



Appendix A

Detailed System Check Results

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Date: 2018/12/12

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; $\sigma = 0.895$ S/m; $\epsilon_r = 41.649$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.67, 10.67, 10.67); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 2.41 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

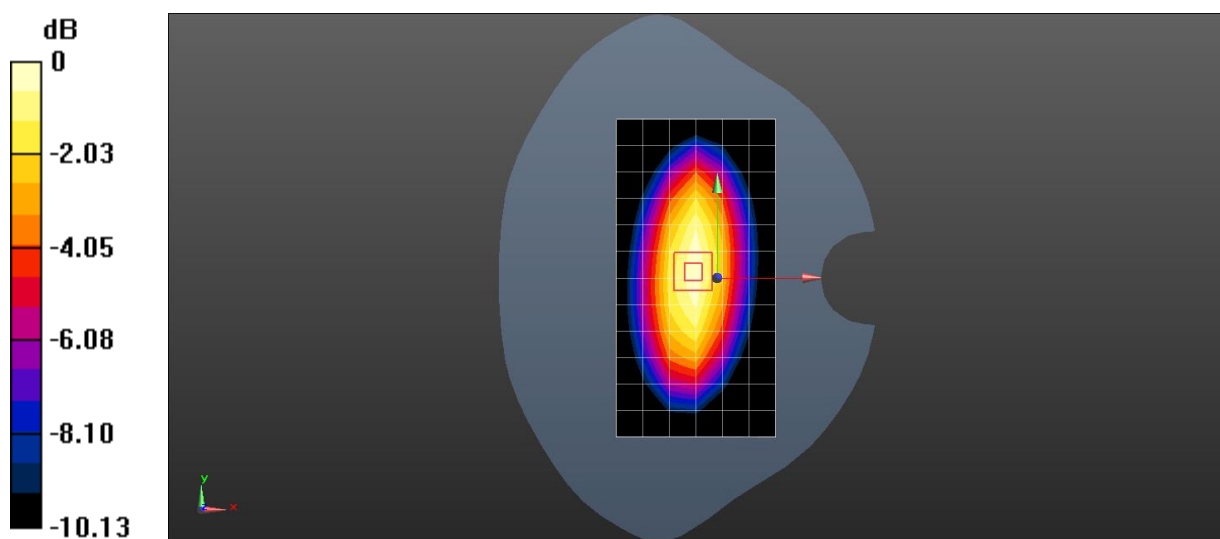
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 44.88 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 2.55 W/kg

SAR(1 g) = 2.11 W/kg; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (measured) = 2.42 W/kg



Date: 2018/12/10

Test Laboratory: SGS-SAR Lab

System Performance Check 750 MHz Body

DUT: D750V3; Type: D750V3; Serial: 1160

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

Medium: MSL750; Medium parameters used: $f = 750$ MHz; $\sigma = 0.964$ S/m; $\epsilon_r = 55.821$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.69, 10.69, 10.69); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 2.68 W/kg

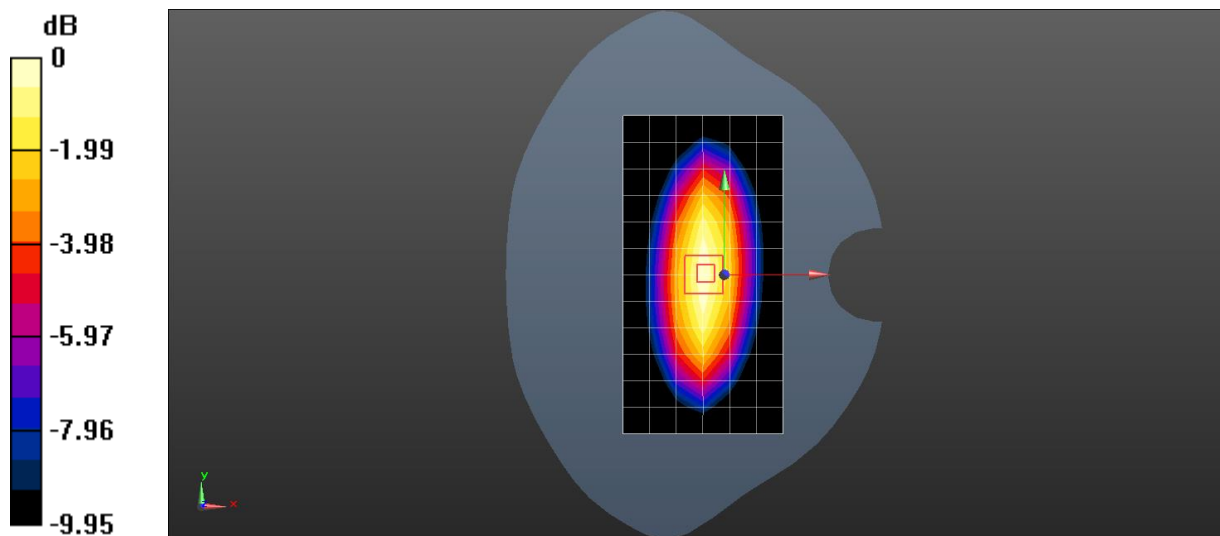
Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 47.02 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.16 W/kg

SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.42 W/kg



0 dB = 2.68 W/kg = 4.28 dBW/kg

Date: 2018/12/4

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Head-12.4

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; $\sigma = 0.936$ S/m; $\epsilon_r = 42.372$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.32, 10.32, 10.32); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 3.25 W/kg

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

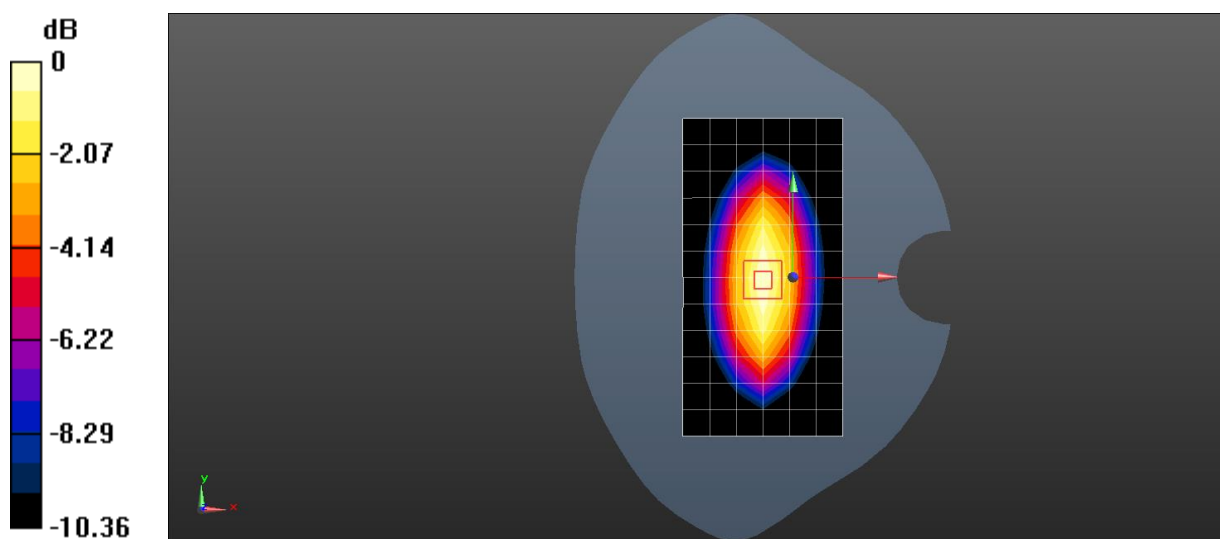
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 55.27 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.55 W/kg; SAR(10 g) = 1.69 W/kg

Maximum value of SAR (measured) = 3.19 W/kg



Date: 2018/12/11

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; $\sigma = 0.905$ S/m; $\epsilon_r = 42.113$;
 $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.32, 10.32, 10.32); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

