

# Appendix A

## Detailed System Check Results

1. System Performance Check
System Performance Check 750 MHz Head
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System Performance Check 5600 MHz Head
System Performance Check 5750 MHz Head

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;  $\sigma = 0.883$  S/m;  $\epsilon_r = 42.498$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.16, 10.16, 10.16); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (8x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.62 W/kg

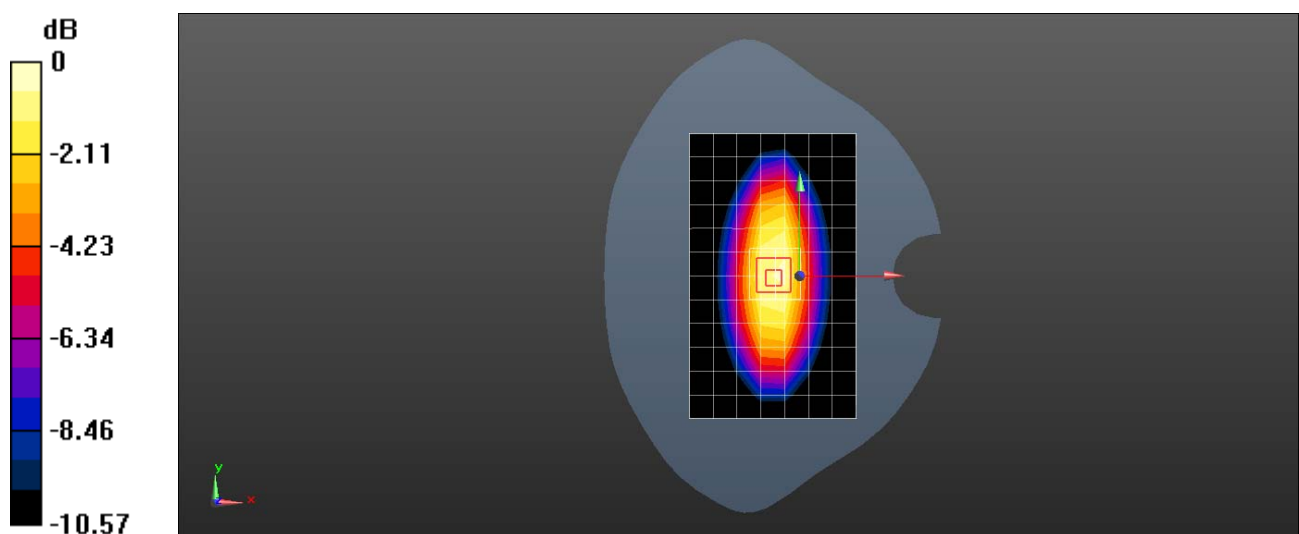
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.48 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.49 W/kg

**SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.41 W/kg**

Maximum value of SAR (measured) = 2.96 W/kg



0 dB = 2.96 W/kg = 4.71 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;  $\sigma = 0.938$  S/m;  $\epsilon_r = 41.763$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.85, 9.85, 9.85); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=15mm, Pin=250mW/Area Scan (8x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 3.12 W/kg

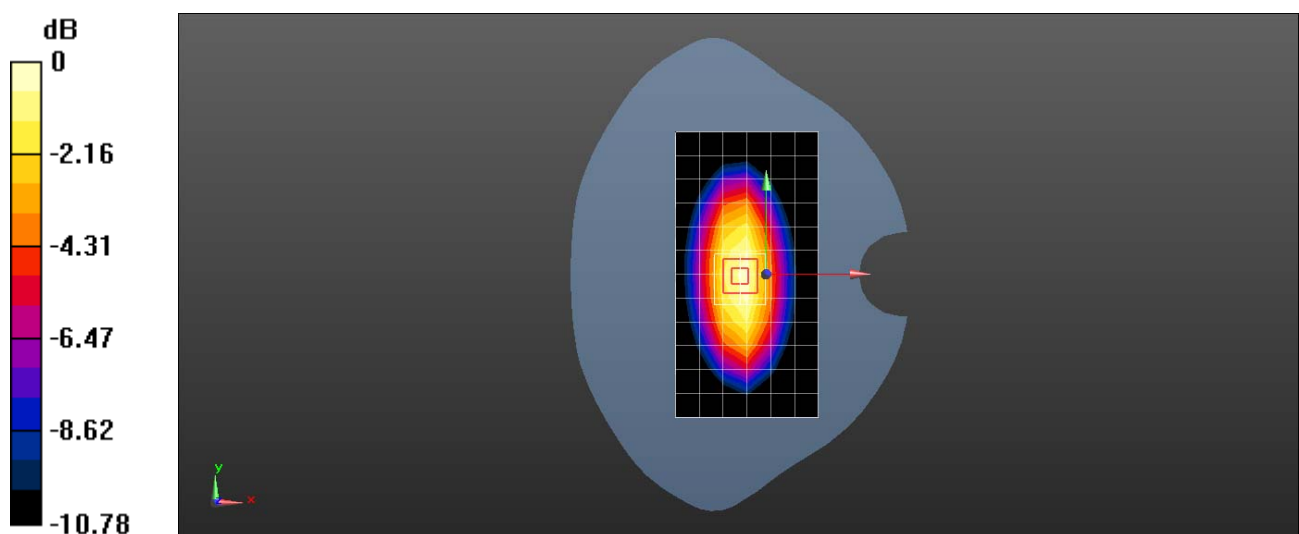
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.24 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.70 W/kg

**SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.61 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 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;  $\sigma = 1.362$  S/m;  $\epsilon_r = 40.029$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.21, 8.21, 8.21); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- 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 (5x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 14.5 W/kg

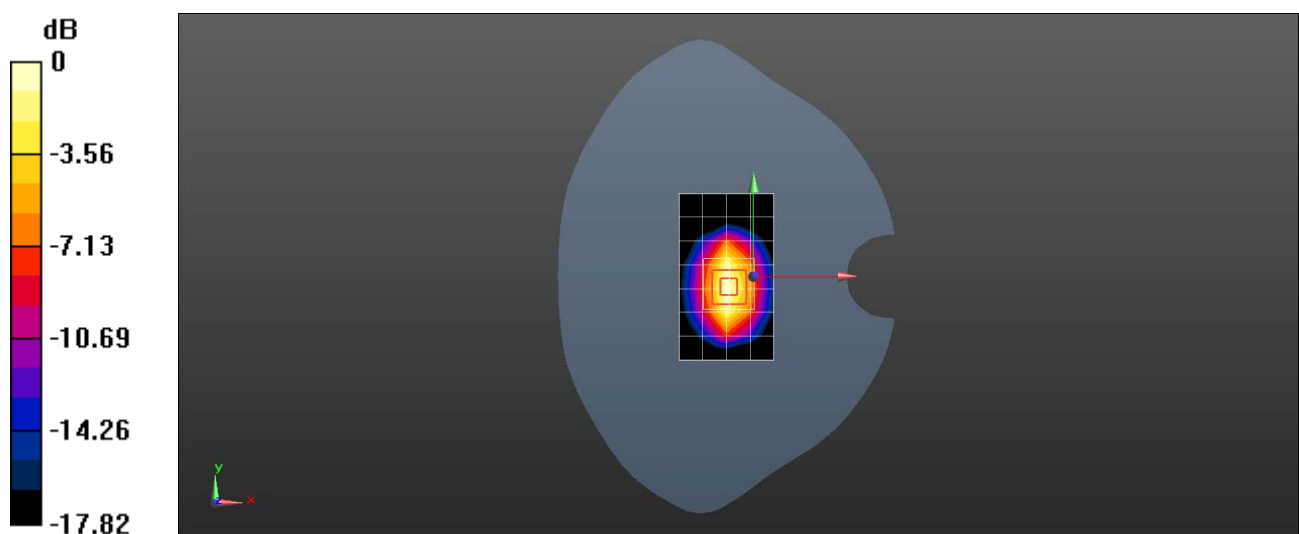
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.37 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 17.4 W/kg

**SAR(1 g) = 9.59 W/kg; SAR(10 g) = 5.05 W/kg**

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



0 dB = 14.6 W/kg = 11.64 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;  $\sigma = 1.825$  S/m;  $\epsilon_r = 40.647$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.6, 7.6, 7.6); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- 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 (10x10x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.1 W/kg

