

APPENDIX A: SAR TEST PLOTS

ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: K92F1

Communication System: UID:10415 - AAA, WLAN; MAIA: Y; Frequency: 2412.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2412.0$ 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 WIFI/ IEEE 802.11b, 22 MHz Bandwidth, Exp: Head| Front Side, Ch. 1,
1Mbps, Aluminum, Sports 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

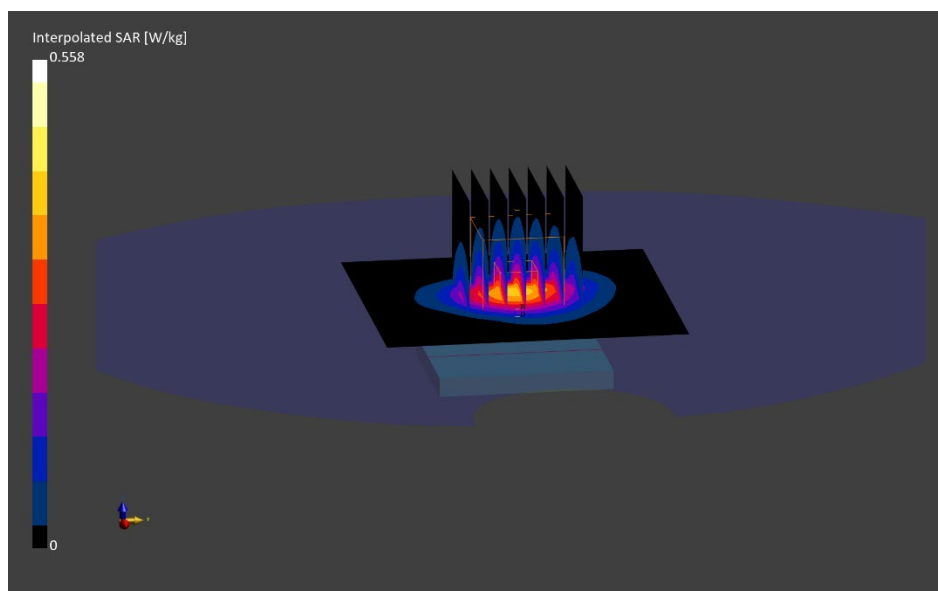
Reference Value = 0.31 W/kg; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.558 W/kg

SAR(1 g) = 0.327 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 = 84.7 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: 03J2X

Communication System: UID:10417 - AAD, WLAN; MAIA: Y; Frequency: 5600.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5600.0$ MHz; $\text{cond} = 4.98$ S/m; $\text{perm} = 34.1$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 06/22/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.6°C

Probe: EX3DV4 - SN7427; ConvF:(4.18,4.62,4.72); 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. 120, 6.5 Mbps, Aluminum, Metal Links 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

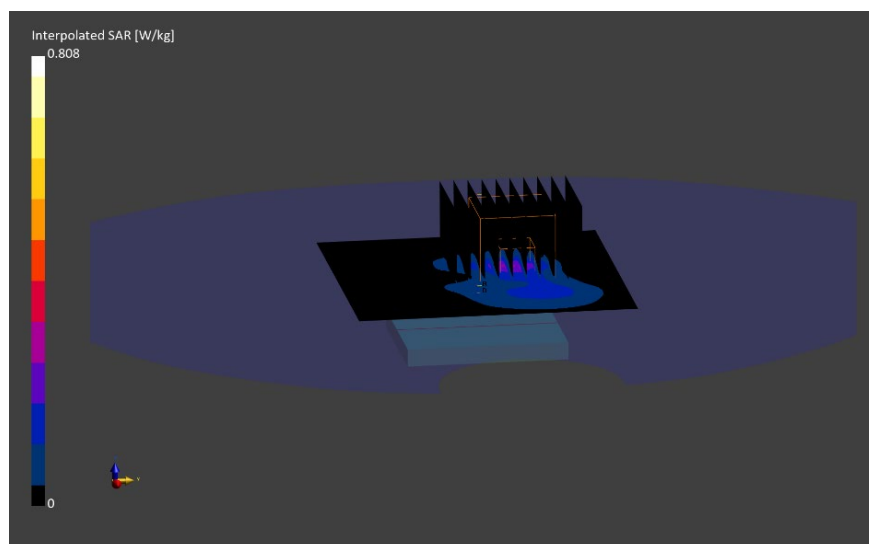
Reference Value = 0.13 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.808 W/kg

