

# Appendix A

## Detailed System Check Results

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Test Laboratory: SGS-SAR Lab

## System Performance Check 750 MHz Head

**DUT: D750V3; Type: Dipole; Serial: 1210**

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

Medium: HSL750; Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.888 \text{ S/m}$ ;  $\epsilon_r = 42.701$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.33, 10.33, 10.33); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP: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) = 2.68 W/kg

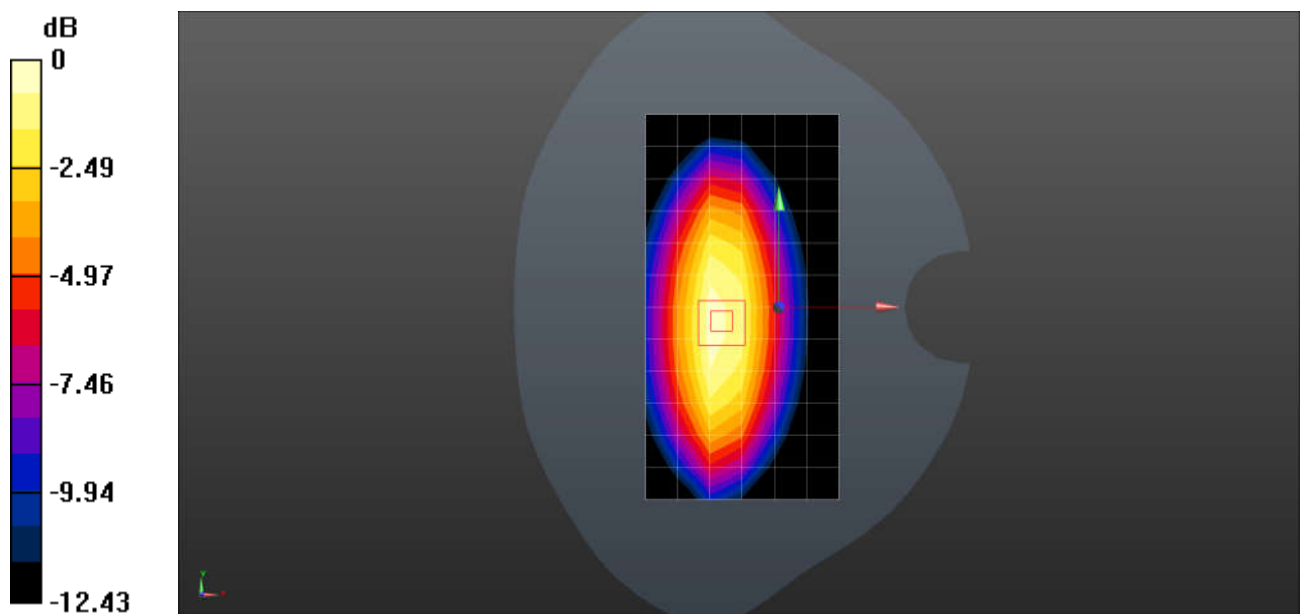
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 44.95 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: Dipole; Serial: 4d161**

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

Medium: HSL835; Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.898 \text{ S/m}$ ;  $\epsilon_r = 42.684$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.93, 9.93, 9.93); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=15mm, Pin=250mW/Area Scan (8x13x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (measured) =  $3.01 \text{ W/kg}$

