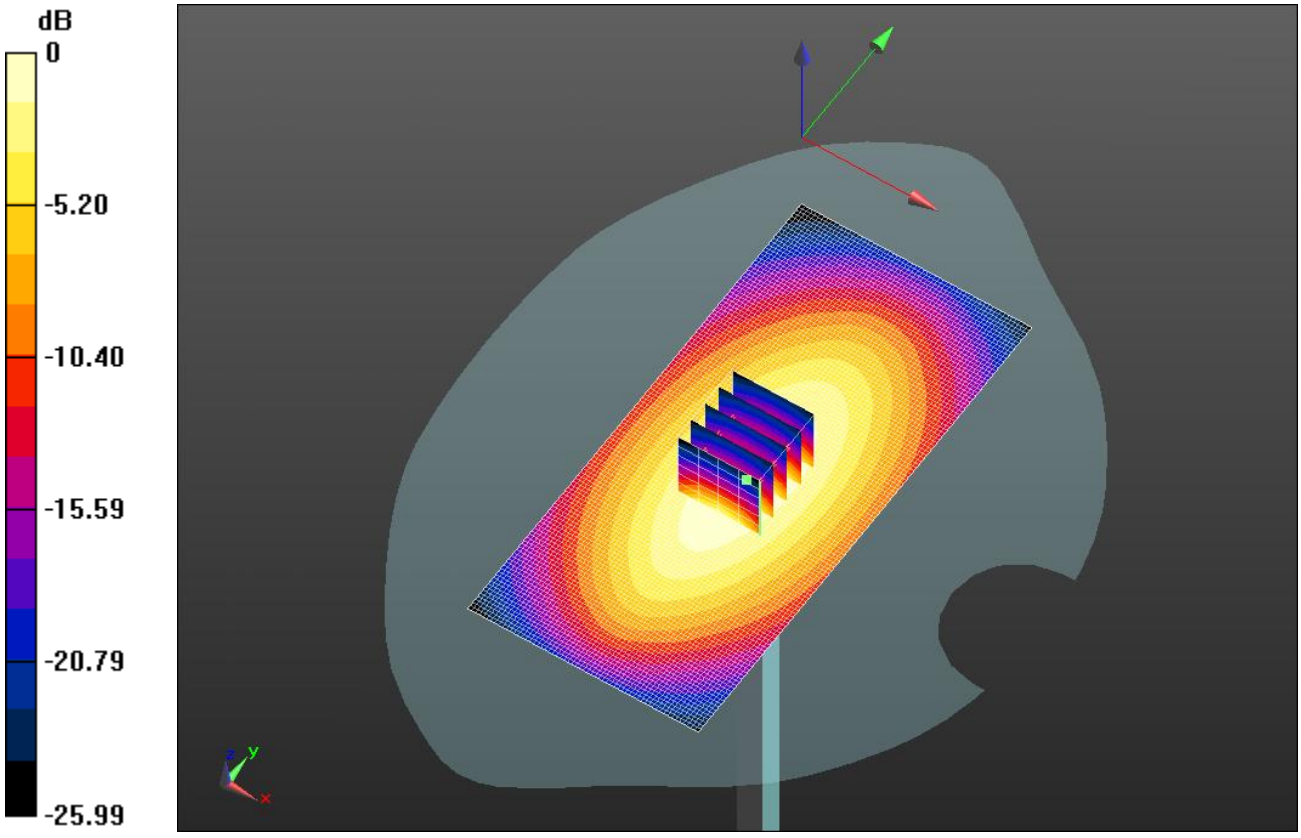
Body/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.330 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 2.789 mW/g

SAR(1 g) = 2.21 mW/g; SAR(10 g) = 1.49 mW/g

Maximum value of SAR (measured) = 2.21 W/kg



0 dB = 2.21 W/kg = 6.98 dB W/kg

SystemPerformanceCheck-D1900 for Body

Date: 2018.11.01.

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; σ = 1.51 mho/m; ε_r = 54.22; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:Probe: EX3DV4 - SN3881; ConvF(7.64, 7.64, 7.64); Calibrated: 2018.07.14.; Electronics: DAE4 Sn876; Calibrated: 2018.03.22.

Body/Dipole1900/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 88.789 V/m; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 10.20 mW/g; SAR(10 g) = 5.44 mW/g

Maximum value of SAR (interpolated) = 11.6 W/kg

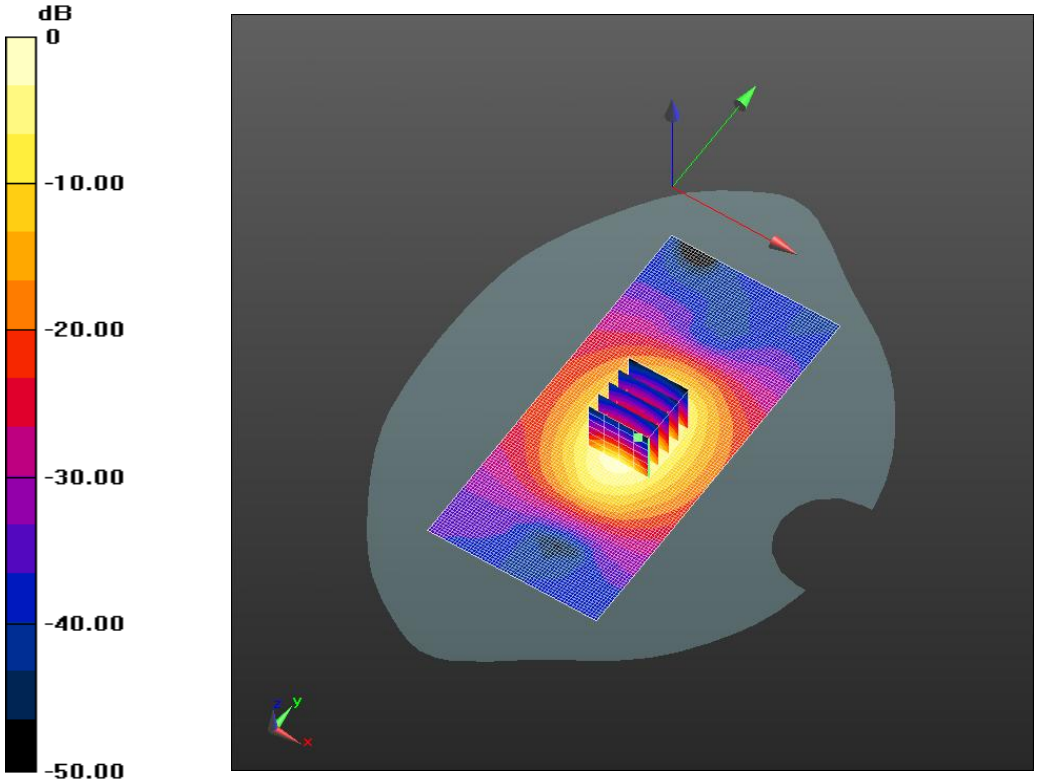
Body/Dipole1900 /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.789 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.811 mW/g

SAR(1 g) = 10.25 mW/g; SAR(10 g) = 5.42 mW/g

Maximum value of SAR (measured) = 11.7 W/kg



0 dB = 11.7 W/kg = 21.37 dB W/kg