

APPENDIX B: SYSTEM VERIFICATION

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

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

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 43.827$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/20/2021; Ambient Temp: 24.8°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7357; ConvF(10.18, 10.18, 10.18) @ 750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

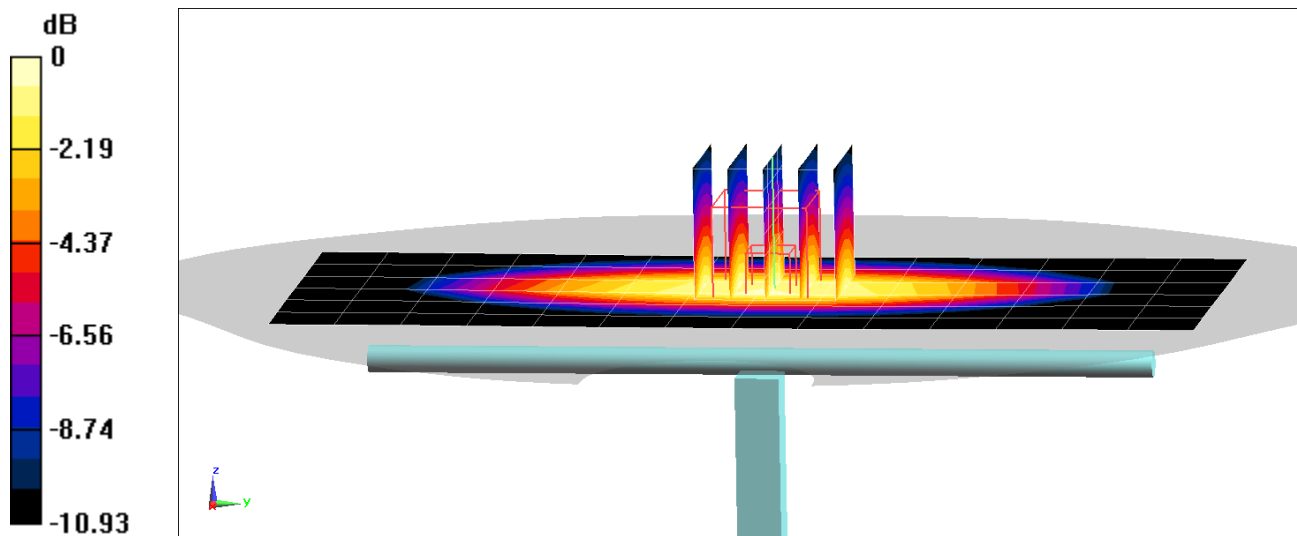
Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.85 W/kg

SAR(1 g) = 1.83 W/kg

Deviation(1 g) = 4.21%



PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133

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

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.932 \text{ S/m}$; $\epsilon_r = 41.465$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06/01/2021; Ambient Temp: 21.7°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7526; ConvF(9.16, 9.16, 9.16) @ 835 MHz; Calibrated: 3/16/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1272; Calibrated: 3/18/2021

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

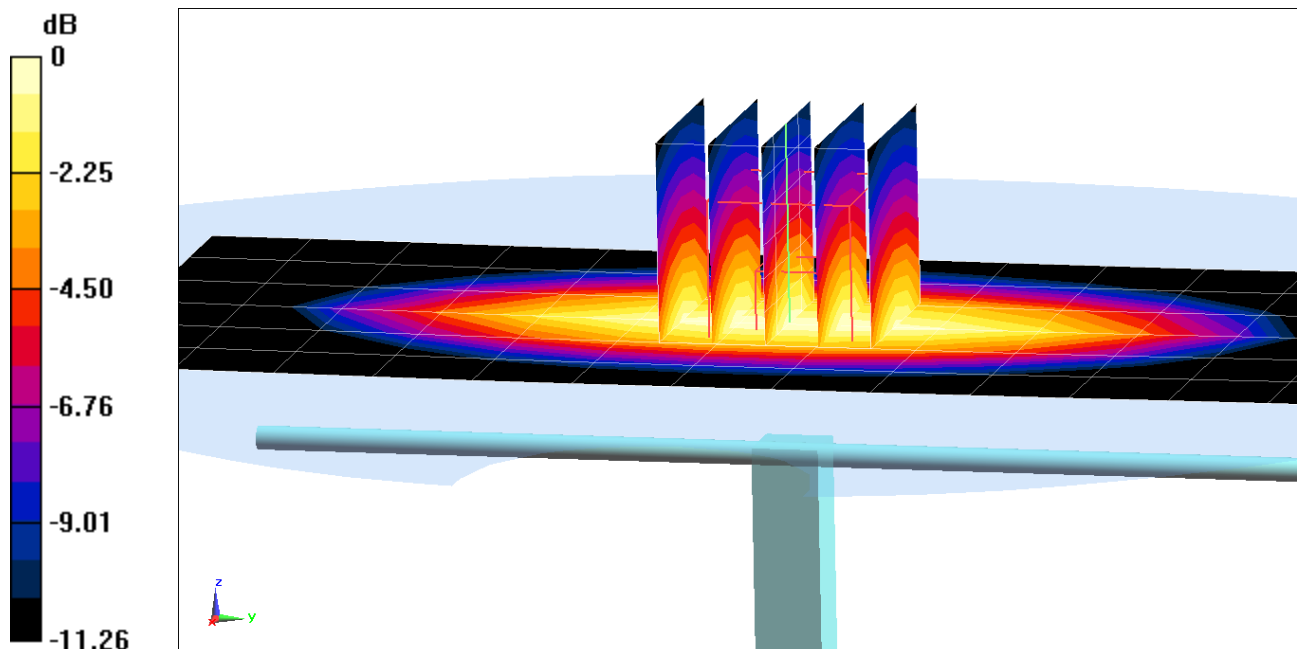
Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 2.02 W/kg;

