

# Appendix A

## Detailed System Check Results

|                                        |
|----------------------------------------|
| 1. System Performance Check            |
| System Performance Check 835 MHz Head  |
| System Performance Check 1900 MHz Head |
| System Performance Check 2450 MHz Head |
| System Performance Check 2600 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;  $\sigma = 0.89$  S/m;  $\epsilon_r = 40.972$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(8.52, 8.52, 8.52); Calibrated: 2019-05-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2019-09-24
- Phantom: SAM5; Type: SAM; Serial: 1481
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

Maximum value of SAR (measured) = 3.14 W/kg

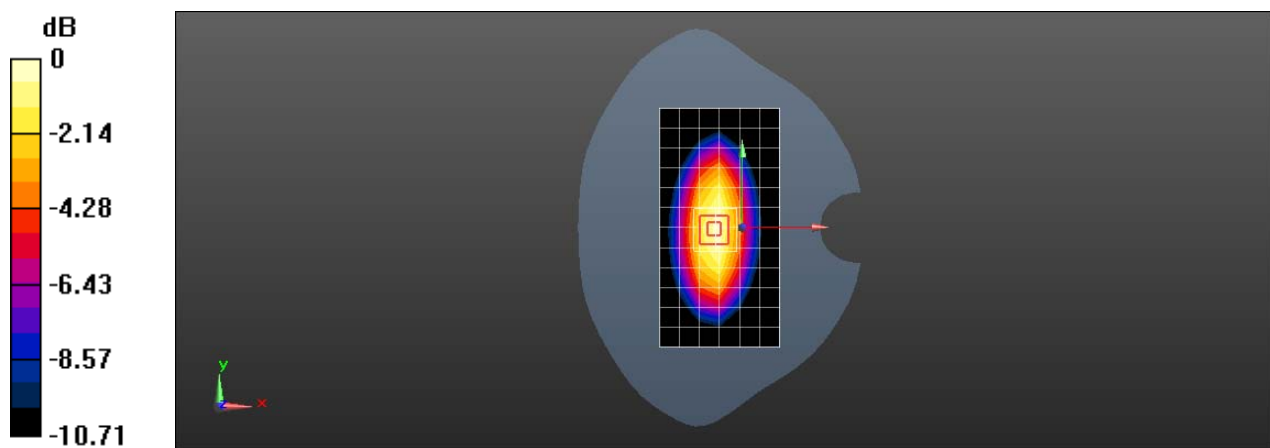
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.54 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.92 W/kg

**SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.58 W/kg**

Maximum value of SAR (measured) = 3.38 W/kg



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;  $\sigma = 0.927$  S/m;  $\epsilon_r = 42.883$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn414; Calibrated: 2019-12-17
- Phantom: SAM5; Type: SAM; Serial: 1481
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

Maximum value of SAR (measured) = 3.29 W/kg

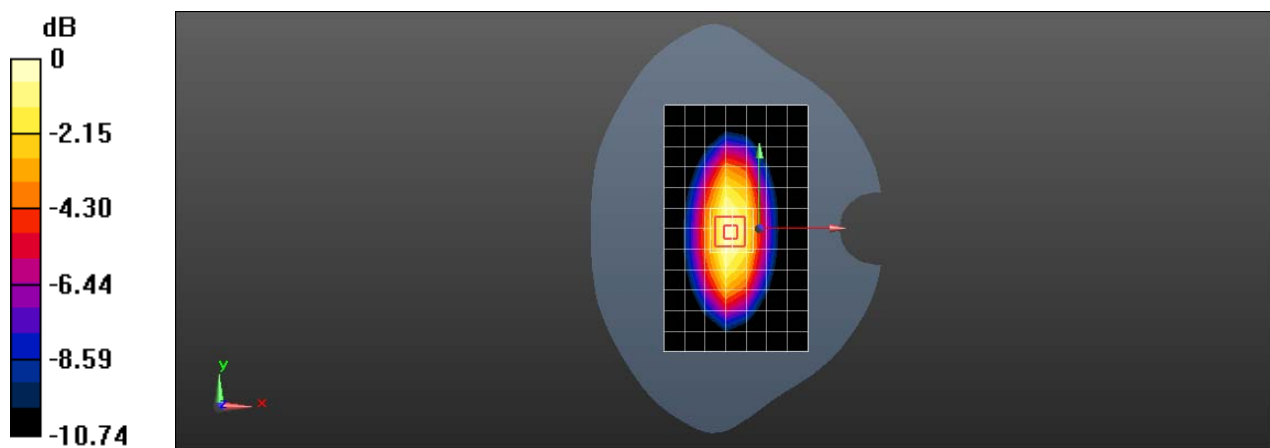
**Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 57.87 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 4.27 W/kg

**SAR(1 g) = 2.6 W/kg; SAR(10 g) = 1.65 W/kg**

Maximum value of SAR (measured) = 3.53 W/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;  $\sigma = 1.394$  S/m;  $\epsilon_r = 40.64$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(7.3, 7.3, 7.3); Calibrated: 2019-05-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2019-09-24
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Body/d=10mm, Pin=250mW/Area Scan (8x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.7 W/kg

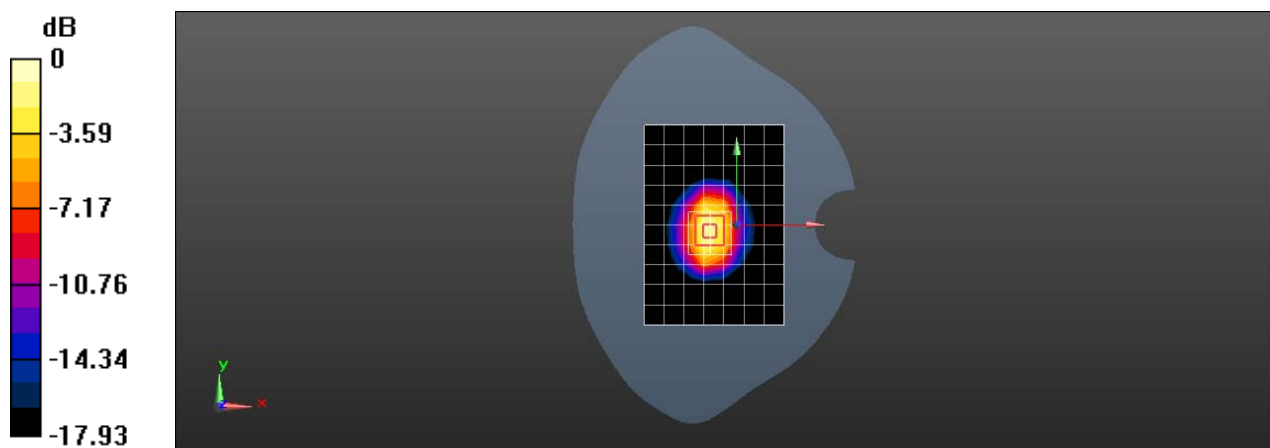
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.02 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.3 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.35 W/kg**

Maximum value of SAR (measured) = 12.0 W/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;  $\sigma = 1.855$  S/m;  $\epsilon_r = 37.999$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.85, 6.85, 6.85); Calibrated: 2019-05-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2019-09-24
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Body/d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 14.3 W/kg

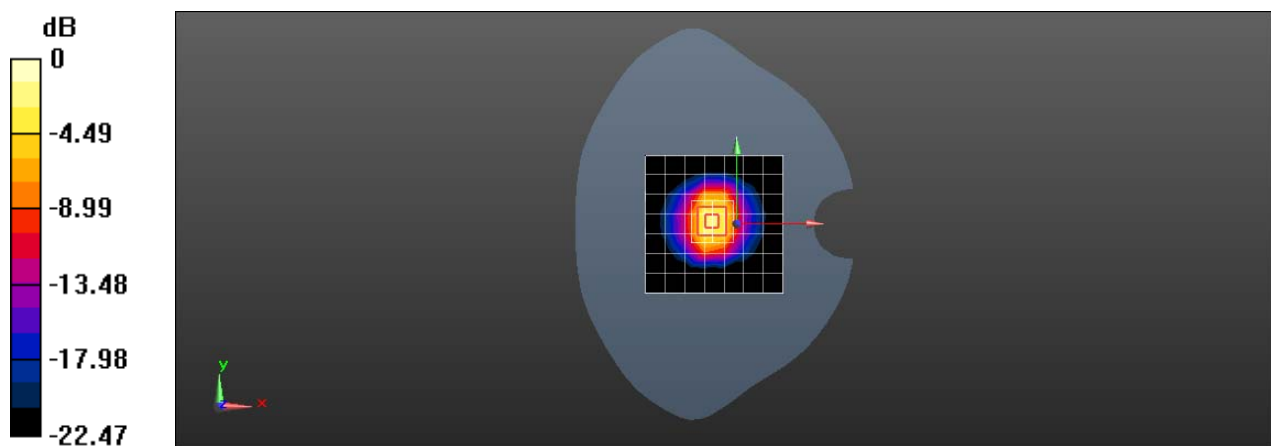
**Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 92.09 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 27.6 W/kg

**SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.33 W/kg**

Maximum value of SAR (measured) = 22.8 W/kg



0 dB = 22.8 W/kg = 13.58 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;  $\sigma = 1.966$  S/m;  $\epsilon_r = 39.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.8, 6.8, 6.8); Calibrated: 2019-05-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1374; Calibrated: 2019-09-24
- Phantom: SAM6; Type: SAM; Serial: 1824
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Body/d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 16.9 W/kg

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

Reference Value = 87.82 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 28.6 W/kg

**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.04 W/kg**

Maximum value of SAR (measured) = 23.2 W/kg

