

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
System Performance Check 1950 MHz Head
System Performance Check 2300 MHz Head
System Performance Check 2450 MHz Head
System Performance Check 2600 MHz Head
System Performance Check 3500 MHz Head
System Performance Check 3700 MHz Head
System Performance Check 3900 MHz Head
System Performance Check 5250 MHz Head
System Performance Check 5600 MHz Head
System Performance Check 5750 MHz Head

Test Laboratory: SGS-SAR Lab

System Performance Check 750 MHz

DUT: D750V3; Type: Dipole; Serial: 1214

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

Medium: HSL750; Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.887 \text{ S/m}$; $\epsilon_r = 41.78$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(9.61, 9.61, 9.61); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- 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) = 2.63 W/kg

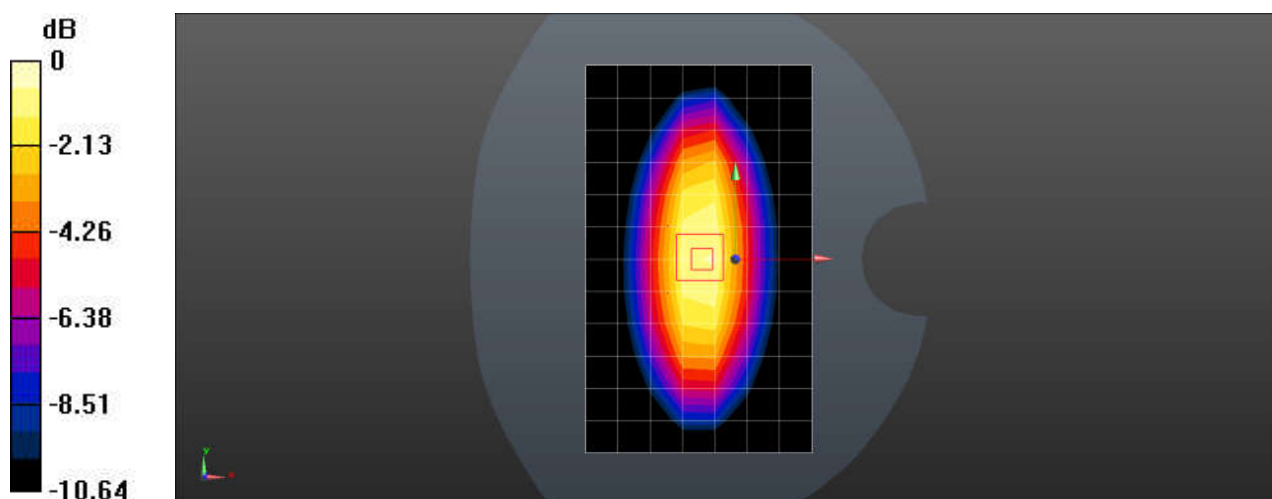
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.67 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 2.17 W/kg ; SAR(10 g) = 1.42 W/kg

Maximum value of SAR (measured) = 3.03 W/kg



0 dB = $3.03 \text{ W/kg} = 4.81 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz

DUT: D835V2; Type: Dipole; Serial: 4d161

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

Medium: HSL835; Medium parameters used: $f = 835$ MHz; $\sigma = 0.907$ S/m; $\epsilon_r = 42.025$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(9.2, 9.2, 9.2); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