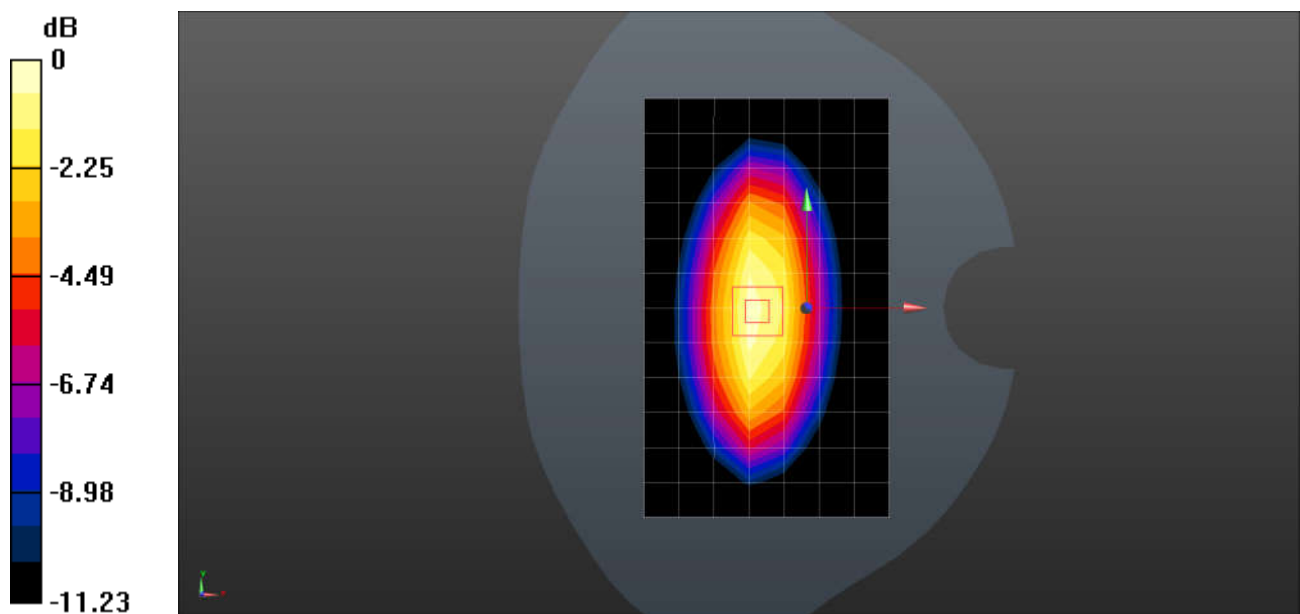
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $53.74 \text{ V/m}$ ; Power Drift =  $-0.09 \text{ dB}$

Peak SAR (extrapolated) =  $3.82 \text{ W/kg}$

**SAR(1 g) =  $2.46 \text{ W/kg}$ ; SAR(10 g) =  $1.61 \text{ W/kg}$**

Maximum value of SAR (measured) =  $3.22 \text{ W/kg}$



Test Laboratory: SGS-SAR Lab

## System Performance Check 1750 MHz Head

**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;  $\sigma = 1.341$  S/m;  $\epsilon_r = 39.144$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.65, 8.65, 8.65); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 9.88 W/kg

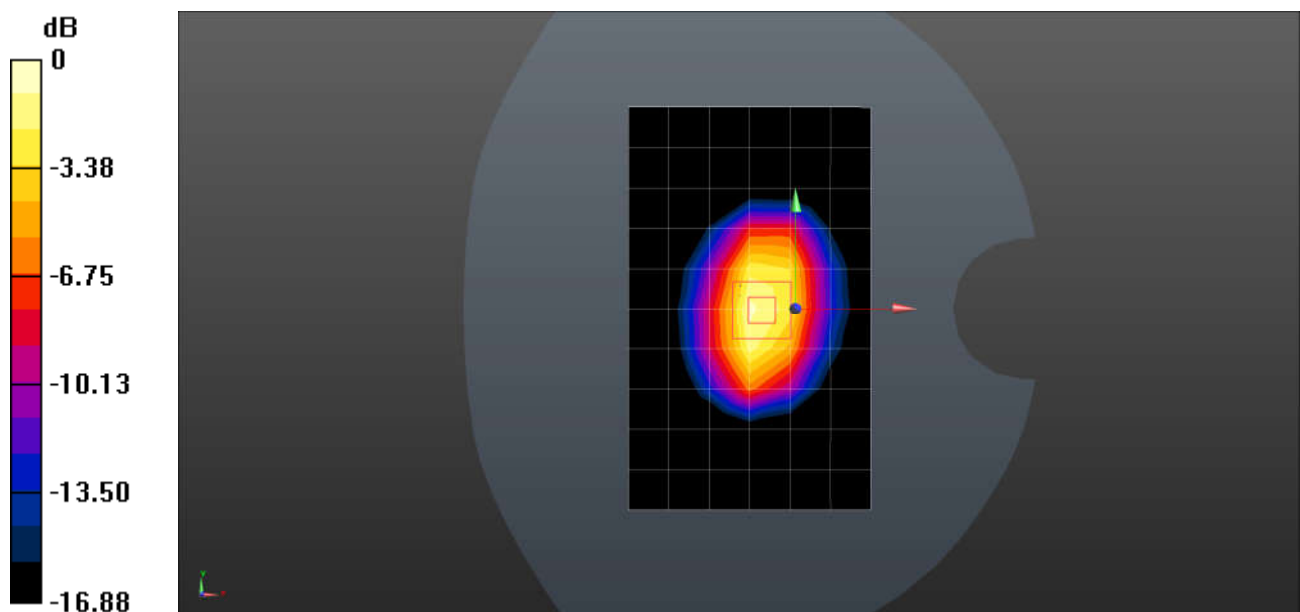
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 78.14 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 14.6 W/kg

**SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.67 W/kg**

Maximum value of SAR (measured) = 11.8 W/kg



0 dB = 11.8 W/kg = 10.72 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1950 MHz Head

**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;  $\sigma = 1.454$  S/m;  $\epsilon_r = 38.906$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.31, 8.31, 8.31); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP: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) = 13.8 W/kg

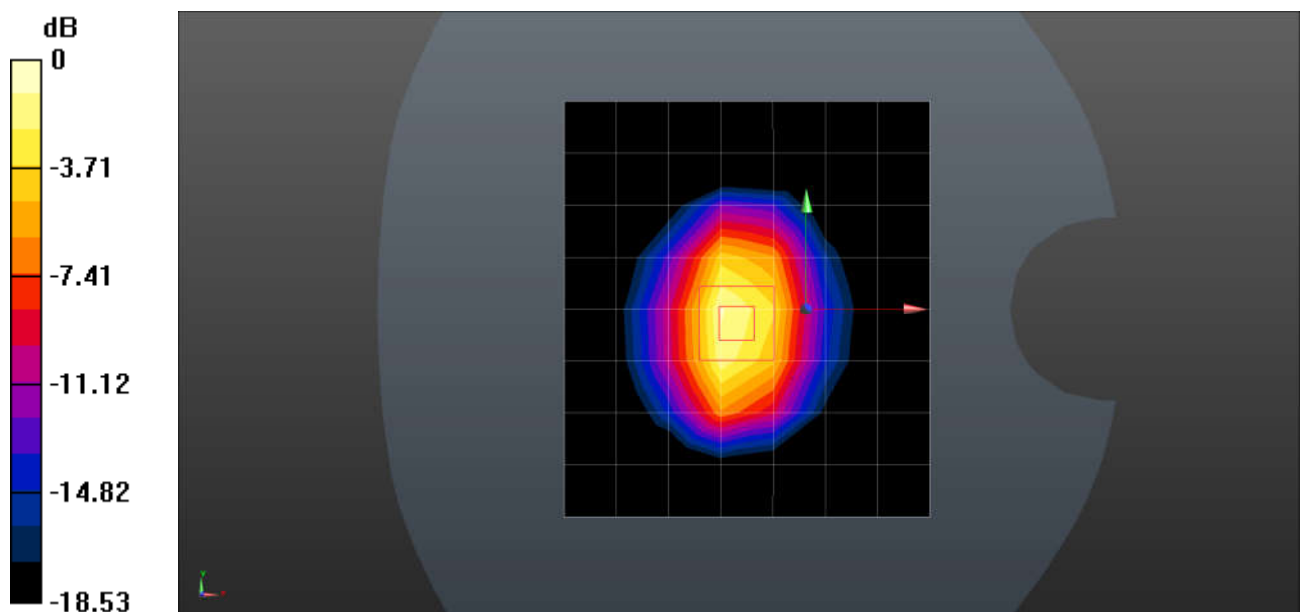
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.23 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 20.8 W/kg

**SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.36 W/kg**

Maximum value of SAR (measured) = 17.5 W/kg



0 dB = 17.5 W/kg = 12.43 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2300MHz Head

**DUT: D2300V2; Type: Dipole; Serial: 1072**

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

Medium: HSL2300; Medium parameters used:  $f = 2300$  MHz;  $\sigma = 1.643$  S/m;  $\epsilon_r = 40.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.06, 8.06, 8.06); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (9x11x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 19.5 W/kg

