

# Appendix A

## Detailed System Validation Results

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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;  $\sigma = 0.895$  S/m;  $\epsilon_r = 41.649$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.89, 8.89, 8.89); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.23 W/kg

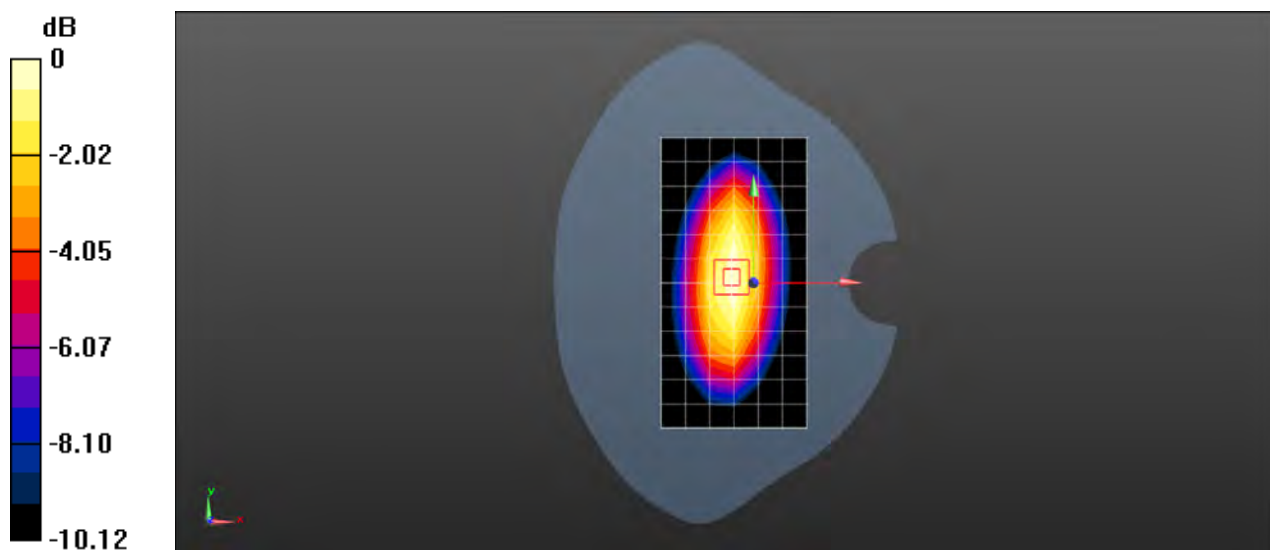
**Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 49.88 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.14 W/kg

**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.38 W/kg**

Maximum value of SAR (measured) = 2.25 W/kg



0 dB = 2.25 W/kg = 3.52 dBW/kg

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;  $\sigma = 0.879$  S/m;  $\epsilon_r = 42.786$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.89, 8.89, 8.89); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.19 W/kg

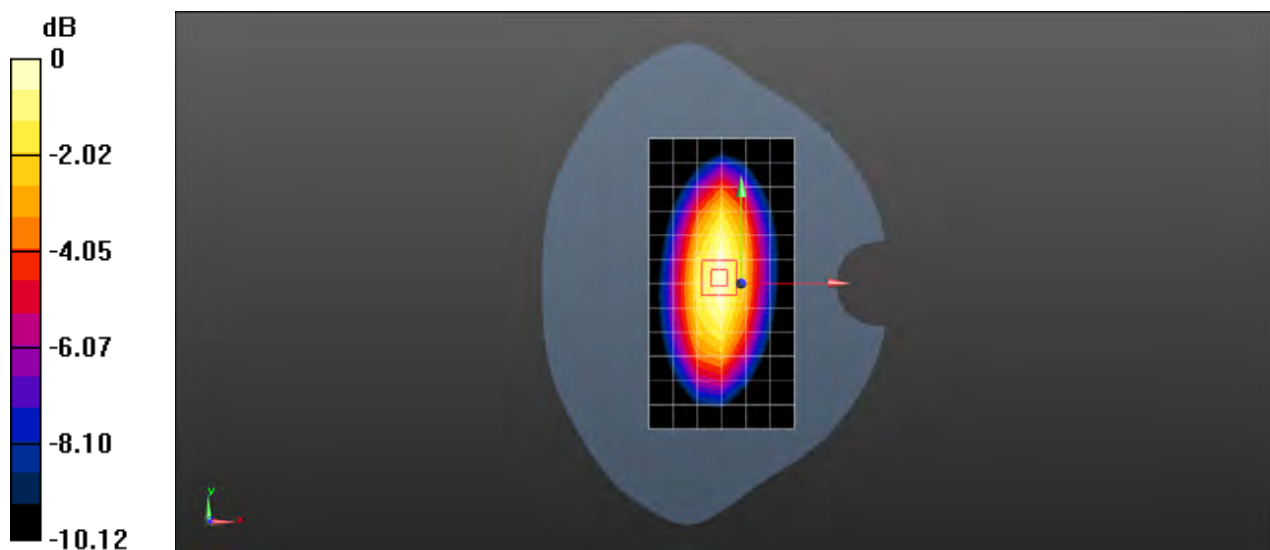
**Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 49.88 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.08 W/kg

**SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.35 W/kg**

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



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;  $\sigma = 0.956$  S/m;  $\epsilon_r = 56.279$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.08, 10.08, 10.08); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.65 W/kg

