



# Appendix A

## Detailed System Check Results

1. System Performance Check
System Performance Check 750 MHz Head
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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;  $\sigma = 0.878$  S/m;  $\epsilon_r = 43.089$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.62, 10.62, 10.62); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

**Body/d=15mm, Pin=250mW/Area Scan (8x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.90 W/kg

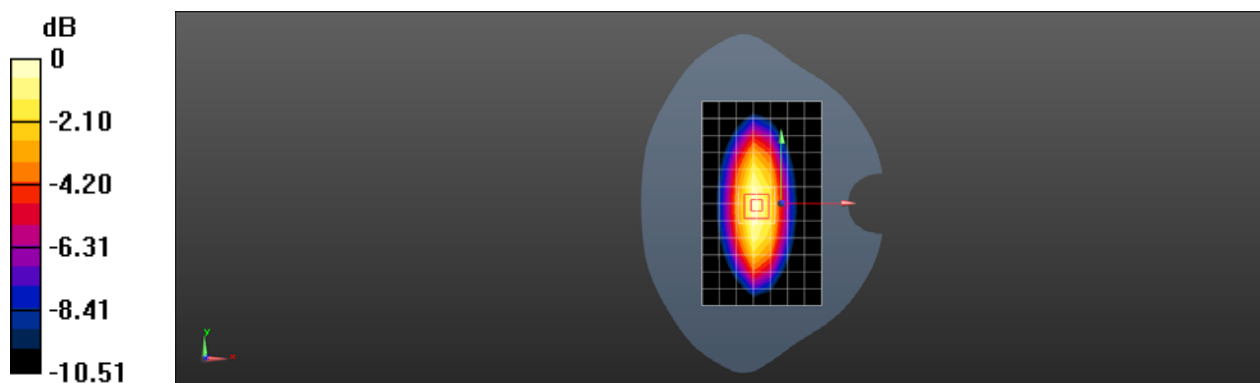
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 49.62 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.50 W/kg

**SAR(1 g) = 2.18 W/kg; SAR(10 g) = 1.43 W/kg**

Maximum value of SAR (measured) = 3.01 W/kg



0 dB = 3.01 W/kg = 4.79 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;  $\sigma = 0.884$  S/m;  $\epsilon_r = 42.499$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.34, 9.34, 9.34); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- 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) = 2.68 W/kg

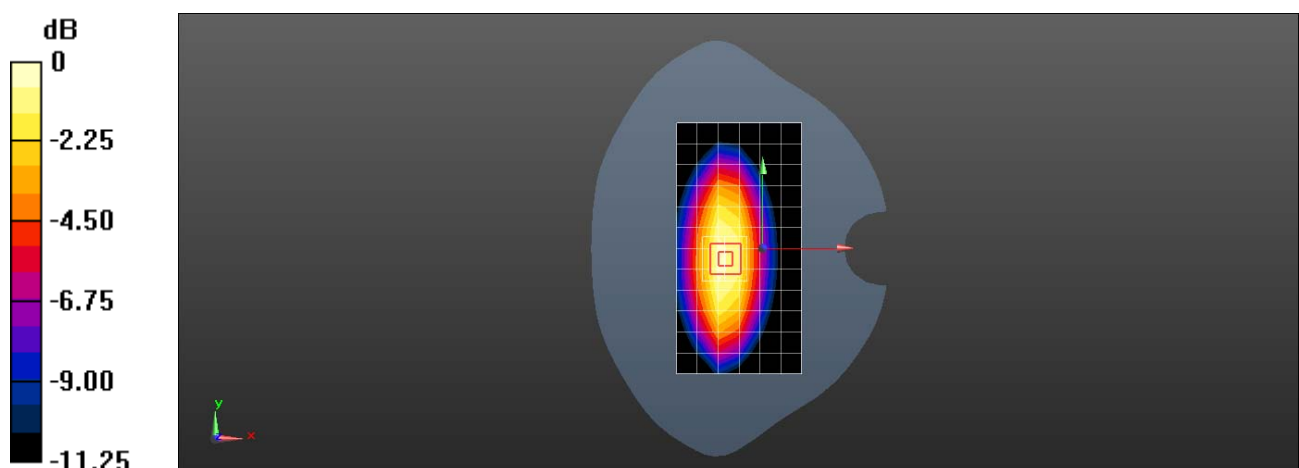
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 44.86 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.38 W/kg

**SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.38 W/kg**

Maximum value of SAR (measured) = 2.94 W/kg



0 dB = 2.94 W/kg = 4.68 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;  $\sigma = 0.929$  S/m;  $\epsilon_r = 42.605$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.34, 10.34, 10.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

**Body/d=15mm, Pin=250mW/Area Scan (6x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.90 W/kg

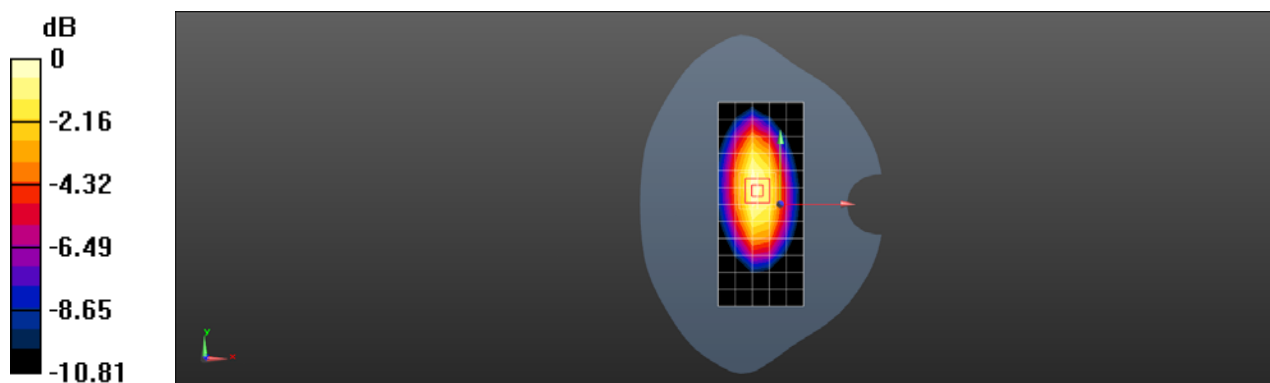
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.17 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.58 W/kg**

Maximum value of SAR (measured) = 3.06 W/kg



0 dB = 3.06 W/kg = 4.86 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;  $\sigma = 1.413$  S/m;  $\epsilon_r = 40.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.90, 8.90, 8.90); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

**Body/d=10mm, Pin=250mW/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

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

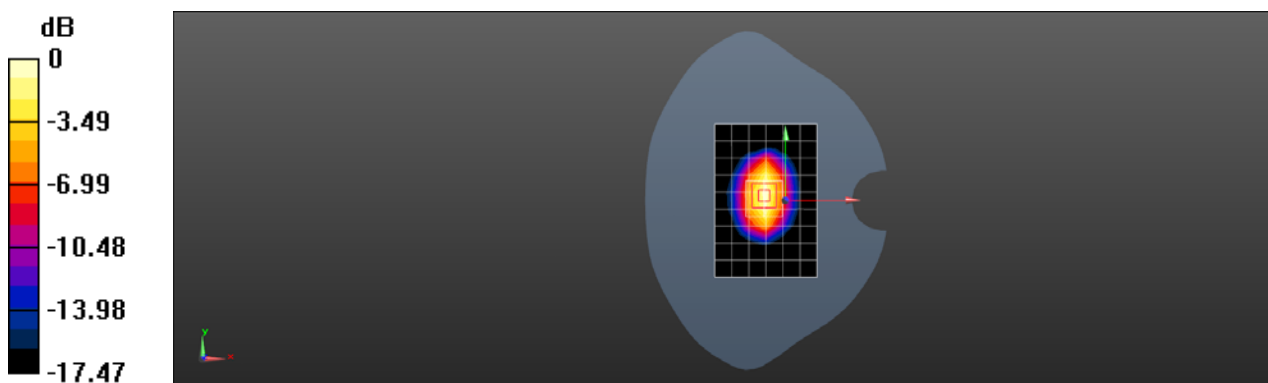
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.86 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 18.1 W/kg