SAR(1 g) = 0.215 W/kg

Smallest distance from peaks to all points 3 dB below is 8.7 mm

Ratio of SAR at M2 to SAR at M1 = 61.3 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: JC076

Communication System: UID:10032 - CAA, Bluetooth; MAIA: Y; Frequency: 2402.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2402.0$ MHz; $\text{cond} = 1.72$ S/m; $\text{perm} = 39.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 07/10/2024; Ambient Temp: 21.5°C; Tissue Temp: 23.3°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, Sports 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

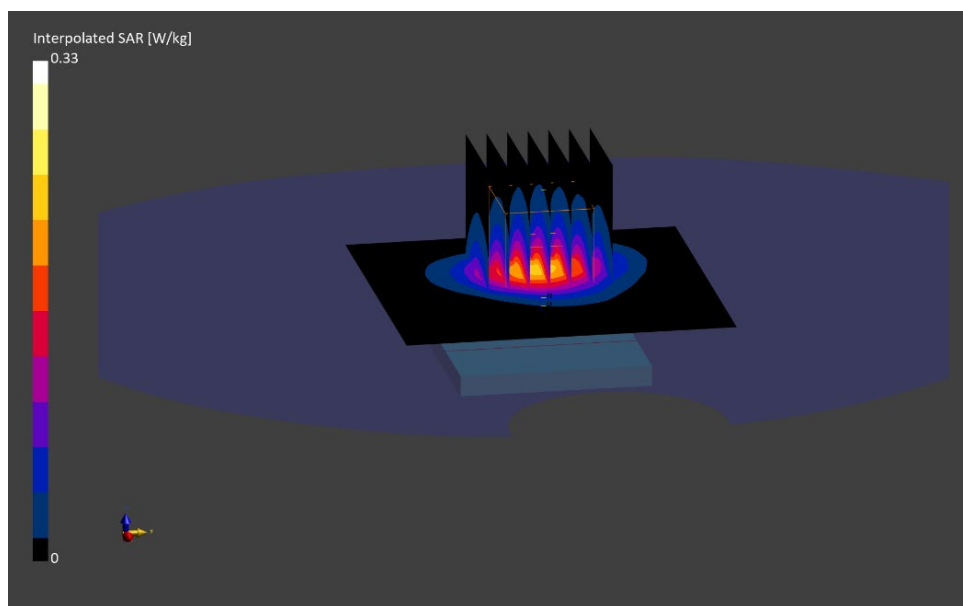
Reference Value = 0.18 W/kg; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.192 W/kg

Smallest distance from peaks to all points 3 dB below is 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 84.4 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: 39N5H

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 5728.8 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5728.8$ MHz; $\text{cond} = 5.16$ S/m; $\text{perm} = 34.8$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10.00 mm

Test Date: 06/17/2024; Ambient Temp: 21.2°C; Tissue Temp: 20.4°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: Head| Front Side, Ch. Low, 1 Mbps, Aluminum, Sports 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

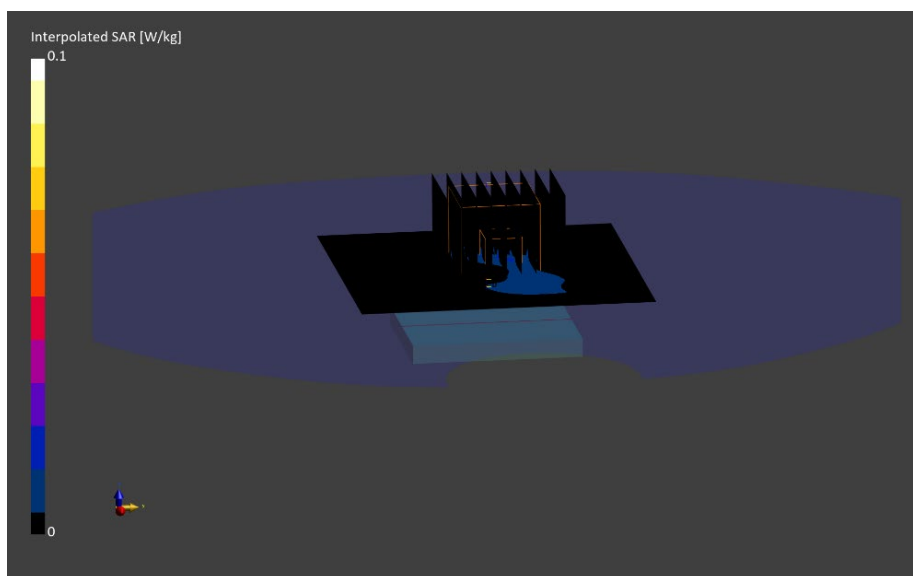
Reference Value = 0.00 W/kg; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.067 W/kg

