Appendix A

Detailed System Check Results

1. System Performance Check for Head and Body
System Performance Check 750 MHz Head
System Performance Check 750 MHz Body
System Performance Check 835 MHz Head
System Performance Check 835 MHz Body
System Performance Check 1750 MHz Head
System Performance Check 1750 MHz Body
System Performance Check 1900 MHz Head
System Performance Check 1900 MHz Body
System Performance Check 2450 MHz Head
System Performance Check 2450 MHz Body
System Performance Check 2600 MHz Head
System Performance Check 2600 MHz Body
System Performance Check 5600 MHz Head
System Performance Check 5600 MHz Body
System Performance Check 5750 MHz Body

Date: 2018-12-17

Test Laboratory: SGS-SAR Lab

System Performance Check 750 MHz Head

DUT: D750V3; Type: D750V3; Serial: 1160

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

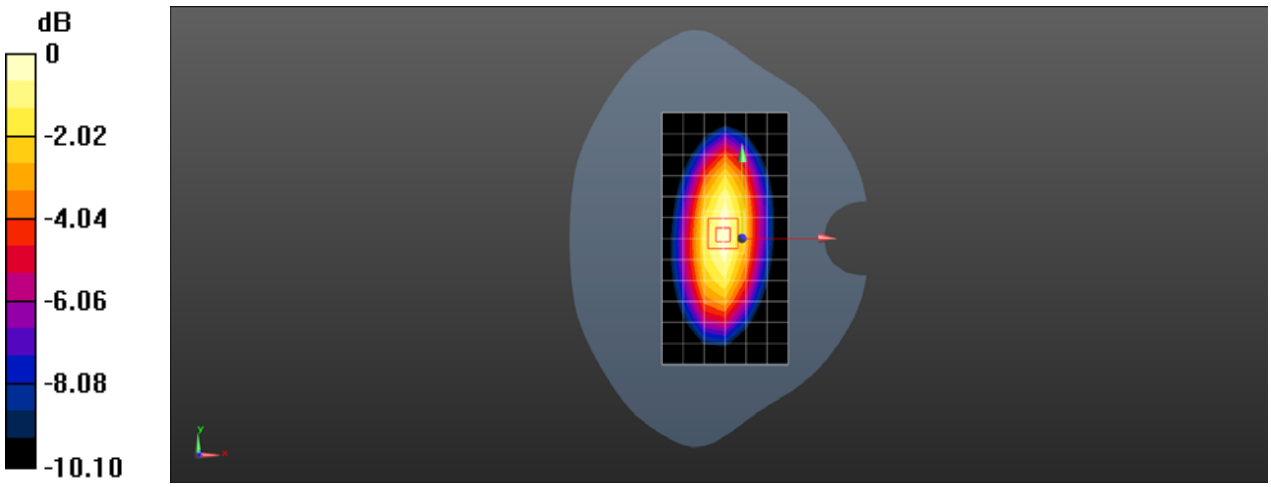
Medium: HSL750;Medium parameters used: f = 750 MHz; σ = 0.88 S/m; ε_r = 43.808; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.93, 8.93, 8.93); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.09 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 48.68 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 2.95 W/kg
SAR(1 g) = 1.96 W/kg; SAR(10 g) = 1.29 W/kg
Maximum value of SAR (measured) = 2.10 W/kg



0 dB = 2.10 W/kg = 3.22 dBW/kg

Date: 2018-12-19

Test Laboratory: SGS-SAR Lab

System Performance Check 750 MHz Body

DUT: D750V3; Type: D750V3; Serial: 1160

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

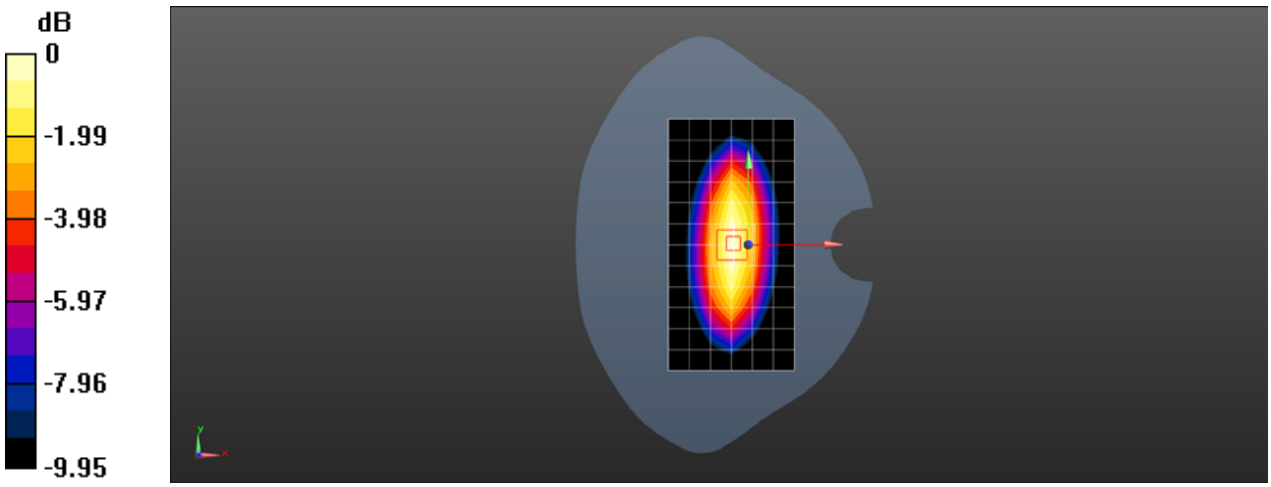
Medium: MSL750;Medium parameters used: f = 750 MHz; σ = 0.953 S/m; ε_r = 54.877; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(9.27, 9.27, 9.27); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.64 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.96 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 3.12 W/kg
SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (measured) = 2.65 W/kg



