

APPENDIX B: SYSTEM VERIFICATION

ELEMENT

DUT: Dipole 13.000 MHz; Type: CLA-13 - SN1004

Communication System: UID: 0, CW; Frequency: 13.000 MHz
Medium: 30 Head; Medium parameters used:
 $f = 13.000$ MHz; $\text{cond} = 0.744$ S/m; $\text{perm} = 52.5$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 0 mm

Test Date: 12/11/2024; Ambient Temp: 21.9°C; Tissue Temp: 24.0°C

Probe: EX3DV4 - SN7308; ConvF:(16.59,16.59,16.59); Calibrated: 2024-02-09
Sensor-Surface: 1.4mm (All points)
Electronics: DAE4 Sn534; Calibrated: 2024-03-06
Phantom: ELI V6.0; Serial: 2003
Measurement SW: DASY Module SAR V16.4.0.5005

13.0 MHz System Verification at 30.0 dBm (1000 mW)

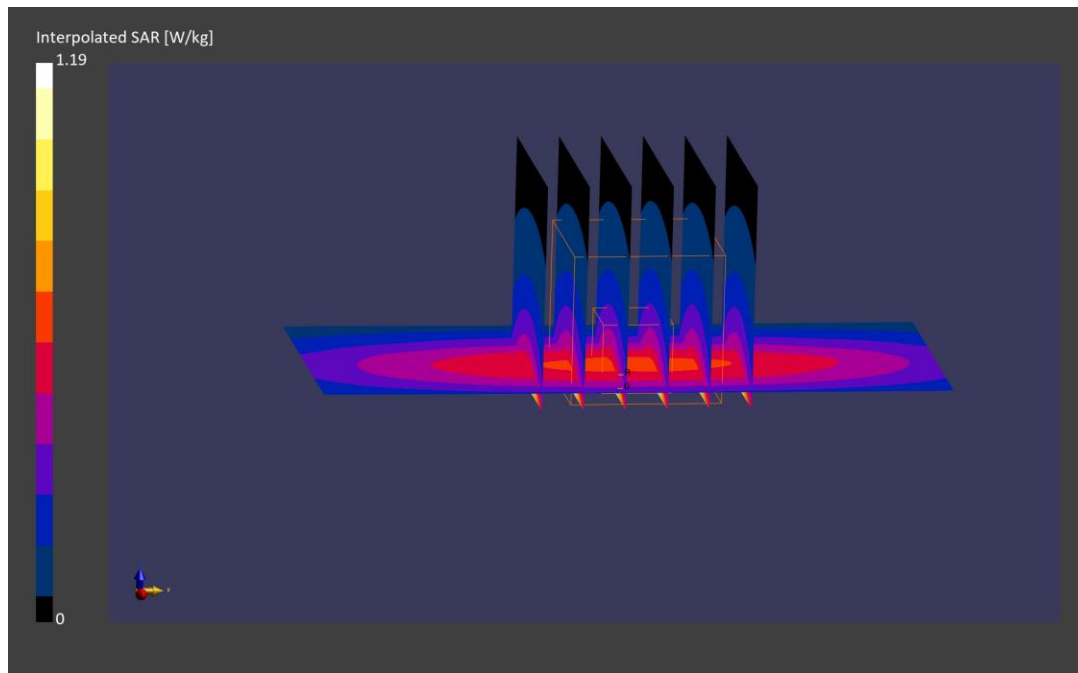
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.566 W/kg;

Deviation (1 g) = -1.57%;



ELEMENT

DUT: Dipole 750.000 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.000 MHz

Medium: 750 Head; Medium parameters used:

$f = 750.000$ MHz; $\text{cond} = 0.902$ S/m; $\text{perm} = 41.7$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/23/2024; Ambient Temp: 21.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7532; ConvF:(9.83,9.71,10.46); 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 V16.4.0.5005

750.0 MHz System Verification at 23.0 dBm (200 mW)

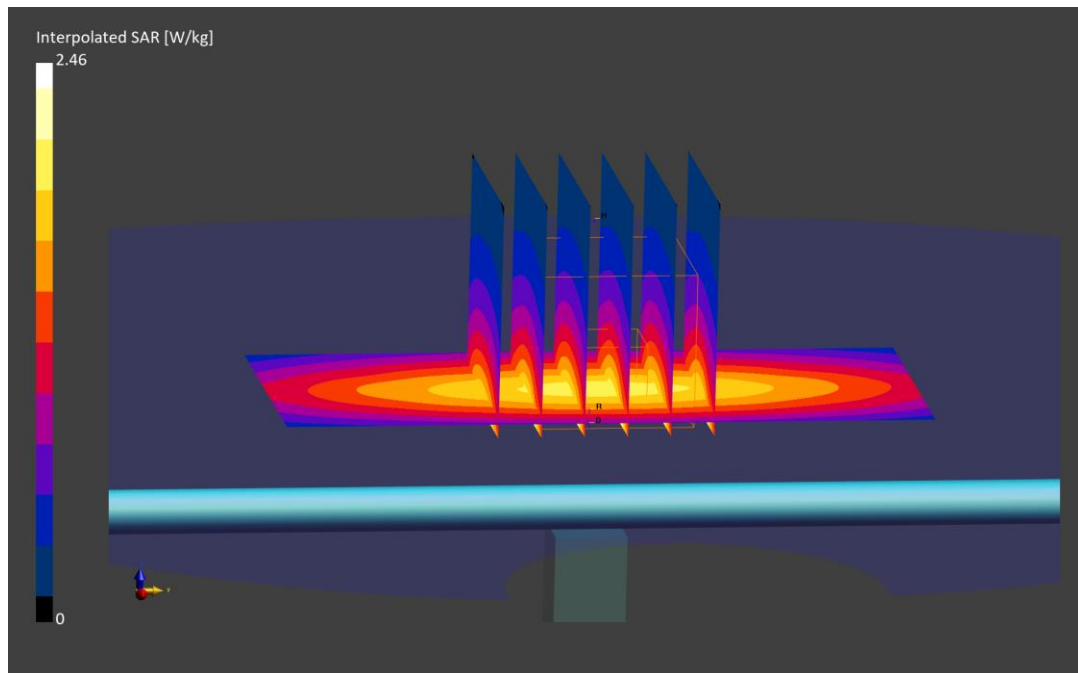
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.46 W/kg

SAR(1 g) = 1.68 W/kg;

Deviation (1 g) = 1.57%;



ELEMENT

DUT: Dipole 750.000 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.000 MHz

Medium: 750 Head; Medium parameters used:

$f = 750.000$ MHz; $\text{cond} = 0.874$ S/m; $\text{perm} = 40.5$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/25/2024; Ambient Temp: 22.2°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7532; ConvF:(9.83,9.71,10.46); 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 V16.4.0.5005

750.0 MHz System Verification at 23.0 dBm (200 mW)

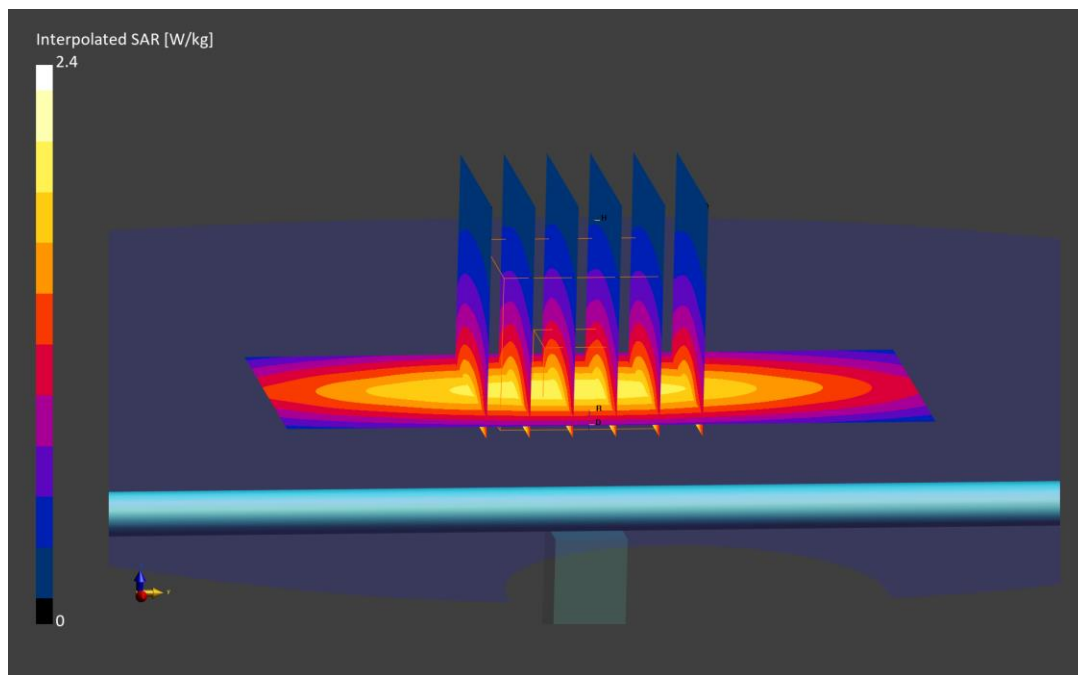
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.40 W/kg

SAR(1 g) = 1.66 W/kg;

Deviation (1 g) = 0.36%;



ELEMENT

DUT: Dipole 750.000 MHz; Type: D750V3 - SN1057

Communication System: UID: 0, CW; Frequency: 750.000 MHz

Medium: 750 Head; Medium parameters used:

$f = 750.000$ MHz; $\text{cond} = 0.888$ S/m; $\text{perm} = 42.0$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/27/2024; Ambient Temp: 21.8°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7416; ConvF:(8.53,9.4,8.96); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn701; Calibrated: 2024-05-08

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

Measurement SW: DASY Module SAR V16.4.0.5005

750.0 MHz System Verification at 23.0 dBm (200 mW)

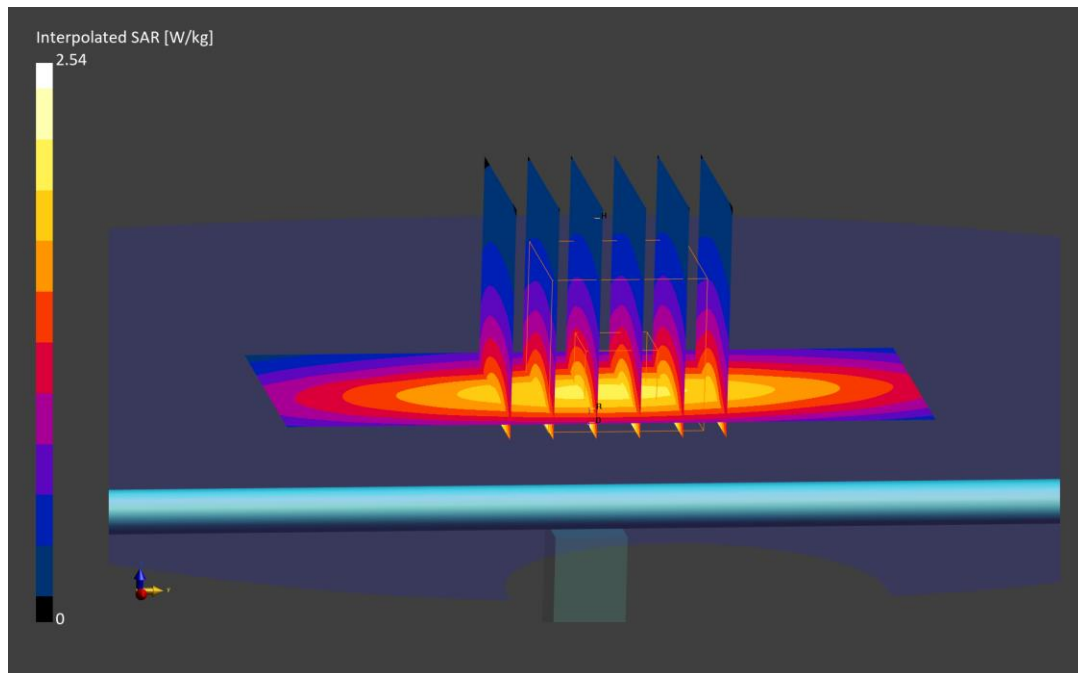
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 1.71 W/kg;

