

<b>Appendix A:SAR System performance Check Plots</b>
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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;  $\sigma = 1.755$  S/m;  $\epsilon_r = 37.668$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.56, 7.56, 7.56); Calibrated: 2/27/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/4/2022
- 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) = 16.9 W/kg

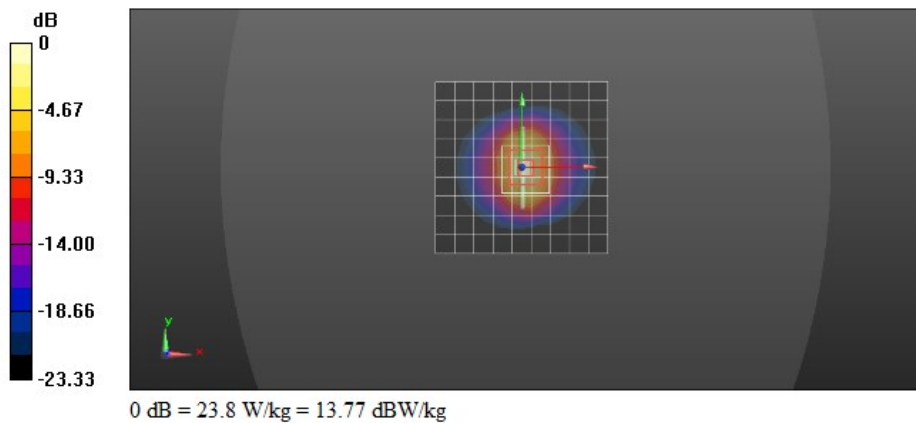
**Configuration/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 108.5 V/m; Power Drift = 0.90 dB

Peak SAR (extrapolated) = 30.4 W/kg

**SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.38 W/kg**

Maximum value of SAR (measured) = 23.8 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;  $\sigma = 4.512$  S/m;  $\epsilon_r = 35.985$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.48, 5.48, 5.48); Calibrated: 2/27/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/4/2022
- 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) = 18.3 W/kg

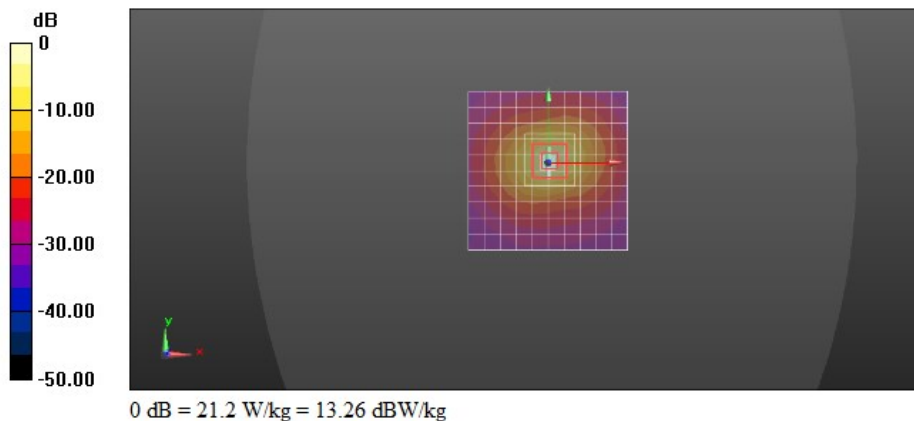
**Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 44.96 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.24 W/kg; SAR(10 g) = 2.41 W/kg**

Maximum value of SAR (measured) = 21.2 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;  $\sigma = 4.539$  S/m;  $\epsilon_r = 36.268$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.48, 5.48, 5.48); Calibrated: 2/27/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/4/2022
- 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) = 18.4 W/kg

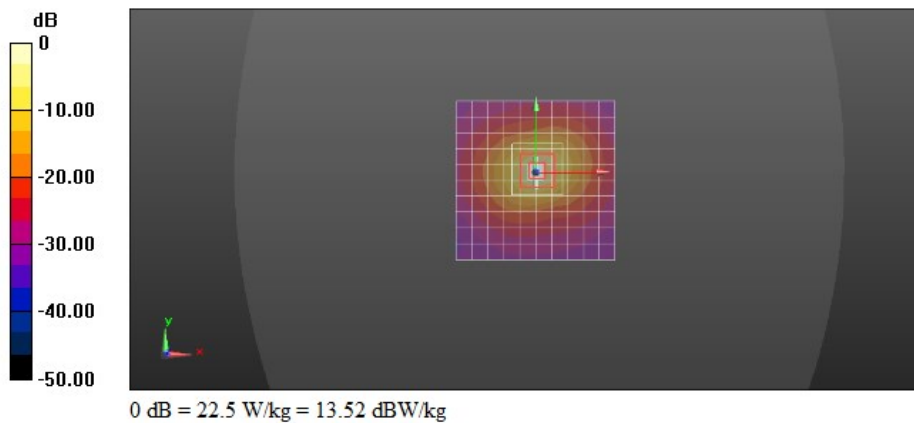
**Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 44.96 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 37.9 W/kg

**SAR(1 g) = 8.65 W/kg; SAR(10 g) = 2.51 W/kg**

Maximum value of SAR (measured) = 22.5 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;  $\sigma = 5.353$  S/m;  $\epsilon_r = 36.665$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.95, 4.95, 4.95); Calibrated: 2/27/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/4/2022
- 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) = 17.2 W/kg

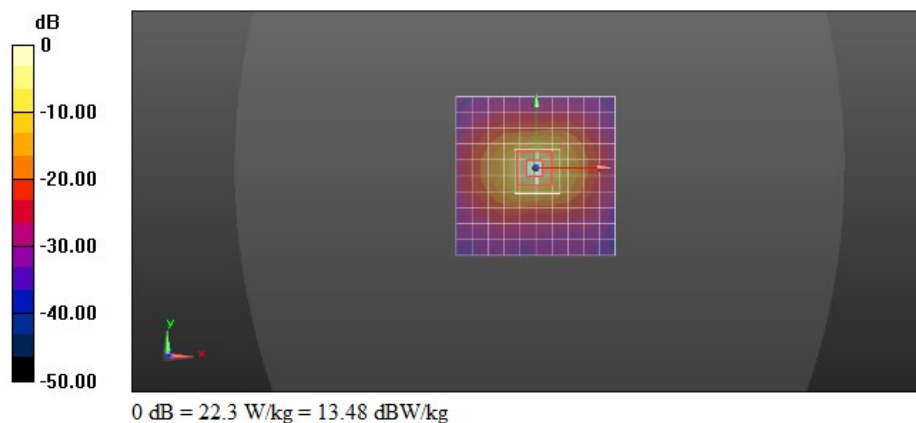
**Configuration/d=10mm,Pin=100mW/Zoom Scan (8x8x16)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 39.73 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 40.4 W/kg

**SAR(1 g) = 8.29 W/kg; SAR(10 g) = 2.39 W/kg**

Maximum value of SAR (measured) = 22.3 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;  $\sigma = 5.347$  S/m;  $\epsilon_r = 36.381$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.95, 4.95, 4.95); Calibrated: 2/27/2022;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/4/2022
- 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) = 16.5 W/kg

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

Reference Value = 38.84 V/m; Power Drift = 0.44 dB

Peak SAR (extrapolated) = 38.6 W/kg

**SAR(1 g) = 8.13 W/kg; SAR(10 g) = 2.36 W/kg**

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