0 dB = 2.65 W/kg = 4.23 dBW/kg

Date: 2018-12-17

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Head

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1

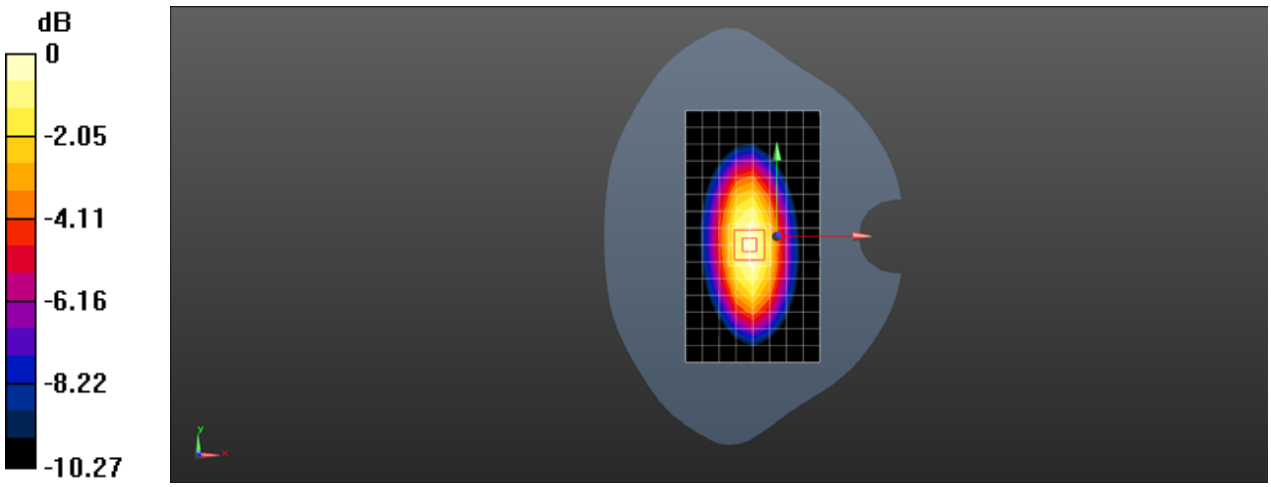
Medium: HSL835;Medium parameters used: f = 835 MHz; σ = 0.909 S/m; ε_r = 40.668; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.66, 8.66, 8.66); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.58 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.88 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.58 W/kg
SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.58 W/kg
Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.59 W/kg = 4.13 dBW/kg

Date: 2018-12-20

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Body

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1

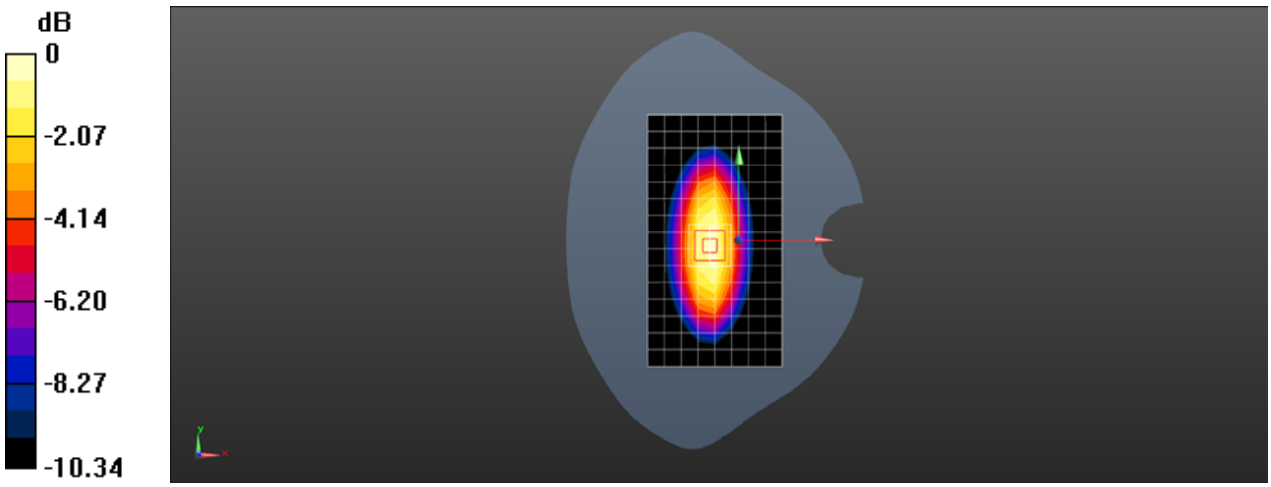
Medium: MSL835;Medium parameters used: f = 835 MHz; σ = 1.009 S/m; ε_r = 54.531; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.84, 8.84, 8.84); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.96 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.91 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 3.66 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.61 W/kg
Maximum value of SAR (measured) = 3.11 W/kg