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

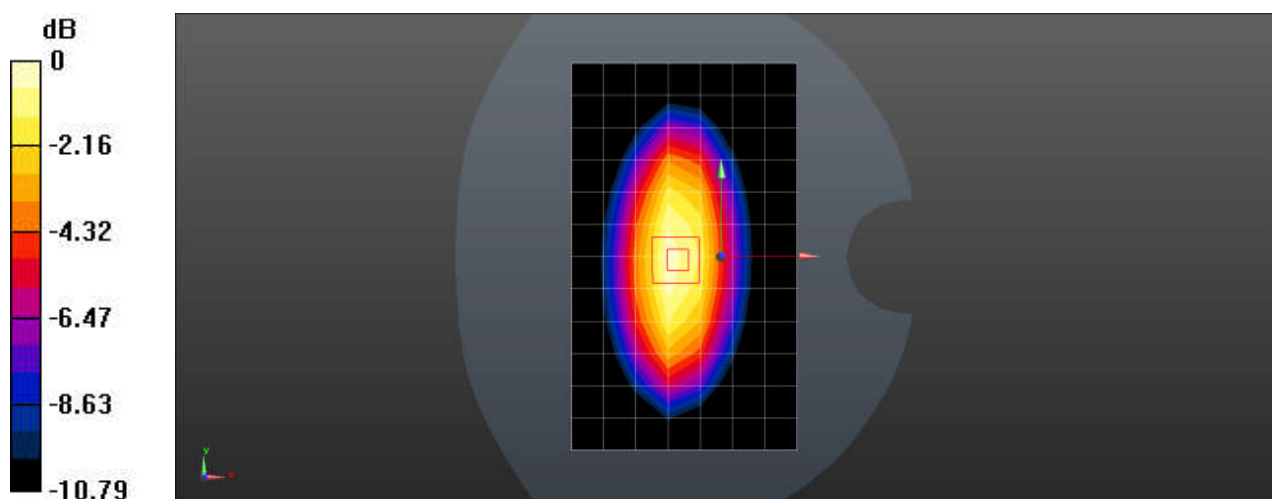
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.72 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.91 W/kg

SAR(1 g) = 2.53 W/kg; SAR(10 g) = 1.64 W/kg

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



0 dB = 3.25 W/kg = 5.12 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz

DUT: D1750V2; Type: Dipole; Serial: 1038

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

Medium: HSL1750; Medium parameters used: $f = 1750$ MHz; $\sigma = 1.325$ S/m; $\epsilon_r = 38.441$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(8.12, 8.12, 8.12); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- 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) = 11.5 W/kg

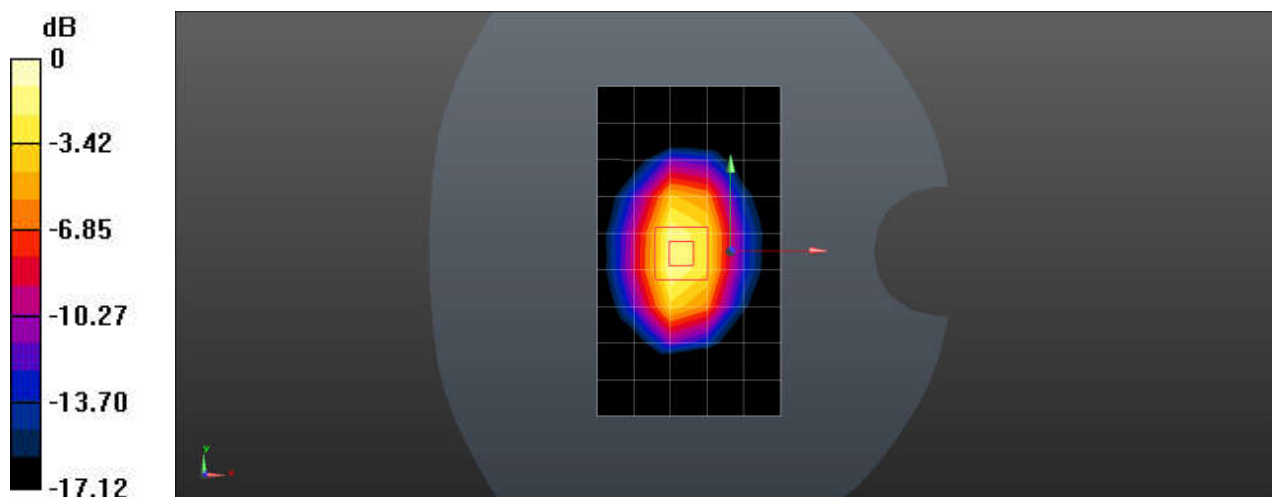
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.13 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 9.58 W/kg; SAR(10 g) = 5.03 W/kg