$dx=15$ mm, $dy=15$ mm

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

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

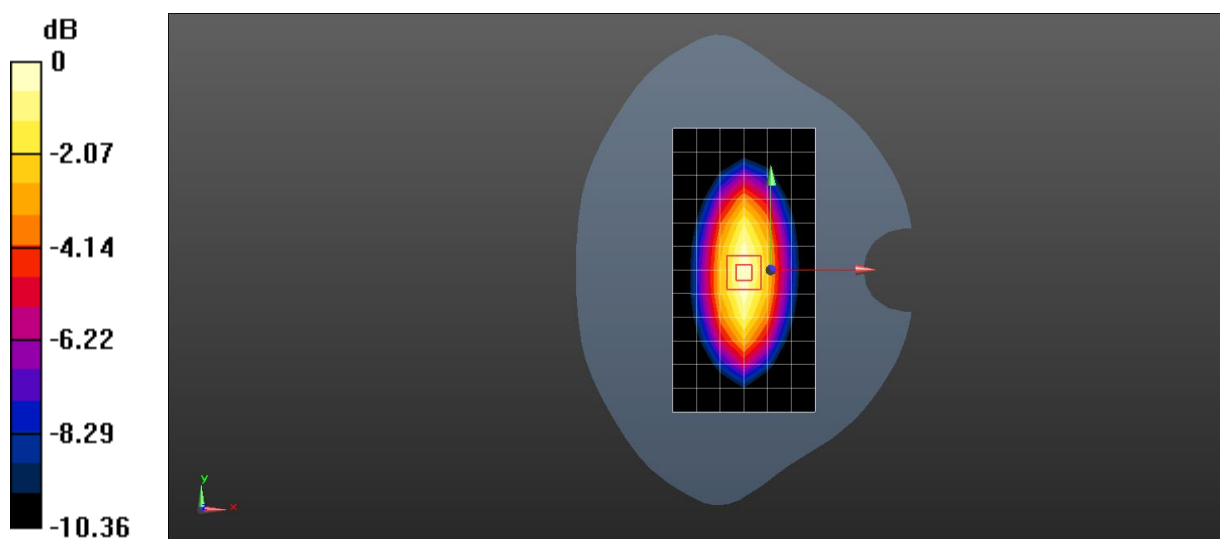
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 55.29 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 3.55 W/kg

SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.64 W/kg

Maximum value of SAR (measured) = 3.09 W/kg



0 dB = 3.09 W/kg = 4.90 dBW/kg

Date: 2018/12/6

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Body-12.6

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL835; Medium parameters used: $f = 835$ MHz; $\sigma = 1$ S/m; $\epsilon_r = 57.82$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.36, 10.36, 10.36); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 3.16 W/kg

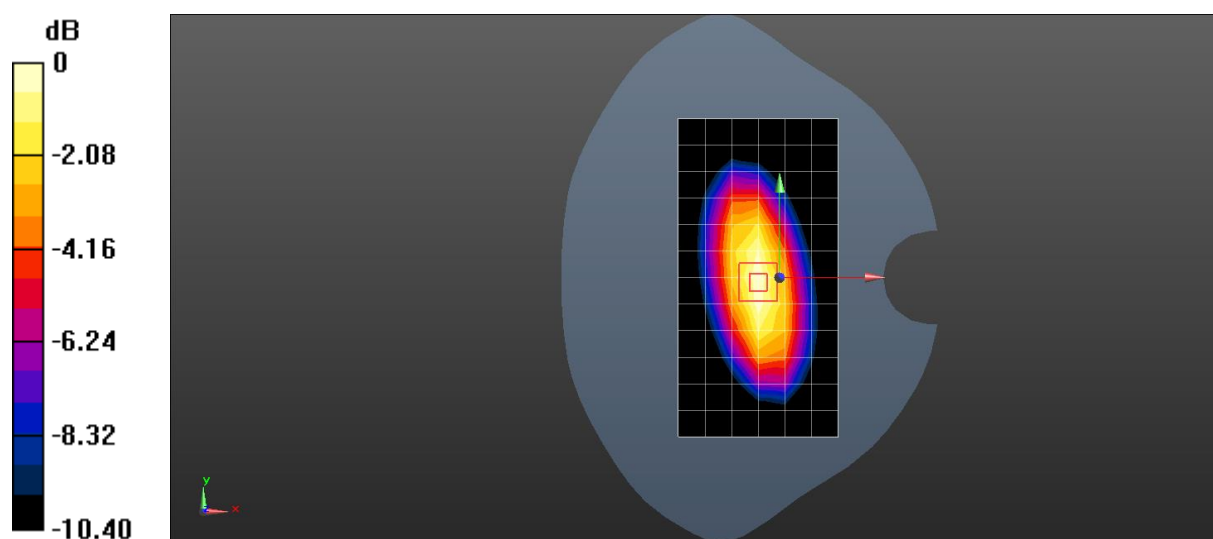
Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 50.78 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.69 W/kg

