

# 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:  $f = 750$  MHz;  $\sigma = 0.883$  S/m;  $\epsilon_r = 42.692$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.4, 10.4, 10.4); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 3.04 W/kg

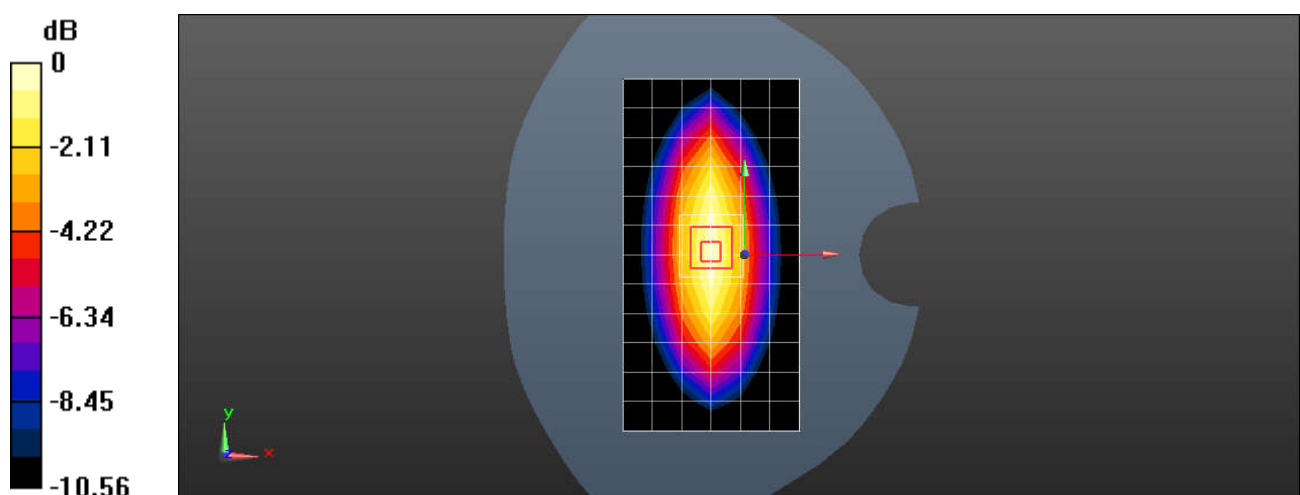
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.43 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.62 W/kg

**SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.48 W/kg**

Maximum value of SAR (measured) = 3.09 W/kg



0 dB = 3.09 W/kg = 4.90 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 835 MHz Head

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

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

Medium: HSL835; Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.921$  S/m;  $\epsilon_r = 41.36$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.02, 10.02, 10.02); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 3.09 W/kg

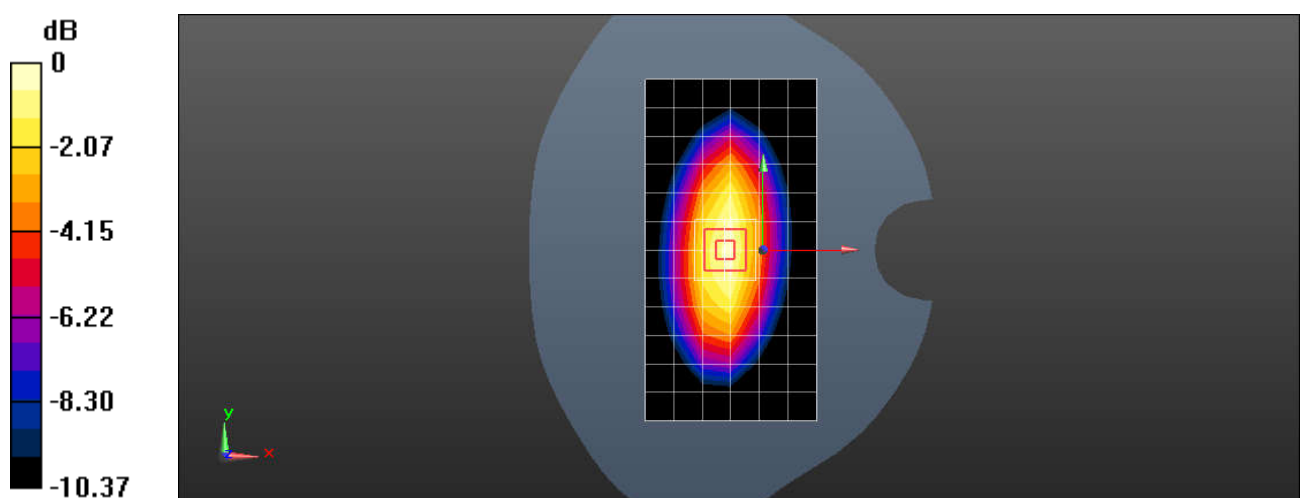
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.59 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 3.79 W/kg