**SAR(1 g) = 9.82 W/kg; SAR(10 g) = 5.22 W/kg**

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



0 dB = 15.1 W/kg = 11.79 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;  $\sigma = 1.411$  S/m;  $\epsilon_r = 40.015$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (6x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 12.5 W/kg

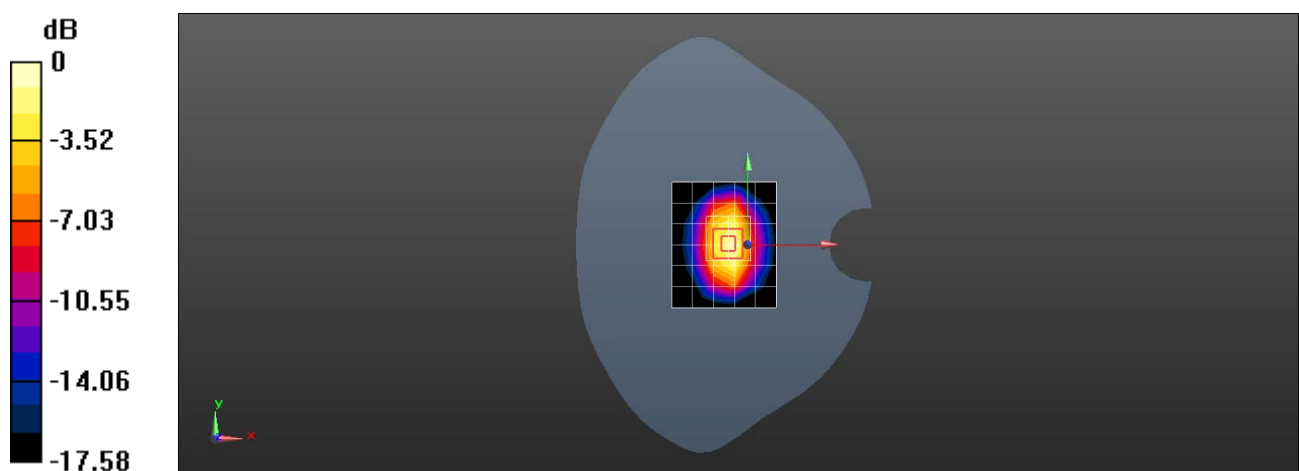
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 83.35 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 17.4 W/kg

**SAR(1 g) = 9.36 W/kg; SAR(10 g) = 4.95 W/kg**

Maximum value of SAR (measured) = 14.3 W/kg



0 dB = 14.3 W/kg = 11.55 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;  $\sigma = 1.413$  S/m;  $\epsilon_r = 40.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 12.2 W/kg

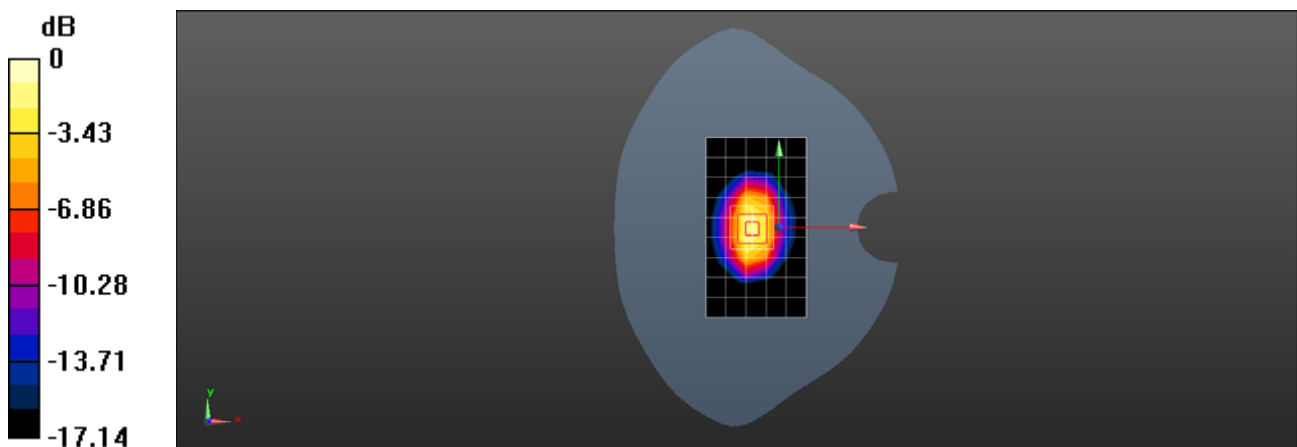
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.03 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.8 W/kg

