

APPENDIX B: SYSTEM VERIFICATION

ELEMENT

DUT: Dipole 750.0 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.0 MHz
Medium: 750 Head; Medium parameters used:
 $f = 750.0$ MHz; Cond = 0.869 S/m; Perm = 40.1; Density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 08/03/2022; Ambient Temp: 21.4°C; Tissue Temp: 19.6°C

Probe: EX3DV4 - SN7499; ConvF:(10.23,10.23,10.23); Calibrated: 2022-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1465; Calibrated: 2022-04-13
Phantom: Twin-SAM V8.0; Serial: 1935
Measurement SW: DASY Module SAR V16.0.2.136

750 MHz System Verification at 23 dBm (200 mW)

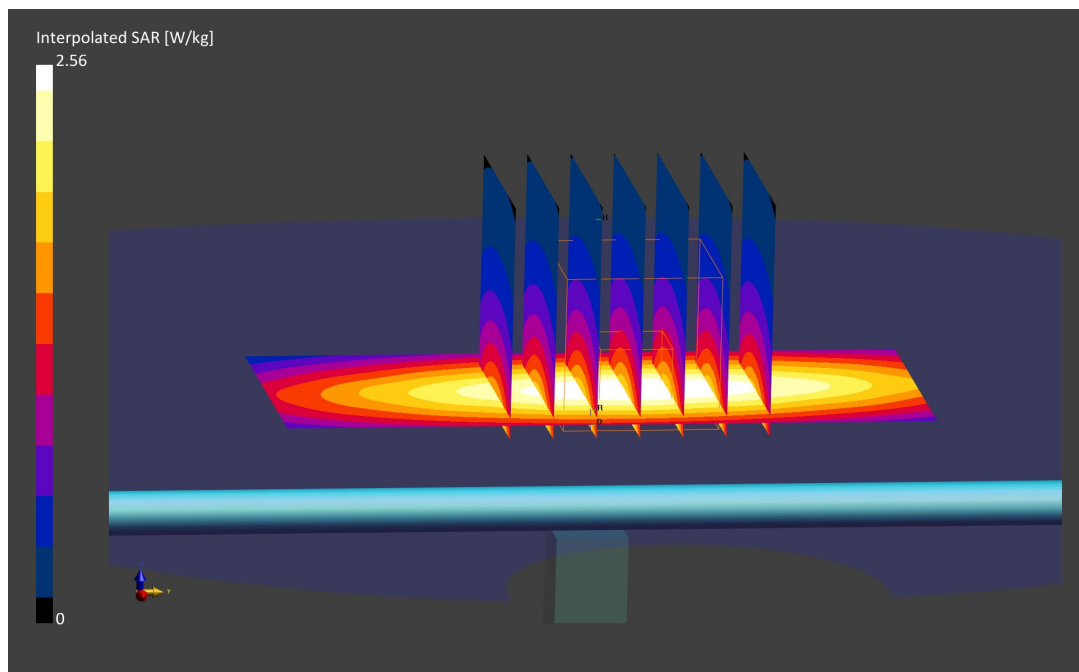
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.56 W/kg

SAR(10 g) = 1.11 W/kg

Deviation (10 g) = 3.93%;



ELEMENT

DUT: Dipole 750.0 MHz; Type: D750V3 - SN1094

Communication System: UID: 0, CW; Frequency: 750.0 MHz
Medium: 750 Head; Medium parameters used:
 $f = 750.0$ MHz; Cond = 0.905 S/m; Perm = 42.3; Density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 08/04/2022; Ambient Temp: 21.9°C; Tissue Temp: 22.9°C

Probe: EX3DV4 - SN7357; ConvF:(10.17,10.17,10.17); Calibrated: 2022-04-21
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1582; Calibrated: 2022-04-13
Phantom: Twin-SAM V8.0; Serial: 1917
Measurement SW: DASY Module SAR V16.0.2.136

750 MHz System Verification at 23 dBm (200 mW)

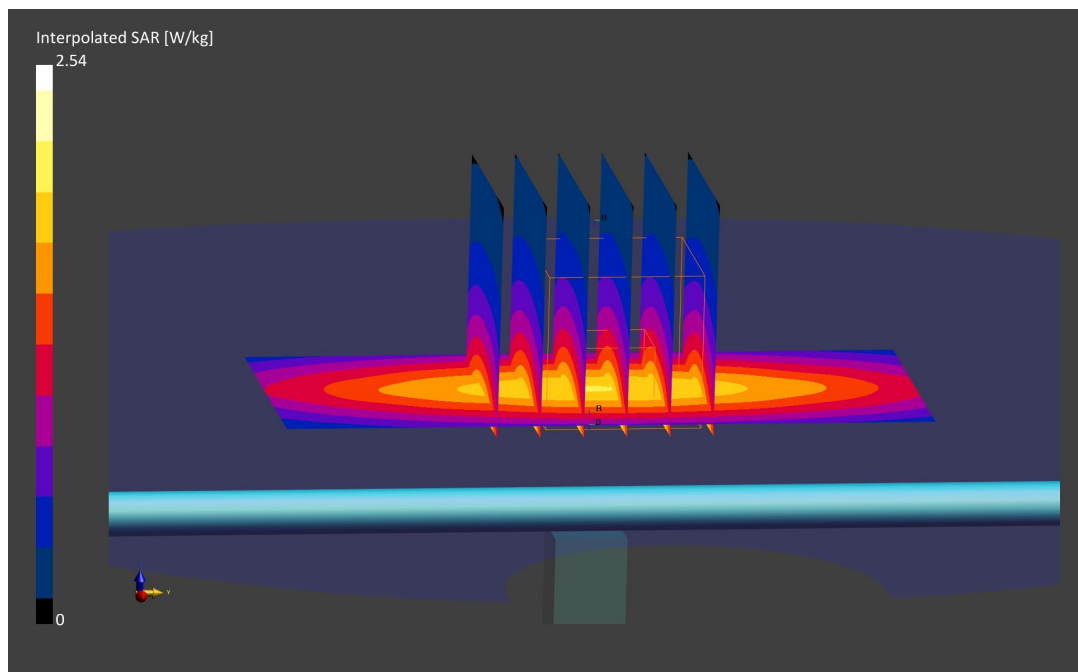
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.54 W/kg

