

APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

ELEMENT

DUT: Dipole 13.0 MHz; Type: CLA-13 - SN1002

Communication System: UID: 0, CW; Frequency: 13.0 MHz

Medium: 30 Head; Medium parameters used:

$f = 13.0$ MHz; $\text{cond} = 0.725$ S/m; $\text{perm} = 53.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 0 mm

Test Date: 10/14/2023; Ambient Temp: 22.5°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7417; ConvF:(18.67,18.67,18.67); 2023-02-08

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

Electronics: DAE4 Sn665; 2023-02-15

Phantom: ELI V8.0 (20deg probe tilt); Serial: 2077

Measurement SW: DASY Module SAR V16.2.0.1425

13.0 MHz System Verification at 30.0 dBm (1000 mW)

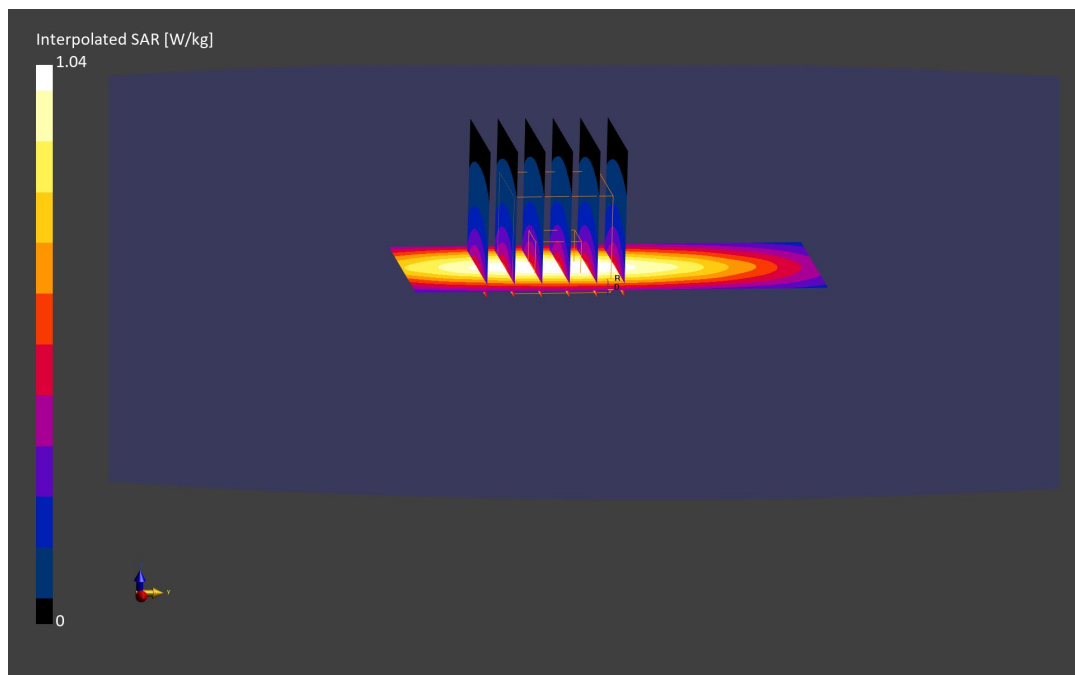
Area Scan (40.0 x 90.0): Measurement grid: $\text{dx}=10.0$ mm, $\text{dy}=15.0$ mm

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

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.314 W/kg

Deviation (1 g) = -2.87%; Deviation (10 g) = -3.98%



ELEMENT

DUT: D750V3 - SN1003; Type: D750V3 - SN1003

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.877 \text{ S/m}$; $\epsilon_r = 43.09$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 09/20/2023; Ambient Temp: 19.8°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7402; ConvF(10.21, 10.21, 10.21) @ 750 MHz; Calibrated: 5/10/2023

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1502; Calibrated: 6/27/2023

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1626

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

750 MHz System Verification at 23.0 dBm (200 mW)

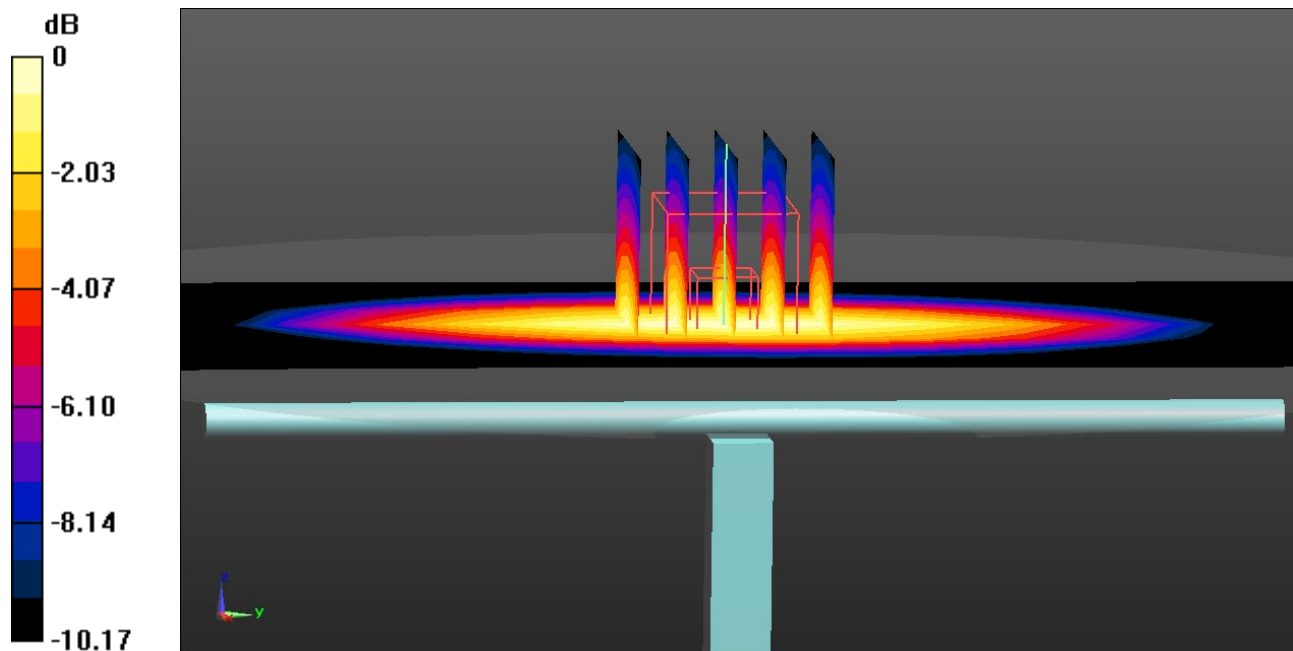
Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.45 W/kg

SAR(1 g) = 1.65 W/kg; SAR(10 g) = 1.1 W/kg

Deviation(1 g) = -2.71%; Deviation(10 g) = -1.08%



0 dB = 2.18 W/kg = 3.38 dBW/kg

ELEMENT

DUT: Dipole 750.0 MHz; Type: D750V3 - SN1046

Communication System: UID: 0, CW; Frequency: 750.0 MHz

Medium: 750 Head; Medium parameters used:

f = 750.0 MHz; cond = 0.918 S/m; perm = 40.9; density = 1000 kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 09/20/2023; Ambient Temp: 19.8°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7547; ConvF:(9.81,9.81,9.81); 2022-10-19

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

Electronics: DAE4 Sn1322; 2022-10-17

Phantom: Twin-SAM V8.0; Serial: 1934

Measurement SW: DASY Module SAR V16.2.0.1425

750.0 MHz System Verification at 23.0 dBm (200 mW)

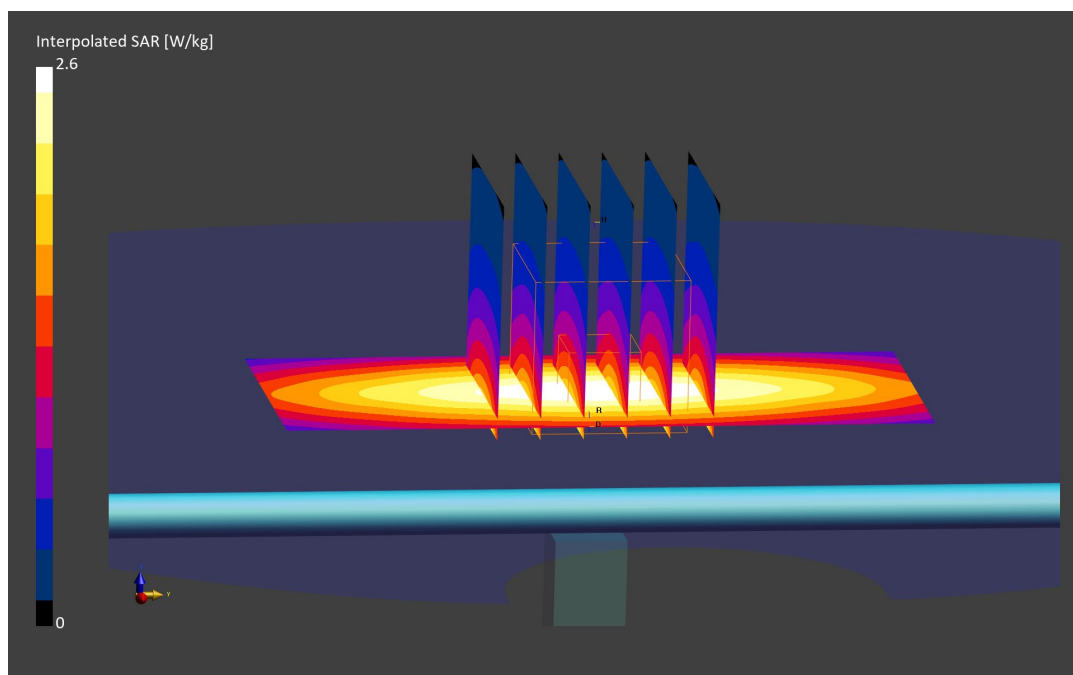
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 2.60 W/kg

SAR(1 g) = 1.71 W/kg; SAR(10 g) = 1.12 W/kg

Deviation (1 g) = -1.61%; Deviation (10 g) = -1.75%



ELEMENT

DUT: D835V2 - SN4d180; Type: D835V2 - SN4d180

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 42.844$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 09/20/2023; Ambient Temp: 19.8°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7402; ConvF(9.84, 9.84, 9.84) @ 835 MHz; Calibrated: 5/10/2023