SAR(1 g) = 2.53 W/kg; SAR(10 g) = 1.68 W/kg



0 dB = 3.16 W/kg = 5.00 dBW/kg

Date: 2018/12/20

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Body

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL835; Medium parameters used: $f = 835$ MHz; $\sigma = 1.012$ S/m; $\epsilon_r = 54.438$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.36, 10.36, 10.36); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: ELI5; Type: ELI5; Serial: 1143
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 3.08 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

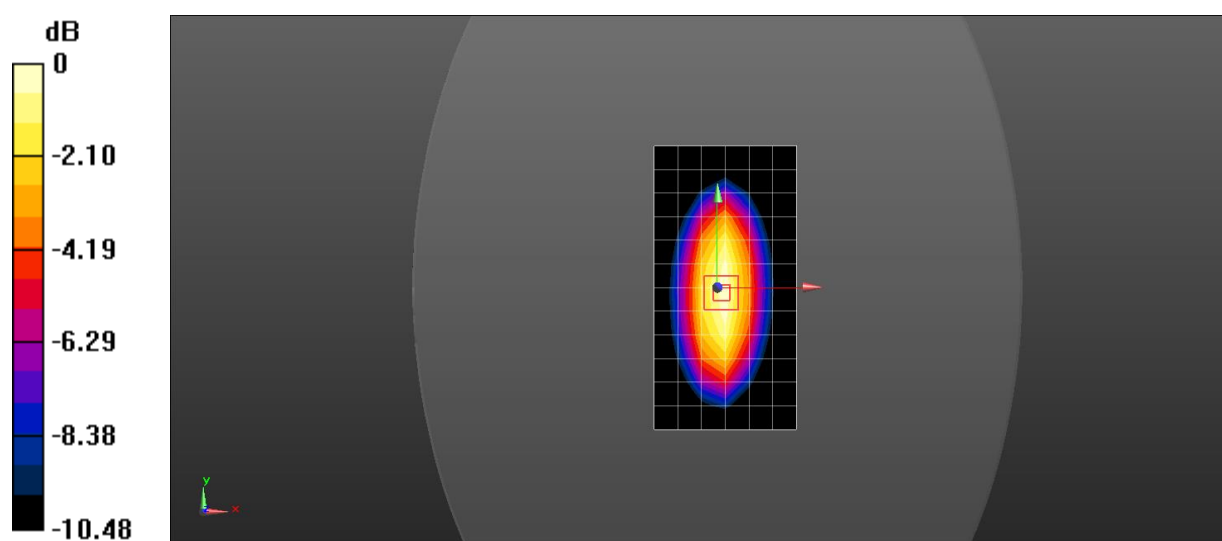
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 51.21 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.73 W/kg

SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.65 W/kg

Maximum value of SAR (measured) = 3.17 W/kg



Date: 2018/12/12

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; $\sigma = 1.332$ S/m; $\epsilon_r = 40.697$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.8, 8.8, 8.8); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x13x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 9.84 W/kg

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

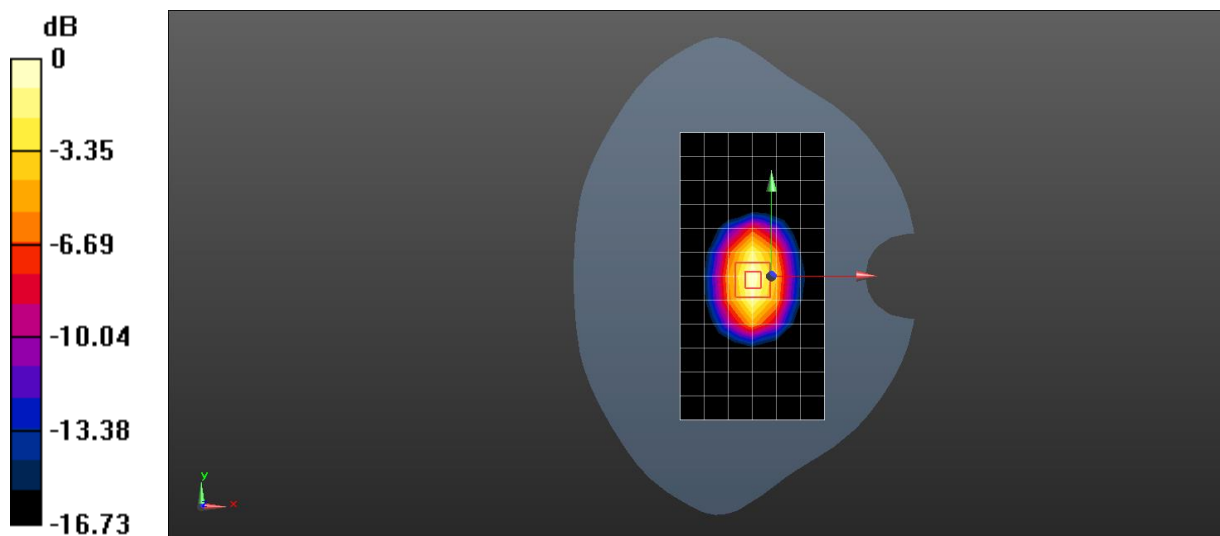
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 77.61 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 16.0 W/kg

