

# Appendix A

## Detailed System Check Results

1. System Performance Check
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Test Laboratory: SGS-SAR Lab

## System Performance Check 750MHz

**DUT: D750V3; Type: Dipole; Serial: 1214**

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

Medium: HSL750; Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.888 \text{ S/m}$ ;  $\epsilon_r = 40.956$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.75, 10.75, 10.75); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

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

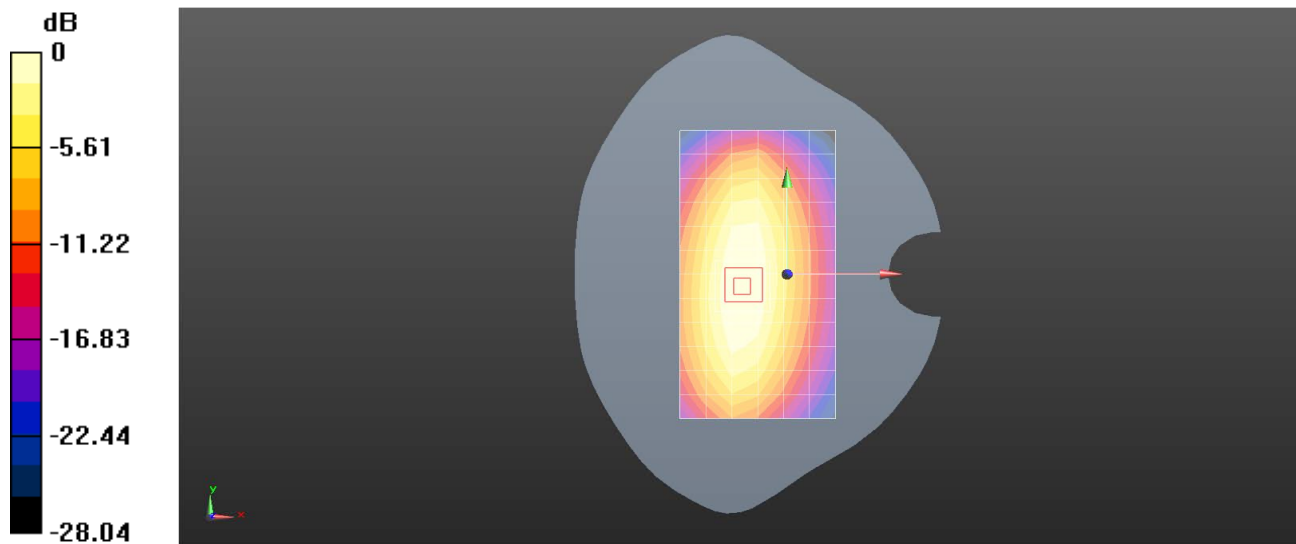
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 46.70 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 3.35 W/kg

**SAR(1 g) = 2.18 W/kg; SAR(10 g) = 1.44 W/kg**

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



0 dB = 2.64 W/kg = 4.22 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 750MHz

**DUT: D750V3; Type: Dipole; Serial: 1214**

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

Medium: HSL750; Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.848 \text{ S/m}$ ;  $\epsilon_r = 42.434$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.75, 10.75, 10.75); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Maximum value of SAR (measured) = 2.42 W/kg

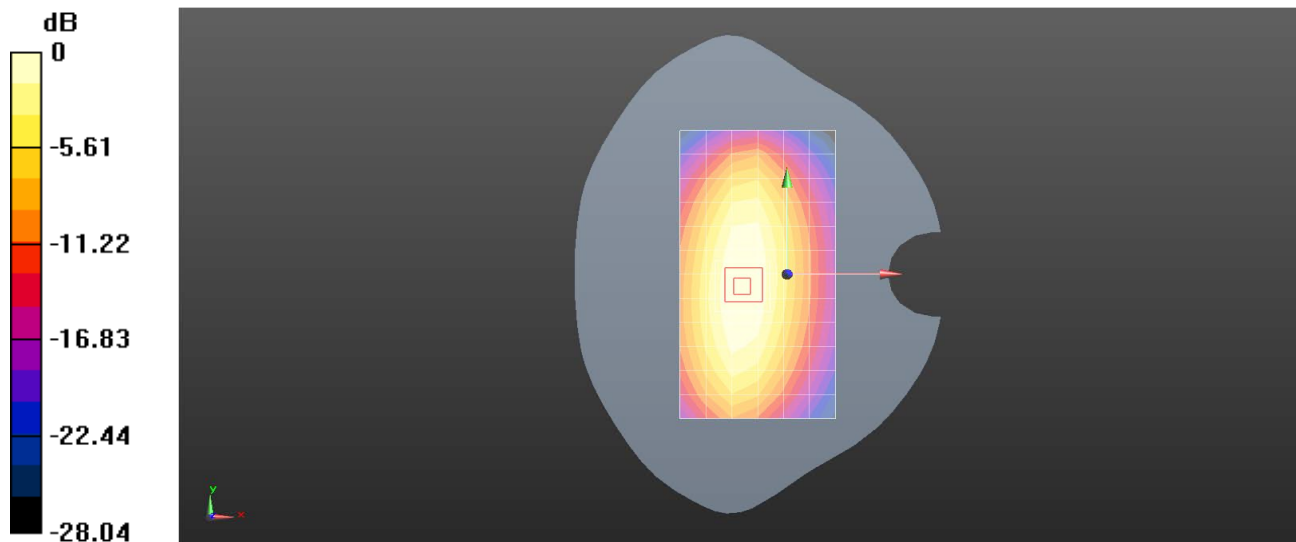
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 46.38 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.14 W/kg

**SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.35 W/kg**

Maximum value of SAR (measured) = 2.76 W/kg



0 dB = 2.42 W/kg = 3.84 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 750MHz

**DUT: D750V3; Type: Dipole; Serial: 1214**

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

Medium: HSL750;Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.894 \text{ S/m}$ ;  $\epsilon_r = 41.637$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.75, 10.75, 10.75); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Maximum value of SAR (measured) = 2.50 W/kg

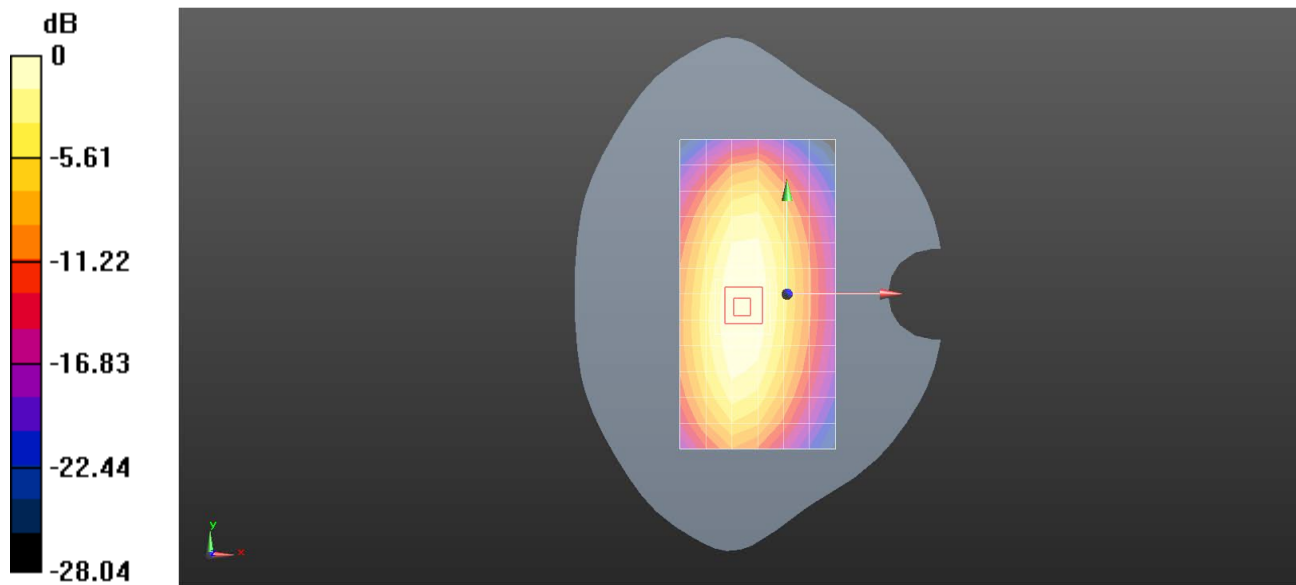
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 45.89 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 3.29 W/kg

**SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.42 W/kg**

Maximum value of SAR (measured) = 2.89 W/kg



0 dB = 2.50 W/kg = 3.97 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 835MHz