SAR(1 g) = 1.67 W/kg

Deviation (1 g) = -1.42%



ELEMENT

DUT: Dipole 750.0 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.0 MHz
Medium: 750 Head; Medium parameters used:
 $f = 750.0$ MHz; Cond = 0.911 S/m; Perm = 40.3; Density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 08/05/2022; Ambient Temp: 24.2°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7499; ConvF:(10.23,10.23,10.23); Calibrated: 2022-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1465; Calibrated: 2022-04-13
Phantom: Twin-SAM V8.0; Serial: 1935
Measurement SW: DASY Module SAR V16.0.2.136

750 MHz System Verification at 23 dBm (200 mW)

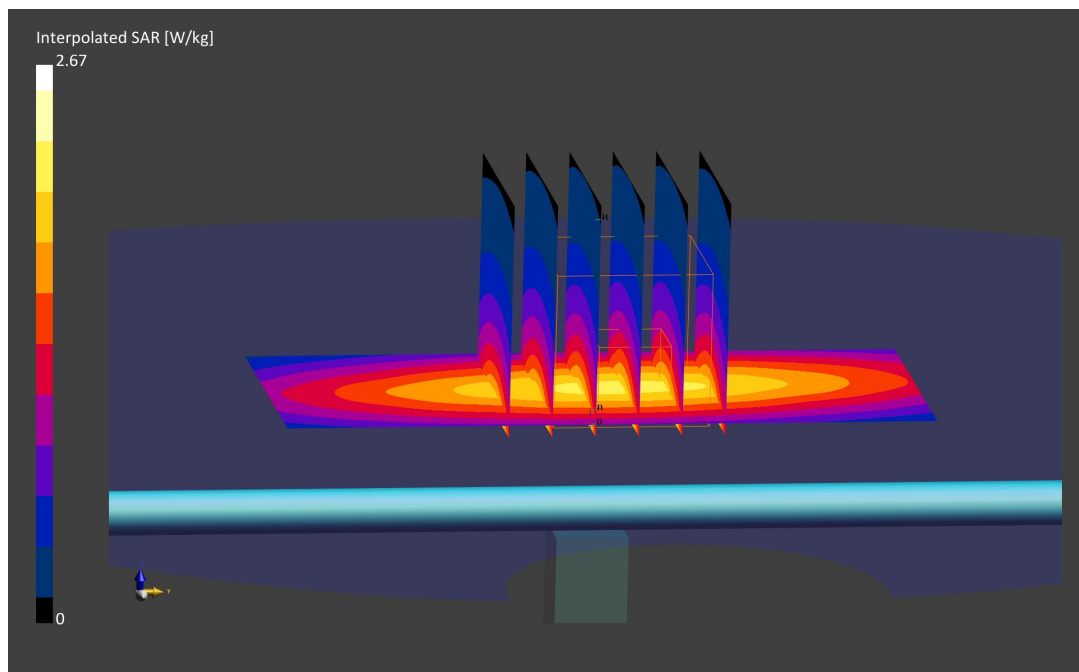
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.67 W/kg

SAR(10 g) = 1.11 W/kg

Deviation (10 g) = 3.00%;



ELEMENT

DUT: Dipole 750.0 MHz; Type: D750V3 - SN1097

Communication System: UID: 0, CW; Frequency: 750.0 MHz
Medium: 750 Head; Medium parameters used:
 $f = 750.0$ MHz; Cond = 0.906 S/m; Perm = 42.0; Density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 08/07/2022; Ambient Temp: 21.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7532; ConvF:(10.95,10.95,10.95); Calibrated: 2022-04-22
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2022-04-13
Phantom: Twin-SAM V8.0; Serial: 1357
Measurement SW: DASY Module SAR V16.0.2.136

750 MHz System Verification at 23 dBm (200 mW)

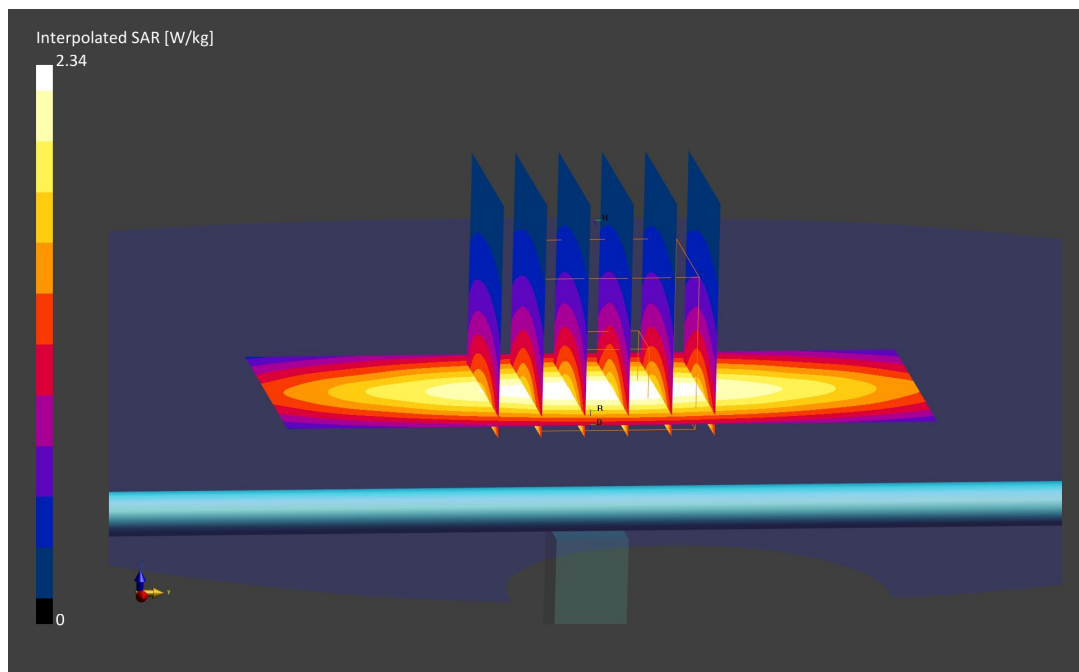
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 2.34 W/kg