SAR(1 g) = 0.012 W/kg

Smallest distance from peaks to all points 3 dB below is 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 79.6 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: JC076

Communication System: UID:10415 - AAA, WLAN; MAIA: Y; Frequency: 2437.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2437.0$ MHz; $\text{cond} = 1.74$ S/m; $\text{perm} = 39.8$; $\text{density} = 1000$ 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. 6, 1Mbps, 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

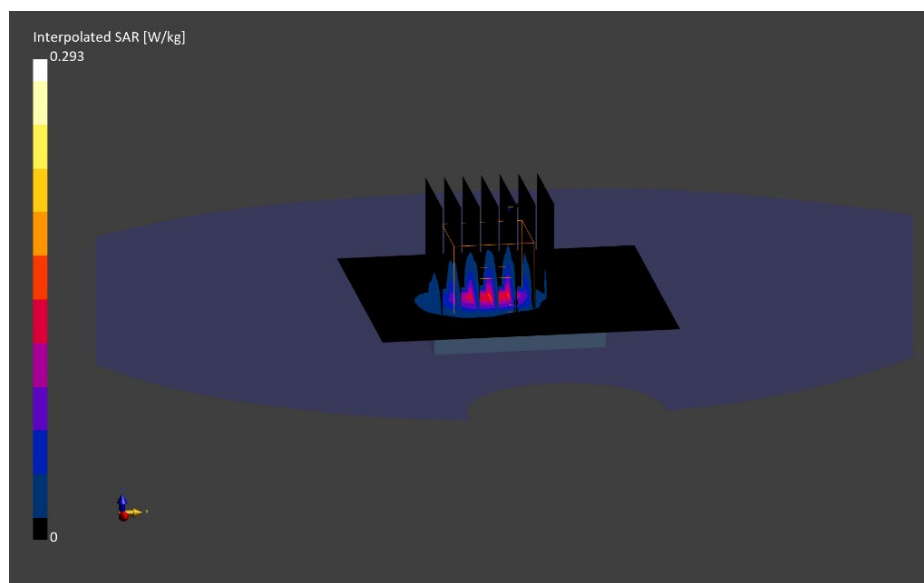
Reference Value = 0.13 W/kg; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.293 W/kg

SAR(10 g) = 0.051 W/kg

Smallest distance from peaks to all points 3 dB below is 7.7 mm

Ratio of SAR at M2 to SAR at M1 = 75.4 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: 03J2X

Communication System: UID:10417 - AAD, WLAN; MAIA: Y; Frequency: 5720.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5720.0$ MHz; $\text{cond} = 5.06$ S/m; $\text{perm} = 36.6$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 06/18/2024; Ambient Temp: 21.3°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN3746; ConvF:(4.59,4.59,4.59); Calibrated: 2023-10-16

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

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

Phantom: Twin-SAM V8.0; Serial: 2027

Measurement SW: DASY Module SAR V16.2.4.2524

Mode: 5 GHz WIFI/ IEEE 802.11a, 20 MHz Bandwidth, U-NII-2C, Exp: Extremity| Back Side, Ch. 144, 6.5 Mbps, Aluminum, Sport 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