**DUT: D835V2; Type: Dipole; Serial: 4d256**

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

Medium: HSL835; Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.915 \text{ S/m}$ ;  $\epsilon_r = 42.824$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.35, 10.35, 10.35); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Maximum value of SAR (measured) = 2.55 W/kg

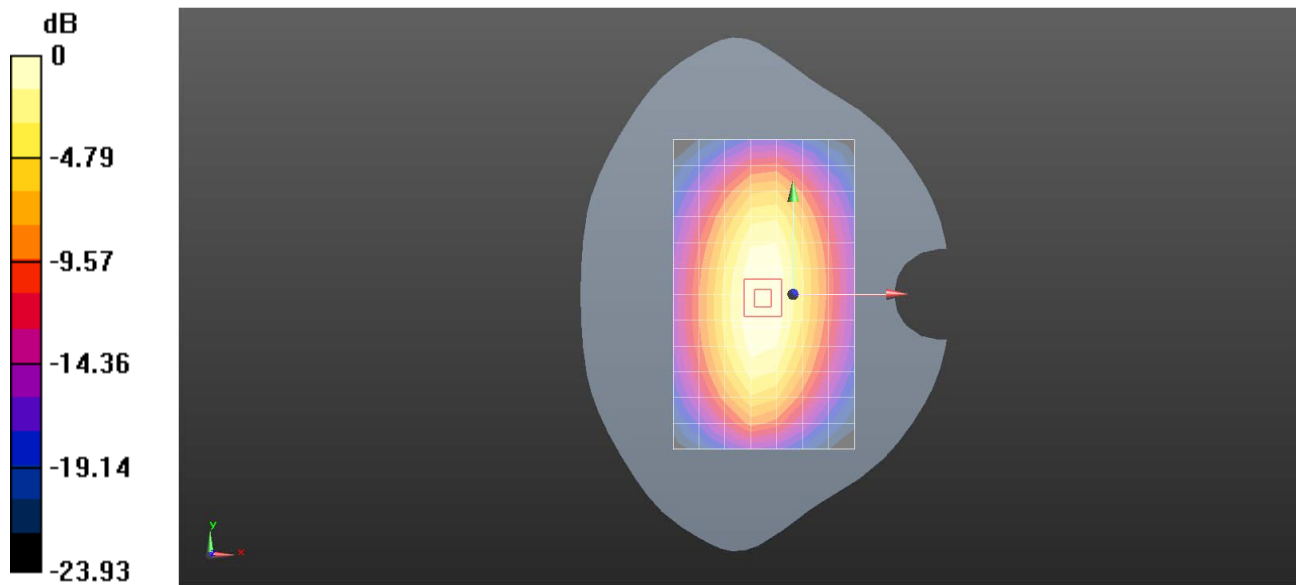
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 52.44 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.45 W/kg

**SAR(1 g) = 2.3 W/kg; SAR(10 g) = 1.52 W/kg**

Maximum value of SAR (measured) = 2.91 W/kg



0 dB = 2.55 W/kg = 4.06 dBW/kg

Test Laboratory: SGS-SAR Lab

**System Performance Check 1750MHz****DUT: D1750V2; Type: Dipole; Serial: 1038**

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

Medium: HSL1750; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.377$  S/m;  $\epsilon_r = 40.296$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.75, 8.75, 8.75); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (5x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.74 W/kg