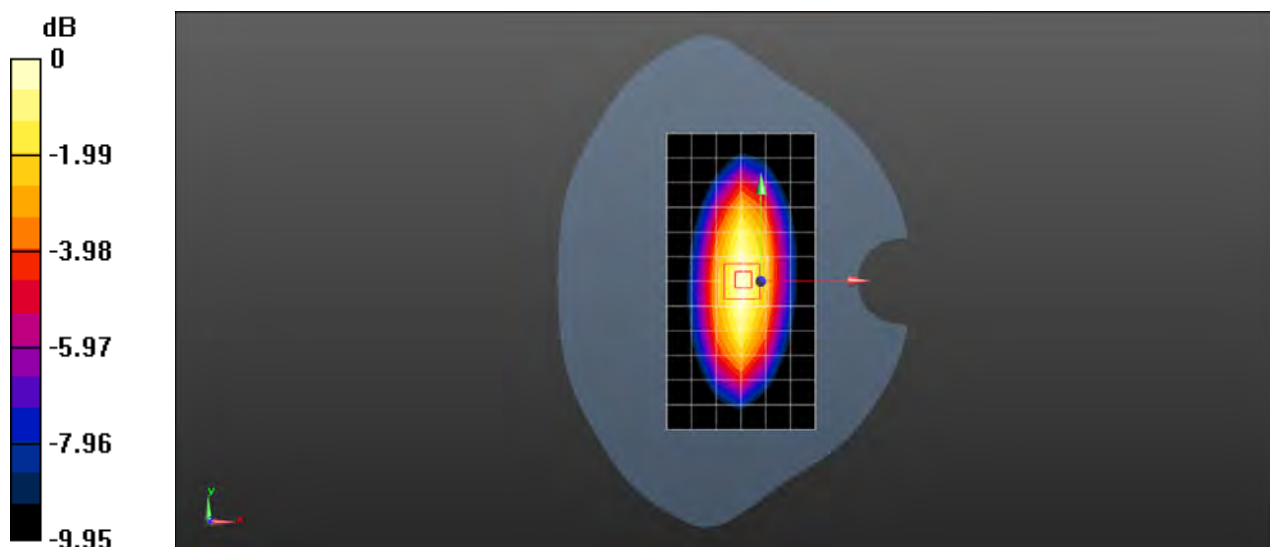
**Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 46.96 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.13 W/kg

**SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.41 W/kg**

Maximum value of SAR (measured) = 2.66 W/kg



0 dB = 2.66 W/kg = 4.25 dBW/kg

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;  $\sigma = 0.909$  S/m;  $\epsilon_r = 42.04$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.61, 8.61, 8.61); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 3.02 W/kg

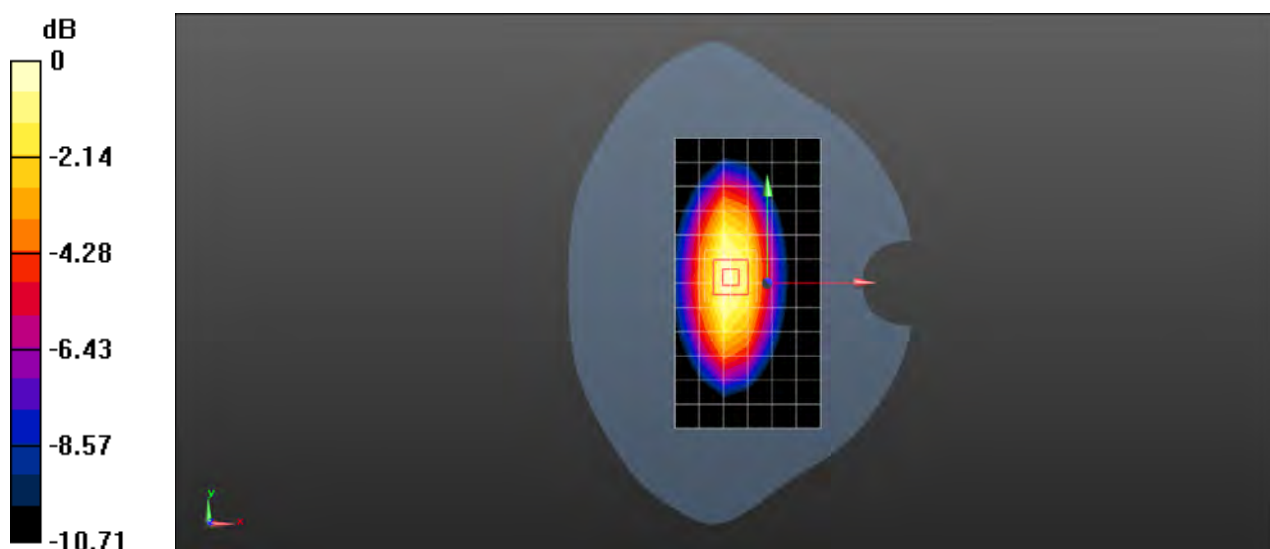
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 52.15 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.76 W/kg

**SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.63 W/kg**

Maximum value of SAR (measured) = 3.19 W/kg



0 dB = 3.19 W/kg = 5.04 dBW/kg

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;  $\sigma = 0.899$  S/m;  $\epsilon_r = 42.668$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.61, 8.61, 8.61); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.82 W/kg

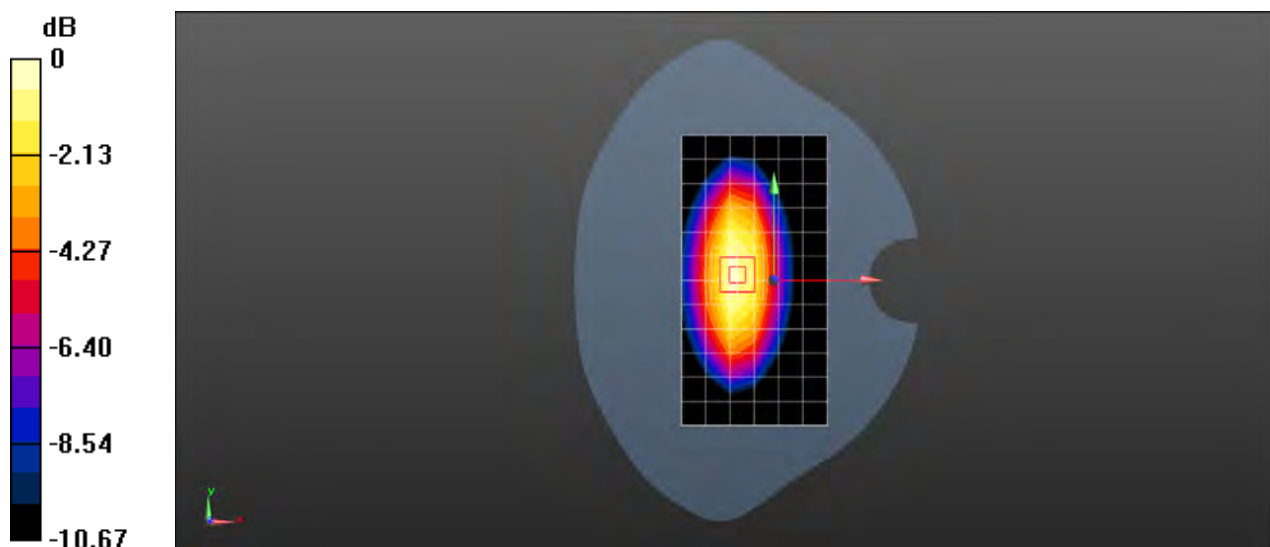
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 50.60 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.49 W/kg