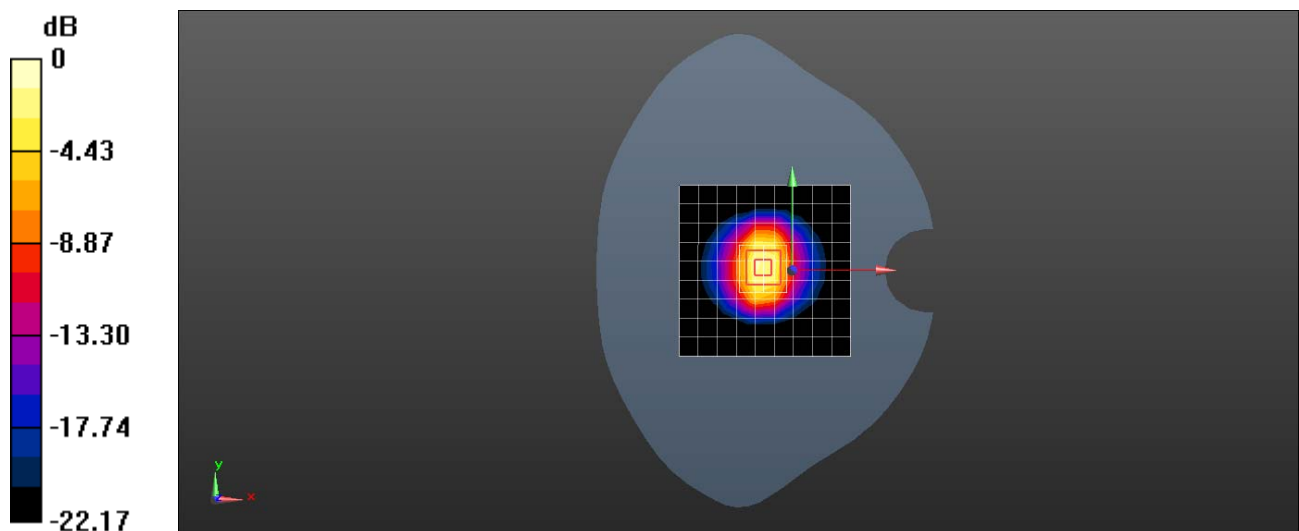
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.70 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 27.5 W/kg

**SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.15 W/kg**

Maximum value of SAR (measured) = 22.3 W/kg



0 dB = 22.3 W/kg = 13.48 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 5.25GHz Head

**DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.629$  S/m;  $\epsilon_r = 35.566$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(5.56, 5.56, 5.56); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (8x8x1):** Measurement grid:

dx=10mm, dy=10mm

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

**Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement

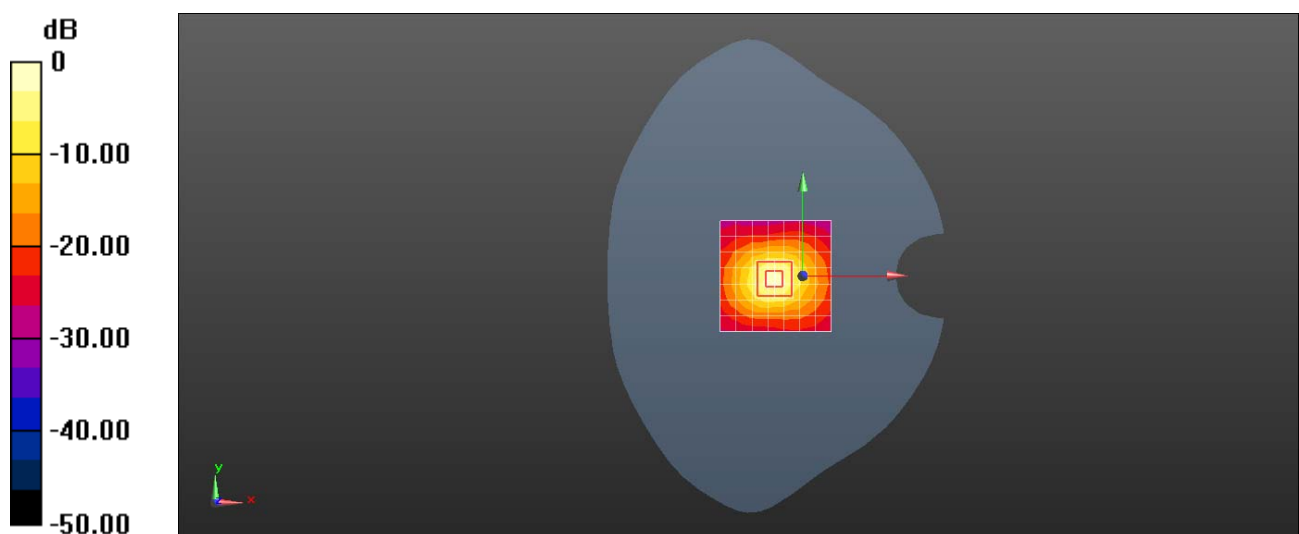
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.31 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 33.8 W/kg