SAR(1 g) = 1.56 W/kg

Deviation (1 g) = -4.99%



ELEMENT

DUT: Dipole 835.0 MHz; Type: D835V2 - SN4d108

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 = 40.1; Density = 1000 kg/m³
Phantom Section: Flat; Space: 15 mm

Test Date: 08/01/2022; Ambient Temp: 21.4°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7499; ConvF:(9.94,9.94,9.94); Calibrated: 2022-04-19
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1465; Calibrated: 2022-04-13
Phantom: Twin-SAM V8.0; Serial: 1935
Measurement SW: DASY Module SAR V16.0.2.136

835 MHz System Verification at 23 dBm (200 mW)

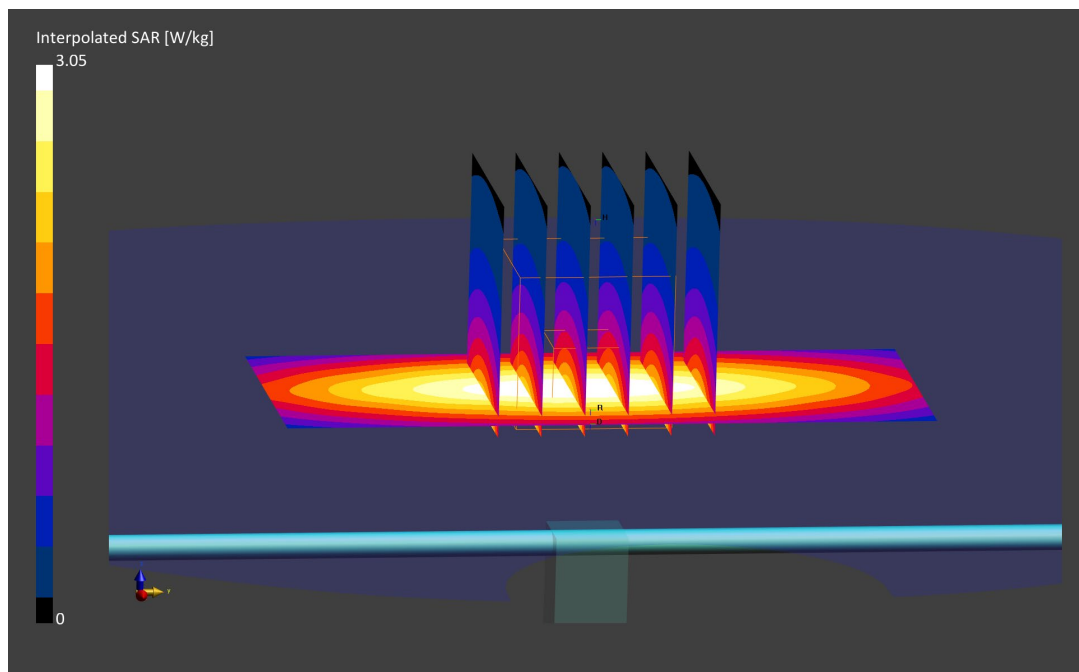
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 3.05 W/kg

SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.28 W/kg

Deviation (1 g) = 1.55%; Deviation (10 g) = 1.11%;



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1104

Communication System: UID: 0, CW; Frequency: 1750.0 MHz
 Medium: 1750 Head; Medium parameters used:
 $f = 1750.0$ MHz; Cond = 1.40 S/m; Perm = 38.8; Density = 1000 kg/m³
 Phantom Section: Flat; Space: 10 mm

Test Date: 06/21/2022; Ambient Temp: 21.8°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7360; ConvF:(9.0,9.0,9.0); Calibrated: 2022-03-21
 Sensor-Surface: 1.4mm (VMS + 6p)
 Electronics: DAE4 Sn534; Calibrated: 2022-03-21
 Phantom: Twin-SAM V8.0; Serial: 1866
 Measurement SW: DASY Module SAR V16.0.2.136

1750 MHz System Verification at 20 dBm (100 mW)

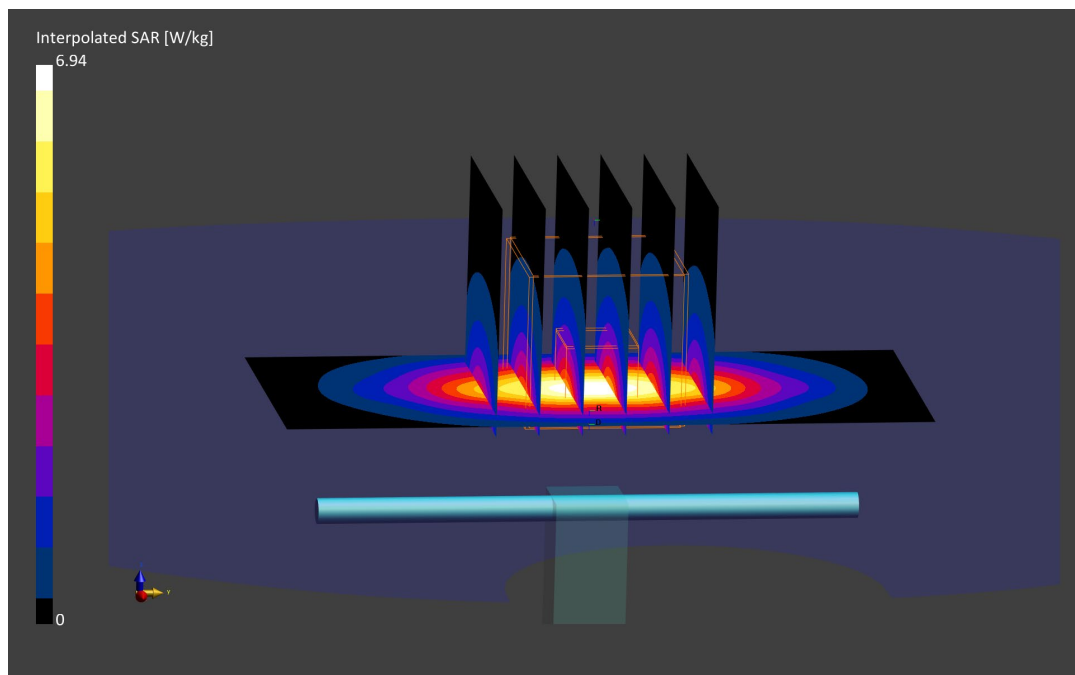
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 6.94 W/kg

