

APPENDIX A: SAR TEST PLOTS

ELEMENT

DUT: BCGA3158; Type: Wireless Earbud; Serial: HJ4H71000UP0000UEB

Communication System: UID:10981 - AAA, CW; MAIA: Y; Frequency: 2440.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2440.0$ MHz; $\text{cond} = 1.79$ S/m; $\text{perm} = 38.3$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/24/2024; Ambient Temp: 20.0°C; Tissue Temp: 23.7°C

Probe: EX3DV4 - SN7499; ConvF:(7.13,7.46,7.69); Calibrated: 2024-01-16

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1644; Calibrated: 2023-12-07

Phantom: Twin-SAM V8.0; Serial: 1357

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 2.4 GHz Bluetooth, Exp: Head| Front Side, Ch. 37, 4 Mbps

Area Scan (80.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (32.0 x 32.0 x 30.0): Measurement grid: $dx=3.2$ mm, $dy=3.2$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

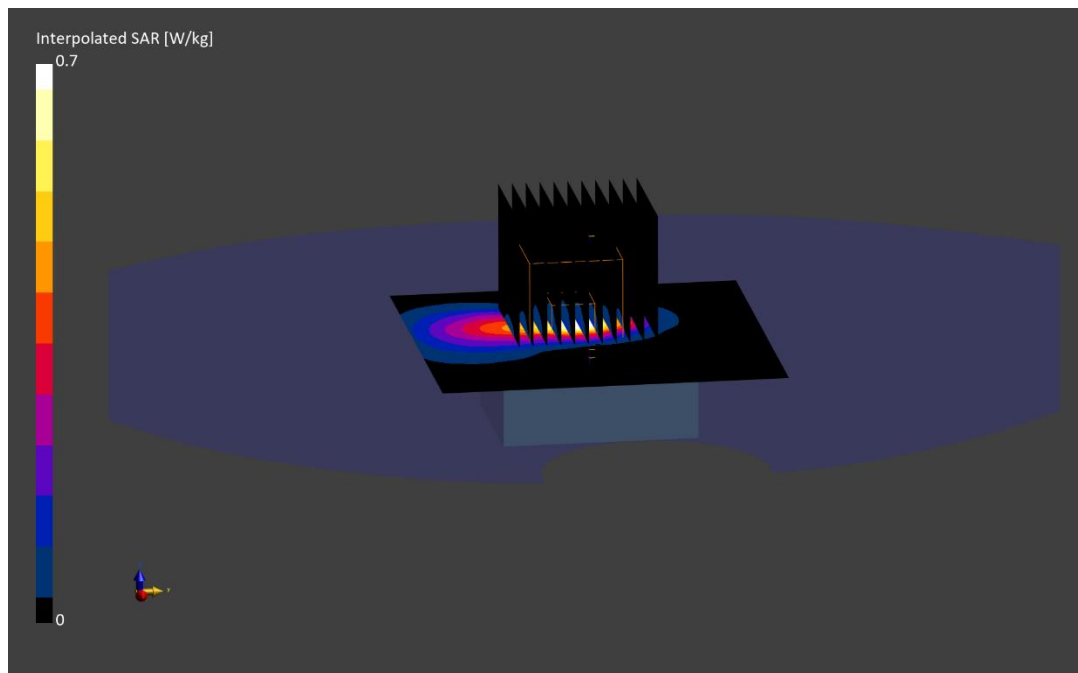
Reference Value = 0.19 W/kg; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.700 W/kg

SAR(1 g) = 0.132 W/kg

Smallest distance from peaks to all points 3 dB below is 4.3 mm

Ratio of SAR at M2 to SAR at M1 = 44.7 %



ELEMENT

DUT: BCGA3158; Type: Wireless Earbud; Serial: HJ4H720001X0000UEB

Communication System: UID:10981 - CAA, CW; MAIA: Y; Frequency: 5731.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5731.0$ MHz; $\text{cond} = 5.26$ S/m; $\text{perm} = 34.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/08/2024; Ambient Temp: 22.8°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7427; ConvF:(4.35,4.78,4.93); Calibrated: 2024-02-09