**SAR(1 g) = 7.23 W/kg; SAR(10 g) = 2.07 W/kg**

Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg

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;  $\sigma = 5.096$  S/m;  $\epsilon_r = 34.894$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.82, 4.82, 4.82); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (8x8x1):** Measurement grid:

dx=10mm, dy=10mm

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

**Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement

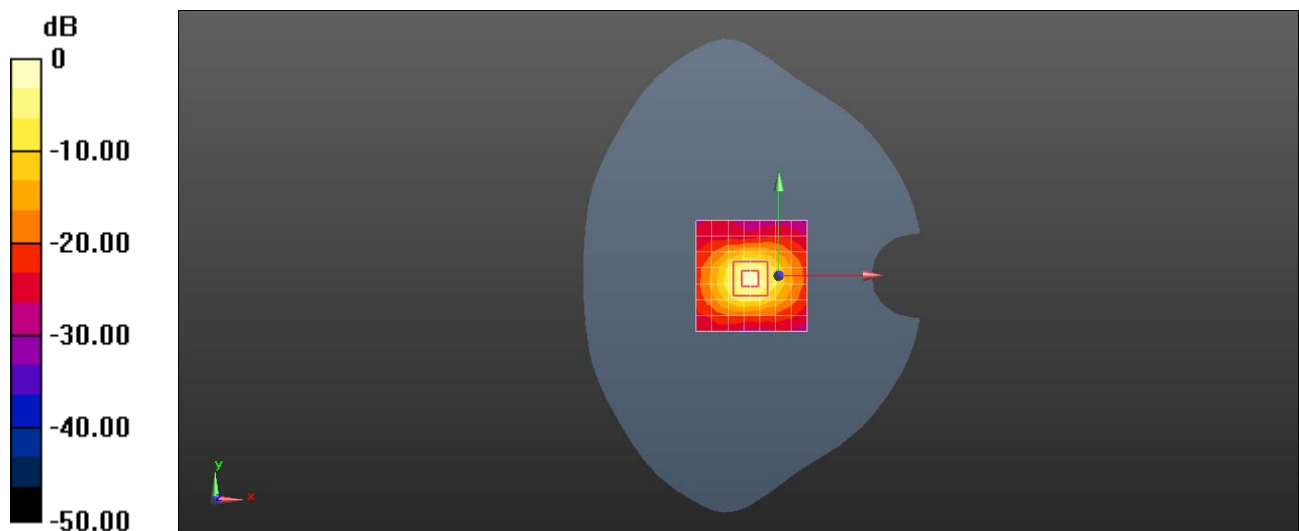
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.36 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 38.5 W/kg

**SAR(1 g) = 7.95 W/kg; SAR(10 g) = 2.27 W/kg**

Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 5.75GHz Head

**DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165**

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

Medium: HSL5G; Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.277$  S/m;  $\epsilon_r = 34.522$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.88, 4.88, 4.88); Calibrated: 2020-04-01;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (8x8x1):** Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 16.7 W/kg

**Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement

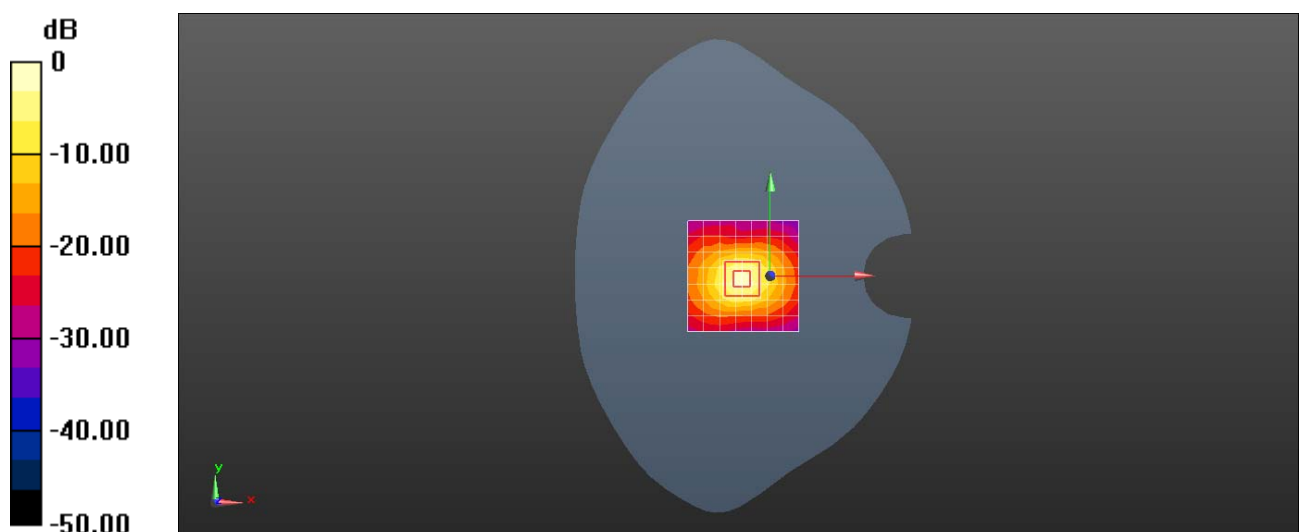
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.31 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 39.1 W/kg

**SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.24 W/kg**

Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 dBW/kg