Deviation (1 g) = 0.47%;



ELEMENT

DUT: Dipole 750.000 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.000 MHz

Medium: 750 Head; Medium parameters used:

$f = 750.000$ MHz; $\text{cond} = 0.878$ S/m; $\text{perm} = 40.6$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/28/2024; Ambient Temp: 20.5°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7532; ConvF:(9.83,9.71,10.46); 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 V16.4.0.5005

750.0 MHz System Verification at 23.0 dBm (200 mW)

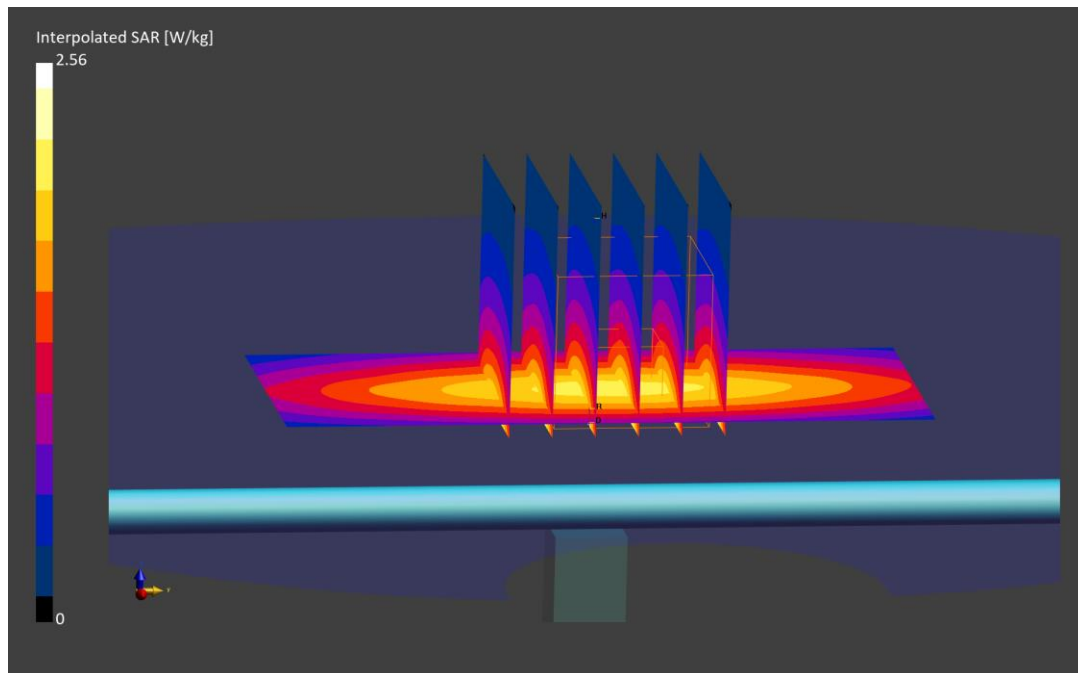
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.56 W/kg

SAR(1 g) = 1.74 W/kg;

Deviation (1 g) = 5.20%;



ELEMENT

DUT: Dipole 835.000 MHz; Type: D835V2 - SN460

Communication System: UID: 0, CW; Frequency: 835.000 MHz

Medium: 835 Head; Medium parameters used:

$f = 835.000$ MHz; $\text{cond} = 0.895$ S/m; $\text{perm} = 40.3$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/23/2024; Ambient Temp: 21.8°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7682; ConvF:(9.76,9.52,10.09); 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 V16.4.0.5005

835.0 MHz System Verification at 23.0 dBm (200 mW)

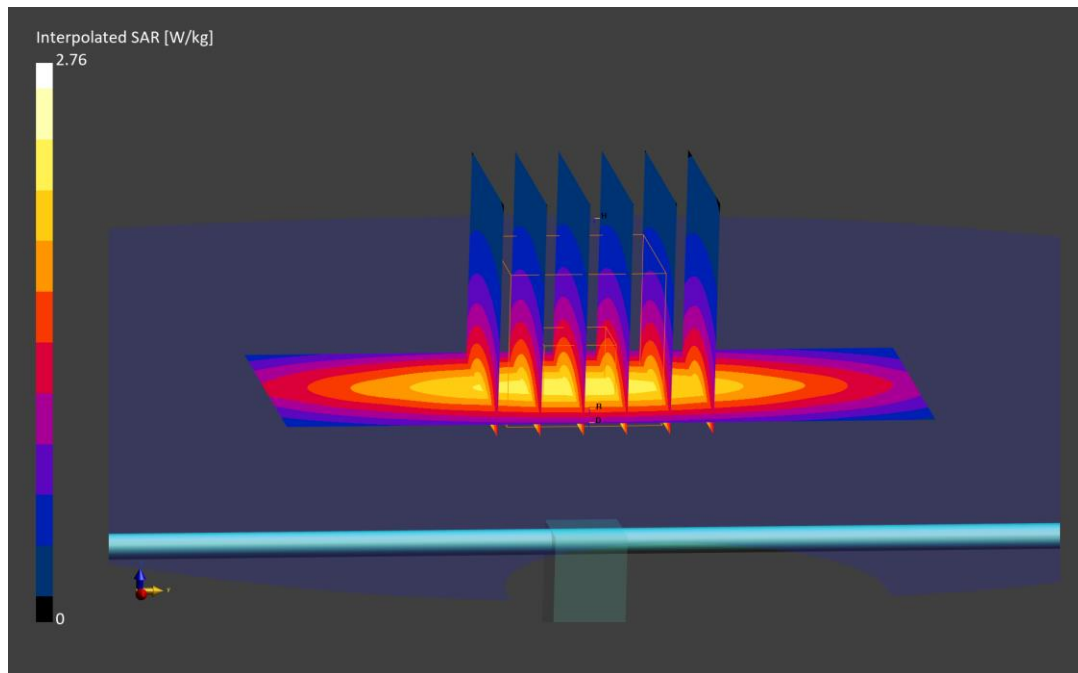
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.91 W/kg;

Deviation (1 g) = -1.75%;



ELEMENT

DUT: Dipole 835.000 MHz; Type: D835V2 - SN460

Communication System: UID: 0, CW; Frequency: 835.000 MHz

Medium: 835 Head; Medium parameters used:

$f = 835.000$ MHz; $\text{cond} = 0.888$ S/m; $\text{perm} = 40.6$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/25/2024; Ambient Temp: 23.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7682; ConvF:(9.76,9.52,10.09); 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 V16.4.0.5005

835.0 MHz System Verification at 23.0 dBm (200 mW)

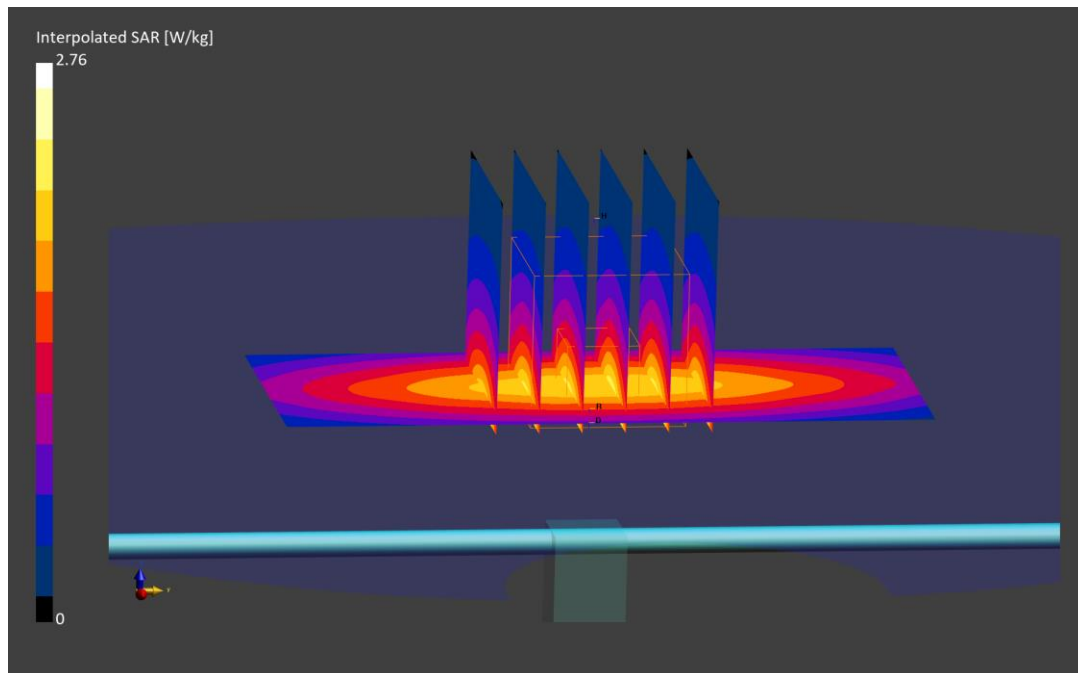
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.91 W/kg;

Deviation (1 g) = -1.75%;



ELEMENT

DUT: Dipole 835.000 MHz; Type: D835V2 - SN460

Communication System: UID: 0, CW; Frequency: 835.000 MHz

Medium: 835 Head; Medium parameters used:

$f = 835.000$ MHz; $\text{cond} = 0.895$ S/m; $\text{perm} = 40.8$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/28/2024; Ambient Temp: 21.8°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7682; ConvF:(9.76,9.52,10.09); 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 V16.4.0.5005

835.0 MHz System Verification at 23.0 dBm (200 mW)

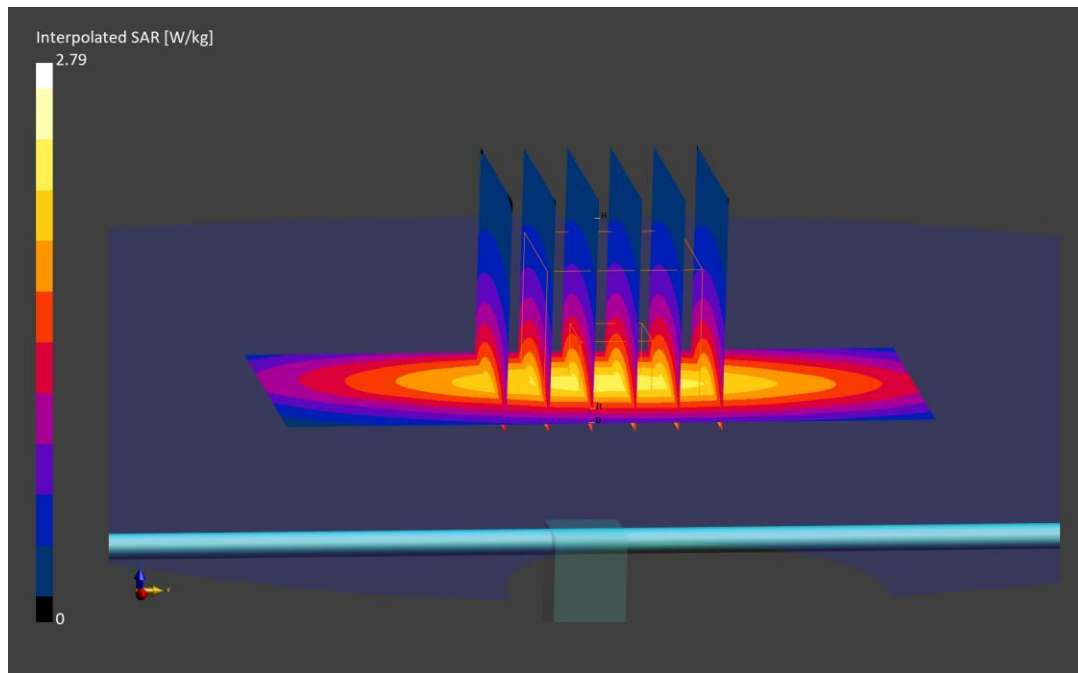
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 2.79 W/kg