SAR(1 g) = 3.70 W/kg

Deviation (1 g) = 3.64%



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1104

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 = 38.6; Density = 1000 kg/m^3
Phantom Section: Flat; Space: 10 mm

Test Date: 06/24/2022; Ambient Temp: 20.8°C ; Tissue Temp: 18.6°C

Probe: EX3DV4 - SN7360; ConvF:(9.0,9.0,9.0); Calibrated: 2022-03-21
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn534; Calibrated: 2022-03-21
Phantom: Twin-SAM V8.0; Serial: 1866
Measurement SW: DASY Module SAR V16.0.2.136

1750 MHz System Verification at 20 dBm (100 mW)

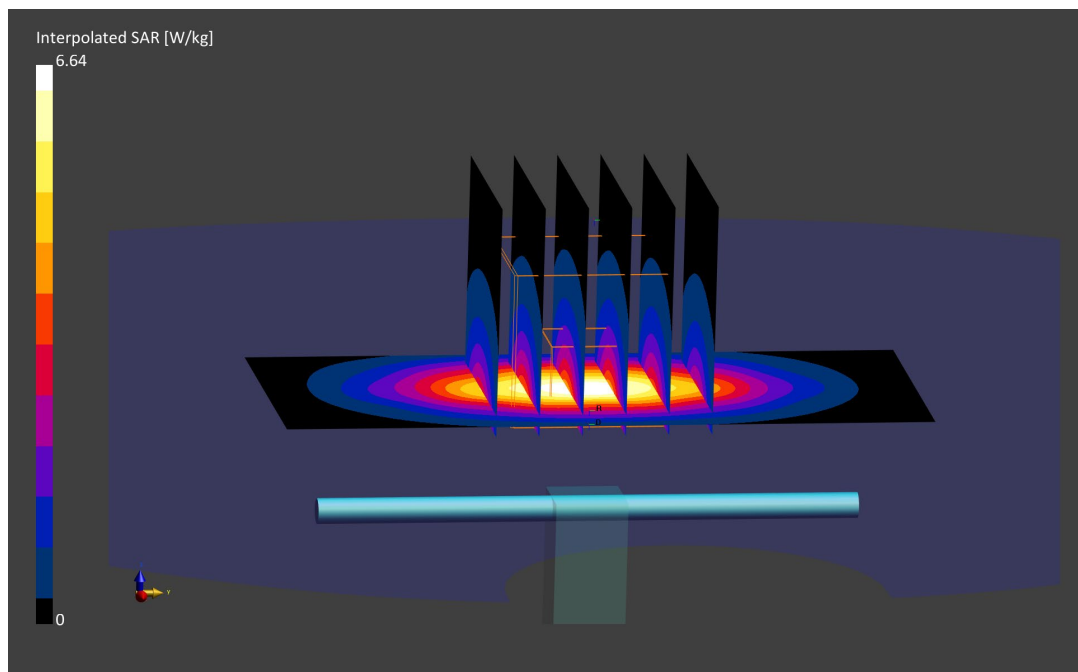
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 6.64 W/kg

SAR(1 g) = 3.44 W/kg; SAR(10 g) = 1.81 W/kg

Deviation (1 g) = -3.64%; Deviation (10 g) = -3.72%;



ELEMENT

DUT: Dipole 1750.0 MHz; Type: D1750V2 - SN1104

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 = 38.6; Density = 1000 kg/m^3
Phantom Section: Flat; Space: 10 mm

Test Date: 08/07/2022; Ambient Temp: 23.4°C ; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7360; ConvF:(9.0,9.0,9.0); Calibrated: 2022-03-21
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn534; Calibrated: 2022-03-21
Phantom: Twin-SAM V8.0; Serial: 1866
Measurement SW: DASY Module SAR V16.0.2.136

1750 MHz System Verification at 20 dBm (100 mW)

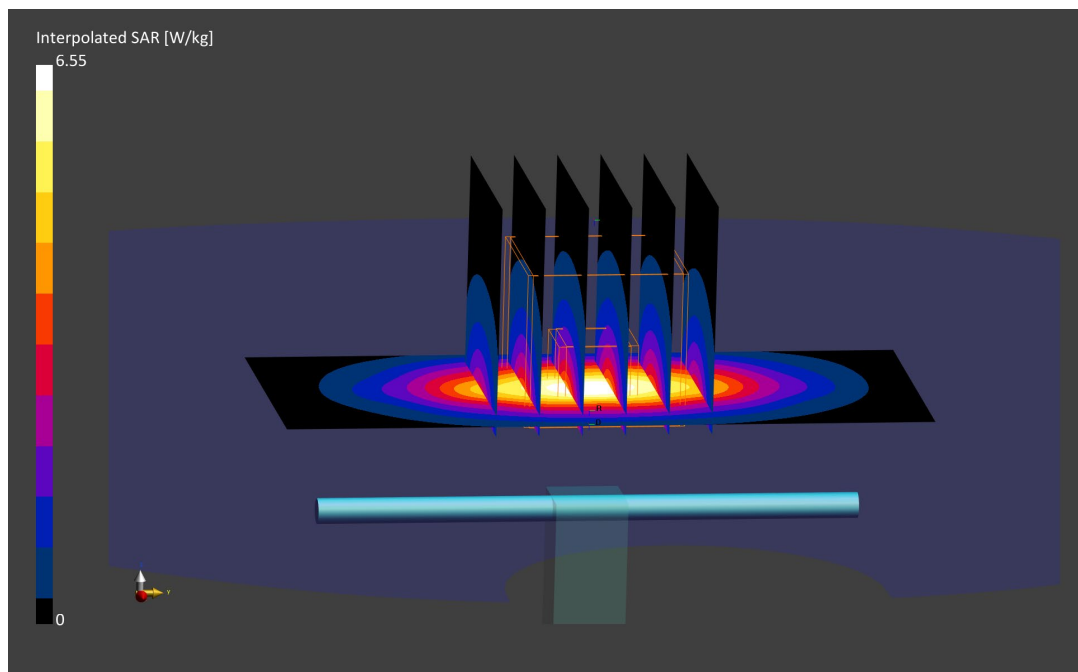
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