0 dB = 3.11 W/kg = 4.93 dBW/kg

Date: 2018-12-15

Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz Head

DUT: D1750V2; Type: D1750V2; Serial: 1149

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1

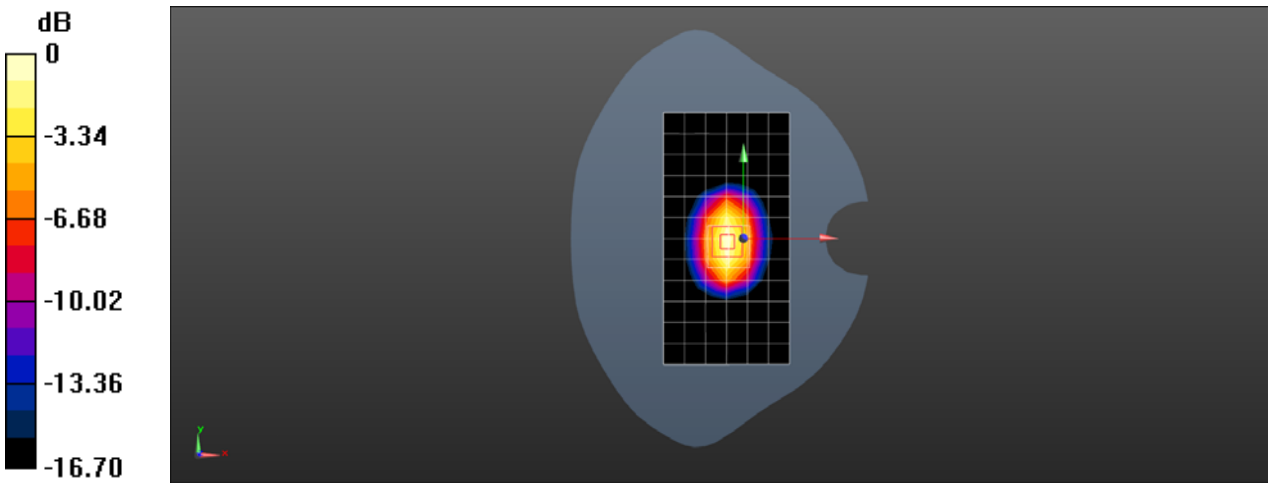
Medium: HSL1750;Medium parameters used: f = 1750 MHz; σ = 1.33 S/m; ε_r = 40.794; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.67, 7.67, 7.67); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 9.82 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 77.61 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 16.0 W/kg
SAR(1 g) = 8.82 W/kg; SAR(10 g) = 4.73 W/kg
Maximum value of SAR (measured) = 9.87 W/kg



0 dB = 9.87 W/kg = 9.94 dBW/kg

Date: 2018-12-19

Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz Body

DUT: D1750V2; Type: D1750V2; Serial: 1149

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1

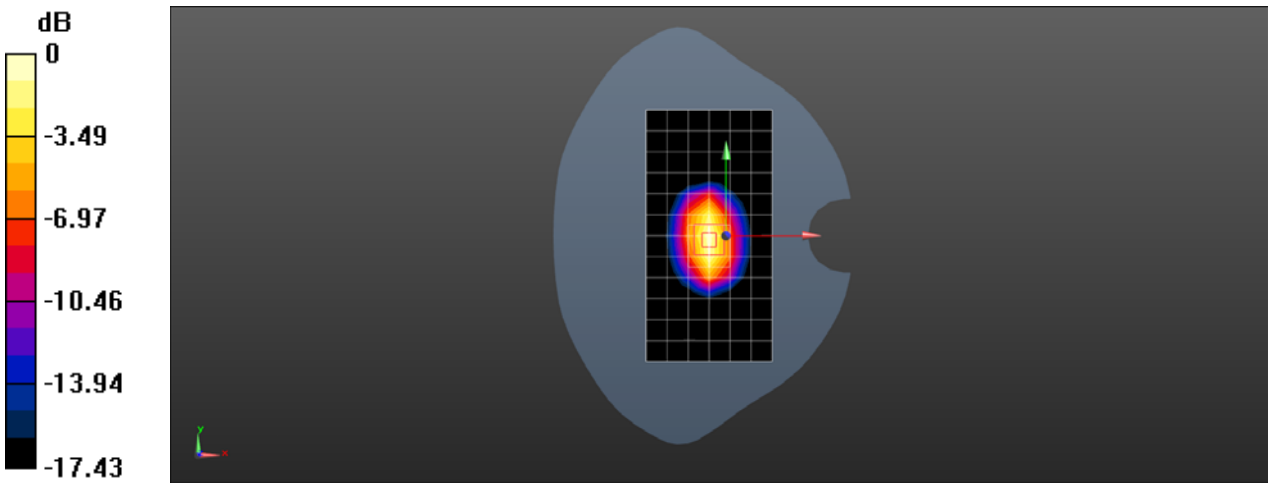
Medium: MSL1750;Medium parameters used: f = 1750 MHz; σ = 1.434 S/m; ε_r = 53.334; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 4; Type: SAM; Serial: 1640
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 12.6 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 79.30 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 16.4 W/kg
SAR(1 g) = 9.12 W/kg; SAR(10 g) = 4.85 W/kg
Maximum value of SAR (measured) = 13.0 W/kg



0 dB = 13.0 W/kg = 11.14 dBW/kg

Date: 2018-12-18

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Head

DUT: D1900V2; Type: D1900V2; Serial: 5d028

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1

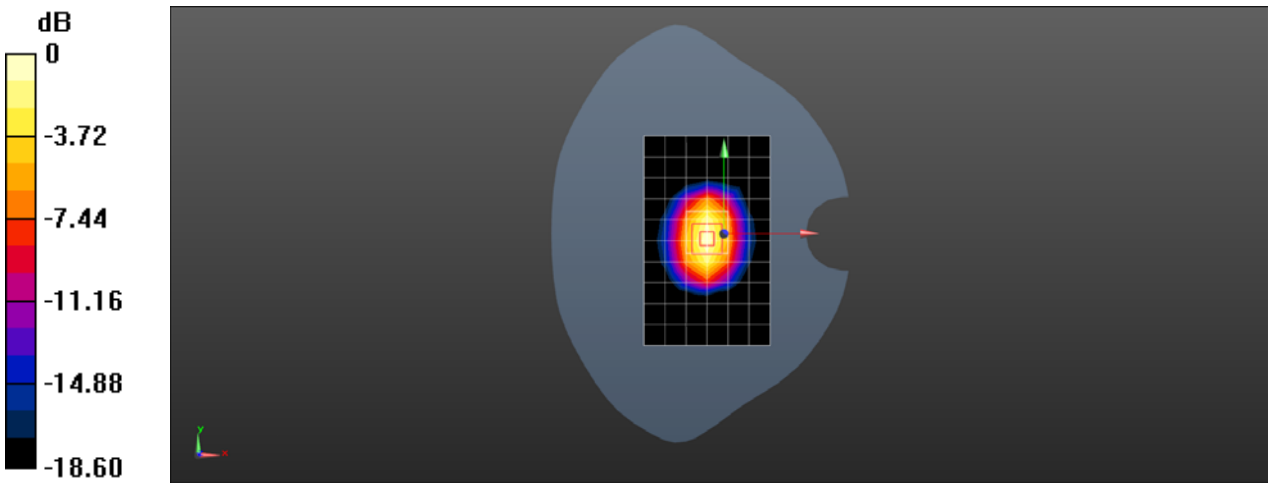
Medium: HSL1900;Medium parameters used: f = 1900 MHz; σ = 1.394 S/m; ε_r = 40.64; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.26, 8.26, 8.26); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 4; Type: SAM; Serial: 1640
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.5 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 84.20 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 19.6 W/kg
SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.35 W/kg
Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.6 W/kg = 10.64 dBW/kg