Deviation(1 g) = 7.10%



0 dB = 2.74 W/kg = 4.38 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.393 \text{ S/m}$; $\epsilon_r = 40.373$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0cm

Test Date: 05/16/2021; Ambient Temp: 22.0°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7357; ConvF(8.67, 8.67, 8.67) @ 1750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

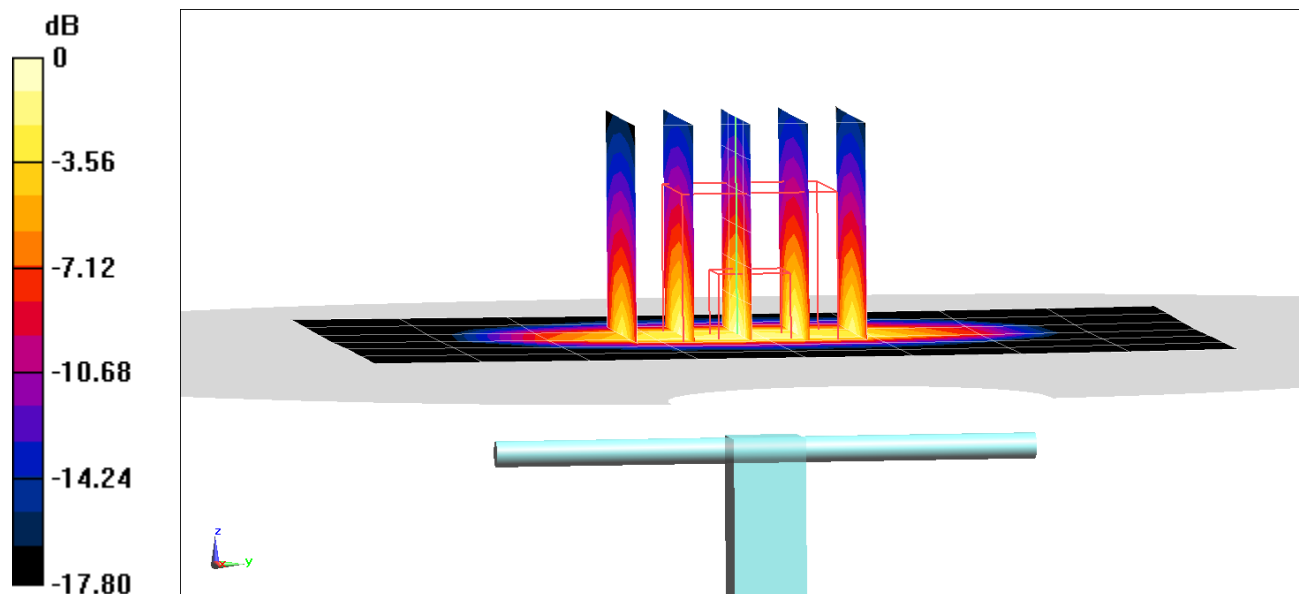
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.58 W/kg

SAR(1 g) = 3.51 W/kg

Deviation(1 g) = -3.84%



0 dB = 5.46 W/kg = 7.37 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.397$ S/m; $\epsilon_r = 41.108$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0cm

Test Date: 05/18/2021; Ambient Temp: 23.0°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7357; ConvF(8.67, 8.67, 8.67) @ 1750 MHz; Calibrated: 4/19/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/7/2021

