

Appendix A:SAR System performance Check Plots
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Test Laboratory: CTI SAR Lab

Systemcheck 2450-Head**DUT: D2450V2 - SN959; Type: D2450V2; Serial: SN959**

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.877$ S/m; $\epsilon_r = 38.057$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(7.7, 7.7, 7.7); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

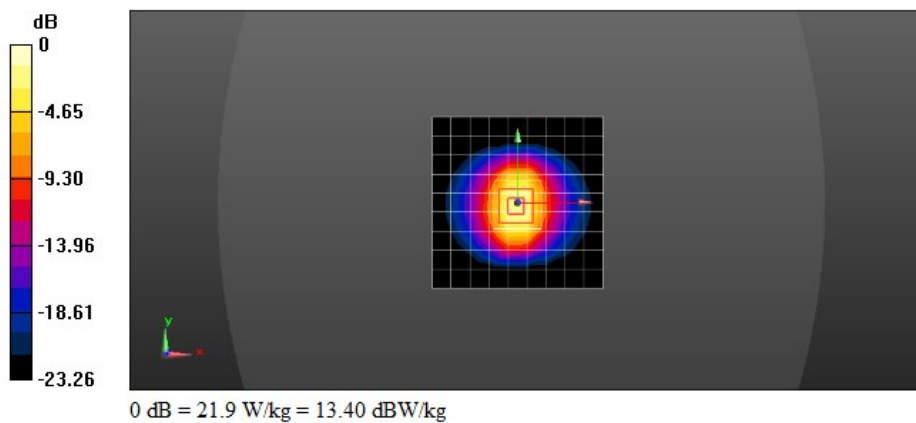
Configuration/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 104.3 V/m; Power Drift = 0.69 dB

Peak SAR (extrapolated) = 28.4 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.83 W/kg

Maximum value of SAR (measured) = 21.9 W/kg



Test Laboratory: CTI SAR Lab

Systemcheck 2450-Head

DUT: D2450V2 - SN959; Type: D2450V2; Serial: SN959

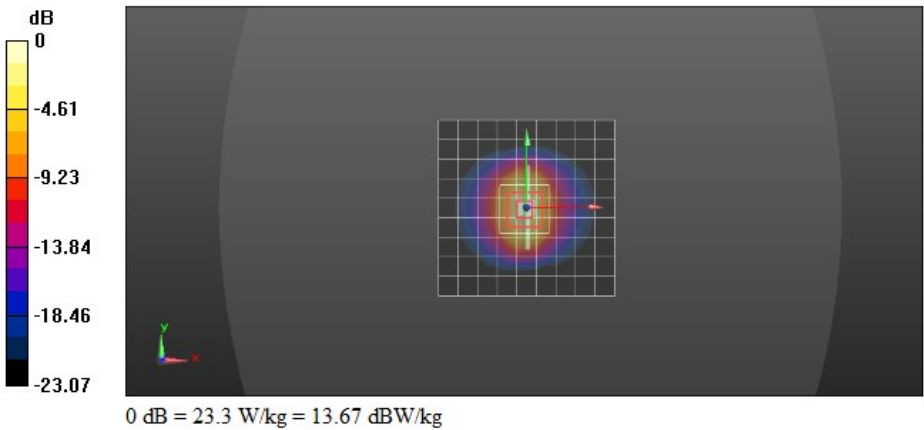
Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.874 \text{ S/m}$; $\epsilon_r = 37.709$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(7.7, 7.7, 7.7); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=250mW/Area Scan (10x10x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$
Maximum value of SAR (measured) = 17.9 W/kg

Configuration/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 111.0 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 30.2 W/kg
SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.05 W/kg
Maximum value of SAR (measured) = 23.3 W/kg



Test Laboratory: CTI SAR Lab

Systemcheck 5200-Head**DUT: D5GHzV2 - SN1208; Type: D5GHzV2; Serial: SN1208**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.818$ S/m; $\epsilon_r = 34.316$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(5.35, 5.35, 5.35); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=100mW/Area Scan (11x11x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 17.4 W/kg