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) = 6.55 W/kg

SAR(10 g) = 1.78 W/kg

Deviation (10 g) = -5.32% ;



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d181

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 = 40.0; Density = 1000 kg/m^3

Phantom Section: Flat; Space: 10 mm

Test Date: 06/15/2022; Ambient Temp: 21.9°C ; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7308; ConvF:(8.27,8.27,8.27); Calibrated: 2022-02-21

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

Electronics: DAE4 Sn467; Calibrated: 2022-02-24

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: DASY Module SAR V16.0.2.136

1900 MHz System Verification at 20 dBm (100 mW)

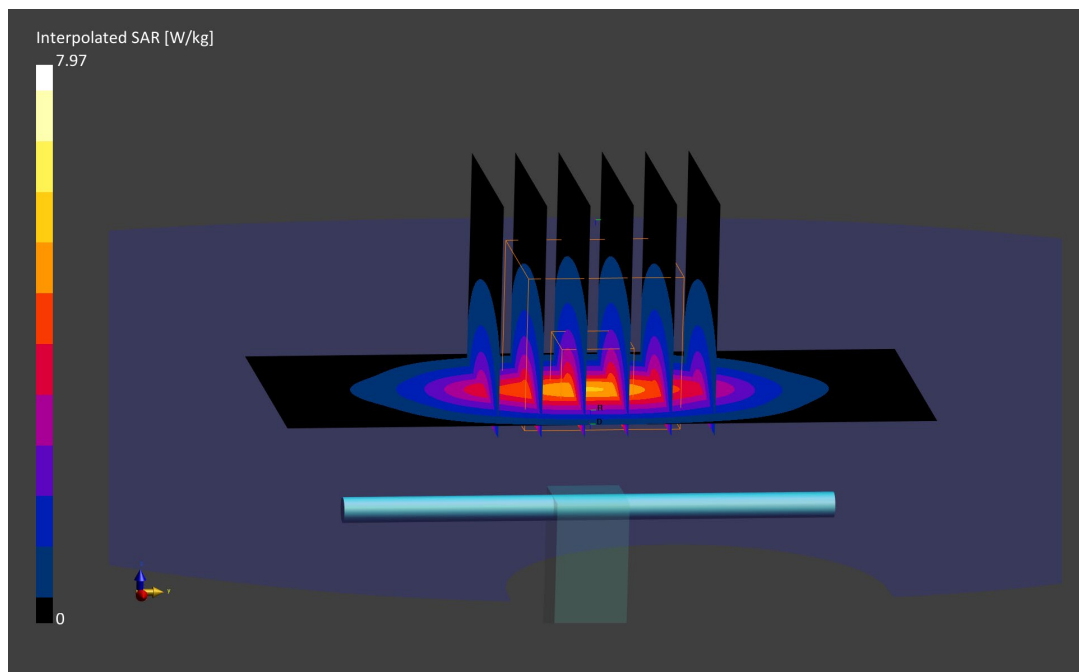
Area Scan (40.0 x 90.0): Measurement grid: $dx=10.0$ mm, $dy=15.0$ mm

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) = 7.97 W/kg

SAR(1 g) = 4.15 W/kg ; SAR(10 g) = 2.14 W/kg

Deviation (1 g) = 3.49%; Deviation (10 g) = 2.88%;



ELEMENT

DUT: Dipole 1900.0 MHz; Type: D1900V2 - SN5d181

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

Medium: 1900 Head; Medium parameters used:

$f = 1900.0$ MHz; Cond = 1.42 S/m; Perm = 38.3; Density = 1000 kg/m^3

Phantom Section: Flat; Space: 10 mm

Test Date: 08/05/2022; Ambient Temp: 23.2°C ; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7360; ConvF:(8.69,8.69,8.69); Calibrated: 2022-03-21

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

Electronics: DAE4 Sn534; Calibrated: 2022-03-21

Phantom: Twin-SAM V8.0; Serial: 1866

Measurement SW: DASY Module SAR V16.0.2.136

1900 MHz System Verification at 20 dBm (100 mW)

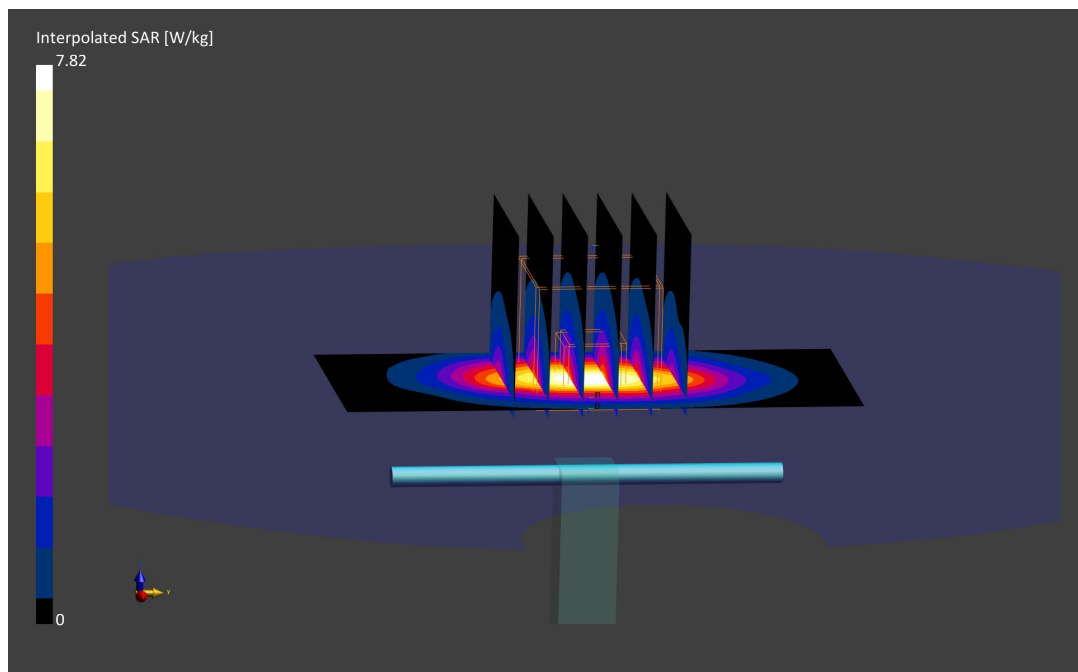
Area Scan (40.0 x 90.0): Measurement grid: dx=10.0 mm, dy=15.0 mm

