

Appendix A

Detailed System Check Results

1. System Performance Check
System Performance Check 750 MHz Head
System Performance Check 835 MHz Head
System Performance Check 1750 MHz Head
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System Performance Check 2450 MHz Head
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System Performance Check 5600 MHz Head
System Performance Check 5750 MHz Head

Test Laboratory: SGS-SAR Lab

System Performance Check 750 MHz Head

DUT: D750V3; Type: Dipole; Serial: 1210

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

Medium: HSL750; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 42.56$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.4, 10.4, 10.4); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 2.91 W/kg

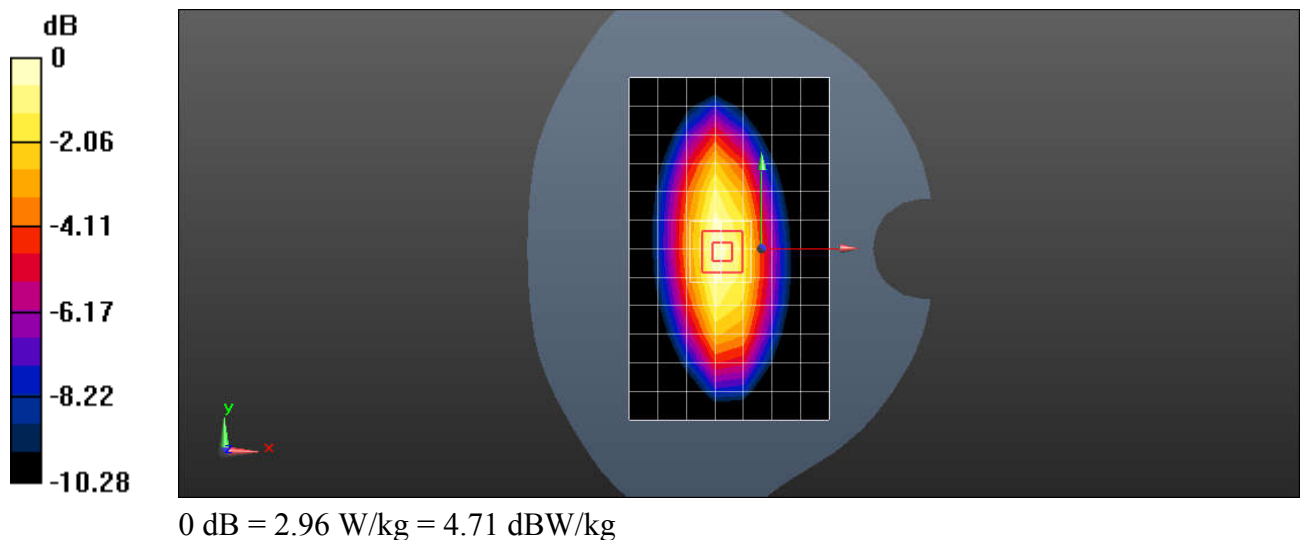
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.86 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.35 W/kg

SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (measured) = 2.96 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Head

DUT: D835V2; Type: Dipole; Serial: 4d256

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

Medium: HSL835; Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.936 \text{ S/m}$; $\epsilon_r = 42.75$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.02, 10.02, 10.02); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 2.95 W/kg

