



Appendix A

Detailed System Validation Results

System Performance Check 2450 MHz Head
System Performance Check 2450 MHz Body
System Performance Check 5750 MHz Head
System Performance Check 5750 MHz Body

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; $\sigma = 1.878$ S/m; $\epsilon_r = 38.488$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.62, 7.62, 7.62); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x14x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 14.3 W/kg

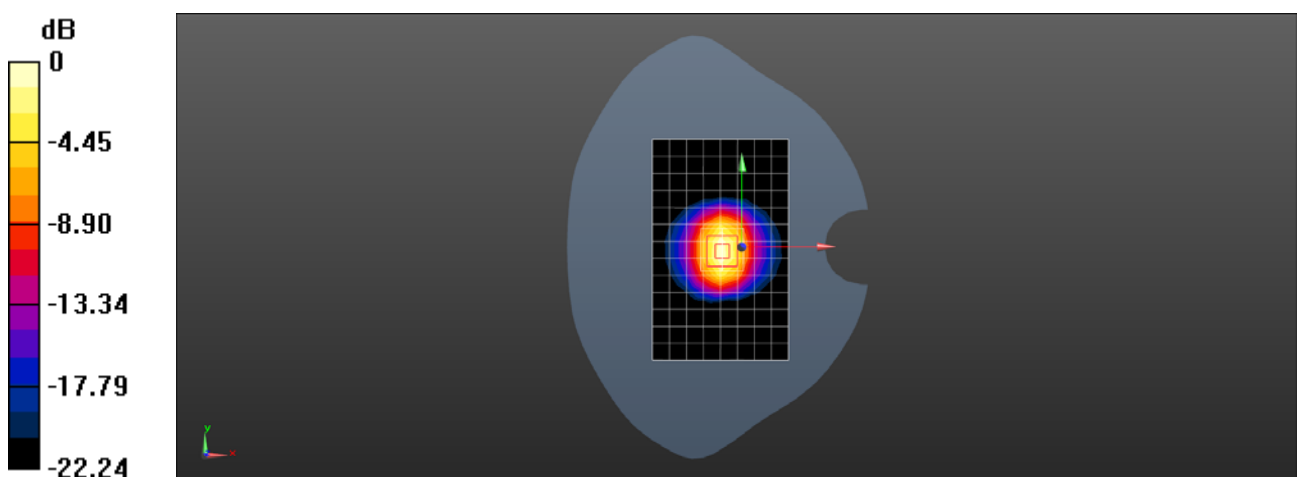
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 86.57 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 28.8 W/kg

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

Maximum value of SAR (measured) = 15.7 W/kg



0 dB = 15.7 W/kg = 11.96 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Body

DUT: D2450V2; Type: D2450V2; Serial: 733

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.969$ S/m; $\epsilon_r = 52.667$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.78, 7.78, 7.78); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -14.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (10x14x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 13.5 W/kg

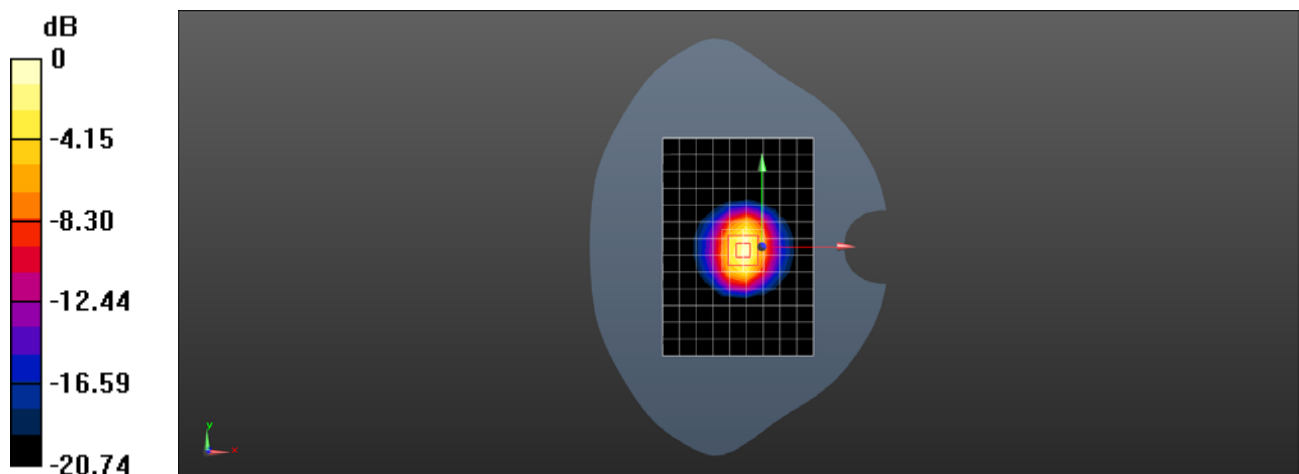
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 79.74 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 25.3 W/kg

SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.93 W/kg

Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 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: HSL5GHz; Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.363 \text{ S/m}$; $\epsilon_r = 35.143$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(5.05, 5.05, 5.05); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 23.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (10x10x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 19.5 W/kg

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

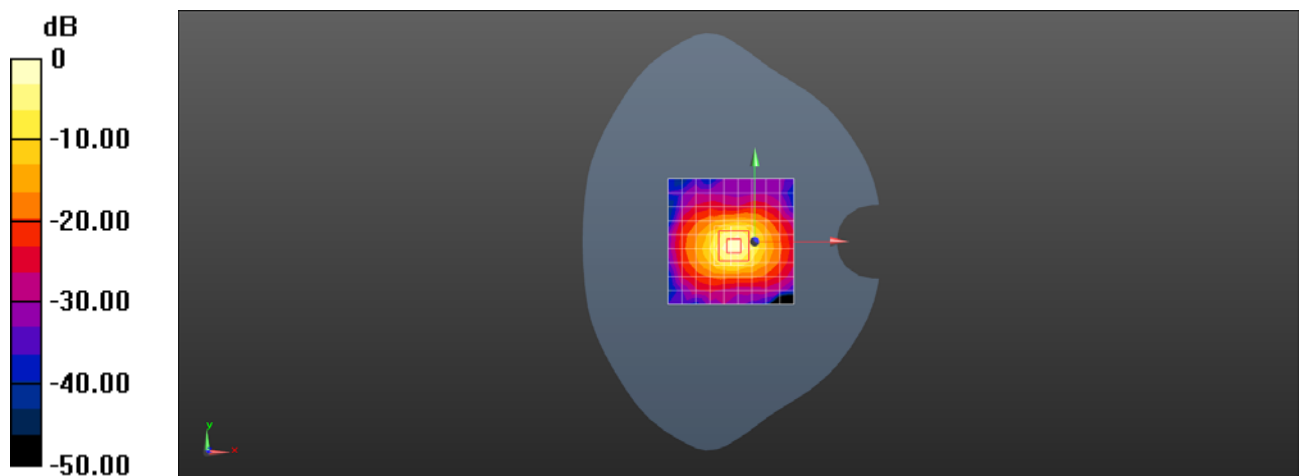
dist=1.4mm (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 64.31 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 39.2 W/kg

SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.42 W/kg

Maximum value of SAR (measured) = 21.0 W/kg



0 dB = 21.0 W/kg = 13.22 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check D5.75GHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: MSL5000; Medium parameters used: $f = 5750$ MHz; $\sigma = 5.969$ S/m; $\epsilon_r = 47.096$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(4.59, 4.59, 4.59); Calibrated: 2018-01-11;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 23.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); 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 (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 58.63 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 36.3 W/kg

SAR(1 g) = 7.55 W/kg; SAR(10 g) = 2.09 W/kg

Maximum value of SAR (measured) = 20.4 W/kg