SAR(1 g) = 8.83 W/kg; SAR(10 g) = 4.74 W/kg

Maximum value of SAR (measured) = 9.89 W/kg



0 dB = 9.89 W/kg = 9.95 dBW/kg

Date: 2018/12/18

Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz Body

DUT: D1750V2; Type: D1750V2; Serial: 1149

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

Medium: MSL1750; Medium parameters used: $f = 1750$ MHz; $\sigma = 1.541$ S/m; $\epsilon_r = 53.107$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.48, 8.48, 8.48); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: ELI5; Type: ELI5; Serial: 1143
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x13x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 12.6 W/kg

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

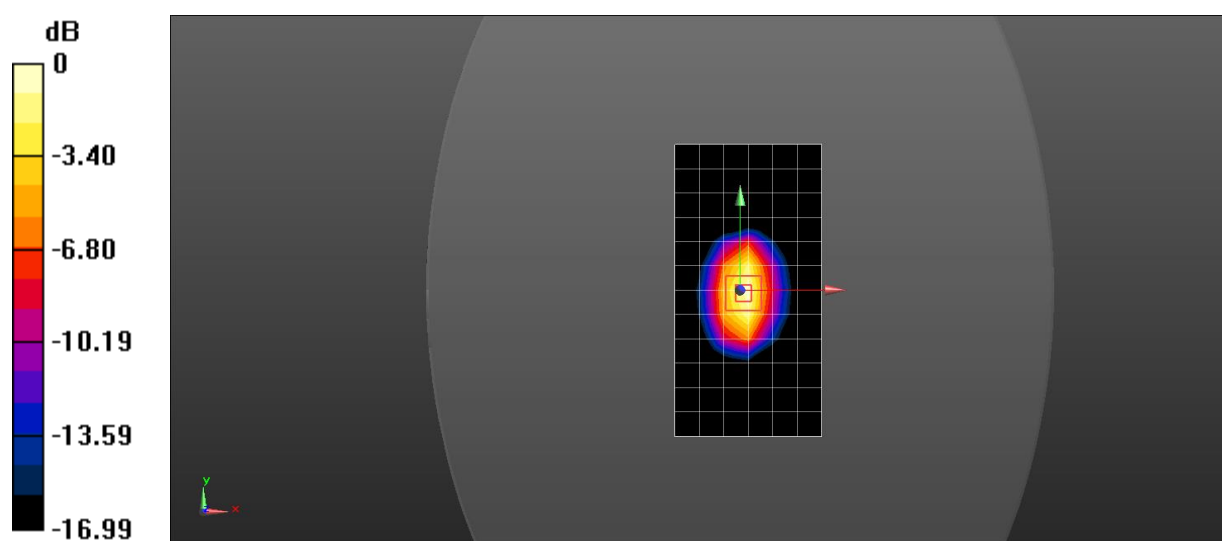
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 82.82 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.57 W/kg; SAR(10 g) = 5.07 W/kg

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



0 dB = 13.5 W/kg = 11.30 dBW/kg

Date: 2018/12/7

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; $\epsilon_r = 38.847$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.5, 8.5, 8.5); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