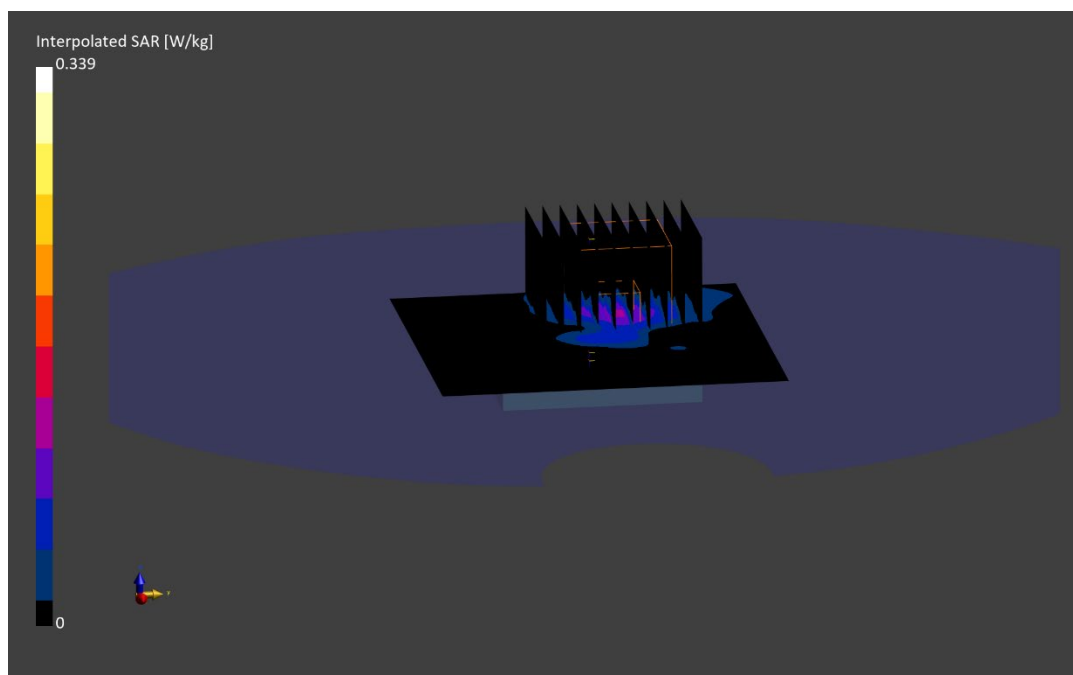
Reference Value = 0.04 W/kg; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(10 g) = 0.032 W/kg

Smallest distance from peaks to all points 3 dB below is 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 61.1 %



ELEMENT

DUT: BCG-A2999 Type: Watch; Serial: JC076

Communication System: UID:10032 - CAA, Bluetooth; MAIA: Y; Frequency: 2441.0 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2441.0$ MHz; $\text{cond} = 1.75$ S/m; $\text{perm} = 39.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/10/2024; Ambient Temp: 21.5°C; Tissue Temp: 23.3°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. 39, 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

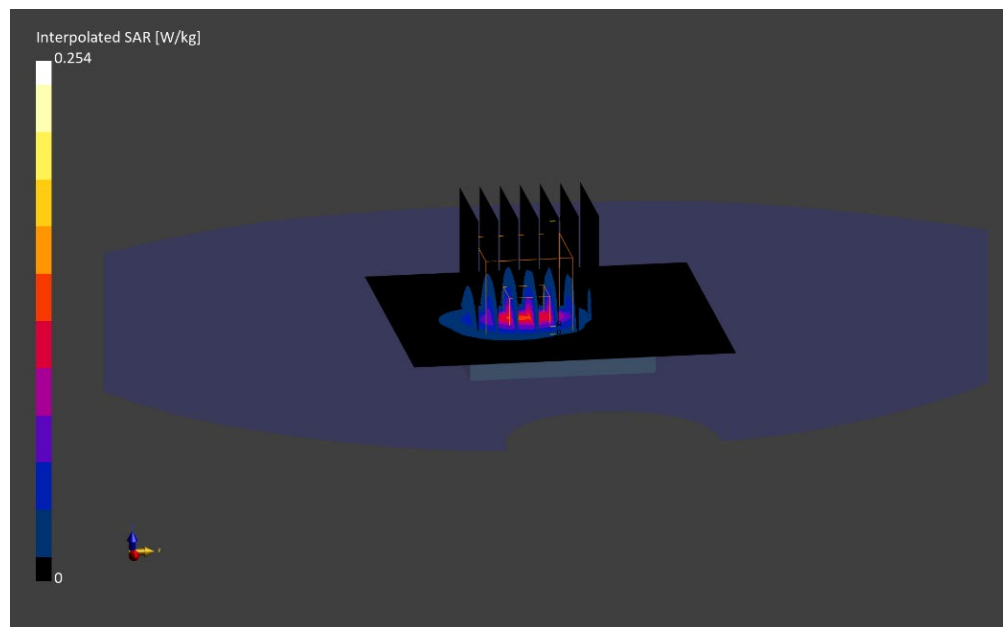
Reference Value = 0.10 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.254 W/kg

SAR(10 g) = 0.043 W/kg

Smallest distance from peaks to all points 3 dB below is 7.0 mm

Ratio of SAR at M2 to SAR at M1 = 74.4 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: 39N5H