SAR(1 g) = 1.93 W/kg;

Deviation (1 g) = -0.72%;



ELEMENT

DUT: Dipole 1750.000 MHz; Type: D1750V2 - SN1083

Communication System: UID: 0, CW; Frequency: 1750.000 MHz
Medium: 1750 Head; Medium parameters used:
 $f = 1750.000$ MHz; $\text{cond} = 1.39$ S/m; $\text{perm} = 38.5$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/29/2024; Ambient Temp: 22.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7532; ConvF:(7.87,7.89,8.57); 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 V16.4.0.5005

1750.0 MHz System Verification at 20.0 dBm (100 mW)

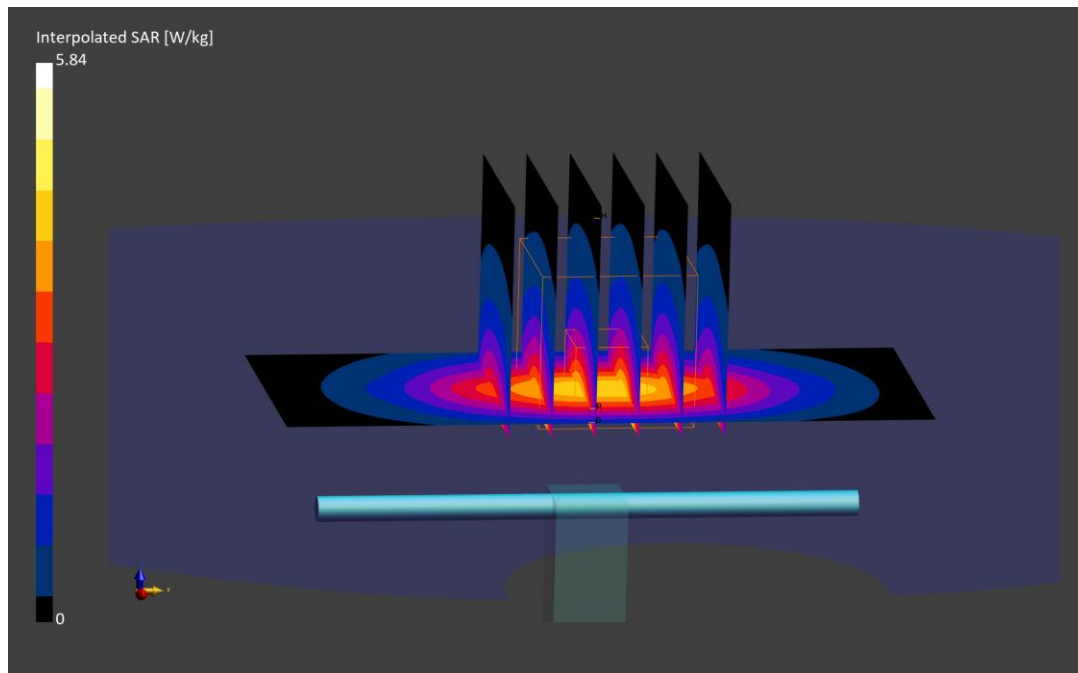
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 5.84 W/kg

SAR(1 g) = 3.48 W/kg;

Deviation (1 g) = -4.66%;



ELEMENT

DUT: Dipole 1750.000 MHz; Type: D1750V2 - SN1104

Communication System: UID: 0, CW; Frequency: 1750.000 MHz

Medium: 1750 Head; Medium parameters used:

f = 1750.000 MHz; cond = 1.32 S/m; perm = 38.7; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 11/07/2024; Ambient Temp: 22.4°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7532; ConvF:(7.87,7.89,8.57); 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 V16.4.0.5005

1750.0 MHz System Verification at 20.0 dBm (100 mW)

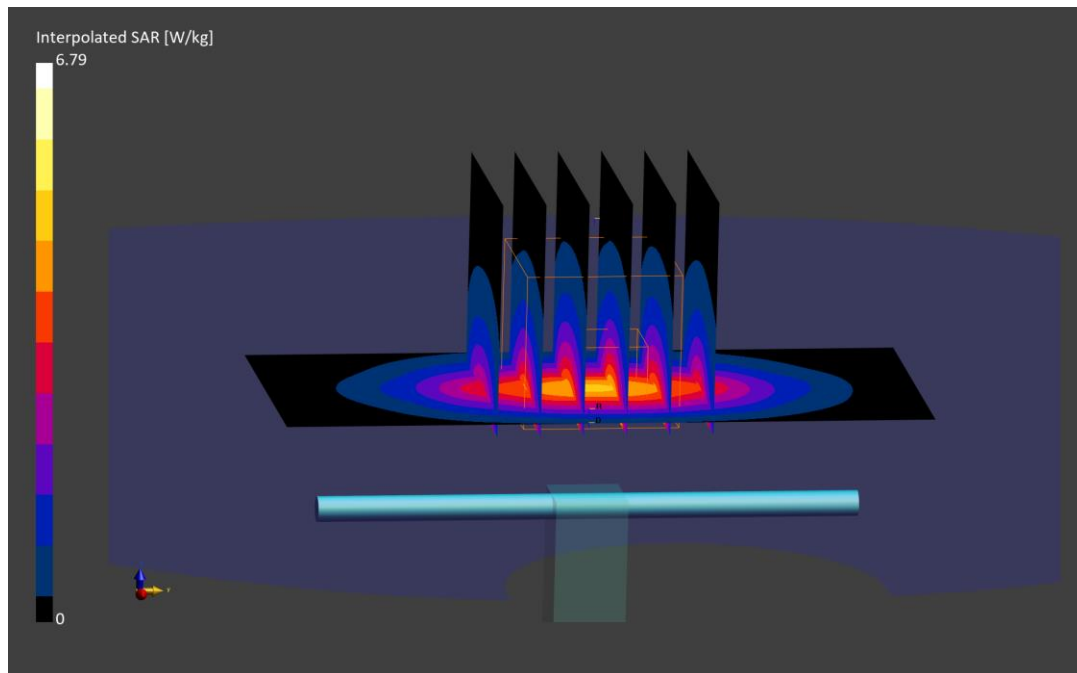
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: dx=6.0 mm, dy=6.0 mm, dz=1.5 mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 6.79 W/kg

SAR(1 g) = 3.71 W/kg;

Deviation (1 g) = 4.21%;



ELEMENT

DUT: Dipole 1900.000 MHz; Type: D1900V2 - SN5d181

Communication System: UID: 0, CW; Frequency: 1900.000 MHz

Medium: 1900 Head; Medium parameters used:

$f = 1900.000$ MHz; $\text{cond} = 1.39$ S/m; $\text{perm} = 40.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/30/2024; Ambient Temp: 20.8°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7421; ConvF:(7.63,7.63,7.63); 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 V16.4.0.5005

1900.0 MHz System Verification at 20.0 dBm (100 mW)

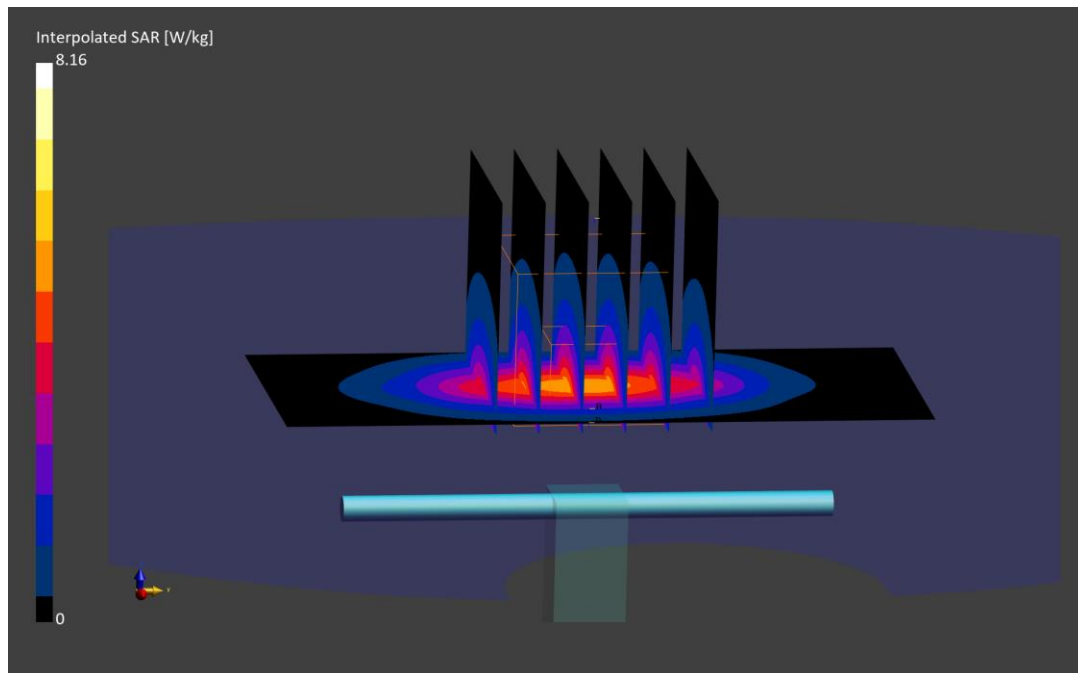
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 8.16 W/kg

SAR(1 g) = 4.28 W/kg;

Deviation (1 g) = 7.27%;



ELEMENT

DUT: Dipole 1900.000 MHz; Type: D1900V2 - SN5d181

Communication System: UID: 0, CW; Frequency: 1900.000 MHz

Medium: 1900 Head; Medium parameters used:

$f = 1900.000$ MHz; $\text{cond} = 1.41$ S/m; $\text{perm} = 39.0$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 11/01/2024; Ambient Temp: 21.2°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7421; ConvF:(7.63,7.63,7.63); 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 V16.4.0.5005

