

Report No.: ZR/2019/A000605

# **Appendix A**

# **Detailed System Check Results**

System Performance Check
System Performance Check 750 MHz Head
System Performance Check 835 MHz Head
System Performance Check 1750 MHz Head
System Performance Check 1900 MHz Head
System Performance Check 2450 MHz Head
System Performance Check 2600 MHz Head

Date: 2019-10-30

Test Laboratory: SGS-SAR Lab

# System Performance Check 750 MHz Head

**DUT: D750V3; Type: D750V3; Serial: 1160** 

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: f = 750 MHz;  $\sigma = 0.878$  S/m;  $\varepsilon_r = 43.027$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3962; ConvF(10.1, 10.1, 10.1); Calibrated: 2019-02-25;

• 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=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (measured) = 2.60 W/kg

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

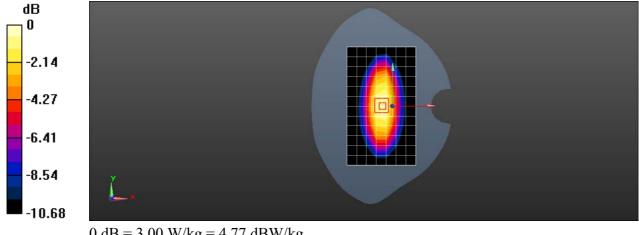
dy=8mm, dz=5mm

Reference Value = 50.64 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.50 W/kg

SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.4 W/kg

Maximum value of SAR (measured) = 3.00 W/kg



0 dB = 3.00 W/kg = 4.77 dBW/kg

Date: 2019-10-31

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;  $\sigma = 0.928$  S/m;  $\varepsilon_r = 42.535$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3962; ConvF(9.8, 9.8, 9.8); Calibrated: 2019-02-25;

• 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=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (measured) = 3.15 W/kg

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

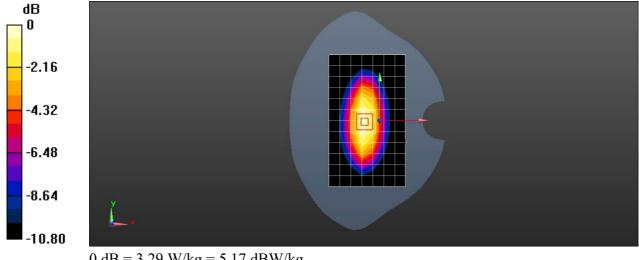
dy=8mm, dz=5mm

Reference Value = 53.77 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.95 W/kg

SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.68 W/kg

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



0 dB = 3.29 W/kg = 5.17 dBW/kg

Date: 2019/11/15

Test Laboratory: SGS-SAR Lab

# **System Performance Check 1750 MHz Head**

DUT: D1750V2; Type: D1750V2; Serial: 1149

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

Medium: HSL1750; Medium parameters used: f = 1750 MHz;  $\sigma = 1.336$  S/m;  $\epsilon_r = 40.679$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3962; ConvF(8.44, 8.44, 8.44); Calibrated: 2019/2/25;

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

• Electronics: DAE4 Sn1267; Calibrated: 2018/12/3

• Phantom: SAM5; Type: SAM; Serial: 1481

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

#### Body/d=10mm, Pin=250mW/Area Scan (7x10x1): Measurement grid: dx=15mm,

dy=15mm

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

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

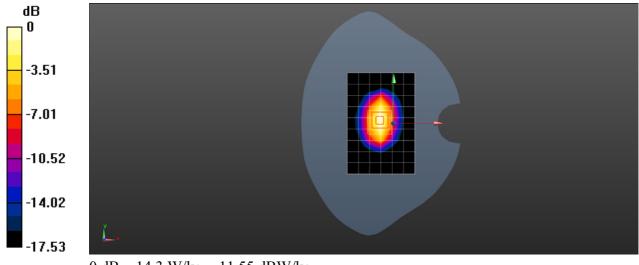
dy=8mm, dz=5mm

Reference Value = 85.92 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.3 W/kg; SAR(10 g) = 4.94 W/kg