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 5728.8 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5728.8$ MHz; $\text{cond} = 5.16$ S/m; $\text{perm} = 33.8$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

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

Probe: EX3DV4 - SN3949; ConvF:(5.31,5.31,5.31); 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: Extremity| Back Side, Ch. Low, 1 Mbps, Aluminum, Metal Links Wristband

Area Scan (160.0 x 160.0): 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

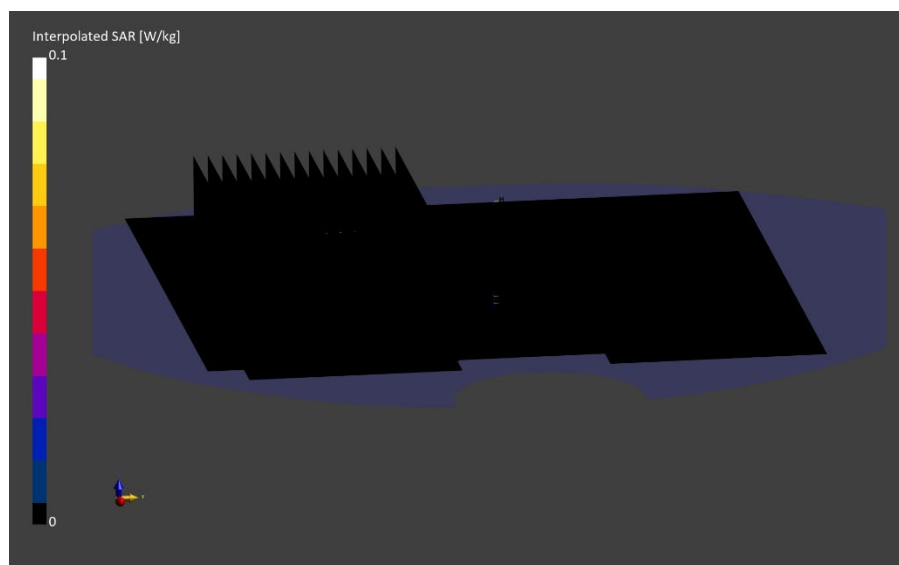
Reference Value = 0.00 W/kg; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.1 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 = 79.1 %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: G59TW

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 7987.2 MHz

Medium: 6000 Head; Medium parameters used:

f = 7987.2 MHz; cond = 7.87 S/m; perm = 31.4; density = 1000 kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/01/2024; Ambient Temp: 20.8°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7532; ConvF:(5.23,5.13,5.61); Calibrated: 2024-04-16

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

Electronics: DAE4 Sn501; Calibrated: 2024-04-09

Phantom: Twin-SAM V5.0 Serial: 1647

Measurement SW: DASY Module SAR V16.2.4.2524

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

Area Scan (75.0 x 90.0): Measurement grid: dx=7.5 mm, dy=7.5 mm

Zoom Scan (23.4 x 23.4 x 22.0): Measurement grid: dx=2.6 mm, dy=2.6 mm, dz=1.4 mm; Graded Ratio: 1.4

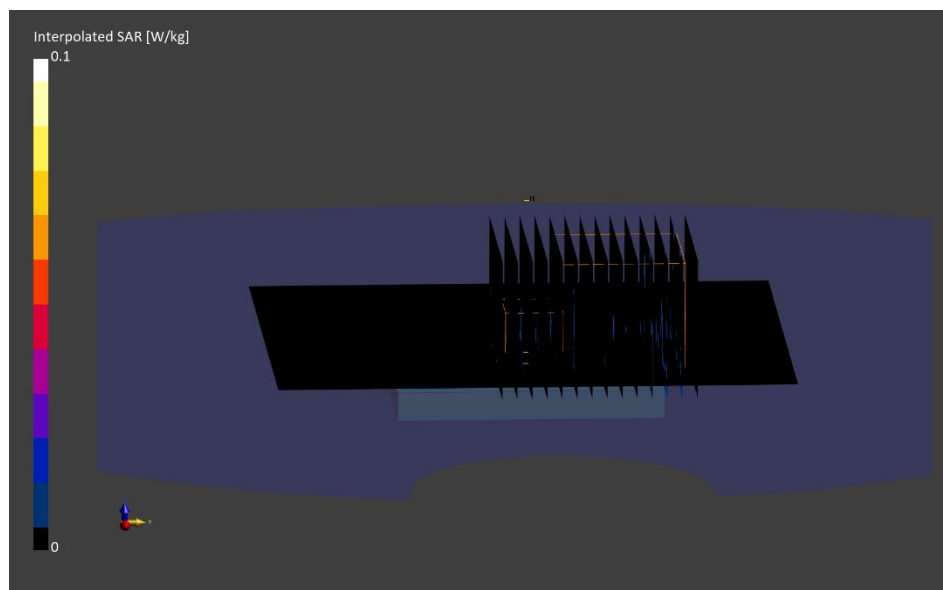
Reference Value = 0.00 W/kg; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.044 W/kg