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) = 7.82 W/kg

SAR(10 g) = 1.94 W/kg

Deviation (10 g) = -6.73%;



ELEMENT

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN855

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

Medium: 2450 Head; Medium parameters used:

$f = 2450.0$ MHz; Cond = 1.89 S/m; Perm = 40.0; Density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 06/14/2022; Ambient Temp: 20.8°C; Tissue Temp: 23°C

Probe: EX3DV4 - SN7420; ConvF:(7.46,7.46,7.46); Calibrated: 2021-10-27

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

Electronics: DAE4 Sn1237; Calibrated: 2021-11-18

Phantom: Twin-SAM V4.0; Serial: 1598

Measurement SW: DASY Module SAR V16.0.2.136

2450 MHz System Verification at 20 dBm (100 mW)

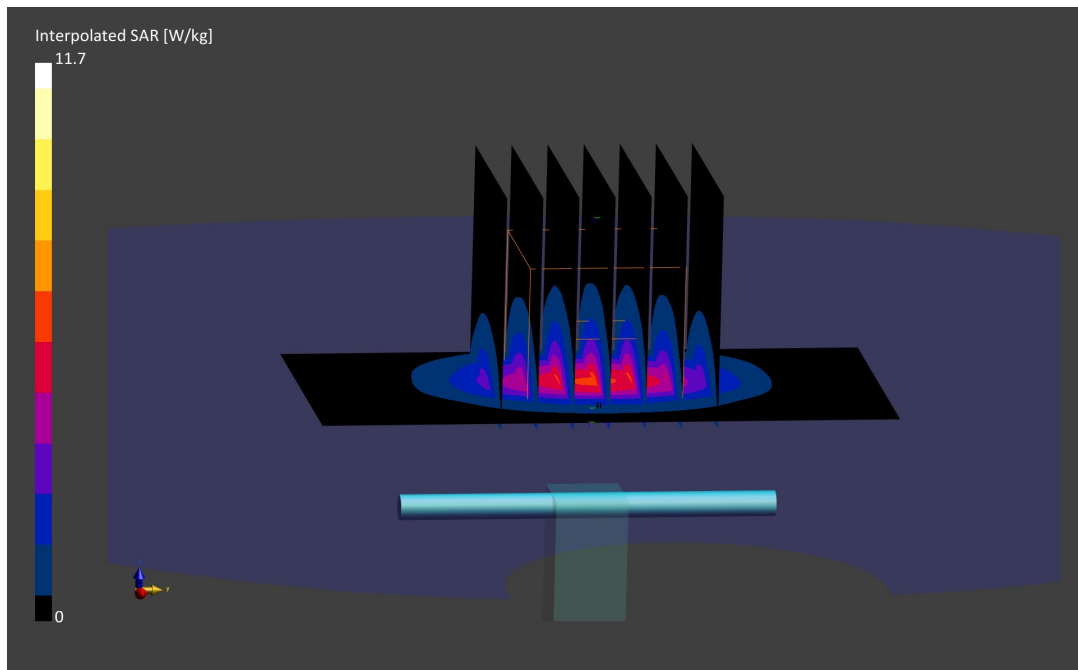
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 11.7 W/kg

SAR(1 g) = 5.13 W/kg; SAR(10 g) = 2.30 W/kg

Deviation (1 g) = -1.91%%; Deviation (10 g) = -6.12%;



ELEMENT

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN921

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 = 38.0; Density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 08/02/2022; Ambient Temp: 21.6°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7308; ConvF:(7.94,7.94,7.94); Calibrated: 2022-02-21

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

Electronics: DAE4 Sn467; Calibrated: 2022-02-24

Phantom: Twin-SAM V8.0; Serial: 2029

Measurement SW: DASY Module SAR V16.0.2.136

2450 MHz System Verification at 20 dBm (100 mW)

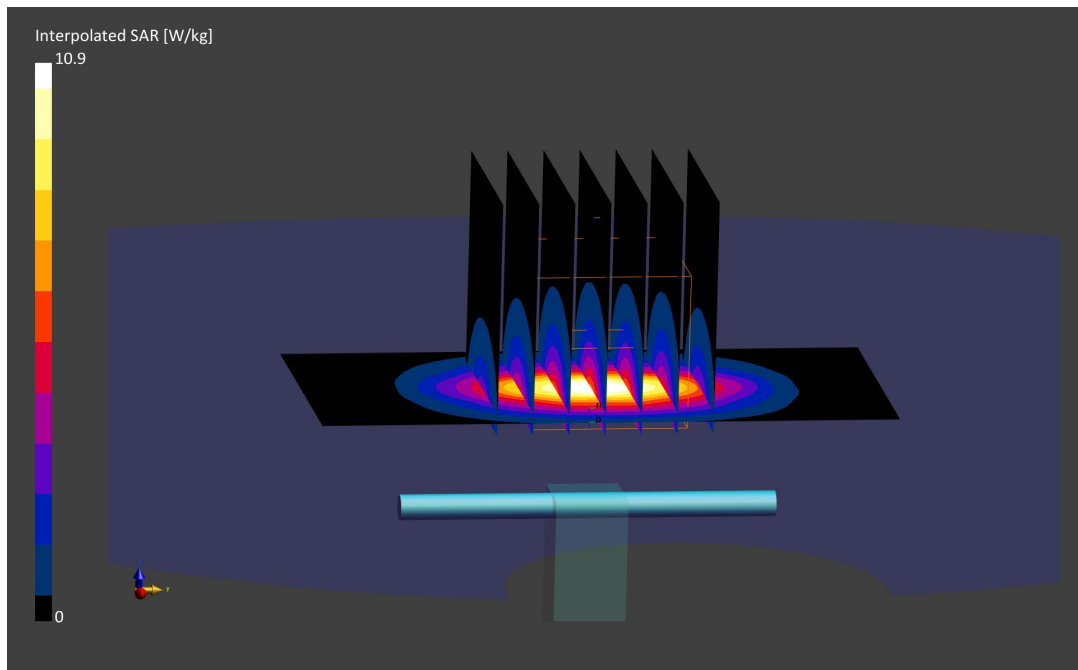
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 10.9 W/kg

