

Appendix A

Detailed System Check Results

1. System Performance Check
System Performance Check 13 MHz Head
System Performance Check 750 MHz Head
System Performance Check 750 MHz Head
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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 13 MHz Head

DUT: CLA-13; Type: Dipole; Serial: 1009

Communication System: UID 0, CW (0); Frequency: 13 MHz; Duty Cycle: 1:1

Medium: HSL13; Medium parameters used: $f = 13 \text{ MHz}$; $\sigma = 0.726 \text{ S/m}$; $\epsilon_r = 54.558$; $\rho = 1000$

kg/m^3

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(15.3, 15.3, 15.3); Calibrated: 2022-09-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2022-10-17
- Phantom: ELI5; Type: ELI5; Serial: 1143
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Configuration/Pin=250mW/Area Scan (8x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 0.293 W/kg

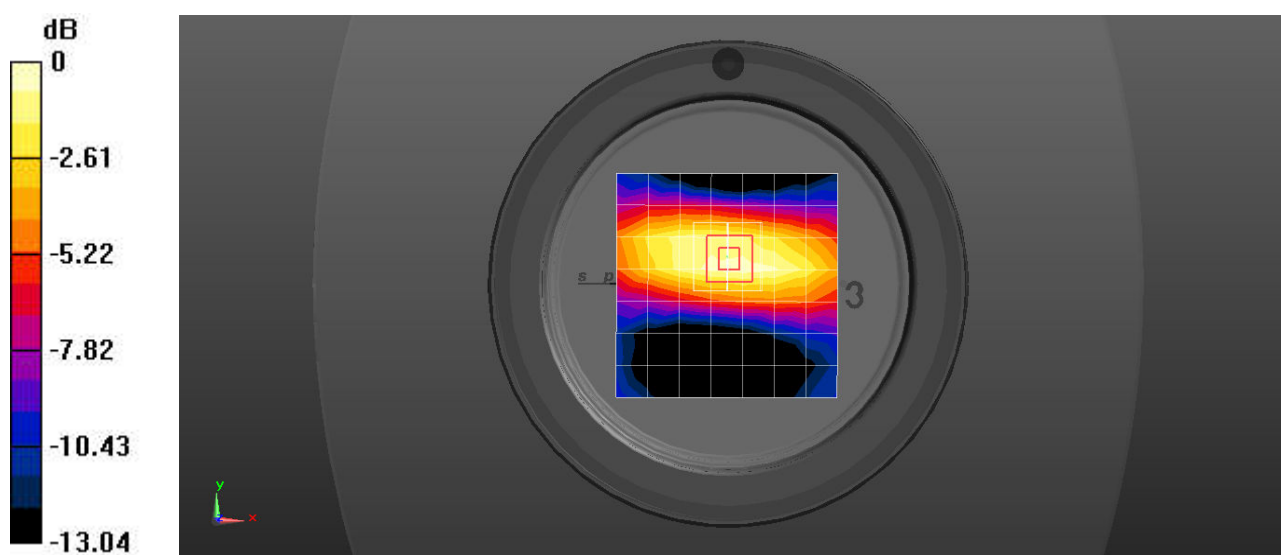
Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.03 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.393 W/kg

SAR(1 g) = 0.144 W/kg ; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.317 W/kg



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: $f = 750$ MHz; $\sigma = 0.886$ S/m; $\epsilon_r = 42.702$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7620; ConvF(11.13, 11.13, 11.13); Calibrated: 2022-11-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2022-10-17
- Phantom: SAM5; Type: SAM; Serial: 1481
- 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) = 3.06 W/kg