**SAR(1 g) = 9.78 W/kg; SAR(10 g) = 5.06 W/kg**

Maximum value of SAR (measured) = 15.8 W/kg



0 dB = 15.8 W/kg = 11.99 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1950 MHz Head

**DUT: D1950V3; Type: D1950V3; Serial: 1138**

Communication System: UID 0, CW (0); Frequency: 1950 MHz; Duty Cycle: 1:1

Medium: HSL1950; Medium parameters used:  $f = 1950$  MHz;  $\sigma = 1.448$  S/m;  $\epsilon_r = 39.656$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (8x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 13.7 W/kg

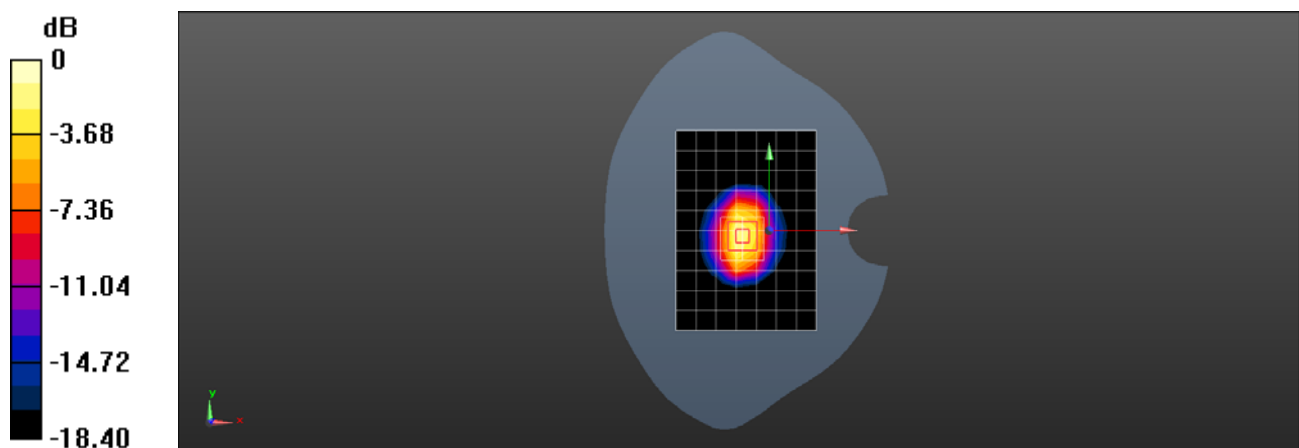
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.34 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 20.2 W/kg

**SAR(1 g) = 10.9 W/kg; SAR(10 g) = 5.44 W/kg**

Maximum value of SAR (measured) = 16.9 W/kg



0 dB = 16.9 W/kg = 12.28 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;  $\sigma = 1.791$  S/m;  $\epsilon_r = 40.663$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

