

APPENDIX A: SAR TEST PLOTS

ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: FV0TK

Communication System: UID:10415 - AAA, WLAN; MAIA: Y; Frequency: 2437.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2437.000$ MHz; $\text{cond} = 1.74$ S/m; $\text{perm} = 39.8$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/08/2024; Ambient Temp: 21.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7682; ConvF:(7.87,7.72,8.18); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn1683; Calibrated: 2024-05-08

Phantom: Twin-SAM V8.0; Serial: 1917

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 2.4 GHz WIFI/ IEEE 802.11b, 22 MHz Bandwidth, Exp: Head| Front Side, Ch. 6, 1 Mbps

Aluminum, Sport Wristband

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

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

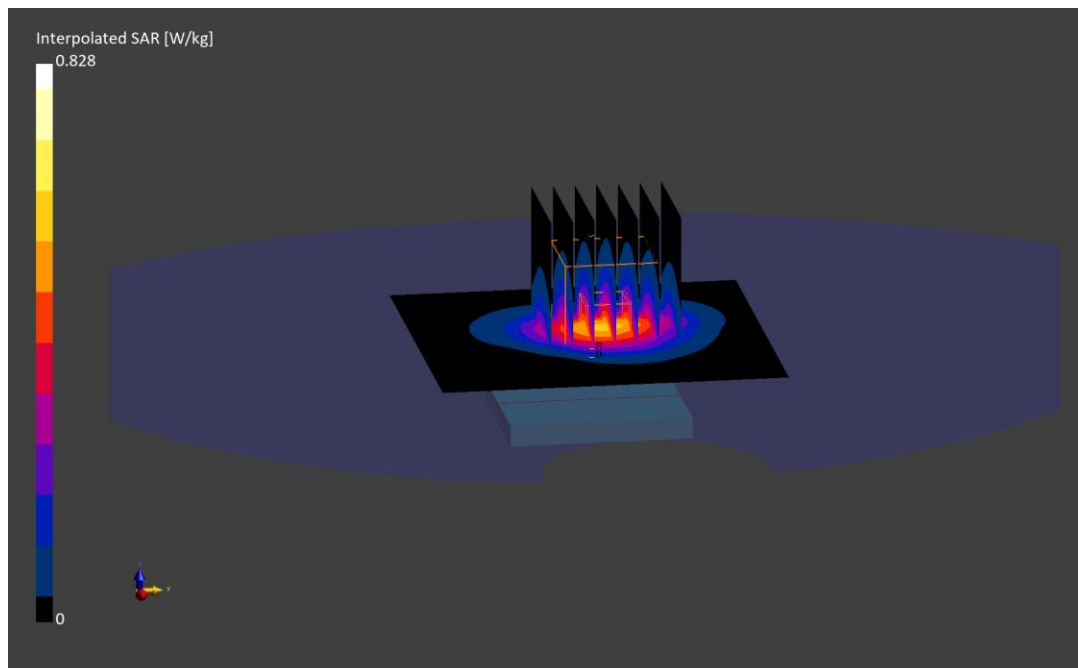
Reference Value = 0.45 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.828 W/kg

SAR(1 g) = 0.483 W/kg

Smallest distance from peaks to all points 3 dB below is 12.0 mm

Ratio of SAR at M2 to SAR at M1 = 84.2 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: T4N59

Communication System: UID:10417 - AAD, WLAN; MAIA: Y; Frequency: 5720.000 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5720.000$ MHz; $\text{cond} = 5.12$ S/m; $\text{perm} = 33.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 06/12/2024; Ambient Temp: 20.6°C; Tissue Temp: 21.0°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: 5 GHz WIFI/ IEEE 802.11a, 20 MHz Bandwidth, U-NII-2C, Exp: Head| Front Side,
Ch. 144, 6.5 Mbps
Aluminum, Metal Loop Wristband**