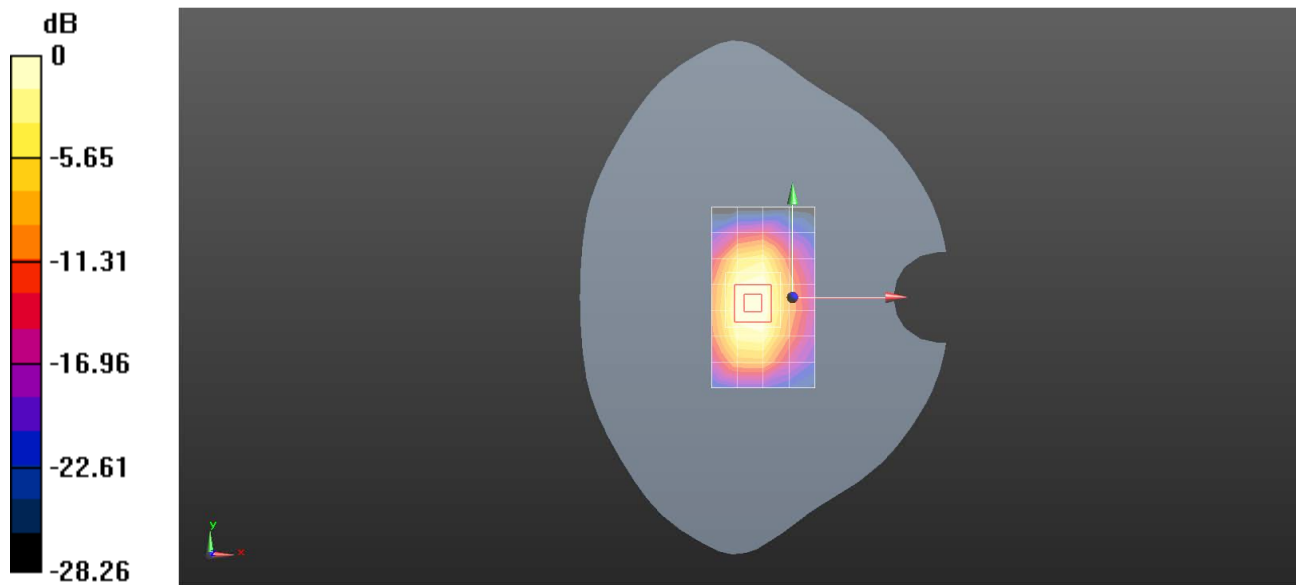
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 75.12 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 16.3 W/kg

**SAR(1 g) = 9.05 W/kg; SAR(10 g) = 4.85 W/kg**

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 9.74 W/kg = 9.88 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1950MHz

**DUT: D1950V3; Type: Dipole; Serial: 1218**

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

Medium: HSL1950; Medium parameters used:  $f = 1950$  MHz;  $\sigma = 1.444$  S/m;  $\epsilon_r = 38.554$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.41, 8.41, 8.41); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (8x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 12.4 W/kg

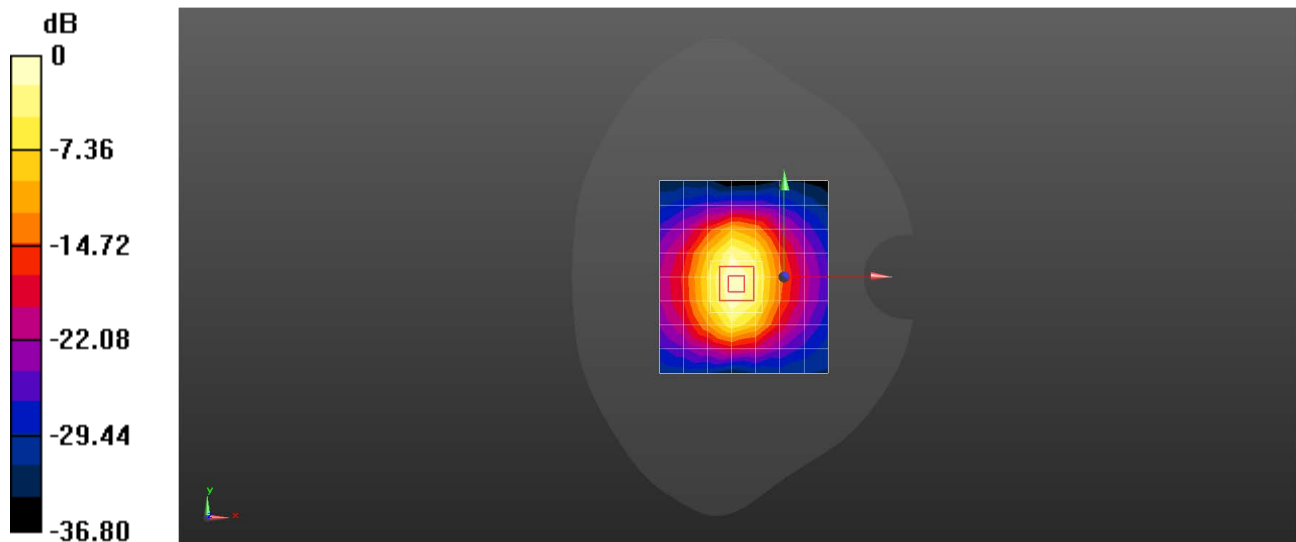
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 84.37 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 19.4 W/kg

**SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.34 W/kg**

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



0 dB = 12.4 W/kg = 10.93 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2300MHz