**SAR(1 g) = 2.34 W/kg; SAR(10 g) = 1.53 W/kg**

Maximum value of SAR (measured) = 2.98 W/kg



0 dB = 2.98 W/kg = 4.74 dBW/kg

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;  $\sigma = 0.986$  S/m;  $\epsilon_r = 53.853$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.87, 9.87, 9.87); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 3.11 W/kg

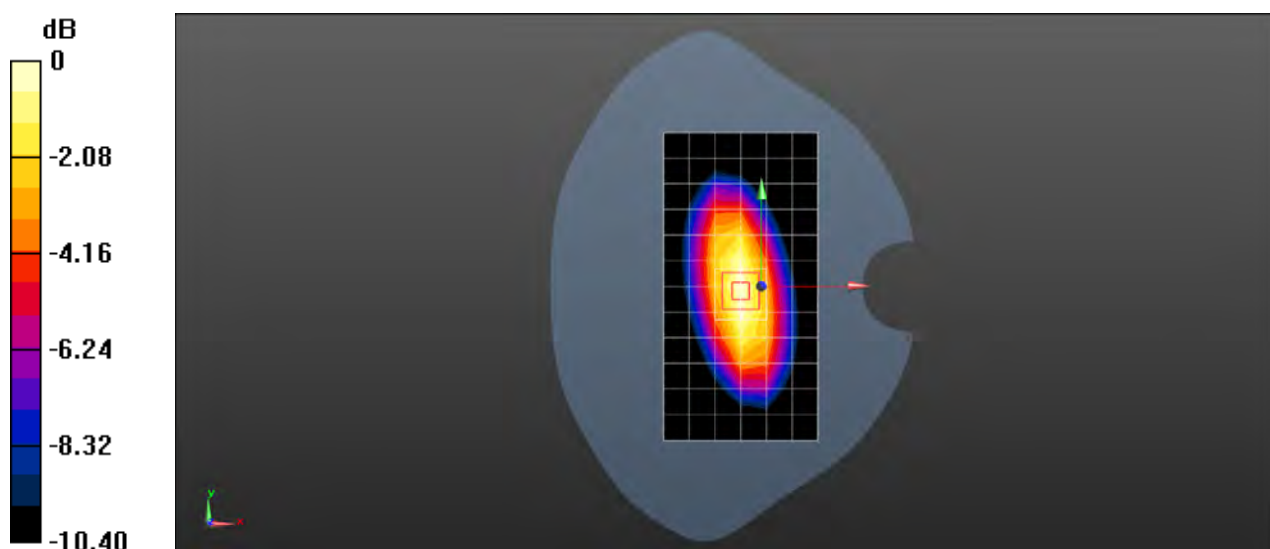
**Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 50.78 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.64 W/kg

**SAR(1 g) = 2.48 W/kg; SAR(10 g) = 1.63 W/kg**

Maximum value of SAR (measured) = 3.12 W/kg



0 dB = 3.12 W/kg = 4.94 dBW/kg

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;  $\sigma = 0.993$  S/m;  $\epsilon_r = 56.266$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.87, 9.87, 9.87); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 3.14 W/kg

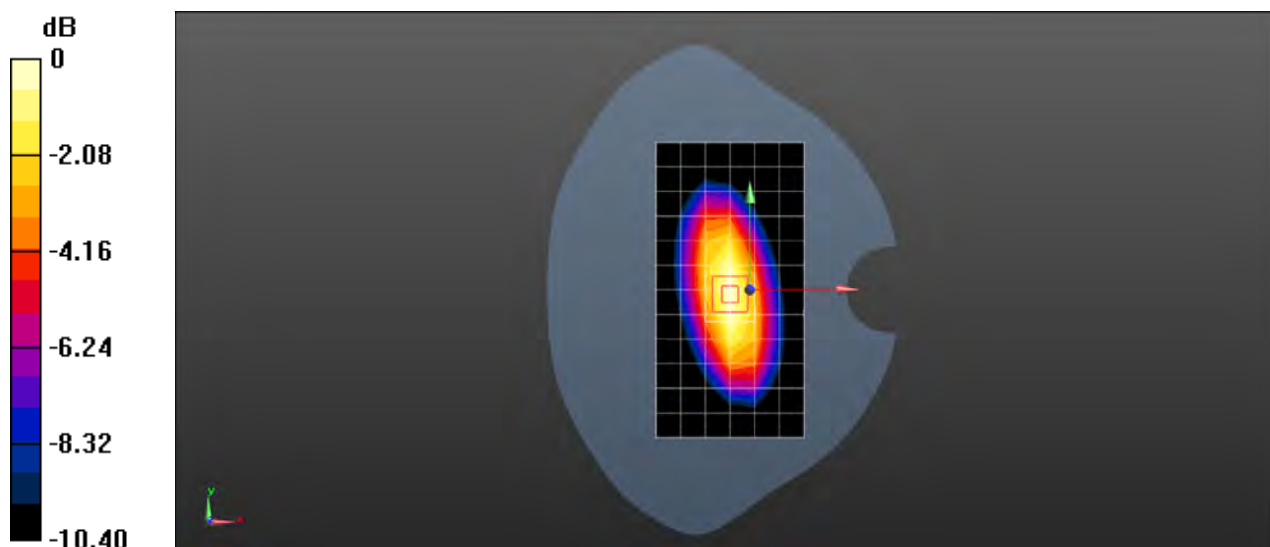
**Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 50.78 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.67 W/kg

**SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.65 W/kg**

Maximum value of SAR (measured) = 3.14 W/kg



0 dB = 3.14 W/kg = 4.97 dBW/kg

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;  $\sigma = 1.332$  S/m;  $\epsilon_r = 40.757$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.55, 7.55, 7.55); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 9.87 W/kg