**Body/d=10mm, Pin=250mW/Area Scan (9x15x1):** Measurement grid: dx=12mm, dy=12mm

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

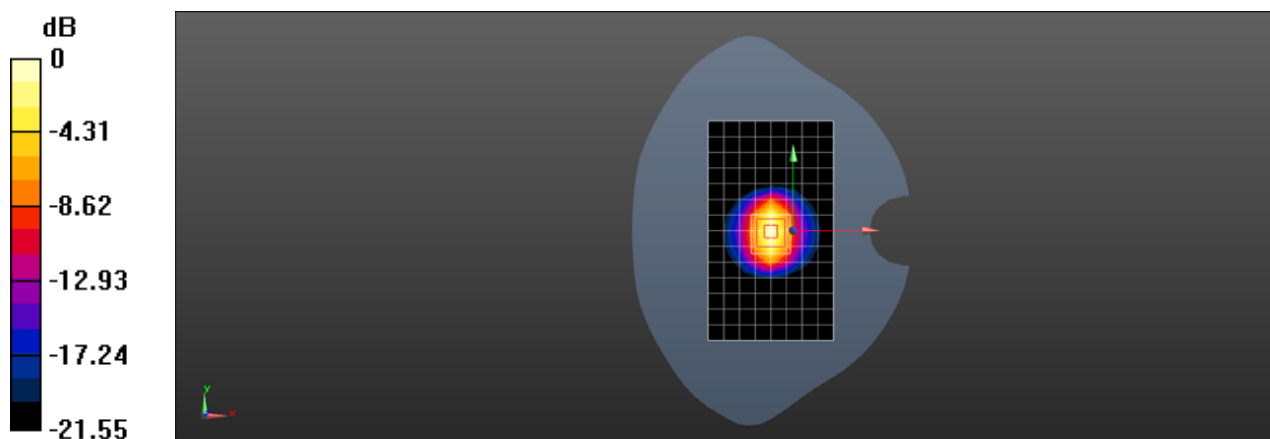
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.34 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 25.1 W/kg

**SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.94 W/kg**

Maximum value of SAR (measured) = 20.7 W/kg



0 dB = 20.7 W/kg = 13.16 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;  $\sigma = 1.823$  S/m;  $\epsilon_r = 39.147$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.06, 7.06, 7.06); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (7x8x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 20.7 W/kg

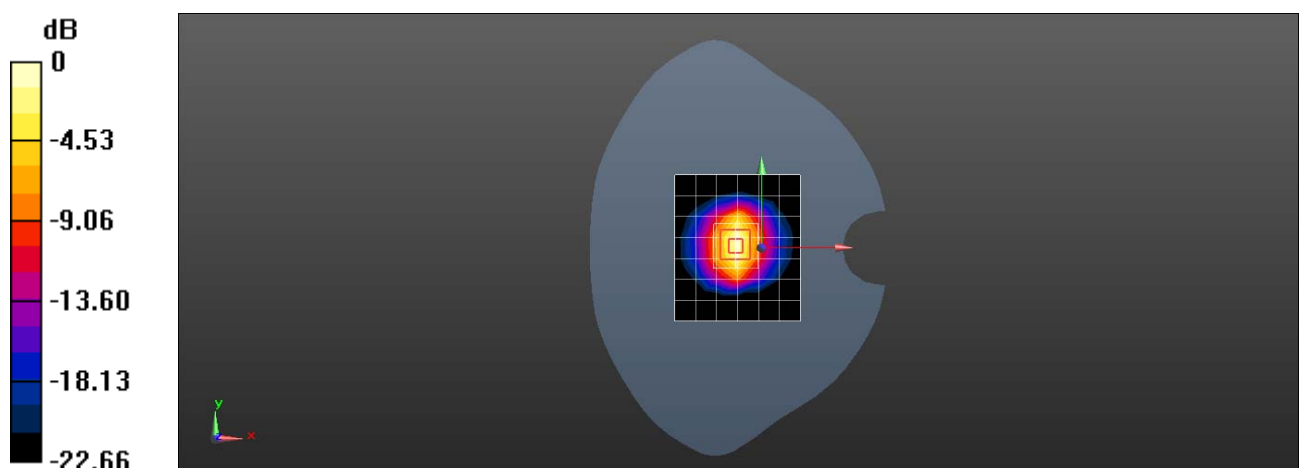
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.07 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 27.3 W/kg

**SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.11 W/kg**

Maximum value of SAR (measured) = 22.4 W/kg



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

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;  $\sigma = 1.962$  S/m;  $\epsilon_r = 40.162$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