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

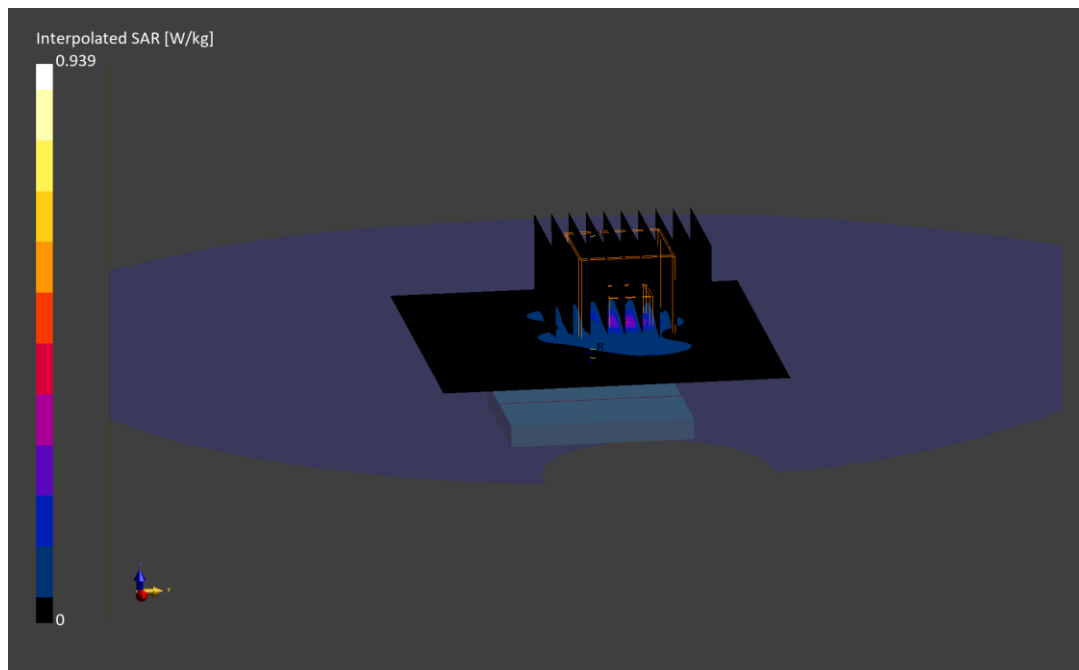
Reference Value = 0.14 W/kg; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.939 W/kg

SAR(1 g) = 0.235 W/kg

Smallest distance from peaks to all points 3 dB below is 7.9 mm

Ratio of SAR at M2 to SAR at M1 = 60.7 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: YYWC9

Communication System: UID:10032 - CAA, Bluetooth; MAIA: Y; Frequency: 2402.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2402.000$ MHz; $\text{cond} = 1.72$ S/m; $\text{perm} = 39.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 07/08/2024; Ambient Temp: 21.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7682; ConvF:(7.87,7.72,8.18); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn1683; Calibrated: 2024-05-08

Phantom: Twin-SAM V8.0; Serial: 1917

Measurement SW: DASY Module SAR V16.2.4.2524

**Mode: 2.4 GHz Bluetooth, Exp: Head| Front Side, Ch. 0, 1 Mbps
Aluminum, Sport Wristband**

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

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

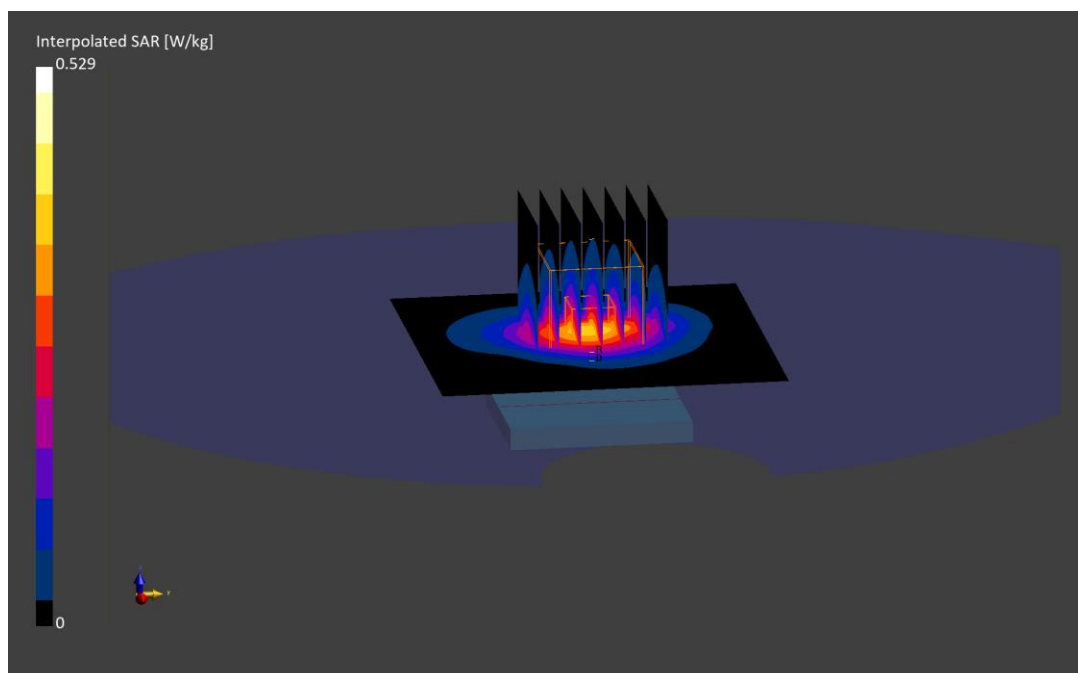
Reference Value = 0.30 W/kg; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.529 W/kg

