

# Appendix A

## Detailed System Check Results

1. System Performance Check
System Performance Check 835 MHz Head
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System Performance Check 5600 MHz Head
System Performance Check 5750 MHz Head

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;  $\sigma = 0.973$  S/m;  $\epsilon_r = 41.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(10.35, 10.35, 10.35); Calibrated: 2020-12-18;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 2.38 W/kg

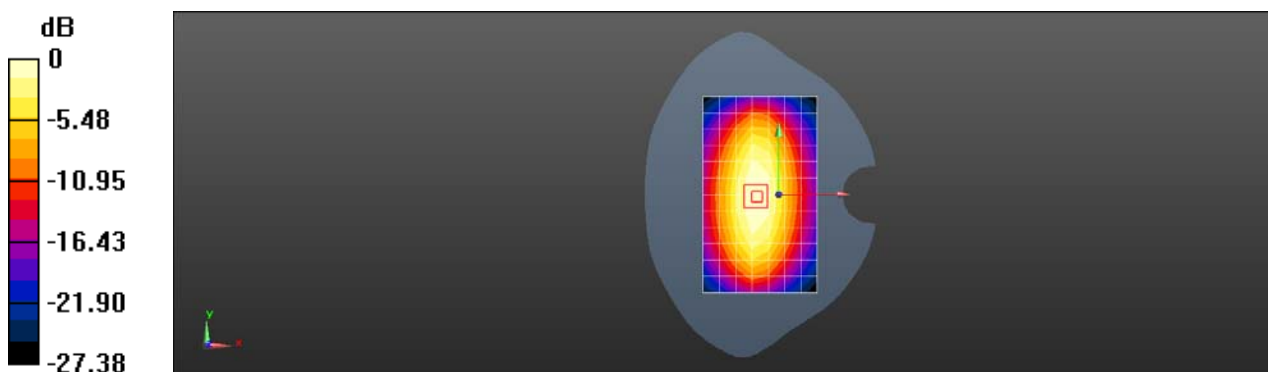
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.56 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.03 W/kg

**SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.59 W/kg**

Maximum value of SAR (measured) = 2.54 W/kg



0 dB = 2.38 W/kg = 3.76 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check 1900 MHz Head

**DUT: D1900V2; Type: D1900V2; Serial: 5d028**

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

Medium: HSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.39$  S/m;  $\epsilon_r = 40.792$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.55, 8.55, 8.55); Calibrated: 2020-12-18;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (8x9x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 7.67 W/kg

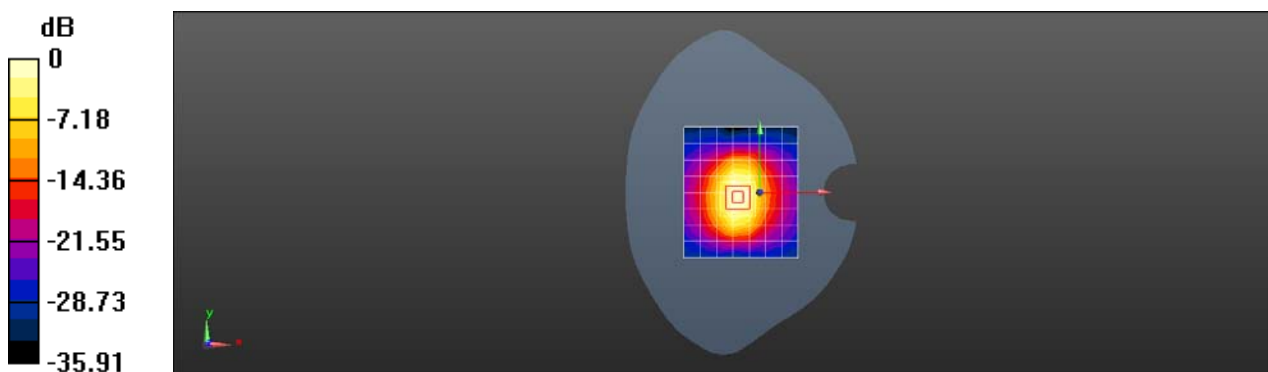
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.21 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 15.0 W/kg

**SAR(1 g) = 9.86 W/kg; SAR(10 g) = 5.2 W/kg**

Maximum value of SAR (measured) = 9.12 W/kg



0 dB = 7.67 W/kg = 8.85 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;  $\sigma = 1.811$  S/m;  $\epsilon_r = 38.95$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.95, 7.95, 7.95); Calibrated: 2020-12-18;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (9x10x1):** Measurement grid: dx=12mm, dy=12mm