SAR(10 g) = 0.002 W/kg; APD(4cm²) = 0.045 W/m²

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

Ratio of SAR at M2 to SAR at M1 = N/A %



ELEMENT

DUT: BCG-A2999; Type: Watch; Serial: 1G2F5

Communication System: UID:0 - -, CW; MAIA: Y; Frequency: 13.6 MHz

Medium: 30 Head; Medium parameters used:

$f = 13.6$ MHz; $\text{cond} = 0.757$ S/m; $\text{perm} = 53.5$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0.00 mm

Test Date: 07/01/2024; Ambient Temp: 22.0°C; Tissue Temp: 21.8°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, Sports Wristband

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

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

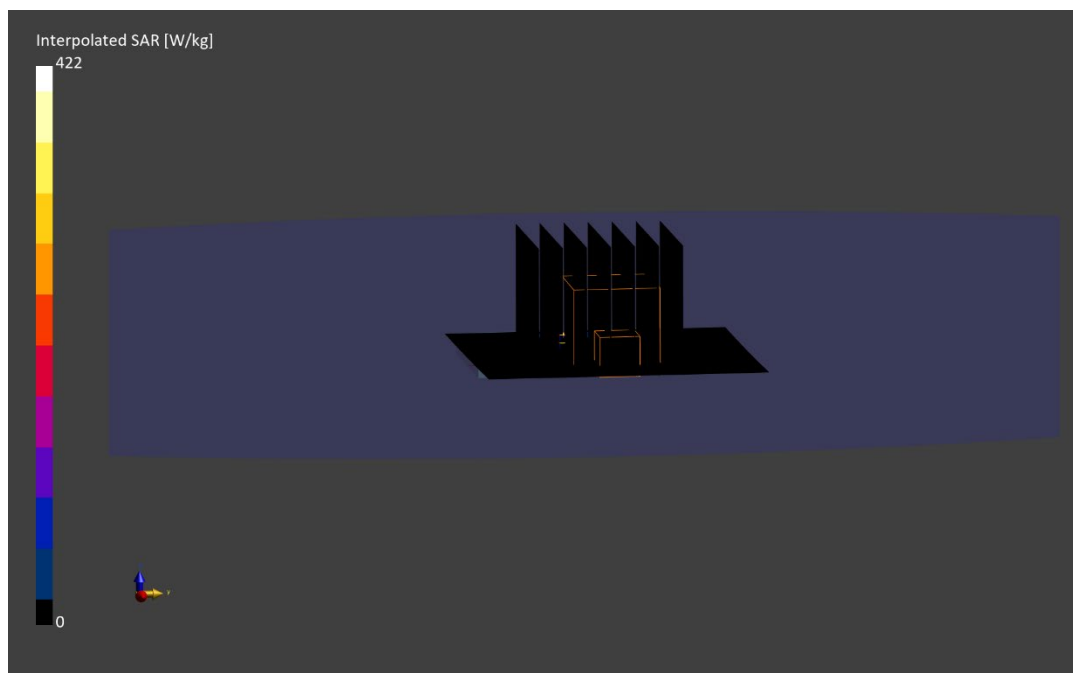
Reference Value = 0.00 W/kg; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.004 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 = 36.5 %



ELEMENT

Date: 07/01/2024

Mode: UWB, Body SAR, Front Side, Ch. 9, Aluminum, Metal Loop Wristband

Device Under Test Properties

DUT	Serial Number	DUT Type
BCG-A2999	P4DNF	Watch

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Channel	Group, UID	Frequency [MHz]
5G	BACK	2.00	9	0	7987.2

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV4 - SN9487, 04/08/2024	DAE4 - SN1408, 03/06/2024

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]	0.997
pS _n avg [W/m²]	0.950
E _{peak} [V/m]	23.9
Power Drift [dB]	-0.08