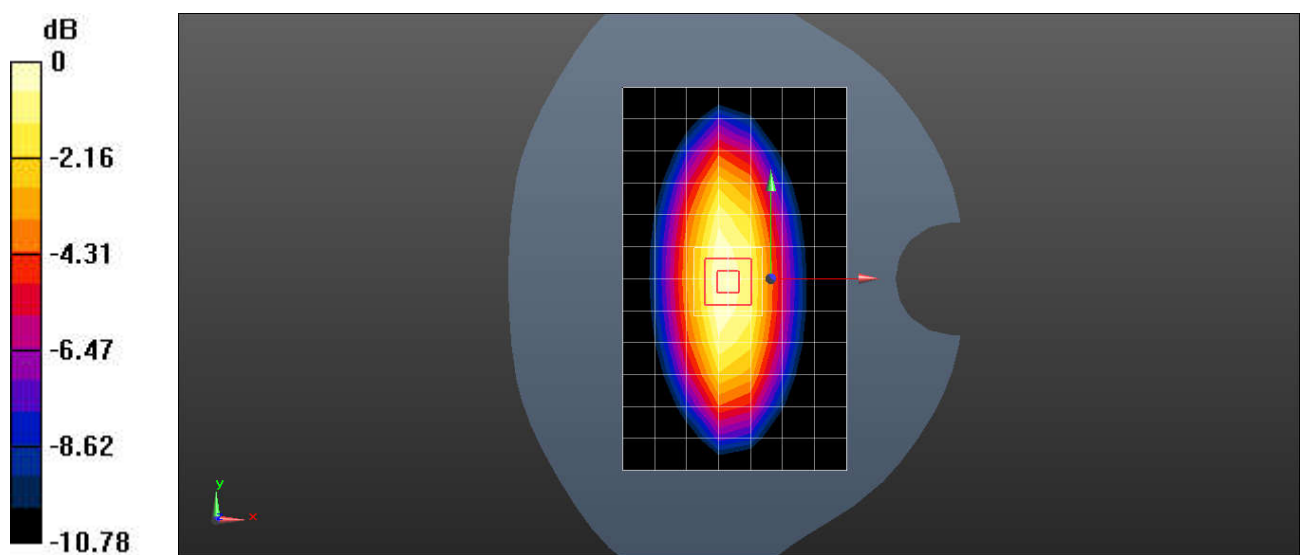
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.08 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.46 W/kg

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

Maximum value of SAR (measured) = 2.98 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: $f = 835 \text{ MHz}$; $\sigma = 0.907 \text{ S/m}$; $\epsilon_r = 40.026$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7620; ConvF(10.73, 10.73, 10.73); Calibrated: 2022-11-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2022-10-17
- Phantom: SAM5; Type: SAM; Serial: 1481
- 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) = 2.78 W/kg

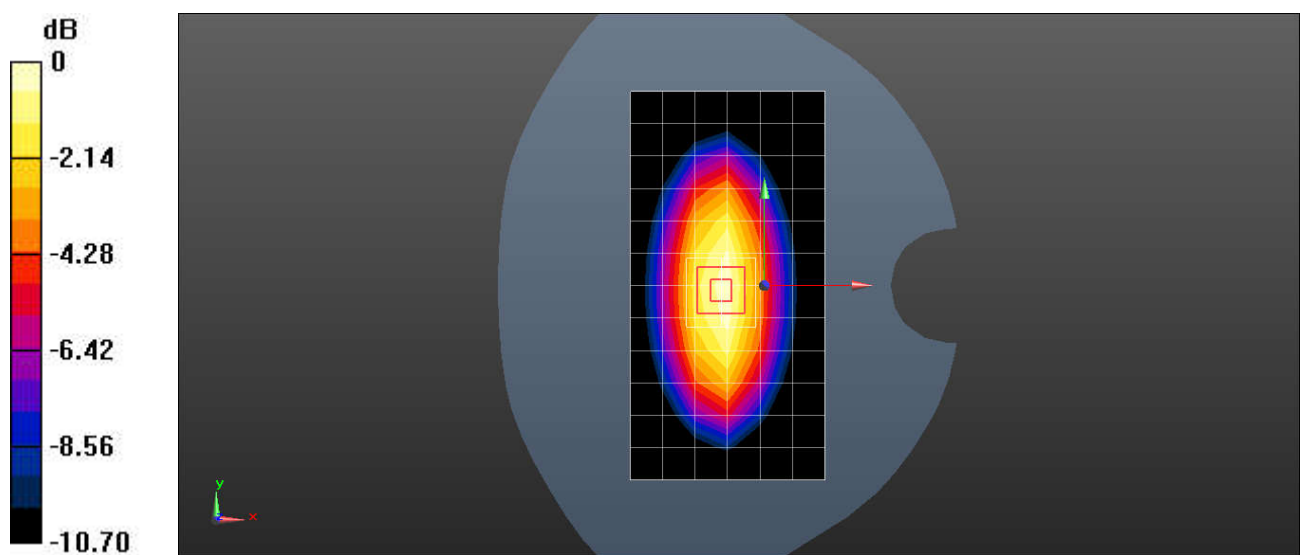
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 51.06 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.38 W/kg

SAR(1 g) = 2.25 W/kg ; SAR(10 g) = 1.48 W/kg

Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.86 W/kg = 4.56 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; $\sigma = 1.393$ S/m; $\epsilon_r = 39.97$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN7620; ConvF(8.65, 8.65, 8.65); Calibrated: 2022-11-20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2022-10-17
- Phantom: SAM5; Type: SAM; Serial: 1481
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=250mW/Area Scan (8x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.02 W/kg