1900.0 MHz System Verification at 20.0 dBm (100 mW)

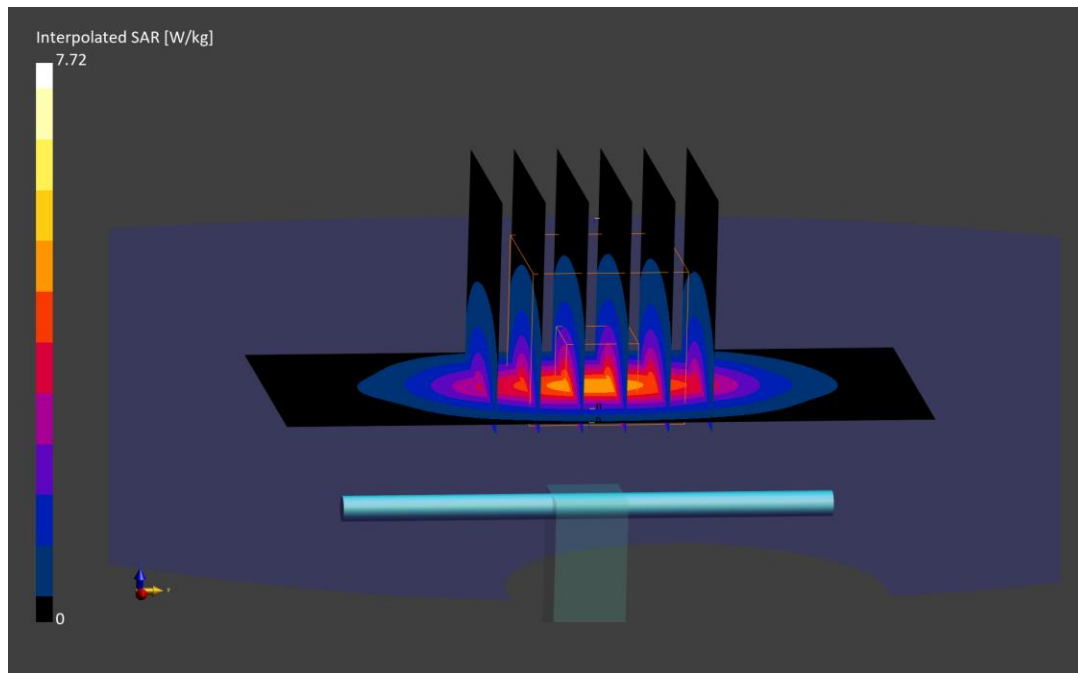
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=6.0$ mm, $dy=6.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 7.72 W/kg

SAR(1 g) = 4.00 W/kg;

Deviation (1 g) = 0.25%;



ELEMENT

DUT: Dipole 2300.000 MHz; Type: D2300V2 - SN1038

Communication System: UID: 0, CW; Frequency: 2300.000 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2300.000$ MHz; $\text{cond} = 1.69$ S/m; $\text{perm} = 38.7$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/25/2024; Ambient Temp: 22.5°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7546; ConvF:(7.57,6.87,7.42); Calibrated: 2024-04-16
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1402; Calibrated: 2024-04-10
Phantom: Twin-SAM V8.0; Serial: 2029
Measurement SW: DASY Module SAR V16.4.0.5005

2300.0 MHz System Verification at 20.0 dBm (100 mW)

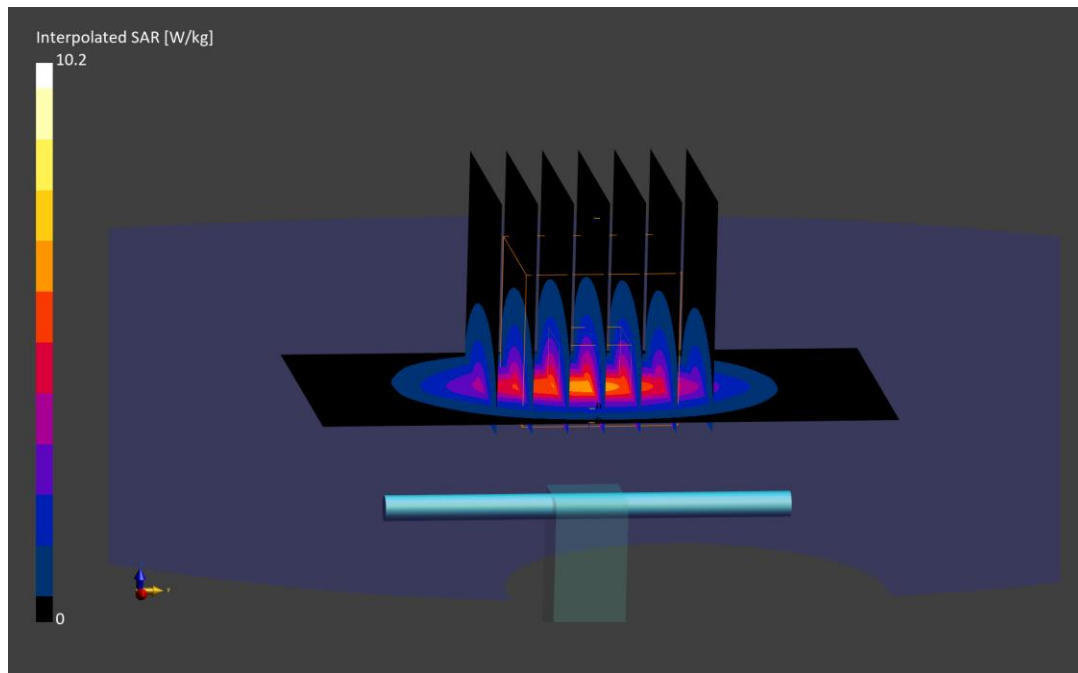
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.2 W/kg

SAR(1 g) = 4.86 W/kg;

Deviation (1 g) = -1.02%;



ELEMENT

DUT: Dipole 2300.000 MHz; Type: D2300V2 - SN1038

Communication System: UID: 0, CW; Frequency: 2300.000 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2300.000$ MHz; $\text{cond} = 1.69$ S/m; $\text{perm} = 38.6$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/31/2024; Ambient Temp: 24.1°C; Tissue Temp: 23.5°C

Probe: EX3DV4 - SN7546; ConvF:(7.57,6.87,7.42); Calibrated: 2024-04-16
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1402; Calibrated: 2024-04-10
Phantom: Twin-SAM V8.0; Serial: 2029
Measurement SW: DASY Module SAR V16.4.0.5005

2300.0 MHz System Verification at 20.0 dBm (100 mW)

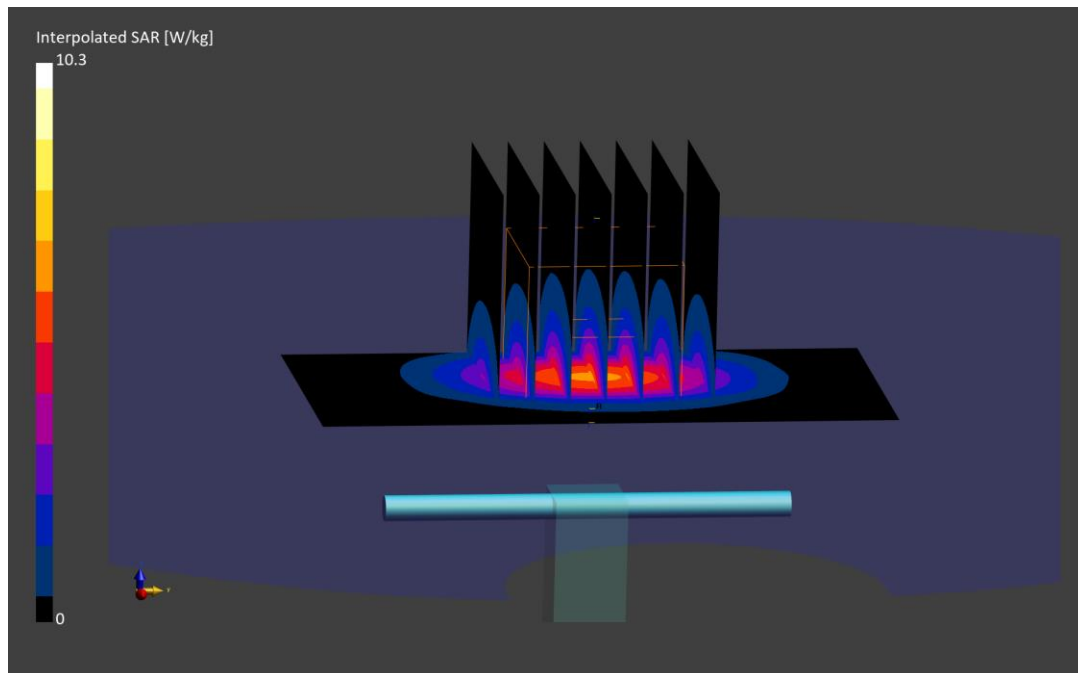
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.3 W/kg

SAR(1 g) = 4.98 W/kg;

Deviation (1 g) = 1.43%;



ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN855

Communication System: UID: 0, CW; Frequency: 2450.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2450.000$ MHz; $\text{cond} = 1.82$ S/m; $\text{perm} = 39.0$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/24/2024; Ambient Temp: 20.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7639; ConvF:(7.43,7.55,8.26); Calibrated: 2024-09-09

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

Electronics: DAE4 Sn1403; Calibrated: 2024-09-04

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

Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

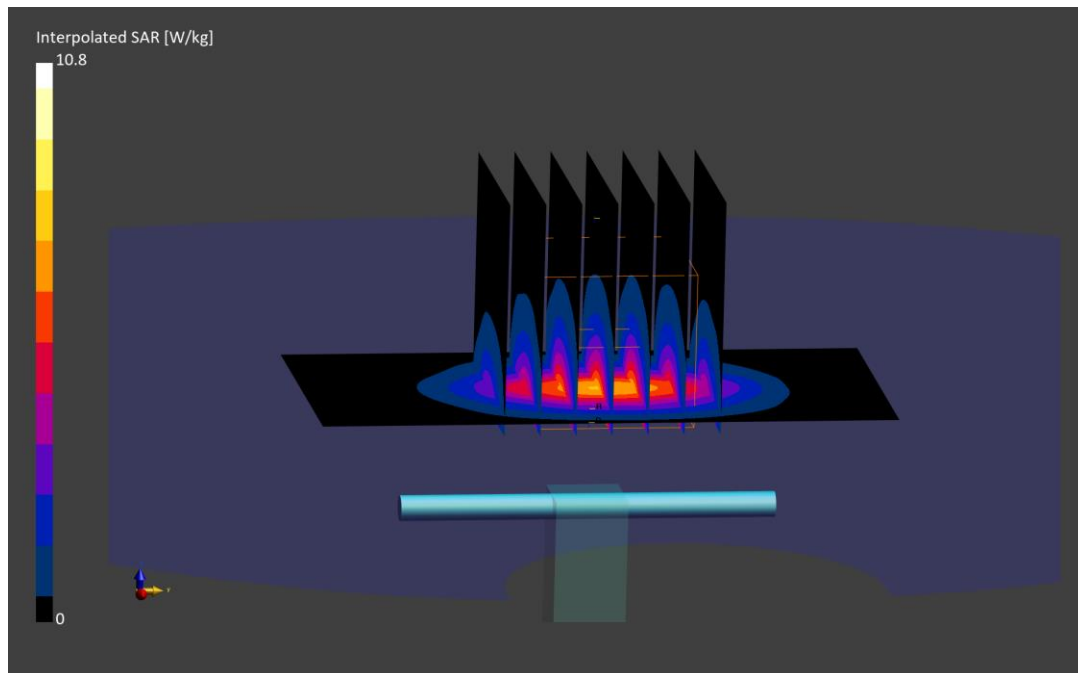
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.48 W/kg;

Deviation (1 g) = 4.58%;



ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN750

Communication System: UID: 0, CW; Frequency: 2450.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2450.000$ MHz; $\text{cond} = 1.84$ S/m; $\text{perm} = 38.1$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/30/2024; Ambient Temp: 22.0°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7552; ConvF:(7.01,7.58,7.38); Calibrated: 2024-05-13

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

Electronics: DAE4 Sn1676; Calibrated: 2024-05-08

Phantom: Twin-SAM V8.0; Serial: 2058

Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

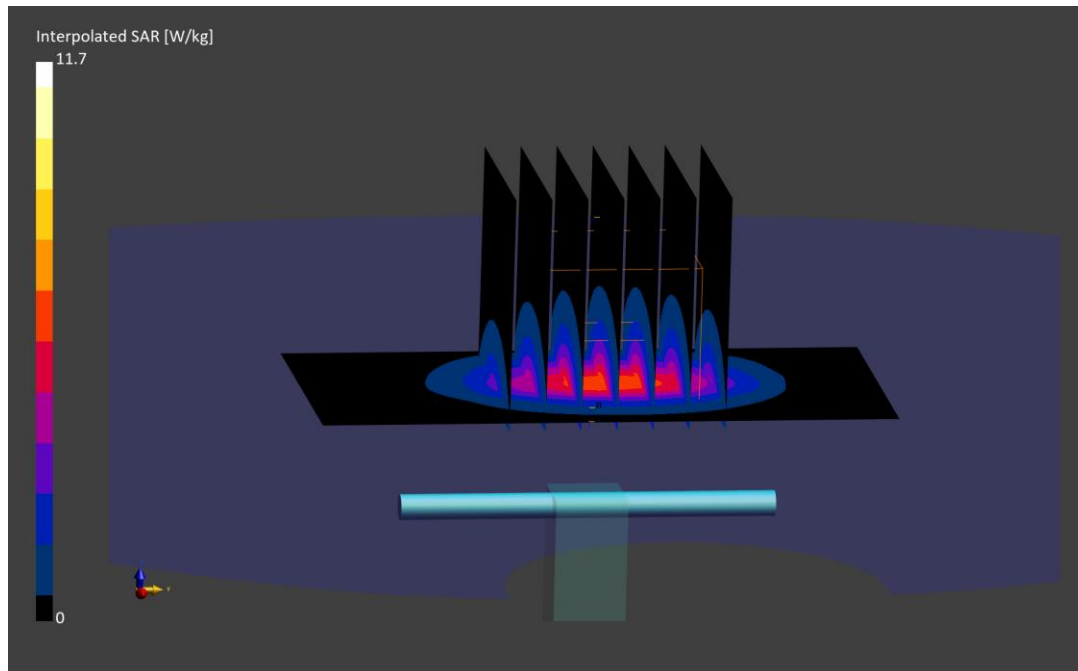
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 11.7 W/kg

SAR(1 g) = 5.23 W/kg;

Deviation (1 g) = -0.57%;



ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN750

Communication System: UID: 0, CW; Frequency: 2450.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2450.000$ MHz; $\text{cond} = 1.81$ S/m; $\text{perm} = 37.9$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/30/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7639; ConvF:(7.43,7.55,8.26); Calibrated: 2024-09-09

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

Electronics: DAE4 Sn1403; Calibrated: 2024-09-04

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

Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

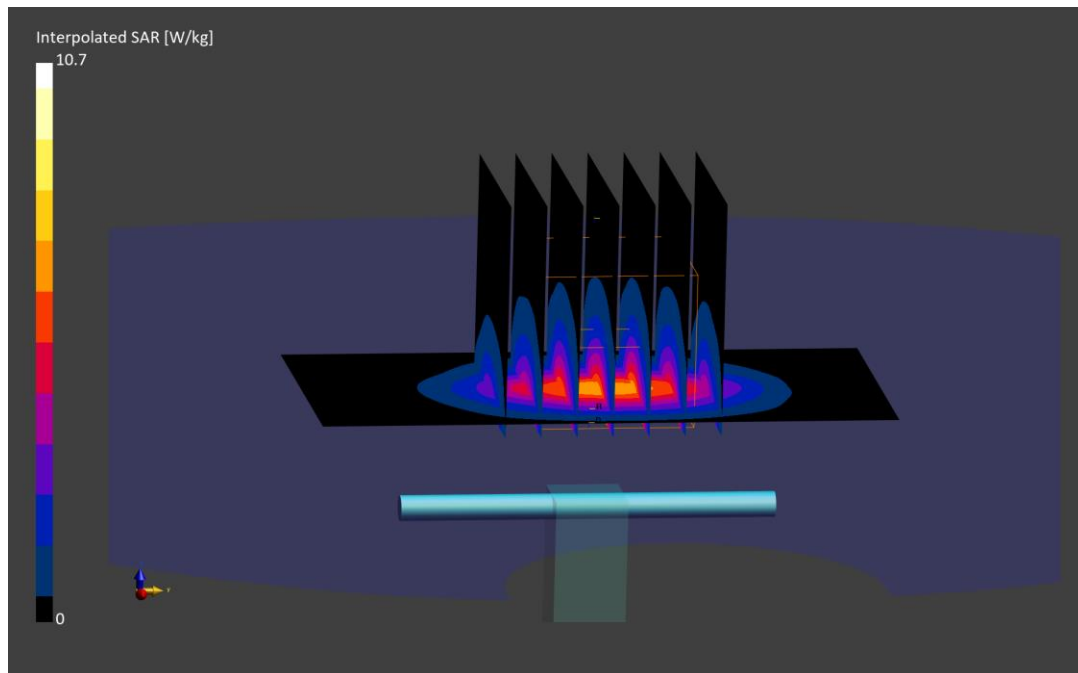
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.6 W/kg

SAR(1 g) = 5.24 W/kg;

Deviation (1 g) = -0.38%;



ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN750

Communication System: UID: 0, CW; Frequency: 2450.000 MHz

Medium: 2450 Head; Medium parameters used:

$f = 2450.000$ MHz; $\text{cond} = 1.79$ S/m; $\text{perm} = 38.3$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 11/07/2024; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7639; ConvF:(7.43,7.55,8.26); Calibrated: 2024-09-09

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

Electronics: DAE4 Sn1403; Calibrated: 2024-09-04

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

Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

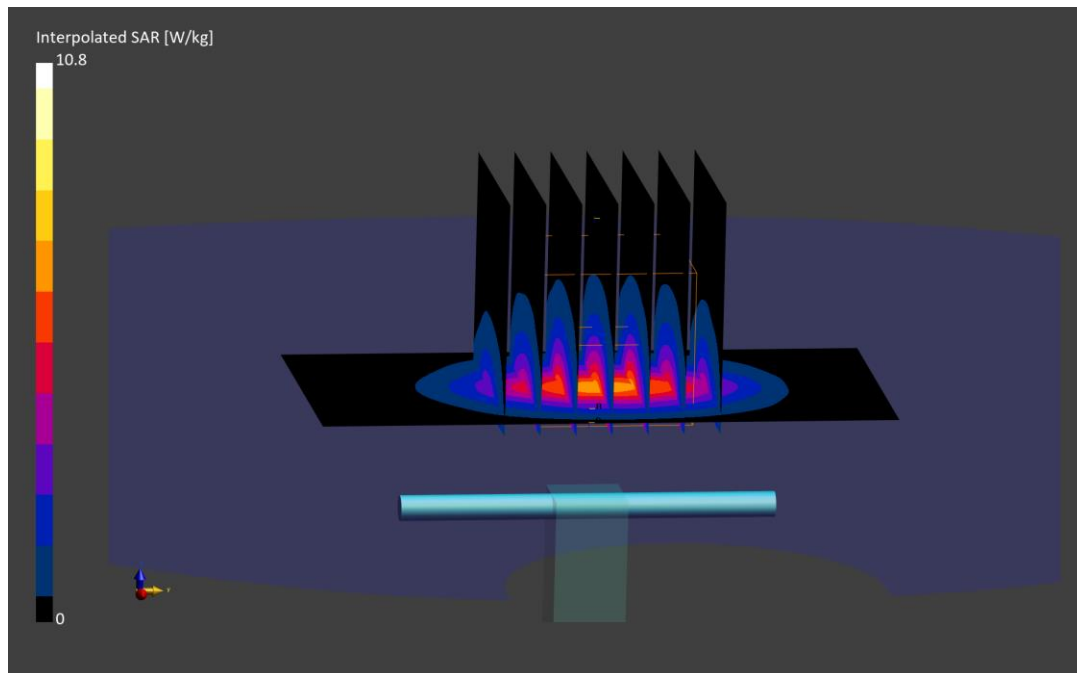
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.27 W/kg;

Deviation (1 g) = 0.19%;



ELEMENT

DUT: Dipole 2600.000 MHz; Type: D2600V2 - SN1042

Communication System: UID: 0, CW; Frequency: 2600.000 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2600.000$ MHz; $\text{cond} = 2.05$ S/m; $\text{perm} = 38.5$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/26/2024; Ambient Temp: 22.1°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7552; ConvF:(6.86,7.45,7.27); Calibrated: 2024-05-13
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1676; Calibrated: 2024-05-08
Phantom: Twin-SAM V8.0; Serial: 2058
Measurement SW: DASY Module SAR V16.4.0.5005

2600.0 MHz System Verification at 20.0 dBm (100 mW)

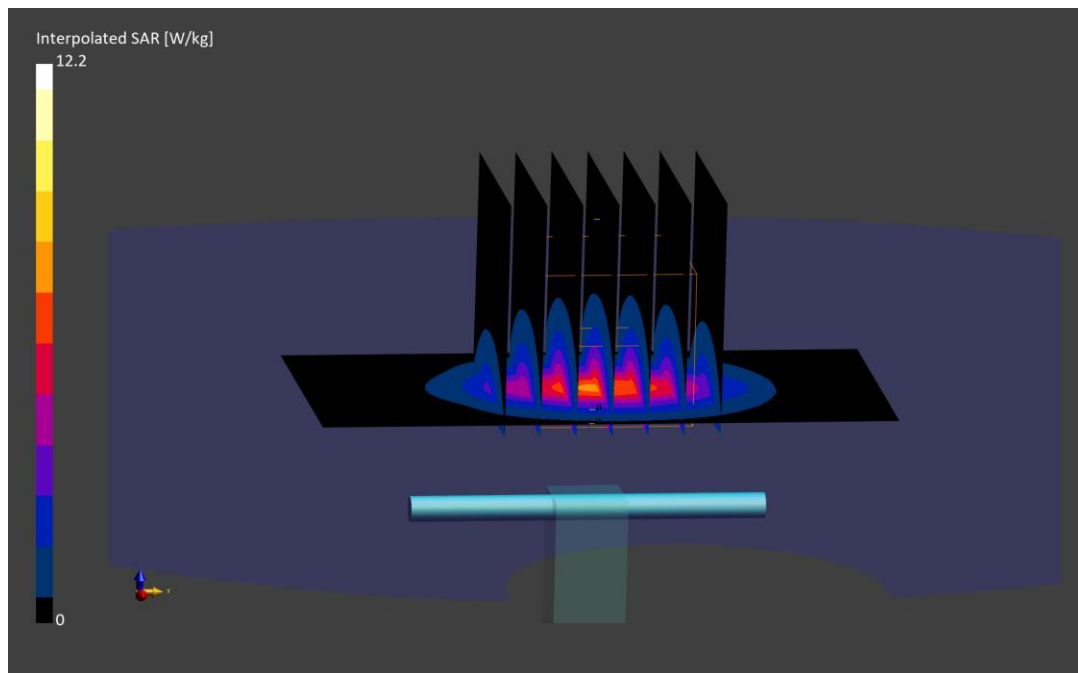
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 12.2 W/kg

SAR(1 g) = 5.41 W/kg;

Deviation (1 g) = -3.05%;



ELEMENT

DUT: Dipole 2600.000 MHz; Type: D2600V2 - SN1042

Communication System: UID: 0, CW; Frequency: 2600.000 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2600.000$ MHz; $\text{cond} = 2.02$ S/m; $\text{perm} = 38.2$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/14/2024; Ambient Temp: 20.0°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7552; ConvF:(6.86,7.45,7.27); Calibrated: 2024-05-13
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1676; Calibrated: 2024-05-08
Phantom: Twin-SAM V8; Serial: 2058
Measurement SW: DASY Module SAR V16.4.0.5005

2600.0 MHz System Verification at 20.0 dBm (100 mW)

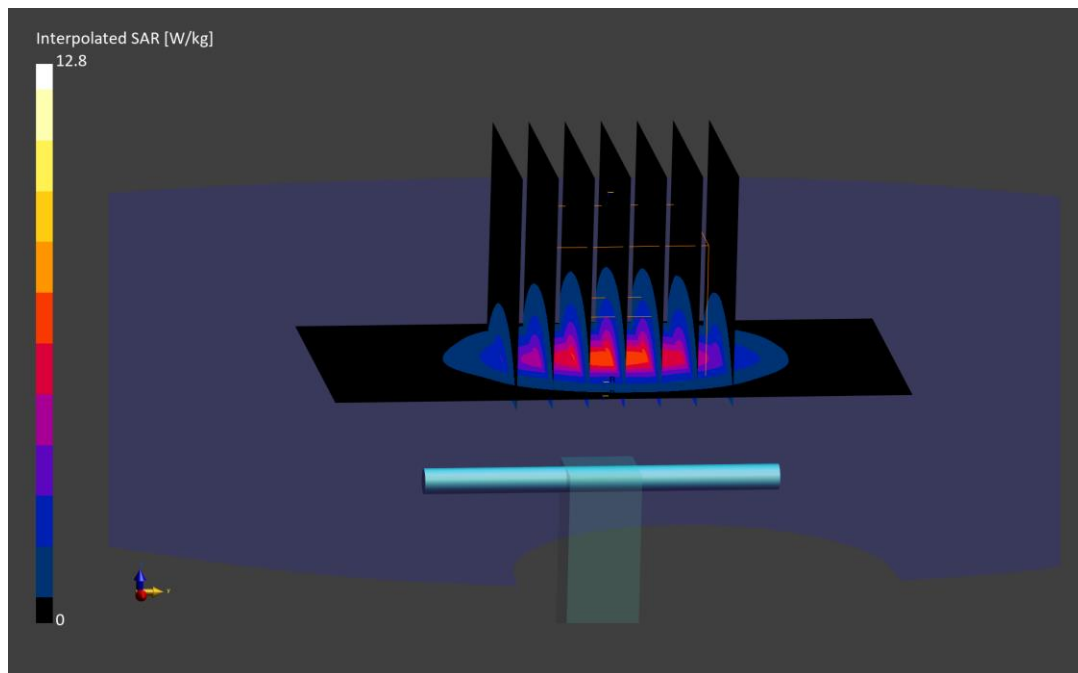
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 12.8 W/kg

SAR(1 g) = 5.59 W/kg;

Deviation (1 g) = 0.18%;



ELEMENT

DUT: Dipole 2600.000 MHz; Type: D2600V2 - SN1042

Communication System: UID: 0, CW; Frequency: 2600.000 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2600.000$ MHz; $\text{cond} = 1.90$ S/m; $\text{perm} = 37.8$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/23/2024; Ambient Temp: 21.6°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7639; ConvF:(7.35,7.47,8.17); Calibrated: 2024-09-09
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1403; Calibrated: 2024-09-04
Phantom: Twin-SAM V8.0; Serial: 1357
Measurement SW: DASY Module SAR V16.4.0.5005

2600.0 MHz System Verification at 20.0 dBm (100 mW)

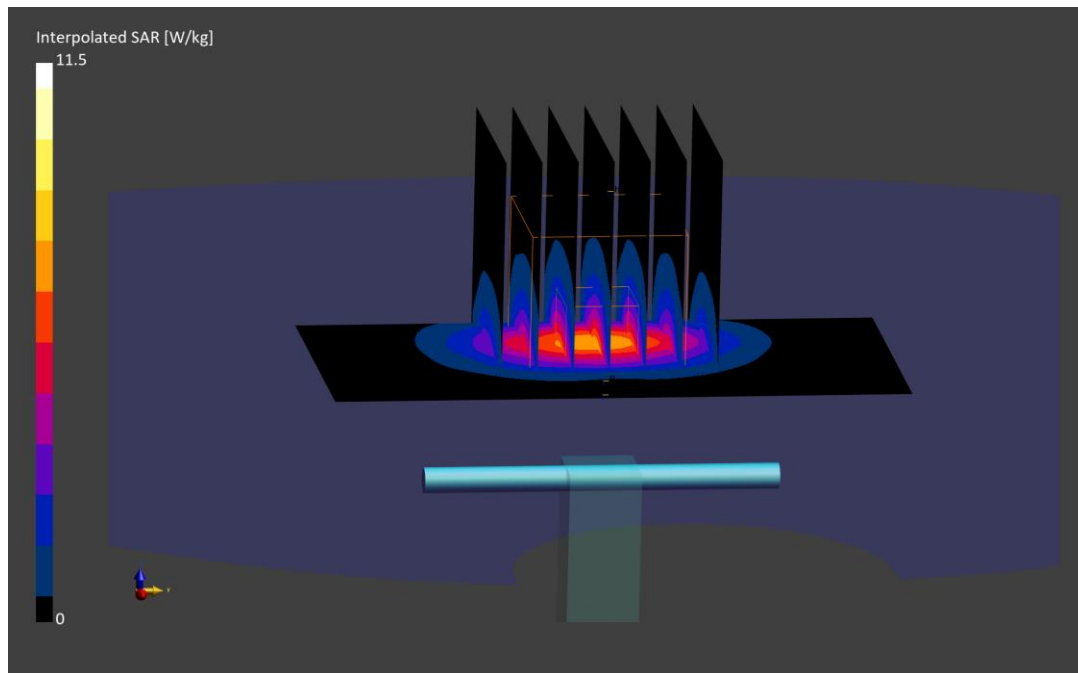
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 31.2): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.5$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 11.5 W/kg

SAR(1 g) = 5.72 W/kg;

Deviation (1 g) = 2.51%;



ELEMENT

DUT: Dipole 3500.000 MHz; Type: D3500V2 - SN1126

Communication System: UID: 0, CW; Frequency: 3500.000 MHz
Medium: 3600 Head; Medium parameters used:
 $f = 3500.000$ MHz; $\text{cond} = 2.78$ S/m; $\text{perm} = 38.8$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/15/2024; Ambient Temp: 23.0°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF:(7.28,6.37,7.82); Calibrated: 2024-04-16
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1582; Calibrated: 2024-04-09
Phantom: Twin-SAM V8.0; Serial: 2034
Measurement SW: DASY Module SAR V16.4.0.5005

3500.0 MHz System Verification at 20.0 dBm (100 mW)

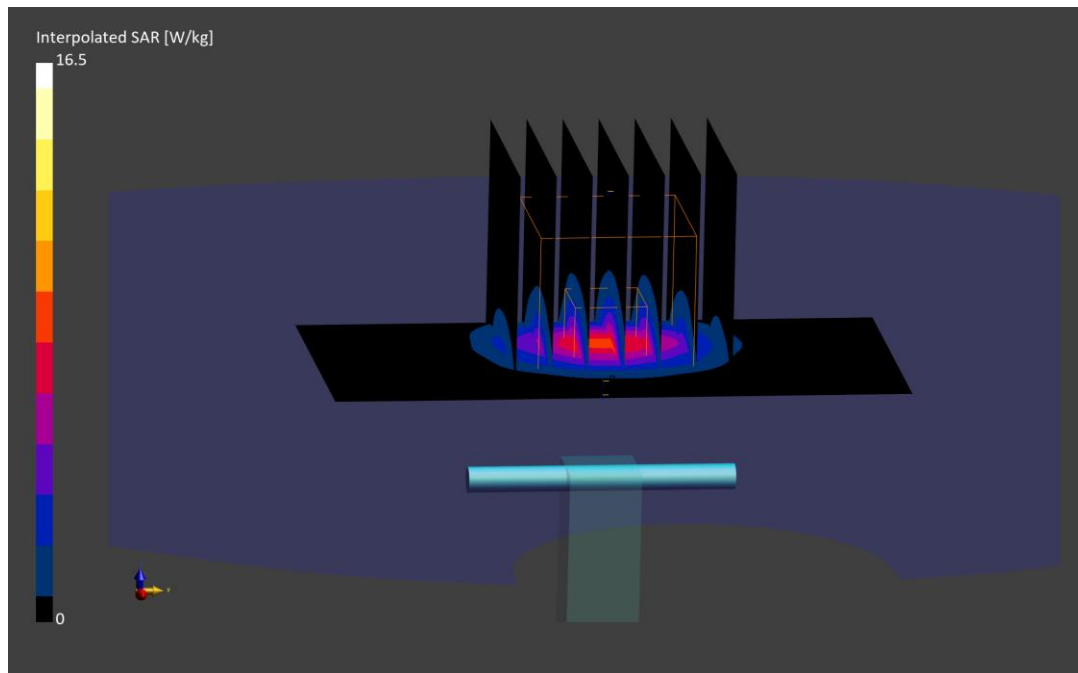
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 29.1): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 6.68 W/kg;

Deviation (1 g) = 0.91%;



ELEMENT

DUT: Dipole 3700.000 MHz; Type: D3700V2 - SN1097

Communication System: UID: 0, CW; Frequency: 3700.000 MHz
Medium: 3600 Head; Medium parameters used:
 $f = 3700.000$ MHz; $\text{cond} = 3.02$ S/m; $\text{perm} = 36.3$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/26/2024; Ambient Temp: 21.5°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7668; ConvF:(6.06,6.33,6.07); Calibrated: 2024-09-04
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1681; Calibrated: 2024-08-08
Phantom: Twin-SAM V8.0; Serial: 1944
Measurement SW: DASY Module SAR V16.4.0.5005

3700.0 MHz System Verification at 20.0 dBm (100 mW)

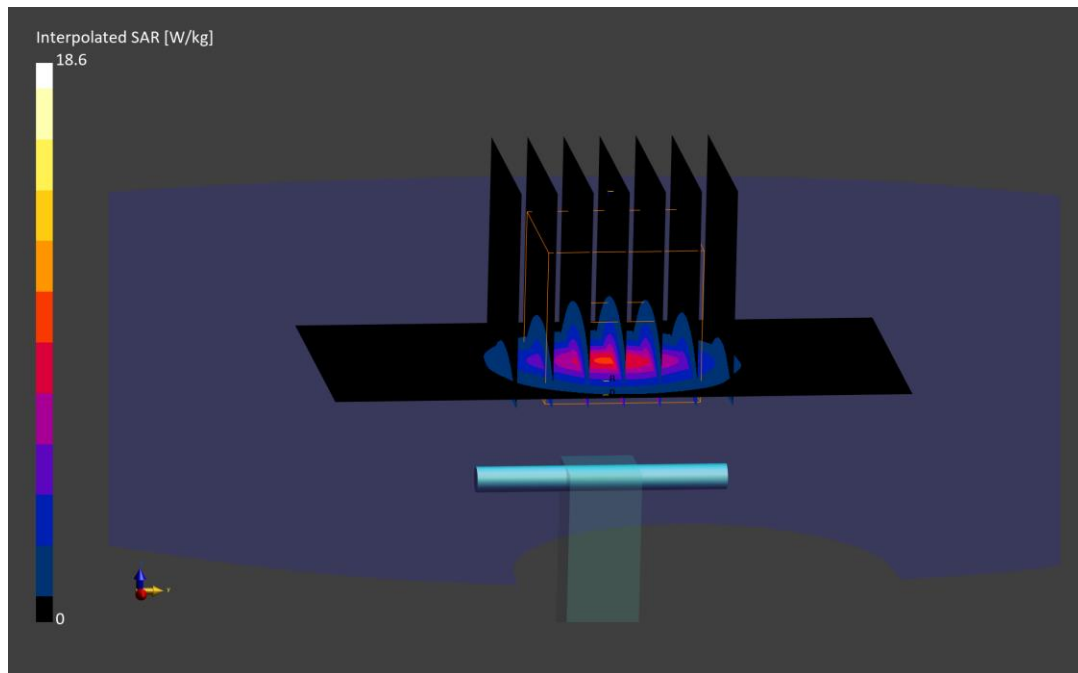
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 29.1): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 6.83 W/kg;

Deviation (1 g) = 0.59%;



ELEMENT

DUT: Dipole 3700.000 MHz; Type: D3700V2 - SN1097

Communication System: UID: 0, CW; Frequency: 3700.000 MHz
Medium: 3600 Head; Medium parameters used:
 $f = 3700.000$ MHz; $\text{cond} = 3.03$ S/m; $\text{perm} = 36.8$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/31/2024; Ambient Temp: 23.3°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7668; ConvF:(6.06,6.33,6.07); Calibrated: 2024-09-04
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1681; Calibrated: 2024-08-08
Phantom: Twin-SAM V8.0; Serial: 1944
Measurement SW: DASY Module SAR V16.4.0.5005

3700.0 MHz System Verification at 20.0 dBm (100 mW)

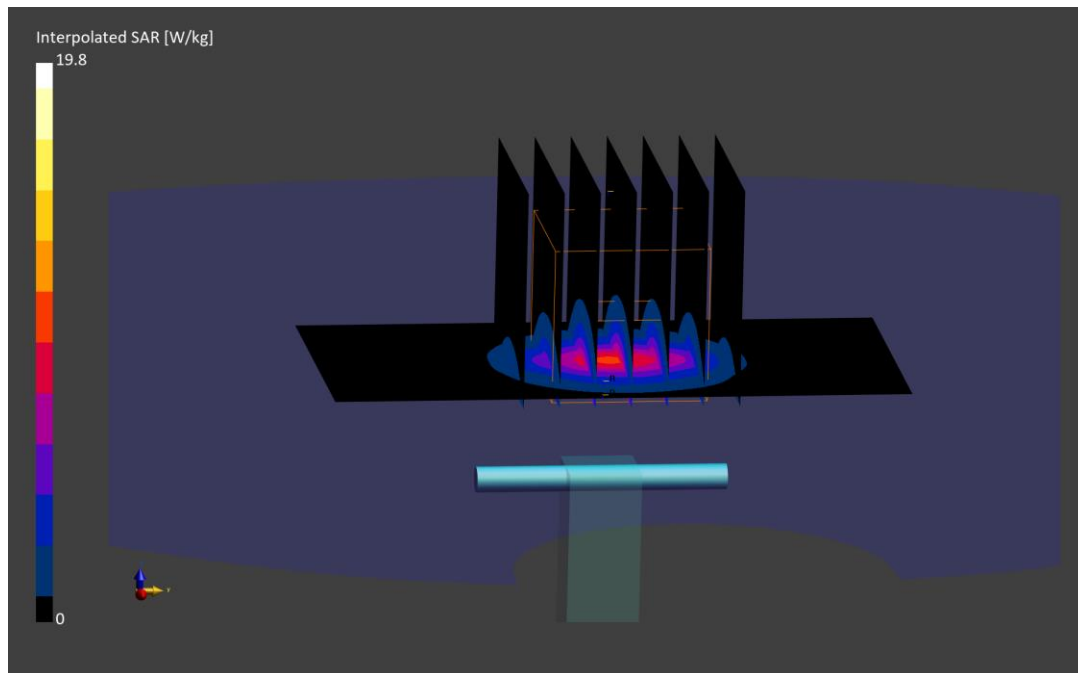
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 29.1): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 19.8 W/kg

SAR(1 g) = 7.22 W/kg;

Deviation (1 g) = 6.33%;



ELEMENT

DUT: Dipole 3900.000 MHz; Type: D3900V2 - SN1062

Communication System: UID: 0, CW; Frequency: 3900.000 MHz
Medium: 3600 Head; Medium parameters used:
 $f = 3900.000$ MHz; $\text{cond} = 3.19$ S/m; $\text{perm} = 36.0$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/26/2024; Ambient Temp: 21.5°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7668; ConvF:(5.96,6.23,5.97); Calibrated: 2024-09-04
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1681; Calibrated: 2024-08-08
Phantom: Twin-SAM V8.0; Serial: 1944
Measurement SW: DASY Module SAR V16.4.0.5005

3900.0 MHz System Verification at 20.0 dBm (100 mW)

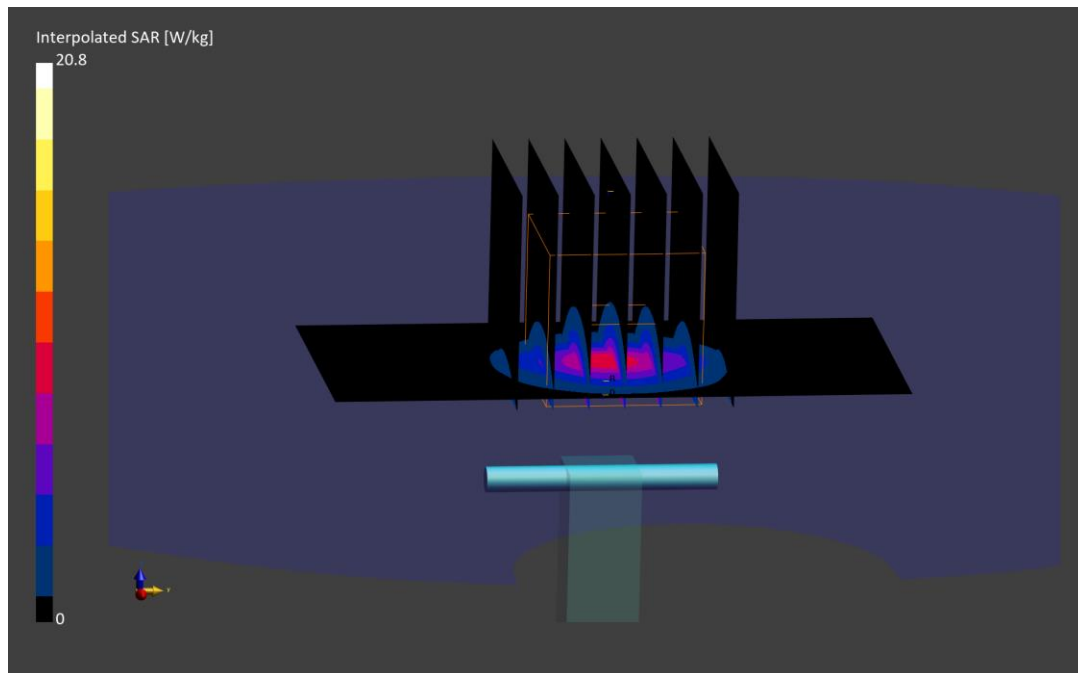
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (30.0 x 30.0 x 29.1): Measurement grid: $dx=5.0$ mm, $dy=5.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.5

Peak SAR (extrapolated) = 20.8 W/kg

SAR(1 g) = 7.21 W/kg;

Deviation (1 g) = 4.64%;



ELEMENT

DUT: Dipole 5250.000 MHz; Type: D5GHzV2 - SN1163

Communication System: UID: 0, CW; Frequency: 5250.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
 $f = 5250.000$ MHz; $\text{cond} = 4.59$ S/m; $\text{perm} = 35.3$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/23/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7782; ConvF:(5.91,5.17,5.06); Calibrated: 2024-09-12
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1646; Calibrated: 2024-09-03
Phantom: Twin-SAM V8.0; Serial: 2027
Measurement SW: DASY Module SAR V16.4.0.5005

5250.0 MHz System Verification at 17.0 dBm (50 mW)

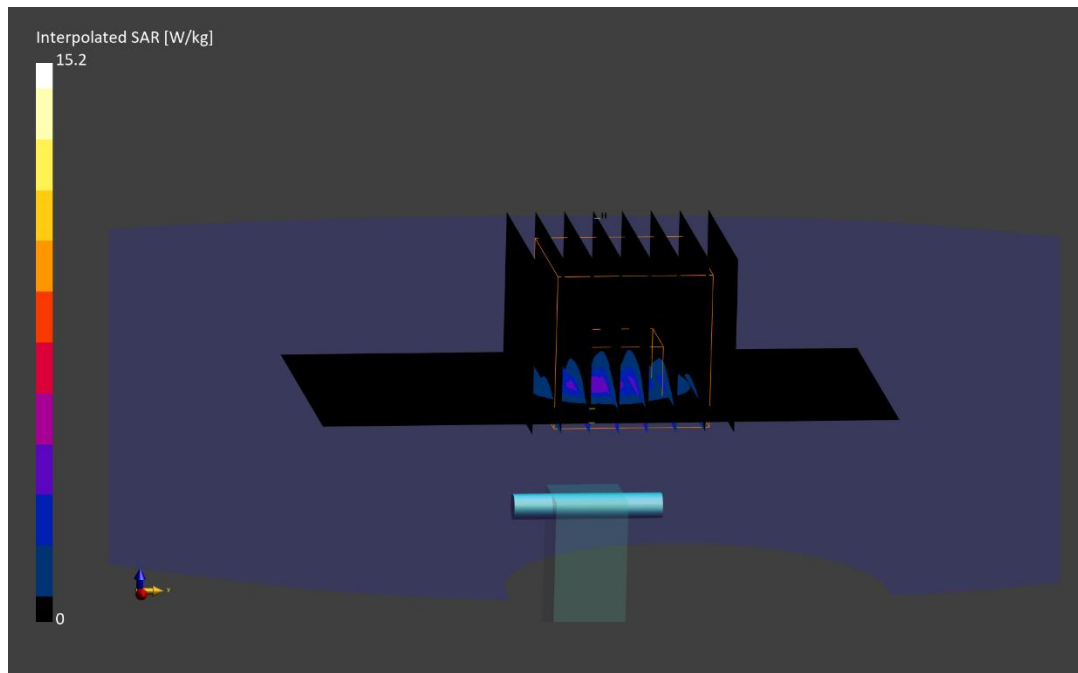
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (28.0 x 28.0 x 22.9): Measurement grid: $dx=4.0$ mm, $dy=4.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.2 W/kg

SAR(1 g) = 3.76 W/kg;

Deviation (1 g) = -5.53%;



ELEMENT

DUT: Dipole 5600.000 MHz; Type: D5GHzV2 - SN1163

Communication System: UID: 0, CW; Frequency: 5600.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
 $f = 5600.000$ MHz; $\text{cond} = 4.98$ S/m; $\text{perm} = 34.7$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/23/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7782; ConvF:(5.12,4.48,4.38); Calibrated: 2024-09-12
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1646; Calibrated: 2024-09-03
Phantom: Twin-SAM V8.0; Serial: 2027
Measurement SW: DASY Module SAR V16.4.0.5005