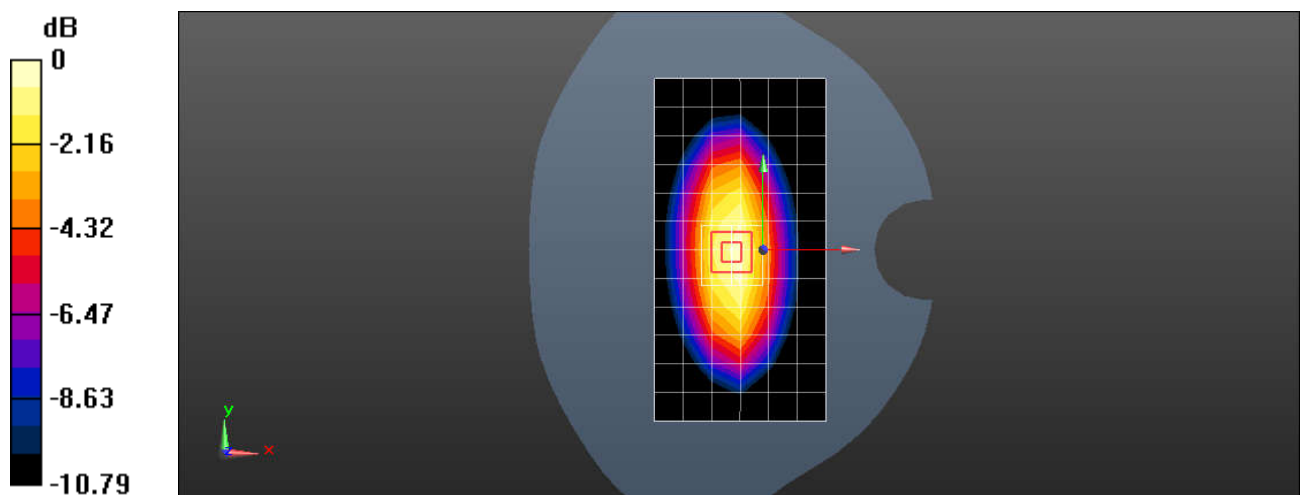
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.24 V/m ; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 3.69 W/kg

SAR(1 g) = 2.45 W/kg ; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 3.12 W/kg



0 dB = 3.12 W/kg = 4.94 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz Head

DUT: D1750V2; Type: Dipole; Serial: 1105

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; $\epsilon_r = 40.757$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.5, 8.5, 8.5); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.7 W/kg

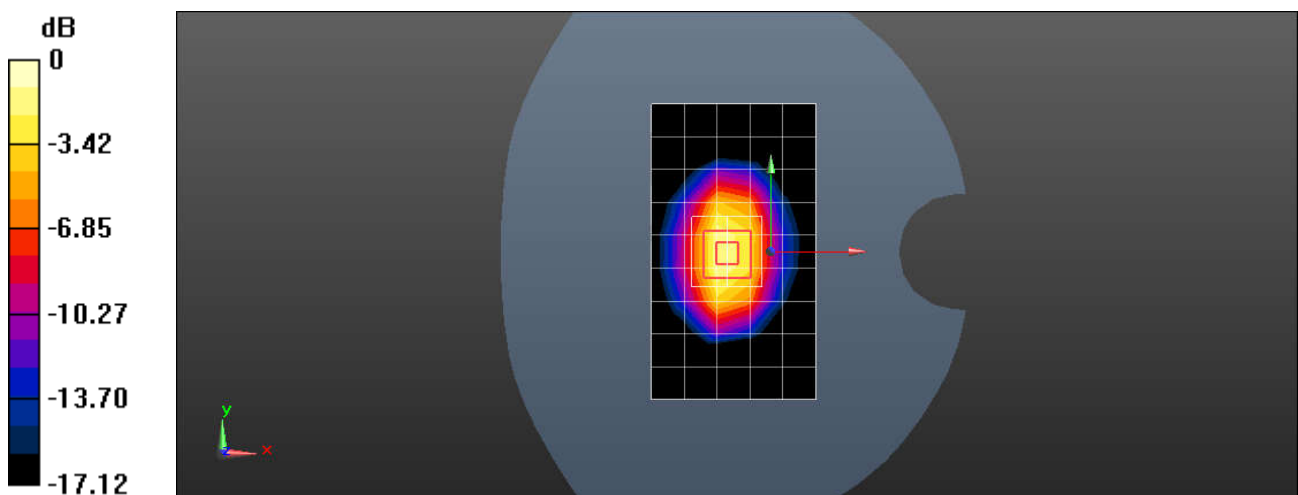
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.00 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 9.69 W/kg; SAR(10 g) = 5.14 W/kg

Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Head

DUT: D1900V2; Type: Dipole; Serial: 5d114

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.426$ S/m; $\epsilon_r = 39.91$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.33, 8.33, 8.33); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 17.0 W/kg

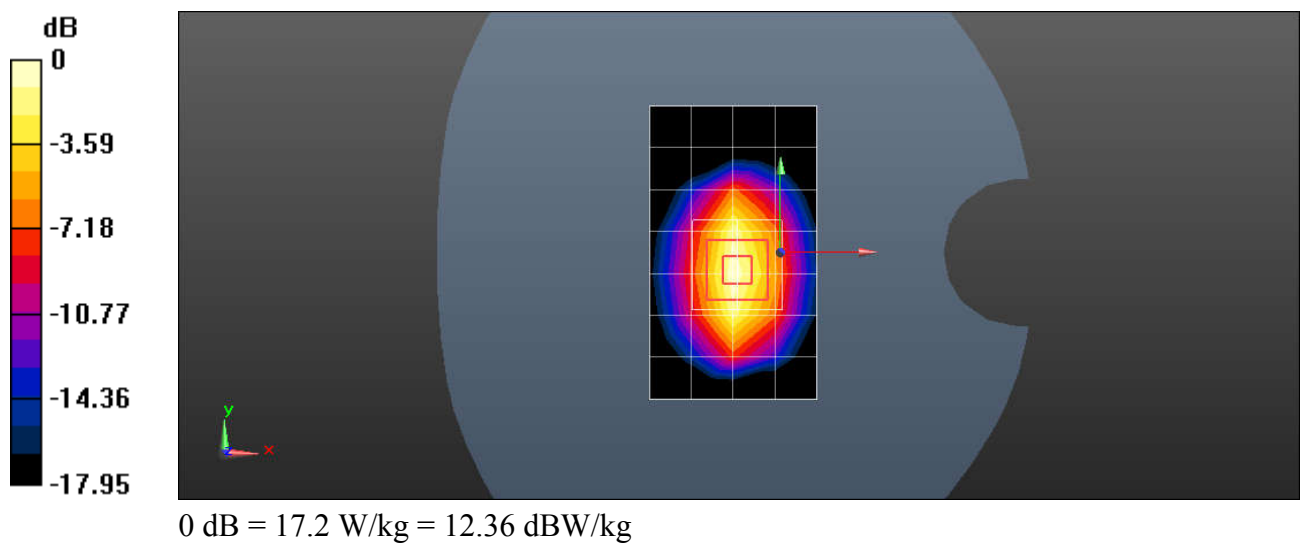
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.56 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 20.4 W/kg

SAR(1 g) = 10.6 W/kg; SAR(10 g) = 4.96 W/kg

Maximum value of SAR (measured) = 17.2 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 2300 MHz Head

DUT: D2300V2; Type: Dipole; Serial: 1072

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: HSL2300; Medium parameters used: $f = 2300$ MHz; $\sigma = 1.666$ S/m; $\epsilon_r = 40.37$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(8.06, 8.06, 8.06); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (9x11x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 20.3 W/kg