**SAR(1 g) = 2.55 W/kg; SAR(10 g) = 1.68 W/kg**

Maximum value of SAR (measured) = 3.22 W/kg



0 dB = 3.22 W/kg = 5.08 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1750 MHz Head

**DUT: D1750V2; Type: Dipole; Serial: 1105**

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

Medium: HSL1750; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.376$  S/m;  $\epsilon_r = 38.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.5, 8.5, 8.5); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (6x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 12.1 W/kg

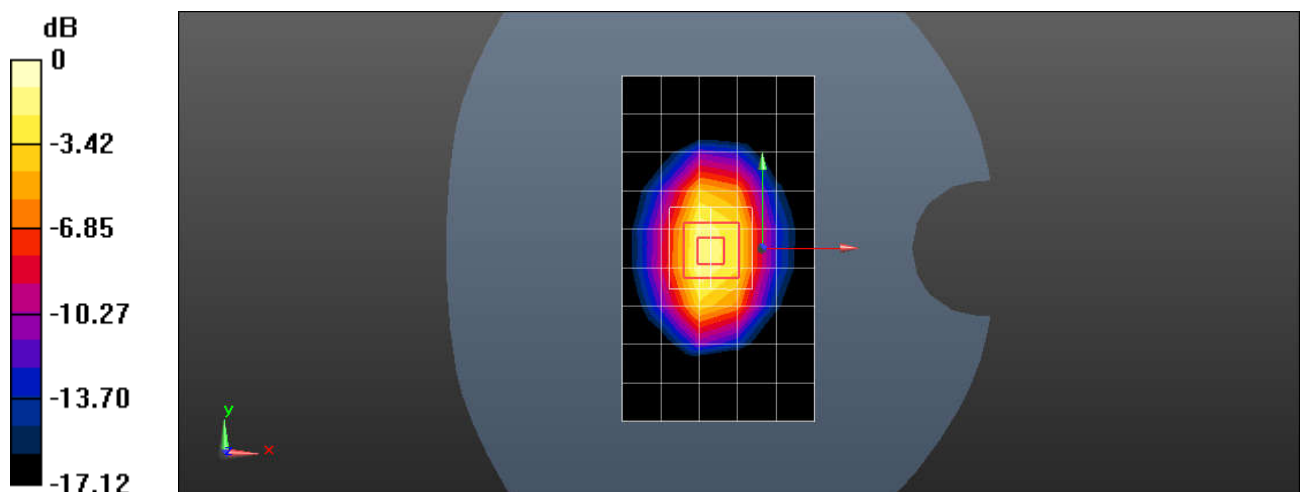
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.00 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.5 W/kg

**SAR(1 g) = 9.41 W/kg; SAR(10 g) = 5.01 W/kg**

Maximum value of SAR (measured) = 15.6 W/kg



0 dB = 15.6 W/kg = 11.93 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1900 MHz Head

**DUT: D1900V2; Type: Dipole; Serial: 5d114**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.453$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1200$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.33, 8.33, 8.33); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- 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) = 14.4 W/kg