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

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

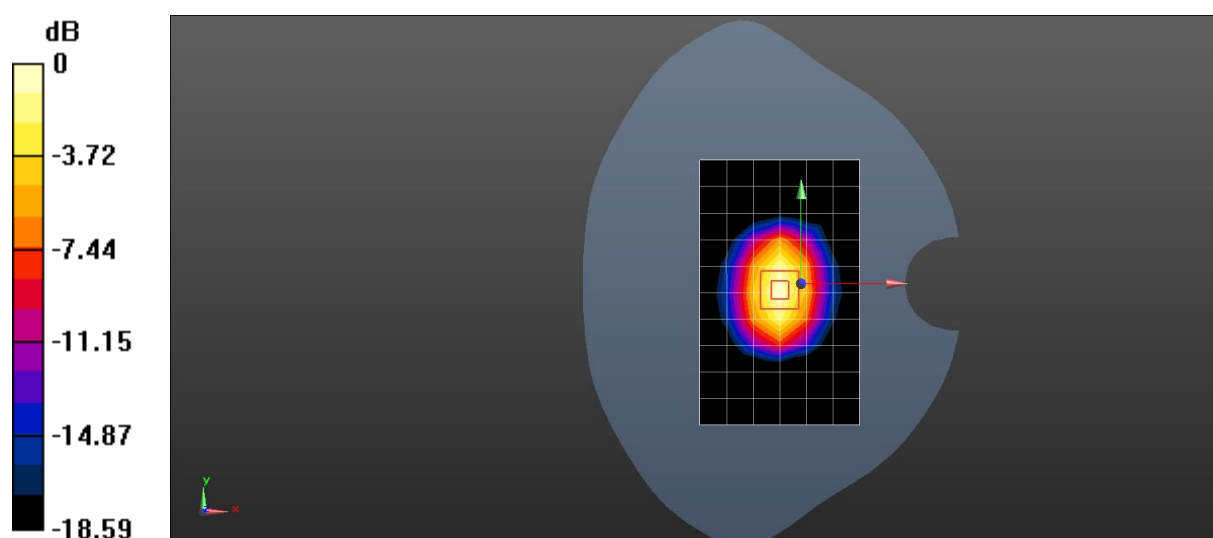
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 84.20 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.5 W/kg

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

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



0 dB = 11.5 W/kg = 10.61 dBW/kg

Date: 2018/12/12

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Head-12.12

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; $\sigma = 1.437$ S/m; $\epsilon_r = 41.171$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.5, 8.5, 8.5); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 10.1 W/kg

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

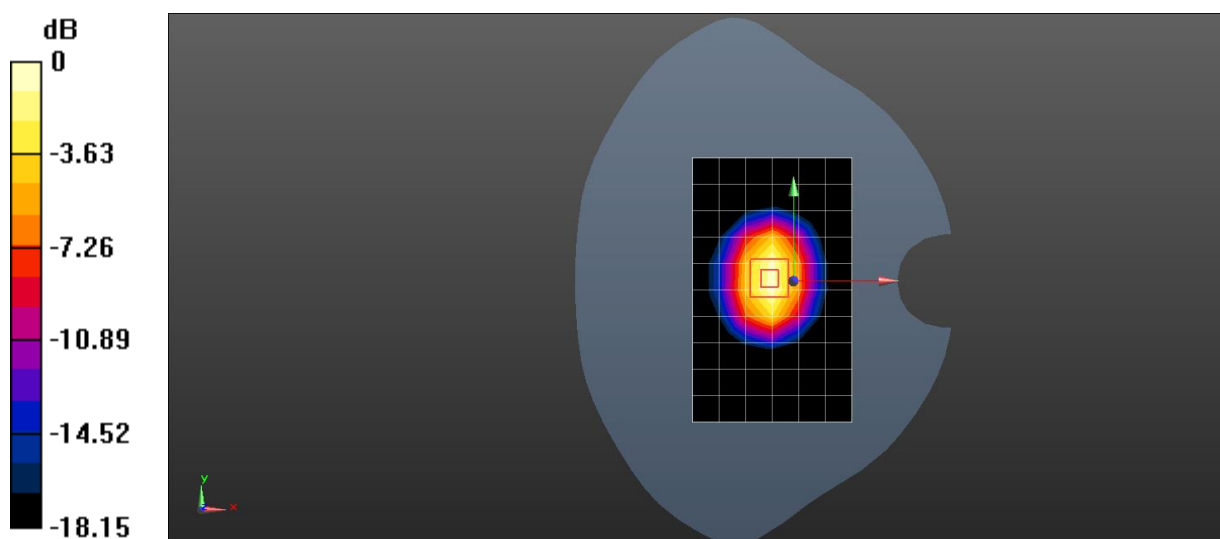
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 85.43 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 19.1 W/kg