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

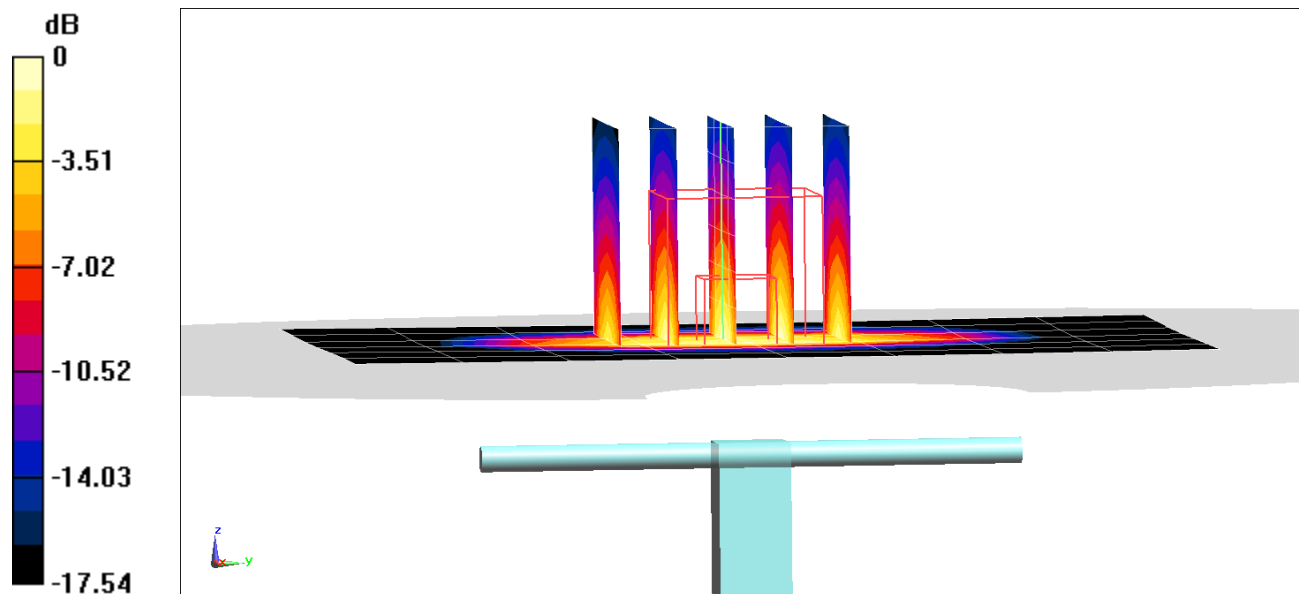
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.14 W/kg

SAR(1 g) = 3.82 W/kg

Deviation(1 g) = 4.66%



0 dB = 5.93 W/kg = 7.73 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.428$ S/m; $\epsilon_r = 38.076$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/03/2021; Ambient Temp: 23.6°C; Tissue Temp: 23.4°C

Probe: EX3DV4 - SN7571; ConvF(8.01, 8.01, 8.01) @ 1900 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

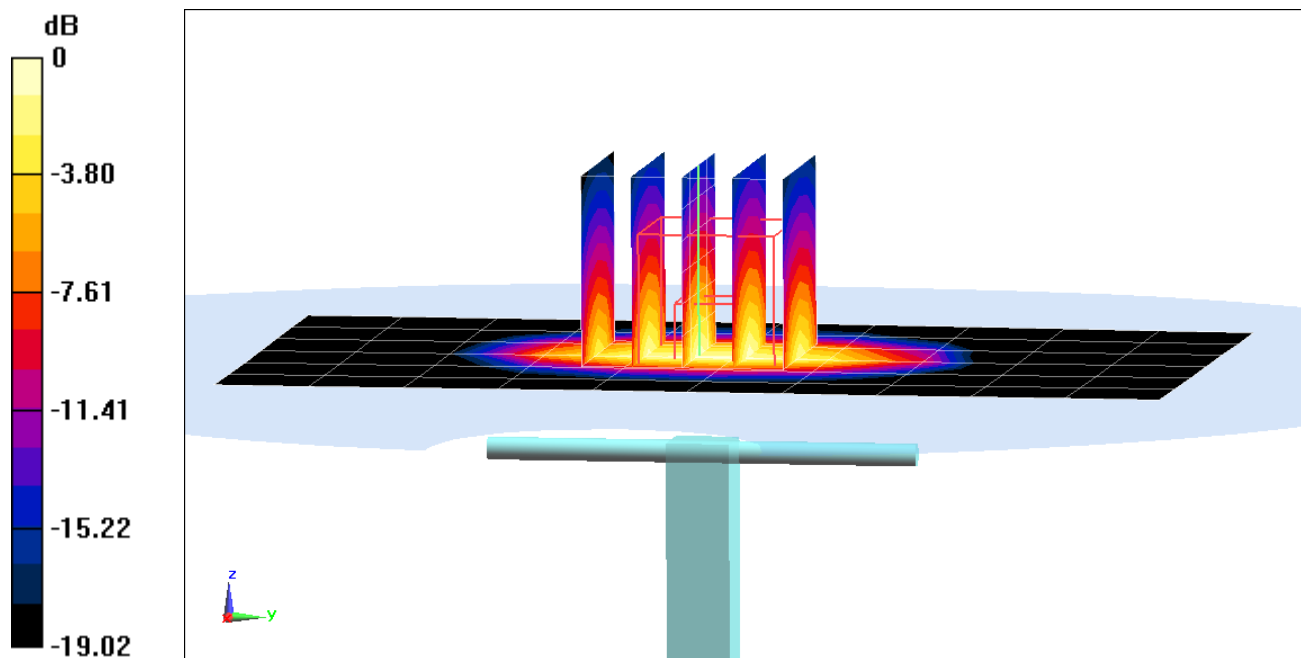
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 8.19 W/kg

SAR(1 g) = 4.17 W/kg

Deviation(1 g) = 6.11%



0 dB = 6.66 W/kg = 8.23 dBW/kg

PCTEST

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2450$ MHz; $\sigma = 1.862$ S/m; $\epsilon_r = 38.554$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/13/2021; Ambient Temp: 23.5°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7308; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