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

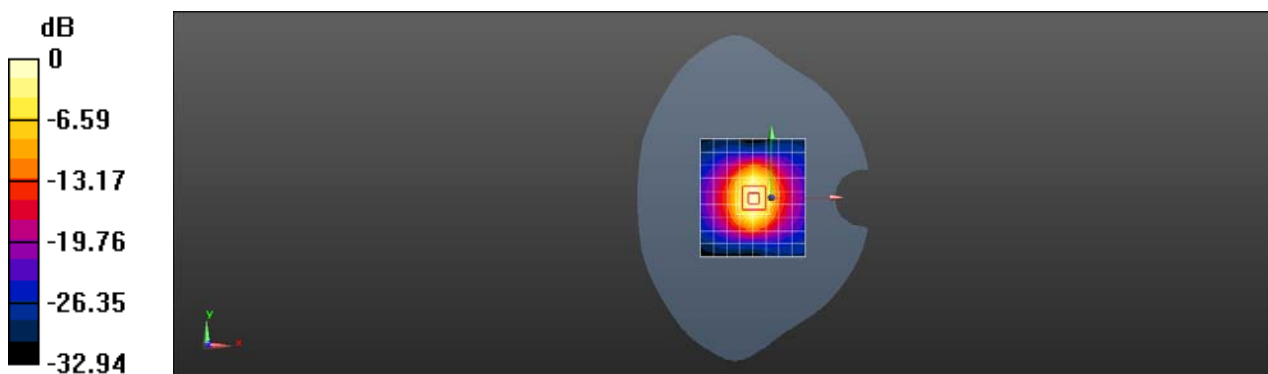
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 79.36 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 21.0 W/kg

**SAR(1 g) = 12.95 W/kg; SAR(10 g) = 5.89 W/kg**

Maximum value of SAR (measured) = 16.7 W/kg



0 dB = 15.8 W/kg = 11.98 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;  $\sigma = 1.999$  S/m;  $\epsilon_r = 37.908$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.7, 7.7, 7.7); Calibrated: 2020-12-18;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=250mW/Area Scan (9x9x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (measured) = 18.2 W/kg

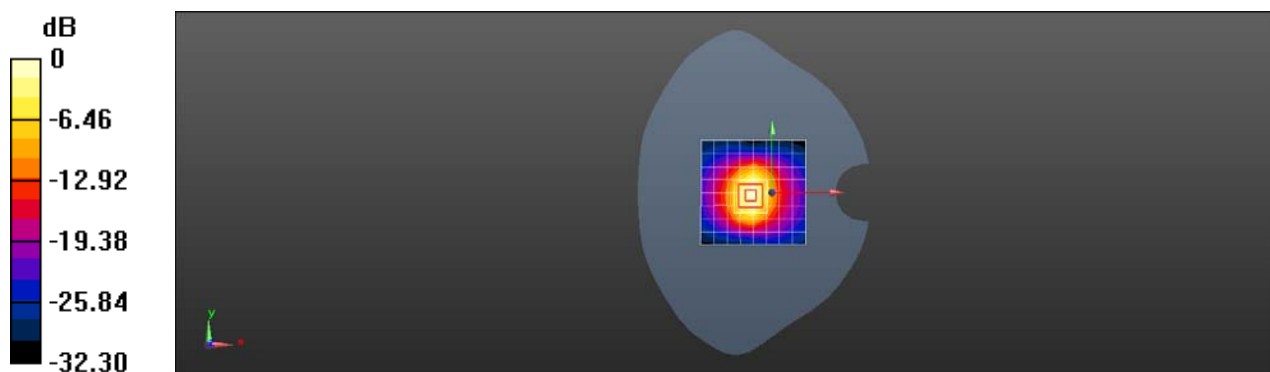
**Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.09 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 24.2 W/kg

**SAR(1 g) = 13.92 W/kg; SAR(10 g) = 6.22 W/kg**

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 18.2 W/kg = 12.60 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check D5.25GHz 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;  $\sigma = 4.721$  S/m;  $\epsilon_r = 36.578$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.7, 5.7, 5.7); Calibrated: 2020-10-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (10x10x1):** Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 10.2 W/kg

**Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (4x4x1.4mm, graded),**

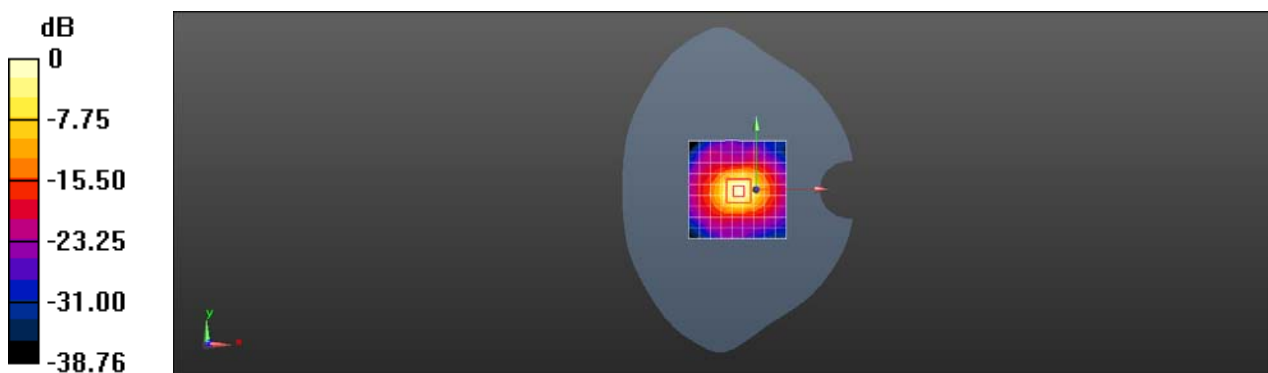
**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 61.21 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 24.2 W/kg

**SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.19 W/kg**

Maximum value of SAR (measured) = 13.9 W/kg



0 dB = 10.2 W/kg = 10.10 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check D5.6GHz Head

**DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165**

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

Medium: HSL5G; Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.107$  S/m;  $\epsilon_r = 35.626$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.12, 5.12, 5.12); Calibrated: 2020-10-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1):** Measurement grid:

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

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

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

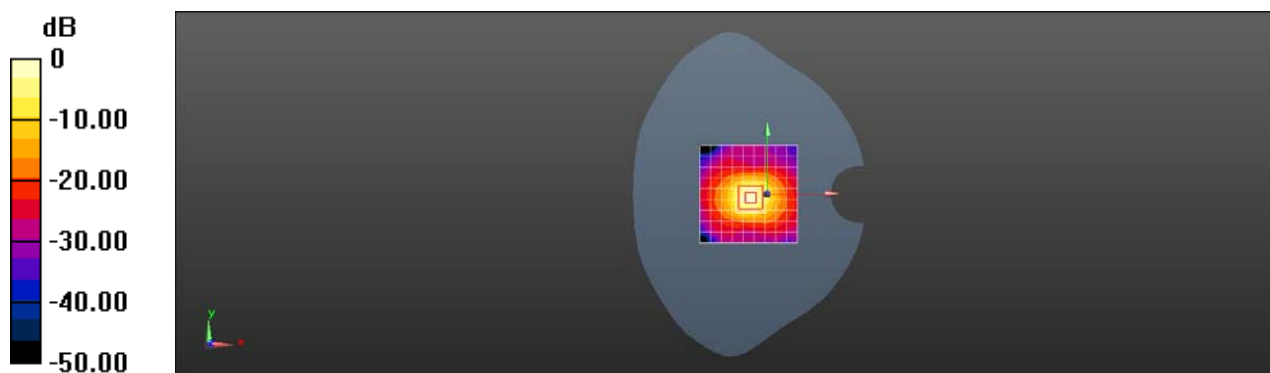
**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 57.83 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 28.7 W/kg

**SAR(1 g) = 7.98 W/kg; SAR(10 g) = 2.17 W/kg**

Maximum value of SAR (measured) = 16.2 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg

Test Laboratory: SGS-SAR Lab

## System Performance Check D5.75GHz 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;  $\sigma = 5.279$  S/m;  $\epsilon_r = 35.262$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.14, 5.14, 5.14); Calibrated: 2020-10-28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2020-11-06
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (10x10x1):** 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 (4x4x1.4mm, graded),**

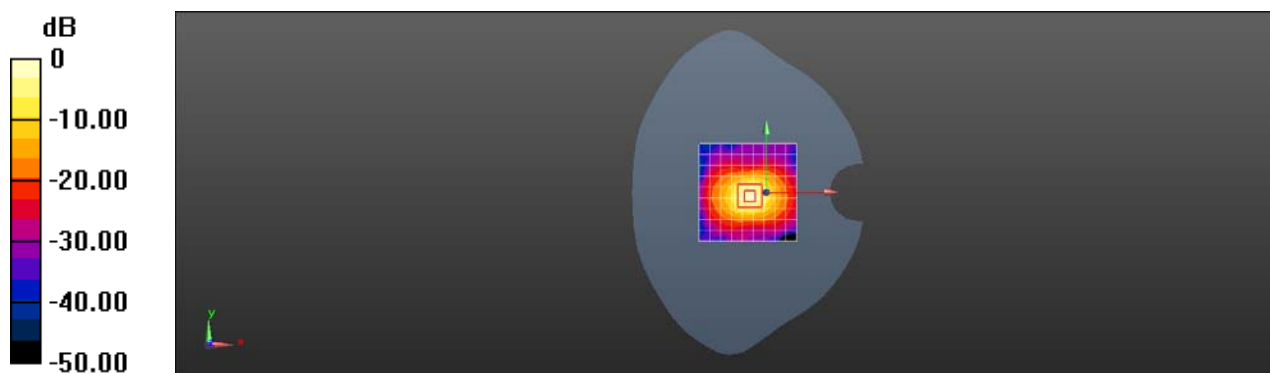
**dist=1.4mm (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 58.20 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 31.1 W/kg

**SAR(1 g) = 7.89 W/kg; SAR(10 g) = 2.25 W/kg**

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



0 dB = 15.8 W/kg = 11.98 dBW/kg