

# Appendix A

## Detailed System Check Results

|                                        |
|----------------------------------------|
| 1. System Performance Check            |
| System Performance Check 750 MHz Head  |
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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:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.874 \text{ S/m}$ ;  $\epsilon_r = 41.049$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.1, 10.1, 10.1) ; Calibrated: 2022-05-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM 5; Type: SAM; Serial: 1481
- 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) =  $2.53 \text{ W/kg}$

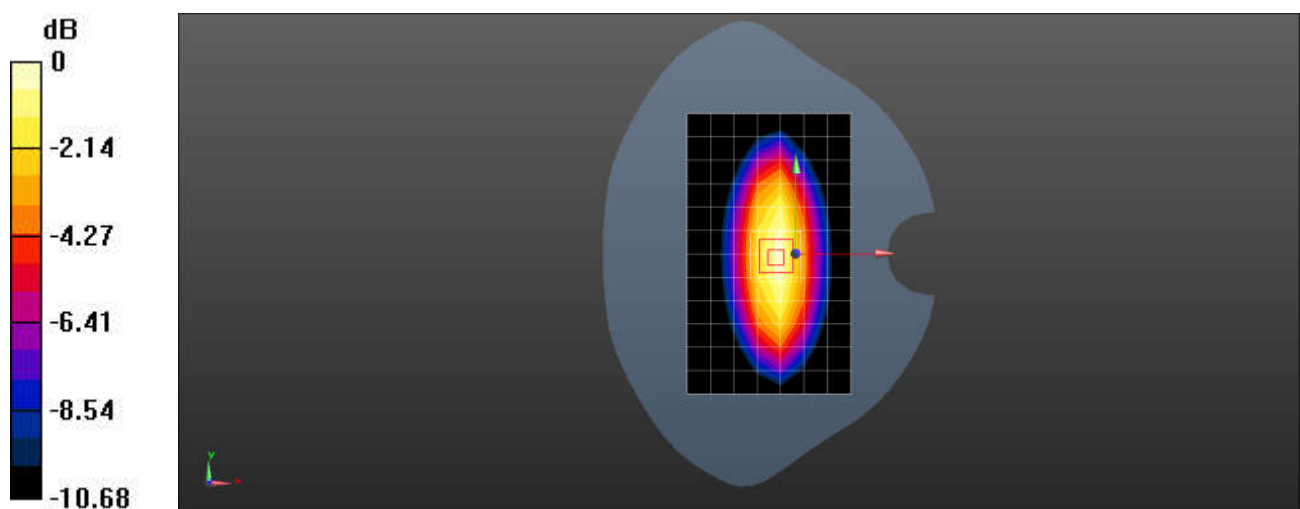
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $47.83 \text{ V/m}$ ; Power Drift =  $-0.03 \text{ dB}$

Peak SAR (extrapolated) =  $3.06 \text{ W/kg}$

**SAR(1 g) =  $1.95 \text{ W/kg}$ ; SAR(10 g) =  $1.27 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.66 \text{ W/kg}$



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:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.894 \text{ S/m}$ ;  $\epsilon_r = 41.606$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.8, 9.8, 9.8) ; Calibrated: 2022-05-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM 5; Type: SAM; Serial: 1481
- 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) =  $2.82 \text{ W/kg}$

