

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; cond = 0.748 S/m; perm = 52.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 0 mm

Test Date: 12/22/2023; Ambient Temp: 20.2°C; Tissue Temp: 20.2°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)

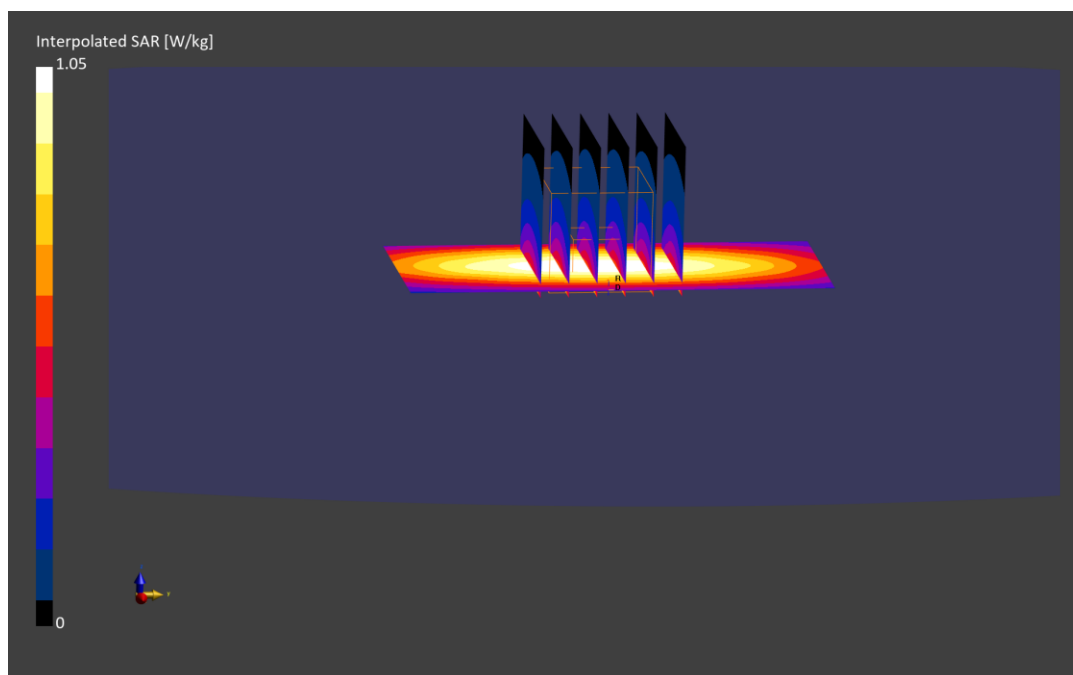
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 1.05 W/kg

SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.323 W/kg

Deviation (1 g) = -0.38%; Deviation (10 g) = -1.22%



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 = 0.883 S/m; perm = 40.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/04/2024; Ambient Temp: 20.1°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7558; ConvF:(10.37,10.37,10.37); 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

750.0 MHz System Verification at 23.0 dBm (200 mW)

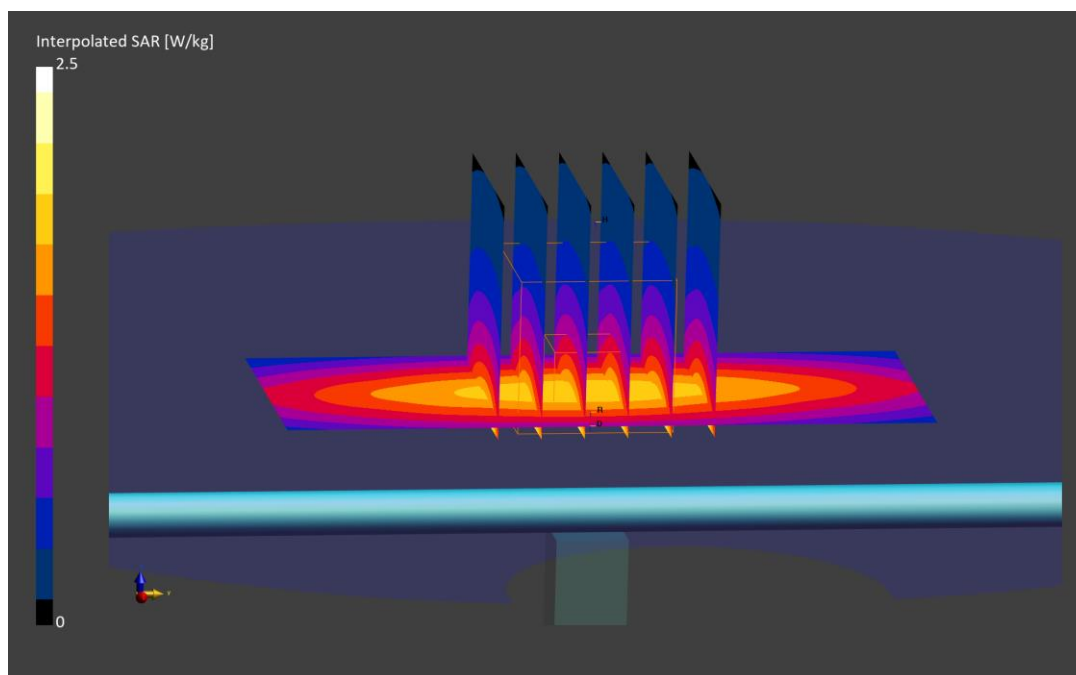
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.50 W/kg

SAR(1 g) = 1.60 W/kg; SAR(10 g) = 1.05 W/kg

Deviation (1 g) = -7.94%; Deviation (10 g) = -7.89%



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 = 0.872 S/m; perm = 42.1; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/04/2024; Ambient Temp: 20.0°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7491; ConvF:(9.91,9.91,9.91); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

750.0 MHz System Verification at 23.0 dBm (200 mW)

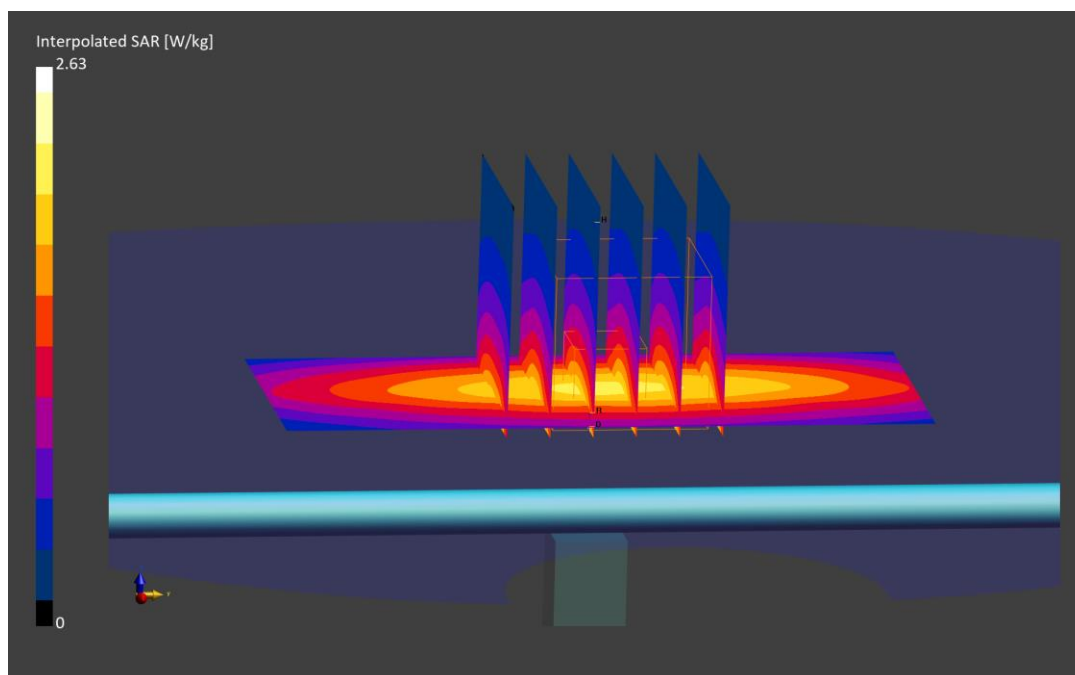
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.63 W/kg

SAR(1 g) = 1.75 W/kg; SAR(10 g) = 1.16 W/kg

Deviation (1 g) = 0.69%; Deviation (10 g) = 1.75%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d047

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.913 S/m; perm = 42.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/03/2024; Ambient Temp: 20.6°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7659; ConvF:(10.54,10.54,10.54); 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

835.0 MHz System Verification at 23.0 dBm (200 mW)

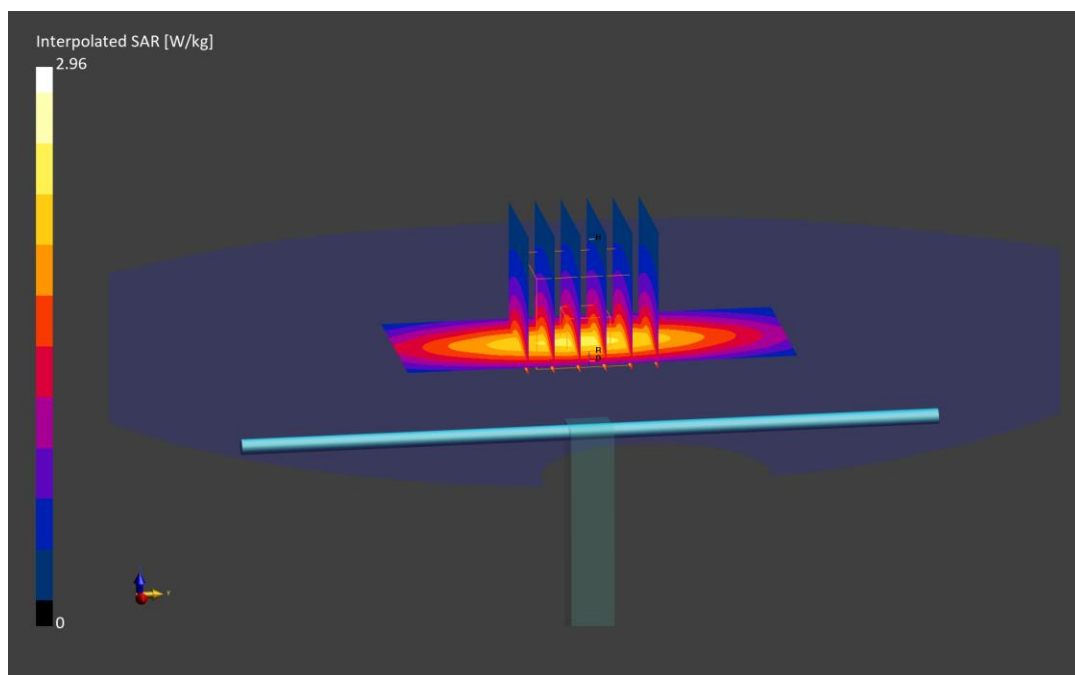
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.96 W/kg

SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.31 W/kg

Deviation (1 g) = 2.07%; Deviation (10 g) = 3.80%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d119

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.903 S/m; perm = 41.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/04/2024; Ambient Temp: 20.0°C; Tissue Temp: 20.2°C

Probe: EX3DV4 - SN7491; ConvF:(9.72,9.72,9.72); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