**Body/d=10mm, Pin=250mW/Area Scan (9x15x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 22.6 W/kg

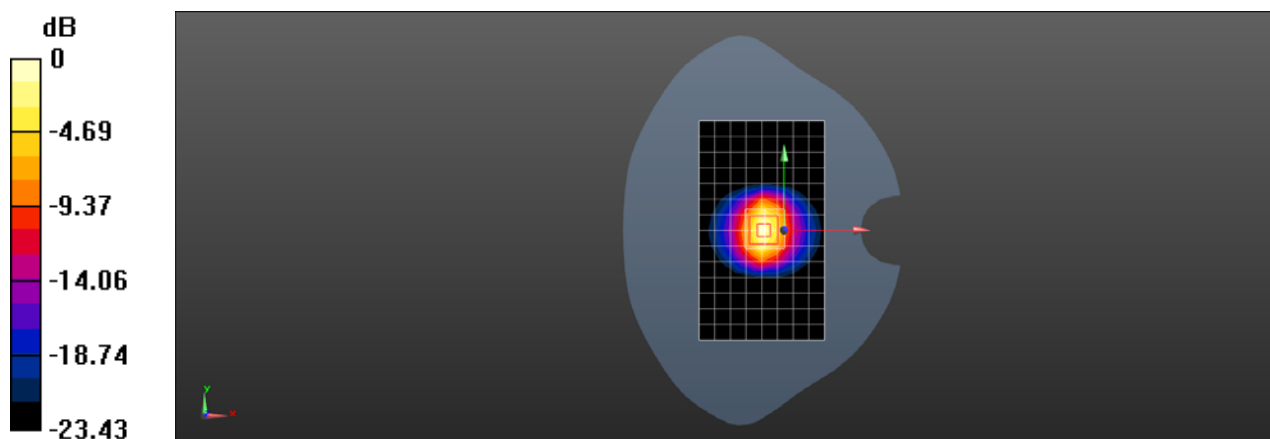
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.57 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 28.9 W/kg

**SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.21 W/kg**

Maximum value of SAR (measured) = 23.5 W/kg



0 dB = 23.5 W/kg = 13.71 dBW/kg

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;  $\sigma = 1.962$  S/m;  $\epsilon_r = 40.162$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.88, 6.88, 6.88); Calibrated: 2020/05/09;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2020/06/12
- Phantom: SAM 10; Type: SAM; Serial: 1563
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 16.9 W/kg

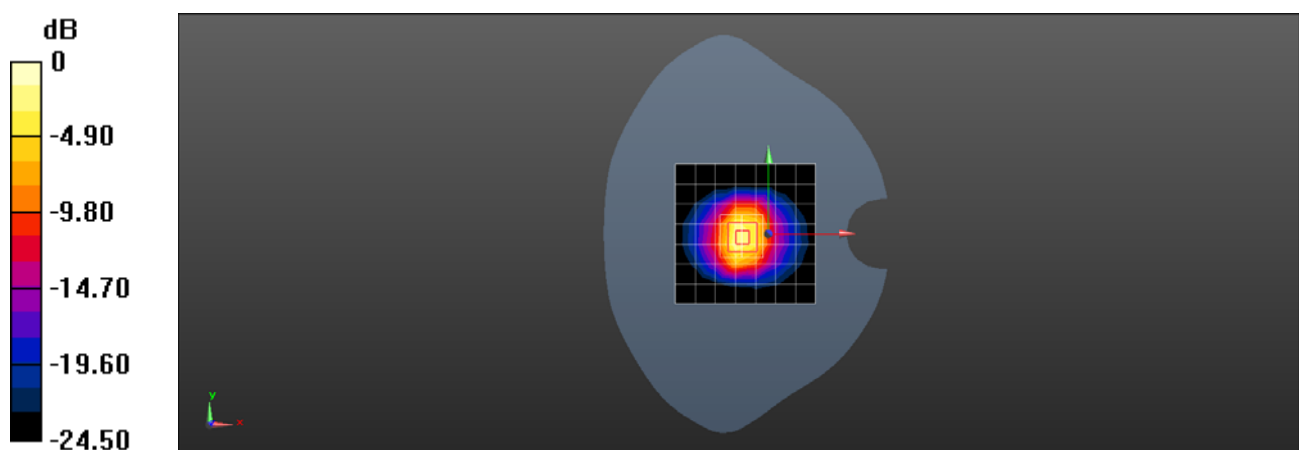
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.14 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.1 W/kg

**SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.06 W/kg**

Maximum value of SAR (measured) = 23.4 W/kg



0 dB = 23.4 W/kg = 13.69 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;  $\sigma = 4.842$  S/m;  $\epsilon_r = 36.638$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.34, 5.34, 5.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