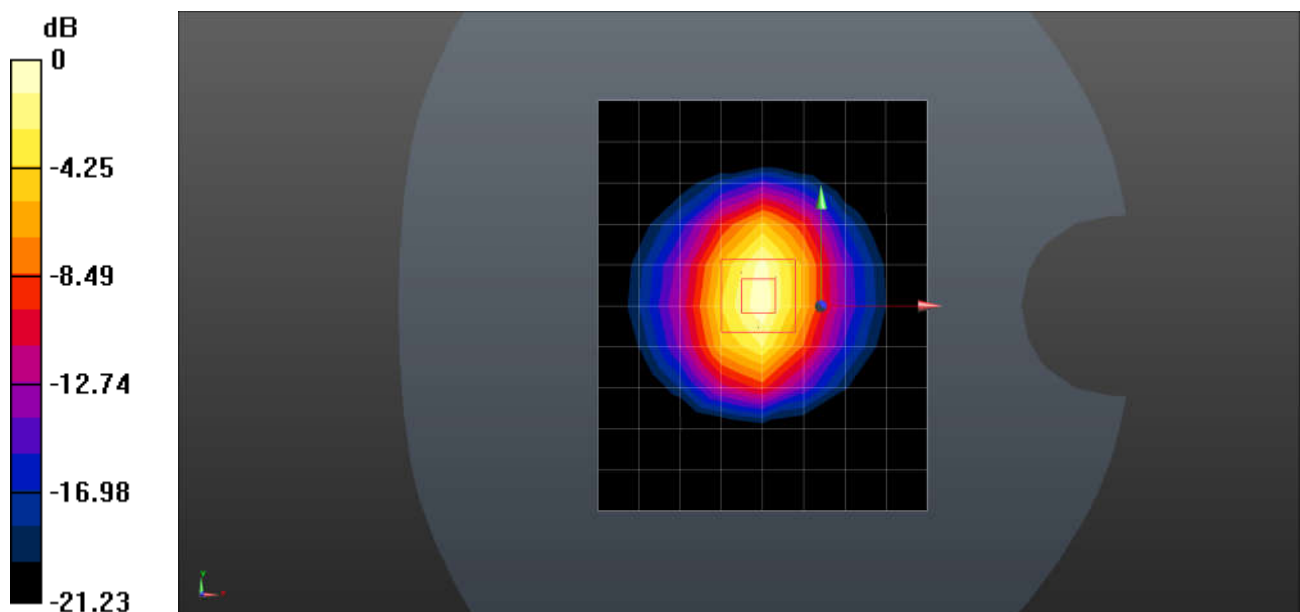
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.92 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 24.8 W/kg

**SAR(1 g) = 12.3 W/kg; SAR(10 g) = 5.83 W/kg**

Maximum value of SAR (measured) = 20.3 W/kg



Test Laboratory: SGS-SAR Lab

## System Performance Check 2450MHz Head

**DUT: D2450V2; Type: Dipole; Serial: 922**

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

Medium: HSL2450; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 40.269$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.8, 7.8, 7.8); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (9x15x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 20.1 W/kg

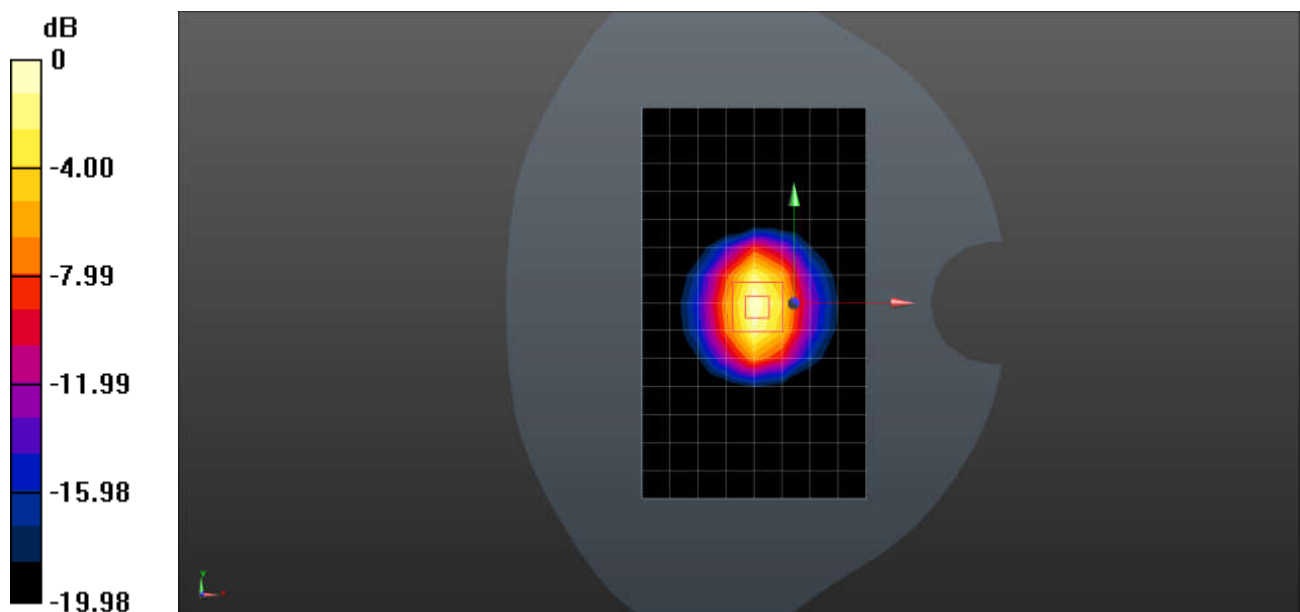
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.33 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 25.3 W/kg

**SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.83 W/kg**

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



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

Test Laboratory: SGS-SAR Lab

## System Performance Check 2600MHz Head

**DUT: D2600V2; Type: Dipole; Serial: 1180**

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

Medium: HSL2600; Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.942$  S/m;  $\epsilon_r = 38.731$   $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.64, 7.64, 7.64); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (9x15x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 23.4 W/kg

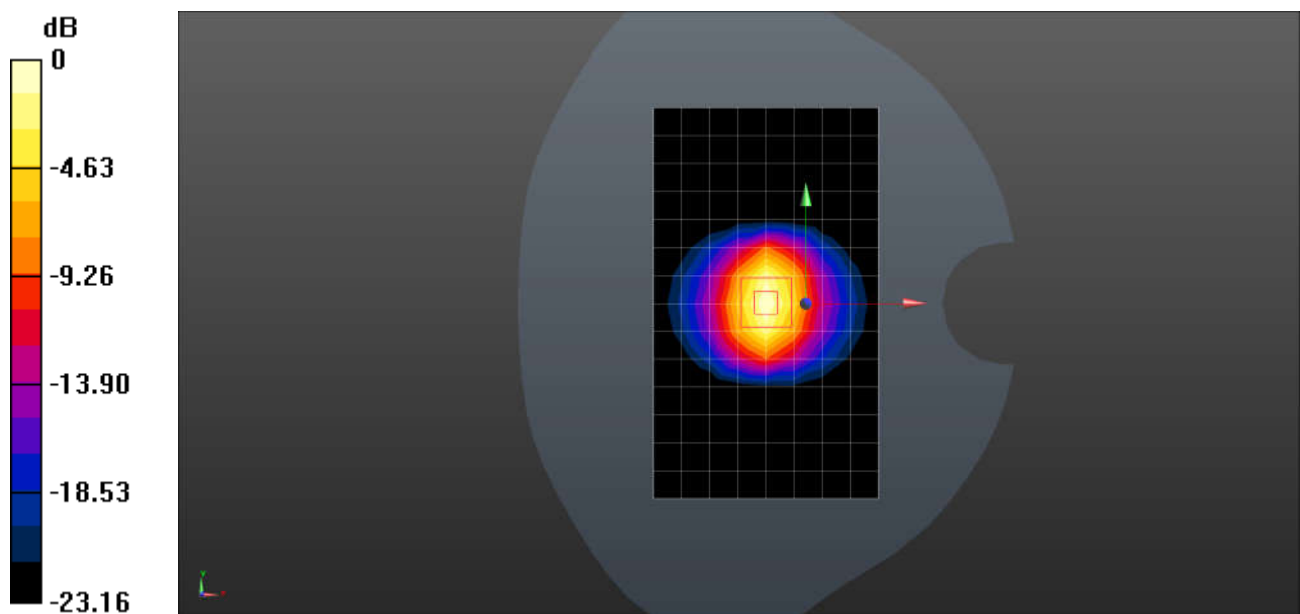
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.17 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 28.6 W/kg

**SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.22 W/kg**

Maximum value of SAR (measured) = 23.3 W/kg



0 dB = 23.3 W/kg = 13.67 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 5.25GHz Head

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

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

Medium: HSL5G; Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.711$  S/m;  $\epsilon_r = 35.489$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(5.6, 5.6, 5.6); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.5 W/kg