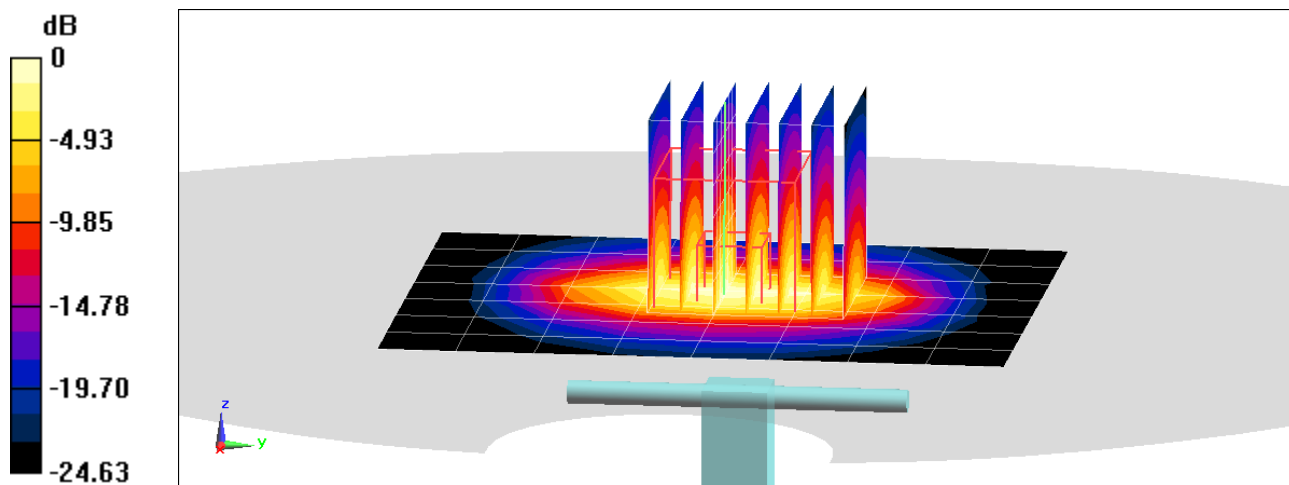
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.01 W/kg

Deviation(1 g) = -2.53%



0 dB = 8.63 W/kg = 9.36 dBW/kg

PCTEST

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: 882

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 Head Medium parameters used:
 $f = 2450$ MHz; $\sigma = 1.839$ S/m; $\epsilon_r = 39.643$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/24/2021; Ambient Temp: 20.9°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7527; ConvF(7.45, 7.45, 7.45) @ 2450 MHz; Calibrated: 3/16/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1466; Calibrated: 11/6/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1868
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

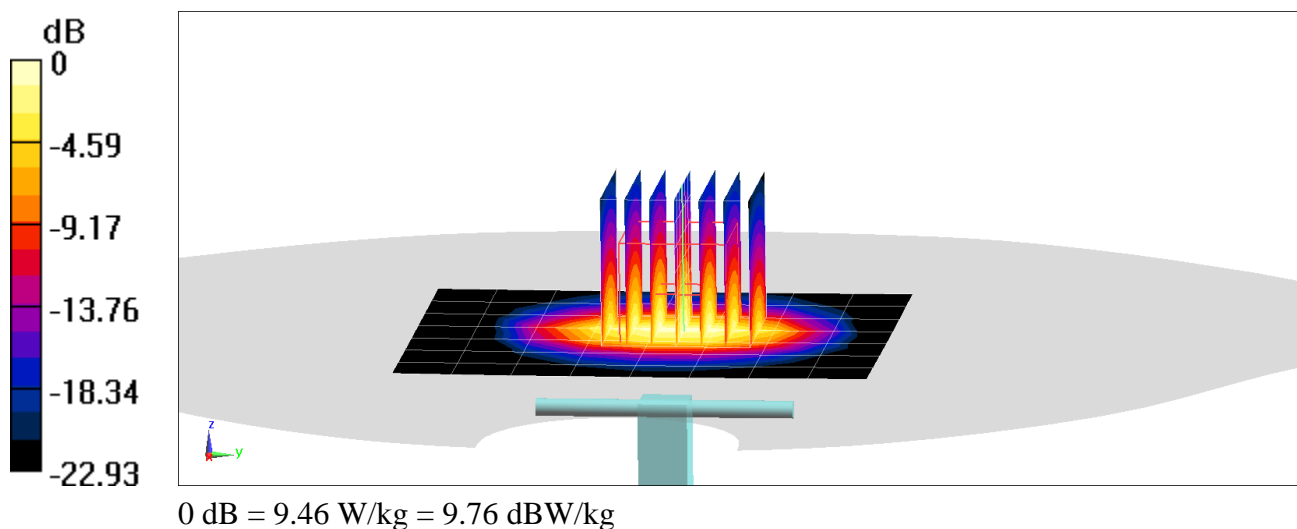
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 12.0 W/kg

SAR(1 g) = 5.5 W/kg

Deviation(1 g) = 4.76%



PCTEST

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: 882

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 Head Medium parameters used:
 $f = 2450$ MHz; $\sigma = 1.845$ S/m; $\epsilon_r = 39.321$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/26/2021; Ambient Temp: 19.5°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7527; ConvF(7.45, 7.45, 7.45) @ 2450 MHz; Calibrated: 3/16/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1466; Calibrated: 11/6/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1868
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