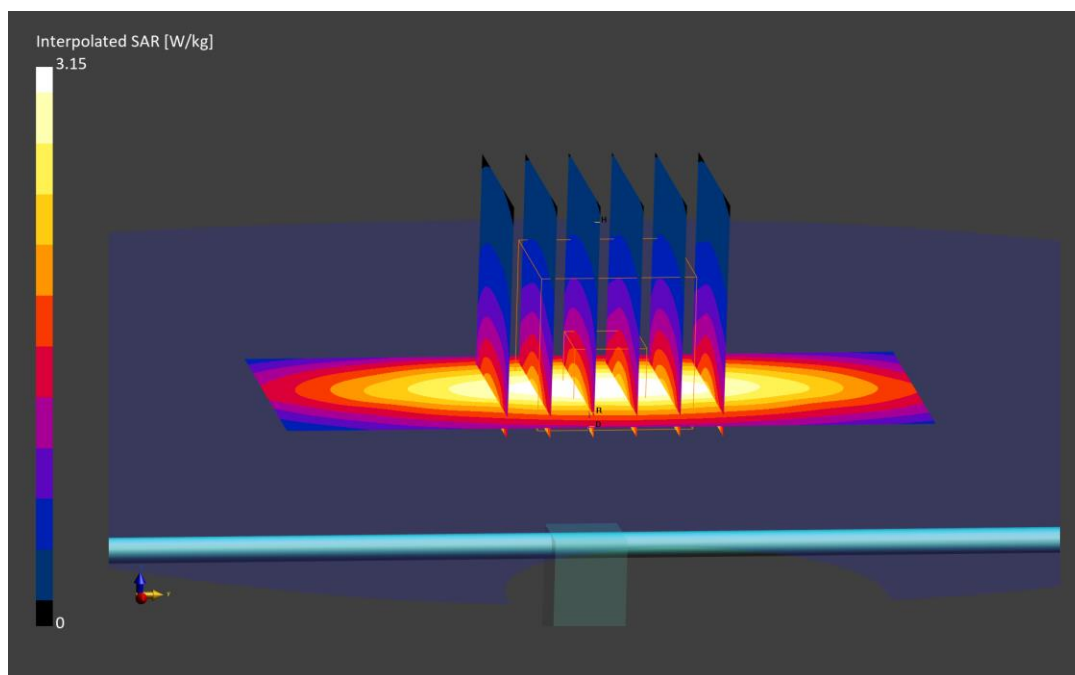
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.15 W/kg

SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.34 W/kg

Deviation (1 g) = 4.94%; Deviation (10 g) = 5.02%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d180

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.909 S/m; perm = 41.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/04/2024; Ambient Temp: 20.6°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7640; ConvF:(10.56,10.56,10.56); 2023-02-10
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1645; 2023-02-16
Phantom: Twin-SAM V5.0; Serial: 1868
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

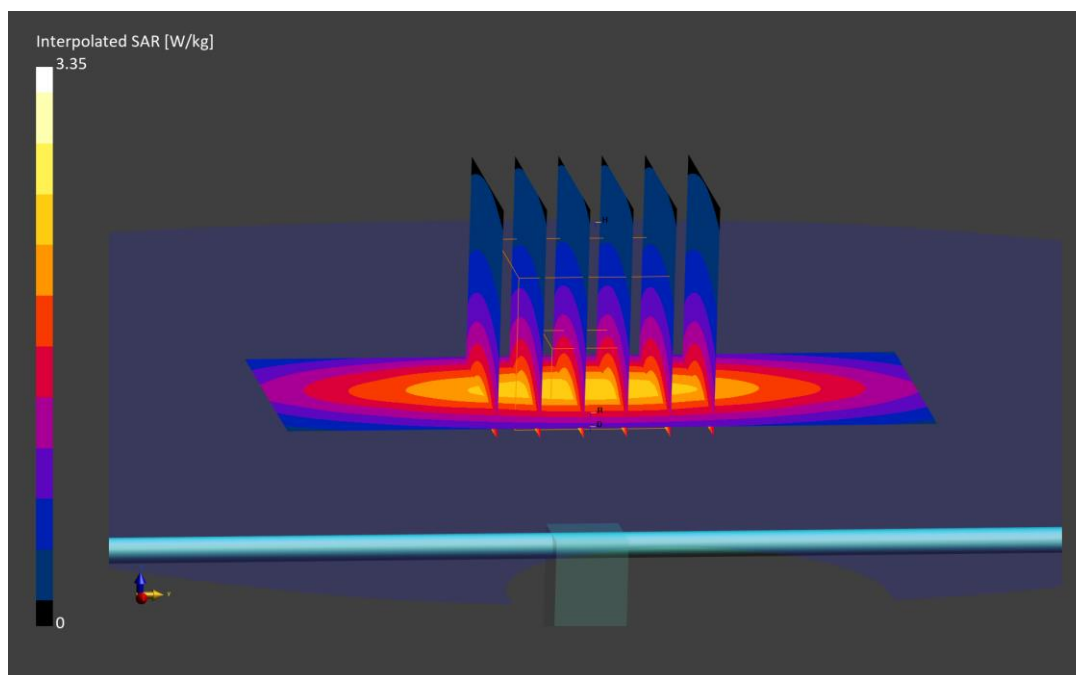
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.08 W/kg; SAR(10 g) = 1.36 W/kg

Deviation (1 g) = 8.00%; Deviation (10 g) = 8.45%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d047

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.882 S/m; perm = 42.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/08/2024; Ambient Temp: 19.3°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7659; ConvF:(10.54,10.54,10.54); 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

835.0 MHz System Verification at 23.0 dBm (200 mW)

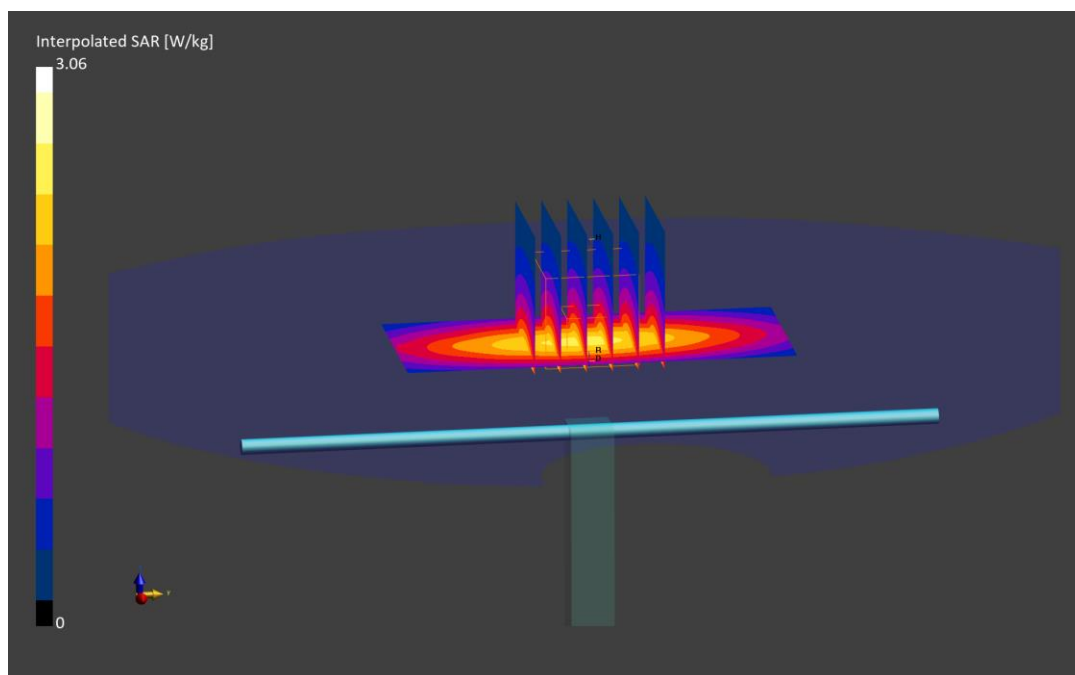
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.06 W/kg

SAR(1 g) = 2.05 W/kg; SAR(10 g) = 1.37 W/kg

Deviation (1 g) = 6.22%; Deviation (10 g) = 8.56%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d119

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.903 S/m; perm = 41.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/09/2024; Ambient Temp: 19.7°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7640; ConvF:(10.56,10.56,10.56); 2023-02-10
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1645; 2023-02-16
Phantom: Twin-SAM V5.0; Serial: 1868
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

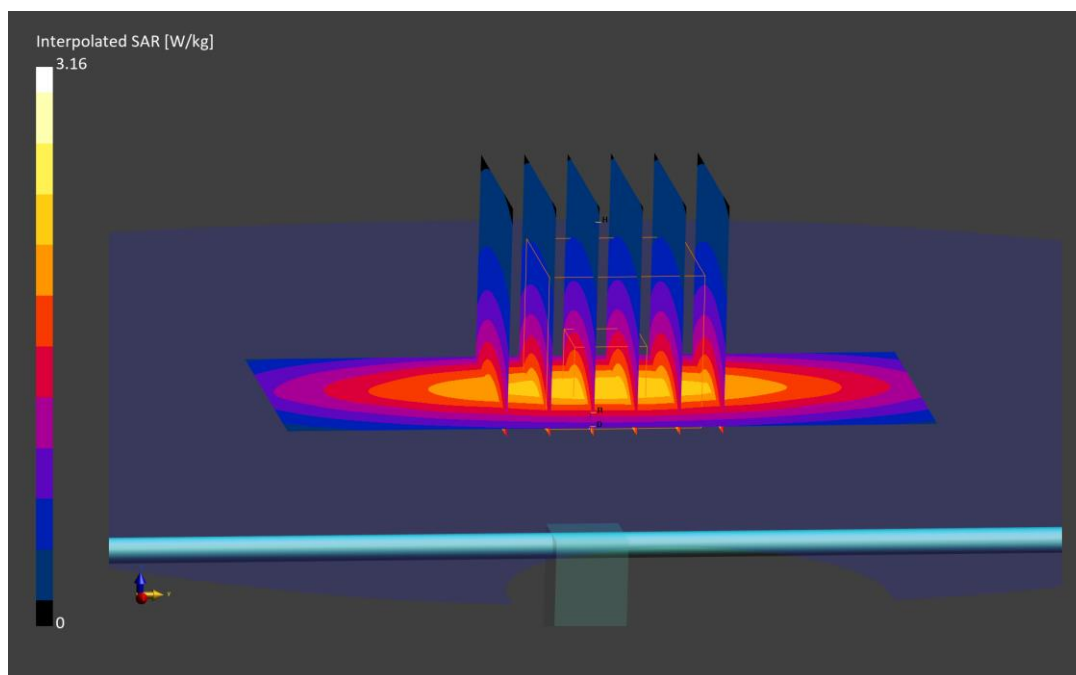
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.16 W/kg

SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.31 W/kg

Deviation (1 g) = 3.40%; Deviation (10 g) = 2.66%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d119

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.914 S/m; perm = 41.0; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/11/2024; Ambient Temp: 21.9°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7640; ConvF:(10.56,10.56,10.56); 2023-02-10
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1645; 2023-02-16
Phantom: Twin-SAM V5.0; Serial: 1868
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

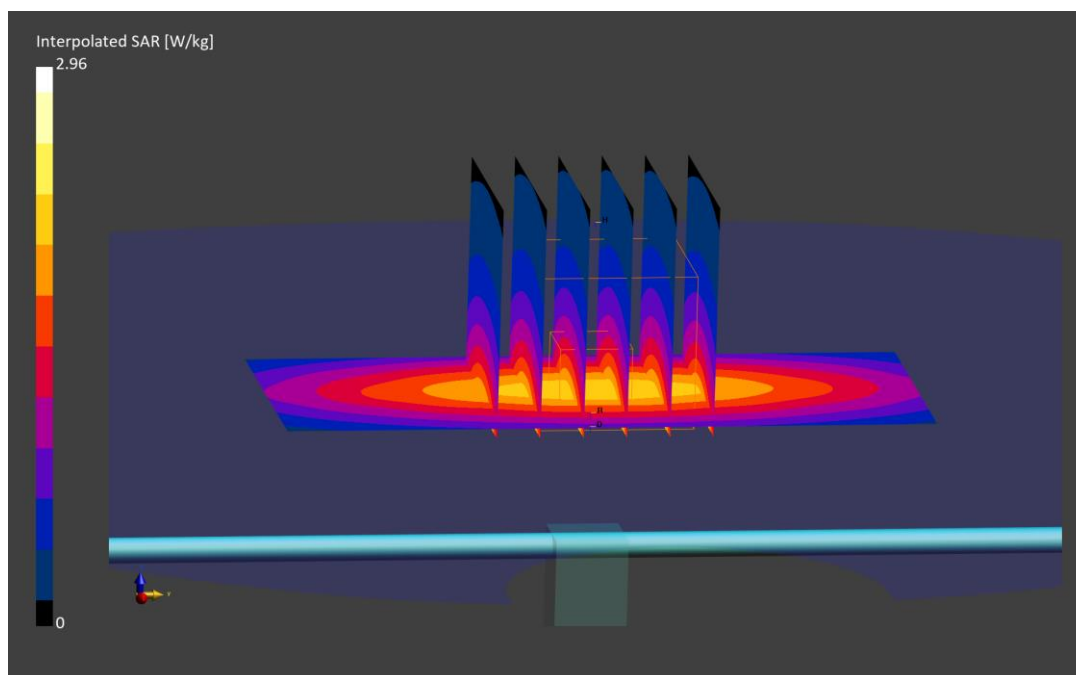
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.96 W/kg

SAR(1 g) = 1.86 W/kg; SAR(10 g) = 1.20 W/kg

Deviation (1 g) = -4.32%; Deviation (10 g) = -5.96%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d180

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.917 S/m; perm = 40.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/11/2024; Ambient Temp: 20.9°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7558; ConvF:(9.92,9.92,9.92); 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

835.0 MHz System Verification at 23.0 dBm (200 mW)

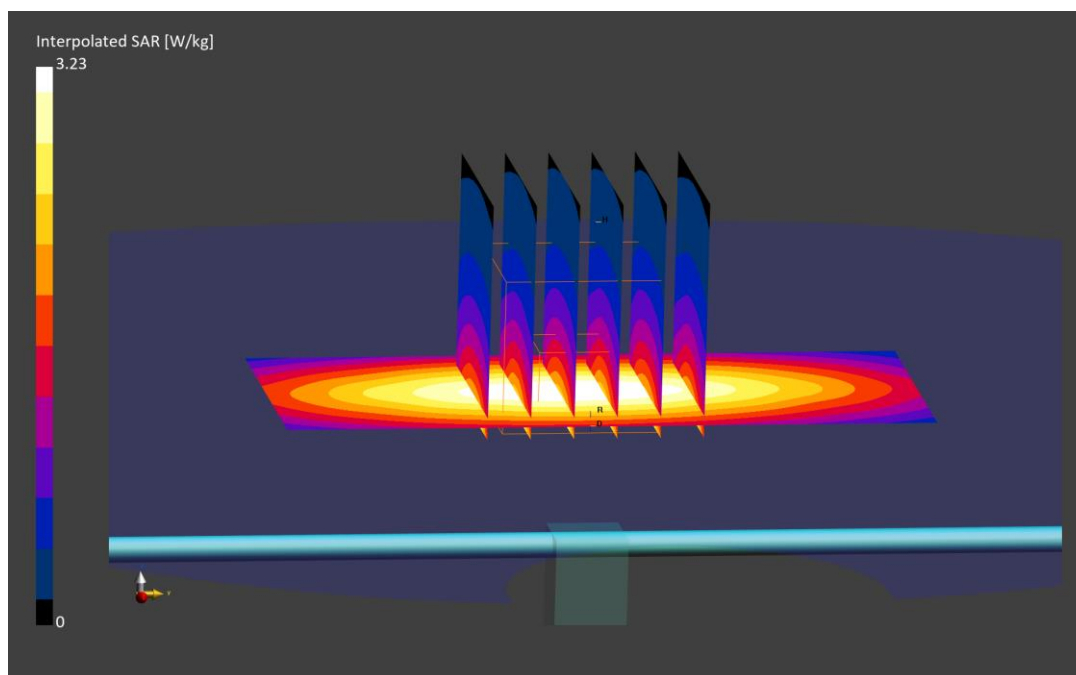
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.23 W/kg

SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.32 W/kg

Deviation (1 g) = 4.88%; Deviation (10 g) = 5.26%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d180

Communication System: UID: 0, CW; Frequency: 835.0 MHz
Medium: 835 Head; Medium parameters used:
f = 835.0 MHz; cond = 0.902 S/m; perm = 39.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 01/15/2024; Ambient Temp: 20.9°C; Tissue Temp: 19.7°C

Probe: EX3DV4 - SN7640; ConvF:(10.56,10.56,10.56); 2023-02-10
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1645; 2023-02-16
Phantom: Twin-SAM V5.0; Serial: 1868
Measurement SW: DASY Module SAR V16.2.0.1425

835.0 MHz System Verification at 23.0 dBm (200 mW)

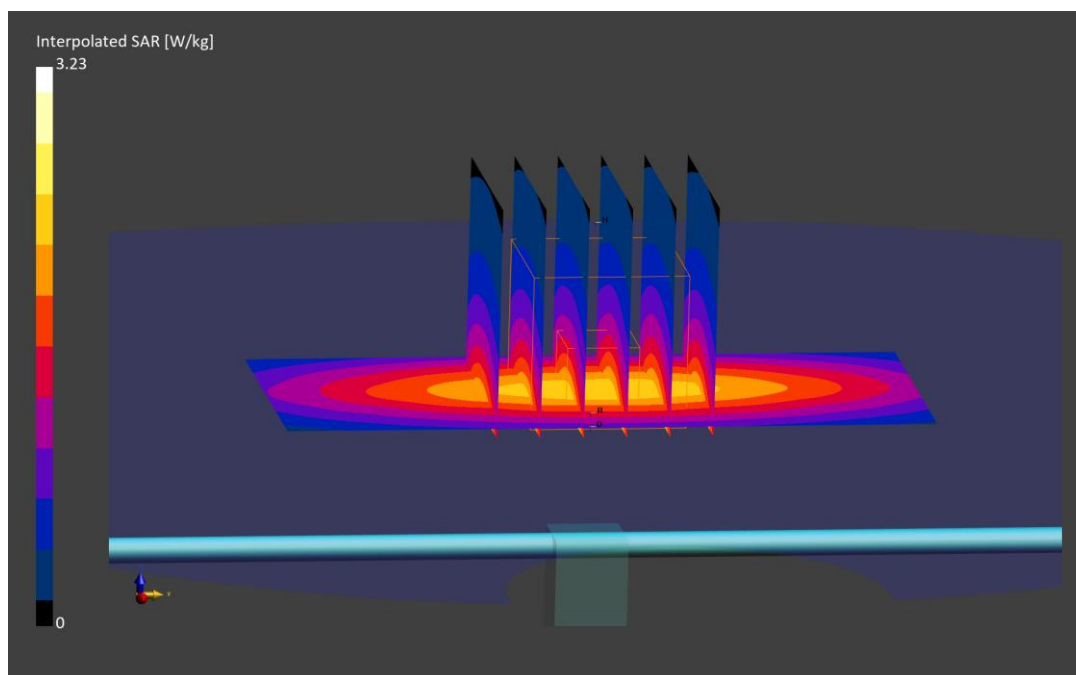
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.24 W/kg

SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.32 W/kg

Deviation (1 g) = 5.92%; Deviation (10 g) = 5.26%



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 = 1.32 S/m; perm = 39.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/10/2024; Ambient Temp: 20.2°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7659; ConvF:(9.19,9.19,9.19); 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

1750.0 MHz System Verification at 20.0 dBm (100 mW)

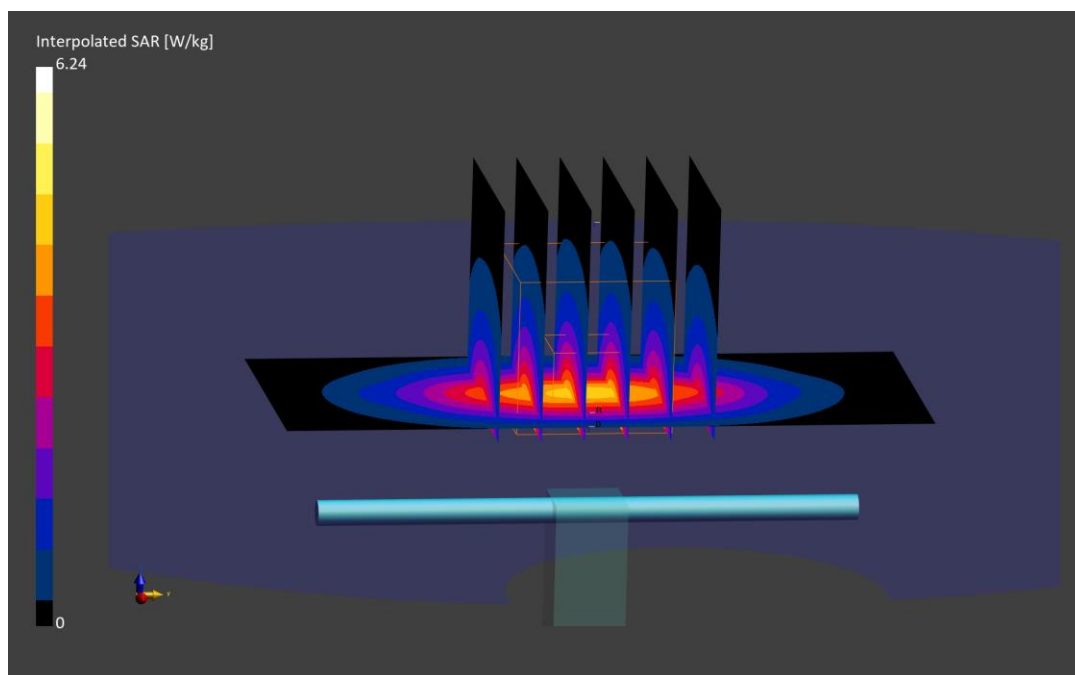
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 6.24 W/kg

SAR(1 g) = 3.53 W/kg; SAR(10 g) = 1.92 W/kg

Deviation (1 g) = -4.34%; Deviation (10 g) = -1.03%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1092

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 = 39.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/15/2024; Ambient Temp: 19.0°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7491; ConvF:(8.69,8.69,8.69); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

