

Appendix B:SAR Measurement results Plots

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Bluetooth- Left ear
Bluetooth- Right ear

Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud GFSK 2480CH Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2480 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.854$ S/m; $\epsilon_r = 40.713$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.868 W/kg

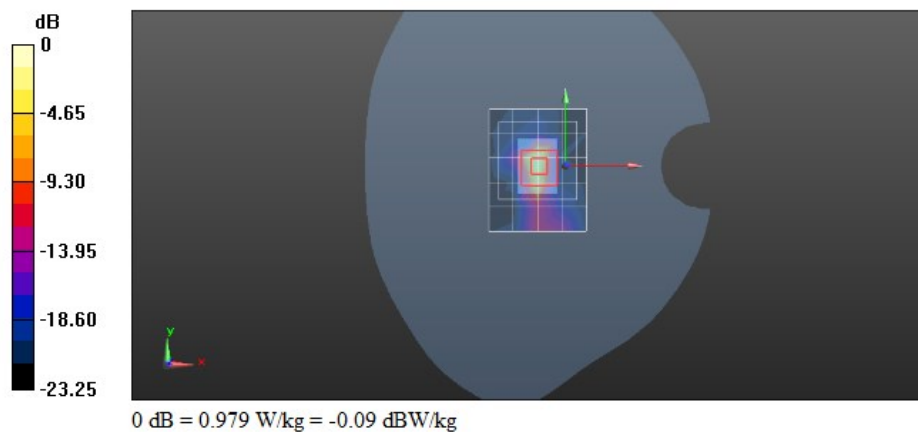
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.08 V/m; Power Drift = -0.58 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.388 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.979 W/kg



Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud 4DQPSK 2480 Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2480 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.854$ S/m; $\epsilon_r = 40.713$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.107 W/kg

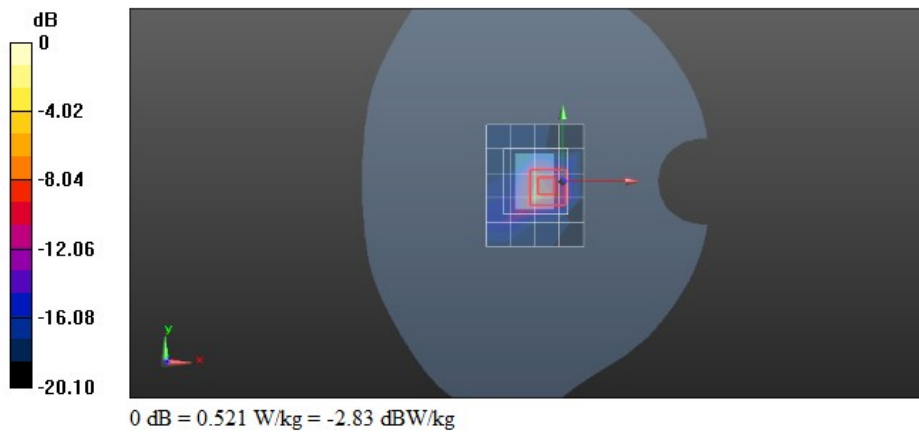
Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.044 V/m; Power Drift = -1.52 dB

Peak SAR (extrapolated) = 0.955 W/kg

SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.521 W/kg



Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud 8DPSK 2480 Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

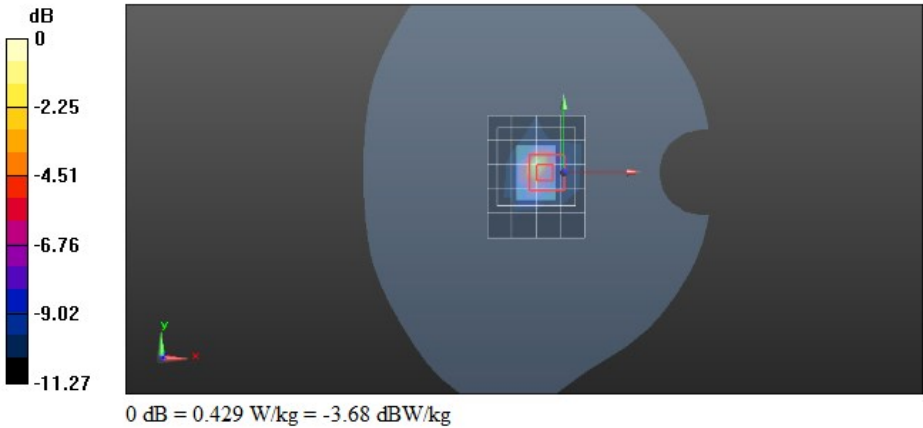
Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: $f = 2480\text{ MHz}$; $\sigma = 1.857\text{ S/m}$; $\epsilon_r = 40.745$; $\rho = 1000\text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 0.340 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 9.476 V/m; Power Drift = -1.02 dB
Peak SAR (extrapolated) = 0.753 W/kg
SAR(1 g) = 0.242 W/kg; SAR(10 g) = 0.091 W/kg
Maximum value of SAR (measured) = 0.429 W/kg



Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud GFSK 2441CH Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2441 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.829$ S/m; $\epsilon_r = 40.775$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 1.01 W/kg

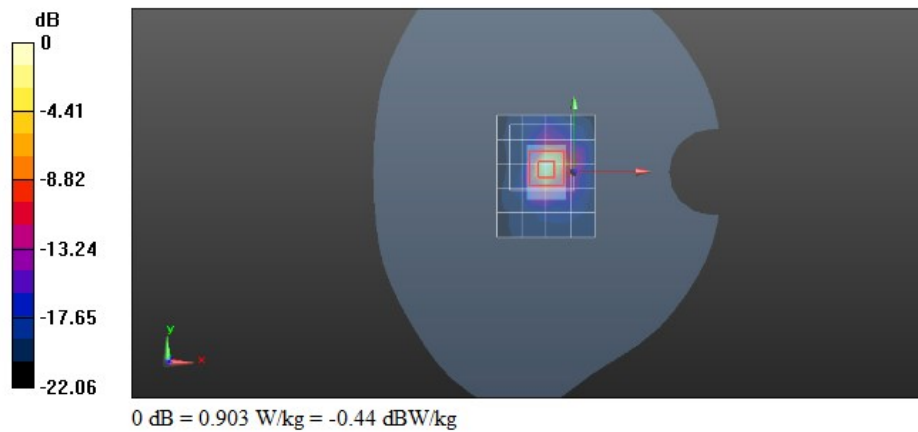
Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 22.67 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.370 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.903 W/kg



Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud 4DQPSK 2480 Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

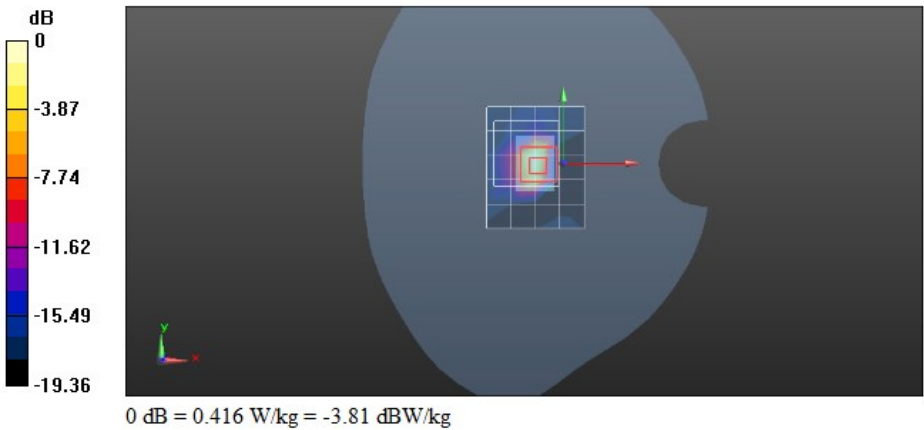
Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: $f = 2480\text{ MHz}$; $\sigma = 1.854\text{ S/m}$; $\epsilon_r = 40.713$; $\rho = 1000\text{ kg/m}^3$
Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 0.589 W/kg

Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 19.59 V/m; Power Drift = -0.29 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.072 W/kg
Maximum value of SAR (measured) = 0.416 W/kg



Test Laboratory: CTI SAR Lab

Hybrid ANC TWS Earbud 8DPSK 2480 Back Side 0mm

DUT: Hybrid ANC TWS Earbud; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2480 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.857$ S/m; $\epsilon_r = 40.745$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.63, 7.63, 7.63); Calibrated: 3/23/2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn373; Calibrated: 1/3/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x6x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.754 W/kg

Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 22.96 V/m; Power Drift = -0.23 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 0.850 W/kg