**DUT: D2300V2; Type: Dipole; Serial: 1124**

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: HSL2300; Medium parameters used:  $f = 2300$  MHz;  $\sigma = 1.641$  S/m;  $\epsilon_r = 39.009$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.23, 8.23, 8.23); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (6x8x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 19.7 W/kg

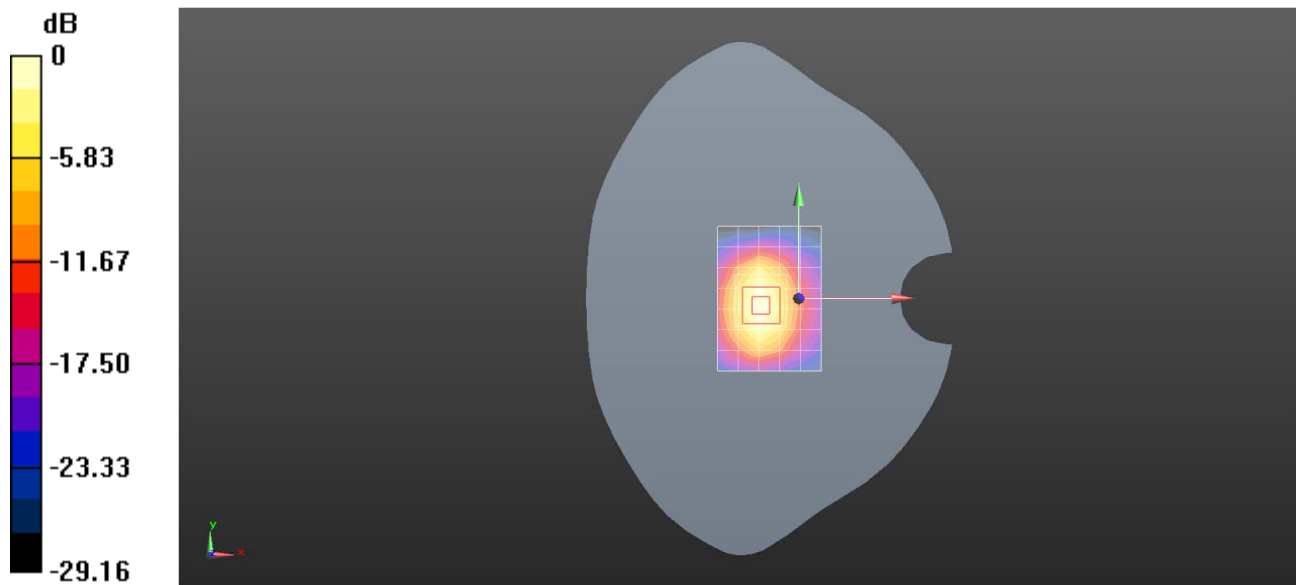
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.26 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 24.1 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6.33 W/kg**

Maximum value of SAR (measured) = 20.0 W/kg



0 dB = 19.7 W/kg = 12.95 dBW/kg



Test Laboratory: SGS-SAR Lab

**System Performance Check 2450MHz****DUT: D2450V2; Type: Dipole; Serial: 1038**

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

Medium: HSL2450; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.816$  S/m;  $\epsilon_r = 38.453$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.95, 7.95, 7.95); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (6x8x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 20.2 W/kg

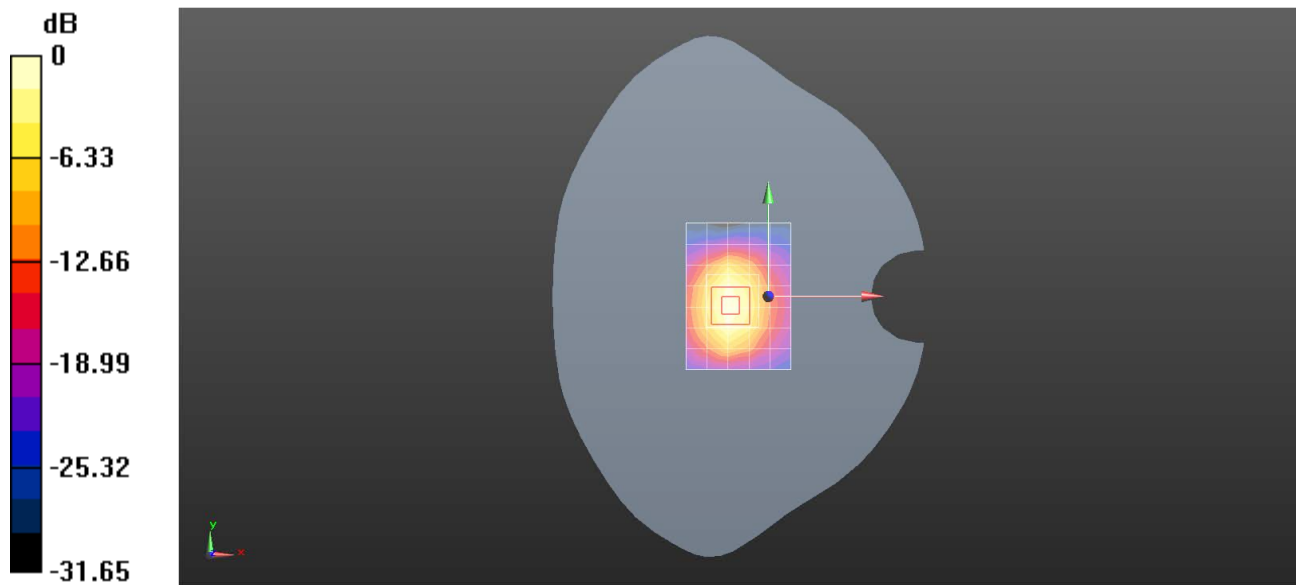
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.02 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 24.8 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6.14 W/kg**

Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.2 W/kg = 13.06 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2600MHz

**DUT: D2600V2; Type: Dipole ; Serial: 1187**

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

Medium: HSL2600;Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.979$  S/m;  $\epsilon_r = 37.884$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.68, 7.68, 7.68); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (6x8x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 22.7 W/kg

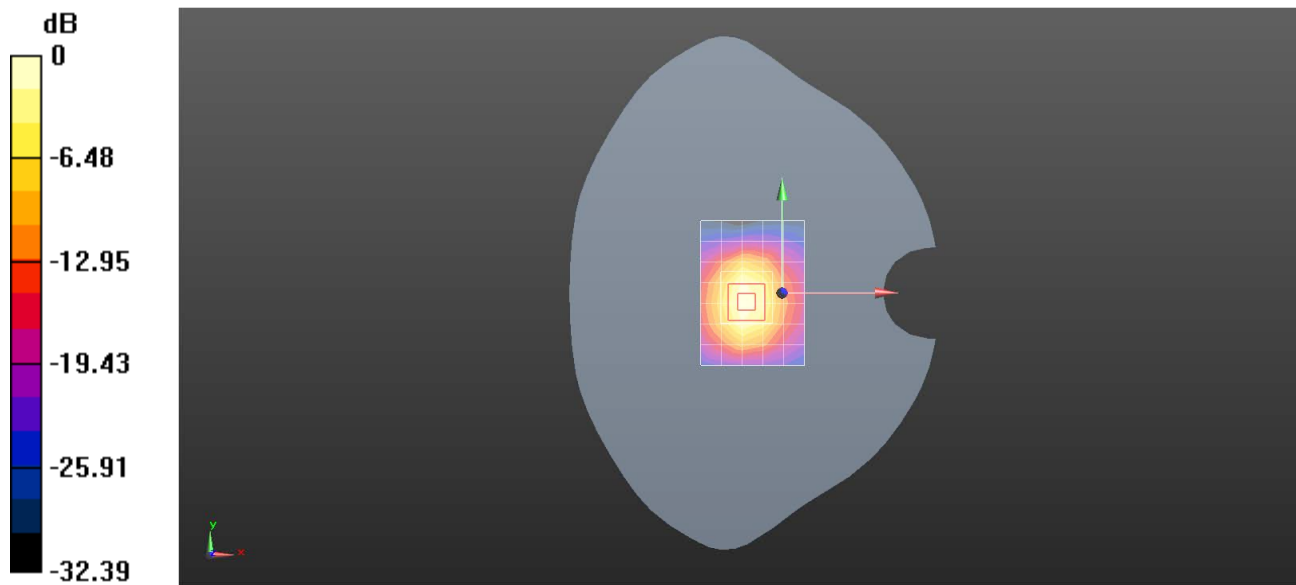
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.24 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.9 W/kg

**SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.81 W/kg**

Maximum value of SAR (measured) = 23.6 W/kg



0 dB = 22.7 W/kg = 13.55 dBW/kg

Test Laboratory: SGS-SAR Lab

**System Performance Check D5.25GHz****DUT: D5GHzV2; Type: Dipole; Serial: 1313**

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

Medium: HSL5250;Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.623$  S/m;  $\epsilon_r = 36.291$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.52, 5.52, 5.52); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (6x6x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 19.0 W/kg