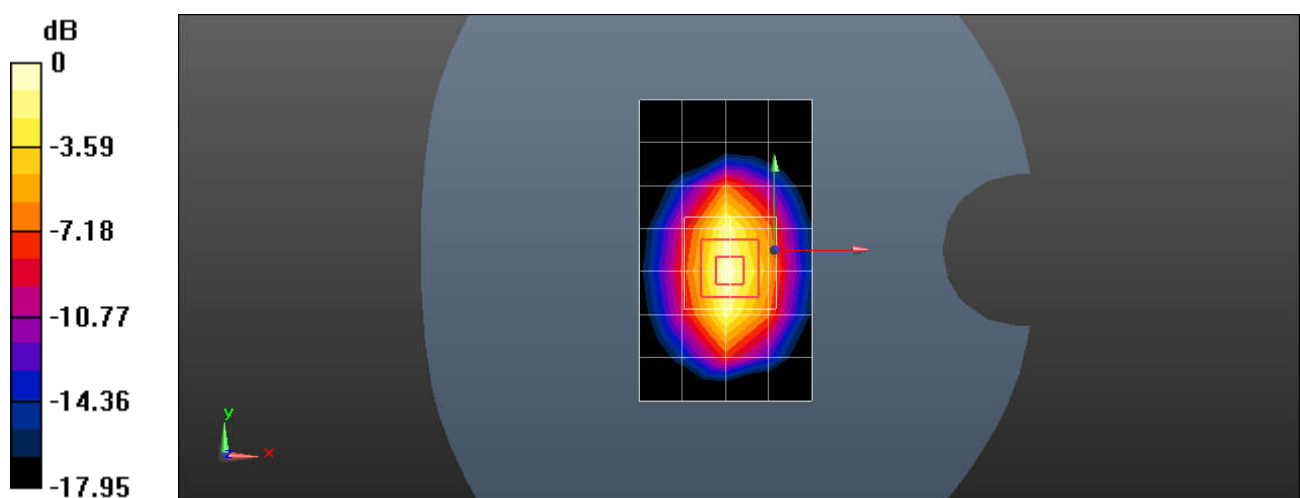
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.56 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.39 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 2300 MHz 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;  $\sigma = 1.689$  S/m;  $\epsilon_r = 39.625$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.06, 8.06, 8.06); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- 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) = 20.1 W/kg

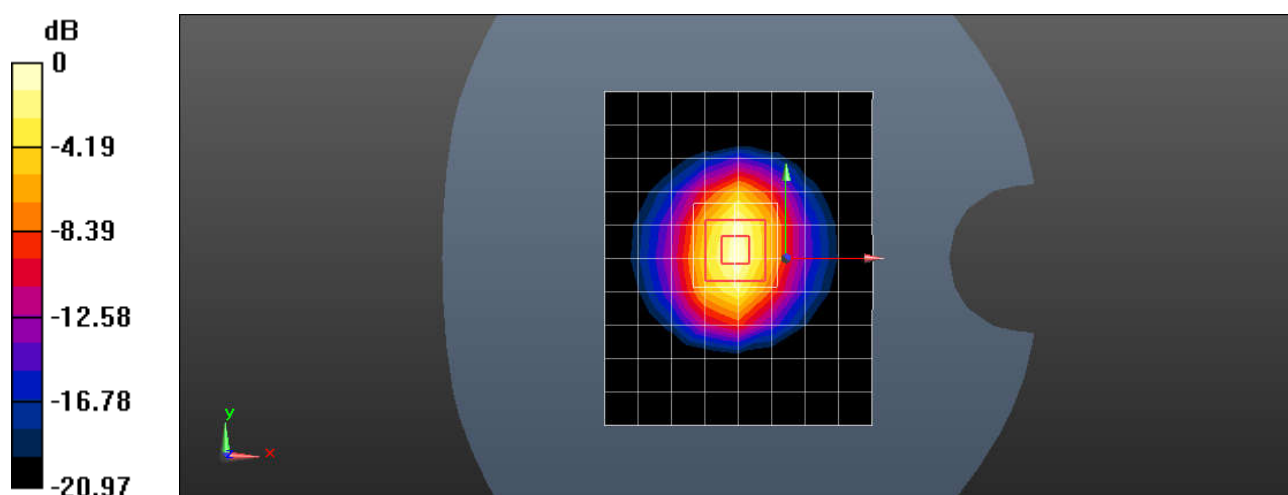
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.06 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 25.6 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6.1 W/kg**

Maximum value of SAR (measured) = 20.9 W/kg



0 dB = 20.9 W/kg = 13.20 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2450 MHz Head

**DUT: D2450V2; Type: Dipole; Serial: 1038**

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

Medium: HSL2450; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.78$  S/m;  $\epsilon_r = 38.105$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(7.77, 7.77, 7.77); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (9x10x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 21.0 W/kg