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1502; Calibrated: 6/27/2023

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1626

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

835 MHz System Verification at 23.0 dBm (200 mW)

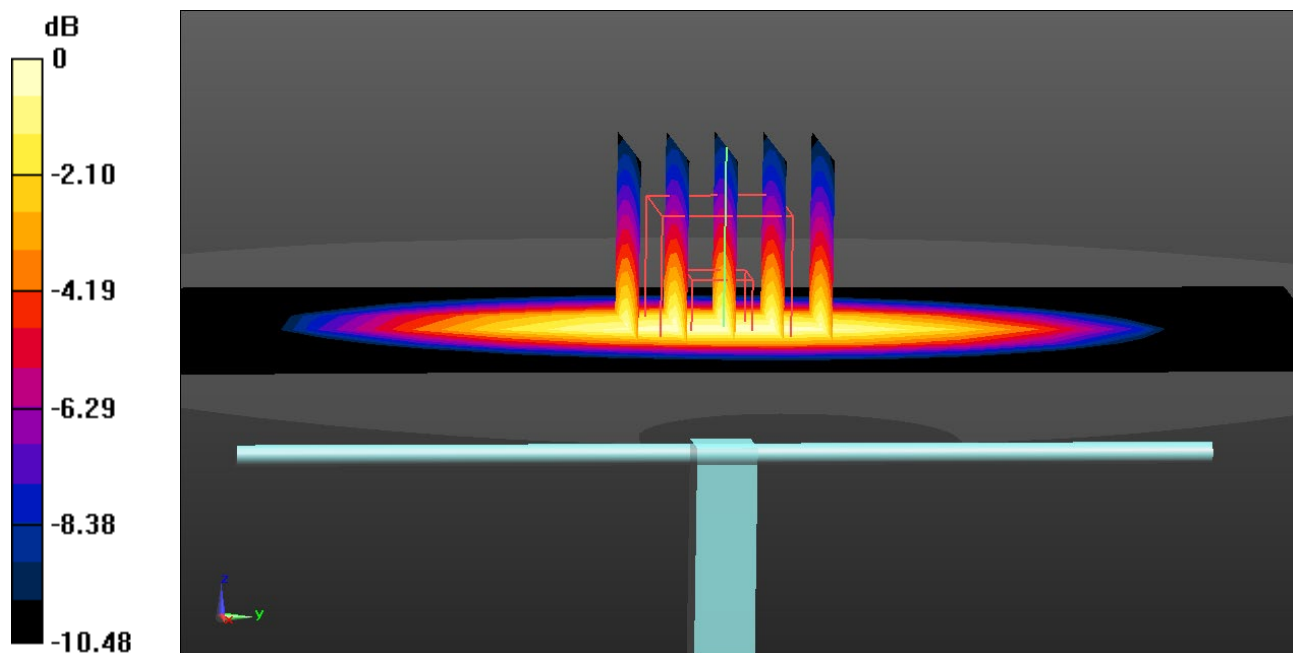
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 2.82 W/kg

SAR(1 g) = 1.88 W/kg; SAR(10 g) = 1.24 W/kg

Deviation(1 g) = -2.39%; Deviation(10 g) = -1.12%



0 dB = 2.51 W/kg = 4.00 dBW/kg

ELEMENT

DUT: D835V2 - SN4d119; Type: D835V2 - SN4d119

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 39.644$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 09/21/2023; Ambient Temp: 20.0°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7637; ConvF(10.23, 10.23, 10.23) @ 835 MHz; Calibrated: 3/16/2023

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1652; Calibrated: 3/16/2023

Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

Mode: 835 MHz System Verification at 23.0 dBm (200 mW)

Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

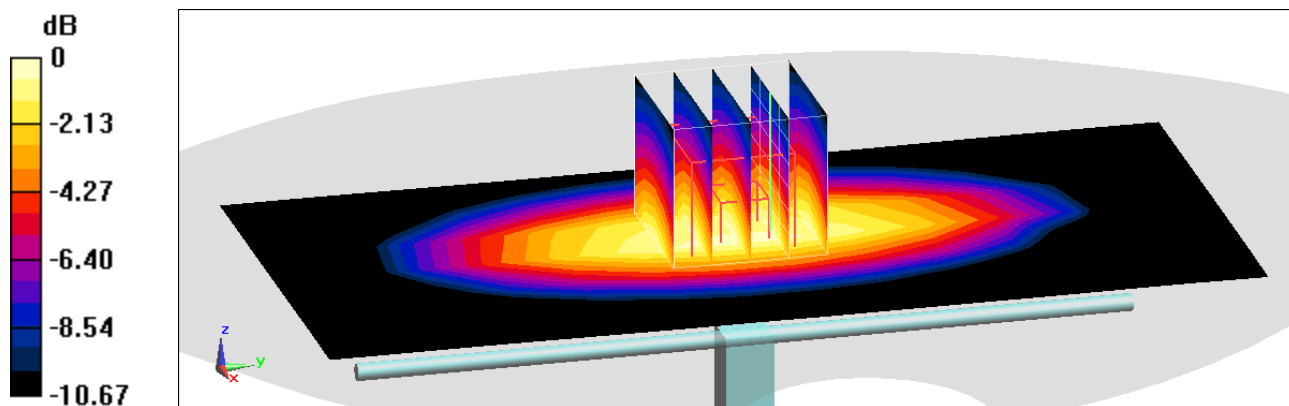
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 46.97 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.83 W/kg

SAR(1 g) = 1.91 W/kg; SAR(10 g) = 1.26 W/kg

Deviation(1 g) = -1.75%; Deviation(10 g) = -1.25%



0 dB = 2.52 W/kg = 4.01 dBW/kg

ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d040

Communication System: UID: 0, CW; Frequency: 835.0 MHz

Medium: 835 Head; Medium parameters used:

f = 835.0 MHz; cond = 0.871 S/m; perm = 41.6; density = 1000 kg/m³

Phantom Section: Flat; Space: 15 mm

Test Date: 10/09/2023; Ambient Temp: 21.9°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7532; ConvF:(10.37,10.37,10.37); 2023-04-18

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

Electronics: DAE4 Sn501; 2023-04-14

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

Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

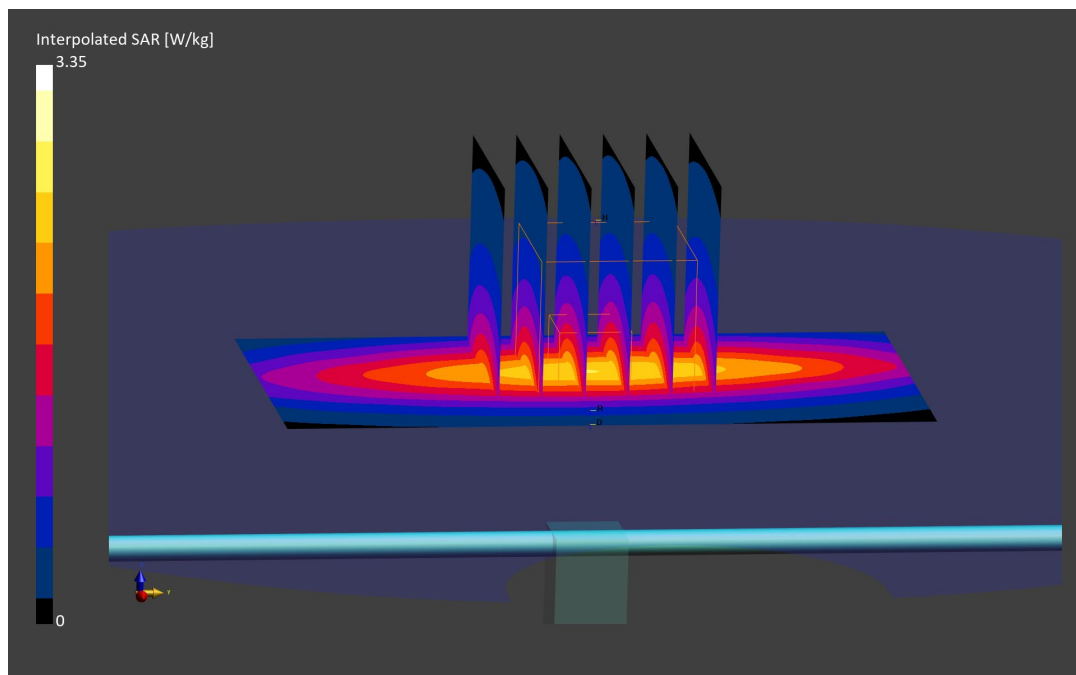
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 3.35 W/kg

SAR(1 g) = 2.10 W/kg; SAR(10 g) = 1.31 W/kg

Deviation (1 g) = 7.25%; Deviation (10 g) = 2.66%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d040

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.871 S/m; perm = 41.2; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 10/12/2023; Ambient Temp: 21.4°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7532; ConvF: (10.37, 10.37, 10.37); 2023-04-18
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; 2023-04-14
Phantom: Twin-SAM V8.0; Serial: 2067
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

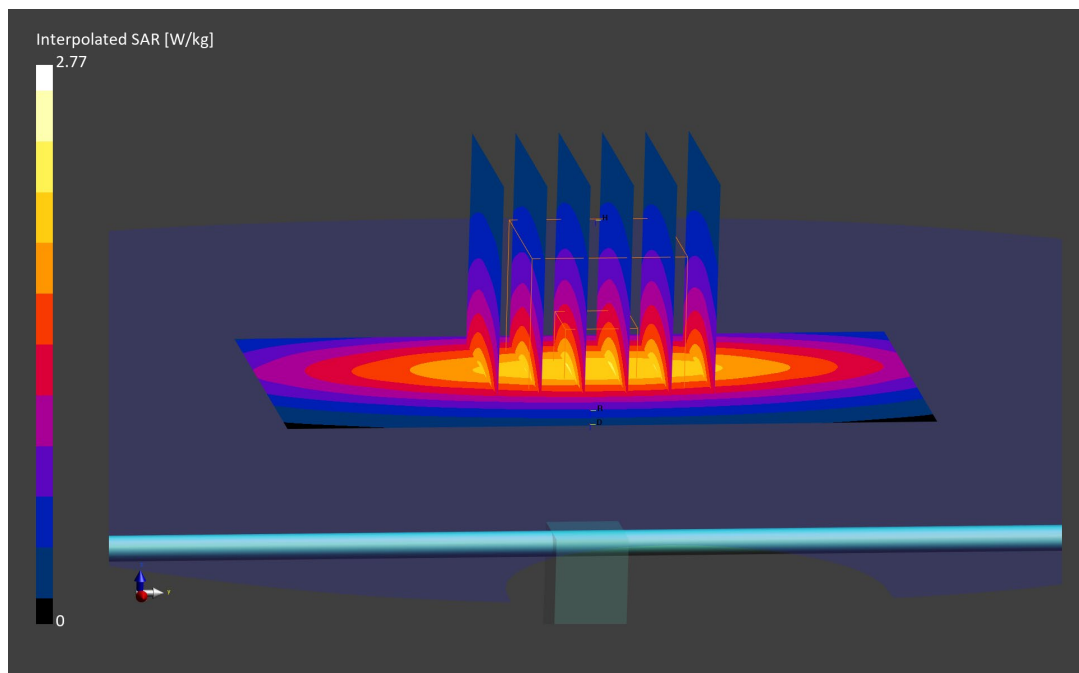
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 2.77 W/kg

SAR(1 g) = 1.88 W/kg; SAR(10 g) = 1.26 W/kg

Deviation (1 g) = -3.98%; Deviation (10 g) = -1.25%



ELEMENT

DUT: D835V2 - SN4d180; Type: D835V2; Serial: SN4d180

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.869 \text{ S/m}$; $\epsilon_r = 42.17$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10/12/2023; Ambient Temp: 22.8°C; Tissue Temp: 23.8°C