5600.0 MHz System Verification at 17.0 dBm (50 mW)

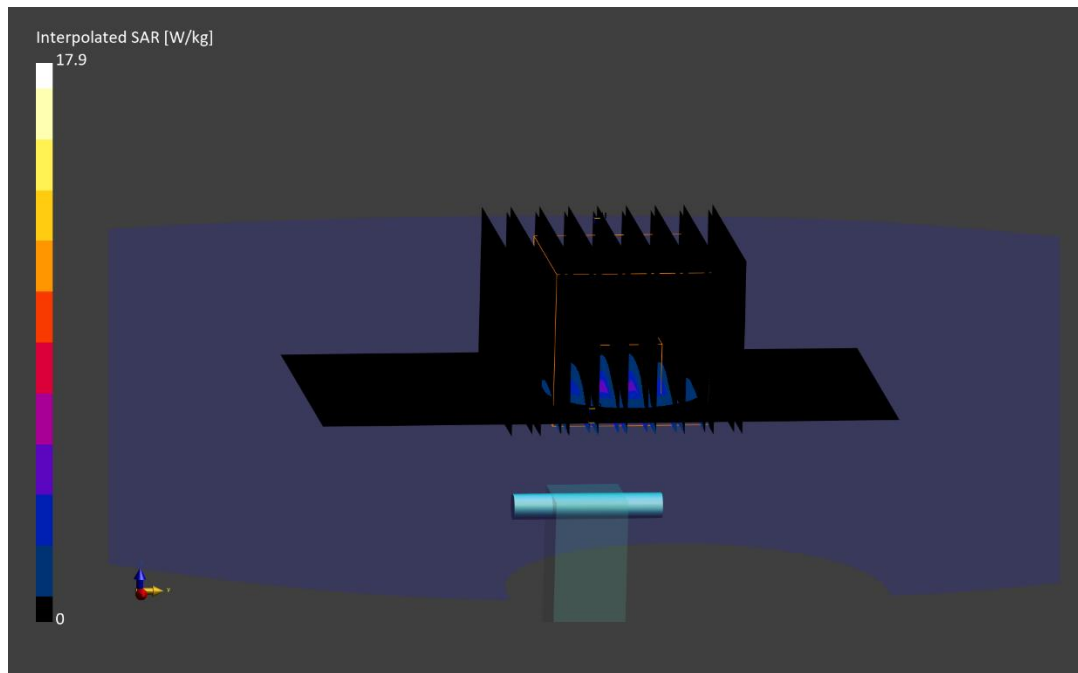
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (32.0 x 32.0 x 22.9): Measurement grid: $dx=4.0$ mm, $dy=4.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 3.97 W/kg;

Deviation (1 g) = -4.11%;



ELEMENT

DUT: Dipole 5750.000 MHz; Type: D5GHzV2 - SN1163

Communication System: UID: 0, CW; Frequency: 5750.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.000 MHz; cond = 5.15 S/m; perm = 34.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/23/2024; Ambient Temp: 21.5°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7782; ConvF:(5.28,4.62,4.52); Calibrated: 2024-09-12
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1646; Calibrated: 2024-09-03
Phantom: Twin-SAM V8.0; Serial: 2027
Measurement SW: DASY Module SAR V16.4.0.5005

5750.0 MHz System Verification at 17.0 dBm (50 mW)

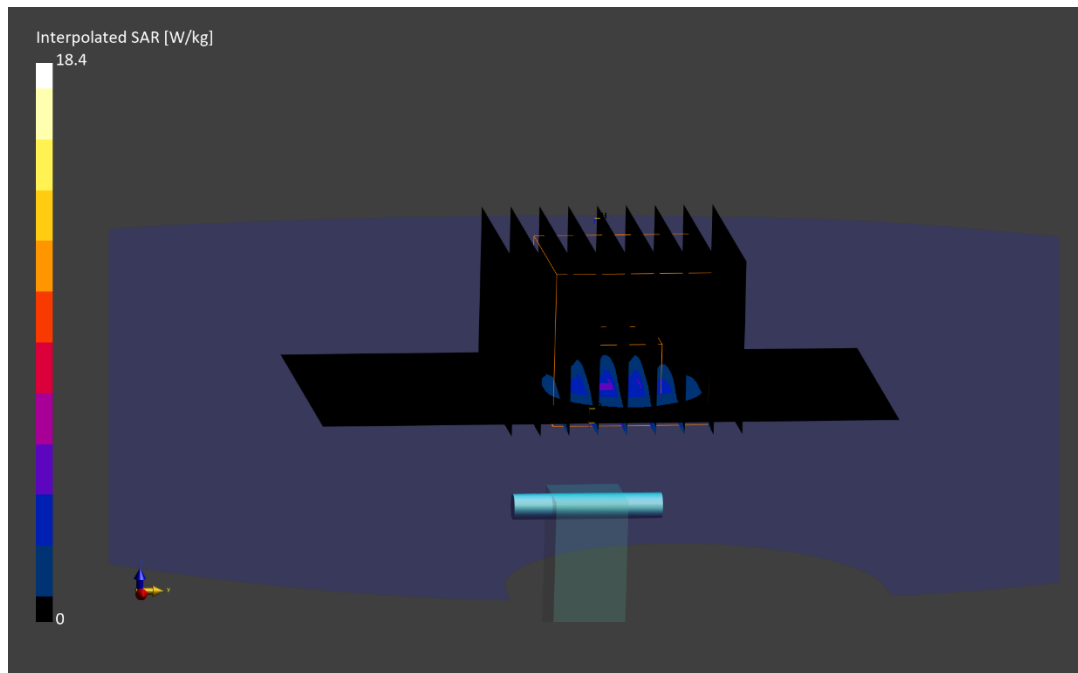
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (32.0 x 32.0 x 22.9): Measurement grid: dx=4.0 mm, dy=4.0 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 3.97 W/kg;

Deviation (1 g) = -2.10%;



ELEMENT

DUT: Dipole 5850.000 MHz; Type: D5GHzV2 - SN1163

Communication System: UID: 0, CW; Frequency: 5850.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
 $f = 5850.000$ MHz; $\text{cond} = 5.27$ S/m; $\text{perm} = 33.7$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/04/2024; Ambient Temp: 22.3°C; Tissue Temp: 20.0°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 V16.4.0.5005

5850.0 MHz System Verification at 17.0 dBm (50 mW)

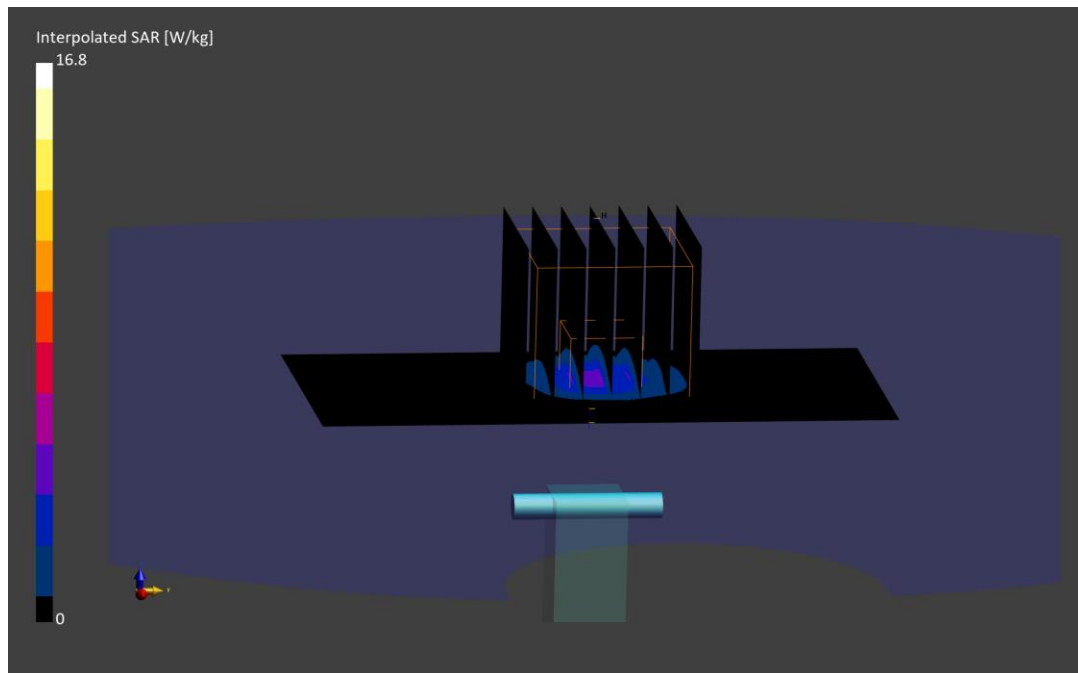
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (24.0 x 24.0 x 22.9): Measurement grid: $dx=4.0$ mm, $dy=4.0$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 3.93 W/kg;

Deviation (1 g) = -0.51%;



ELEMENT

DUT: Dipole 6500.000 MHz; Type: D6.5GHzV2 - SN1019

Communication System: UID: 0, CW; Frequency: 6500.000 MHz
Medium: 6000 Head; Medium parameters used:
 $f = 6500.000$ MHz; $\text{cond} = 6.00$ S/m; $\text{perm} = 34.3$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 10/27/2024; Ambient Temp: 22.1°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN3949; ConvF:(5.23,5.7,5.57); Calibrated: 2024-09-09
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1684; Calibrated: 2024-09-04
Phantom: Twin-SAM V4.0; Serial: 1275
Measurement SW: DASY Module SAR V16.2.4.2524

6500.0 MHz System Verification at 14.0 dBm (25 mW)

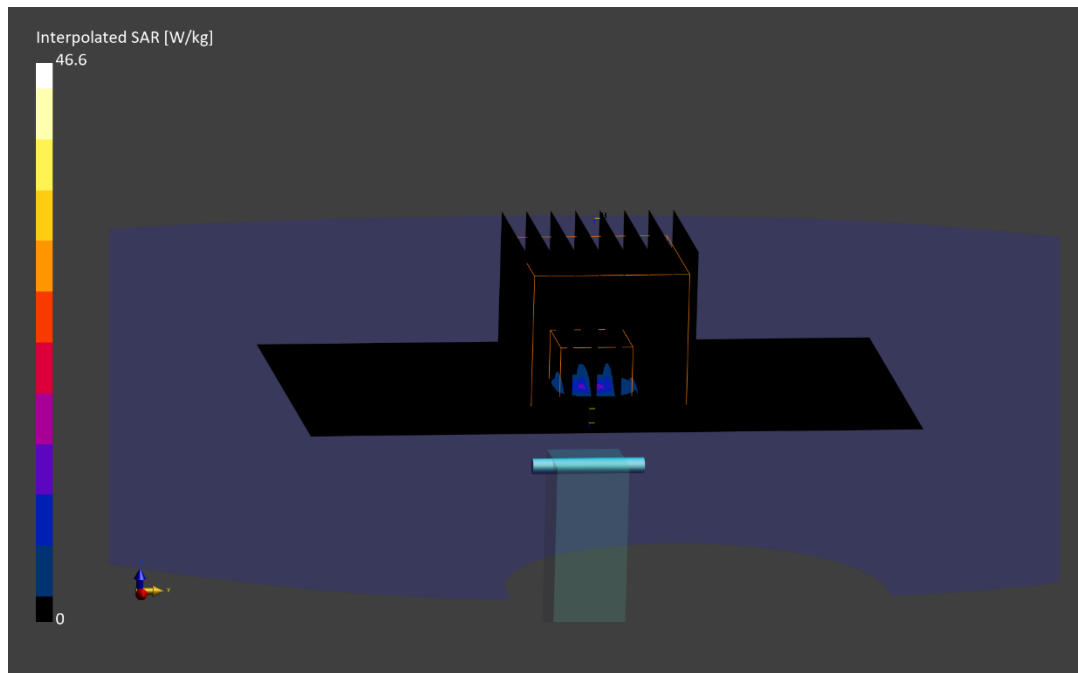
Area Scan (51.0 x 85.0): Measurement grid: $dx=8.5$ mm, $dy=8.5$ mm

Zoom Scan (23.8 x 23.8 x 22.9): Measurement grid: $dx=3.4$ mm, $dy=3.4$ mm, $dz=1.4$ mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 46.6 W/kg

SAR(1 g) = 7.72 W/kg; APD (4 cm²) = 34.7 W/m²

Deviation (1 g) = 2.93%; Deviation (4 cm²) = 5.15%;



Date: 10-25-2024

10 GHz System Verification

Device Under Test Properties

DUT	Serial Number
10 GHz Verification Source	1004

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	FRONT	10.00	Validation band	10000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV4 - SN9487, 04-08-2024	DAE4 - SN1333, 10-09-2024

Software Setup

Software	Software Version
cDASY6 Module mmWave	3.2.0.1840

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	56.8
pSn avg [W/m²]	56.6
Epeak [V/m]	154
Deviation [dB] pStot	-0.01
Deviation [dB] pSn	-0.01