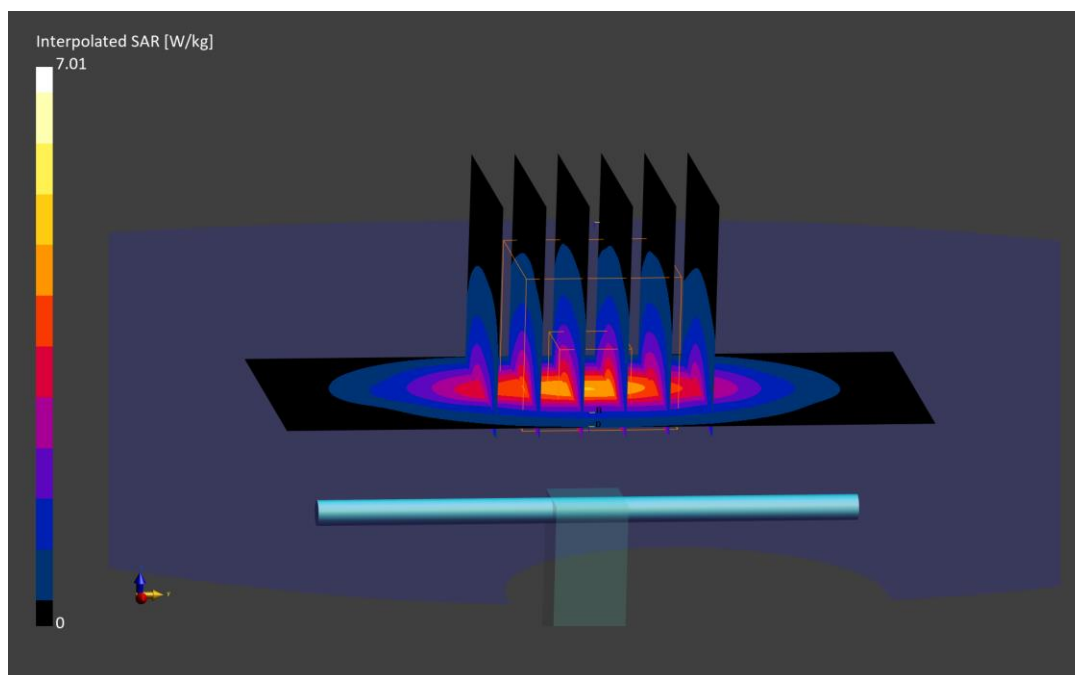
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 7.01 W/kg

SAR(1 g) = 3.68 W/kg; SAR(10 g) = 1.95 W/kg

Deviation (1 g) = 1.66%; Deviation (10 g) = 2.09%



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 = 1.34 S/m; perm = 39.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/17/2024; Ambient Temp: 19.9°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7491; ConvF:(8.69,8.69,8.69); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

1750.0 MHz System Verification at 20.0 dBm (100 mW)

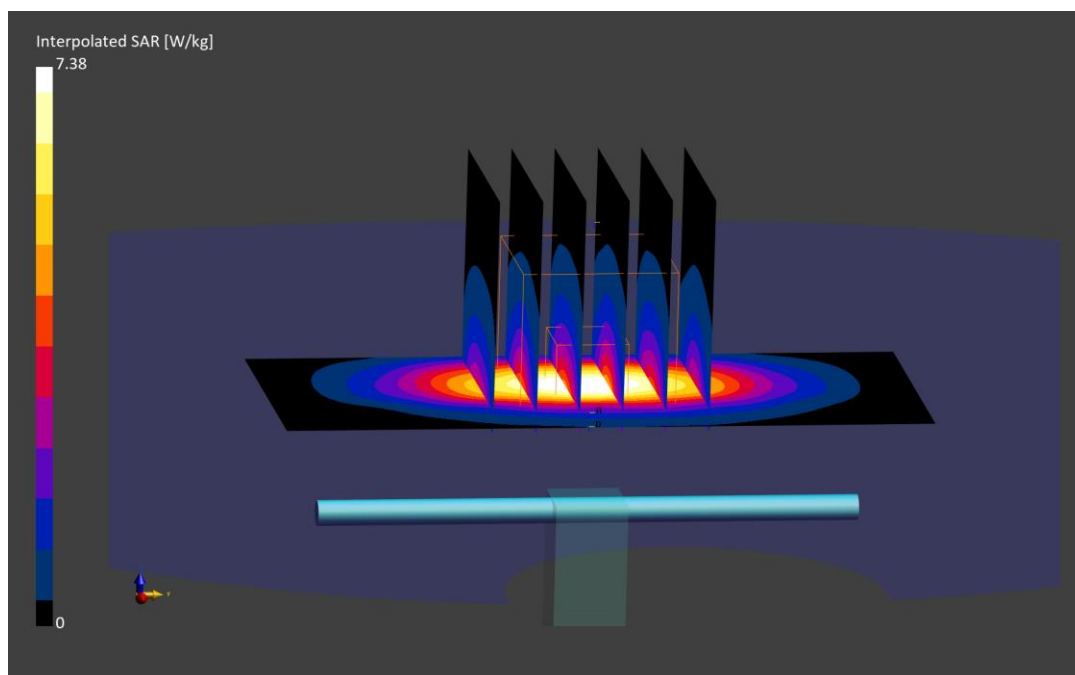
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 7.38 W/kg

SAR(1 g) = 3.85 W/kg; SAR(10 g) = 2.03 W/kg

Deviation (1 g) = 6.65%; Deviation (10 g) = 6.84%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d141

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 = 40.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/02/2024; Ambient Temp: 21.1°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7491; ConvF:(8.27,8.27,8.27); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

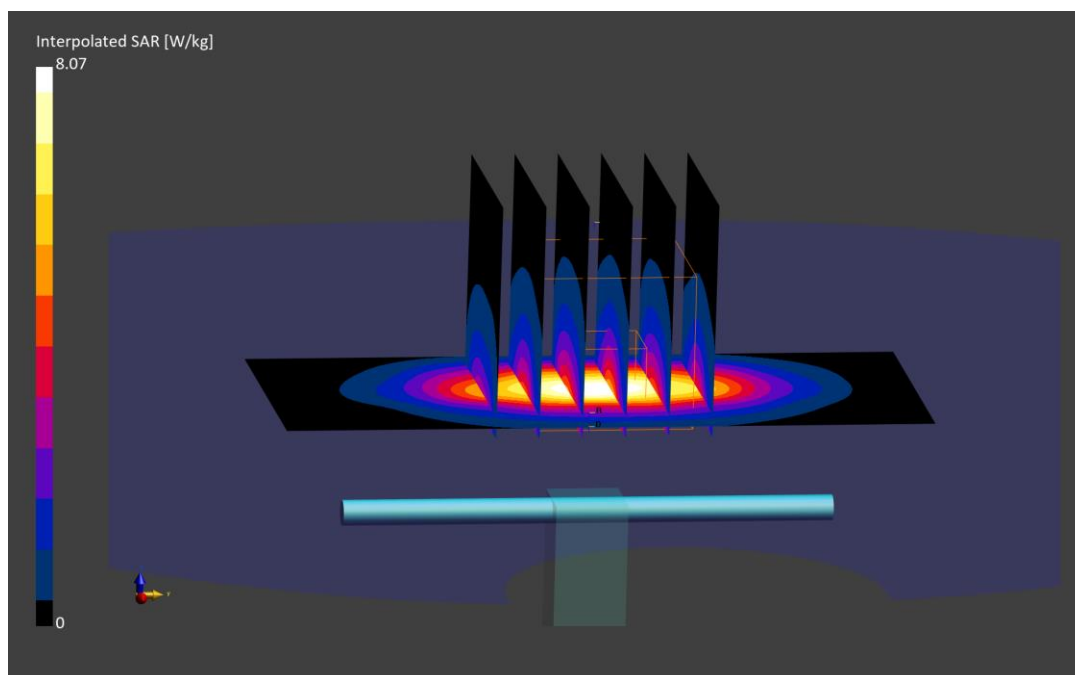
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 8.07 W/kg

SAR(1 g) = 4.17 W/kg; SAR(10 g) = 2.13 W/kg

Deviation (1 g) = 4.51%; Deviation (10 g) = 2.40%



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d026

Communication System: UID: 0, CW; Frequency: 1900.0 MHz
Medium: 1750 Head; Medium parameters used:
f = 1900.0 MHz; cond = 1.44 S/m; perm = 39.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/15/2024; Ambient Temp: 19.0°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7491; ConvF:(8.27,8.27,8.27); 2023-06-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1532; 2023-06-15
Phantom: Twin-SAM V5.0; Serial: 1797
Measurement SW: DASY Module SAR V16.2.0.1425

1900.0 MHz System Verification at 20.0 dBm (100 mW)

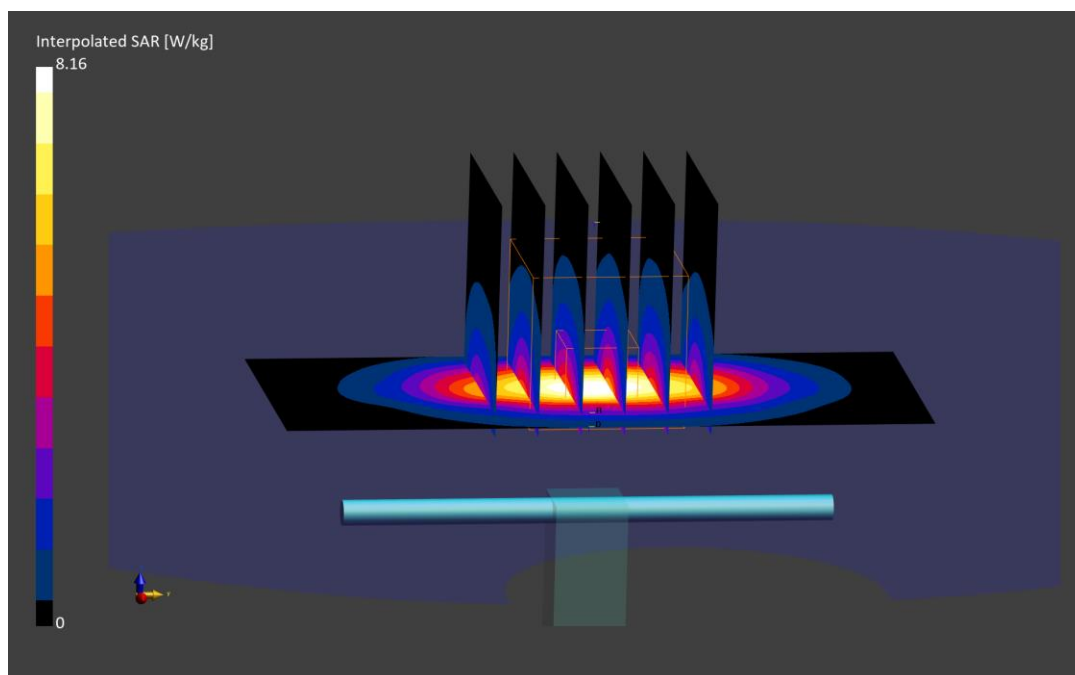
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 8.16 W/kg

SAR(1 g) = 4.21 W/kg; SAR(10 g) = 2.16 W/kg

Deviation (1 g) = 8.23%; Deviation (10 g) = 5.37%



ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN981

Communication System: UID: 0, CW; Frequency: 2450.000 MHz
Medium: 2450 Head; Medium parameters used:
f = 2450.000 MHz; cond = 1.78 S/m; perm = 38.6; density = 1000 kg/m3
Phantom Section: Flat; Space: 10 mm

Test Date: 01/10/2024; Ambient Temp: 21.3°C; Tissue Temp: 20.2°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 V16.2.4.2524

2450.0 MHz System Verification at 20.0 dBm (100 mW)

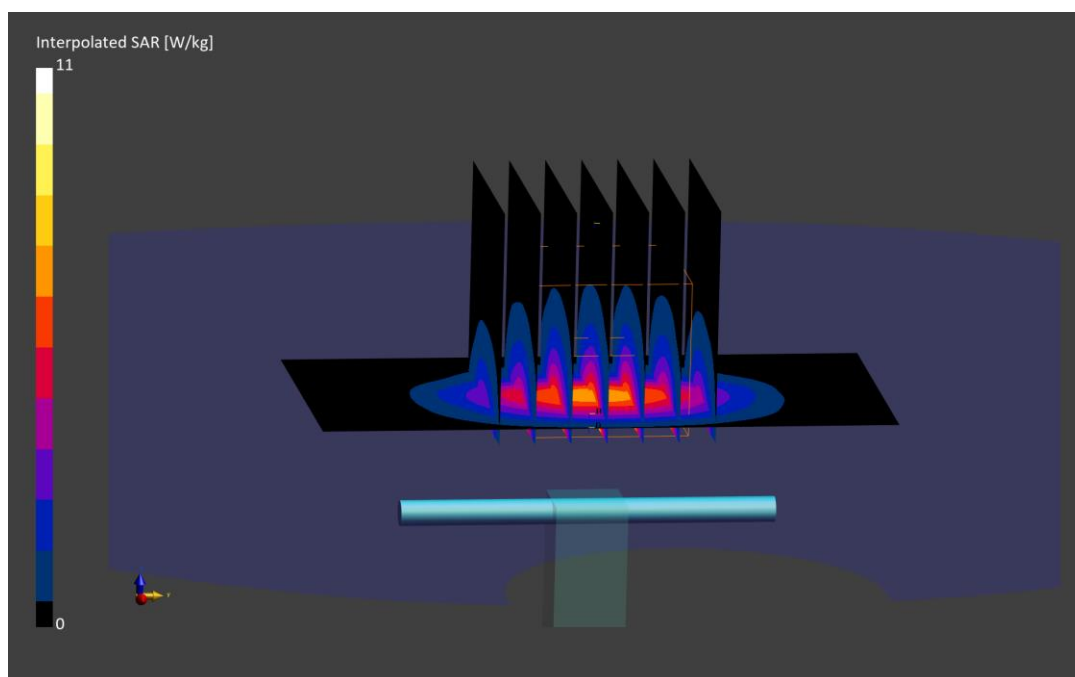
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 11.0 W/kg

SAR(1 g) = 5.35 W/kg; SAR(10 g) = 2.49 W/kg

Deviation (1 g) = -0.74%; Deviation (10 g) = -1.97%



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 = 1.84 S/m; perm = 38.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/15/2024; Ambient Temp: 20.1°C; Tissue Temp: 19.8°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 V16.2.4.2524

2450.0 MHz System Verification at 20.0 dBm (100 mW)

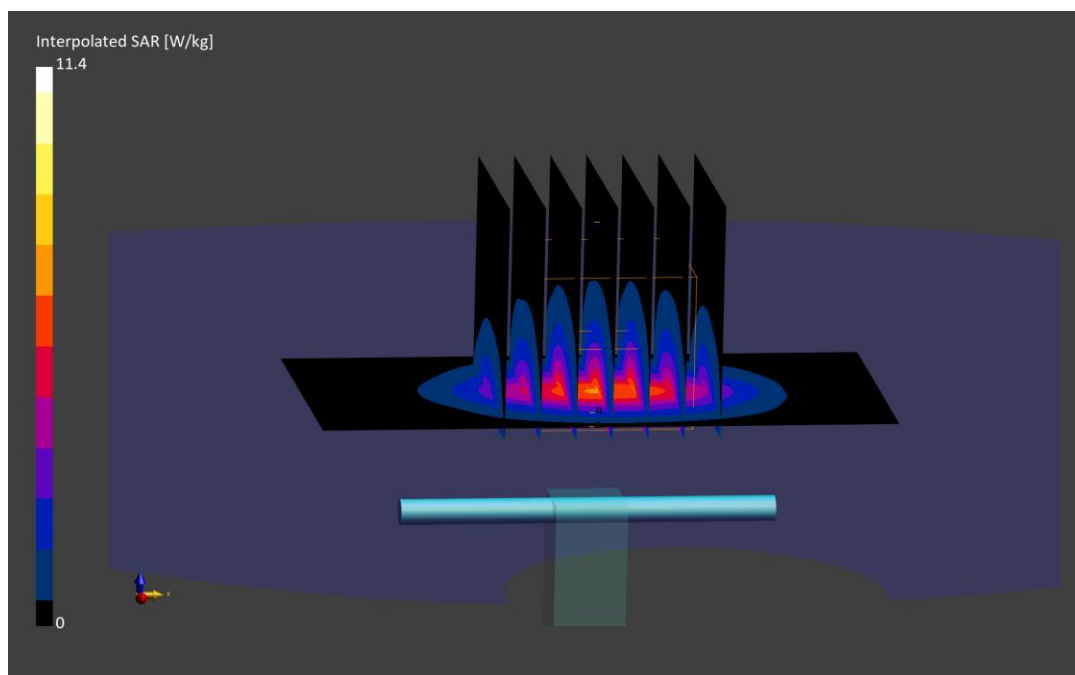
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 11.4 W/kg

SAR(1 g) = 5.39 W/kg; SAR(10 g) = 2.50 W/kg

Deviation (1 g) = 0.00%; Deviation (10 g) = -1.57%



ELEMENT

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1126

Communication System: UID: 0, CW; Frequency: 2600.0 MHz
Medium: 2450 Head; Medium parameters used:
f = 2600.0 MHz; cond = 1.93 S/m; perm = 37.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/08/2024; Ambient Temp: 21.8°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7547; ConvF:(7.08,7.08,7.08); 2023-10-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1322; 2023-10-18
Phantom: Twin-SAM V8.0; Serial: 1937
Measurement SW: DASY Module SAR V16.2.0.1425

2600.0 MHz System Verification at 20.0 dBm (100 mW)

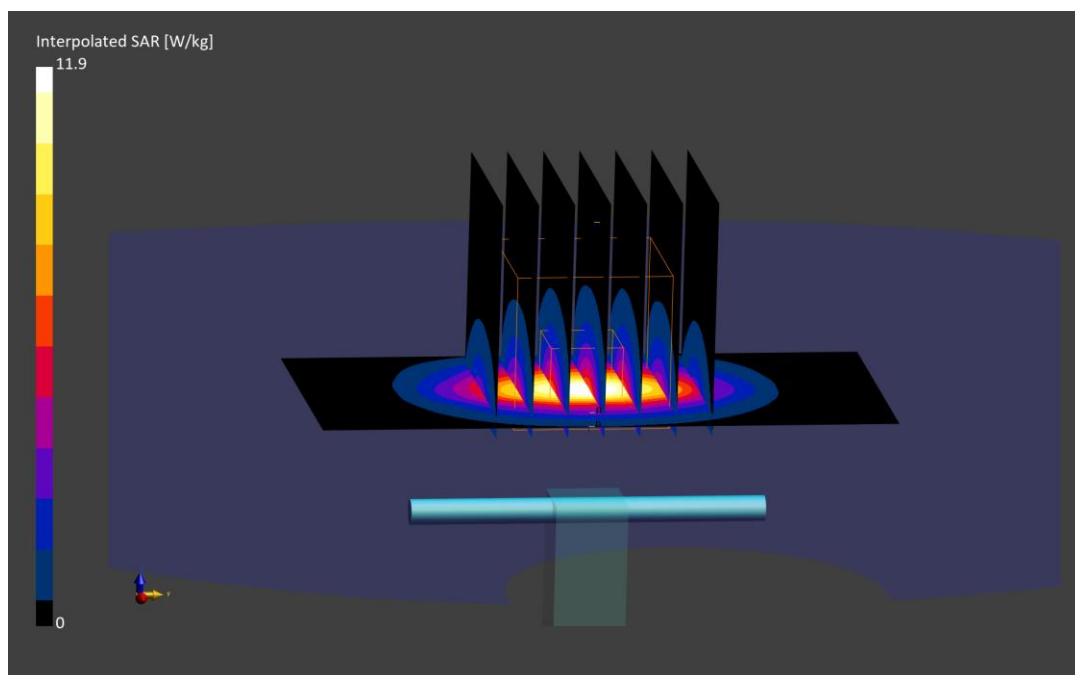
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 11.9 W/kg

SAR(1 g) = 5.49 W/kg; SAR(10 g) = 2.48 W/kg

Deviation (1 g) = -1.96%; Deviation (10 g) = -1.98%



ELEMENT

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1004

Communication System: UID: 0, CW; Frequency: 2600.0 MHz
Medium: 2450 Head; Medium parameters used:
 $f = 2600.0$ MHz; $\text{cond} = 1.97$ S/m; $\text{perm} = 38.2$; $\text{density} = 1000$ kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/15/2024; Ambient Temp: 20.1°C; Tissue Temp: 19.8°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 V16.2.4.2524

2600.0 MHz System Verification at 20.0 dBm (100 mW)

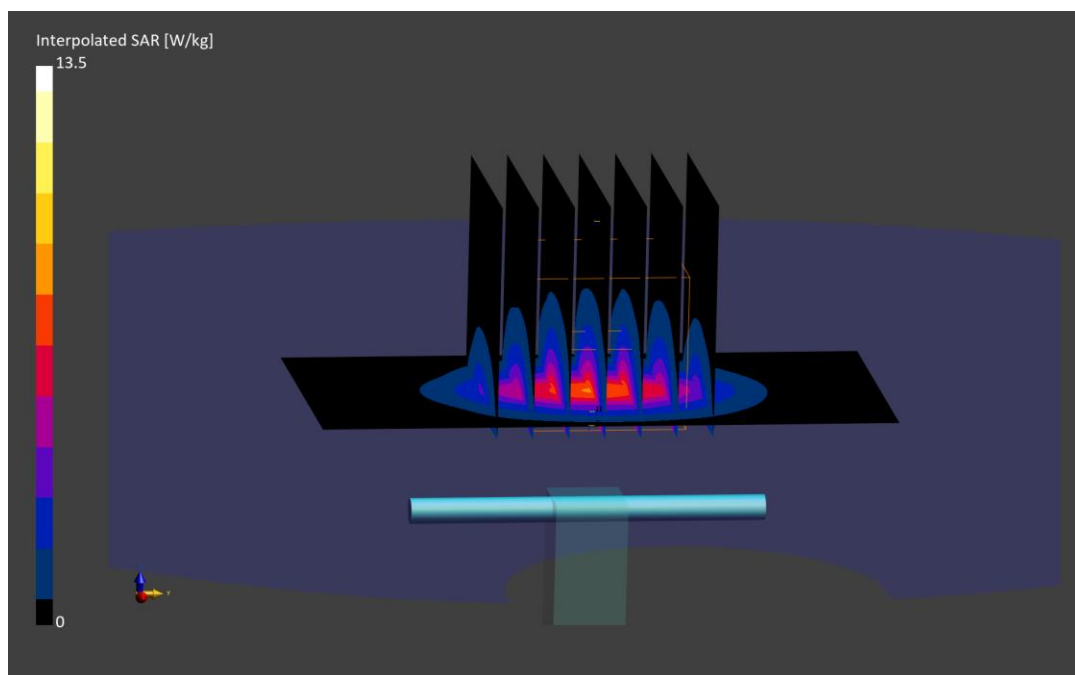
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

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) = 13.5 W/kg

SAR(1 g) = 6.05 W/kg; SAR(10 g) = 2.71 W/kg

Deviation (1 g) = 4.67%; Deviation (10 g) = 5.45%



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1057

Communication System: UID: 0, CW; Frequency: 5250.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5250.0 MHz; cond = 4.51 S/m; perm = 35.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/09/2024; Ambient Temp: 21.6°C; Tissue Temp: 21.8°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)