Maximum value of SAR (measured) = 14.8 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 1950 MHz

DUT: D1950V3; Type: Dipole; Serial: 1218

Communication System: UID 0, CW (0); Frequency: 1950 MHz; Duty Cycle: 1:1

Medium: HSL1950; Medium parameters used: $f = 1950$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 38.645$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(7.81, 7.81, 7.81); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (9x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 15.4 W/kg

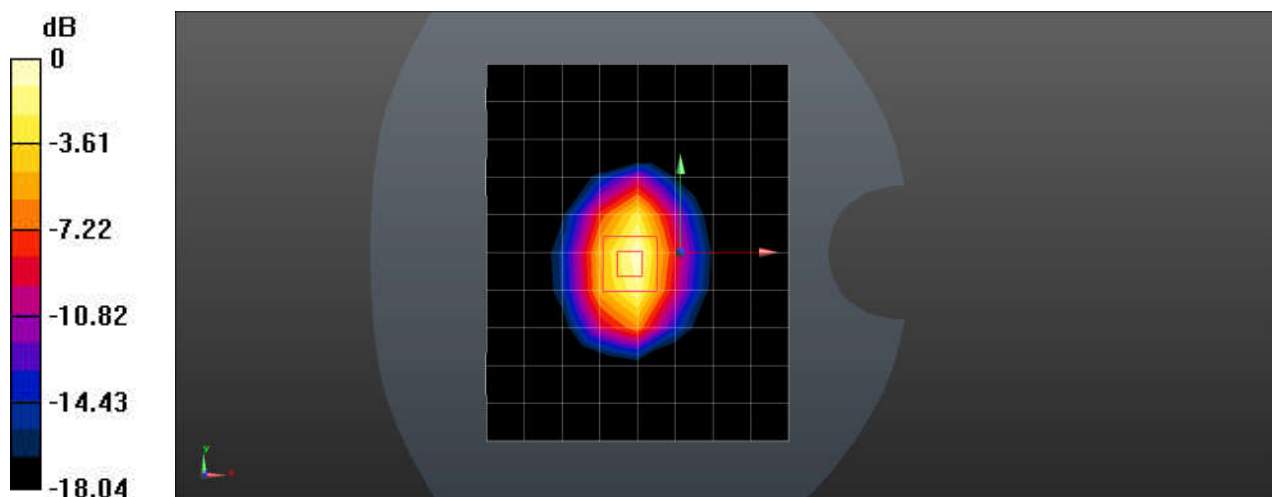
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.37 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 19.7 W/kg

SAR(1 g) = 10.7 W/kg; SAR(10 g) = 5.49 W/kg

Maximum value of SAR (measured) = 16.6 W/kg



0 dB = 16.6 W/kg = 12.20 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2300MHz

DUT: D2300V2; Type: Dipole; Serial: 1124

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

Medium: HSL2300; Medium parameters used: $f = 2300$ MHz; $\sigma = 1.683$ S/m; $\epsilon_r = 38.55$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(7.66, 7.66, 7.66); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- 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) = 20.0 W/kg