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

$dx=10$ mm,  $dy=10$ mm

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

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

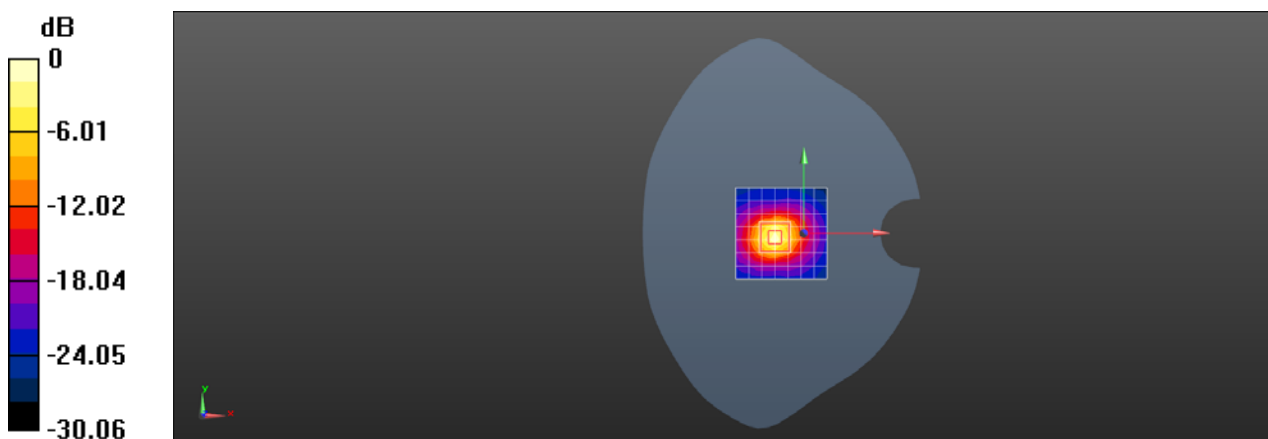
grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 58.28 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 33.2 W/kg

**SAR(1 g) = 8.17 W/kg; SAR(10 g) = 2.35 W/kg**

Maximum value of SAR (measured) = 20.9 W/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;  $\sigma = 5.43$  S/m;  $\epsilon_r = 35.589$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.83, 4.83, 4.83); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.13(7474)

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

$dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 15.8 W/kg

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

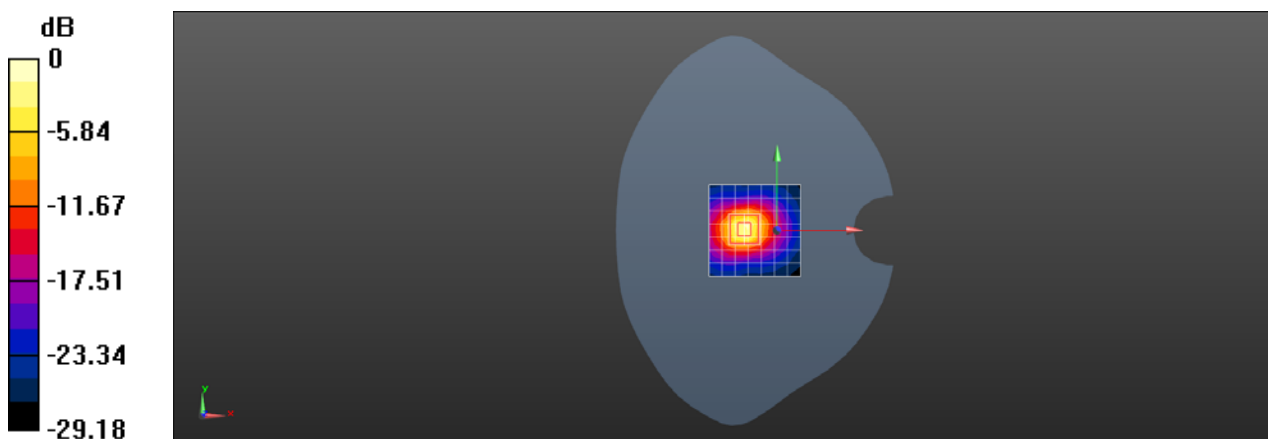
grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 45.88 V/m; Power Drift = 0.82 dB

Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.3 W/kg**

Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg