Report No: E5/2019/B0006

# **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;  $\sigma = 0.938$  S/m;  $\varepsilon_r = 41.753$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3923; ConvF(10.34, 10.34, 10.34); Calibrated: 2019-10-22;

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE3 Sn414; Calibrated: 2018-12-03

• Phantom: SAM 8; Type: SAM; Serial: 1063

• DASY52 52.8.8(1222); 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) = 3.18 W/kg

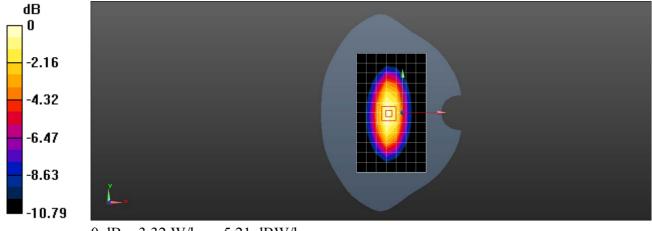
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 53.77 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.99 W/kg

SAR(1 g) = 2.6 W/kg; SAR(10 g) = 1.69 W/kgMaximum value of SAR (measured) = 3.32 W/kg



0 dB = 3.32 W/kg = 5.21 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;  $\sigma = 1.385$  S/m;  $\varepsilon_r = 38.847$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn896; Calibrated: 2019-09-18

• Phantom: SAM 3; Type: SAM; Serial: 1912

• DASY52 52.8.8(1222); 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) = 9.66 W/kg

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

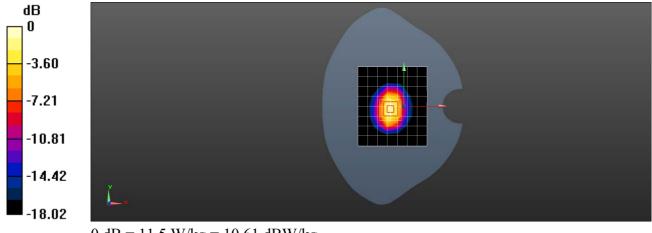
dy=8mm, dz=5mm

Reference Value = 88.89 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.3 W/kg

Maximum value of SAR (measured) = 11.5 W/kg



0 dB = 11.5 W/kg = 10.61 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;  $\sigma = 1.789$  S/m;  $\varepsilon_r = 40.713$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22;

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE3 Sn414; Calibrated: 2018-12-03

• Phantom: SAM 7; Type: SAM; Serial: 1027

• DASY52 52.8.8(1222); 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) = 19.6 W/kg

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

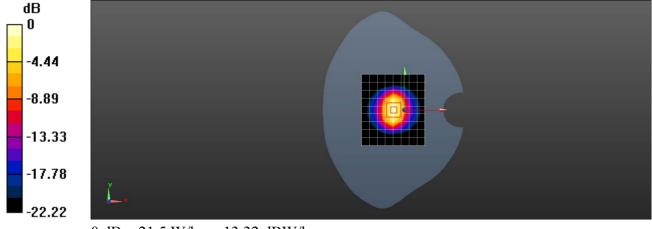
dy=5mm, dz=5mm

Reference Value = 89.26 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.7 W/kg

SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.78 W/kg

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 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;  $\sigma = 1.994$  S/m;  $\varepsilon_r = 40.181$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22;

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE3 Sn414; Calibrated: 2018-12-03

• Phantom: SAM 7; Type: SAM; Serial: 1027

• DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

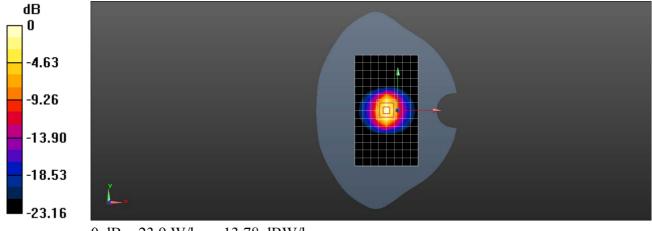
**Body/d=10mm, Pin=250mW/Area Scan (9x15x1):** Measurement grid: dx=12mm, dy=12mm Maximum value of SAR (measured) = 24.0 W/kg

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

Reference Value = 91.21 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 29.4 W/kg

SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.34 W/kgMaximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg = 13.78 dBW/kg