SAR(1 g) = 5.13 W/kg; SAR(10 g) = 2.36 W/kg

Deviation (1 g) = -5.35%; Deviation (10 g) = -7.45%;



ELEMENT

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1042

Communication System: UID: 0, CW; Frequency: 2600.0 MHz
 Medium: 2600 Head; Medium parameters used:
 $f = 2600.0$ MHz; Cond = 1.94 S/m; Perm = 39.2; Density = 1000 kg/m^3
 Phantom Section: Flat; Space: 10 mm

Test Date: 06/14/2022; Ambient Temp: 23.4°C ; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7308; ConvF:(7.85,7.85,7.85); Calibrated: 2022-02-21
 Sensor-Surface: 1.4mm (VMS + 6p)
 Electronics: DAE4 Sn467; Calibrated: 2022-02-24
 Phantom: Twin-SAM V8.0; Serial: 2029
 Measurement SW: DASY Module SAR V16.0.2.136

2600 MHz System Verification at 20 dBm (100 mW)

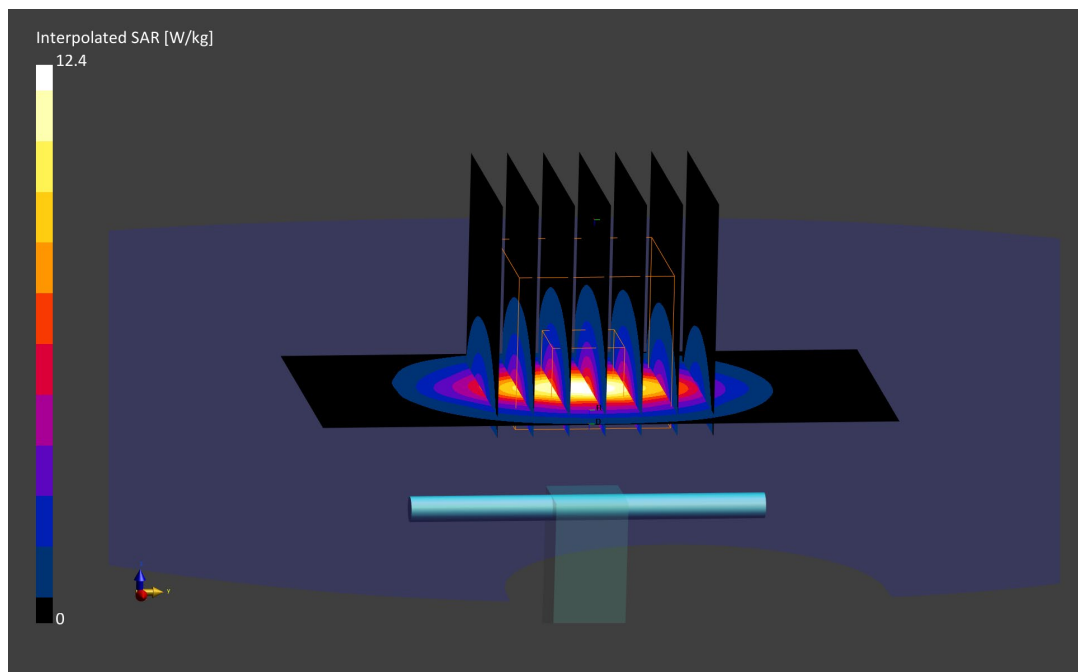
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 12.4 W/kg

SAR(1 g) = 5.70 W/kg; SAR(10 g) = 2.55 W/kg

Deviation (1 g) = 2.15%; Deviation (10 g) = 2.41%;



ELEMENT

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1042

Communication System: UID: 0, CW; Frequency: 2600.0 MHz

Medium: 2600 Head; Medium parameters used:

$f = 2600.0$ MHz; Cond = 1.91 S/m; Perm = 40.2; Density = 1000 kg/m^3

Phantom Section: Flat; Space: 10 mm

Test Date: 06/14/2022; Ambient Temp: 22.8°C ; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN3837; ConvF:(6.98,6.98,6.98); Calibrated: 2022-01-19

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

Electronics: DAE4 Sn793; Calibrated: 2022-01-13

Phantom: Twin-SAM V8.0; Serial: 2034

Measurement SW: DASY Module SAR V16.0.2.136

2600 MHz System Verification at 20 dBm (100 mW)

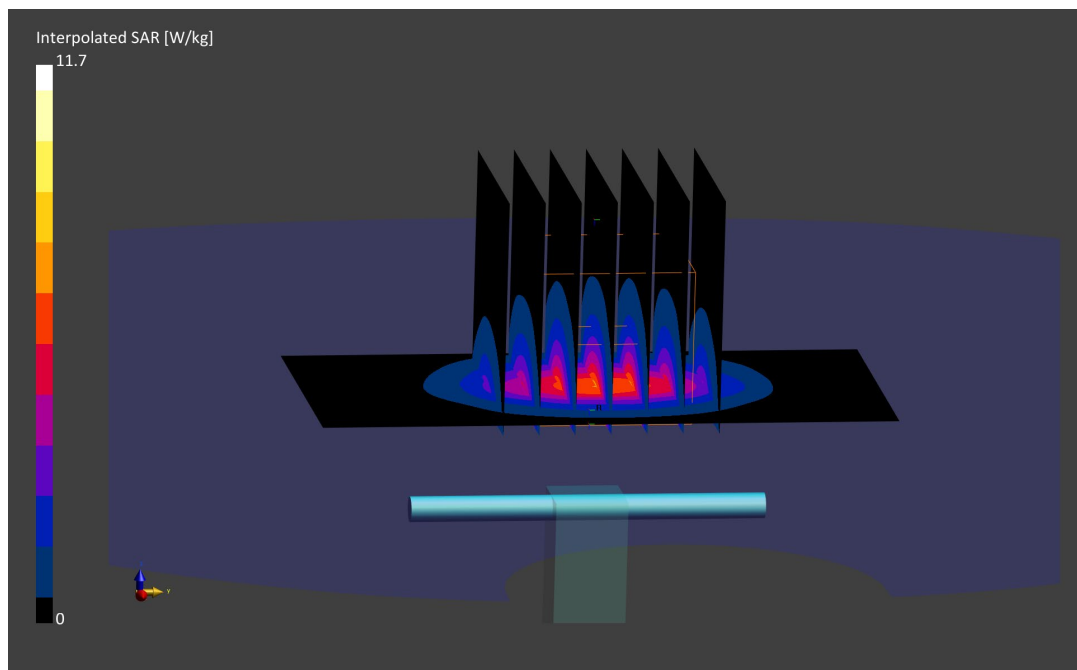
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