Date: 2018-12-18

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Body

DUT: D1900V2; Type: D1900V2; Serial: 5d028

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1

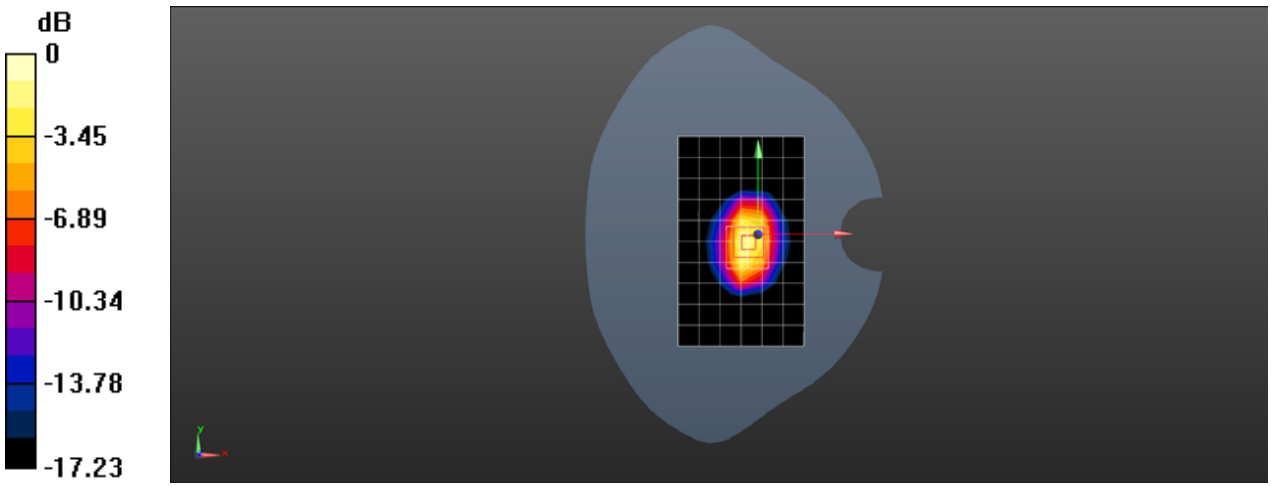
Medium: MSL1900;Medium parameters used: f = 1900 MHz; σ = 1.523 S/m; ε_r = 53.897; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.28, 7.28, 7.28); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.6 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 60.09 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 18.5 W/kg
SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.48 W/kg
Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 dBW/kg

Date: 2018-12-27

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Body

DUT: D1900V2; Type: D1900V2; Serial: 5d028

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1

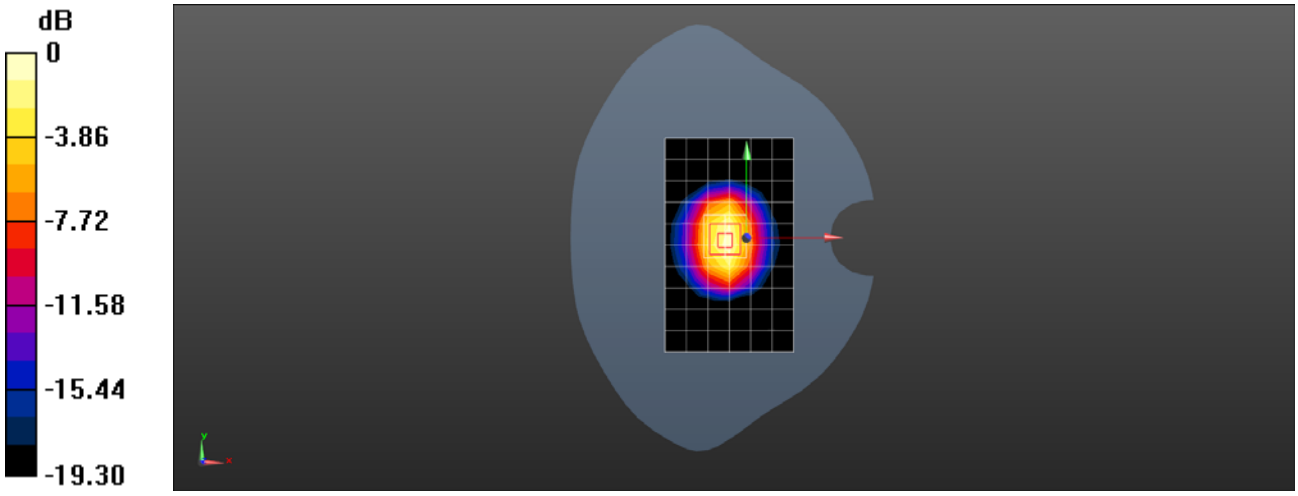
Medium: MSL1900;Medium parameters used: f = 1900 MHz; σ = 1.483 S/m; ε_r = 52.531; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.28, 7.28, 7.28); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.6 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.97 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 21.6 W/kg
SAR(1 g) = 11.1 W/kg; SAR(10 g) = 5.61 W/kg
Maximum value of SAR (measured) = 12.3 W/kg