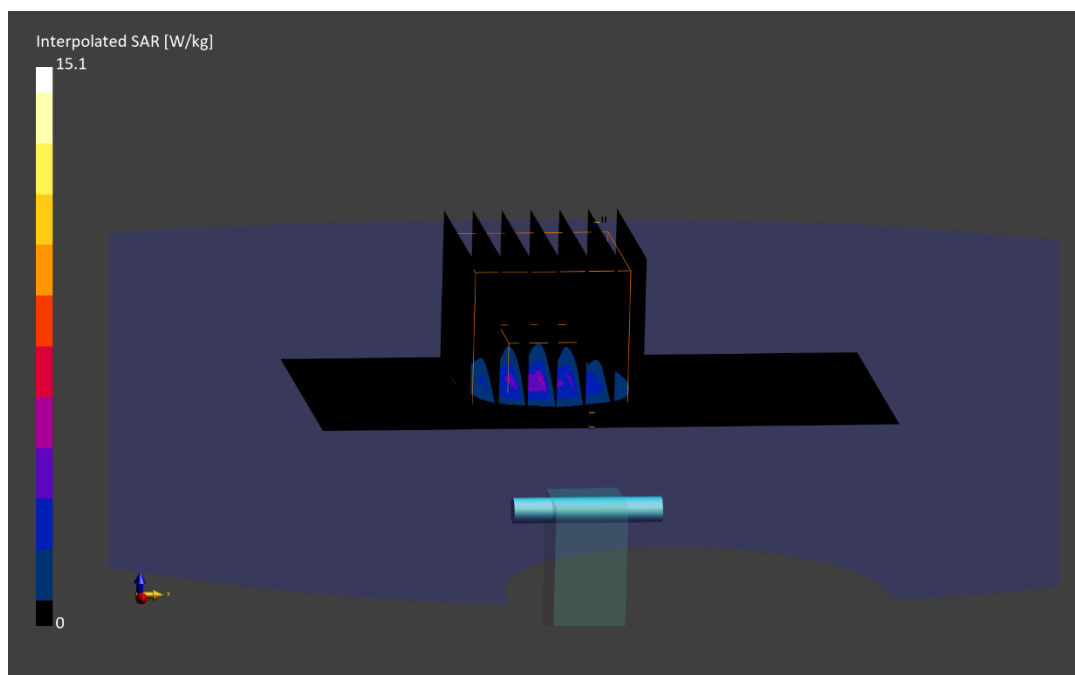
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 15.1 W/kg

SAR(1 g) = 3.86 W/kg; SAR(10 g) = 1.13 W/kg

Deviation (1 g) = -4.93%; Deviation (10 g) = -2.59%



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 = 4.77 S/m; perm = 36.0; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/29/2024; Ambient Temp: 19.1°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7803; ConvF:(5.27,5.46,5.32); 2024-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1533; 2024-01-09
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)

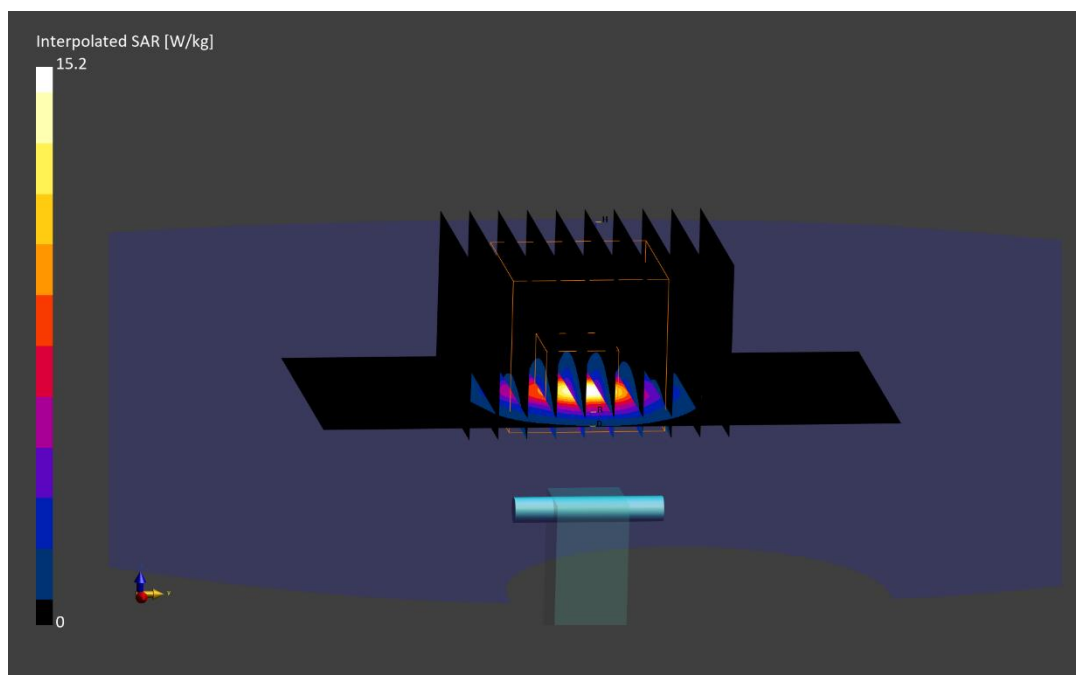
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 15.2 W/kg

SAR(1 g) = 4.01 W/kg; SAR(10 g) = 1.17 W/kg

Deviation (1 g) = 4.70%; Deviation (10 g) = 5.88%



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1057

Communication System: UID: 0, CW; Frequency: 5600.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5600.0 MHz; cond = 4.90 S/m; perm = 35.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/09/2024; Ambient Temp: 21.6°C; Tissue Temp: 21.8°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)

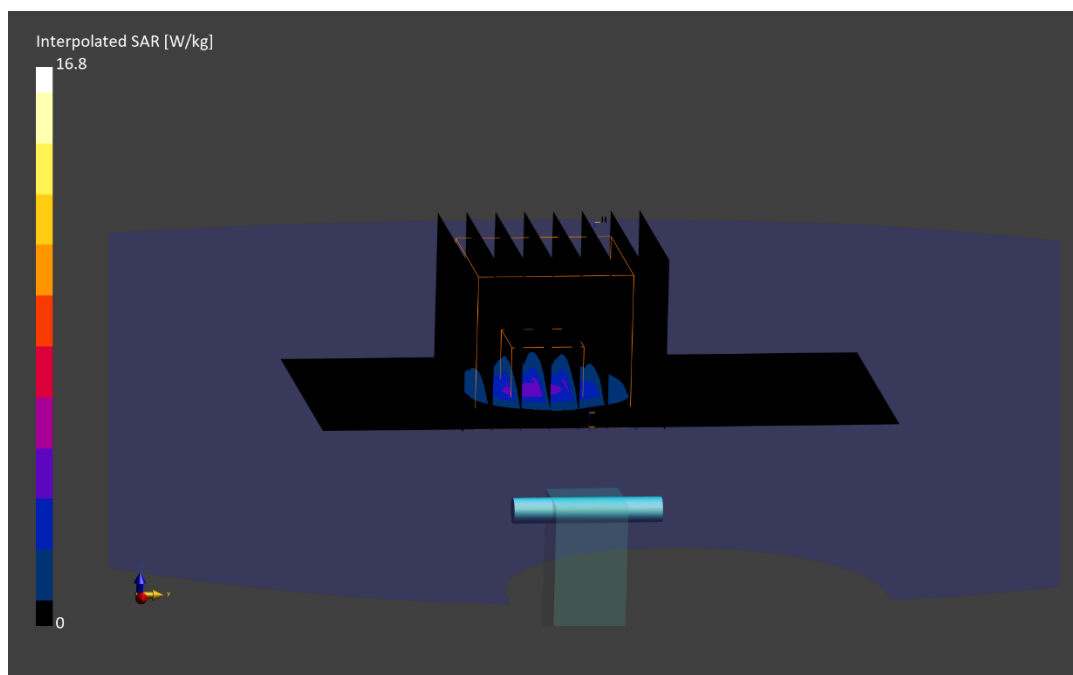
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 16.8 W/kg

SAR(1 g) = 3.97 W/kg; SAR(10 g) = 1.15 W/kg

Deviation (1 g) = -5.70%; Deviation (10 g) = -3.77%



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 = 5.21 S/m; perm = 35.3; density = 1000 kg/m3
Phantom Section: Flat; Space: 10 mm

Test Date: 01/29/2024; Ambient Temp: 19.1°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7803; ConvF:(4.51,4.6,4.55); 2024-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1533; 2024-01-09
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)

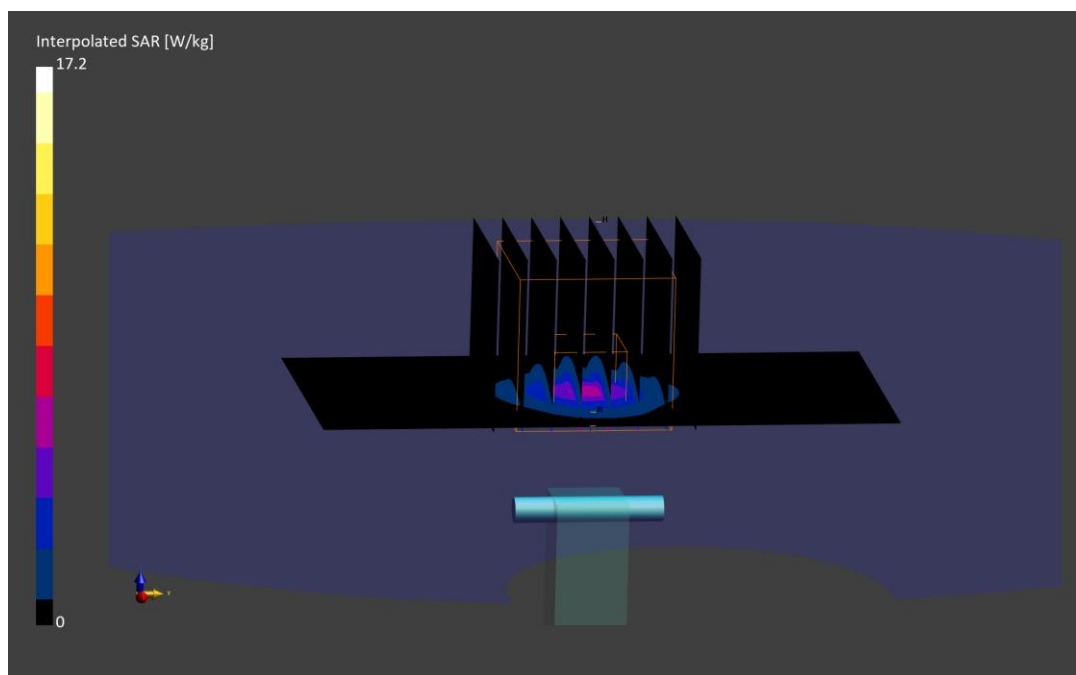
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 17.2 W/kg

SAR(1 g) = 4.36 W/kg; SAR(10 g) = 1.26 W/kg

Deviation (1 g) = 8.32%; Deviation (10 g) = 8.62%



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1057

Communication System: UID: 0, CW; Frequency: 5750.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.0 MHz; cond = 5.04 S/m; perm = 35.1; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/09/2024; Ambient Temp: 21.6°C; Tissue Temp: 21.8°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)