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn467; Calibrated: 2024-02-09

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: NB U-NII 3, Exp: Head| Front Side, Ch. Low, 4 Mbps

Area Scan (80.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: $dx=4.0$ mm, $dy=4.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

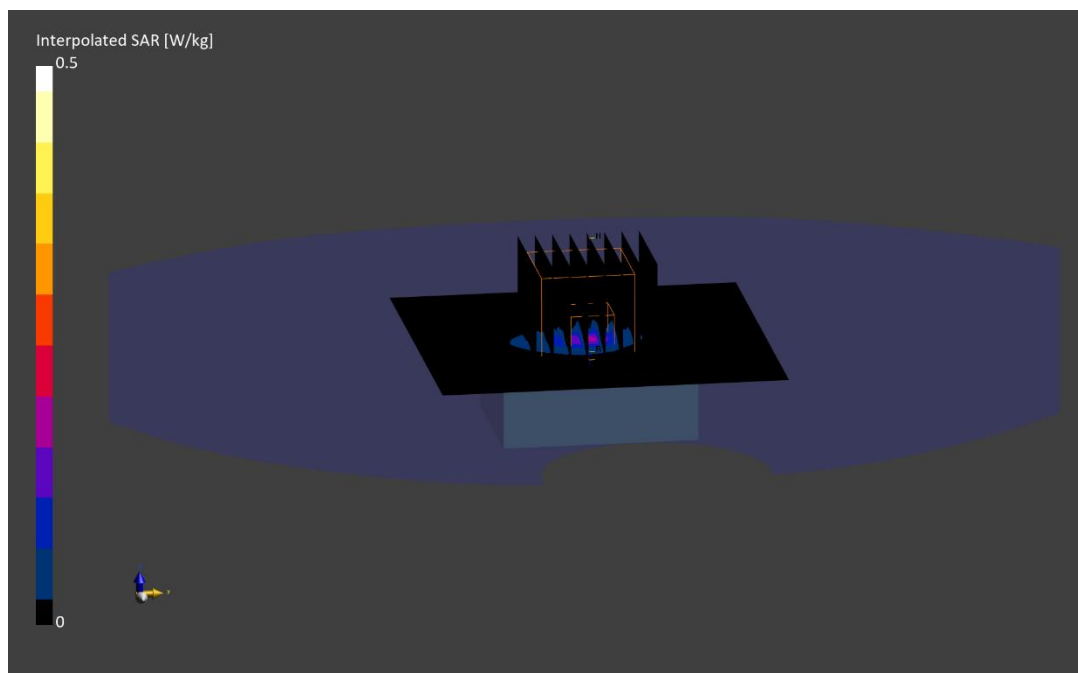
Reference Value = 0.08 W/kg; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.500 W/kg

SAR(1 g) = 0.110 W/kg

Smallest distance from peaks to all points 3 dB below is 6.1 mm

Ratio of SAR at M2 to SAR at M1 = 59.2 %



ELEMENT

DUT: BCGA3158; Type: Wireless Earbud; Serial: HJ4H71000UY0000UEB

Communication System: UID:10981 - AAA, CW; MAIA: Y; Frequency: 2404.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2404.0$ MHz; $\text{cond} = 1.76$ S/m; $\text{perm} = 38.4$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/24/2024; Ambient Temp: 20.0°C; Tissue Temp: 23.7°C

Probe: EX3DV4 - SN7499; ConvF:(7.13,7.46,7.69); Calibrated: 2024-01-16

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn1644; Calibrated: 2023-12-07

Phantom: Twin-SAM V8.0; Serial: 1357

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 2.4 GHz Bluetooth, Exp: Body-worn| Non-Button Edge, Ch. 1, 4 Mbps