0 dB = 12.3 W/kg = 10.90 dBW/kg

Date: 2018-12-17

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Head

DUT: D2450V2; Type: D2450V2; Serial: 733

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1

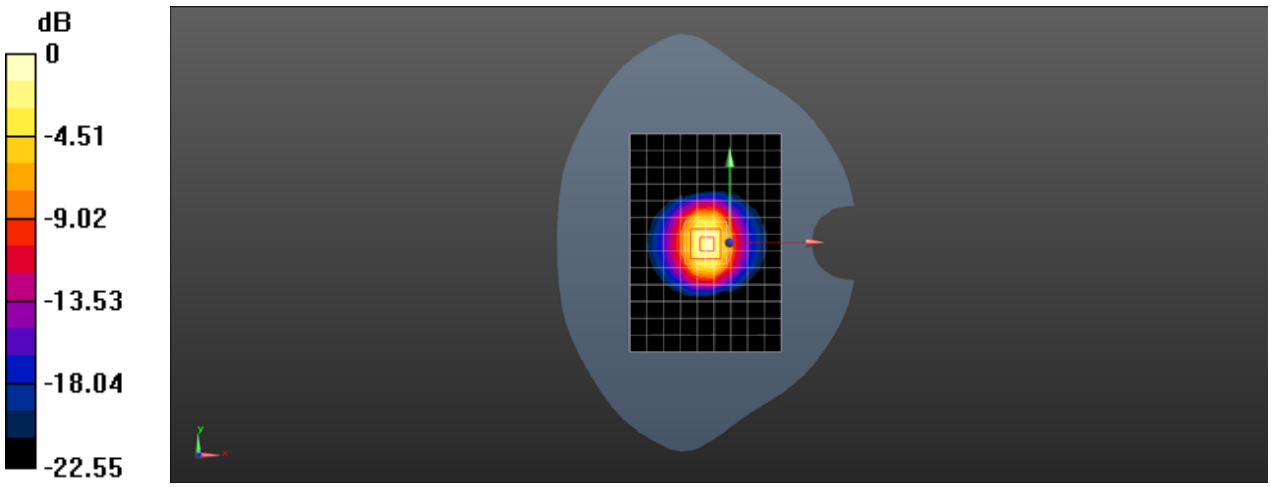
Medium: HSL2450;Medium parameters used: f = 2450 MHz; σ = 1.805 S/m; ε_r = 40.224; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.62, 7.62, 7.62); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (10x14x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 11.8 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.30 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 28.9 W/kg
SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.1 W/kg
Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

Date: 2018-12-17

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Body

DUT: D2450V2; Type: D2450V2; Serial: 733

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1

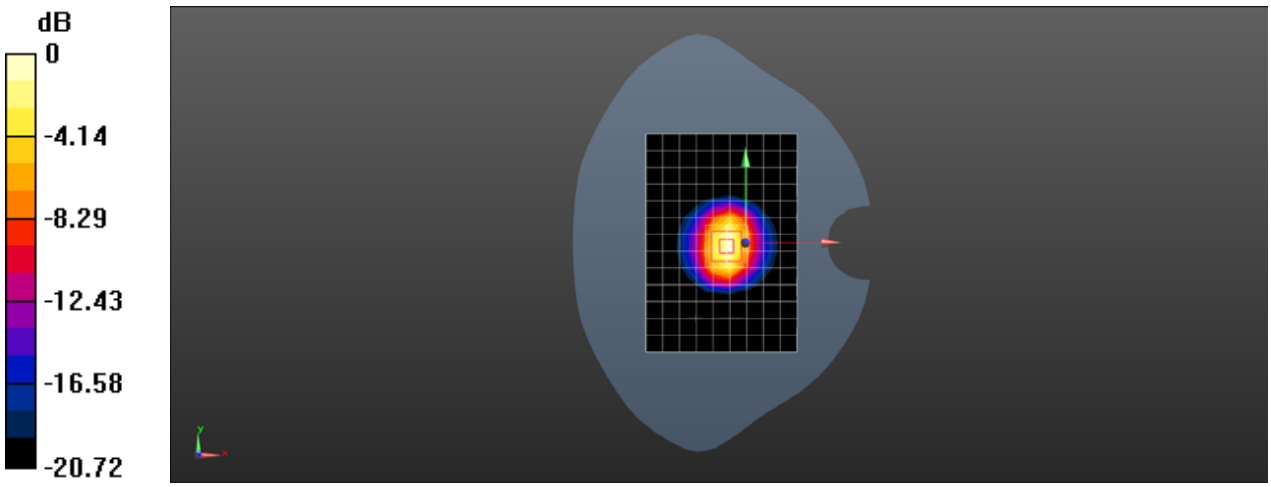
Medium: MSL2450;Medium parameters used: f = 2450 MHz; σ = 1.986 S/m; ε_r = 50.483; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.15, 7.15, 7.15); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (10x14x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 13.0 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 78.21 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 24.1 W/kg
SAR(1 g) = 12.2 W/kg; SAR(10 g) = 5.73 W/kg
Maximum value of SAR (measured) = 14.1 W/kg