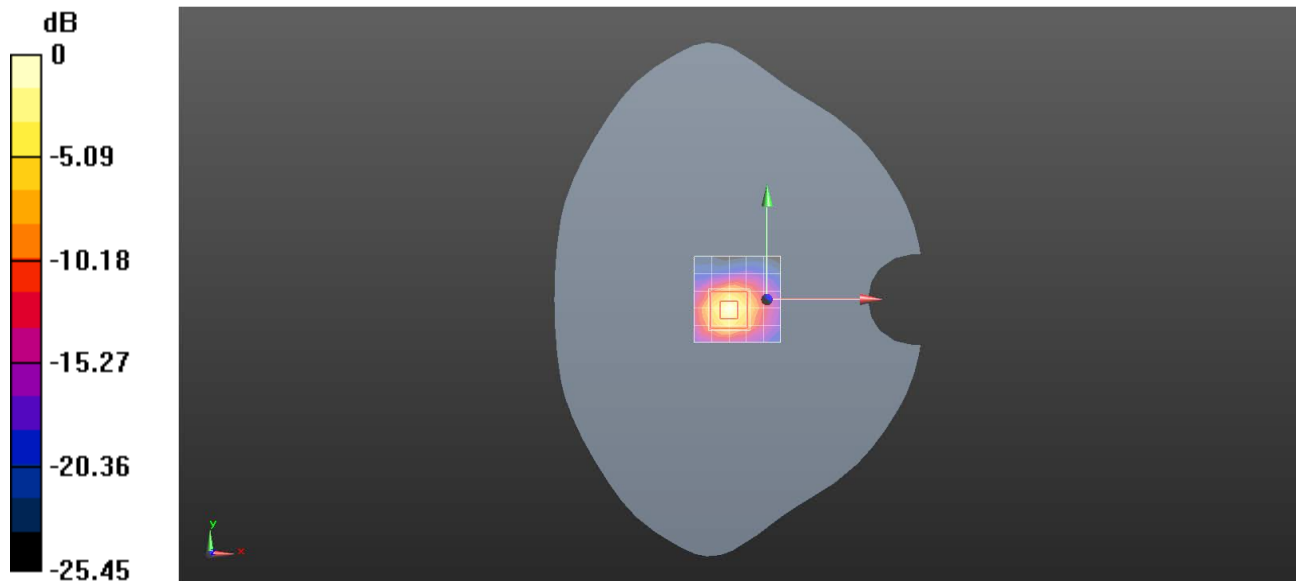
**Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm****(7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 48.95 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 28.7 W/kg

**SAR(1 g) = 7.98 W/kg; SAR(10 g) = 2.31 W/kg**

Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.0 W/kg = 12.78 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check D5.6GHz

**DUT: D5GHzV2; Type: Dipole; Serial: 1313**

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

Medium: HSL5600; Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.088$  S/m;  $\epsilon_r = 34.919$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.95, 4.95, 4.95); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 21.3 W/kg

**Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm**

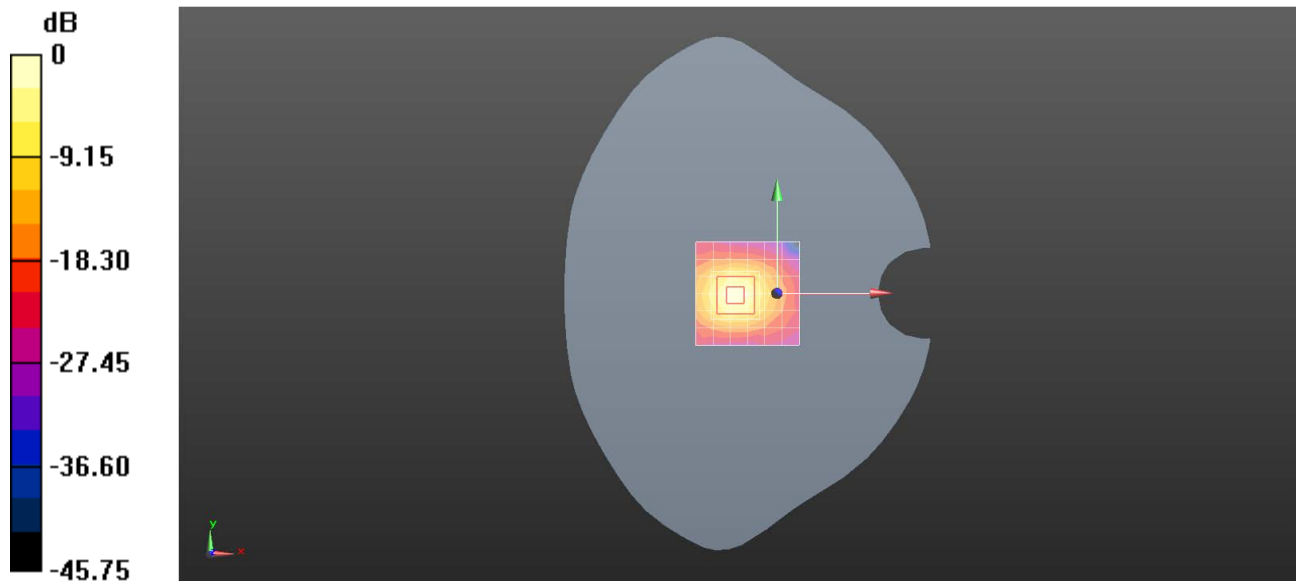
**(8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 55.24 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 33.5 W/kg

**SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.21 W/kg**

Maximum value of SAR (measured) = 18.8 W/kg



0 dB = 21.3 W/kg = 13.29 dBW/kg

Test Laboratory: SGS-SAR Lab

**System Performance Check D5.75GHz****DUT: D5GHzV2; Type: Dipole; Serial: 1313**

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

Medium: HSL5750;Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.323$  S/m;  $\epsilon_r = 34.656$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.05, 5.05, 5.05); Calibrated: 2023/2/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2022/11/18
- Phantom: SAM 7; Type: SAM; Serial: 1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

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

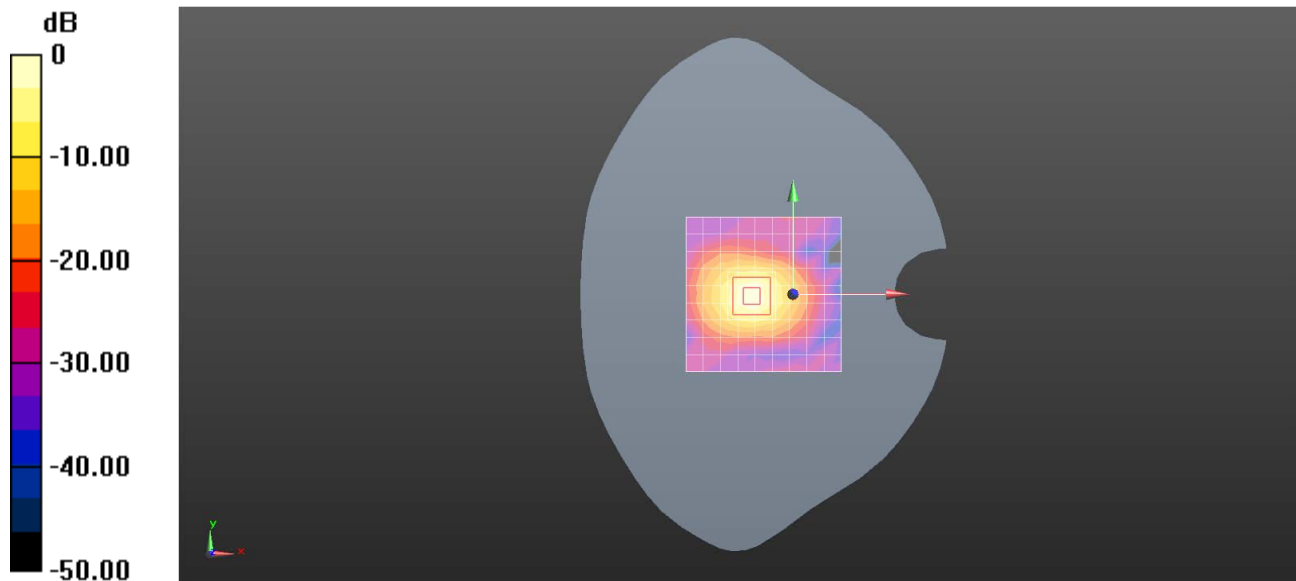
**Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm****(8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.20 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 34.8 W/kg

**SAR(1 g) = 7.83 W/kg; SAR(10 g) = 2.22 W/kg**

Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 15.8 W/kg = 12.00 dBW/kg