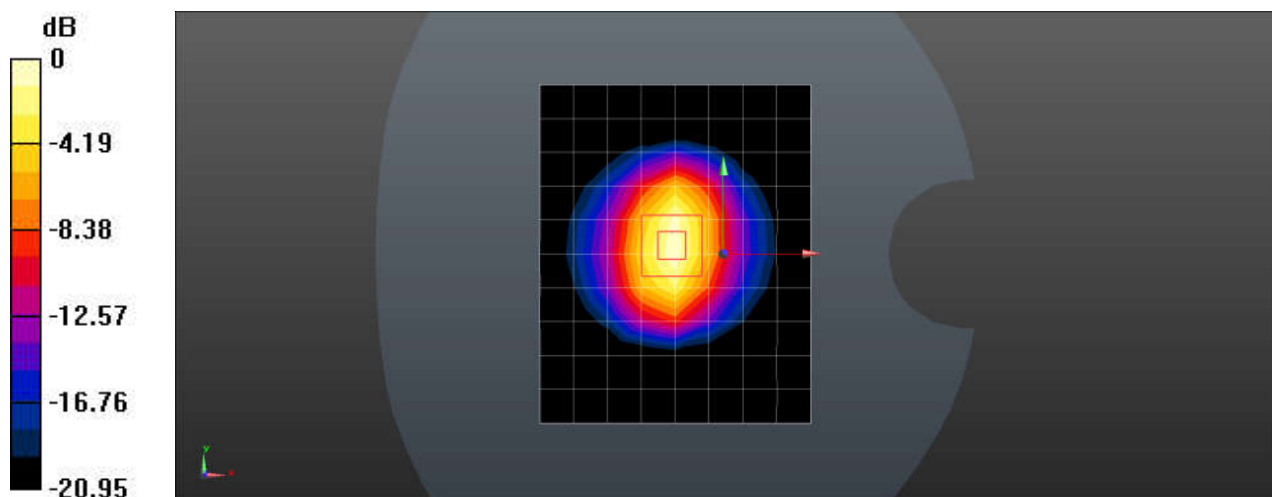
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.12 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 25.5 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 6.09 W/kg

Maximum value of SAR (measured) = 20.9 W/kg



0 dB = 20.9 W/kg = 13.20 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz

DUT: D2450V2; Type: Dipole; Serial: 922

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

Medium: HSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 37.993$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(7.41, 7.41, 7.41); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm

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

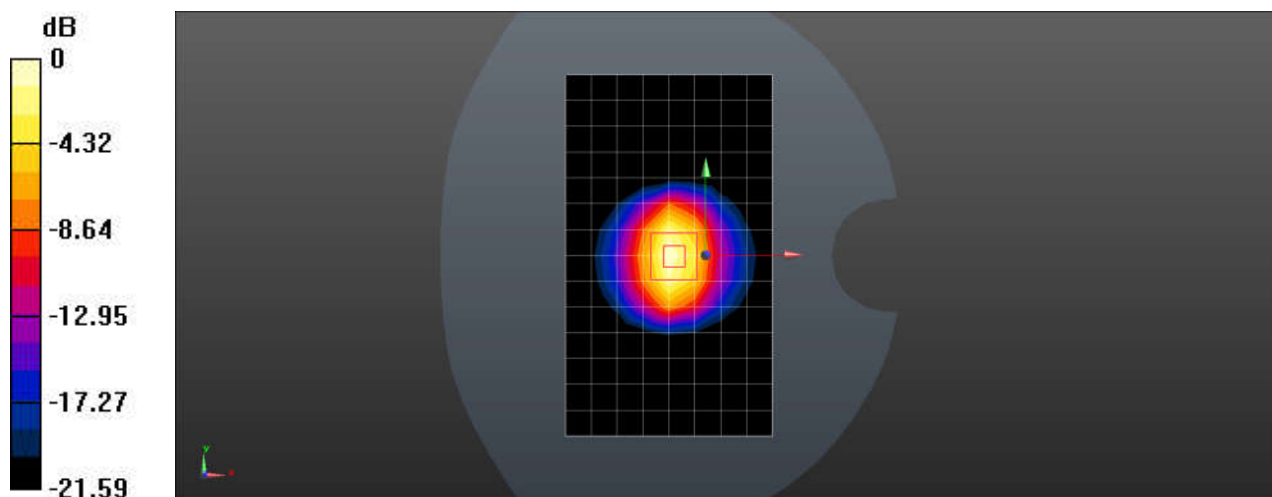
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.08 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.3 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.21 W/kg

Maximum value of SAR (measured) = 21.6 W/kg



0 dB = 21.6 W/kg = 13.34 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2600MHz