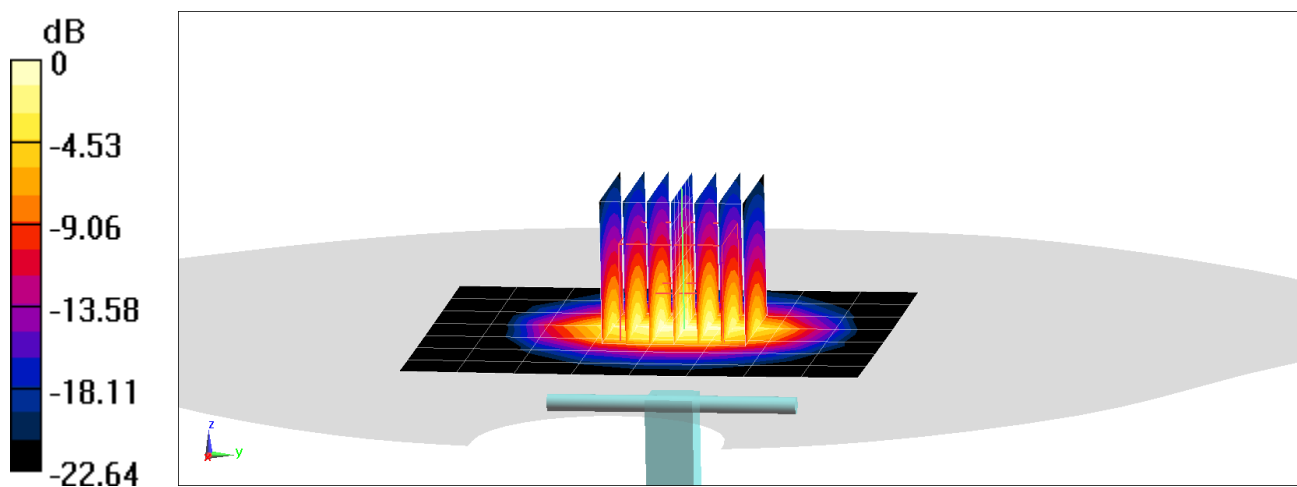
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.9 W/kg

SAR(1 g) = 5.49 W/kg

Deviation(1 g) = 4.57%



0 dB = 9.39 W/kg = 9.73 dBW/kg

PCTEST

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2600$ MHz; $\sigma = 2.021$ S/m; $\epsilon_r = 37.949$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04/13/2021; Ambient Temp: 23.5°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7308; ConvF(7.19, 7.19, 7.19) @ 2600 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2600 MHz System Verification at 20.0 dBm (100 mW)

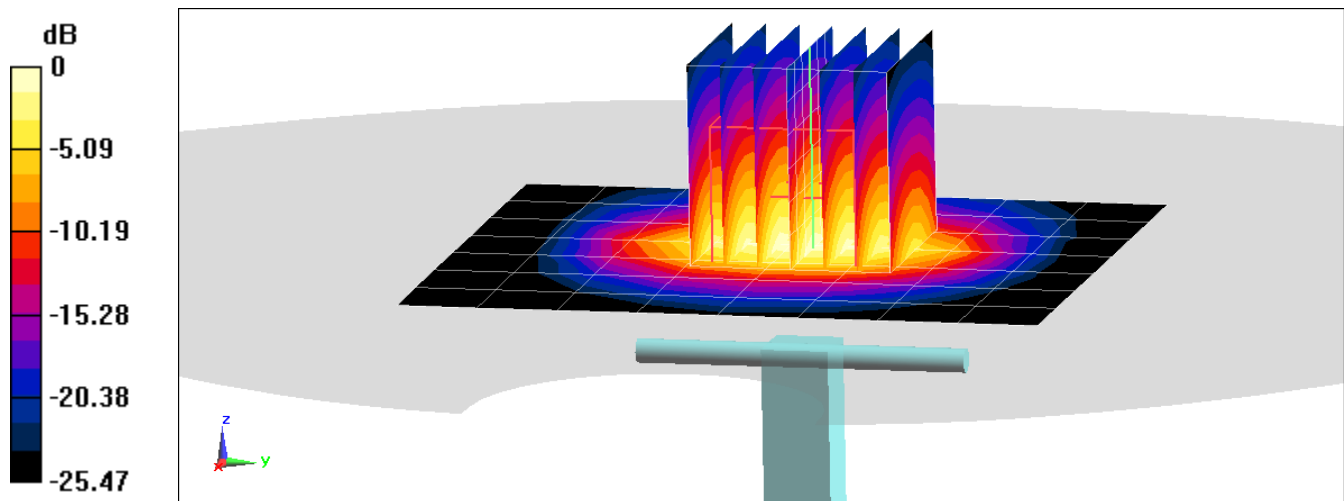
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 13.3 W/kg

SAR(1 g) = 5.85 W/kg

Deviation(1 g) = 0.69%



0 dB = 10.3 W/kg = 10.13 dBW/kg

PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Head Medium parameters used:
 $f = 5250$ MHz; $\sigma = 4.639$ S/m; $\epsilon_r = 36.382$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/17/2021; Ambient Temp: 20.2°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7637; ConvF(5.78, 5.78, 5.78) @ 5250 MHz; Calibrated: 03/03/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 03/01/2021
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 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