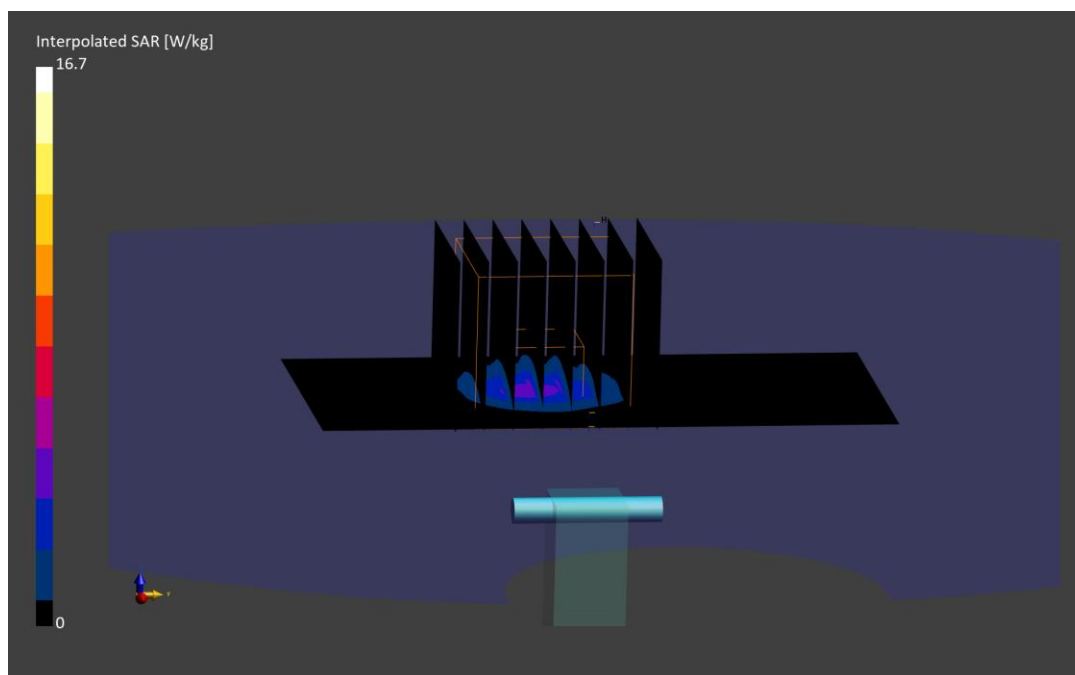
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 16.7 W/kg

SAR(1 g) = 3.87 W/kg; SAR(10 g) = 1.13 W/kg

Deviation (1 g) = -4.21%; Deviation (10 g) = -1.31%



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 = 5.41 S/m; perm = 35.0; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/29/2024; Ambient Temp: 19.1°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7803; ConvF:(4.68,4.79,4.72); 2024-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1533; 2024-01-09
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)

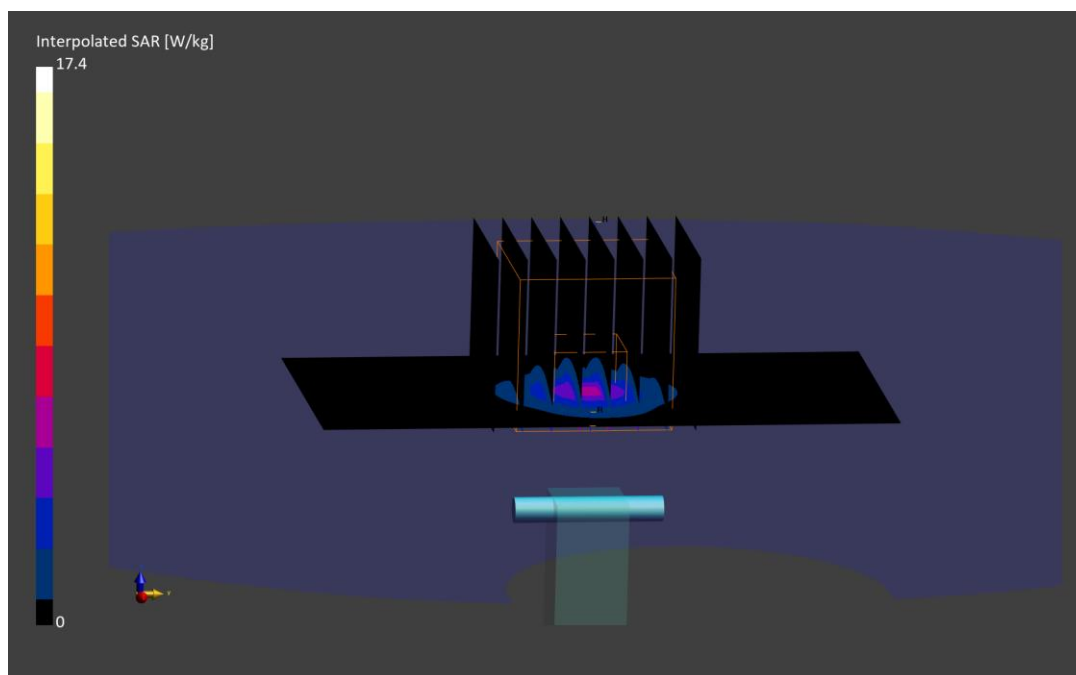
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 17.4 W/kg

SAR(1 g) = 4.27 W/kg; SAR(10 g) = 1.22 W/kg

Deviation (1 g) = 8.24%; Deviation (10 g) = 8.93%



ELEMENT

DUT: Dipole 5800.0 MHz; Type: D5GHzV2 - SN1057

Communication System: UID: 0, CW; Frequency: 5800.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5800.0 MHz; cond = 5.13 S/m; perm = 34.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/09/2024; Ambient Temp: 21.6°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7417; ConvF:(4.88,4.88,4.88); 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

5800.0 MHz System Verification at 17.0 dBm (50 mW)

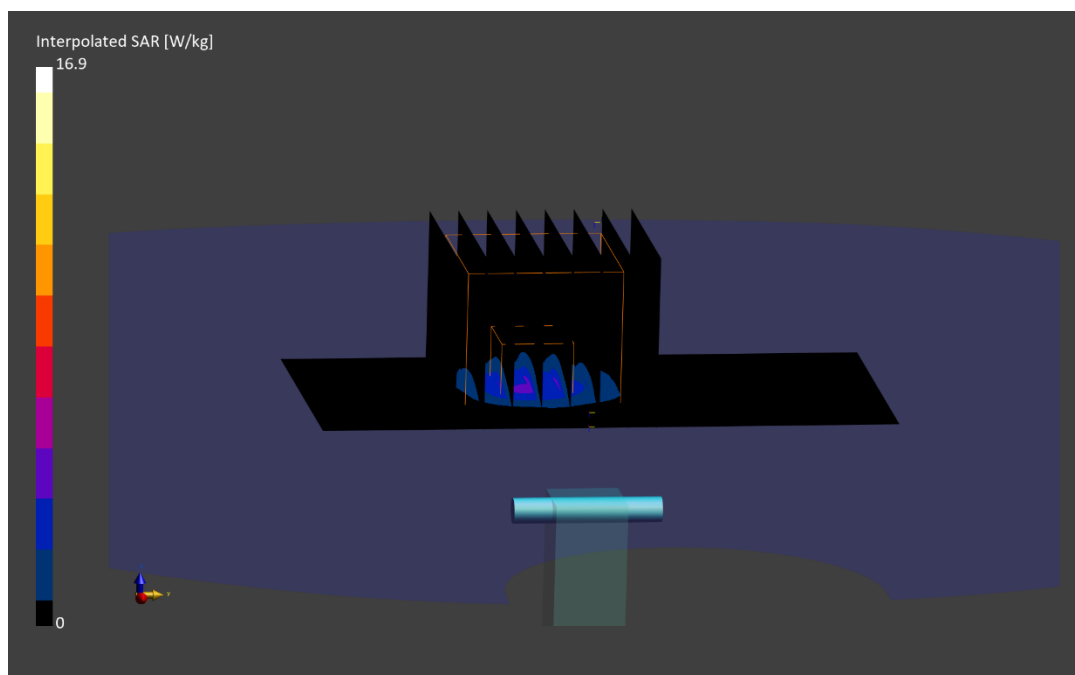
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 3.84 W/kg; SAR(10 g) = 1.11 W/kg

Deviation (1 g) = -6.46%; Deviation (10 g) = -3.48%



ELEMENT

DUT: Dipole 5850.0 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5850.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5850.0 MHz; cond = 5.54 S/m; perm = 34.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/29/2024; Ambient Temp: 19.1°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7803; ConvF:(4.52,4.64,4.58); 2024-01-11
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1533; 2024-01-09
Phantom: Twin-SAM V8.0; Serial: 2060
Measurement SW: DASY Module SAR V16.2.0.1425

5850.0 MHz System Verification at 17.0 dBm (50 mW)

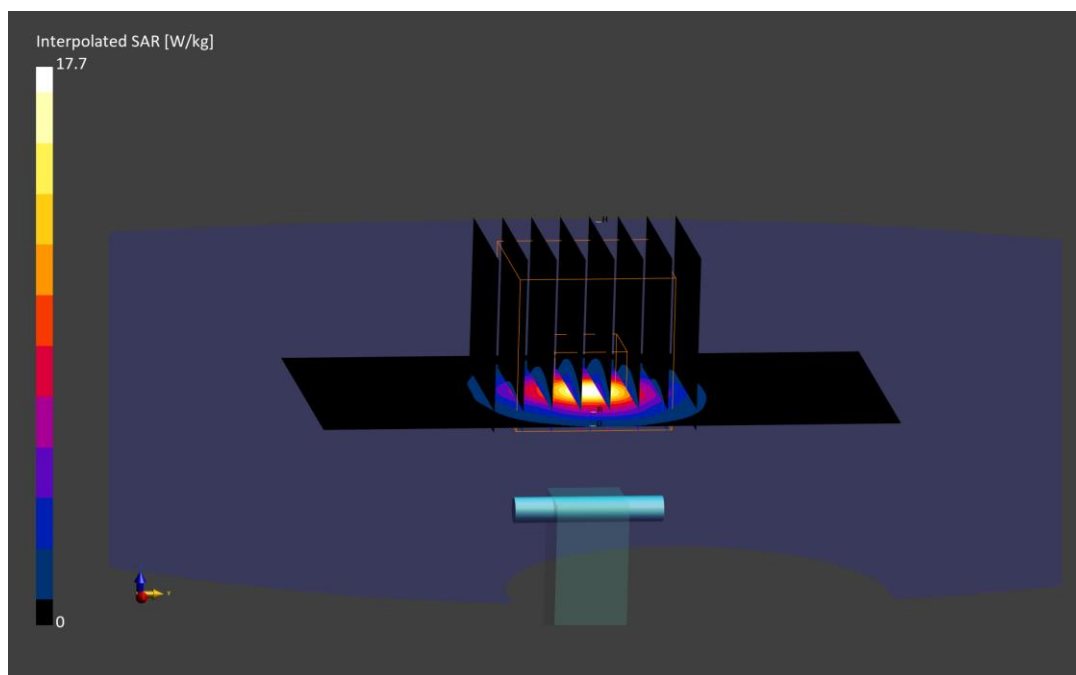
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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) = 17.7 W/kg