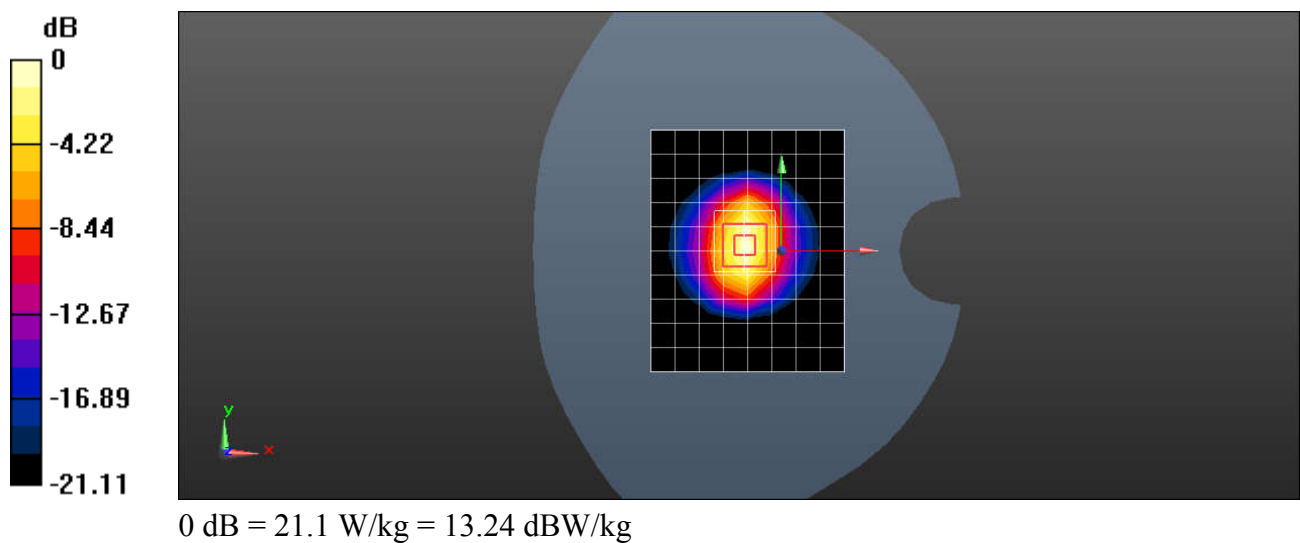
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.42 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.2 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6.1 W/kg

Maximum value of SAR (measured) = 21.1 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Head

DUT: D2450V2; Type: Dipole; Serial: 1038

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

Medium: HSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.821$ S/m; $\epsilon_r = 39.921$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(7.77, 7.77, 7.77); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (9x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 17.6 W/kg

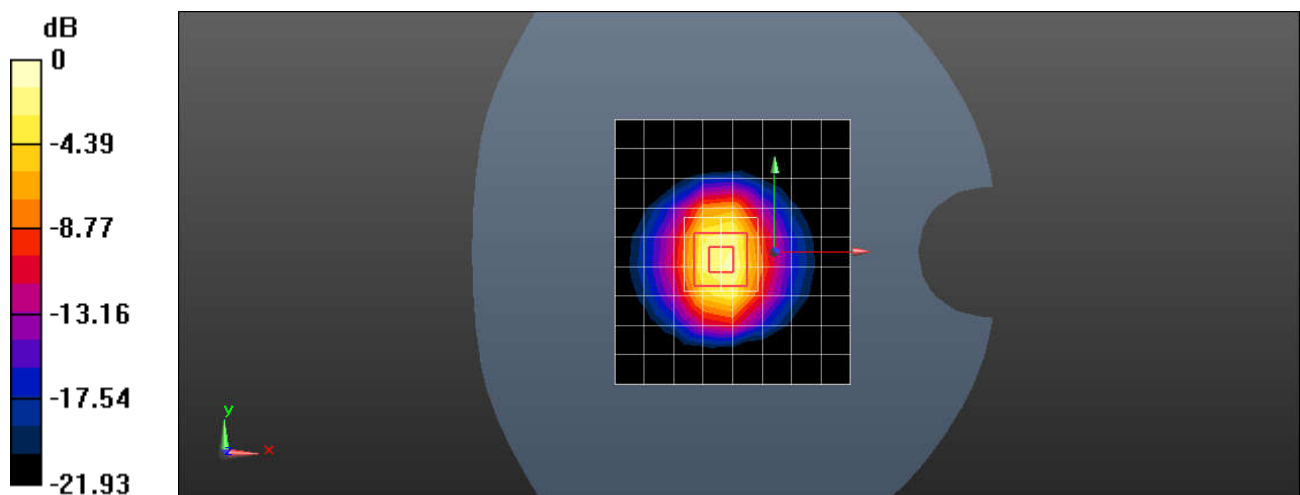
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 80.91 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 27.0 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.1 W/kg

Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.25GHz Head

DUT: D5GHzV2; Type: Dipole; Serial: 1313

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used: $f = 5250$ MHz; $\sigma = 4.711$ S/m; $\epsilon_r = 36.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.55, 5.55, 5.55); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 18.0 W/kg

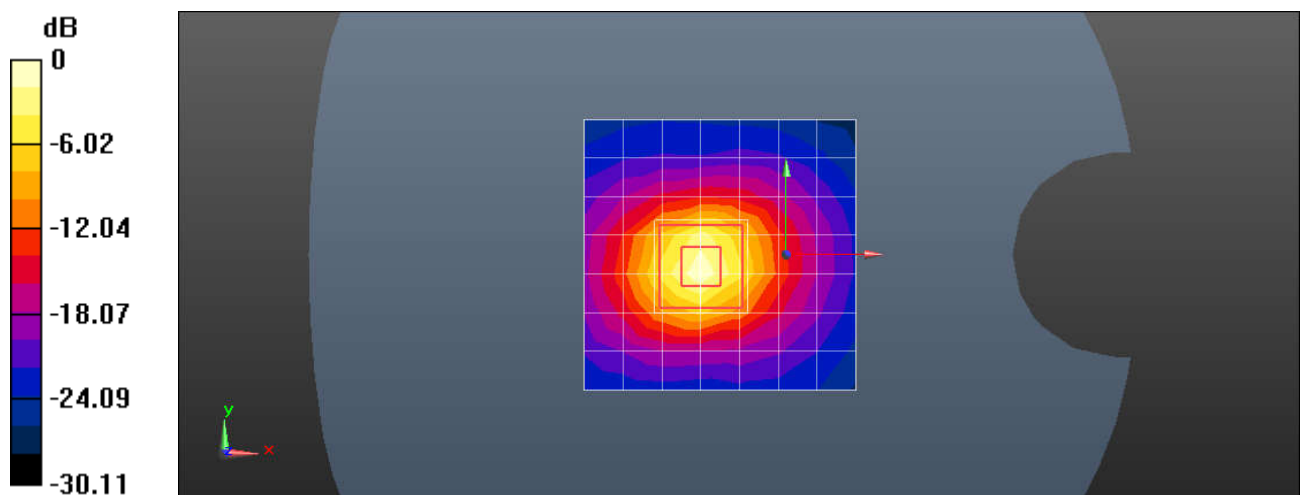
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 56.63 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 30.1 W/kg

SAR(1 g) = 7.48 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg = 12.81 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.6GHz Head

DUT: D5GHzV2; Type: Dipole; Serial: 1313

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.094$ S/m; $\epsilon_r = 35.64$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5, 5, 5); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 17.8 W/kg

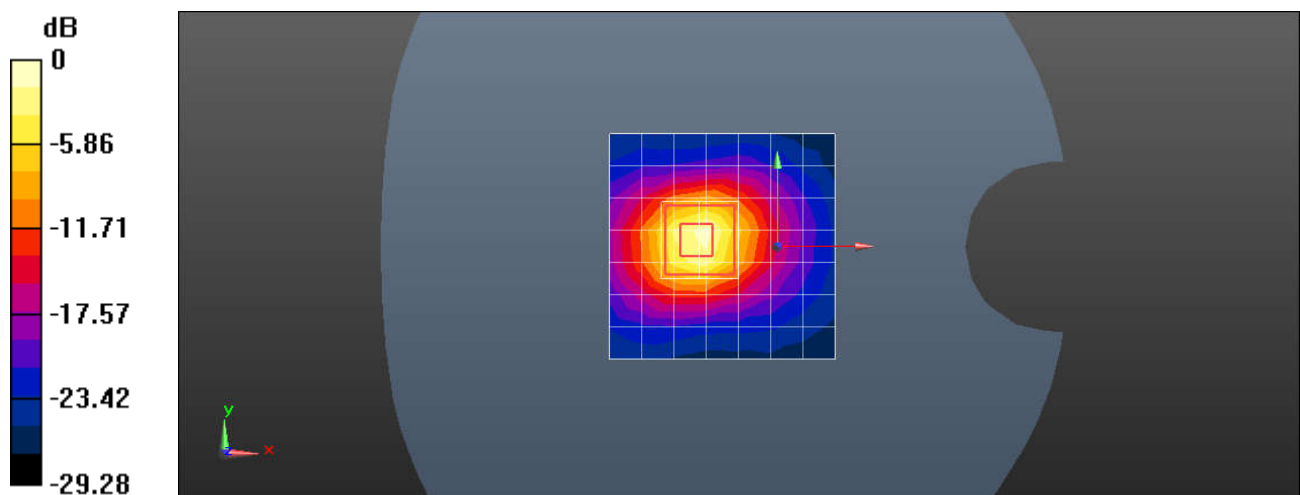
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 49.50 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 34.8 W/kg