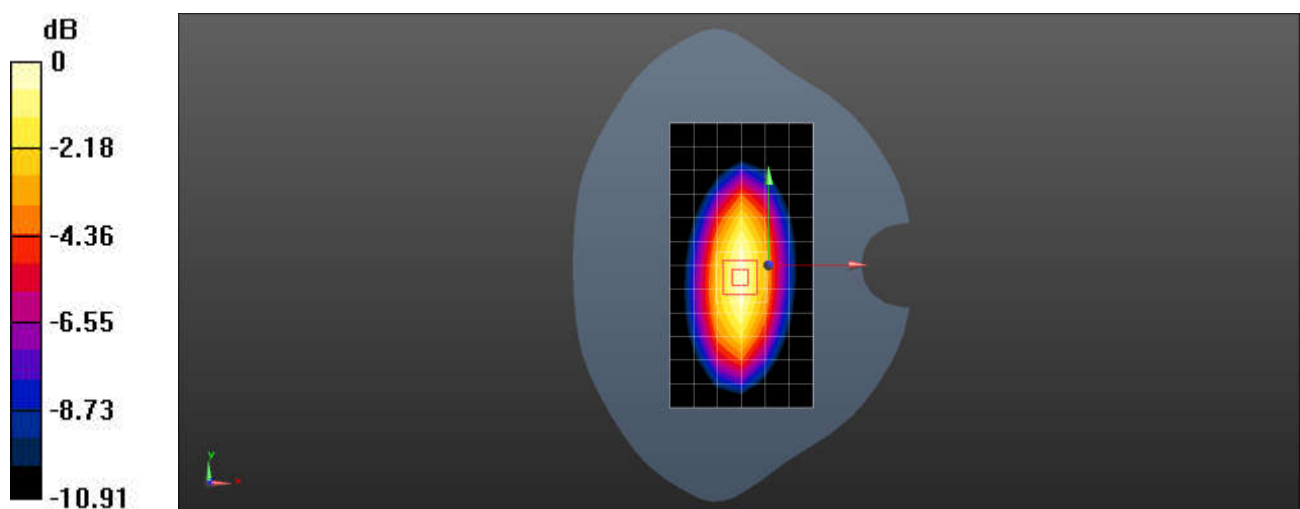
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $51.67 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $3.40 \text{ W/kg}$

**SAR(1 g) =  $2.26 \text{ W/kg}$ ; SAR(10 g) =  $1.47 \text{ W/kg}$**

Maximum value of SAR (measured) =  $2.87 \text{ W/kg}$



0 dB =  $2.87 \text{ W/kg}$  =  $4.58 \text{ dBW/kg}$

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;  $\sigma = 1.305$  S/m;  $\epsilon_r = 40.304$ ;  $\rho = 1000$  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 Sn1374; Calibrated: 2021-11-05
- Phantom: SAM 1; Type: SAM; Serial: 1410
- 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) = 11.5 W/kg

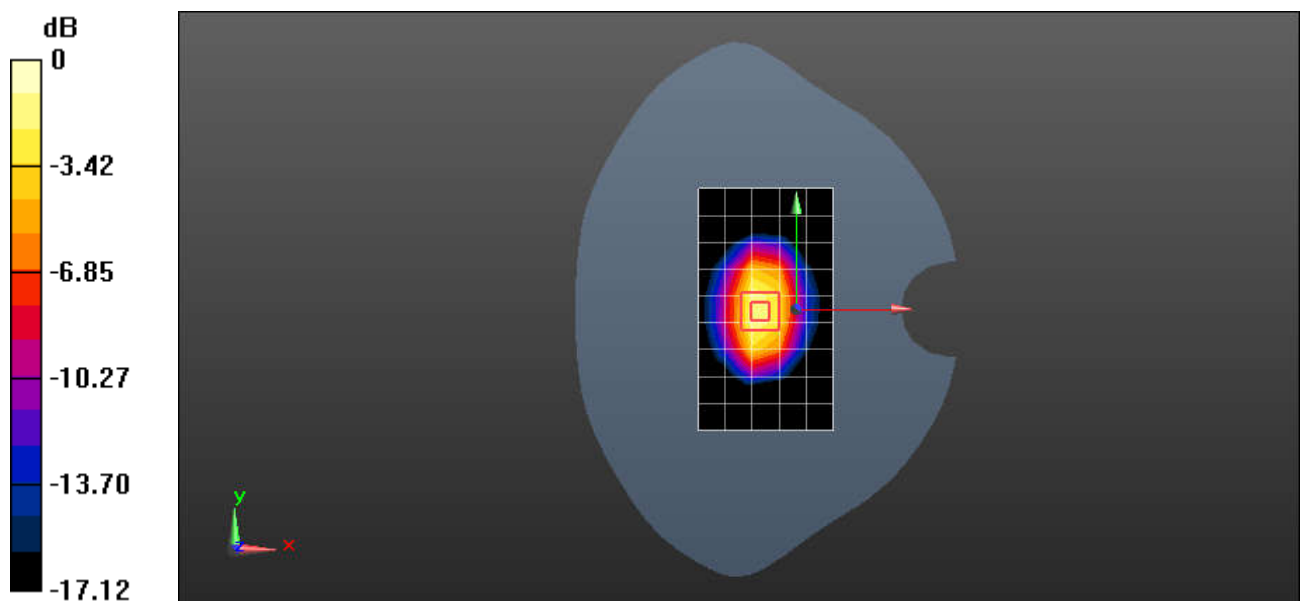
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 9.5 W/kg; SAR(10 g) = 5.04 W/kg**

Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.8 W/kg = 11.70 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;  $\sigma = 1.404$  S/m;  $\epsilon_r = 40.118$ ;  $\rho = 1200$  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 Sn1374; Calibrated: 2021-11-05
- Phantom: SAM 1; Type: SAM; Serial: 1410
- 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) = 14.0 W/kg

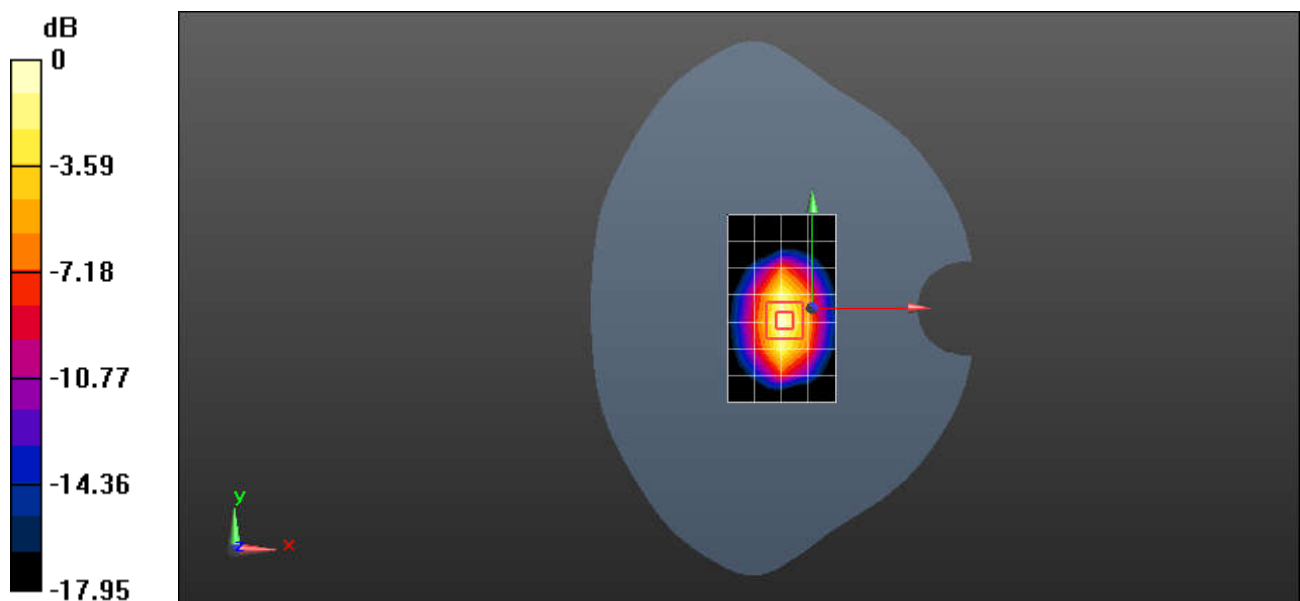
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

Peak SAR (extrapolated) = 16.7 W/kg

**SAR(1 g) = 9.57 W/kg; SAR(10 g) = 5.2 W/kg**

Maximum value of SAR (measured) = 14.1 W/kg



0 dB = 14.1 W/kg = 11.49 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 2450MHz 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;  $\sigma = 1.843$  S/m;  $\epsilon_r = 38.858$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.67, 7.67, 7.67) ; Calibrated: 2022-05-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM 5; Type: SAM; Serial: 1481
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (10x10x1):** Measurement grid: dx=12mm, dy=12mm