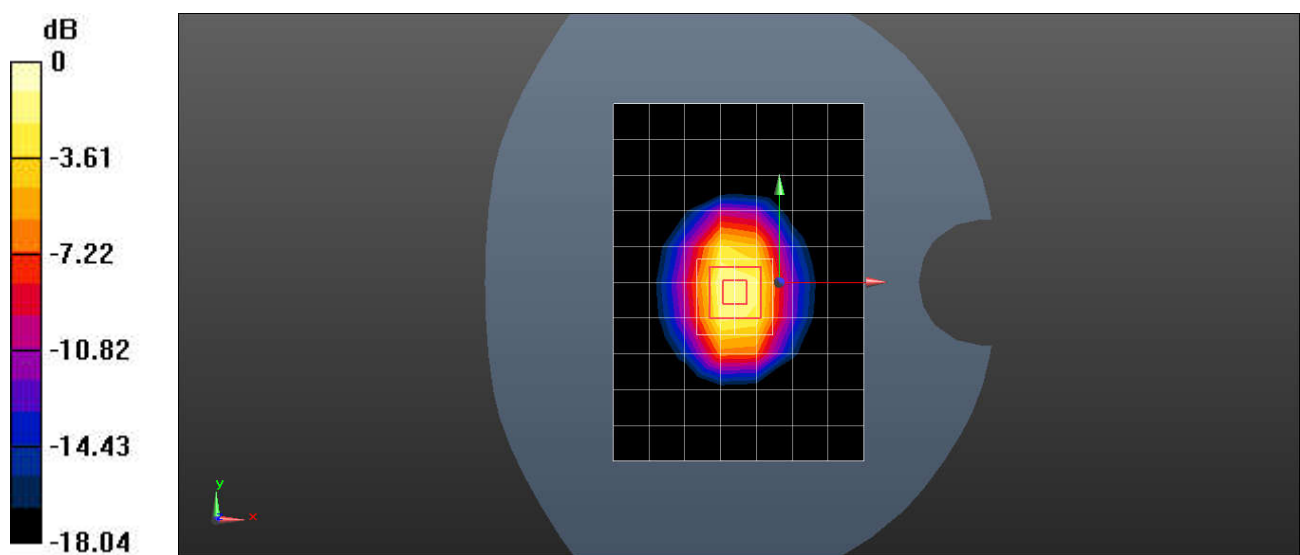
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.40 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.32 W/kg; SAR(10 g) = 4.84 W/kg

Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 10.4 W/kg = 10.17 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Head

DUT: D2450V2; Type: Dipole; Serial: 1038

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

Medium: HSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.791$ S/m; $\epsilon_r = 38.416$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(6.98, 6.98, 6.98); Calibrated: 2022-09-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM3; Type: SAM; Serial: TP:1770
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Maximum value of SAR (measured) = 17.1 W/kg

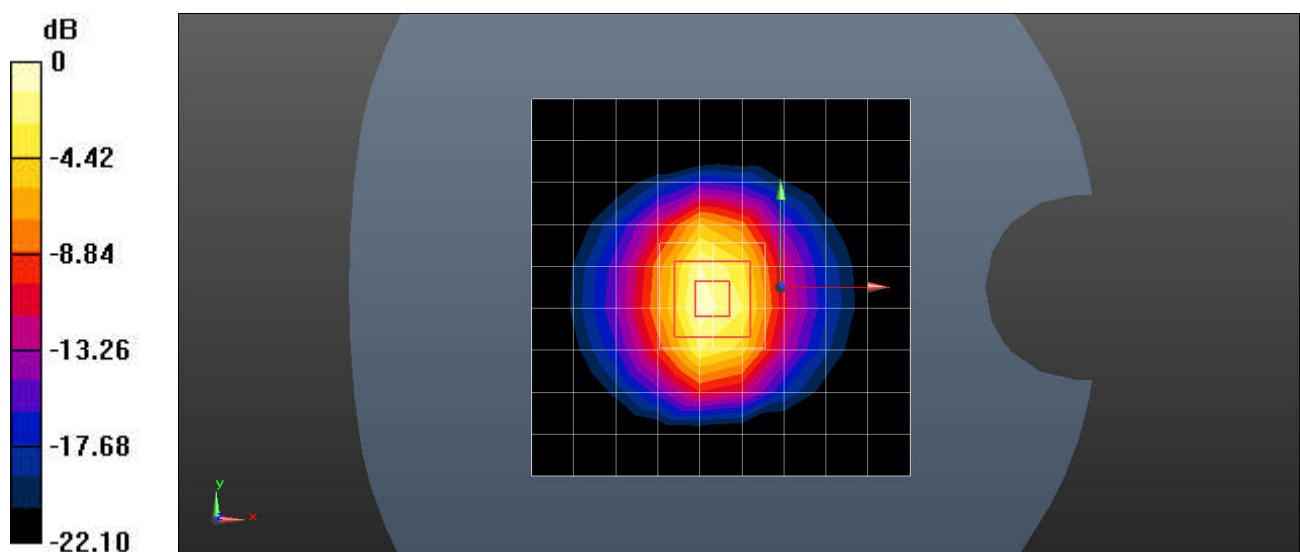
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.88 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 23.9 W/kg

SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.83 W/kg

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg = 12.83 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; $\sigma = 4.739$ S/m; $\epsilon_r = 36.526$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(5.02, 5.02, 5.02); Calibrated: 2022-09-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM3; Type: SAM; Serial: TP:1770
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (10x10x1): Measurement grid:

dx=10mm, dy=10mm

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

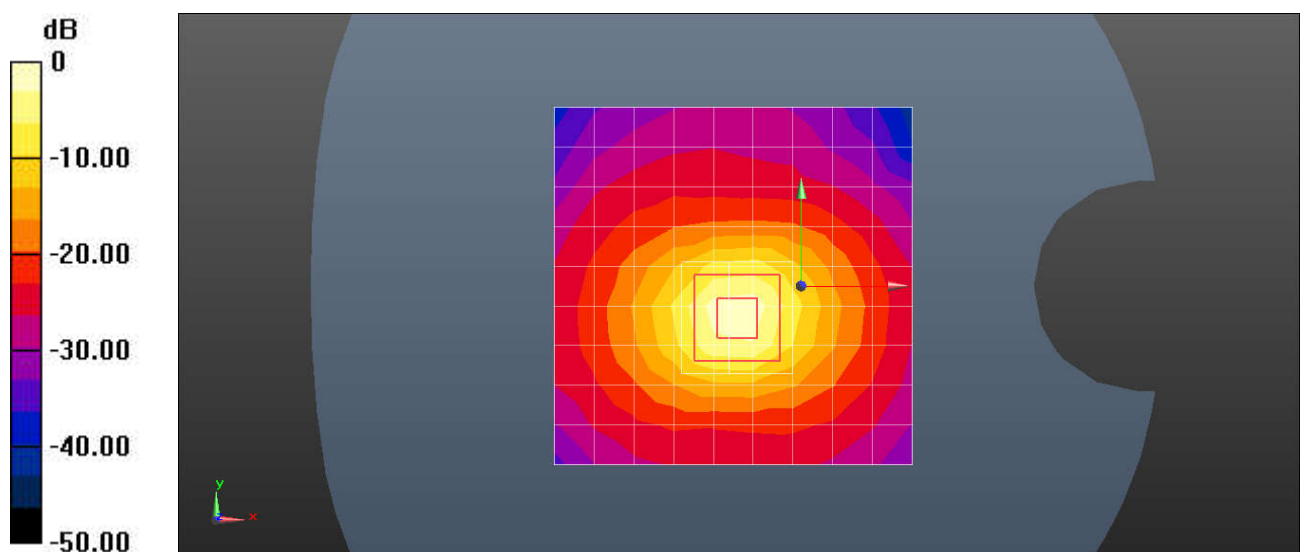
Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 48.35 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 29.5 W/kg

SAR(1 g) = 7.62 W/kg; SAR(10 g) = 2.16 W/kg

Maximum value of SAR (measured) = 17.8 W/kg



0 dB = 17.8 W/kg = 12.50 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; $\sigma = 5.148$ S/m; $\epsilon_r = 35.623$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(4.43, 4.43, 4.43); Calibrated: 2022-09-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM3; Type: SAM; Serial: TP:1770
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 16.3 W/kg

