

Appendix B:SAR Measurement results Plots

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Bluetooth

Test Laboratory: CTI SAR Lab

Smart Watch BT 4DQPSK 2402CH Back Side 0mm

DUT: Smart Watch; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2402 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2402$ MHz; $\sigma = 1.741$ S/m; $\epsilon_r = 40.078$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.69, 7.69, 7.69) @ 2402 MHz; Calibrated: 4/18/2024
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/23/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.0459 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.147 V/m; Power Drift = 0.20 dB

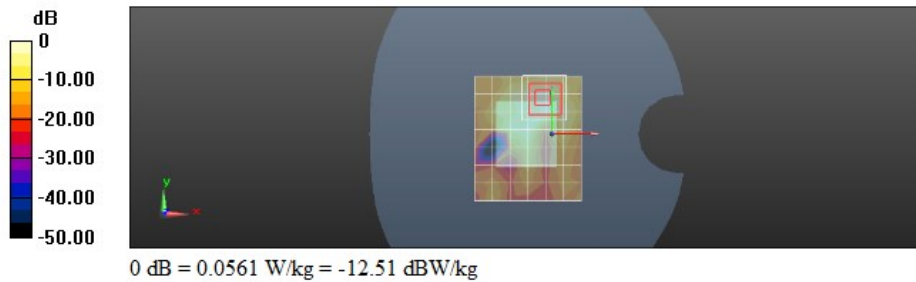
Peak SAR (extrapolated) = 0.0760 W/kg

SAR(1 g) = 0.031 W/kg; SAR(10 g) = 0.011 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 45.4%

Maximum value of SAR (measured) = 0.0561 W/kg



Test Laboratory: CTI SAR Lab

Smart Watch BT 4DQPSK 2402CH Front Side 10mm

DUT: Smart Watch; Type: NA; Serial: NA

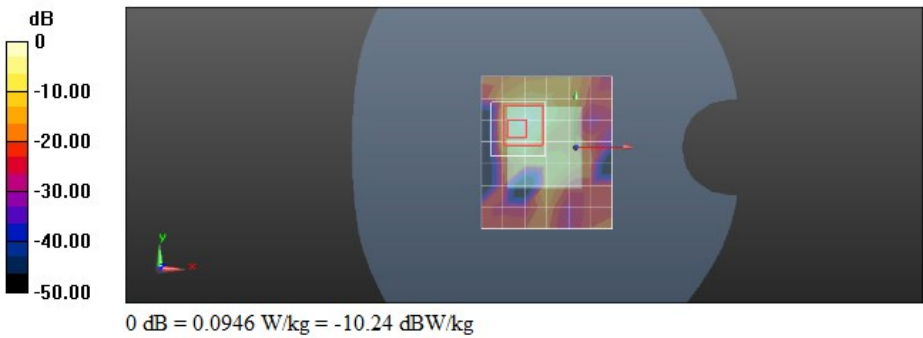
Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 3.0; Frequency: 2402 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2402 \text{ MHz}$; $\sigma = 1.741 \text{ S/m}$; $\epsilon_r = 40.078$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.69, 7.69, 7.69) @ 2402 MHz; Calibrated: 4/18/2024
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/23/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$
Maximum value of SAR (measured) = 0.0692 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 1.283 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.126 W/kg
SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.012 W/kg
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 31.3%
Maximum value of SAR (measured) = 0.0946 W/kg



Test Laboratory: CTI SAR Lab

Smart Watch BLE GFSK 2402CH Back Side 0mm

DUT: Smart Watch; Type: NA; Serial: NA

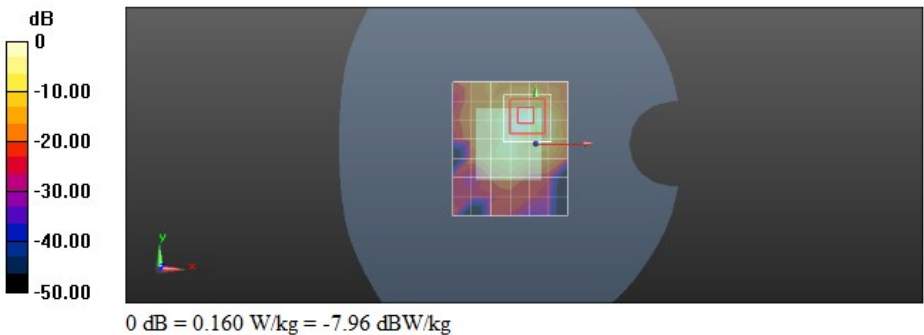
Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 4.0; Frequency: 2402 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2402\text{ MHz}$; $\sigma = 1.741\text{ S/m}$; $\epsilon_r = 40.078$; $\rho = 1000\text{ kg/m}^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.69, 7.69, 7.69) @ 2402 MHz; Calibrated: 4/18/2024
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/23/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$
Maximum value of SAR (measured) = 0.140 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 5.117 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.216 W/kg
SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.031 W/kg
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 41.9%
Maximum value of SAR (measured) = 0.160 W/kg



Test Laboratory: CTI SAR Lab

Smart Watch BLE GFSK 2440CH Front Side 10mm

DUT: Smart Watch; Type: NA; Serial: NA

Communication System: UID 0, Bluetooth (0); Communication System Band: Bluetooth 4.0; Frequency: 2440 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2440$ MHz; $\sigma = 1.792$ S/m; $\epsilon_r = 39.932$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN7328; ConvF(7.69, 7.69, 7.69) @ 2440 MHz; Calibrated: 4/18/2024
 - Modulation Compensation:
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1458; Calibrated: 1/23/2024
- Phantom: Twin SAM V5.0; Type: QD000P40CD; Serial: 1875
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.133 W/kg

Configuration/Body/Zoom Scan (7x7x5)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.409 V/m; Power Drift = 0.03dB

Peak SAR (extrapolated) = 0.294 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.031 W/kg

Smallest distance from peaks to all points 3 dB below = 5 mm

Ratio of SAR at M2 to SAR at M1 = 33.9%

Maximum value of SAR (measured) = 0.202 W/kg