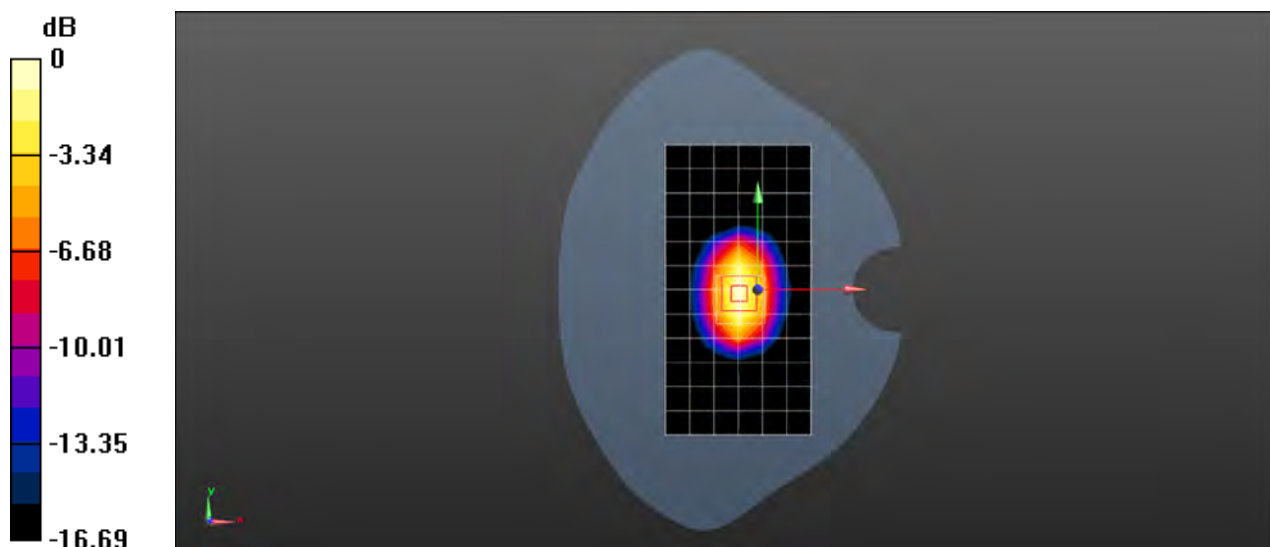
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 77.82 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 15.9 W/kg

**SAR(1 g) = 8.85 W/kg; SAR(10 g) = 4.76 W/kg**

Maximum value of SAR (measured) = 9.92 W/kg



0 dB = 9.92 W/kg = 9.97 dBW/kg

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;  $\sigma = 1.506$  S/m;  $\epsilon_r = 53.503$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.41, 8.41, 8.41); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

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

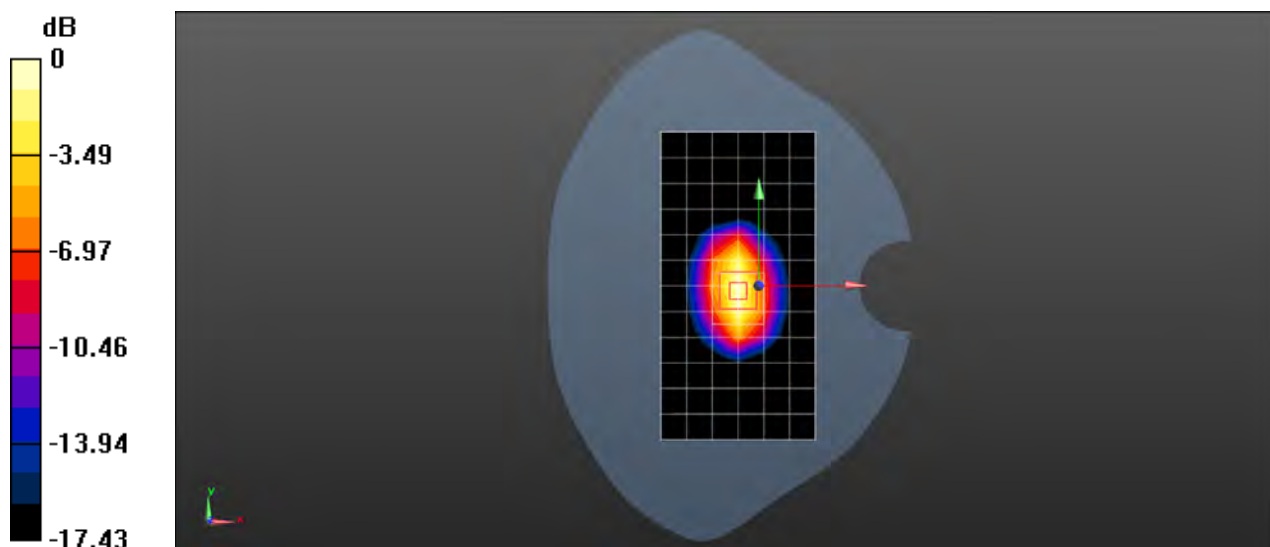
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 79.31 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 9.59 W/kg; SAR(10 g) = 5.1 W/kg**

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



0 dB = 13.7 W/kg = 11.37 dBW/kg

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;  $\sigma = 1.372$  S/m;  $\epsilon_r = 40.64$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.37, 7.37, 7.37); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 11.4 W/kg

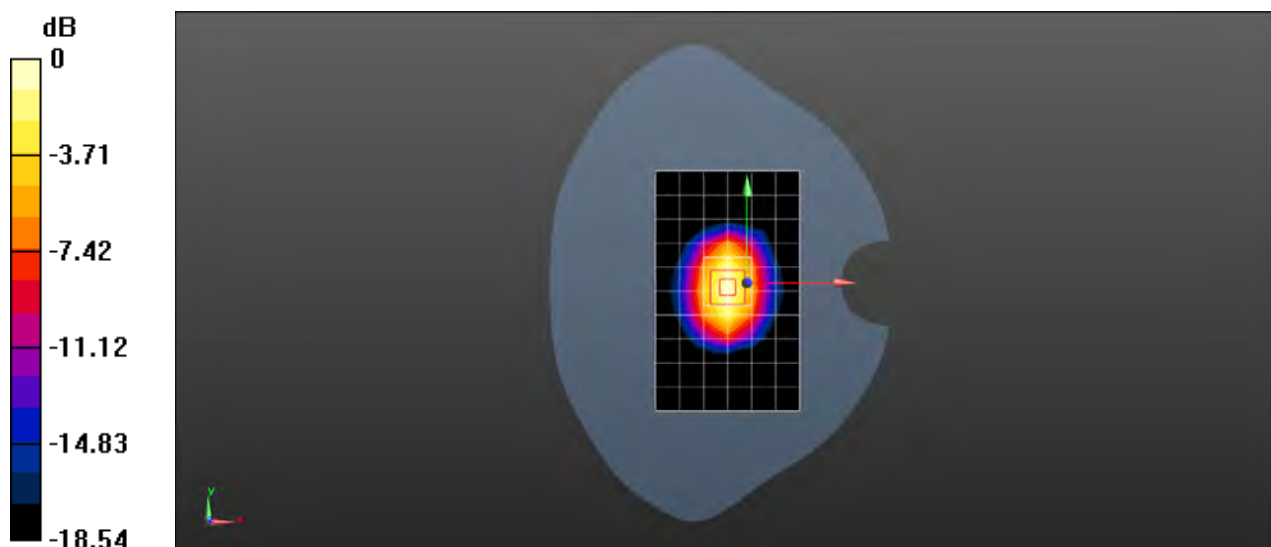
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 84.52 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.2 W/kg

**SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.29 W/kg**

Maximum value of SAR (measured) = 0.227 W/kg



0 dB = 11.4 W/kg = 10.57 dBW/kg

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;  $\sigma = 1.389$  S/m;  $\epsilon_r = 40.284$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.37, 7.37, 7.37); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

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

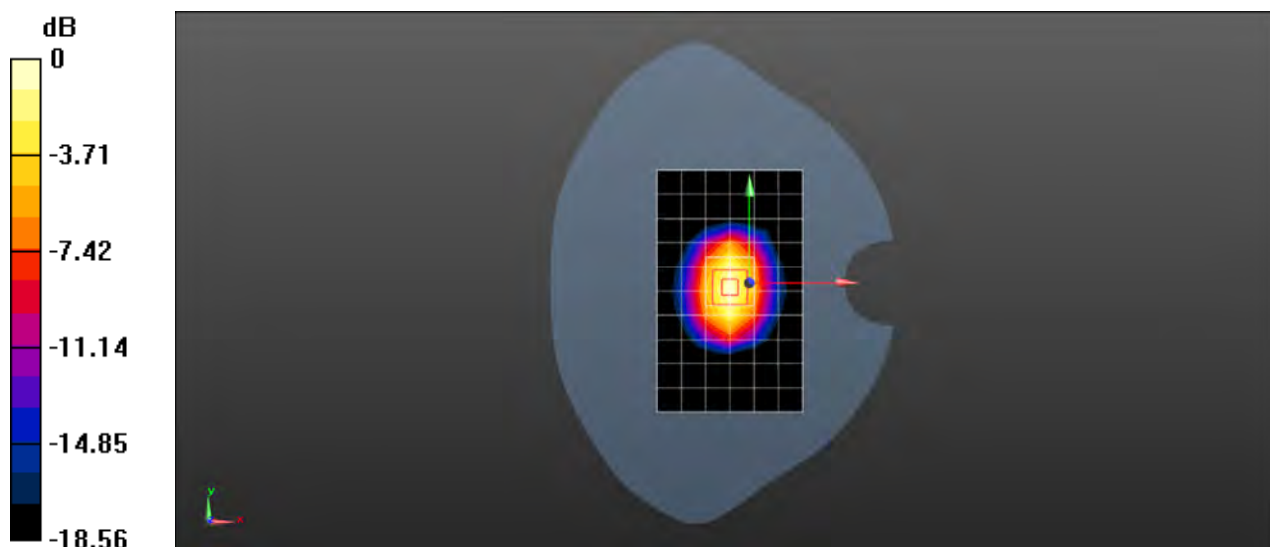
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 84.52 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.4 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

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;  $\sigma = 1.502$  S/m;  $\epsilon_r = 51.834$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.06, 7.06, 7.06); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 11.9 W/kg

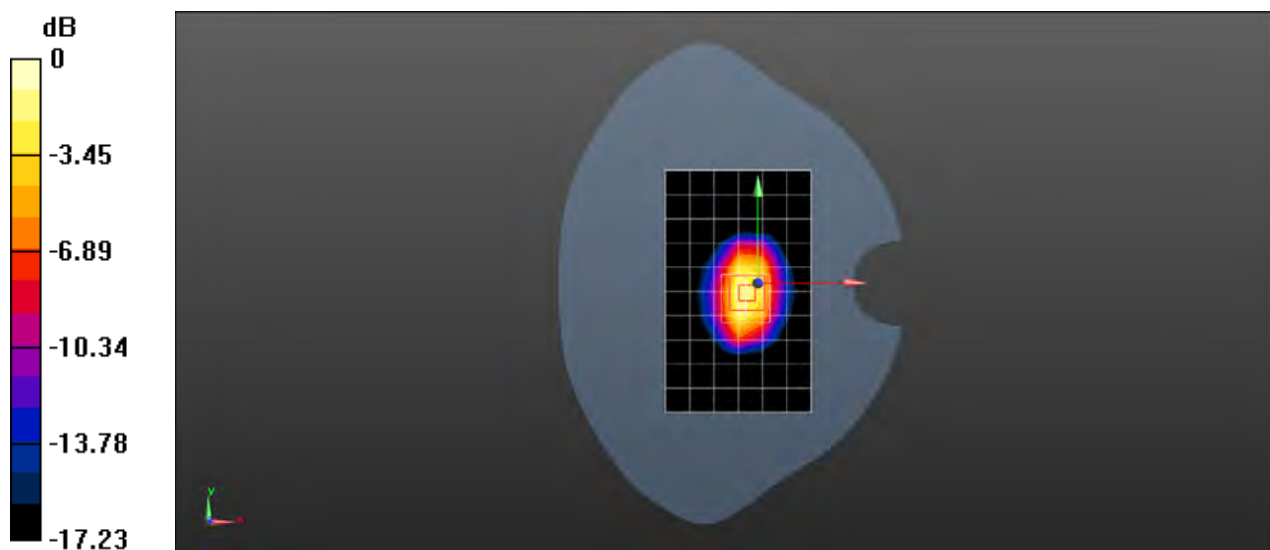
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 61.27 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.9 W/kg

**SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.62 W/kg**

Maximum value of SAR (measured) = 14.9 W/kg



0 dB = 14.9 W/kg = 11.73 dBW/kg

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;  $\sigma = 1.51$  S/m;  $\epsilon_r = 53.234$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.06, 7.06, 7.06); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 12.0 W/kg

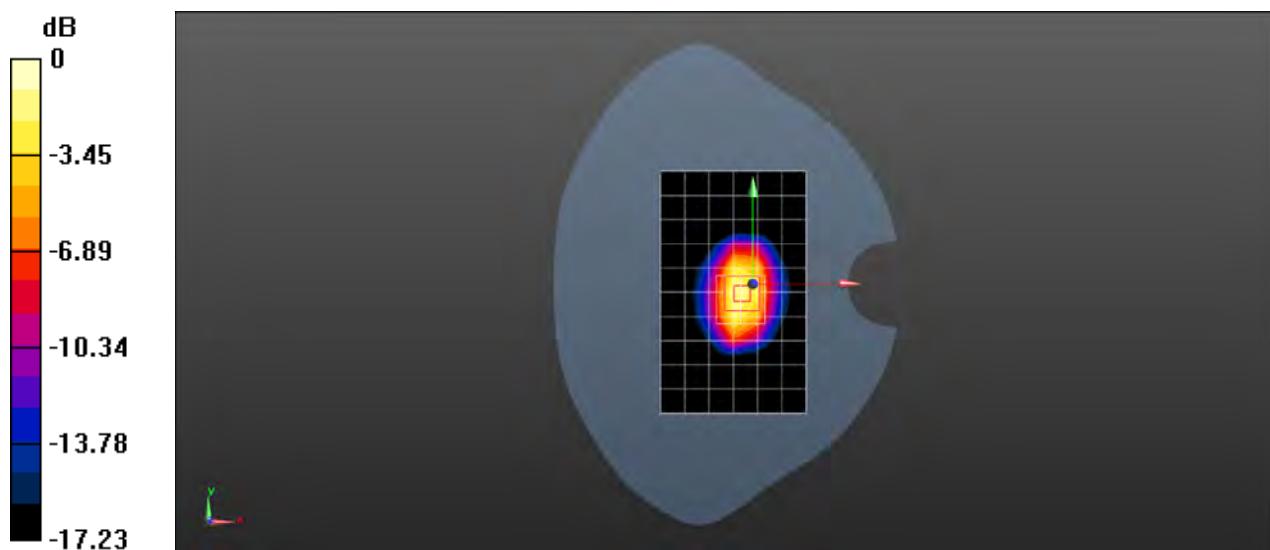
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 61.27 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.0 W/kg

**SAR(1 g) = 10.7 W/kg; SAR(10 g) = 5.65 W/kg**

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg = 11.76 dBW/kg

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;  $\sigma = 1.513$  S/m;  $\epsilon_r = 53.19$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.06, 7.06, 7.06); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 12.0 W/kg

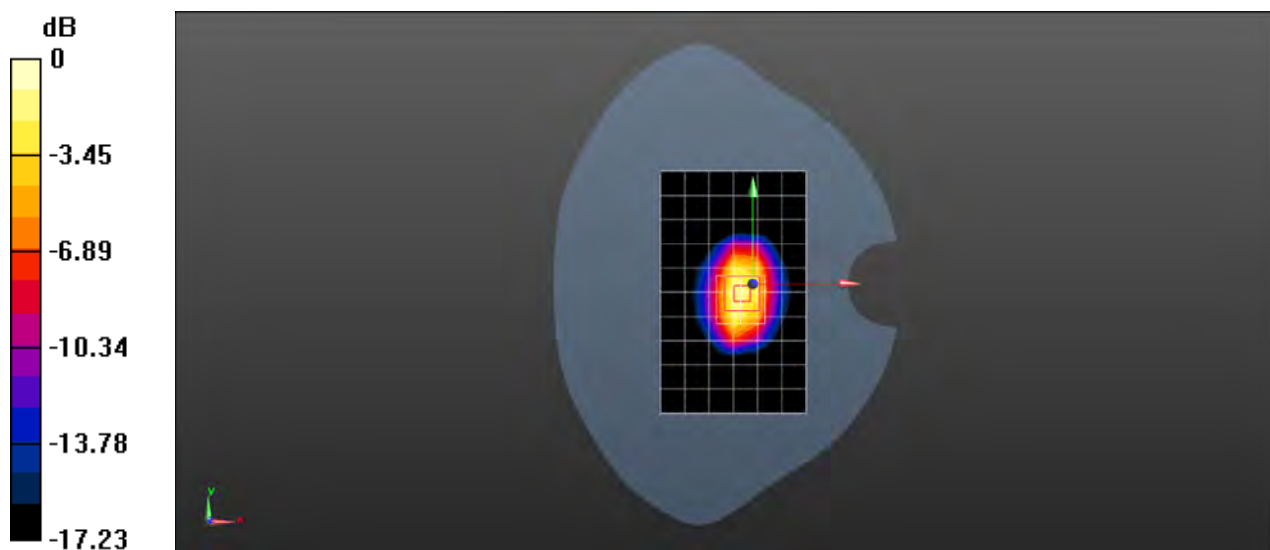
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 61.27 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.0 W/kg

**SAR(1 g) = 10.7 W/kg; SAR(10 g) = 5.66 W/kg**

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg = 11.76 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2450MHz Head

**DUT: D2450V2; Type: D2450V2; Serial: 733**

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

Medium: HSL2450; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.806$  S/m;  $\epsilon_r = 38.232$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.85, 6.85, 6.85); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (9x14x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