SAR(1 g) = 4.26 W/kg; SAR(10 g) = 1.21 W/kg

Deviation (1 g) = 8.12%; Deviation (10 g) = 7.56%



ELEMENT

DUT: Dipole 6500.0 MHz; Type: D6.5GHzV2 - SN1019

Communication System: UID: 0, CW; Frequency: 6500.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.0 MHz; cond = 6.05 S/m; perm = 34.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 01/17/2024; Ambient Temp: 22.7°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7718; ConvF:(5.15,5.15,5.15); 2023-04-18
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1368; 2023-04-14
Phantom: Twin-SAM V5.0; Serial: 1759
Measurement SW: DASY Module SAR V16.2.0.1425

6500.0 MHz System Verification at 14.0 dBm (25 mW)

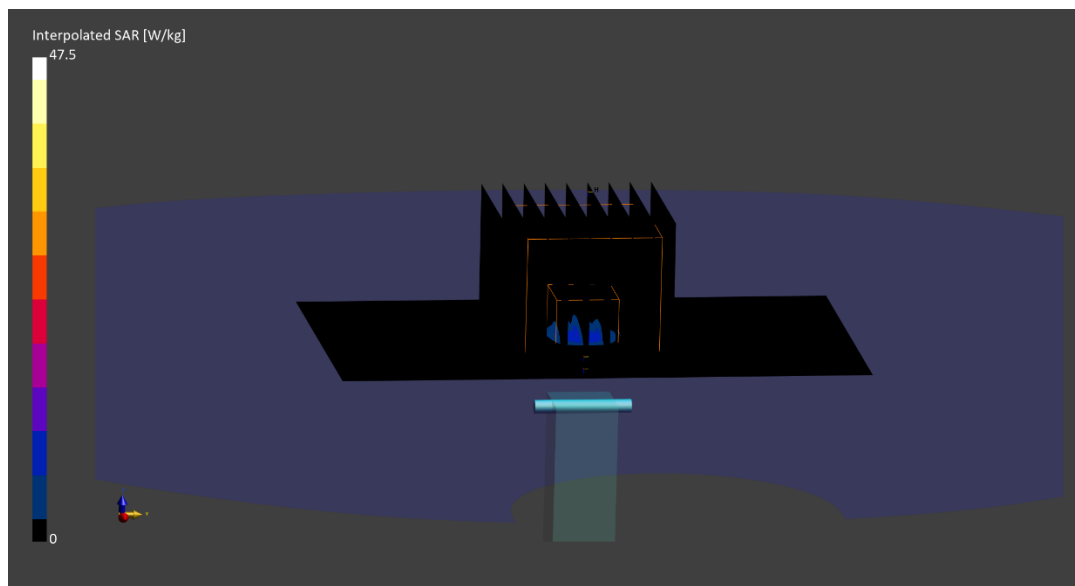
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: dx=3.4 mm, dy=3.4 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 47.5 W/kg

SAR(1 g) = 7.45 W/kg; SAR(10 g) = 1.36 W/kg

Deviation (1 g) = 1.71%; Deviation (10 g) = 0.55%



ELEMENT

DUT: Dipole 6500.000 MHz; Type: D6.5GHzV2 - SN1018

Communication System: UID: 0, CW; Frequency: 6500.000 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.000 MHz; cond = 5.98 S/m; perm = 33.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 01/26/2024; Ambient Temp: 22.9°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7410; ConvF:(5.55,5.55,5.55); 2023-07-07
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4ip Sn1638; 2023-10-18
Phantom: Twin-SAM V8.0; Serial: 1979
Measurement SW: DASY Module SAR V16.2.4.2524

6500.0 MHz System Verification at 14.0 dBm (25 mW)

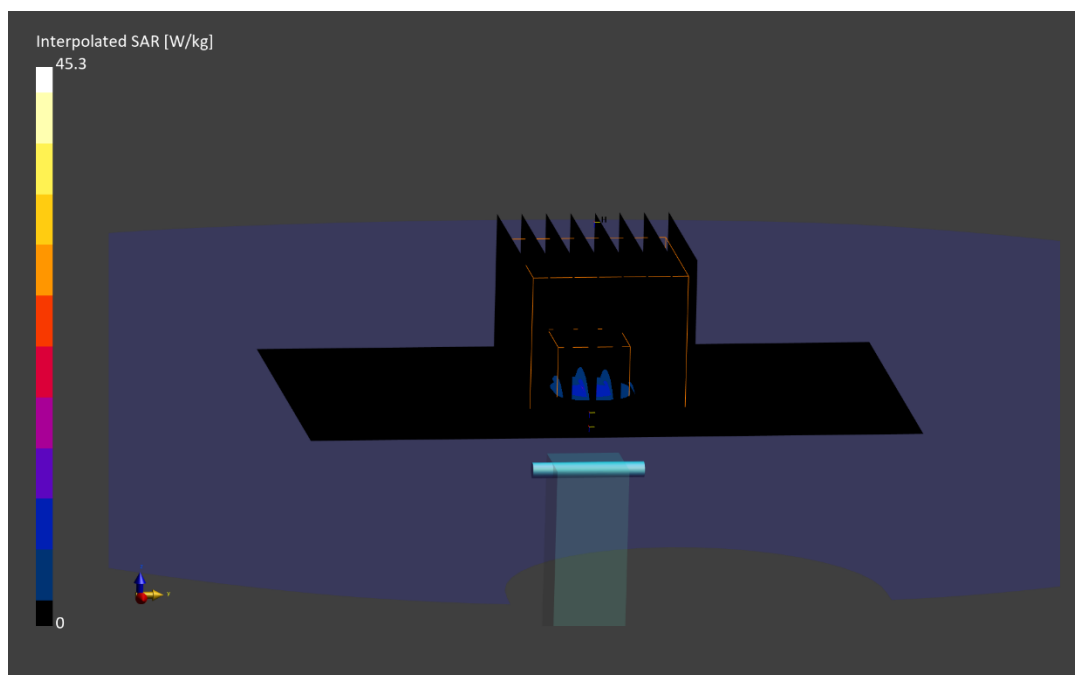
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: dx=3.4 mm, dy=3.4 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 45.3 W/kg

SAR(1 g) = 7.04 W/kg; SAR(10 g) = 1.28 W/kg

Deviation (1 g) = -3.89%; Deviation (10 g) = -5.01%



ELEMENT

DUT: Dipole 8000.000 MHz; Type: D8GHzV2 - SN1006

Communication System: UID: 0, CW; Frequency: 8000.000 MHz
Medium: 6000 Head; Medium parameters used:
f = 8000.000 MHz; cond = 8.19 S/m; perm = 31.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 02/01/2024; Ambient Temp: 21.1°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7410; ConvF:(5.65,5.65,5.65); 2023-07-07
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4ip Sn1638; 2023-10-18
Phantom: Twin-SAM V8.0; Serial: 1979
Measurement SW: DASY Module SAR V16.2.4.2524

8000.0 MHz System Verification at 14.0 dBm (25 mW)

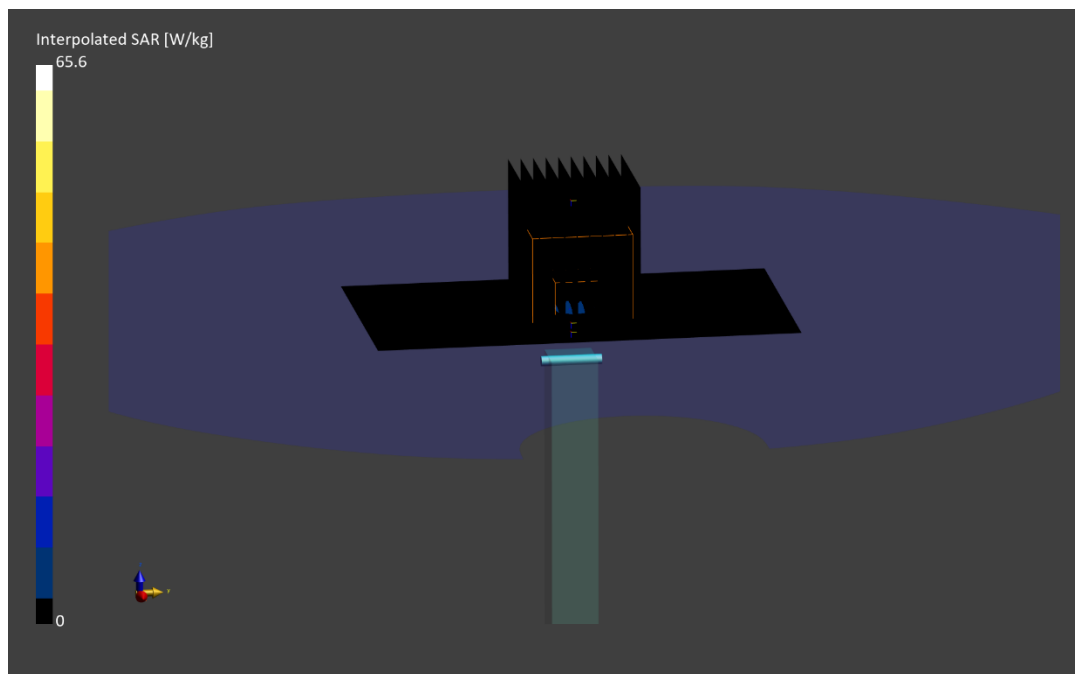
Area Scan (52.0 x 91.0): Measurement grid: dx=6.5 mm, dy=6.5 mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: dx=2.7 mm, dy=2.7 mm, dz=1.3 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 65.6 W/kg

SAR(1 g) = 7.07 W/kg; SAR(10 g) = 1.17 W/kg

Deviation (1 g) = 4.74%; Deviation (10 g) = 3.08%



Date: 2023-01-16

10 GHz System Verification

Device Under Test Properties

DUT	Serial Number	DUT Type
10 GHz Verification Source		Phone

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 – SN9622_F1–55GHz, 2023-02-15	DAE4 Sn1415, 2023-02-15

Software Setup

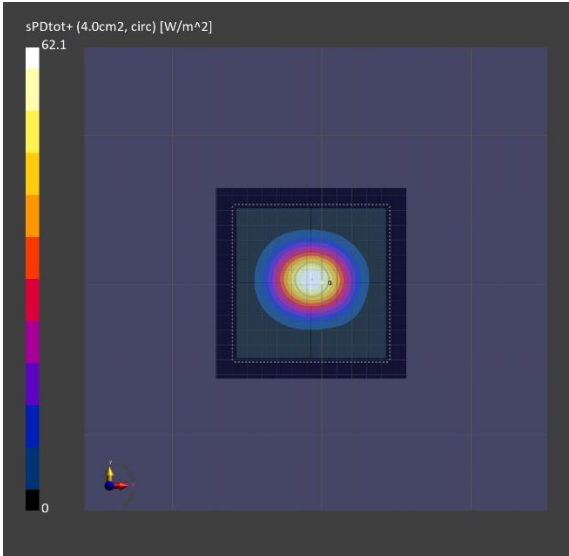
Software	Software Version
cDasy6 Module mmWave	3.2.0.1840

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m²]	62.1
pS _n avg [W/m²]	61.8
E _{peak} [V/m]	163
Power Drift [dB]	0.03



Date: 2024-02-01

Measurement Group

Device Under Test Properties

DUT	Serial Number	DUT Type
10 GHz Verification Source	1004	Phone
		10 GHz Verification Source

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Channel	Group, UID	Frequency [MHz]
5G	FRONT	10.00	10000	0	10000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 – SN9389, 2024-01-05	DAE4 – SN1415, 2023-02-15

Software Setup

Software	Software Version
cDASY6 Module mmWave	3.2.0.1840

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m²]	48.7
pS _n avg [W/m²]	48.5
E _{peak} [V/m]	144
Power Drift [dB]	0.06