DUT: D2600V2; Type: Dipole; Serial: 1187

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2600$ MHz; $\sigma = 2.022$ S/m; $\epsilon_r = 37.423$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(7.16, 7.16, 7.16); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 23.5 W/kg

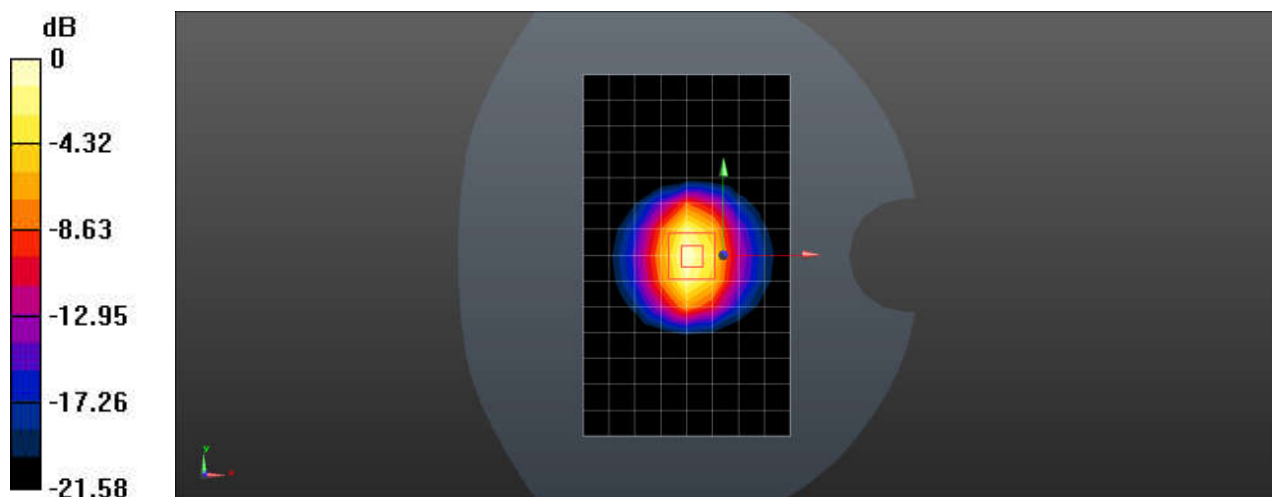
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.24 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.47 W/kg

Maximum value of SAR (measured) = 24.2 W/kg



0 dB = 24.2 W/kg = 13.84 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 3500MHz

DUT: D3500V2; Type: Dipole; Serial: 1133

Communication System: UID 0, CW (0); Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: HSL3500; Medium parameters used: $f = 3500$ MHz; $\sigma = 2.98$ S/m; $\epsilon_r = 38.576$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(6.82, 6.82, 6.82); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (6x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.57 W/kg

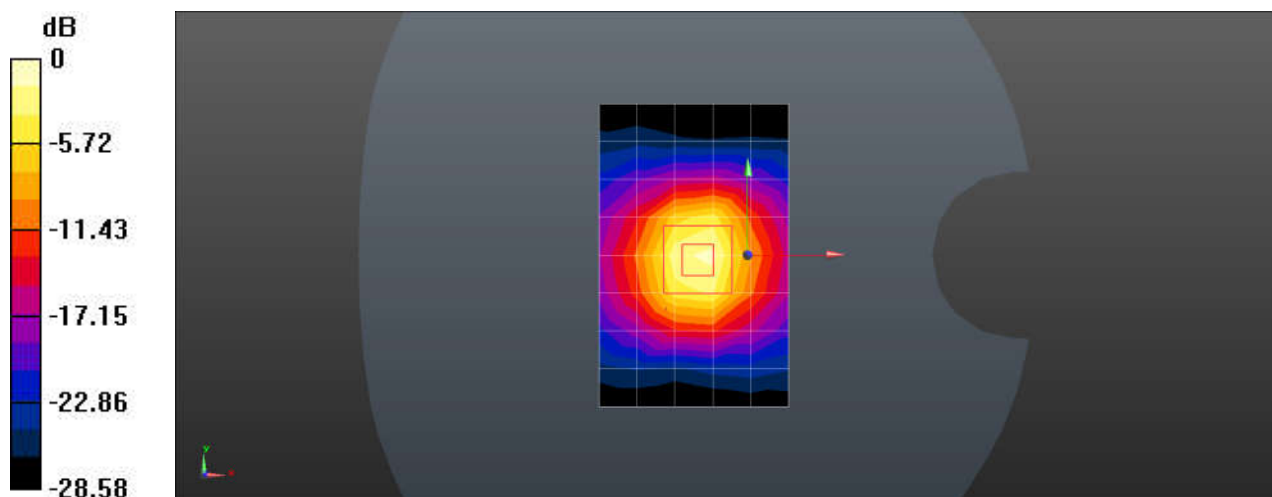
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 51.10 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 6.55 W/kg; SAR(10 g) = 2.48 W/kg