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

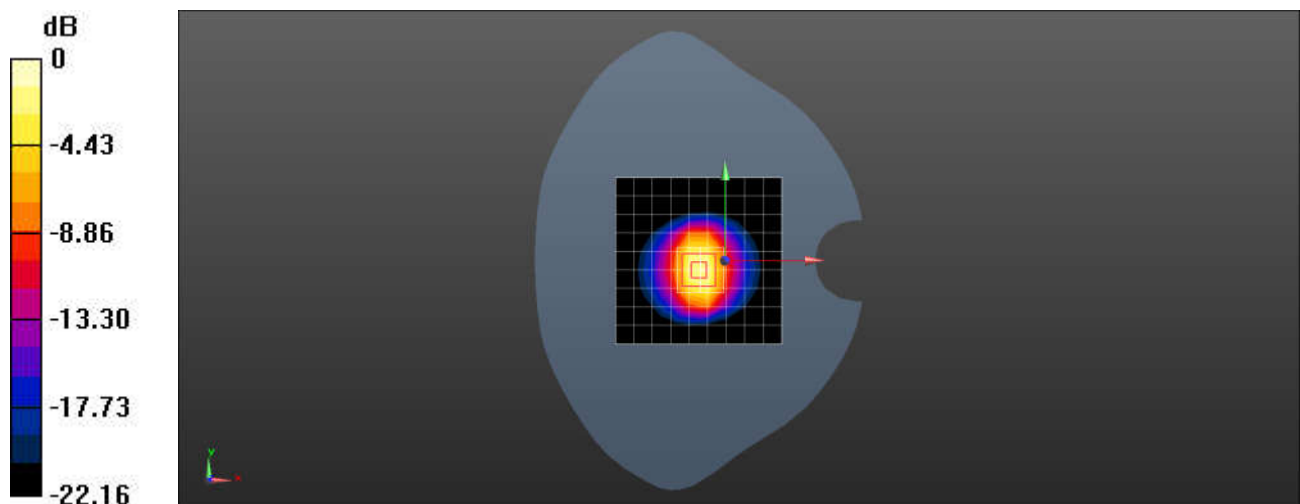
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.88 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 24.5 W/kg

**SAR(1 g) = 12.2 W/kg; SAR(10 g) = 5.68 W/kg**

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



0 dB = 20.2 W/kg = 13.05 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;  $\sigma = 2.043$  S/m;  $\epsilon_r = 37.282$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.42, 7.42, 7.42) ; Calibrated: 2022-05-26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM 5; Type: SAM; Serial: 1481
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Body/d=10mm, Pin=250mW/Area Scan (10x10x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 16.5 W/kg

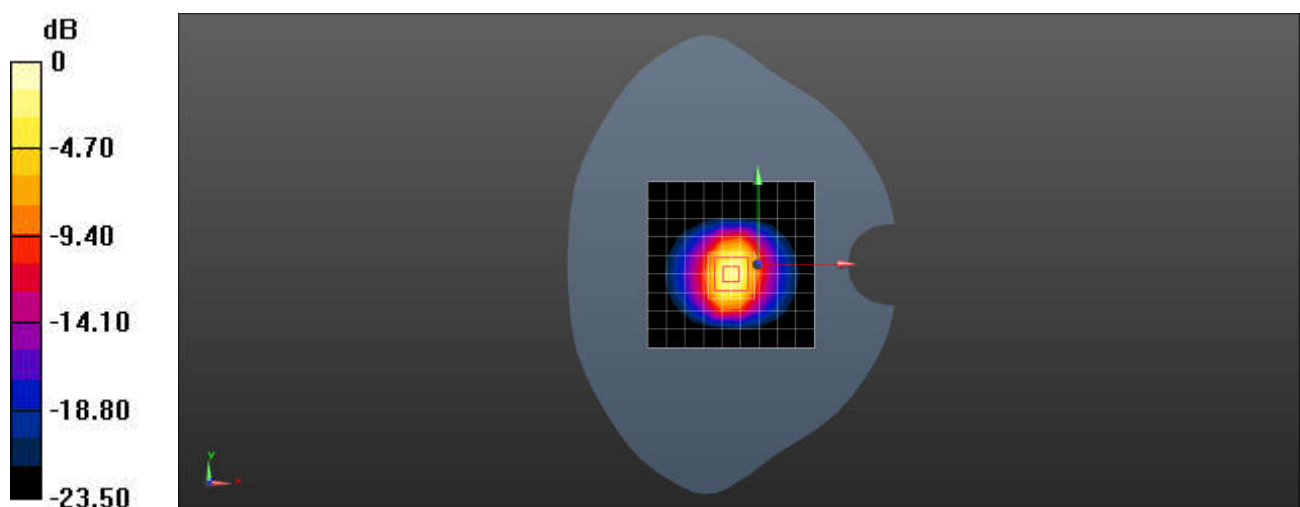
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.36 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 27.7 W/kg

**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 5.91 W/kg**

Maximum value of SAR (measured) = 22.5 W/kg



0 dB = 22.5 W/kg = 13.52 dBW/kg