SAR(1 g) = 0.318 W/kg

Smallest distance from peaks to all points 3 dB below is 11.0 mm

Ratio of SAR at M2 to SAR at M1 = 85.2 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: T4N59

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 5846.300 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5846.300$ MHz; $\text{cond} = 5.29$ S/m; $\text{perm} = 33.6$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 07/10/2024; Ambient Temp: 21.6°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN3949; ConvF:(5.21,5.21,5.21); Calibrated: 2023-10-02

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

Electronics: DAE4 Sn1684; Calibrated: 2023-09-12

Phantom: Twin-SAM V8.0; Serial: 1736

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 802.15.4 ab-NB, Exp: Head| Front Side, Ch. High, 1 Mbps
Aluminum, Metal Loop Wristband

Area Scan (100.0 x 100.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (24.0 x 24.0 x 22.0): Measurement grid: $dx=4.0$ mm, $dy=4.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

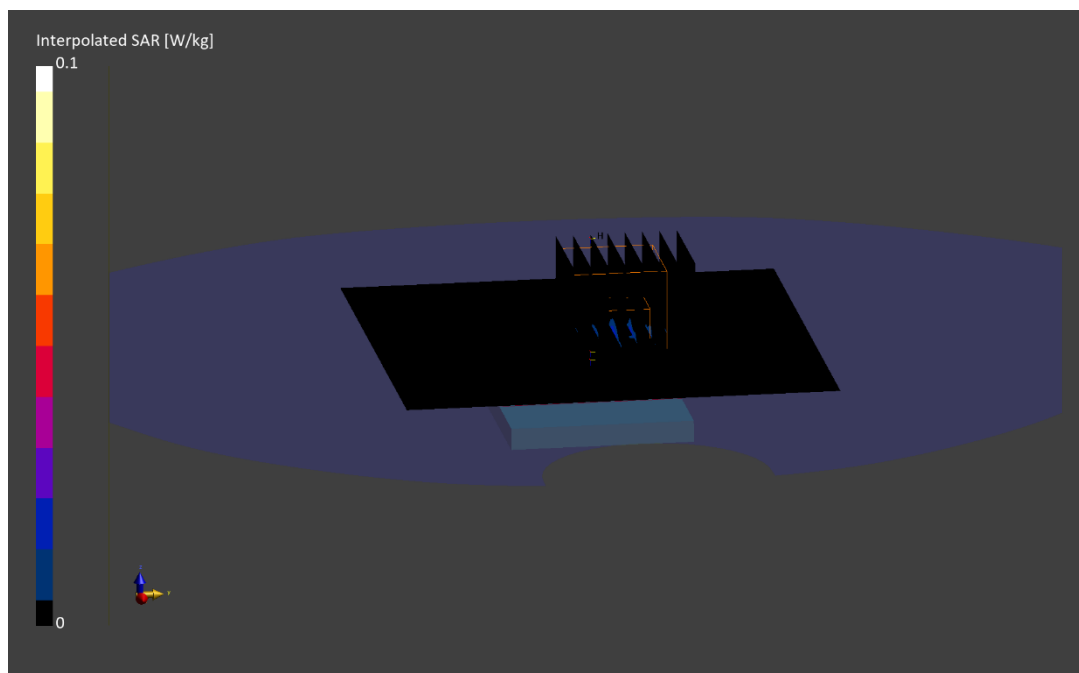
Reference Value = 0.00 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.015 W/kg