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

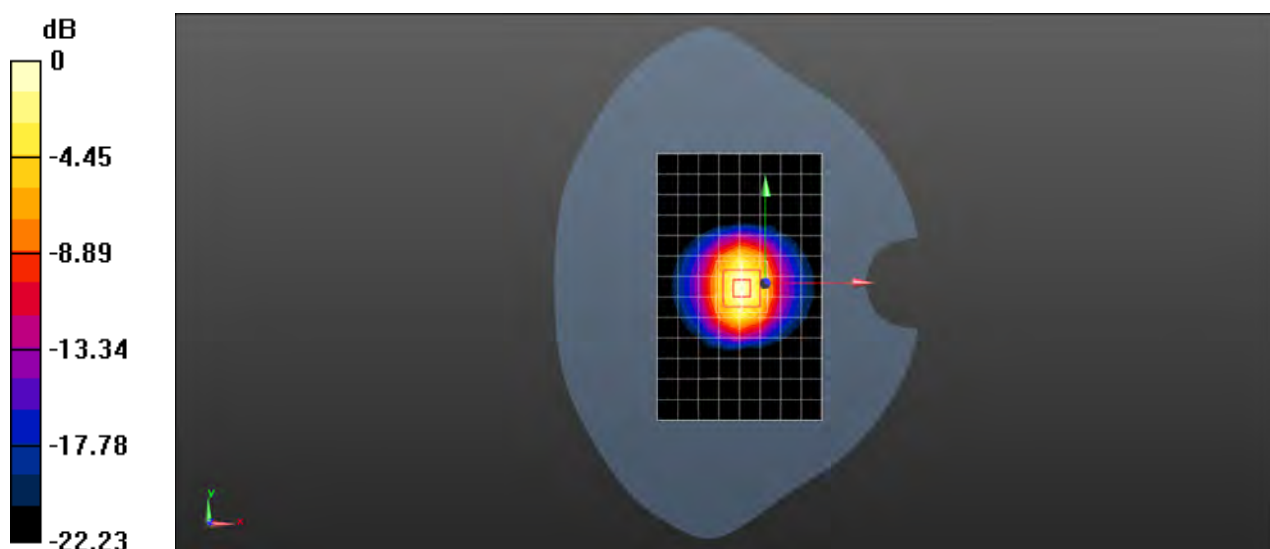
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 86.79 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 28.4 W/kg

**SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.16 W/kg**

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



0 dB = 15.3 W/kg = 11.85 dBW/kg

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;  $\sigma = 1.984$  S/m;  $\epsilon_r = 53.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.46, 7.46, 7.46); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: ELI V5.0; Type: ELI; Serial: 1128
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (10x14x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 14.2 W/kg

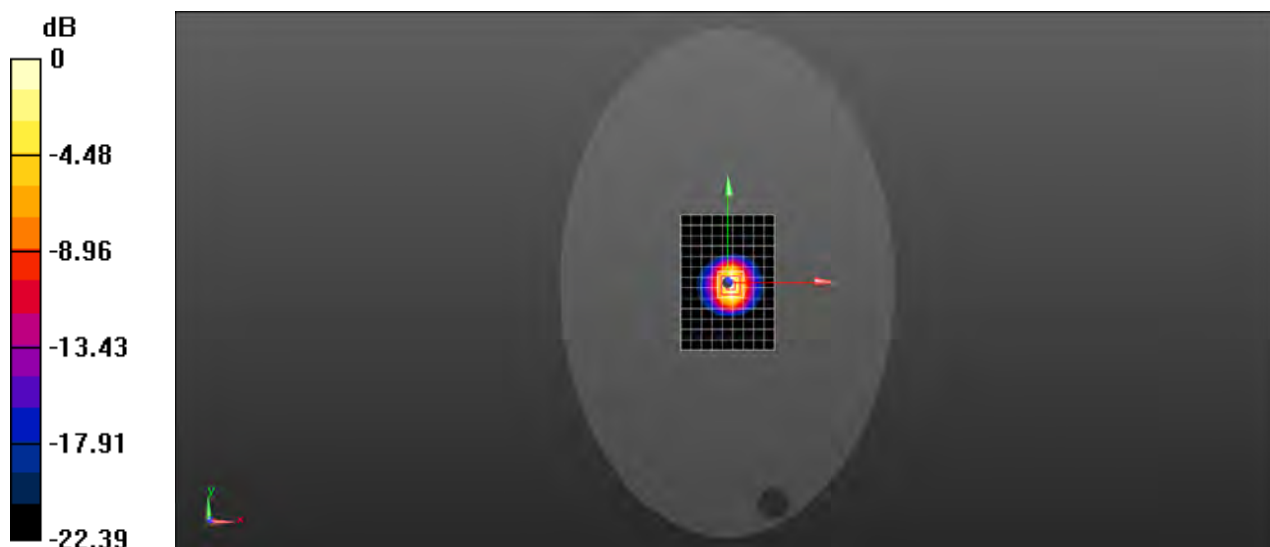
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 80.35 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 26.4 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.89 W/kg**

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



0 dB = 14.7 W/kg = 11.67 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2600MHz Head

**DUT: Dipole 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;  $\sigma = 1.969$  S/m;  $\epsilon_r = 37.735$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.7, 6.7, 6.7); Calibrated: 2017-01-13;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (10x13x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 14.9 W/kg

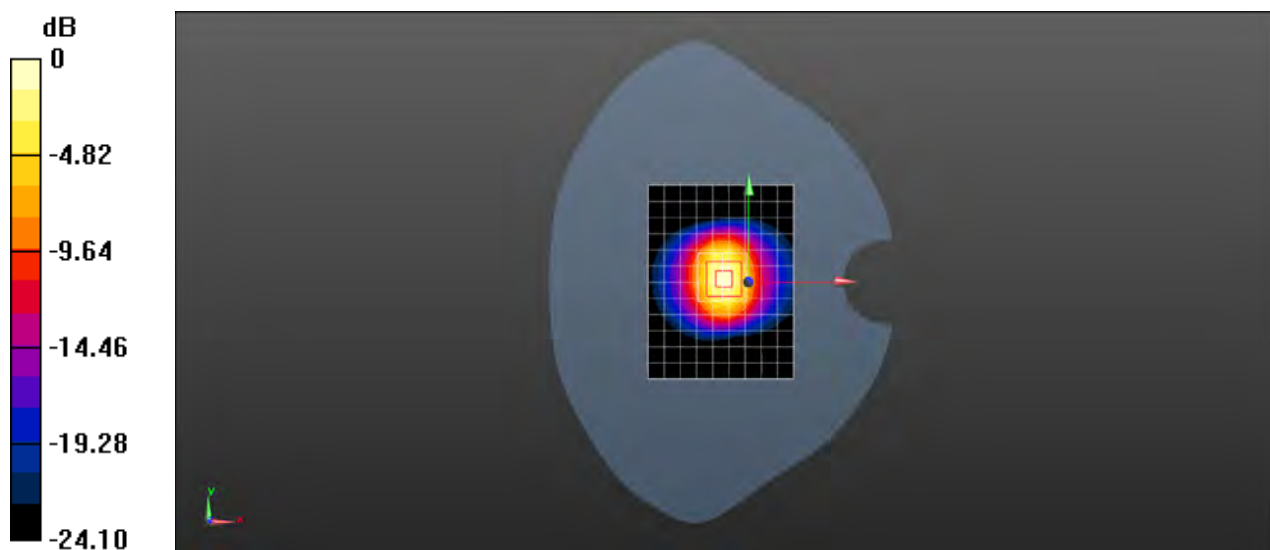
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 90.00 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 32.7 W/kg

**SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.38 W/kg**

Maximum value of SAR (measured) = 16.6 W/kg



0 dB = 16.6 W/kg = 12.20 dBW/kg

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;  $\sigma = 2.163$  S/m;  $\epsilon_r = 53.353$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.26, 7.26, 7.26); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn1267; Calibrated: 2017-02-23
- Phantom: ELI V5.0; Type: ELI; Serial: 1128
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (10x13x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 18.7 W/kg

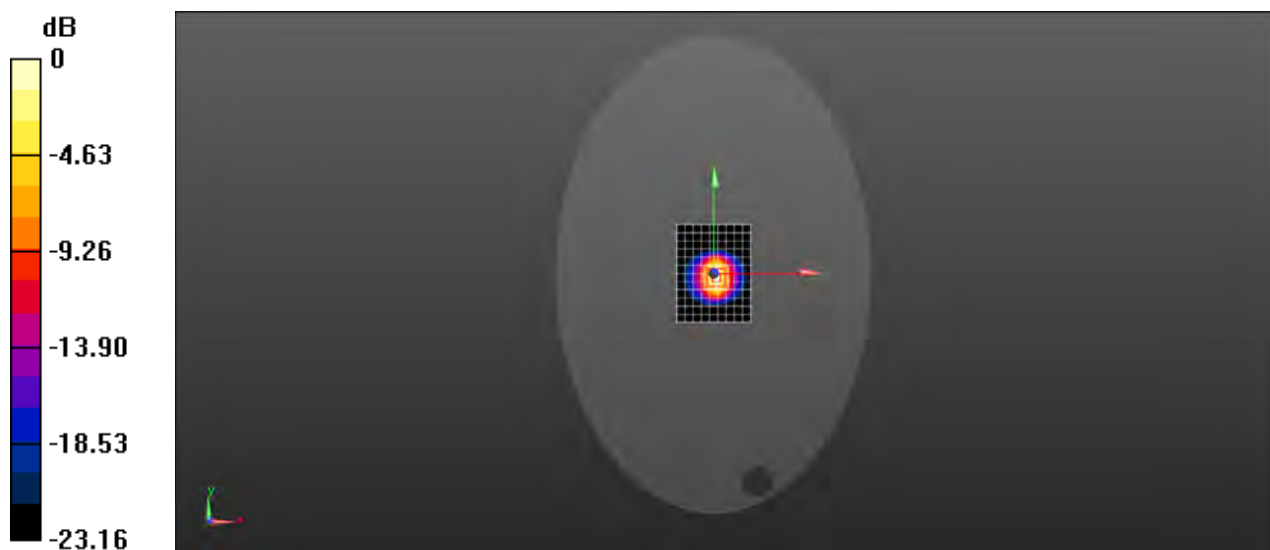
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 80.77 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.08 W/kg**

Maximum value of SAR (measured) = 21.0 W/kg



0 dB = 21.0 W/kg = 13.22 dBW/kg

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;  $\sigma = 2.136$  S/m;  $\epsilon_r = 53.335$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.26, 7.26, 7.26); Calibrated: 2016-12-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -2.0, 31.0$
- Electronics: DAE4 Sn896; Calibrated: 2017-09-27
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (10x11x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 17.4 W/kg

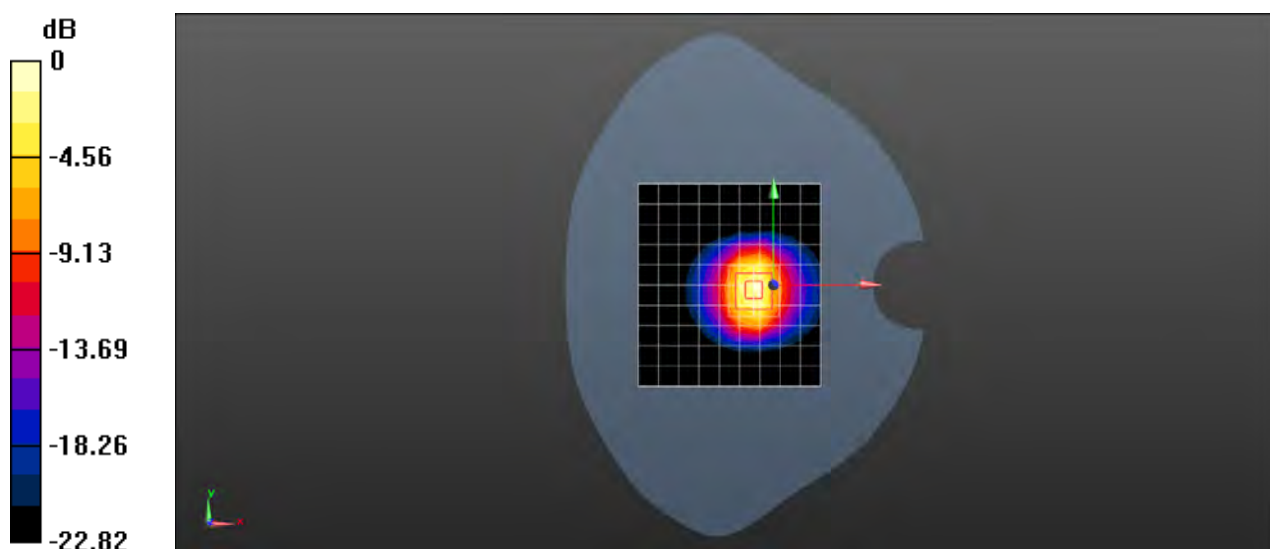
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 76.32 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 27.5 W/kg

**SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.02 W/kg**

Maximum value of SAR (measured) = 20.6 W/kg



0 dB = 20.6 W/kg = 13.14 dBW/kg