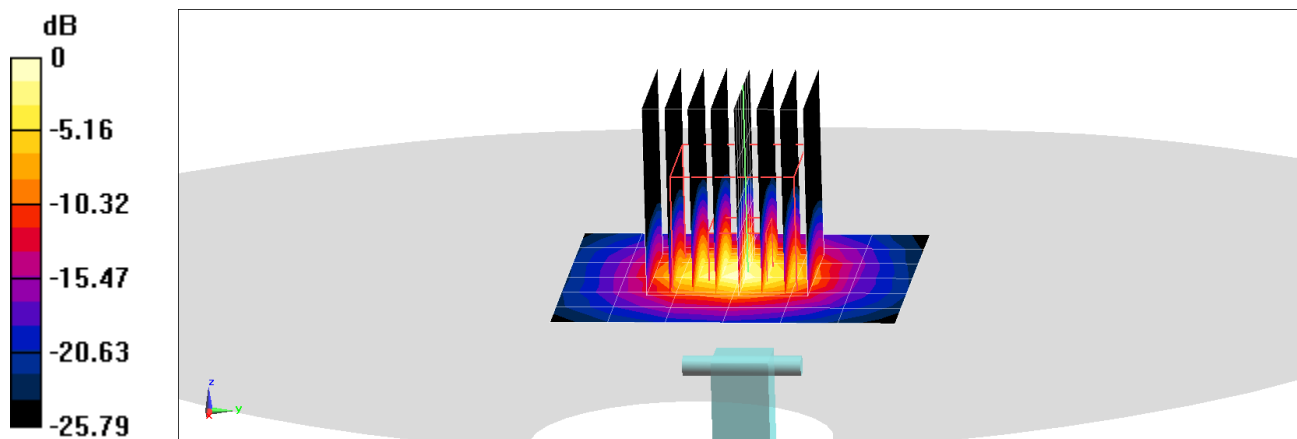
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.8 W/kg

SAR(1 g) = 3.86 W/kg

Deviation(1 g) = -5.62%



0 dB = 9.44 W/kg = 9.75 dBW/kg

PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Head Medium parameters used:
 $f = 5600 \text{ MHz}$; $\sigma = 5.02 \text{ S/m}$; $\epsilon_r = 35.874$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/17/2021; Ambient Temp: 20.2°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7637; ConvF(5.15, 5.15, 5.15) @ 5600 MHz; Calibrated: 03/03/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 03/01/2021
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 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

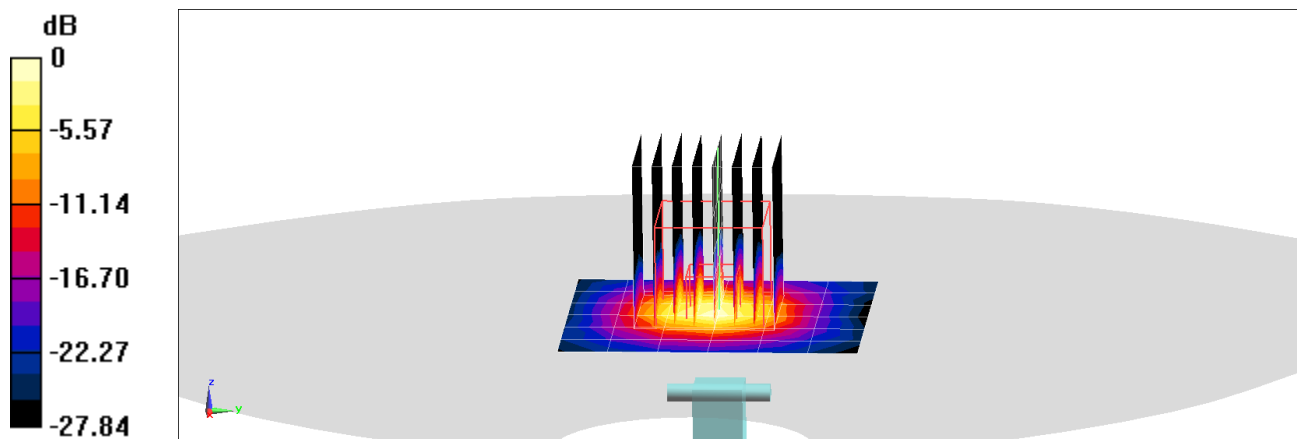
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 3.98 W/kg

Deviation(1 g) = -5.80%



0 dB = 9.89 W/kg = 9.95 dBW/kg

PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Head Medium parameters used:
 $f = 5750$ MHz; $\sigma = 5.178$ S/m; $\epsilon_r = 35.697$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/17/2021; Ambient Temp: 20.2°C; Tissue Temp: 19.9°C

Probe: EX3DV4 - SN7637; ConvF(5.25, 5.25, 5.25) @ 5750 MHz; Calibrated: 03/03/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 03/01/2021
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 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

