

<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;  $\sigma = 1.836$  S/m;  $\epsilon_r = 38.624$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.67, 7.67, 7.67); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 16.5 W/kg

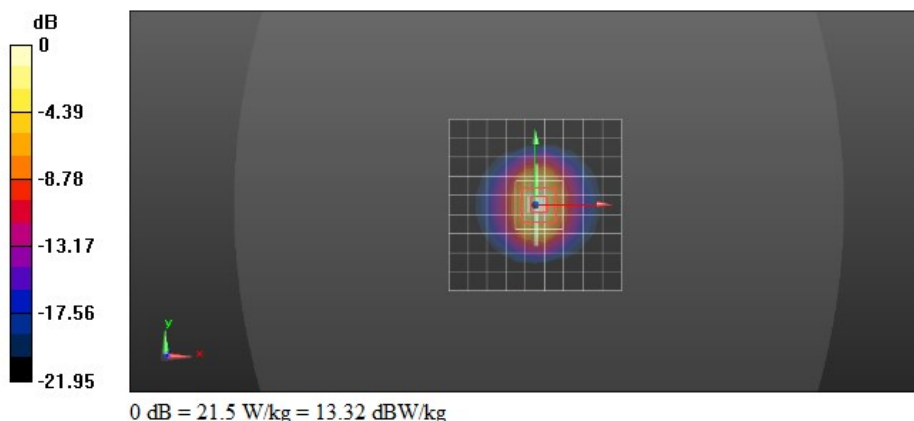
**Configuration/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 113.0 V/m; Power Drift = -0.48 dB

Peak SAR (extrapolated) = 26.6 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.86 W/kg

Maximum value of SAR (measured) = 21.5 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:  $f = 2450$  MHz;  $\sigma = 1.846$  S/m;  $\epsilon_r = 38.791$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.67, 7.67, 7.67); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 17.4 W/kg

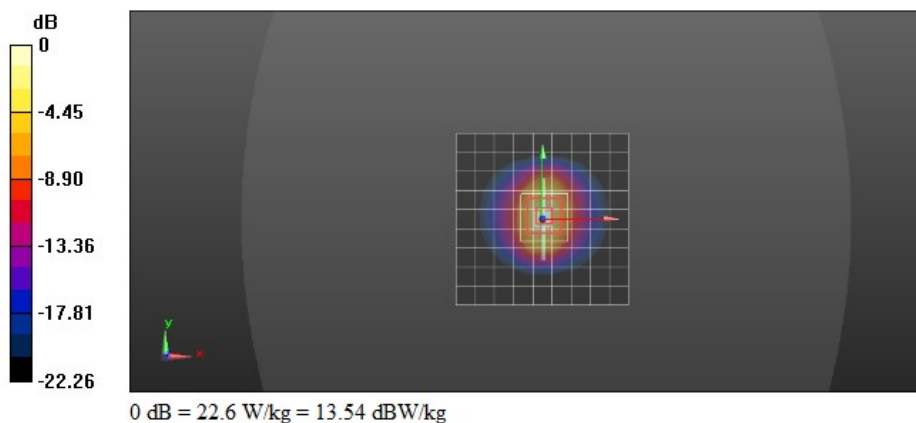
**Configuration/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 115.5 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 28.2 W/kg

**SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.24 W/kg**

Maximum value of SAR (measured) = 22.6 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;  $\sigma = 4.604$  S/m;  $\epsilon_r = 36.111$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.44, 5.44, 5.44); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 17.7 W/kg

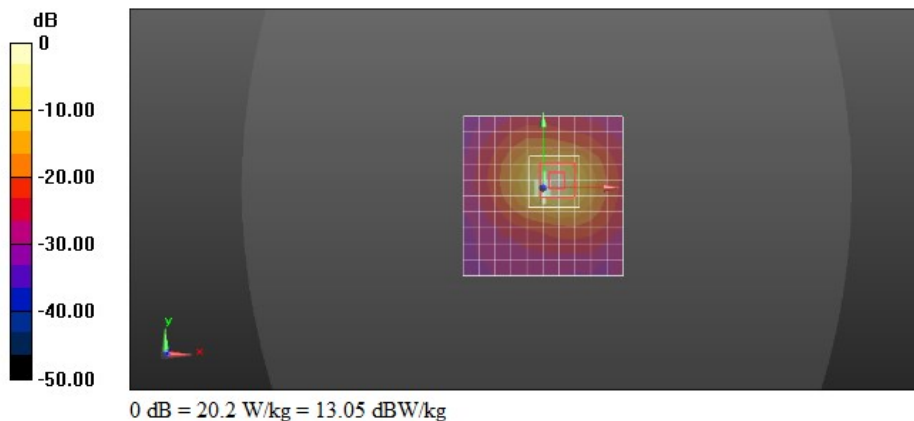
**Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 23.45 V/m; Power Drift = -0.24 dB

Peak SAR (extrapolated) = 36.1 W/kg

**SAR(1 g) = 8.3 W/kg; SAR(10 g) = 2.34 W/kg**

Maximum value of SAR (measured) = 20.2 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;  $\sigma = 4.608$  S/m;  $\epsilon_r = 36.167$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.44, 5.44, 5.44); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 14.2 W/kg