Area Scan (80.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (32.0 x 32.0 x 30.0): Measurement grid: $dx=3.2$ mm, $dy=3.2$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

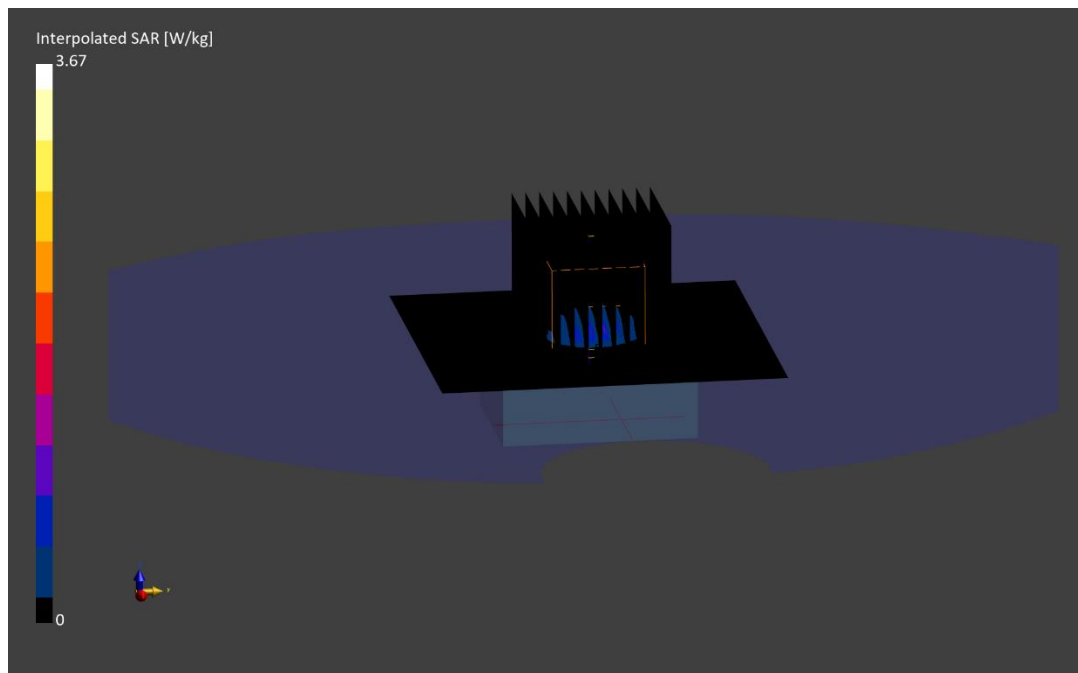
Reference Value = 1.47 W/kg; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 0.837 W/kg

Smallest distance from peaks to all points 3 dB below is 4.5 mm

Ratio of SAR at M2 to SAR at M1 = 55.5 %



ELEMENT

DUT: BCGA3158; Type: Wireless Earbud; Serial: HJ4H720001X0000UEB

Communication System: UID:10981 - CAA, CW; MAIA: Y; Frequency: 5844.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5844.0$ MHz; $\text{cond} = 5.38$ S/m; $\text{perm} = 34.0$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/08/2024; Ambient Temp: 22.8°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7427; ConvF:(4.04,4.57,4.63); Calibrated: 2024-02-09

Sensor-Surface: 1.4mm (VMS + 6p)

Electronics: DAE4 Sn467; Calibrated: 2024-02-09

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: NB U-NII 3, Exp: Body-worn| Button, Ch. High, 4 Mbps

Area Scan (80.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: $dx=3.8$ mm, $dy=3.8$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

Reference Value = 0.49 W/kg; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 5.28 W/kg

SAR(1 g) = 0.869 W/kg

Smallest distance from peaks to all points 3 dB below is 4.1 mm

Ratio of SAR at M2 to SAR at M1 = 56.1 %