0 dB = 14.1 W/kg = 11.49 dBW/kg

Date: 2018-12-20

Test Laboratory: SGS-SAR Lab

System Performance Check 2600MHz Head

DUT: D2600V2; Type: D2600V2; Serial: 1125

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1

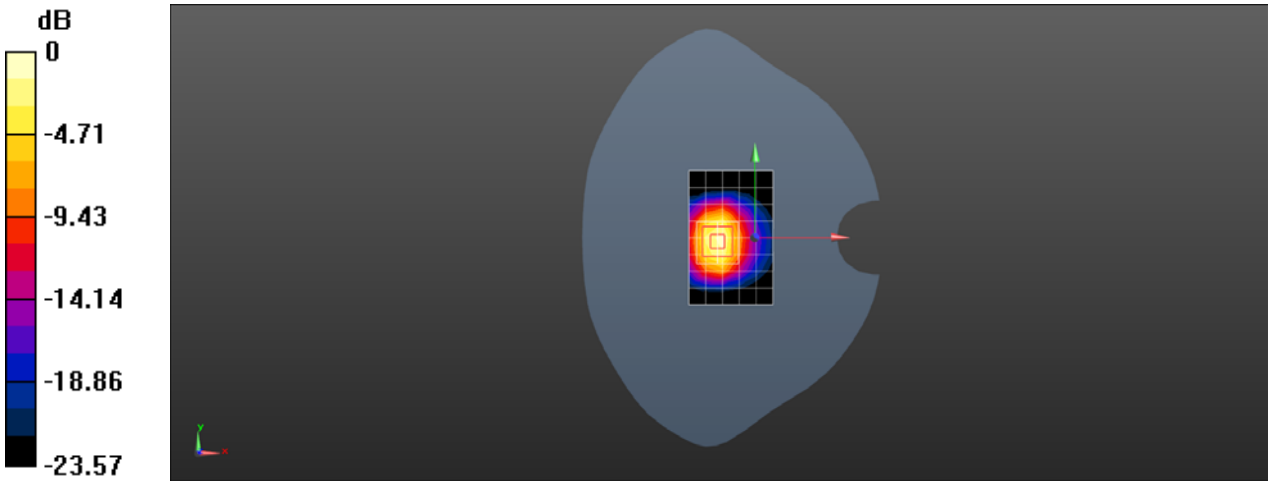
Medium: HSL2600;Medium parameters used: f = 2600 MHz; σ = 1.967 S/m; ε_r = 39.726; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 18.8 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 63.15 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 30.1 W/kg
SAR(1 g) = 14 W/kg; SAR(10 g) = 6.23 W/kg
Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

Date: 2018-12-18

Test Laboratory: SGS-SAR Lab

System Performance Check 2600MHz Body

DUT: D2600V2; Type: D2600V2; Serial: 1125

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1

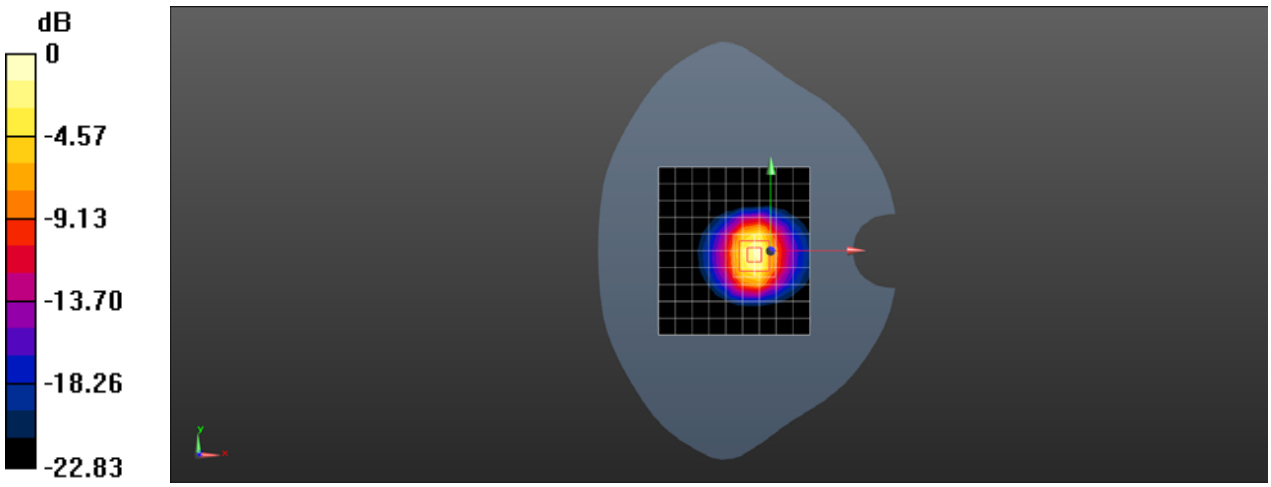
Medium: MSL2600;Medium parameters used: f = 2600 MHz; σ = 2.155 S/m; ε_r = 50.087; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.96, 6.96, 6.96); Calibrated: 2018-02-08;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 31.0
- Electronics: DAE4 Sn896; Calibrated: 2018-11-08
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (10x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 16.6 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 74.75 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 26.2 W/kg
SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.76 W/kg
Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

Date: 2018-12-18

Test Laboratory: SGS-SAR Lab

System Performance Check 5.6GHz Head

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1

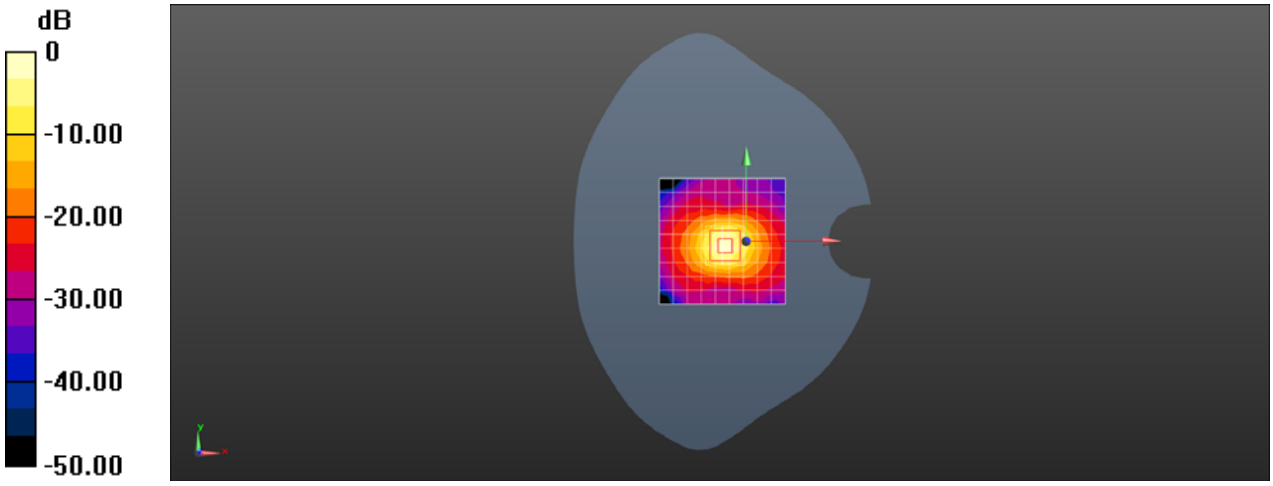
Medium: HSL5G;Medium parameters used: f = 5600 MHz; σ = 5.107 S/m; ε_r = 35.059; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.89, 4.89, 4.89); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 23.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.4 W/kg

Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.24 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 34.7 W/kg
SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.16 W/kg
Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg = 12.83 dBW/kg

Date: 2018-12-19

Test Laboratory: SGS-SAR Lab

System Performance Check 5.6GHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1

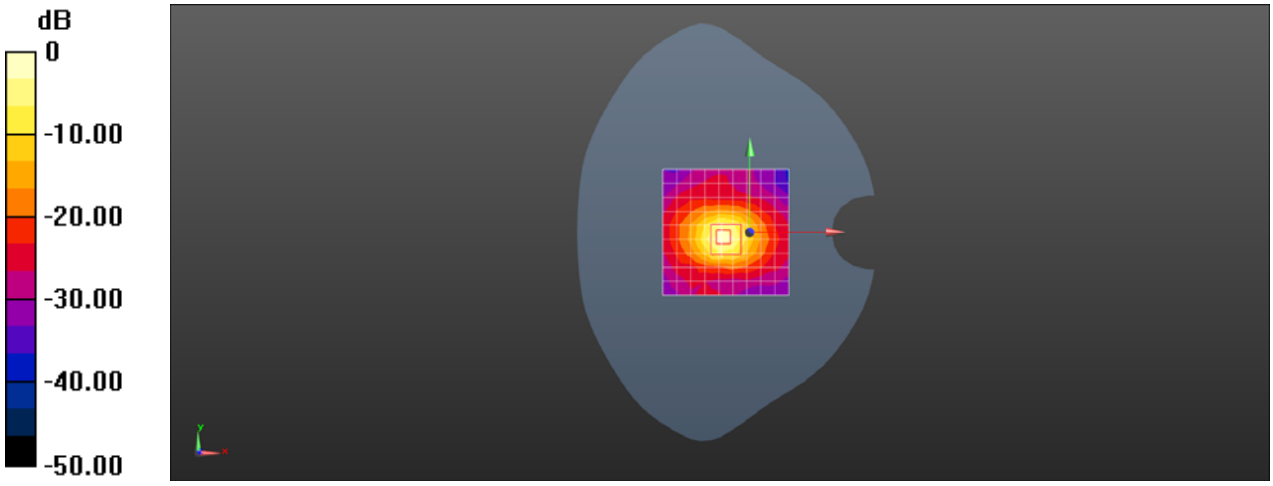
Medium: MSL5GHz;Medium parameters used: f = 5600 MHz; σ = 5.803 S/m; ε_r = 47.435; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.45, 4.45, 4.45); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 23.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 20.1 W/kg

Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 62.96 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 40.1 W/kg
SAR(1 g) = 8.44 W/kg; SAR(10 g) = 2.29 W/kg
Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg

Date: 2018-12-19

Test Laboratory: SGS-SAR Lab

System Performance Check 5.75GHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1

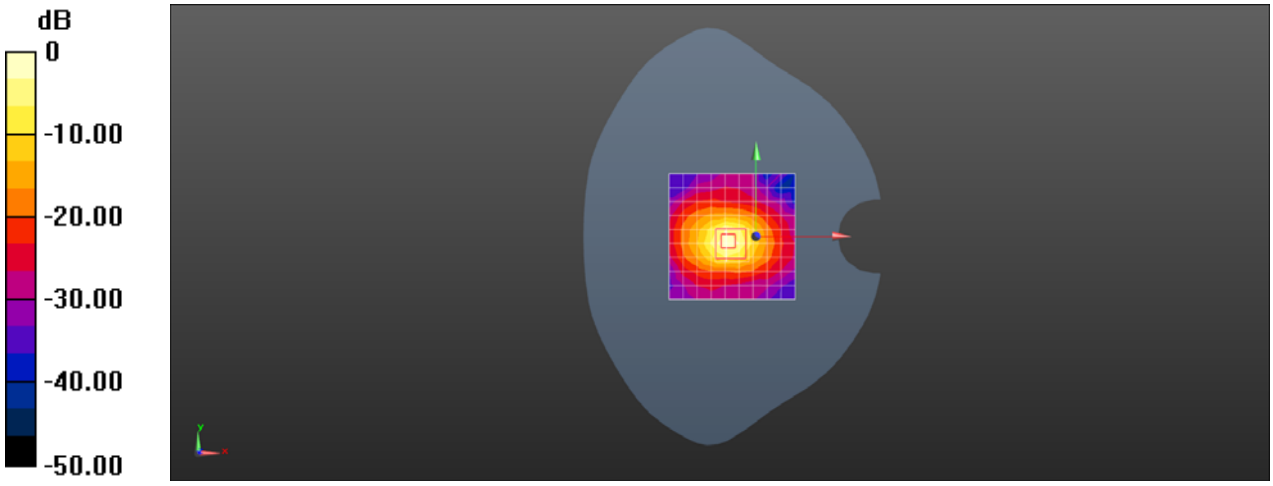
Medium: MSL5GHz;Medium parameters used: f = 5750 MHz; σ = 5.969 S/m; ε_r = 47.096; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.59, 4.59, 4.59); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = -2.0, 23.0
- Electronics: DAE4 Sn1428; Calibrated: 2018-01-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 17.2 W/kg

Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 57.07 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 32.7 W/kg
SAR(1 g) = 7.03 W/kg; SAR(10 g) = 1.95 W/kg
Maximum value of SAR (measured) = 18.0 W/kg



0 dB = 18.0 W/kg = 12.55 dBW/kg

System Validation

Per FCC KDB 865664 D02, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013.Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.
a tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Table of SAR System validation summary:

Frequency (MHz)	Date	Probe SN	Probe Type	Probe CAL POINT		PERM (εr)	COND (σ)	CW Validation			MOD.VALIDATION		
								Sensitivity	Probe Linarity	Probe Isotropy	Modulation	DUTY. FACTORE	PAR
750	2018/2/9	3962	EX3DV4	750	Head	43.090	0.878	PASS	PASS	PASS	N/A	N/A	N/A
835	2018/2/9	3962	EX3DV4	835	Head	42.600	0.929	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2018/2/9	3962	EX3DV4	1750	Head	40.790	1.330	PASS	PASS	PASS	N/A	N/A	N/A
1900	2018/2/9	3962	EX3DV4	1900	Head	41.790	1.413	PASS	PASS	PASS	GMSK	PASS	N/A
2300	2018/2/9	3962	EX3DV4	2300	Head	40.480	1.645	PASS	PASS	PASS	N/A	N/A	N/A
2450	2018/2/9	3962	EX3DV4	2450	Head	39.900	1.826	PASS	PASS	PASS	OFDM	PASS	N/A
2600	2018/2/9	3962	EX3DV4	2600	Head	39.390	2.000	PASS	PASS	PASS	TDD	PASS	N/A
5250	2018/2/9	3962	EX3DV4	5250	Head	36.010	4.767	PASS	PASS	PASS	OFDM	PASS	N/A
5600	2018/2/9	3962	EX3DV4	5600	Head	35.060	5.157	PASS	PASS	PASS	OFDM	PASS	N/A
5750	2018/2/9	3962	EX3DV4	5750	Head	34.700	5.329	PASS	PASS	PASS	OFDM	PASS	N/A
750	2018/2/9	3962	EX3DV4	750	Body	55.820	0.943	PASS	PASS	PASS	N/A	N/A	N/A
835	2018/2/9	3962	EX3DV4	835	Body	55.390	0.986	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2018/2/9	3962	EX3DV4	1750	Body	53.500	1.506	PASS	PASS	PASS	N/A	N/A	N/A
1900	2018/2/9	3962	EX3DV4	1900	Body	53.030	1.476	PASS	PASS	PASS	GMSK	PASS	N/A
2300	2018/2/9	3962	EX3DV4	2300	Body	51.210	1.814	PASS	PASS	PASS	N/A	N/A	N/A
2450	2018/2/9	3962	EX3DV4	2450	Body	52.690	1.970	PASS	PASS	PASS	OFDM	PASS	N/A
2600	2018/2/9	3962	EX3DV4	2600	Body	50.240	2.187	PASS	PASS	PASS	TDD	PASS	N/A
5250	2018/2/9	3962	EX3DV4	5250	Body	48.370	5.382	PASS	PASS	PASS	OFDM	PASS	N/A
5600	2018/2/9	3962	EX3DV4	5600	Body	47.440	5.803	PASS	PASS	PASS	OFDM	PASS	N/A
5750	2018/2/9	3962	EX3DV4	5750	Body	47.100	5.969	PASS	PASS	PASS	OFDM	PASS	N/A
750	2018/2/19	3789	EX3DV4	750	Head	42.786	0.879	PASS	PASS	PASS	N/A	N/A	N/A
835	2018/2/19	3789	EX3DV4	835	Head	40.972	0.890	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2018/2/19	3789	EX3DV4	1750	Head	40.413	1.318	PASS	PASS	PASS	N/A	N/A	N/A
1900	2018/2/19	3789	EX3DV4	1900	Head	40.564	1.414	PASS	PASS	PASS	GMSK	PASS	N/A
2300	2018/2/19	3789	EX3DV4	2300	Head	39.657	1.659	PASS	PASS	PASS	N/A	N/A	N/A
2450	2018/2/19	3789	EX3DV4	2450	Head	39.903	1.825	PASS	PASS	PASS	OFDM	PASS	N/A

2600	2018/2/19	3789	EX3DV4	2600	Head	38.589	1.977	PASS	PASS	PASS	TDD	PASS	N/A
750	2018/2/19	3789	EX3DV4	750	Body	56.463	0.972	PASS	PASS	PASS	N/A	N/A	N/A
835	2018/2/19	3789	EX3DV4	835	Body	54.871	1.011	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2018/2/19	3789	EX3DV4	1750	Body	51.003	1.481	PASS	PASS	PASS	N/A	N/A	N/A
1900	2018/2/19	3789	EX3DV4	1900	Body	53.025	1.524	PASS	PASS	PASS	GMSK	PASS	N/A
2300	2018/2/19	3789	EX3DV4	2300	Body	51.209	1.814	PASS	PASS	PASS	N/A	N/A	N/A
2450	2018/2/19	3789	EX3DV4	2450	Body	52.345	2.001	PASS	PASS	PASS	OFDM	PASS	N/A
2600	2018/2/19	3789	EX3DV4	2600	Body	52.237	2.203	PASS	PASS	PASS	TDD	PASS	N/A

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.