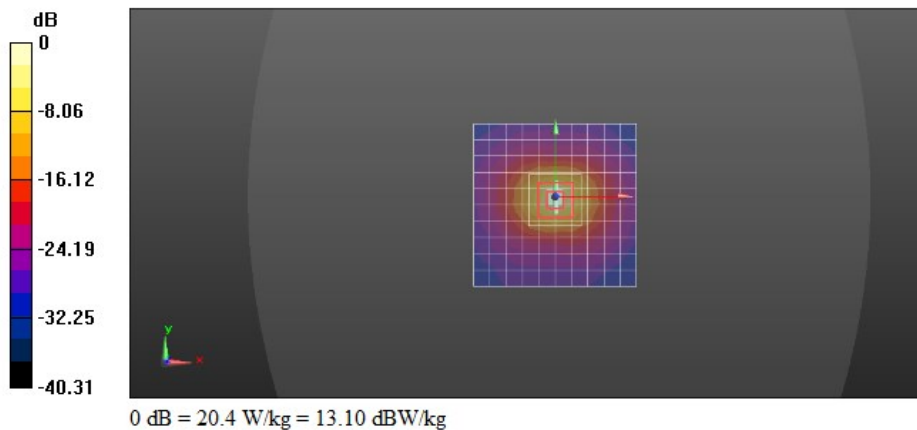
Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 41.80 V/m; Power Drift = 0.23 dB

Peak SAR (extrapolated) = 34.7 W/kg

SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.36 W/kg

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



Test Laboratory: CTI SAR Lab

Systemcheck 5200-Head**DUT: D5GHzV2 - SN1208; Type: D5GHzV2; Serial: SN1208**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.774$ S/m; $\epsilon_r = 34.382$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(5.35, 5.35, 5.35); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=100mW/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 16.1 W/kg

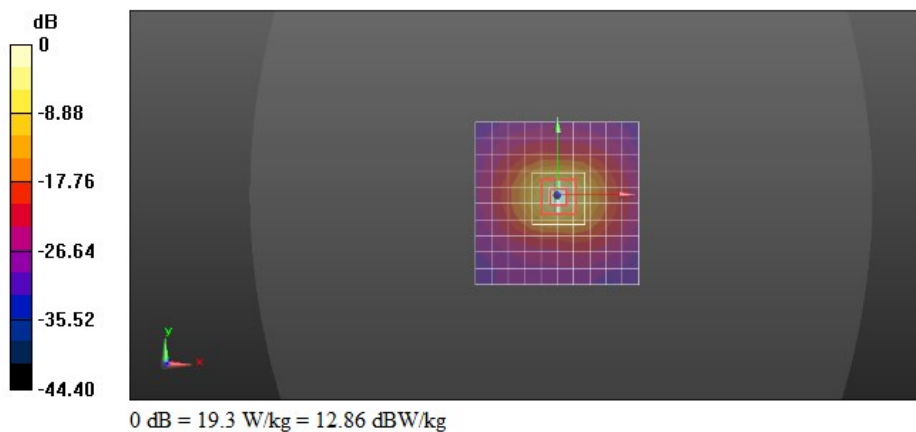
Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 41.85 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 32.8 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.25 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



Test Laboratory: CTI SAR Lab

Systemcheck 5800-Head**DUT: D5GHzV2 - SN1208; Type: D5GHzV2; Serial: SN1208**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.273$ S/m; $\epsilon_r = 33.722$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(4.85, 4.85, 4.85); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=100mW/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