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

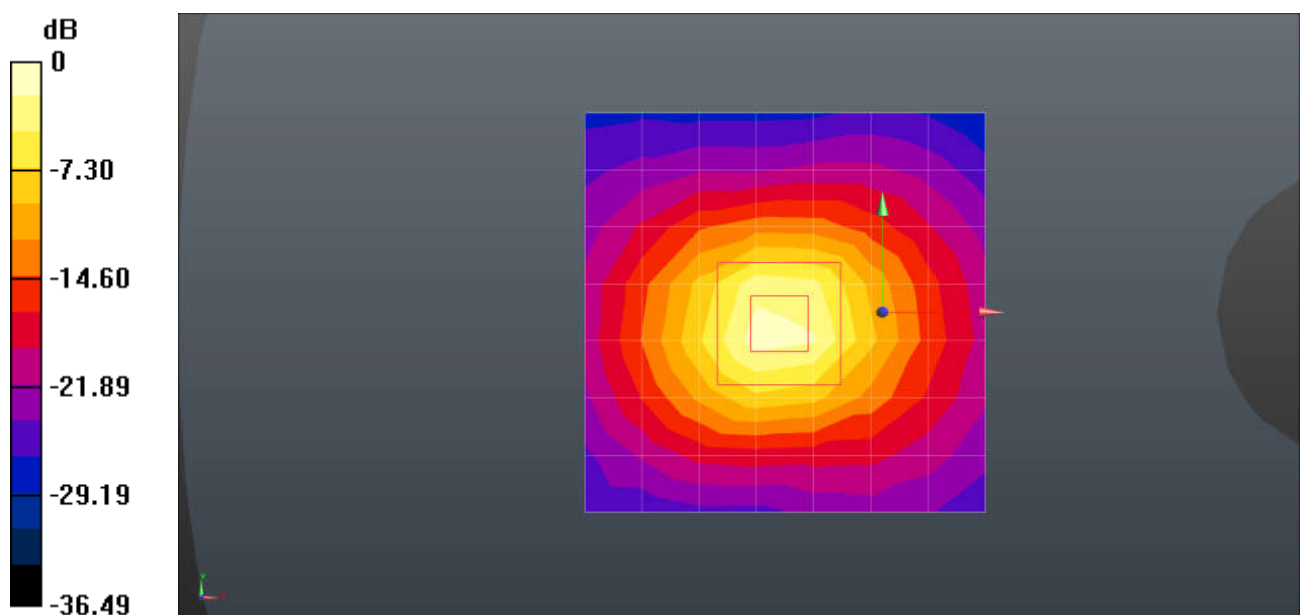
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 70.11 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 34.2 W/kg

**SAR(1 g) = 7.27 W/kg; SAR(10 g) = 2.06 W/kg**

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



0 dB = 20.0 W/kg = 13.01 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 5.6GHz Head

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

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

Medium: HSL5G; Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.184$  S/m;  $\epsilon_r = 34.816$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(5.02, 5.02, 5.02); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (8x8x1):** Measurement grid:

dx=10mm, dy=10mm

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

**Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement

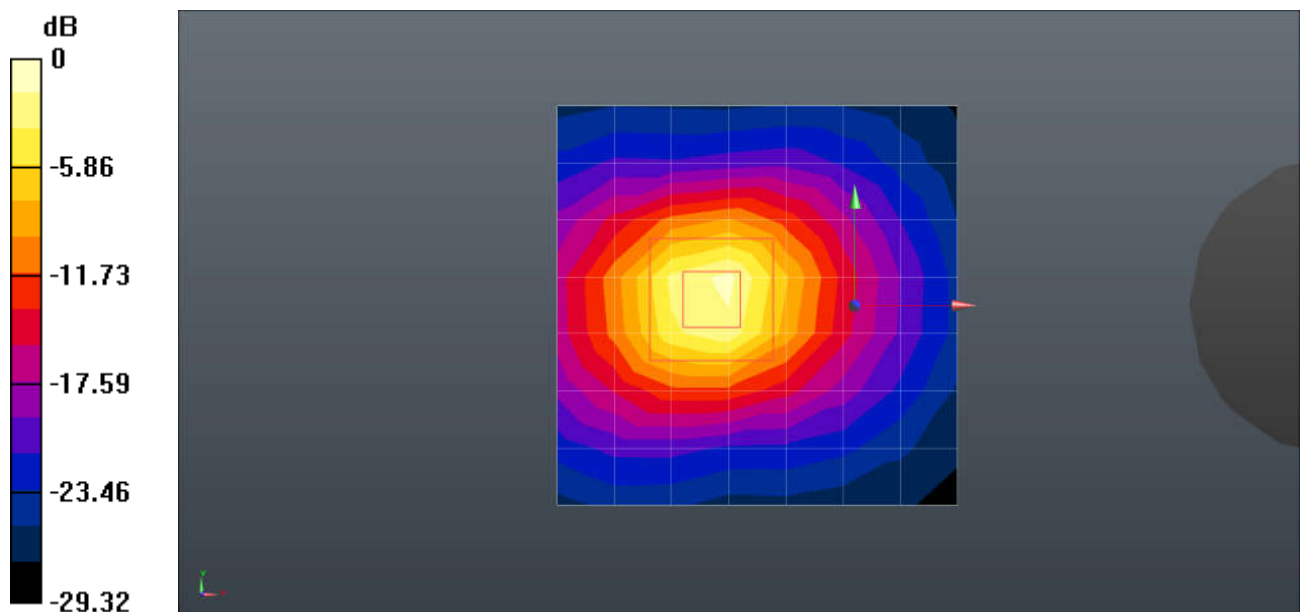
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.32 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 36.7 W/kg

**SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.27 W/kg**

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



0 dB = 21.3 W/kg = 13.28 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 5.75GHz Head

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

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

Medium: HSL5G; Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.367$  S/m;  $\epsilon_r = 34.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(5.11, 5.11, 5.11); Calibrated: 2023-06-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2023-06-05
- Phantom: SAM 7; Type: QD000P40CD; Serial: TP:1702
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**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

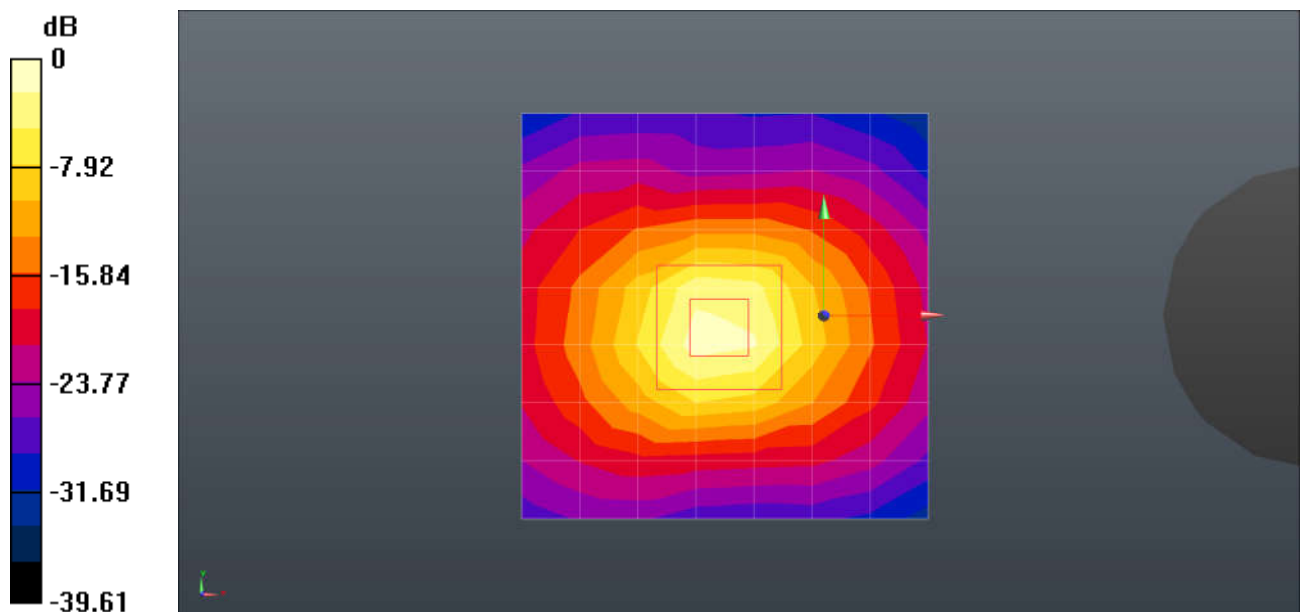
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.42 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 39.8 W/kg

**SAR(1 g) = 7.76 W/kg; SAR(10 g) = 2.16 W/kg**

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



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