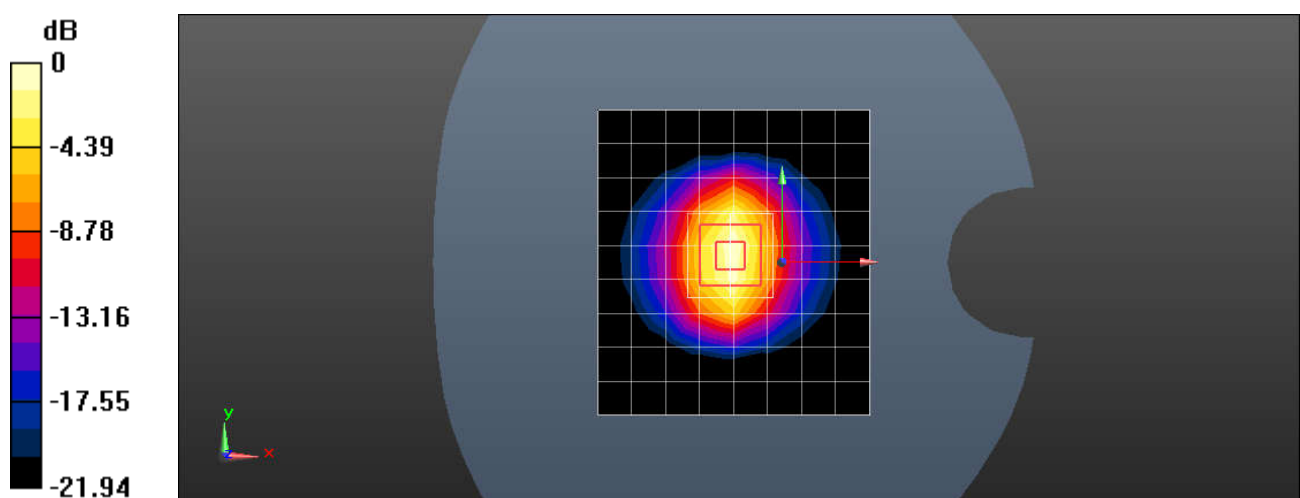
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.88 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 26.6 W/kg

**SAR(1 g) = 13 W/kg; SAR(10 g) = 6.01 W/kg**

Maximum value of SAR (measured) = 21.7 W/kg



0 dB = 21.7 W/kg = 13.36 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;  $\sigma = 4.747$  S/m;  $\epsilon_r = 35.548$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.55, 5.55, 5.55); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 19.4 W/kg

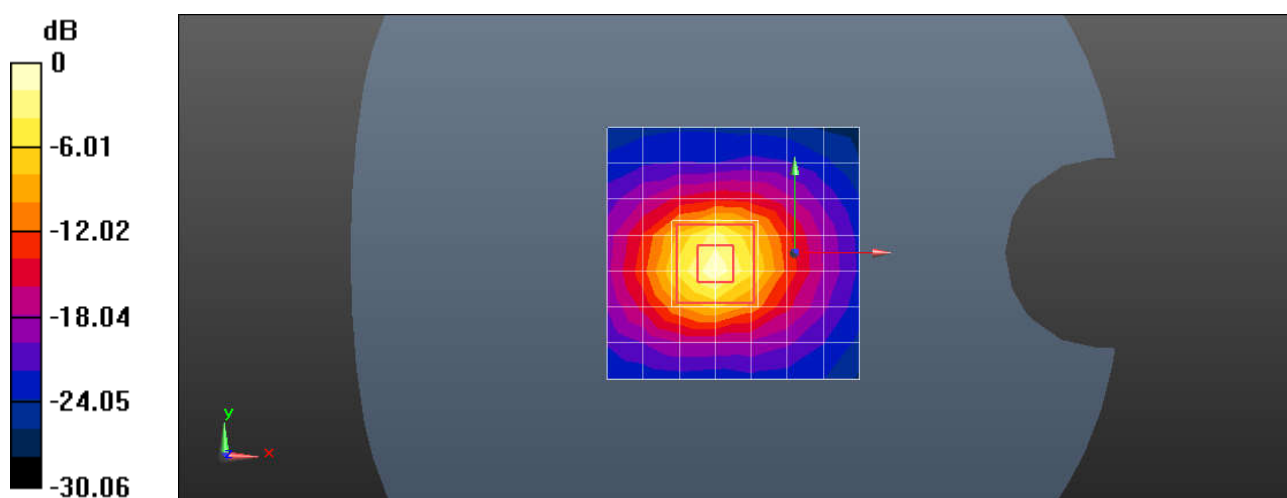
**Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 32.6 W/kg

**SAR(1 g) = 8.01 W/kg; SAR(10 g) = 2.31 W/kg**

Maximum value of SAR (measured) = 20.5 W/kg



0 dB = 20.5 W/kg = 13.12 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;  $\sigma = 5.135$  S/m;  $\epsilon_r = 34.596$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5, 5, 5); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 15.7 W/kg