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

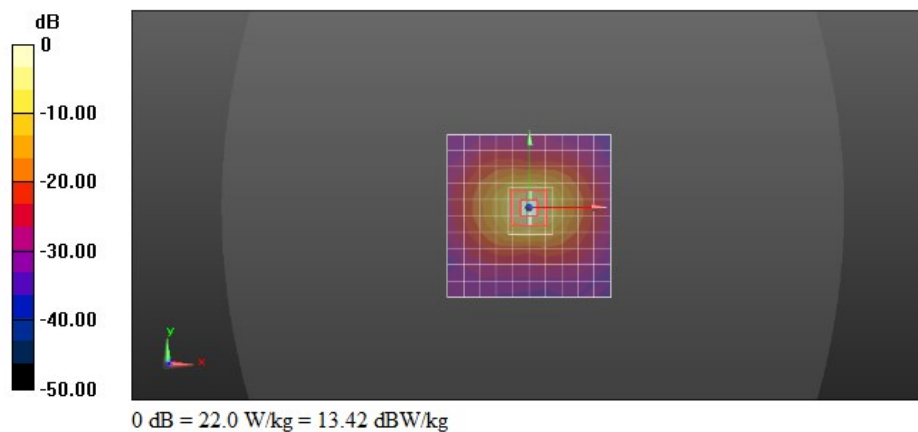
Configuration/d=10mm,Pin=100mW/Zoom Scan (8x8x16)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 39.79 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 41.6 W/kg

SAR(1 g) = 8.24 W/kg; SAR(10 g) = 2.4 W/kg

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



Test Laboratory: CTI SAR Lab

Systemcheck 5800-Head-2**DUT: D5GHzV2 - SN1208; Type: D5GHzV2; Serial: SN1208**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.292$ S/m; $\epsilon_r = 33.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(4.85, 4.85, 4.85); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=100mW/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 18.7 W/kg

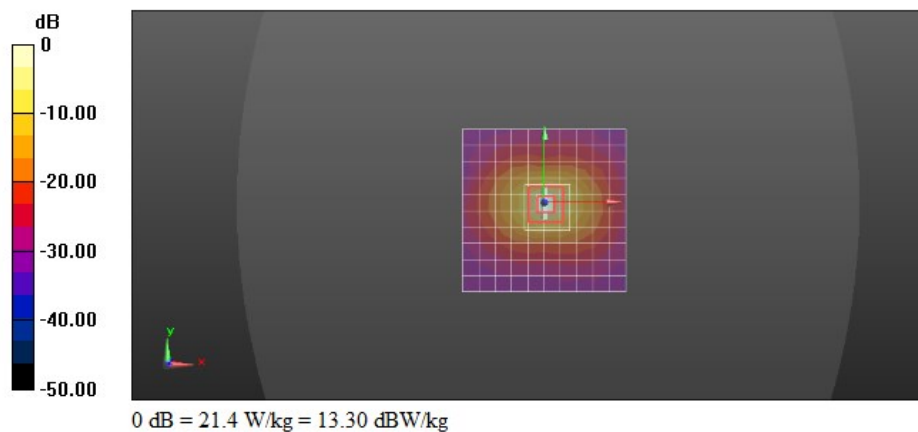
Configuration/d=10mm,Pin=100mW/Zoom Scan (8x8x16)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 40.17 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 41.0 W/kg

SAR(1 g) = 8.34 W/kg; SAR(10 g) = 2.41 W/kg

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



Test Laboratory: CTI SAR Lab

Systemcheck 5800-Head**DUT: D5GHzV2 - SN1208; Type: D5GHzV2; Serial: SN1208**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.224$ S/m; $\epsilon_r = 33.702$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7769; ConvF(4.85, 4.85, 4.85); Calibrated: 9/20/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/11/2023
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: 2024
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=10mm,Pin=100mW/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

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

Configuration/d=10mm,Pin=100mW/Zoom Scan (8x8x16)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 35.68 V/m; Power Drift = 0.39 dB

Peak SAR (extrapolated) = 39.8 W/kg

SAR(1 g) = 8.38 W/kg; SAR(10 g) = 2.39 W/kg

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