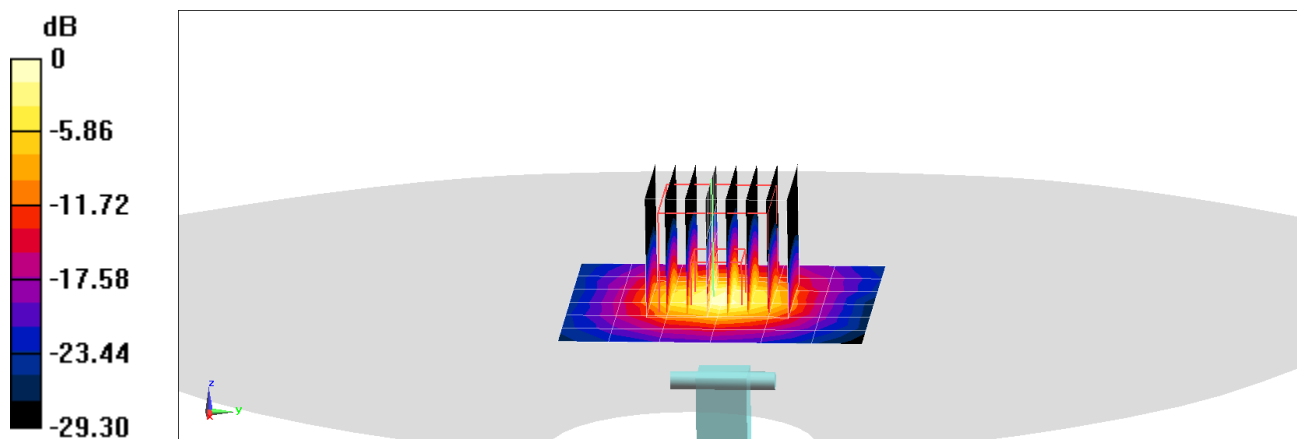
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 3.87 W/kg

Deviation(1 g) = -4.68%



0 dB = 9.81 W/kg = 9.92 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

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

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.989 \text{ S/m}$; $\epsilon_r = 54.303$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04/14/2021; Ambient Temp: 22.8°C; Tissue Temp: 24.5°C

Probe: EX3DV4 - SN7406; ConvF(9.66, 9.66, 9.66) @ 750 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

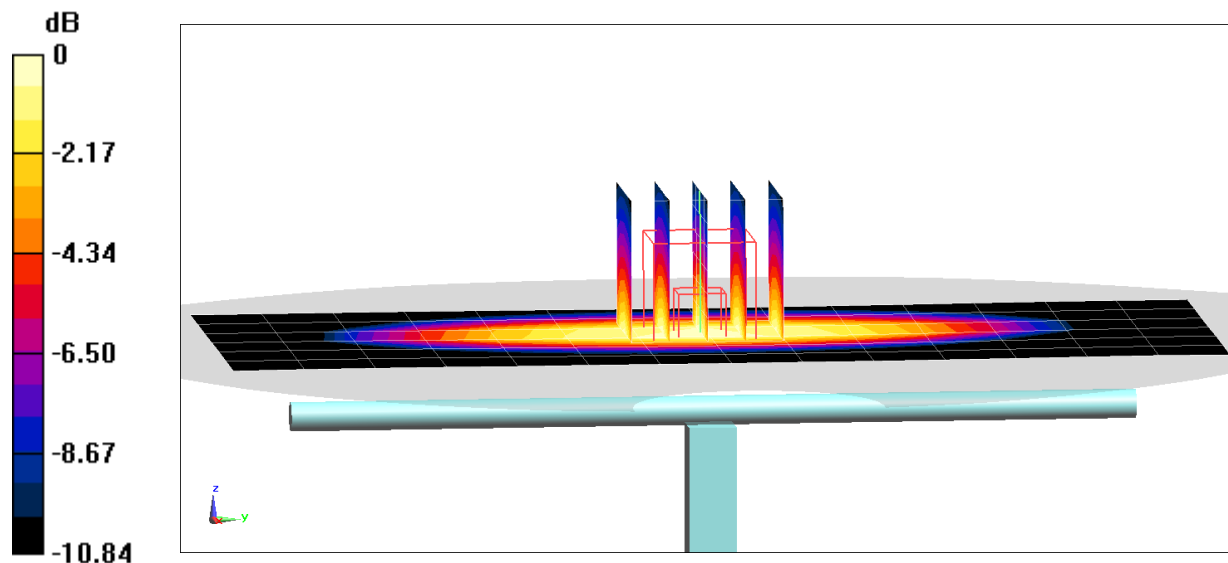
Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 1.79 W/kg

Deviation(1 g) = 3.95%



0 dB = 2.46 W/kg = 3.91 dBW/kg

PCTEST

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003

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

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$; $\sigma = 0.956 \text{ S/m}$; $\epsilon_r = 54.537$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/13/2021; Ambient Temp: 23.4°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7406; ConvF(9.66, 9.66, 9.66) @ 750 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