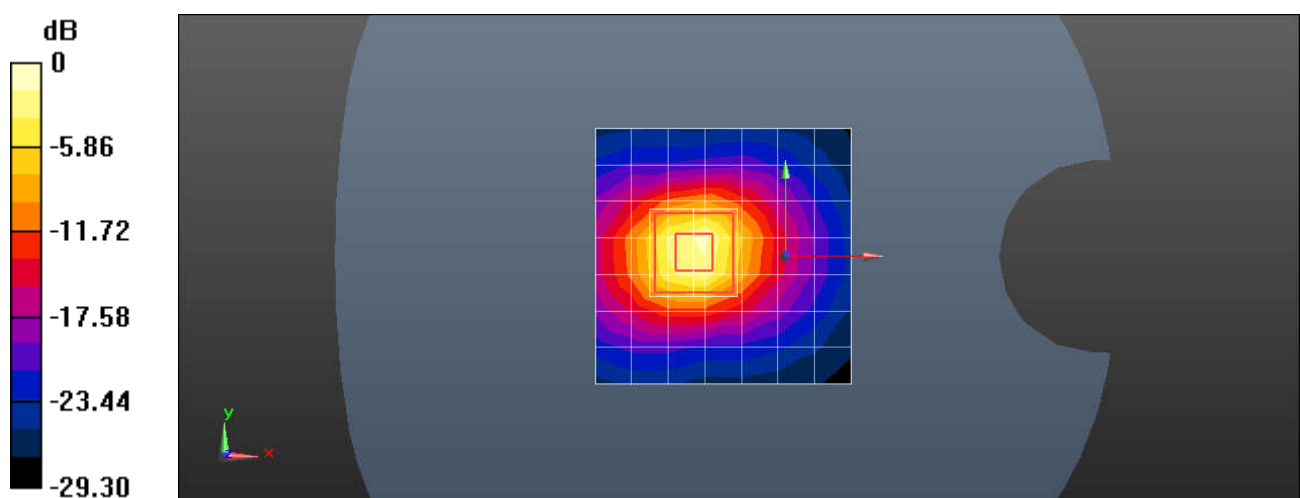
**Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.32 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 36.5 W/kg

**SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.26 W/kg**

Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 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;  $\sigma = 5.307$  S/m;  $\epsilon_r = 34.232$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.1, 5.1, 5.1); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2021-06-22
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=100mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 15.5 W/kg

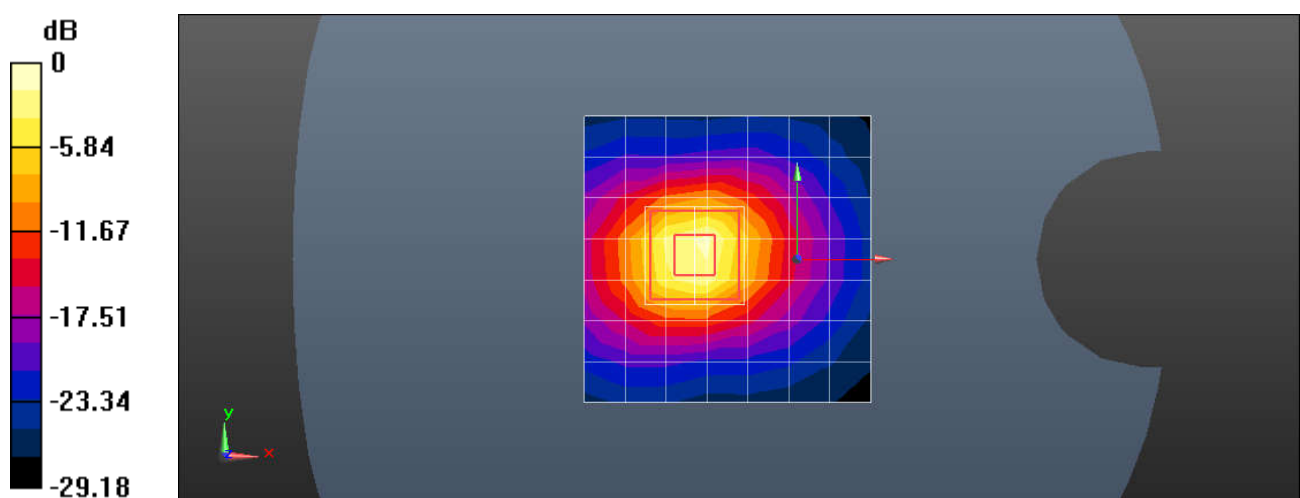
**Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.88 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 35.0 W/kg

**SAR(1 g) = 7.88 W/kg; SAR(10 g) = 2.24 W/kg**

Maximum value of SAR (measured) = 20.9 W/kg



0 dB = 20.9 W/kg = 13.20 dBW/kg