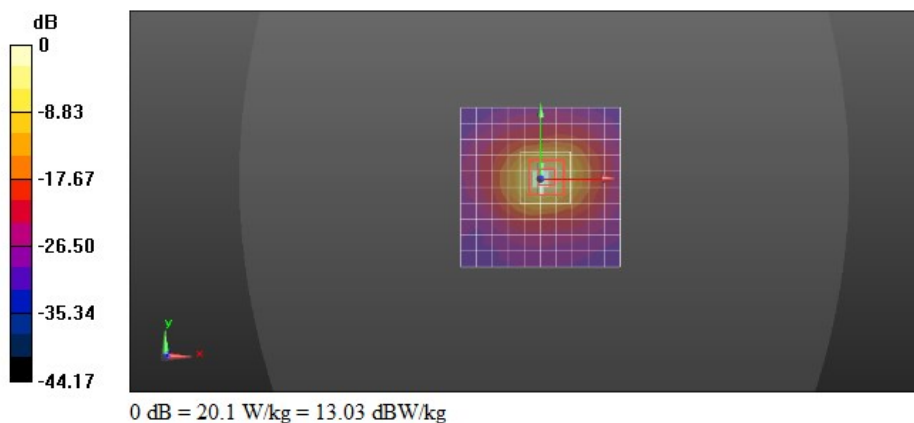
**Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 42.30 V/m; Power Drift = -0.81 dB

Peak SAR (extrapolated) = 33.4 W/kg

**SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.27 W/kg**

Maximum value of SAR (measured) = 20.1 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;  $\sigma = 4.624$  S/m;  $\epsilon_r = 35.933$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(5.44, 5.44, 5.44); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 23.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 16.7 W/kg

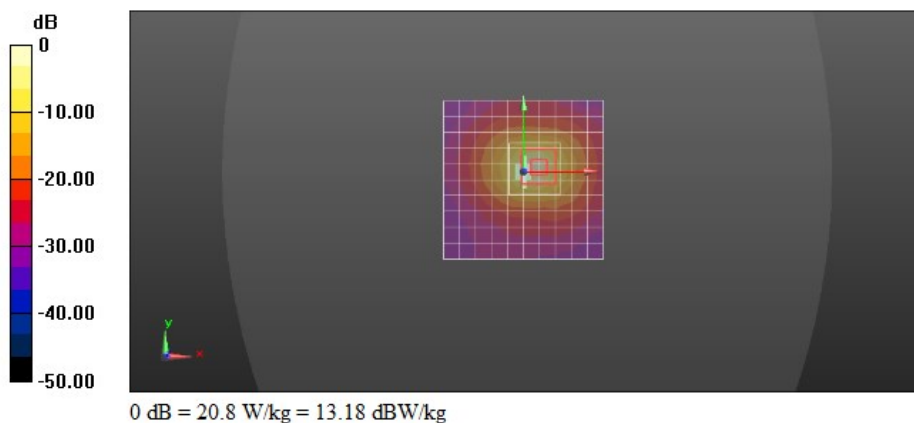
**Configuration/d=10mm,Pin=100mW/Zoom Scan (9x9x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 24.73 V/m; Power Drift = -0.29 dB

Peak SAR (extrapolated) = 36.1 W/kg

**SAR(1 g) = 8.5 W/kg; SAR(10 g) = 2.4 W/kg**

Maximum value of SAR (measured) = 20.8 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;  $\sigma = 5.414$  S/m;  $\epsilon_r = 35.082$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.85, 4.85, 4.85); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 17.3 W/kg

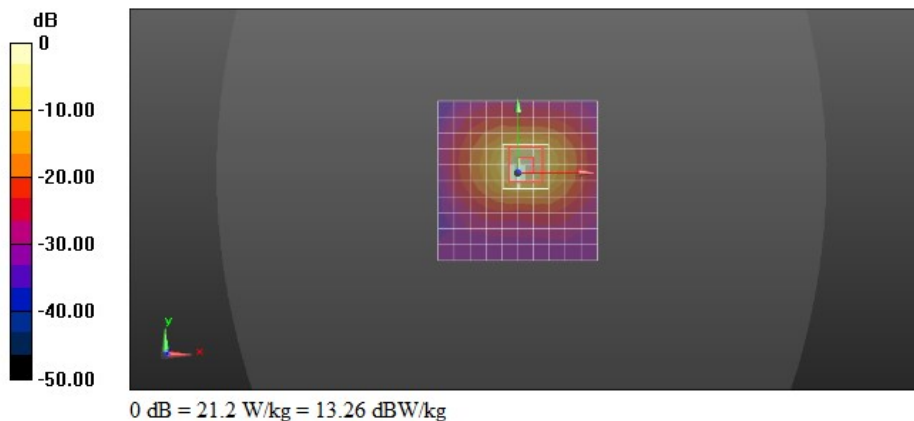
**Configuration/d=10mm,Pin=100mW/Zoom Scan (8x8x16)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 33.78 V/m; Power Drift = -1.28 dB

Peak SAR (extrapolated) = 38.8 W/kg

**SAR(1 g) = 8.2 W/kg; SAR(10 g) = 2.32 W/kg**

Maximum value of SAR (measured) = 21.2 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;  $\sigma = 5.217$  S/m;  $\epsilon_r = 34.442$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(4.85, 4.85, 4.85); Calibrated: 2/3/2021;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/8/2021
- 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) = 19.3 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 = 23.13 V/m; Power Drift = -0.30 dB

Peak SAR (extrapolated) = 39.3 W/kg

**SAR(1 g) = 8.21 W/kg; SAR(10 g) = 2.31 W/kg**

Maximum value of SAR (measured) = 21.3 W/kg