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



0 dB = 12.6 W/kg = 11.00 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 3700MHz

DUT: D3700V2; Type: Dipole; Serial: 1108

Communication System: UID 0, CW (0); Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: HSL3700; Medium parameters used: $f = 3700$ MHz; $\sigma = 3.212$ S/m; $\epsilon_r = 37.958$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(6.67, 6.67, 6.67); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (6x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 8.44 W/kg

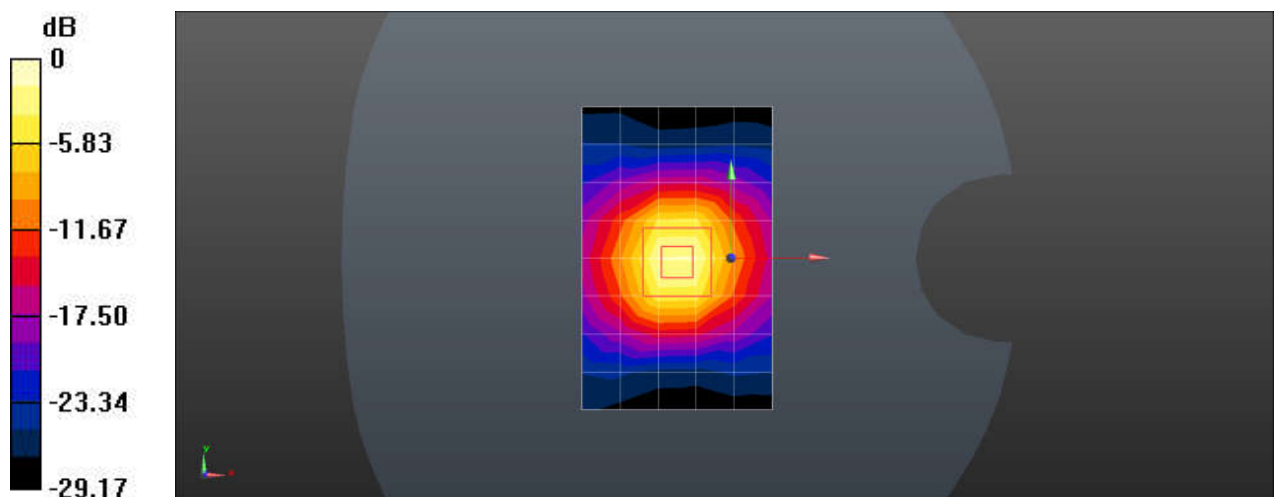
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.53 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 6.42 W/kg; SAR(10 g) = 2.31 W/kg

Maximum value of SAR (measured) = 12.7 W/kg



0 dB = 12.7 W/kg = 11.04 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 3900MHz

DUT: D3900V2; Type: Dipole; Serial: 1083

Communication System: UID 0, CW (0); Frequency: 3900 MHz; Duty Cycle: 1:1

Medium: HSL3900; Medium parameters used: $f = 3900$ MHz; $\sigma = 3.443$ S/m; $\epsilon_r = 37.324$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(6.57, 6.57, 6.57); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW/Area Scan (6x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 13.6 W/kg