Smallest distance from peaks to all points 3 dB below is 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 60.9 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: T4N59

Communication System: UID:10415 - AAA, WLAN; MAIA: Y; Frequency: 2412.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2412.000$ MHz; $\text{cond} = 1.72$ S/m; $\text{perm} = 39.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/08/2024; Ambient Temp: 21.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7682; ConvF:(7.87,7.72,8.18); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn1683; Calibrated: 2024-05-08

Phantom: Twin-SAM V8.0; Serial: 1917

Measurement SW: DASY Module SAR V16.2.4.2524

**Mode: 2.4 GHz WIFI/ IEEE 802.11b, 22 MHz Bandwidth, Exp: Extremity| Back Side, Ch. 1,
1 Mbps
Aluminum, Metal Links Wristband**

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

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

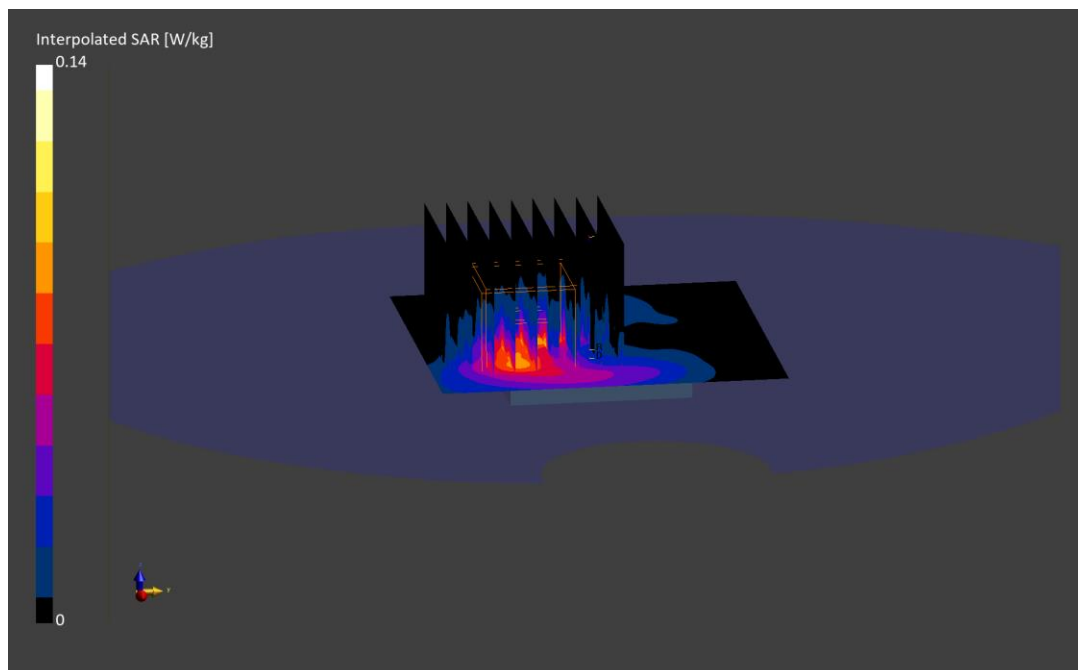
Reference Value = 0.08 W/kg; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(10 g) = 0.035 W/kg

Smallest distance from peaks to all points 3 dB below is 5.9 mm

Ratio of SAR at M2 to SAR at M1 = 83.5 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: 3XW6L

Communication System: UID:10417 - AAD, WLAN; MAIA: Y; Frequency: 5825.000 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5825.000$ MHz; $\text{cond} = 5.21$ S/m; $\text{perm} = 33.7$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 06/22/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.6°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: 5 GHz WIFI/ IEEE 802.11a, 20 MHz Bandwidth, U-NII-3, Exp: Extremity| Back Side,
Ch. 165, 6.5 Mbps
Aluminum, Metal Loop Wristband**