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) = 11.7 W/kg

SAR(1 g) = 5.53 W/kg ; SAR(10 g) = 2.52 W/kg

Deviation (1 g) = -0.9% ; Deviation (10 g) = 1.2% ;



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1123

Communication System: UID: 0, CW; Frequency: 5250.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
 $f = 5250.0$ MHz; Cond = 4.56 S/m; Perm = 35.1; Density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 06/15/2022; Ambient Temp: 22.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7638; ConvF:(5.59,5.59,5.59); Calibrated: 2022-03-22
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1408; Calibrated: 2022-03-21
Phantom: Twin-SAM V8.0; Serial: 2027
Measurement SW: DASY Module SAR V16.0.2.136

5250 MHz System Verification at 17 dBm (50 mW)

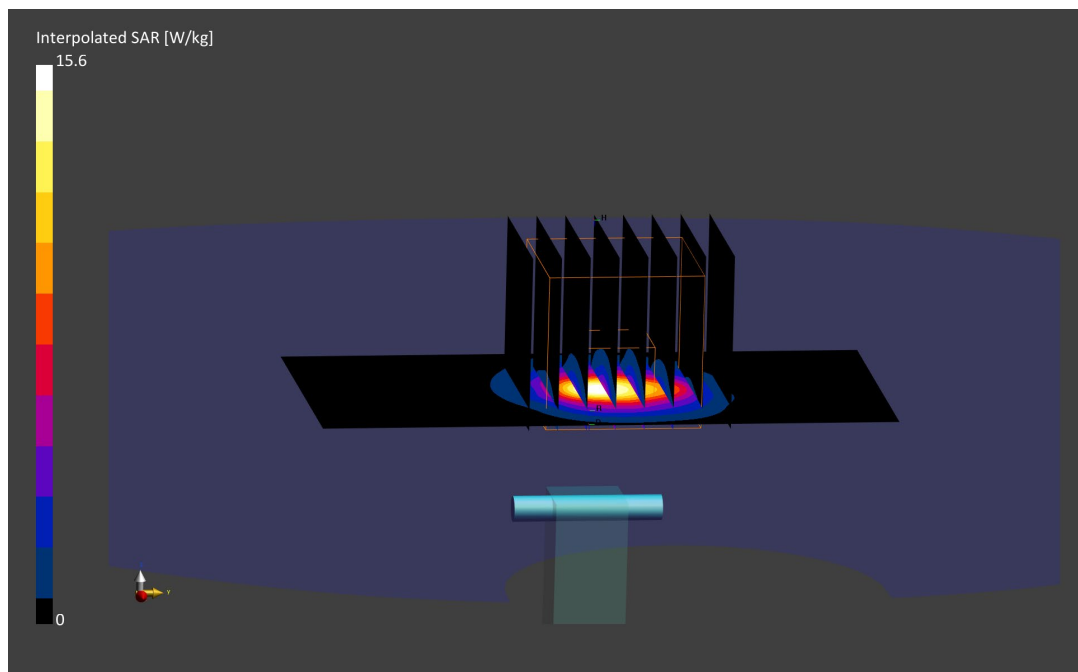
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 4.17 W/kg; SAR(10 g) = 1.20 W/kg

Deviation (1 g) = 3.60%; Deviation (10 g) = 4.80%;



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1123

Communication System: UID: 0, CW; Frequency: 5600.0 MHz
 Medium: 5200-5800 Head; Medium parameters used:
 $f = 5600.0$ MHz; Cond = 4.96 S/m; Perm = 34.6; Density = 1000 kg/m^3
 Phantom Section: Flat; Space: 10 mm

Test Date: 06/15/2022; Ambient Temp: 22.6°C ; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7638; ConvF:(4.96,4.96,4.96); Calibrated: 2022-03-22
 Sensor-Surface: 1.4mm (VMS + 6p)
 Electronics: DAE4 Sn1408; Calibrated: 2022-03-21
 Phantom: Twin-SAM V8.0; Serial: 2027
 Measurement SW: DASY Module SAR V16.0.2.136

5600 MHz System Verification at 17 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) = 3.89 W/kg; SAR(10 g) = 1.10 W/kg

Deviation (1 g) = -7.05%; Deviation (10 g) = -7.17%;



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1123

Communication System: UID: 0, CW; Frequency: 5750.0 MHz
Medium: 5200-5800 Head; Medium parameters used:
 $f = 5750.0$ MHz; Cond = 5.12 S/m; Perm = 34.3; Density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 06/15/2022; Ambient Temp: 22.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7638; ConvF:(5.18,5.18,5.18); Calibrated: 2022-03-22
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1408; Calibrated: 2022-03-21
Phantom: Twin-SAM V8.0; Serial: 2027
Measurement SW: DASY Module SAR V16.0.2.136

5750 MHz System Verification at 17 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) = 15.5 W/kg

SAR(1 g) = 3.78 W/kg; SAR(10 g) = 1.09 W/kg

Deviation (1 g) = -6.09%; Deviation (10 g) = -3.96%;