SAR(1 g) = 9.98 W/kg; SAR(10 g) = 5.13 W/kg

Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg

Date: 2018/12/5

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Body-12.5

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

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

Medium: MSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.499$ S/m; $\epsilon_r = 52.651$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.13, 8.13, 8.13); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

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

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

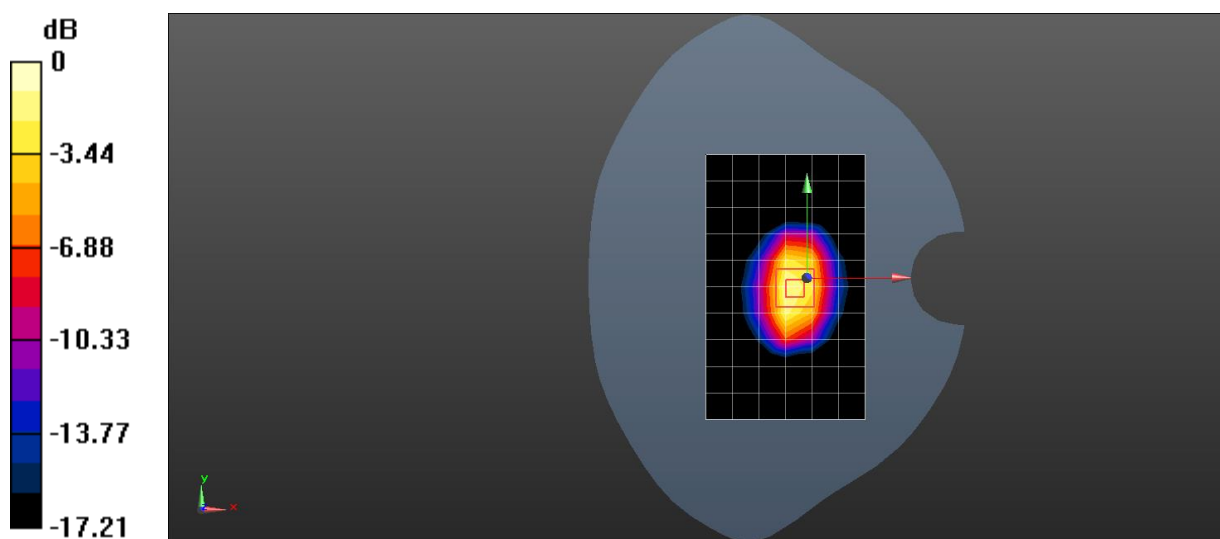
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 60.09 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.39 W/kg

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



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

Date: 2018/12/11

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Body

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

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

Medium: MSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.51$ S/m; $\epsilon_r = 53.237$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.13, 8.13, 8.13); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: ELI5; Type: ELI5; Serial: 1143
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7373)

Body/d=10mm, Pin=250mW/Area Scan (5x9x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 12.5 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (5x5x7)/Cube 0:

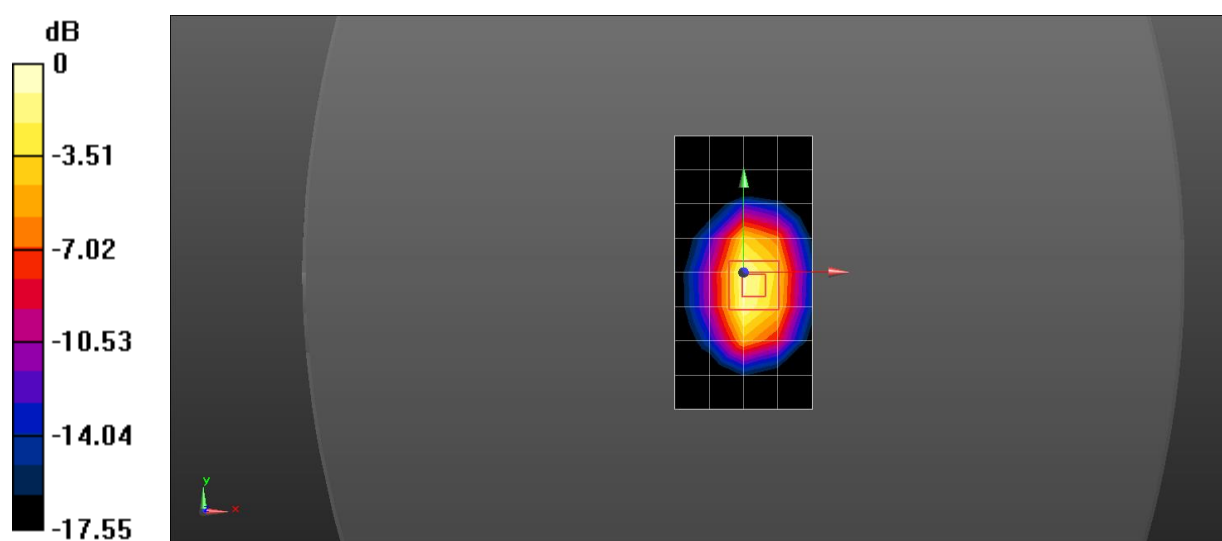
Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 82.55 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 10.8 W/kg; SAR(10 g) = 5.68 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

Date: 2018/12/13

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; $\sigma = 1.819$ S/m; $\epsilon_r = 39.924$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(7.94, 7.94, 7.94); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: Twin phantom; Type: SAM1; Serial: 1141
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Body/d=10mm, Pin=250mW/Area Scan (9x14x1): Measurement grid:

$dx=12$ mm, $dy=12$ mm

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

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

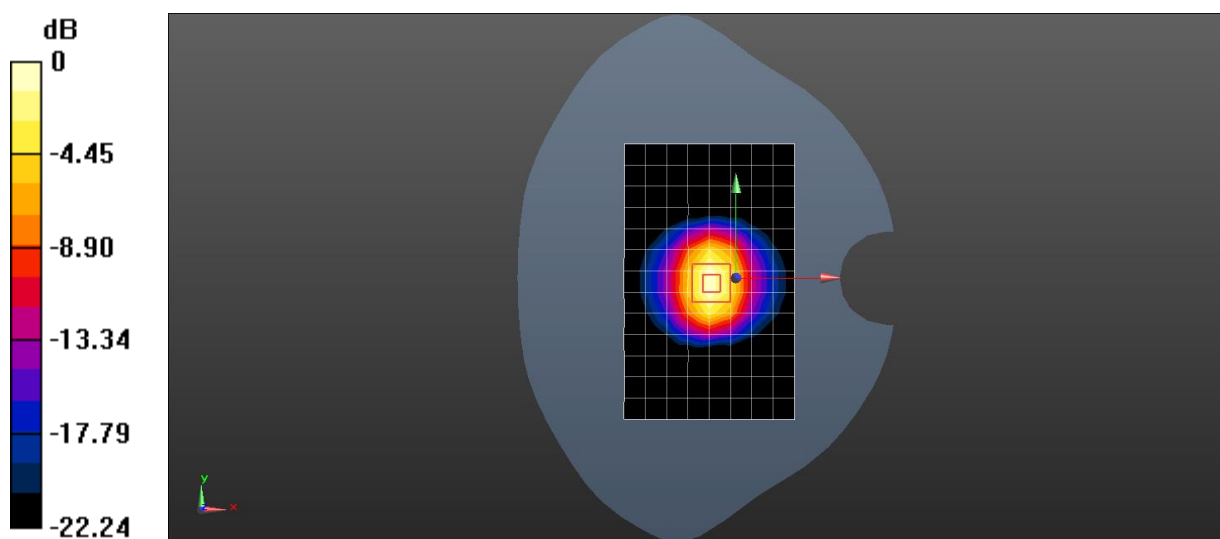
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 86.68 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

Date: 2018/12/21

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; $\sigma = 1.966$ S/m; $\epsilon_r = 52.537$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(7.82, 7.82, 7.82); Calibrated: 2018/4/10;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1428; Calibrated: 2018/1/17
- Phantom: ELI5; Type: ELI5; Serial: 1143
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

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

$dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 14.1 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 = 80.45 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 26.2 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.85 W/kg

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