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

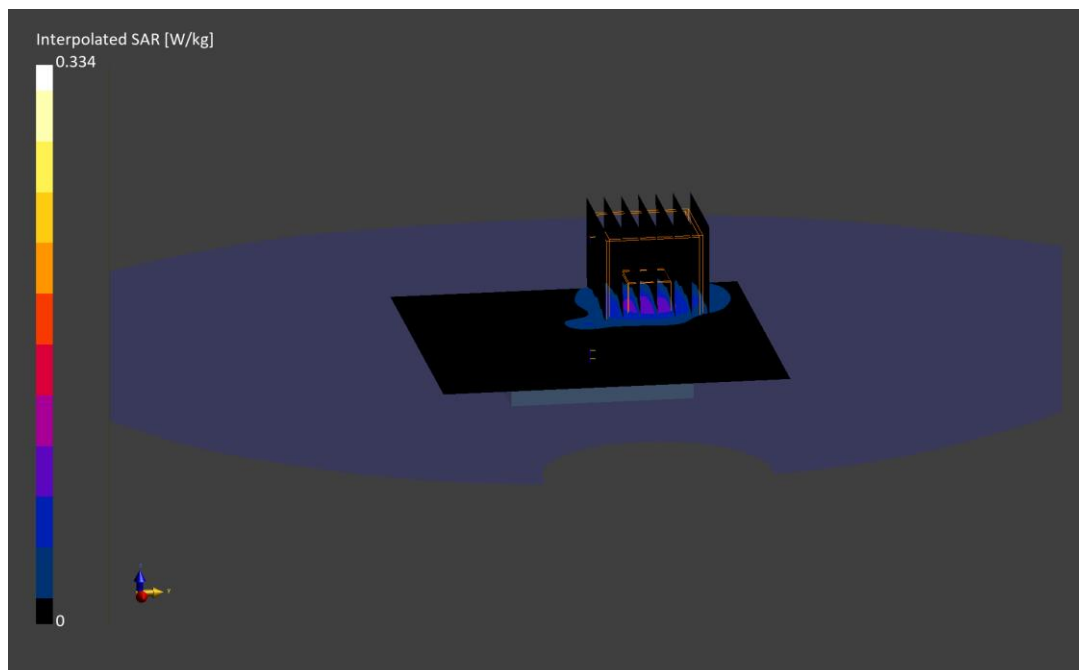
Reference Value = 0.04 W/kg; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.334 W/kg

SAR(10 g) = 0.027 W/kg

Smallest distance from peaks to all points 3 dB below is 9.0 mm

Ratio of SAR at M2 to SAR at M1 = 57.1 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: FV0TK

Communication System: UID:10032 - CAA, Bluetooth; MAIA: Y; Frequency: 2402.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2402.000$ MHz; $\text{cond} = 1.72$ S/m; $\text{perm} = 39.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/08/2024; Ambient Temp: 21.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7682; ConvF:(7.87,7.72,8.18); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn1683; Calibrated: 2024-05-08

Phantom: Twin-SAM V8.0; Serial: 1917

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 2.4 GHz Bluetooth, Exp: Extremity| Back Side, Ch. 0, 1 Mbps
Aluminum, Metal Links Wristband