Maximum value of SAR (measured) = 14.3 W/kg



0 dB = 14.3 W/kg = 11.55 dBW/kg

Date: 2019/10/27

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;  $\sigma = 1.373$  S/m;  $\varepsilon_r = 40.58$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3789; ConvF(7.3, 7.3, 7.3); Calibrated: 2019/5/25;

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

• Electronics: DAE4 Sn1267; Calibrated: 2018/12/3

• Phantom: SAM5; Type: SAM; Serial: 1481

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Body/d=10mm, Pin=250mW/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 10.7 W/kg

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

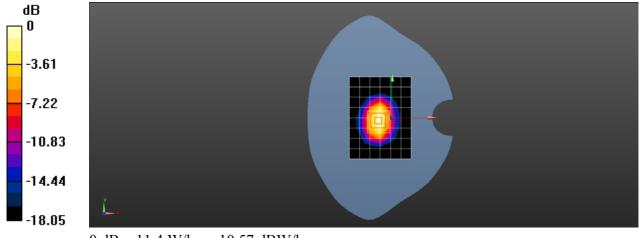
dy=8mm, dz=5mm

Reference Value = 88.67 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.25 W/kg

Maximum value of SAR (measured) = 11.4 W/kg



0 dB = 11.4 W/kg = 10.57 dBW/kg

Date: 2019/11/3

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;  $\sigma = 1.389$  S/m;  $\varepsilon_r = 40.284$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3789; ConvF(7.3, 7.3, 7.3); Calibrated: 2019/5/25;

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

• Electronics: DAE4 Sn1267; Calibrated: 2018/12/3

• Phantom: SAM5; Type: SAM; Serial: 1481

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

**Body/d=10mm, Pin=250mW/Area Scan (8x9x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 9.69 W/kg

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

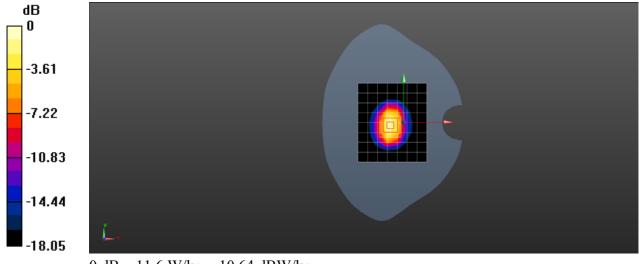
dy=8mm, dz=5mm

Reference Value = 88.89 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.31 W/kg

Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.6 W/kg = 10.64 dBW/kg

Date: 2019-11-01

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;  $\sigma = 1.823$  S/m;  $\epsilon_r = 39.147$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3962; ConvF(7.58, 7.58, 7.58); Calibrated: 2019-02-25;

• 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 (9x9x1):** Measurement grid: dx=12mm, dy=12mm Maximum value of SAR (measured) = 20.9 W/kg

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

dy=5mm, dz=5mm

Reference Value = 89.48 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 26.1 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.88 W/kg

Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg

Date: 2019/11/2

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;  $\sigma = 1.982$  S/m;  $\varepsilon_r = 38.658$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Phantom section: Flat Section

#### DASY 5 Configuration:

• Probe: EX3DV4 - SN3962; ConvF(7.39, 7.39, 7.39); Calibrated: 2019/2/25;

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

• Electronics: DAE4 Sn1374; Calibrated: 2019/9/24

• Phantom: SAM6; Type: SAM; Serial: 1824

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

dy=12mm

Maximum value of SAR (measured) = 21.4 W/kg

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

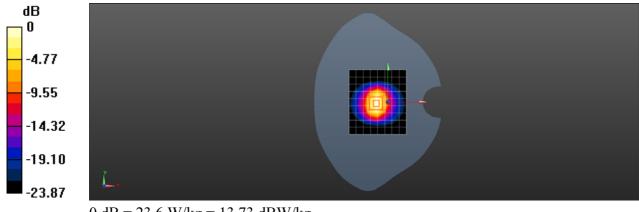
dy=5mm, dz=5mm

Reference Value = 86.89 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 29.6 W/kg

#### SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.11 W/kg

Maximum value of SAR (measured) = 23.6 W/kg



0 dB = 23.6 W/kg = 13.73 dBW/kg