SAR(1 g) = 8.26 W/kg; SAR(10 g) = 2.36 W/kg

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



Test Laboratory: SGS-SAR Lab

System Performance Check 5.75GHz Head

DUT: D5GHzV2; Type: Dipole; Serial: 1313

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

Medium: HSL5G; Medium parameters used: $f = 5750$ MHz; $\sigma = 5.284$ S/m; $\epsilon_r = 35.46$; $\rho = 1500$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(5.1, 5.1, 5.1); Calibrated: 2021-12-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1455; Calibrated: 2021-12-29
- Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1563
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 13.5 W/kg

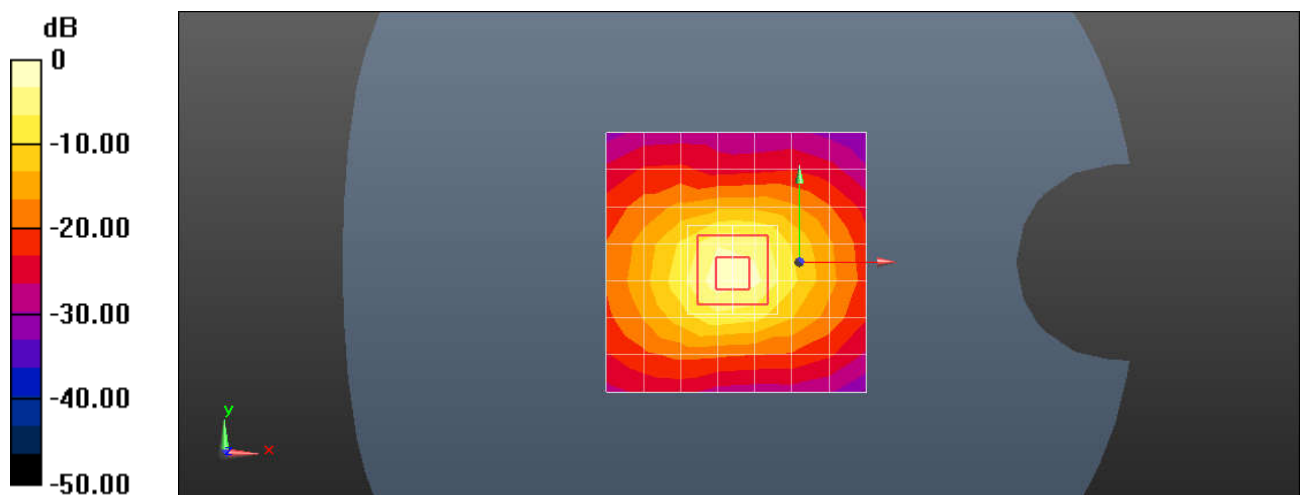
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 75.63 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 7.55 W/kg; SAR(10 g) = 2.38 W/kg

Maximum value of SAR (measured) = 17.9 W/kg



0 dB = 17.9 W/kg = 12.53 dBW/kg