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

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

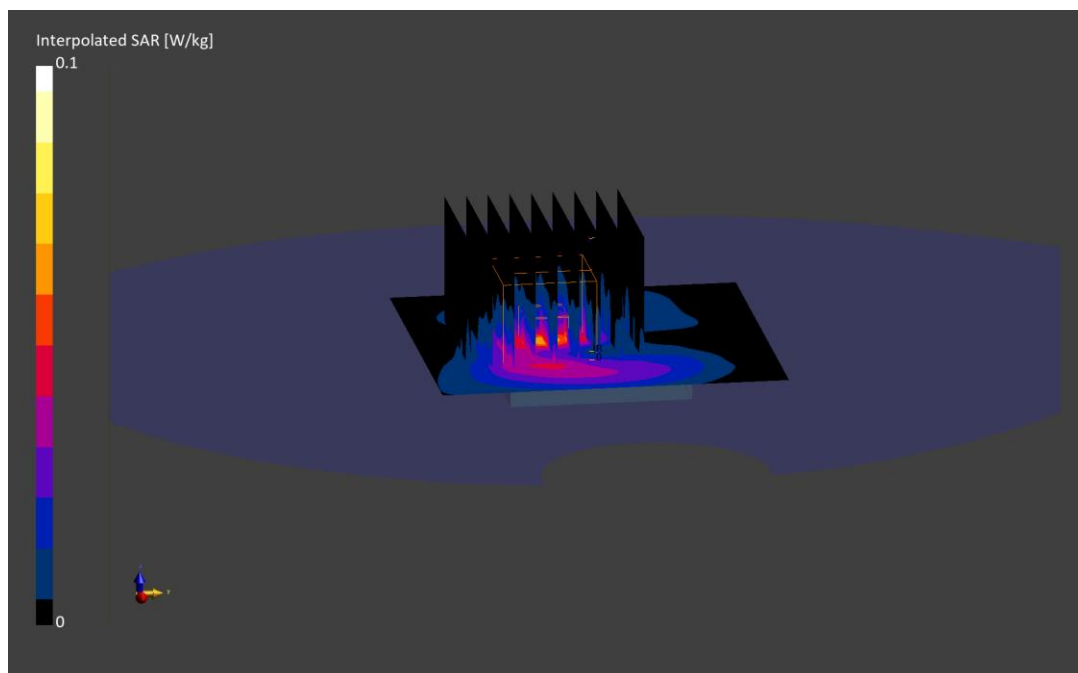
Reference Value = 0.05 W/kg; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.087 W/kg

SAR(10 g) = 0.020 W/kg

Smallest distance from peaks to all points 3 dB below is 5.0 mm

Ratio of SAR at M2 to SAR at M1 = 88.5 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: T4N59

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 5728.800 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5728.800$ MHz; $\text{cond} = 5.12$ S/m; $\text{perm} = 33.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 06/22/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.6°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: 802.15.4 ab-NB, Exp: Extremity| Back Side, Ch. Low, 1 Mbps
Aluminum, Metal Loop Wristband**

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: $dx=2.6$ mm, $dy=2.6$ mm, $dz=1.2$ mm; Graded Ratio: 1.2

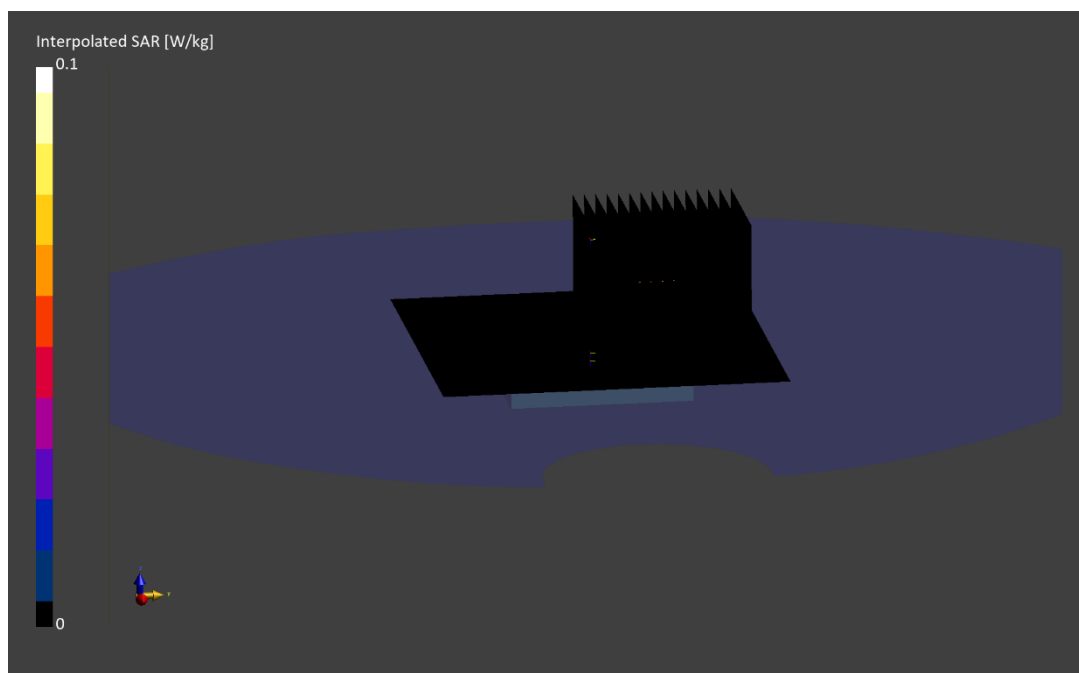
Reference Value = 0.00 W/kg; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.069 W/kg