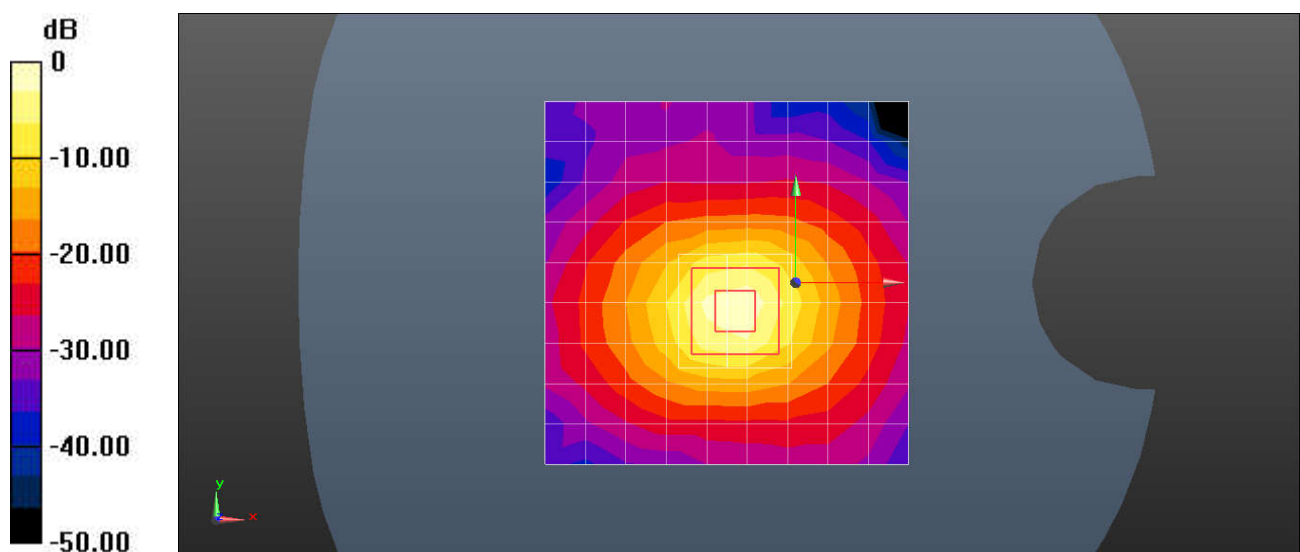
Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 49.80 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 32.2 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 18.3 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; $\sigma = 5.308$ S/m; $\epsilon_r = 35.196$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3789; ConvF(4.55, 4.55, 4.55); Calibrated: 2022-09-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2022-04-27
- Phantom: SAM3; Type: SAM; Serial: TP:1770
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 19.4 W/kg

Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (8x8x7)/Cube 0: Measurement

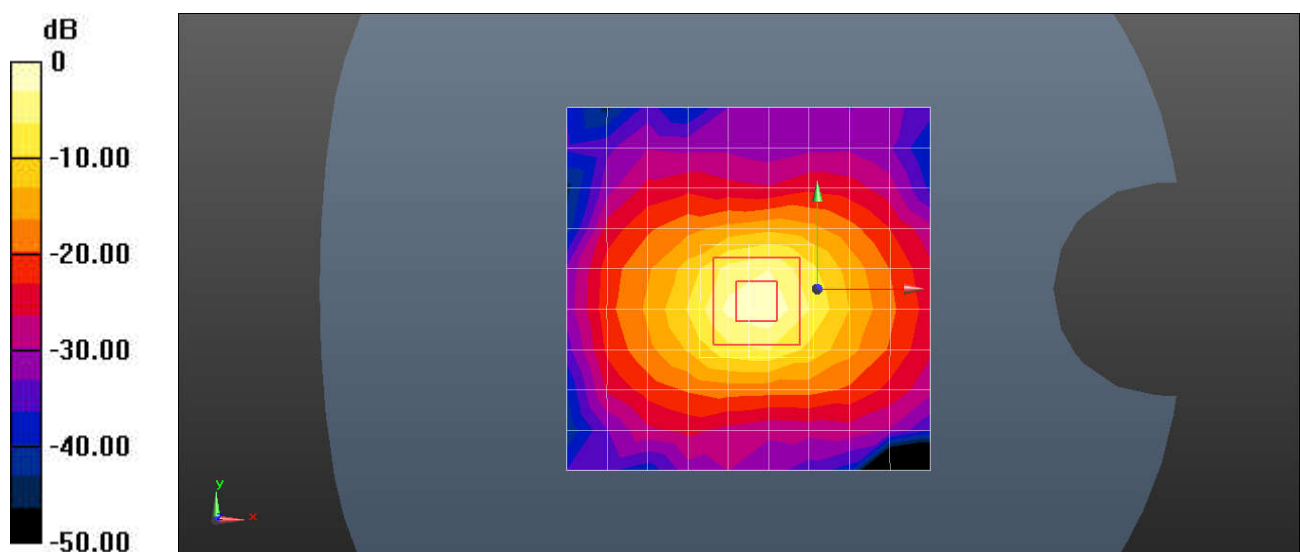
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 64.38 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 38.9 W/kg

SAR(1 g) = 7.45 W/kg; SAR(10 g) = 2.11 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



0 dB = 20.8 W/kg = 13.18 dBW/kg