Probe: EX3DV4 - SN7402; ConvF(9.84, 9.84, 9.84) @ 835 MHz; Calibrated: 5/10/2023

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1502; Calibrated: 6/27/2023

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1626

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

835 MHz System Verification at 23.0 dBm (200 mW)

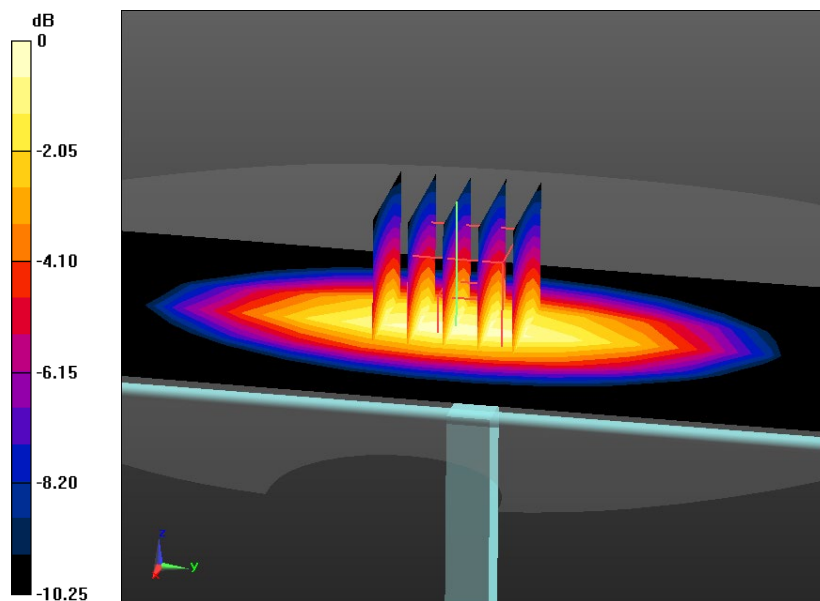
Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.32 W/kg

Deviation(1 g) = 2.80%; Deviation(10 g) = 5.26%



0 dB = 2.65 W/kg = 4.23 dBW/kg

ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1051

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.37 S/m; perm = 39.0; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 09/26/2023; Ambient Temp: 19.0°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7640; ConvF:(9.23,9.23,9.23); 2023-02-10
Sensor-Surface: 1.4mm (All points)
Electronics: DAE4 Sn1645; 2023-02-16
Phantom: Twin-SAM V5.0 (30deg probe tilt); Serial: 1868
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

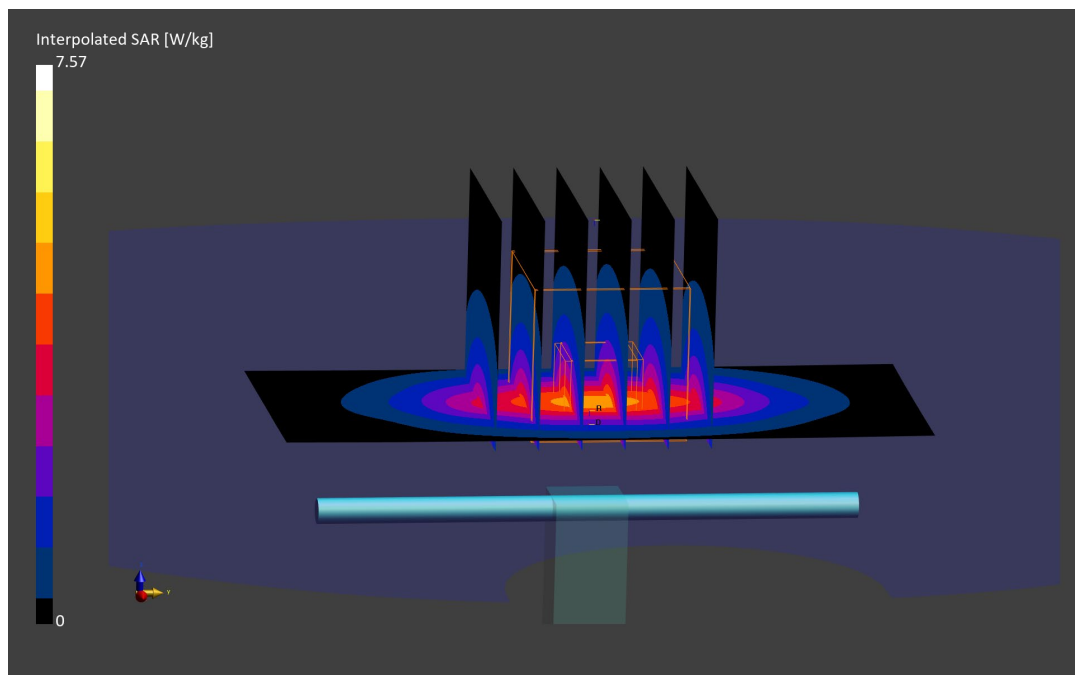
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.57 W/kg

SAR(1 g) = 3.87 W/kg; SAR(10 g) = 2.05 W/kg

Deviation (1 g) = 7.20%; Deviation (10 g) = 7.89%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1051

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.36 S/m; perm = 42.0; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/12/2023; Ambient Temp: 22.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7558; ConvF:(8.94,8.94,8.94); 2023-09-12
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1364; 2023-09-06
Phantom: Twin-SAM V8.0; Serial: 1934
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

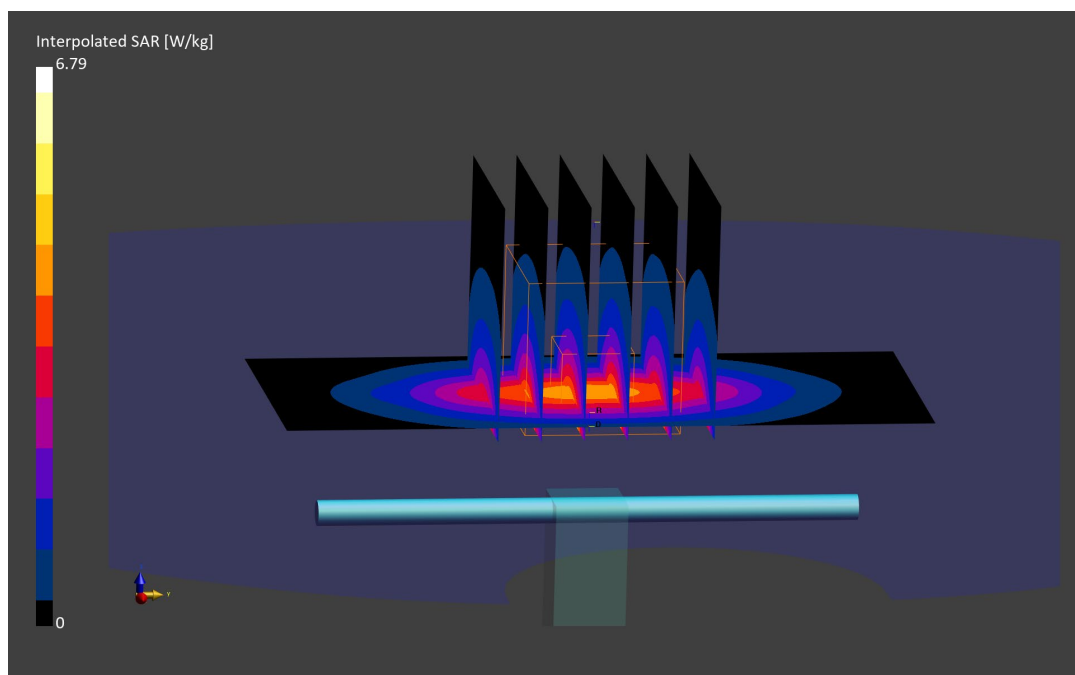
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

Zoom Scan (30.0 x 30.0 x 30.0): 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) = 3.63 W/kg; SAR(10 g) = 1.94 W/kg

Deviation (1 g) = 0.55%; Deviation (10 g) = 2.11%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1150

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.34 S/m; perm = 39.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/17/2023; Ambient Temp: 23.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7409; ConvF:(8.37,8.37,8.37); 2023-06-15
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1334; 2023-06-15
Phantom: Twin-SAM V8.0; Serial: 1630
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

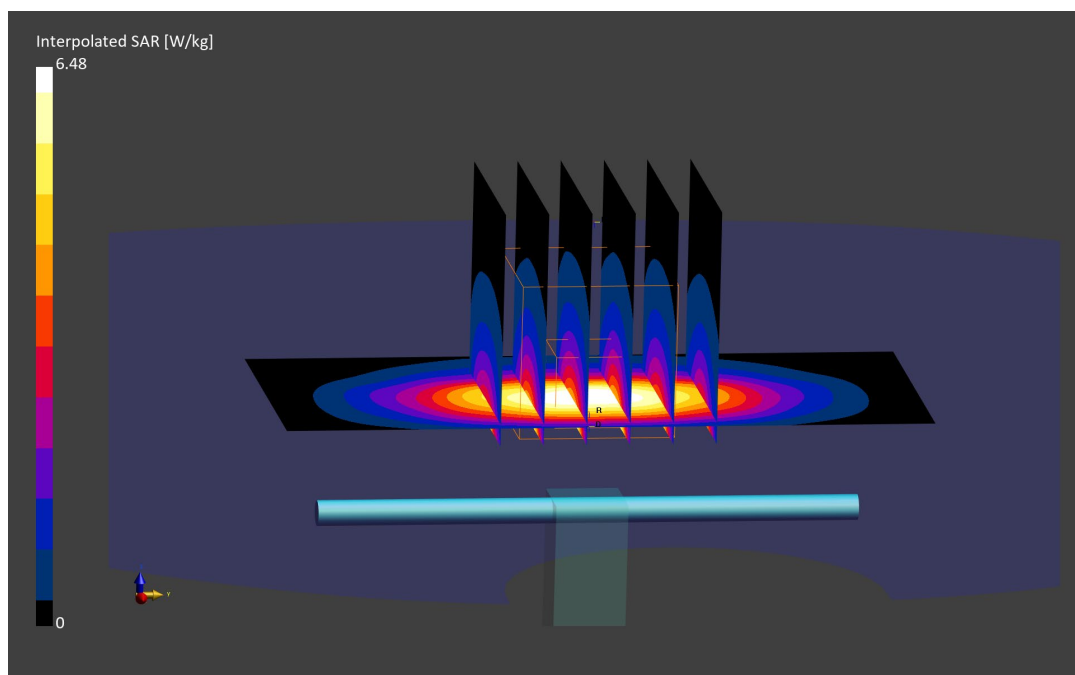
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 6.48 W/kg

SAR(1 g) = 3.54 W/kg; SAR(10 g) = 1.90 W/kg

Deviation (1 g) = -4.07%; Deviation (10 g) = -2.06%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1148

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.35 S/m; perm = 39.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/19/2023; Ambient Temp: 23.0°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7409; ConvF:(8.37,8.37,8.37); 2023-06-15
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1334; 2023-06-15
Phantom: Twin-SAM V8.0; Serial: 1630
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

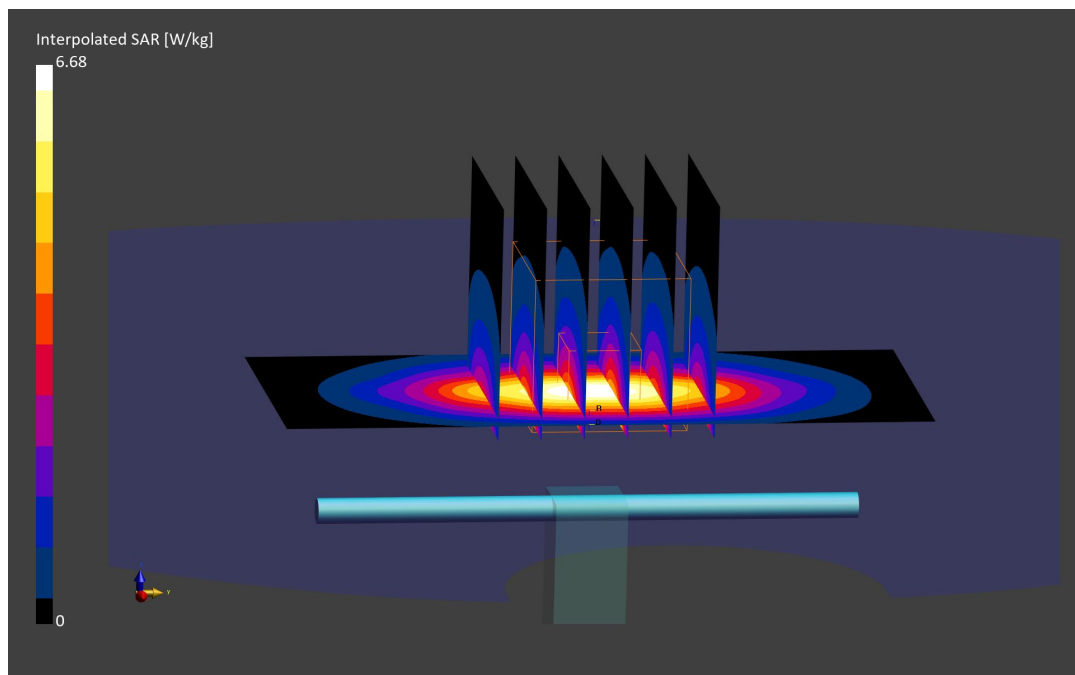
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 6.68 W/kg

SAR(1 g) = 3.60 W/kg; SAR(10 g) = 1.92 W/kg

Deviation (1 g) = -3.23%; Deviation (10 g) = -1.03%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1148

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.32 S/m; perm = 39.1; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/23/2023; Ambient Temp: 22.9°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7661; ConvF:(8.97,8.97,8.97); 2023-06-14
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn728; 2023-05-11
Phantom: Twin-SAM V8.0; Serial: 2064
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

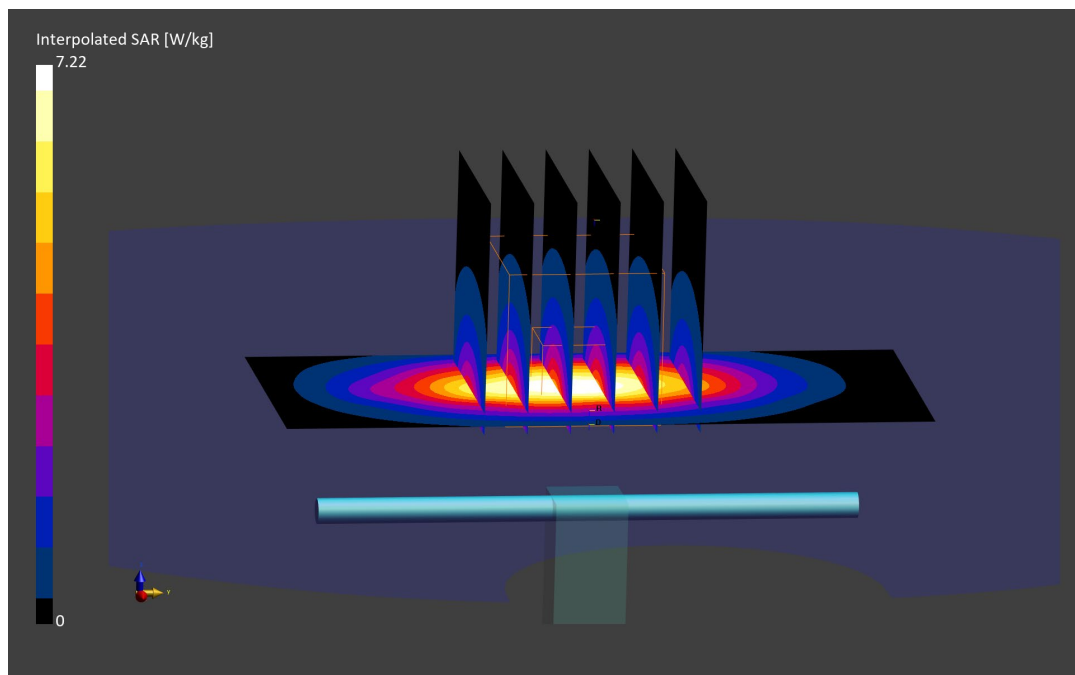
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.22 W/kg

SAR(1 g) = 3.71 W/kg; SAR(10 g) = 1.96 W/kg

Deviation (1 g) = -0.27%; Deviation (10 g) = 1.03%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1051

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1750.0 MHz; cond = 1.39 S/m; perm = 38.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/13/2023; Ambient Temp: 21.8°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7558; ConvF:(8.94,8.94,8.94); 2023-09-12
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1364; 2023-09-06
Phantom: Twin-SAM V8.0; Serial: 1934
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

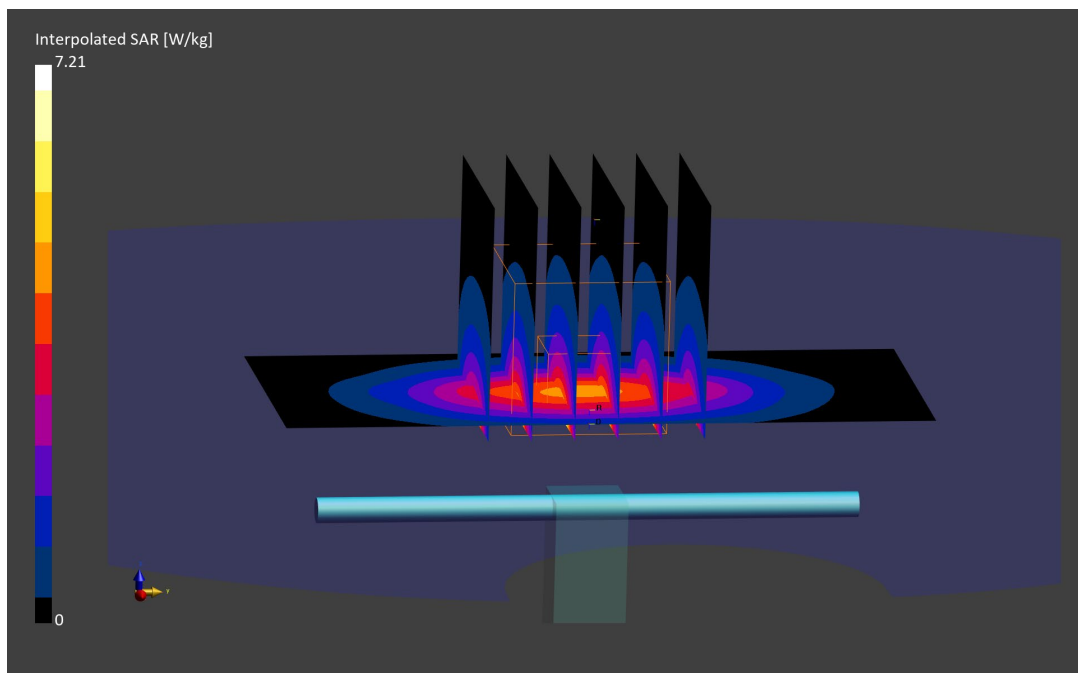
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.22 W/kg

SAR(1 g) = 3.75 W/kg; SAR(10 g) = 1.98 W/kg

Deviation (1 g) = 3.88%; Deviation (10 g) = 4.21%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d148

Communication System: UID: 0, CW; Frequency: 1900.0 MHz

Medium: 1900 Head; Medium parameters used:

f = 1900.0 MHz; cond = 1.45 S/m; perm = 41.5; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 09/20/2023; Ambient Temp: 21.9°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7659; ConvF:(9.09,9.09,9.09); 2023-04-14

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

Electronics: DAE4 Sn1407; 2023-04-14

Phantom: Twin-SAM V5.0; Serial: 1792

Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

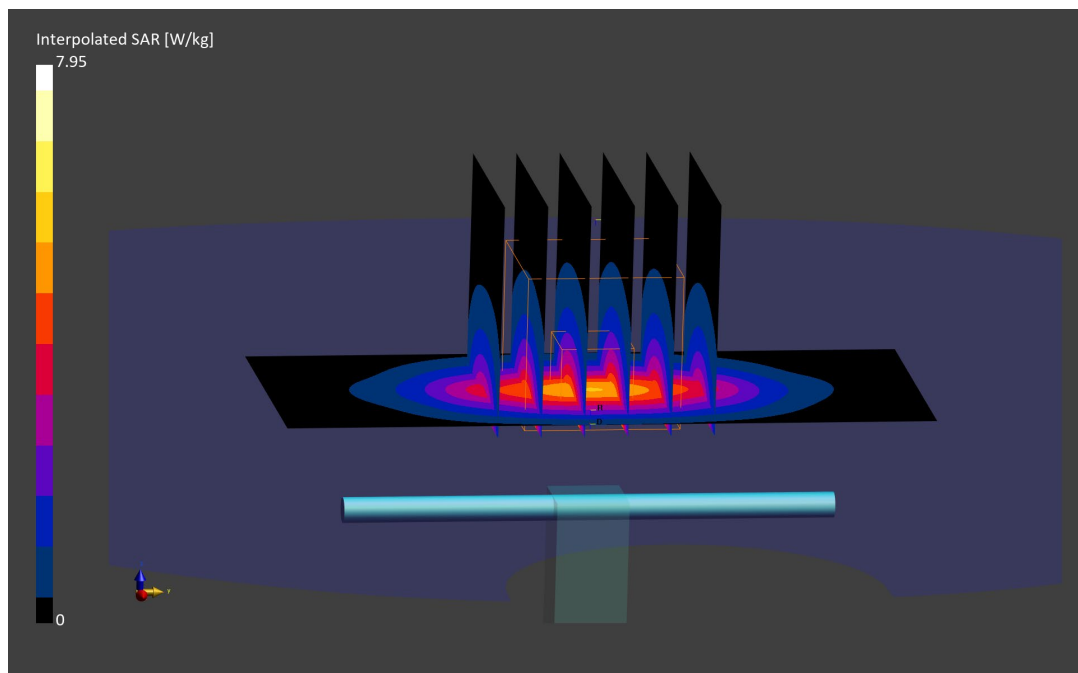
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.95 W/kg

SAR(1 g) = 4.07 W/kg; SAR(10 g) = 2.08 W/kg

Deviation (1 g) = 1.50%; Deviation (10 g) = -0.95%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d131

Communication System: UID: 0, CW; Frequency: 1900.0 MHz

Medium: 1900 Head; Medium parameters used:

f = 1900.0 MHz; cond = 1.37 S/m; perm = 41.3; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 09/25/2023; Ambient Temp: 21.1°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7638; ConvF:(8.8,8.8,8.8); 2023-03-16

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

Electronics: DAE4 Sn1408; 2023-03-13

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

Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

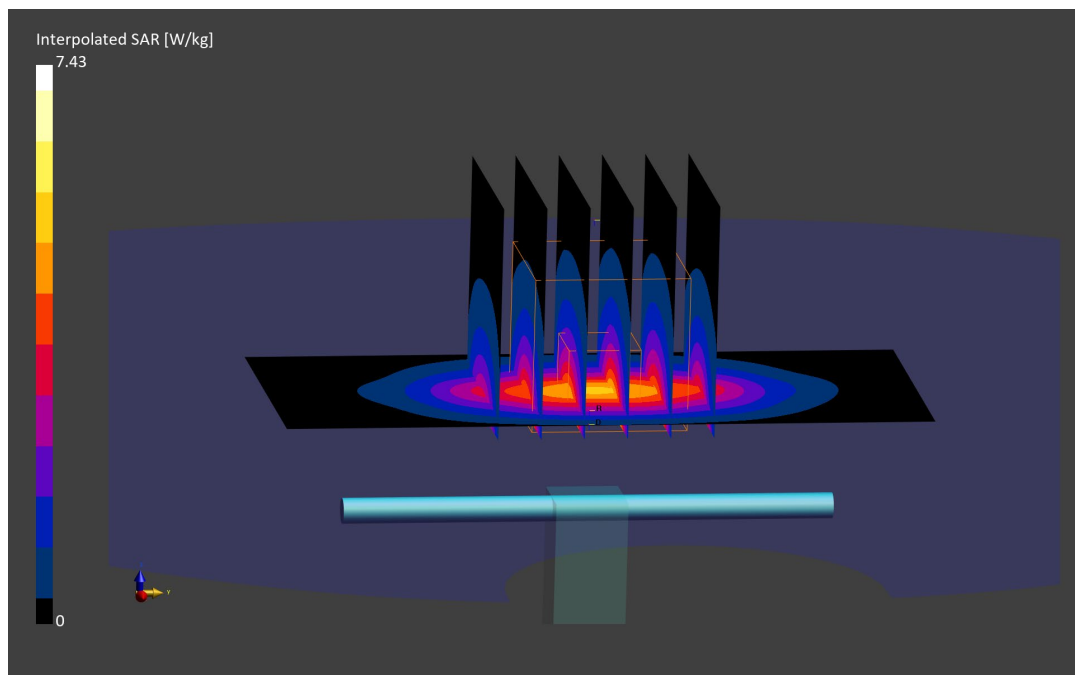
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.43 W/kg

SAR(1 g) = 4.00 W/kg; SAR(10 g) = 2.09 W/kg

Deviation (1 g) = -0.25%; Deviation (10 g) = 0.00%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d180

Communication System: UID: 0, CW; Frequency: 1900.0 MHz
Medium: 1900 Head; Medium parameters used:
f = 1900.0 MHz; cond = 1.44 S/m; perm = 38.9; density = 1000 kg/m3
Phantom Section: Flat; Space: 10 mm

Test Date: 10/09/2023; Ambient Temp: 22.0°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7421; ConvF:(7.43,7.43,7.43); 2023-03-16
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn604; 2023-03-15
Phantom: Twin-SAM V8.0; Serial: 2070
Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

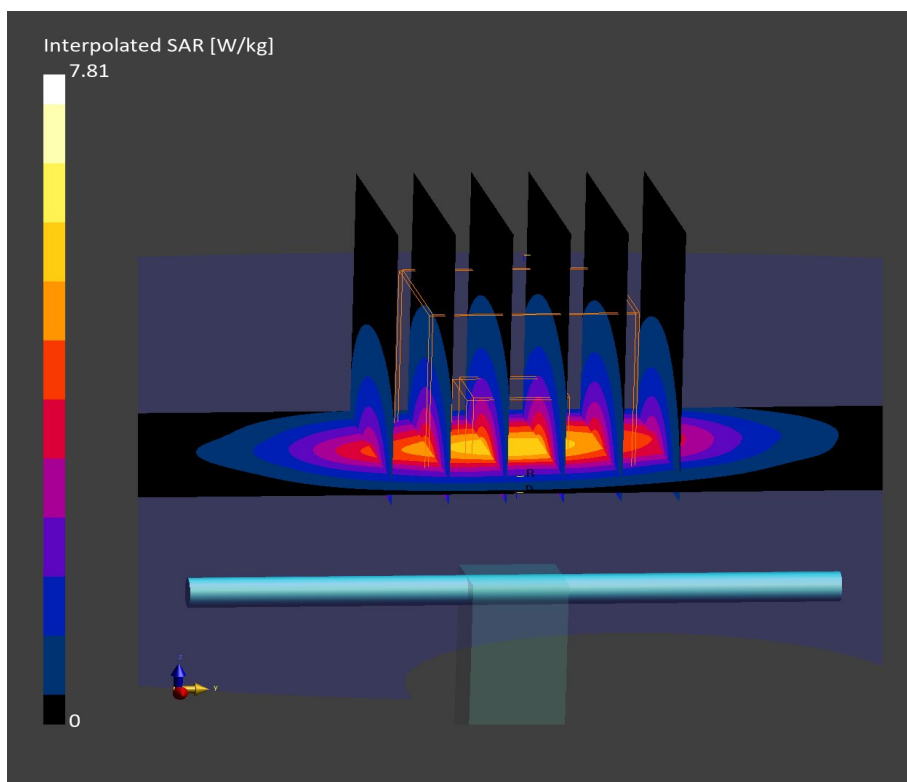
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.81 W/kg

SAR(1 g) = 4.06 W/kg; SAR(10 g) = 2.07 W/kg

Deviation (1 g) = 3.57%; Deviation (10 g) = 0.49%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d148

Communication System: UID: 0, CW; Frequency: 1900.0 MHz
Medium: 1900 Head; Medium parameters used:
f = 1900.0 MHz; cond = 1.43 S/m; perm = 40.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/16/2023; Ambient Temp: 21.8°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7659; ConvF:(9.09,9.09,9.09); 2023-04-14
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1407; 2023-04-14
Phantom: Twin-SAM V5.0; Serial: 1792
Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

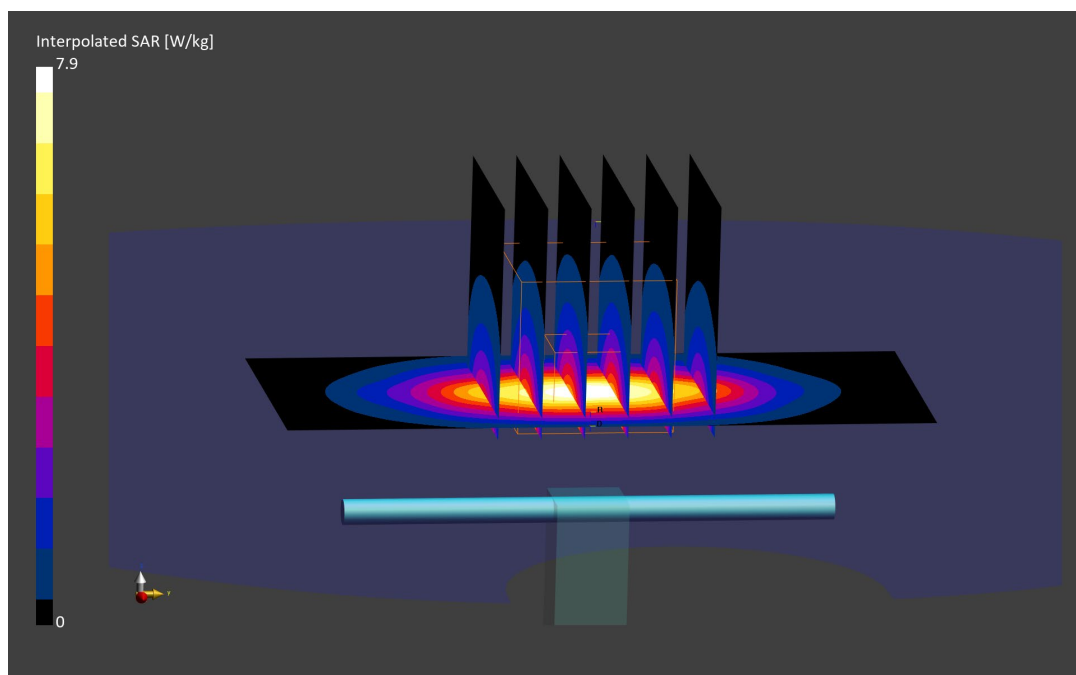
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.90 W/kg

SAR(1 g) = 4.15 W/kg; SAR(10 g) = 2.16 W/kg

Deviation (1 g) = 3.49%; Deviation (10 g) = 2.86%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d148

Communication System: UID: 0, CW; Frequency: 1900.0 MHz

Medium: 1900 Head; Medium parameters used:

f = 1900.0 MHz; cond = 1.45 S/m; perm = 41.7; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 11/20/2023; Ambient Temp: 21.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7713; ConvF:(8.68,8.68,8.68); 2023-01-11

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

Electronics: DAE4 Sn1530; 2023-01-18

Phantom: Twin-SAM V8.0; Serial: 2065

Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

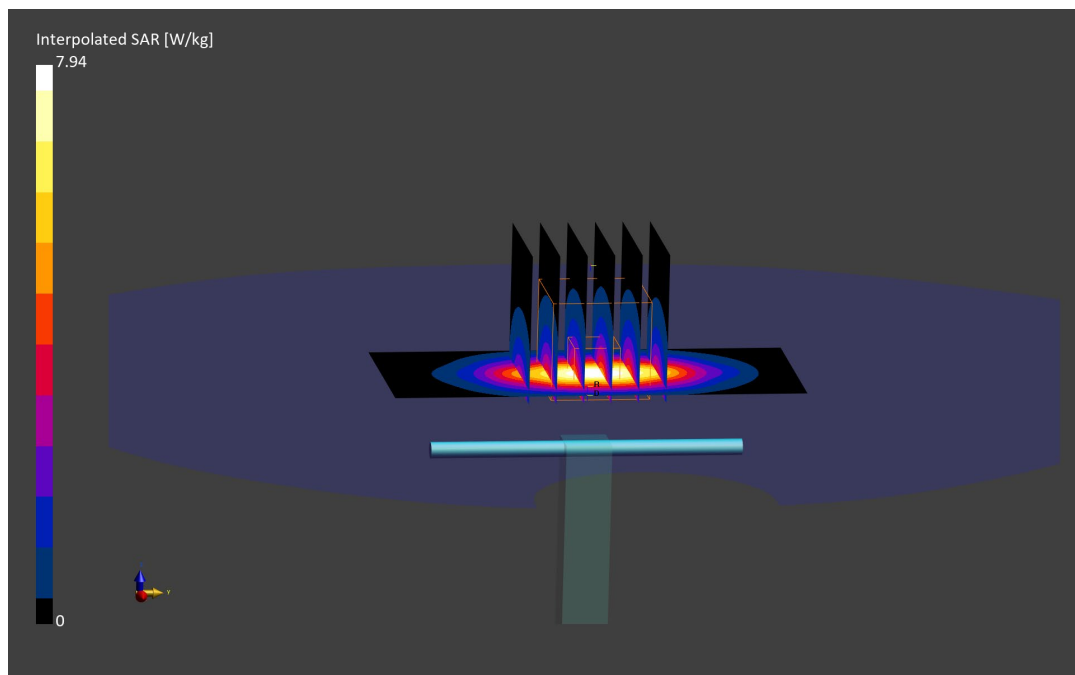
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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

Peak SAR (extrapolated) = 7.94 W/kg

SAR(1 g) = 4.15 W/kg; SAR(10 g) = 2.15 W/kg

Deviation (1 g) = 3.49%; Deviation (10 g) = 2.38%



ELEMENT

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN981

Communication System: UID: 0, CW; Frequency: 2450.0 MHz

Medium: 2450 Head; Medium parameters used:

f = 2450.0 MHz; cond = 1.83 S/m; perm = 39.0; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/09/2023; Ambient Temp: 20.8°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7409; ConvF:(7.44,7.44,7.44); 2023-06-15

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

Electronics: DAE4 Sn1334; 2023-06-15

Phantom: Twin-SAM V8.0; Serial: 1630

Measurement SW: DASY Module SAR V16.2.0.1425

2450.0 MHz System Verification at 20.0 dBm (100 mW)

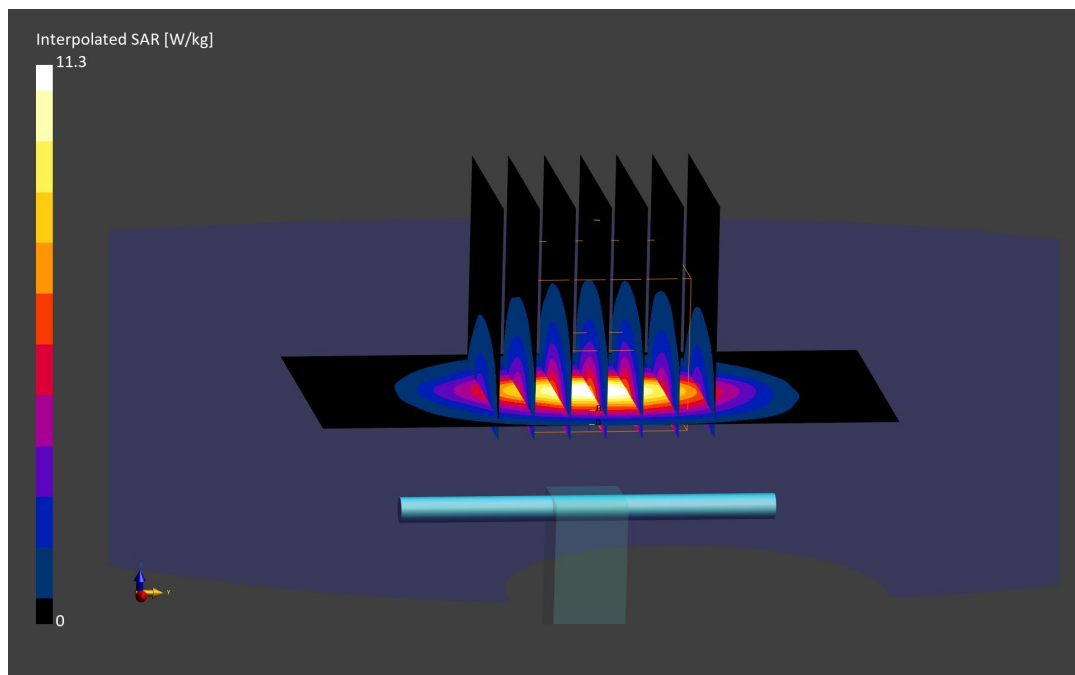
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 11.3 W/kg

SAR(1 g) = 5.43 W/kg; SAR(10 g) = 2.53 W/kg

Deviation (1 g) = 0.74%; Deviation (10 g) = -0.39%



ELEMENT

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN981

Communication System: UID: 0, CW; Frequency: 2450.0 MHz

Medium: 2450 Head; Medium parameters used:

f = 2450.0 MHz; cond = 1.82 S/m; perm = 38.9; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 10/19/2023; Ambient Temp: 21.7°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7409; ConvF:(7.44,7.44,7.44); 2023-06-15

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

Electronics: DAE4 Sn1334; 2023-06-15

Phantom: Twin-SAM V8.0; Serial: 1630

Measurement SW: DASY Module SAR V16.2.0.1425

2450.0 MHz System Verification at 20.0 dBm (100 mW)

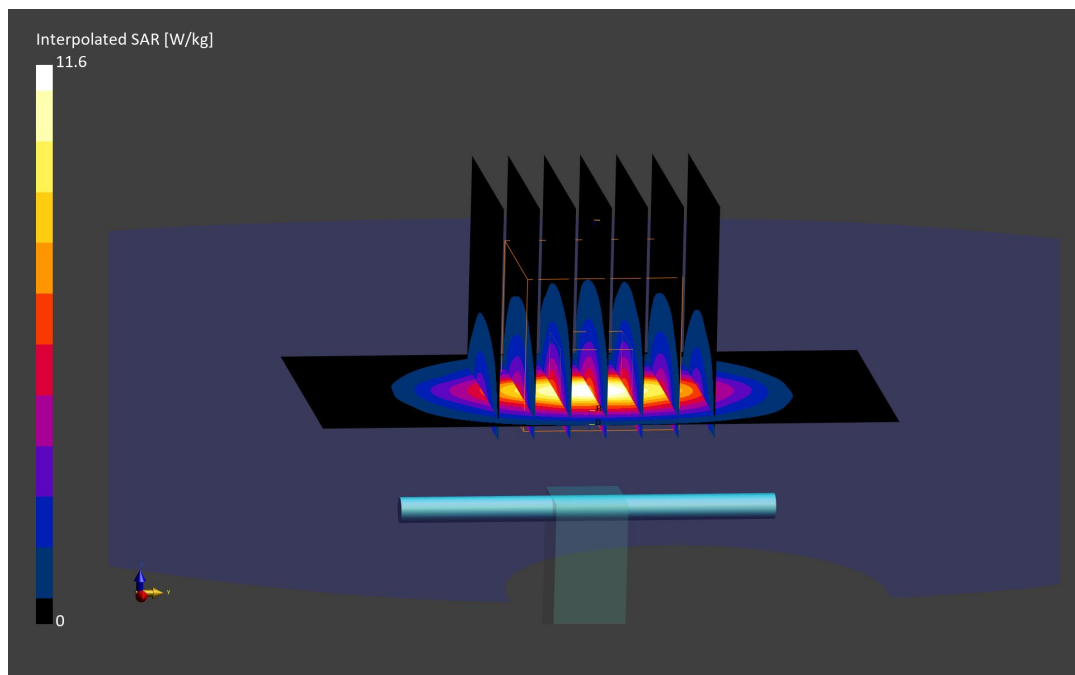
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 11.6 W/kg

SAR(1 g) = 5.53 W/kg; SAR(10 g) = 2.56 W/kg

Deviation (1 g) = 2.60%; Deviation (10 g) = 0.79%



ELEMENT

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1064

Communication System: UID: 0, CW; Frequency: 2600.0 MHz
Medium: 2450 Head; Medium parameters used:
f = 2600.0 MHz; cond = 1.96 S/m; perm = 38.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/09/2023; Ambient Temp: 20.8°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7409; ConvF:(7.17,7.17,7.17); 2023-06-15
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1334; 2023-06-15
Phantom: Twin-SAM V8.0; Serial: 1630
Measurement SW: DASY Module SAR V16.2.0.1425

2600.0 MHz System Verification at 20.0 dBm (100 mW)

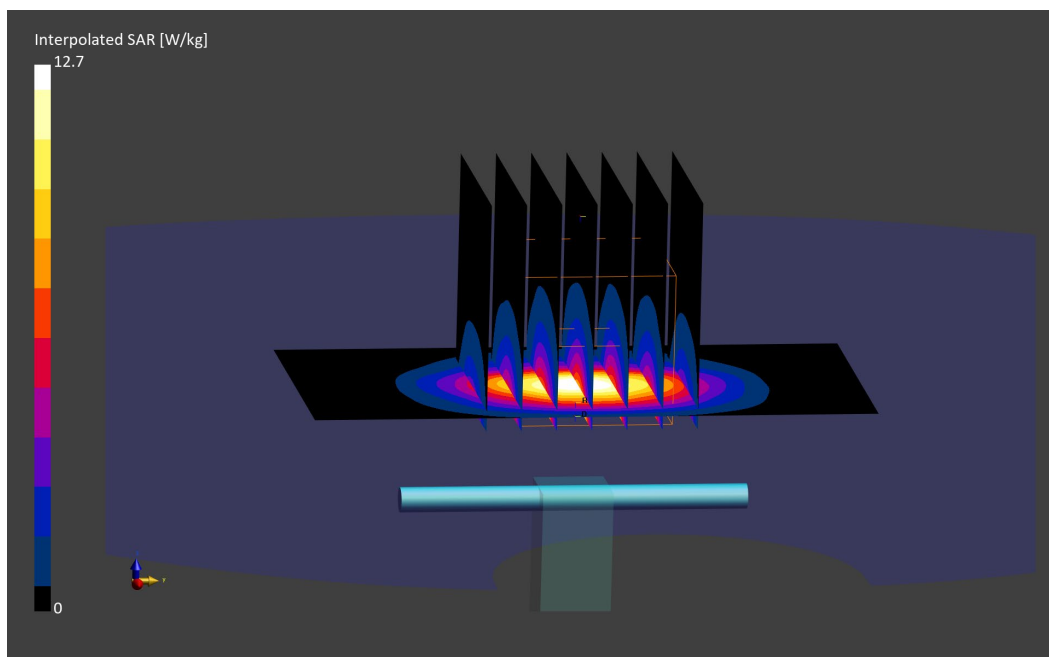
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 6.01 W/kg; SAR(10 g) = 2.71 W/kg

Deviation (1 g) = 6.56%; Deviation (10 g) = 7.54%



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5250.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5250.0 MHz; cond = 4.60 S/m; perm = 35.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/07/2023; Ambient Temp: 21.8°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7417; ConvF:(5.61,5.61,5.61); 2023-02-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn665; 2023-02-15
Phantom: Twin-SAM V5.0; Serial: 1757
Measurement SW: DASY Module SAR V16.2.0.1425

5250.0 MHz System Verification at 17.0 dBm (50 mW)

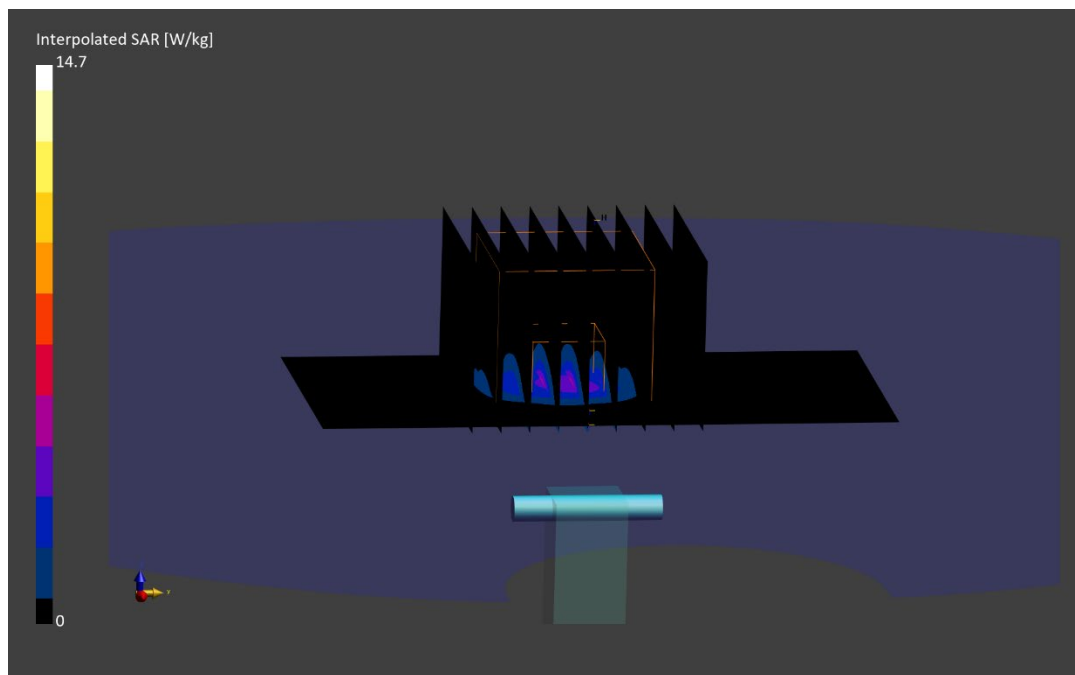
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 14.7 W/kg

SAR(1 g) = 3.72 W/kg; SAR(10 g) = 1.05 W/kg

Deviation (1 g) = -7.46%; Deviation (10 g) = -9.09%



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5250.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5250.0 MHz; cond = 4.50 S/m; perm = 35.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/10/2023; Ambient Temp: 21.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF:(5.52,5.52,5.52); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5250.0 MHz System Verification at 17.0 dBm (50 mW)

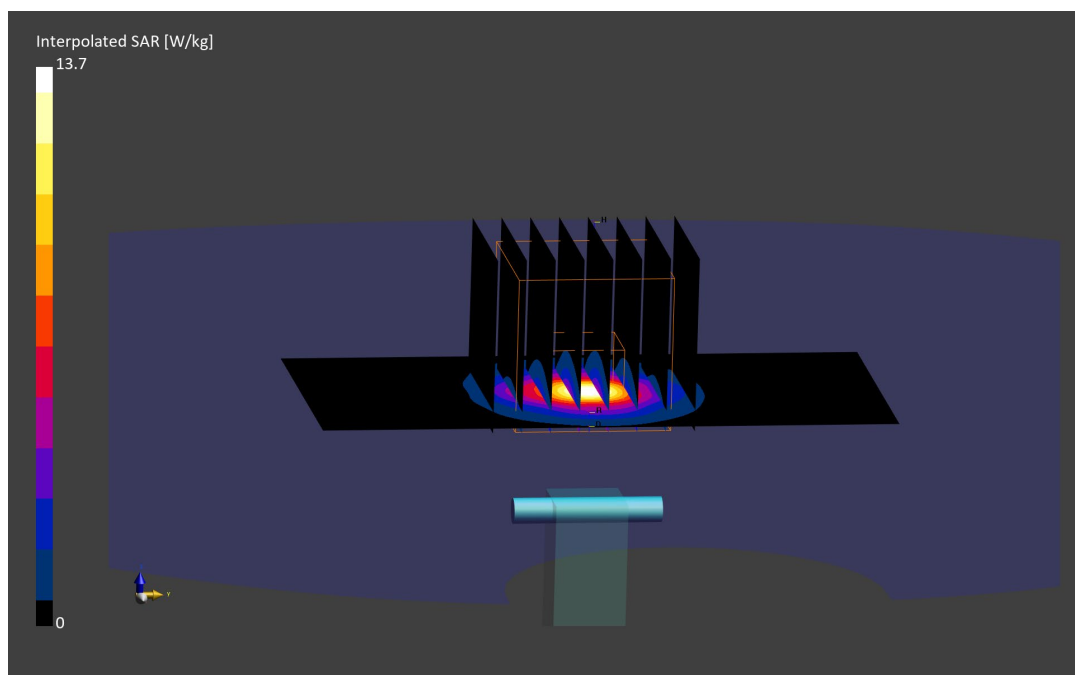
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 13.6 W/kg

SAR(1 g) = 3.64 W/kg; SAR(10 g) = 1.06 W/kg

Deviation (1 g) = -9.45%; Deviation (10 g) = -8.23%



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5250.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5250.0 MHz; cond = 4.69 S/m; perm = 35.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/13/2023; Ambient Temp: 19.1°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7570; ConvF:(5.52,5.52,5.52); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5250.0 MHz System Verification at 17.0 dBm (50 mW)

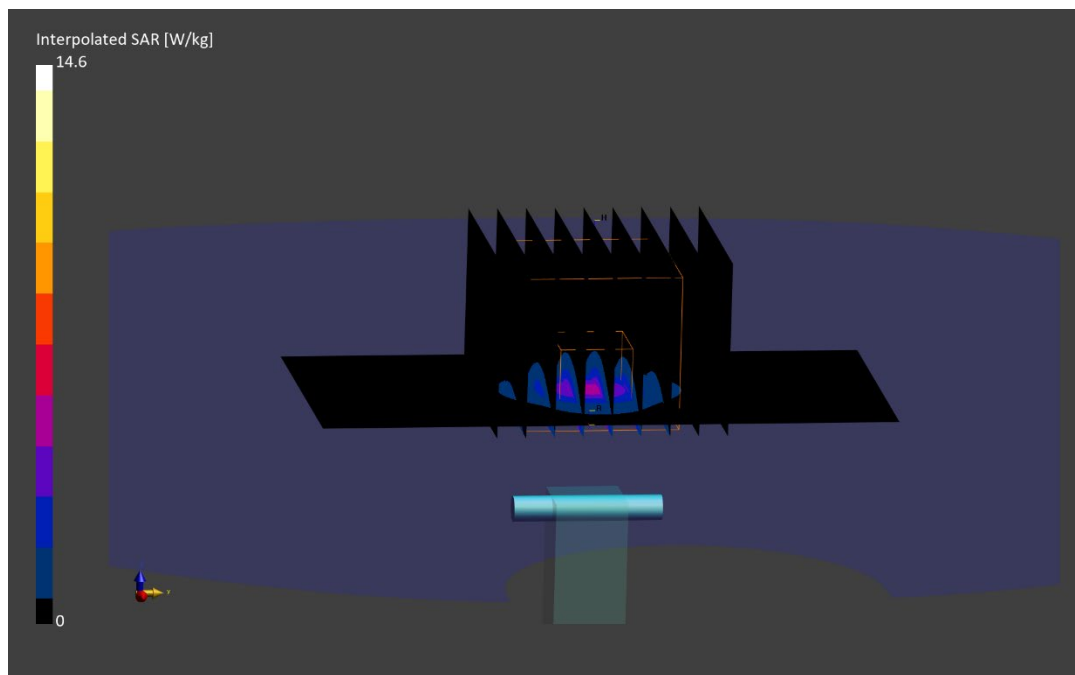
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 14.6 W/kg

SAR(1 g) = 3.71 W/kg; SAR(10 g) = 1.06 W/kg

Deviation (1 g) = -7.71%; Deviation (10 g) = -8.23%



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5600.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5600.0 MHz; cond = 5.00 S/m; perm = 34.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/07/2023; Ambient Temp: 21.8°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7417; ConvF:(4.99,4.99,4.99); 2023-02-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn665; 2023-02-15
Phantom: Twin-SAM V5.0; Serial: 1757
Measurement SW: DASY Module SAR V16.2.0.1425

5600.0 MHz System Verification at 17.0 dBm (50 mW)

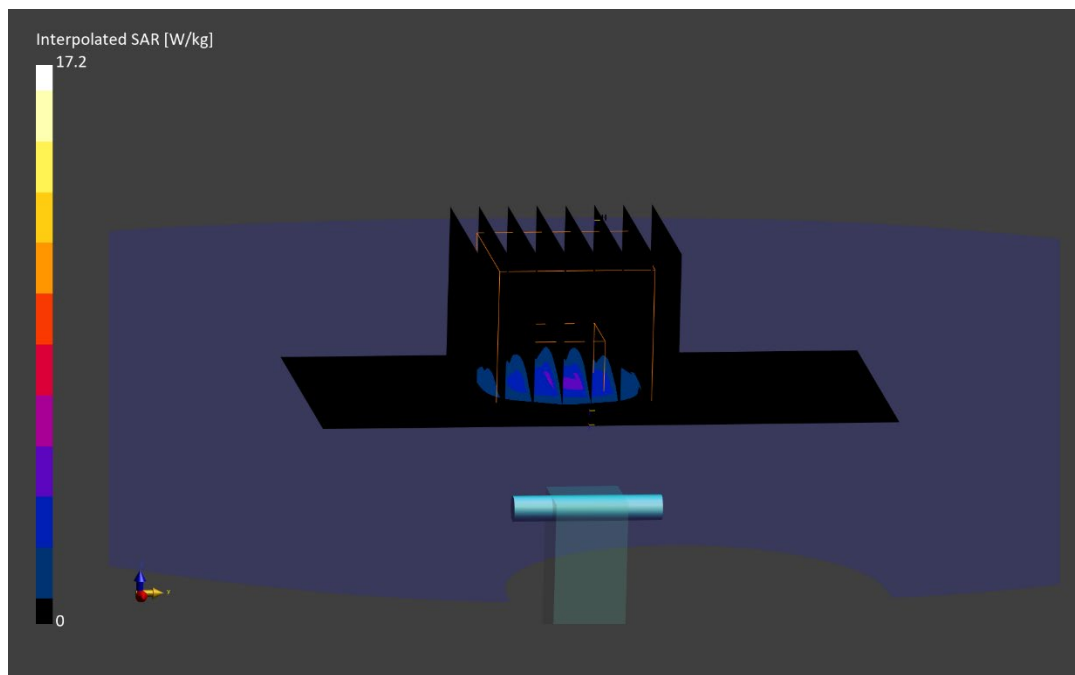
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 4.06 W/kg; SAR(10 g) = 1.14 W/kg

Deviation (1 g) = -0.85%; Deviation (10 g) = -2.15%



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5600.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5600.0 MHz; cond = 4.91 S/m; perm = 34.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/10/2023; Ambient Temp: 21.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF:(4.84,4.84,4.84); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5600.0 MHz System Verification at 17.0 dBm (50 mW)

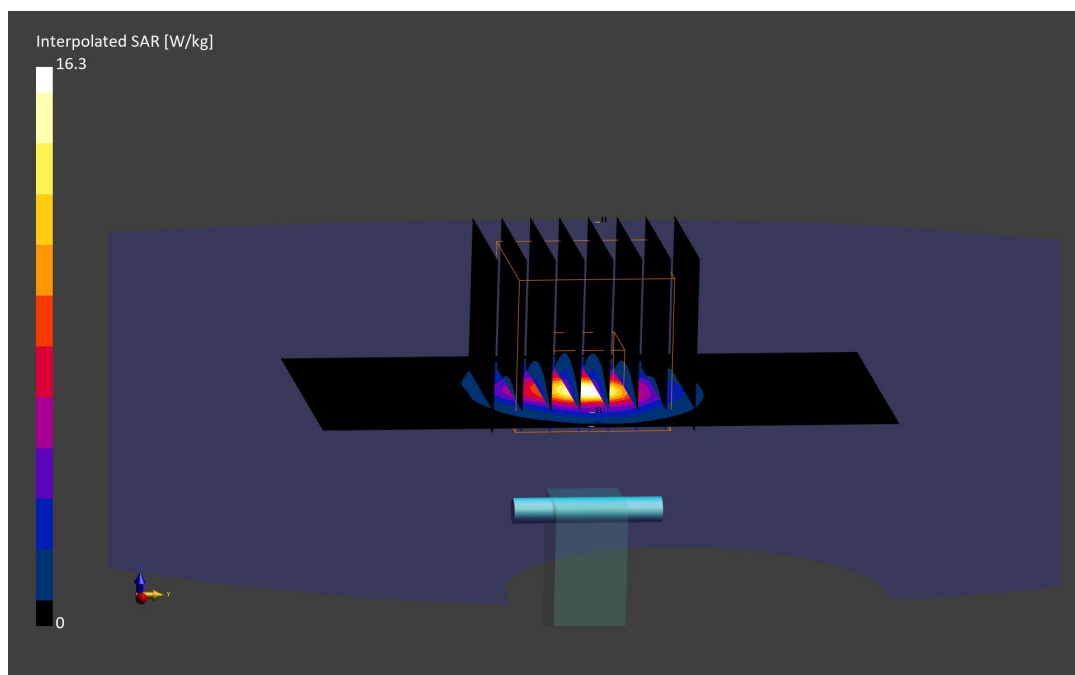
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 4.07 W/kg; SAR(10 g) = 1.17 W/kg

Deviation (1 g) = -0.61%; Deviation (10 g) = 0.43%



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5600.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5600.0 MHz; cond = 5.09 S/m; perm = 34.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/13/2023; Ambient Temp: 19.1°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7570; ConvF:(4.84,4.84,4.84); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5600.0 MHz System Verification at 17.0 dBm (50 mW)

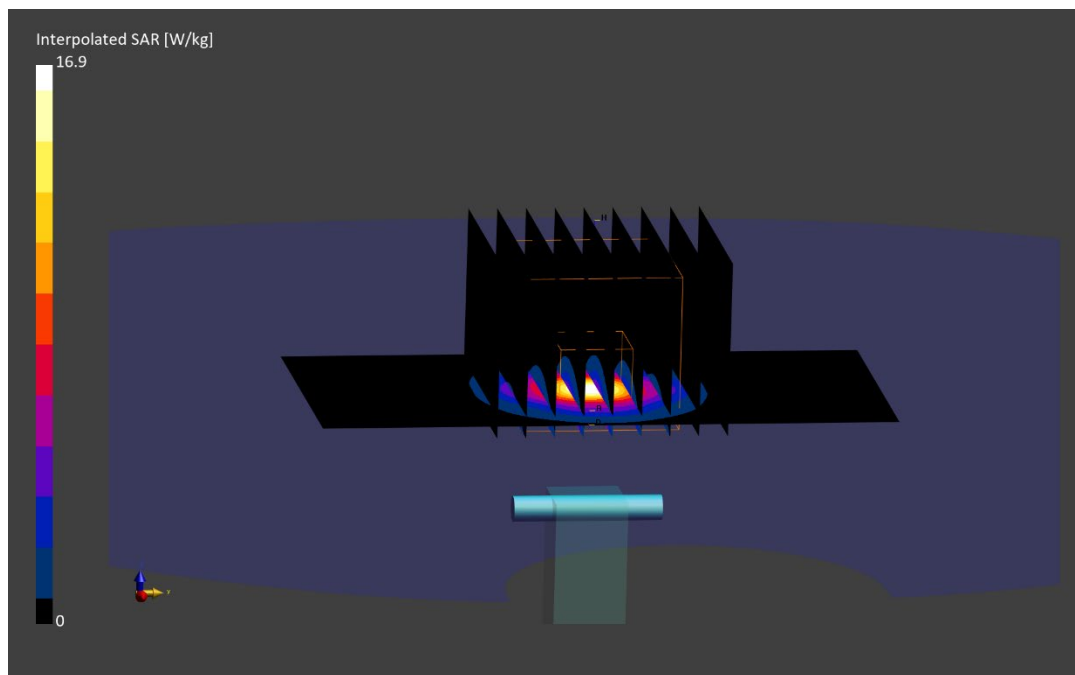
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 4.03 W/kg; SAR(10 g) = 1.15 W/kg

Deviation (1 g) = -1.59%; Deviation (10 g) = -1.29%



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5750.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.0 MHz; cond = 5.17 S/m; perm = 34.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/07/2023; Ambient Temp: 21.8°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7417; ConvF:(5.13,5.13,5.13); 2023-02-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn665; 2023-02-15
Phantom: Twin-SAM V5.0; Serial: 1757
Measurement SW: DASY Module SAR V16.2.0.1425

5750.0 MHz System Verification at 17.0 dBm (50 mW)

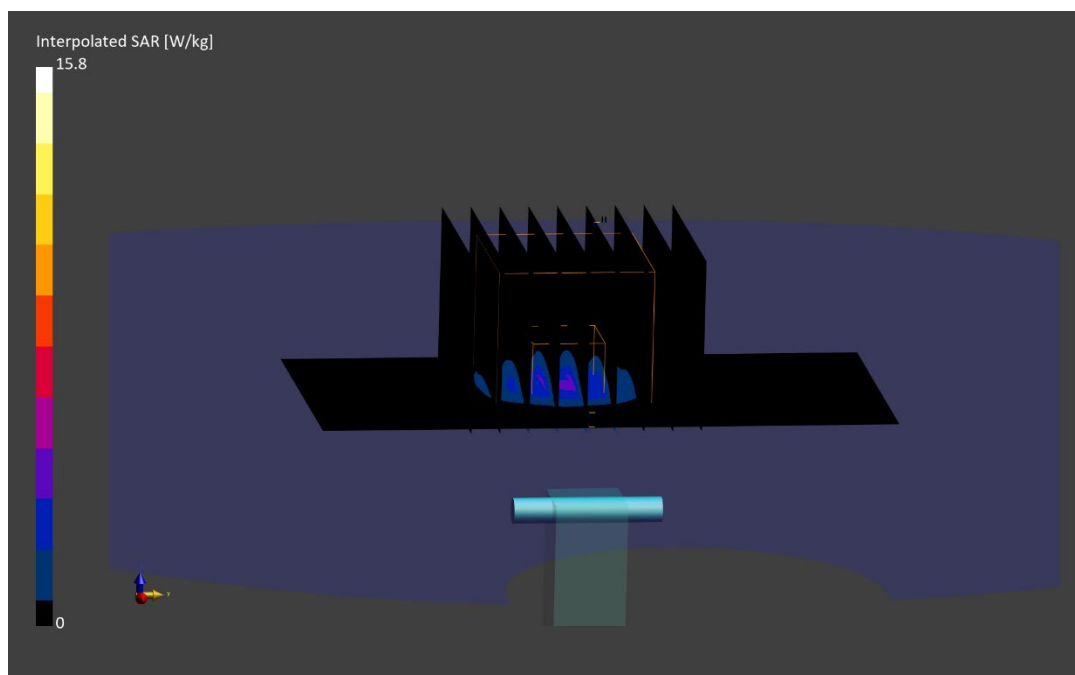
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 15.8 W/kg

SAR(1 g) = 3.69 W/kg; SAR(10 g) = 1.05 W/kg

Deviation (1 g) = -5.87%; Deviation (10 g) = -5.83%



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5750.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.0 MHz; cond = 5.08 S/m; perm = 34.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 10/10/2023; Ambient Temp: 21.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7570; ConvF:(4.92,4.92,4.92); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5750.0 MHz System Verification at 17.0 dBm (50 mW)

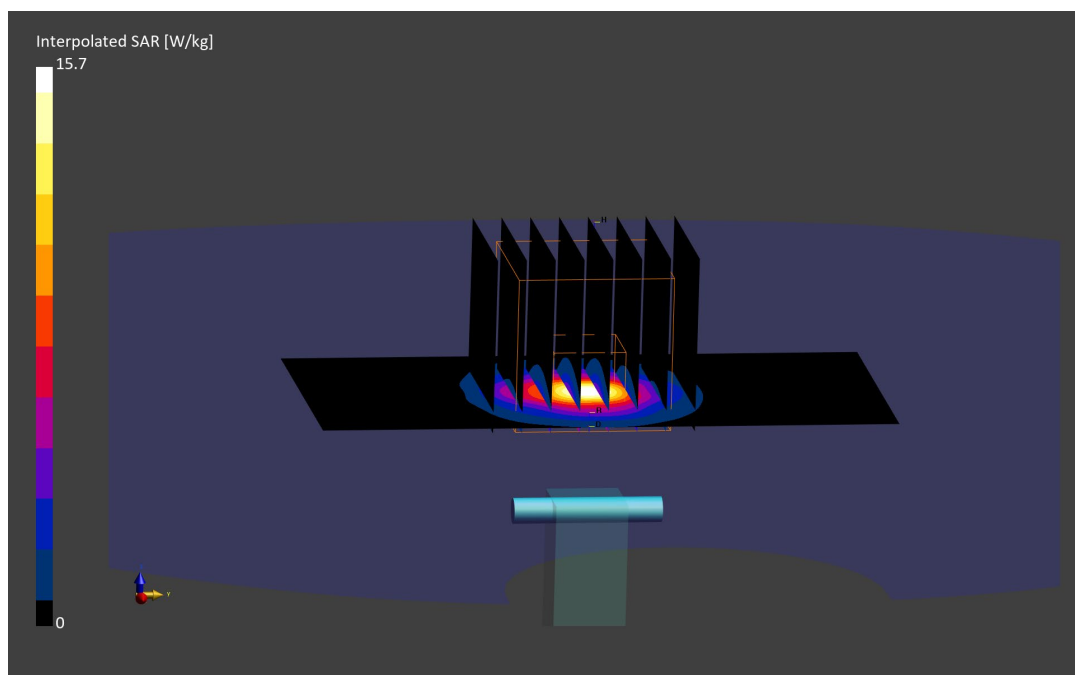
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 3.81 W/kg; SAR(10 g) = 1.09 W/kg

Deviation (1 g) = -2.81%; Deviation (10 g) = -2.24%



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5750.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.0 MHz; cond = 5.27 S/m; perm = 34.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 11/13/2023; Ambient Temp: 19.1°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7570; ConvF:(4.92,4.92,4.92); 2023-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1558; 2023-01-17
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

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 (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

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 3.60 W/kg; SAR(10 g) = 1.03 W/kg

Deviation (1 g) = -8.16%; Deviation (10 g) = -7.62%