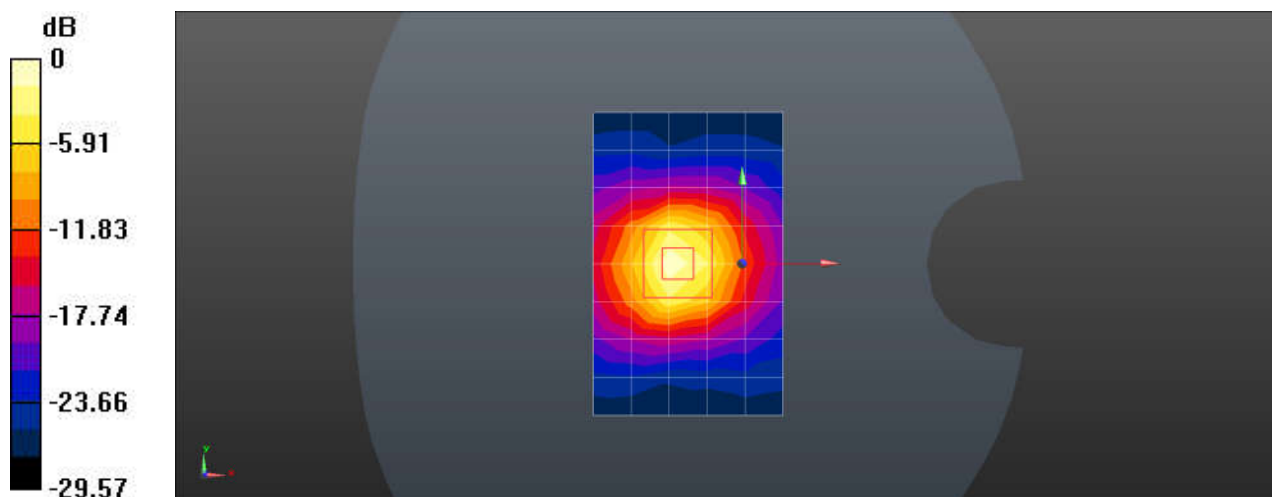
Body/d=10mm, Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 49.15 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 19.3 W/kg

SAR(1 g) = 7.47 W/kg; SAR(10 g) = 2.58 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 5.25GHz

DUT: D5GHzV2; Type: Dipole; Serial: 1174

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

Medium: HSL5G; Medium parameters used: $f = 5250$ MHz; $\sigma = 4.758$ S/m; $\epsilon_r = 35.985$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(5.3, 5.3, 5.3); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

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

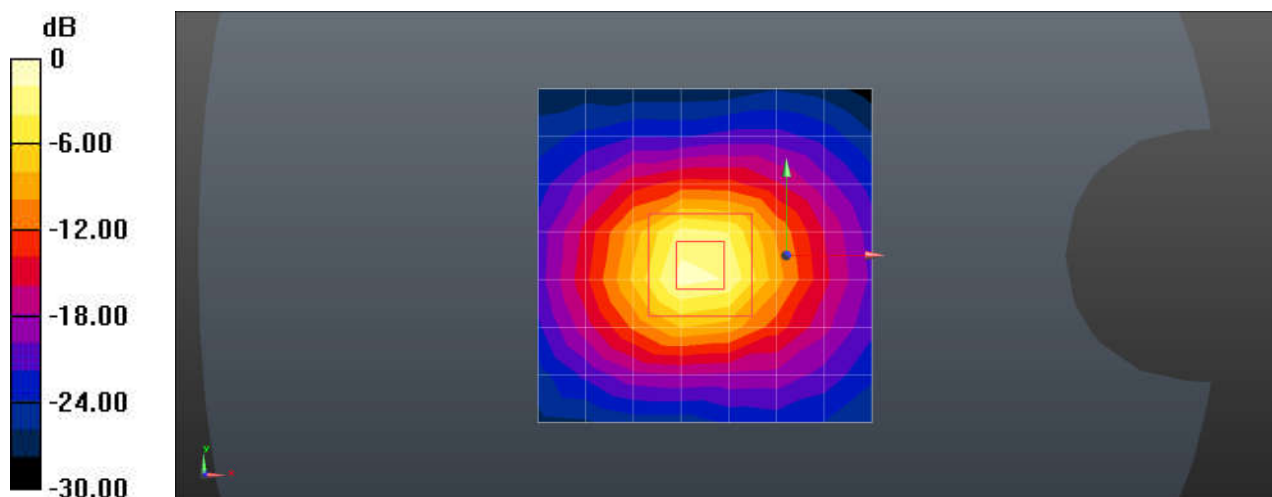
Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 70.22 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 34.6 W/kg