SAR(10 g) = 0 W/kg

Smallest distance from peaks to all points 3 dB below is N/A

Ratio of SAR at M2 to SAR at M1 = 56.2 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: 03V9M

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 7987.200 MHz

Medium: 6000 Head; Medium parameters used:

$f = 7987.200 \text{ MHz}$; $\text{cond} = 7.78 \text{ S/m}$; $\text{perm} = 32.7$; $\text{density} = 1000 \text{ kg/m}^3$

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/01/2024; Ambient Temp: 20.3°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7421; ConvF:(5.25,5.25,5.25); Calibrated: 2024-03-11

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

Electronics: DAE4 Sn604; Calibrated: 2024-03-06

Phantom: Twin-SAM V8.0; Serial: 2067

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: UWB, Exp: Extremity| Back Side, Ch. 9
Aluminum, Metal Loop Wristband

Area Scan (75.0 x 120.0): Measurement grid: $\text{dx}=7.5 \text{ mm}$, $\text{dy}=7.5 \text{ mm}$

Zoom Scan (24.0 x 24.0 x 22.0): Measurement grid: $\text{dx}=3.0 \text{ mm}$, $\text{dy}=3.0 \text{ mm}$, $\text{dz}=1.4 \text{ mm}$; Graded Ratio: 1.4

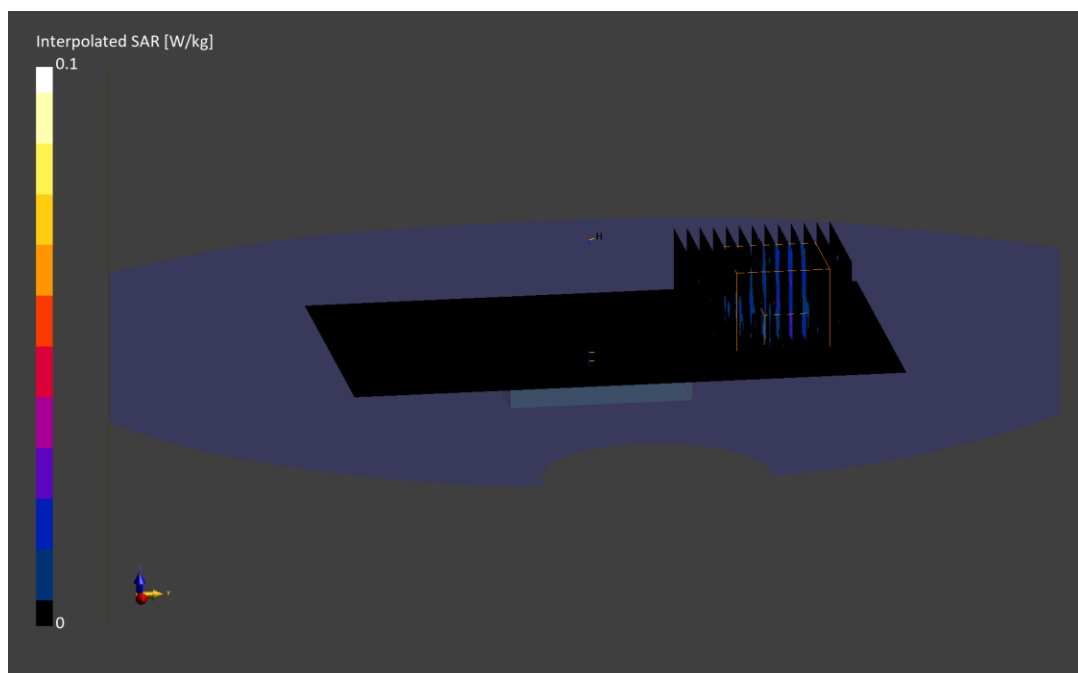
Reference Value = -0.01 W/kg ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.048 W/kg

SAR(10 g) = 0.003 W/kg ; APD(4cm^2) = 0.077 W/m^2

Smallest distance from peaks to all points 3 dB below is N/A

Ratio of SAR at M2 to SAR at M1 = 90.2 %



ELEMENT

DUT: BCG-A2997; Type: Watch; Serial: T4N59

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 13.600 MHz

Medium: 30 Head; Medium parameters used:

$f = 13.600$ MHz; $\text{cond} = 0.723$ S/m; $\text{perm} = 52.4$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/09/2024; Ambient Temp: 22.0°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3746; ConvF:(16.19,16.19,16.19); Calibrated: 2023-10-16

Sensor-Surface: 1.4mm (All points)

Electronics: DAE4 Sn1237; Calibrated: 2023-10-18

Phantom: ELI V6.0; Serial: 2003

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: NFC, Exp: Extremity| Back Side
Aluminum, Metal Links Wristband

Area Scan (90.0 x 90.0): Measurement grid: $\text{dx}=15.0$ mm, $\text{dy}=15.0$ mm

Zoom Scan (30.0 x 30.0 x 30.0): Measurement grid: $\text{dx}=6.0$ mm, $\text{dy}=6.0$ mm, $\text{dz}=1.5$ mm; Graded Ratio: 1.5

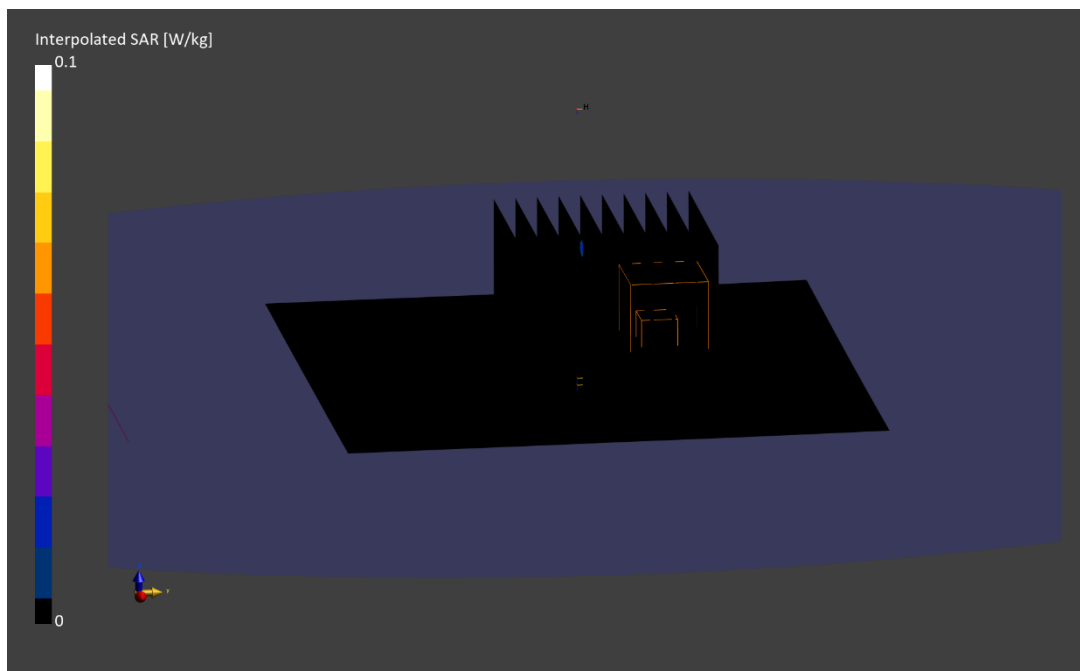
Reference Value = -0.00 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.099 W/kg

SAR(10 g) = 0 W/kg

Smallest distance from peaks to all points 3 dB below is N/A

Ratio of SAR at M2 to SAR at M1 = 33.1 %



Date: 07/01/2024

UWB, Extremity, Ch. 5, Aluminum, Sports Wristband

Device Under Test Properties

DUT	Serial Number	DUT Type
BCG-A2997	60H3K	Watch

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Channel	Group, UID	Frequency [MHz]
5G	BACK	2.00	6489600	0	6489.6

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9407, 10/09/2023	DAE4 - SN793, 10/18/2023

Software Setup

Software	Software Version
cDASY6 Module mmWave	3.2.0.1840

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m²]	0.384
pS _n avg [W/m²]	0.363
E _{peak} [V/m]	13.6
Power Drift [dB]	0.04