SAR(1 g) = 7.37 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (measured) = 20.2 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 5.6GHz

DUT: D5GHzV2; Type: Dipole; Serial: 1174

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

Medium: HSL5G; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.147$ S/m; $\epsilon_r = 35.033$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(4.71, 4.71, 4.71); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 16.8 W/kg

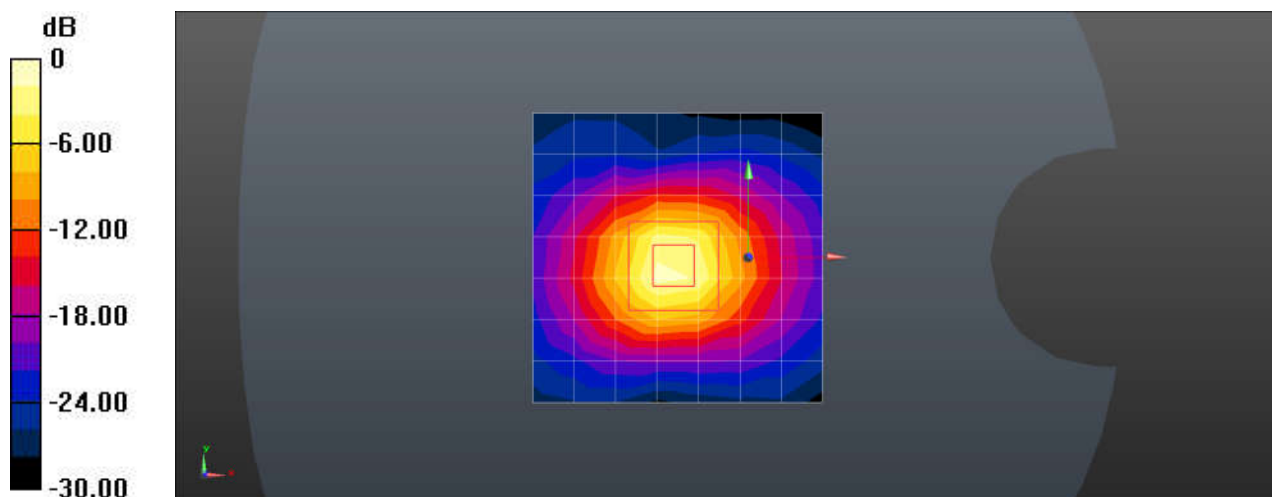
Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.10 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 38.4 W/kg

SAR(1 g) = 7.9 W/kg; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 22.0 W/kg



0 dB = 22.0 W/kg = 13.42 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.75GHz

DUT: D5GHzV2; Type: Dipole; Serial: 1174

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

Medium: HSL5G; Medium parameters used: $f = 5750$ MHz; $\sigma = 5.32$ S/m; $\epsilon_r = 34.669$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7735; ConvF(4.79, 4.79, 4.79); Calibrated: 2023-10-17
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 2023-11-17
- Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1769
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 16.6 W/kg

Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.50 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 39.5 W/kg

SAR(1 g) = 7.91 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (measured) = 22.1 W/kg