750 MHz System Verification at 23.0 dBm (200 mW)

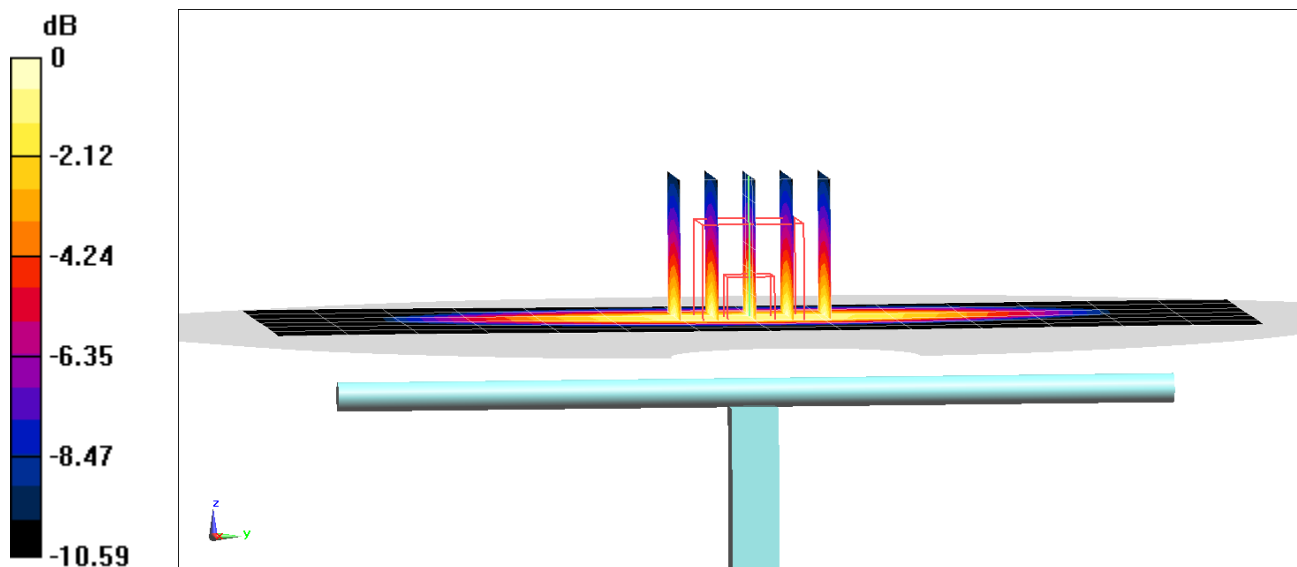
Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 2.85 W/kg

SAR(1 g) = 1.81 W/kg

Deviation(1 g) = 5.11%



0 dB = 2.47 W/kg = 3.93 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

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

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.962 \text{ S/m}$; $\epsilon_r = 53.676$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 05/10/2021; Ambient Temp: 23.6°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

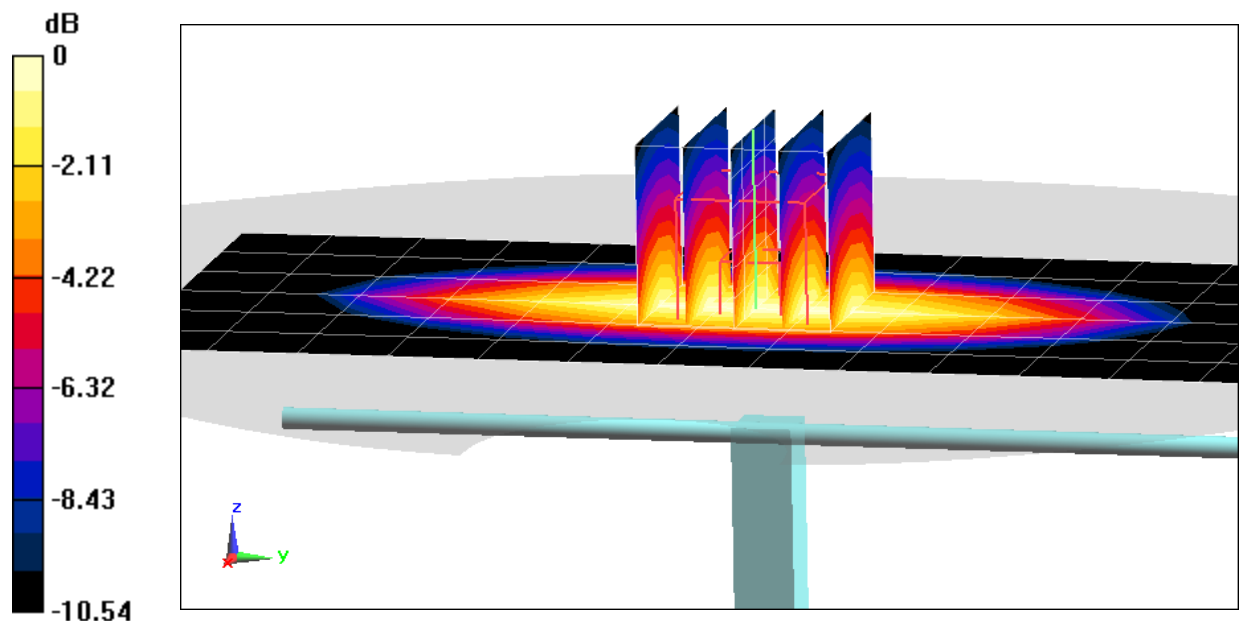
Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 1.97 W/kg

Deviation(1 g) = 4.01%



0 dB = 2.67 W/kg = 4.27 dBW/kg

PCTEST

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047

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

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$; $\sigma = 0.964 \text{ S/m}$; $\epsilon_r = 53.676$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5cm

Test Date: 05/17/2021; Ambient Temp: 23.9°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

835 MHz System Verification at 23.0 dBm (200 mW)

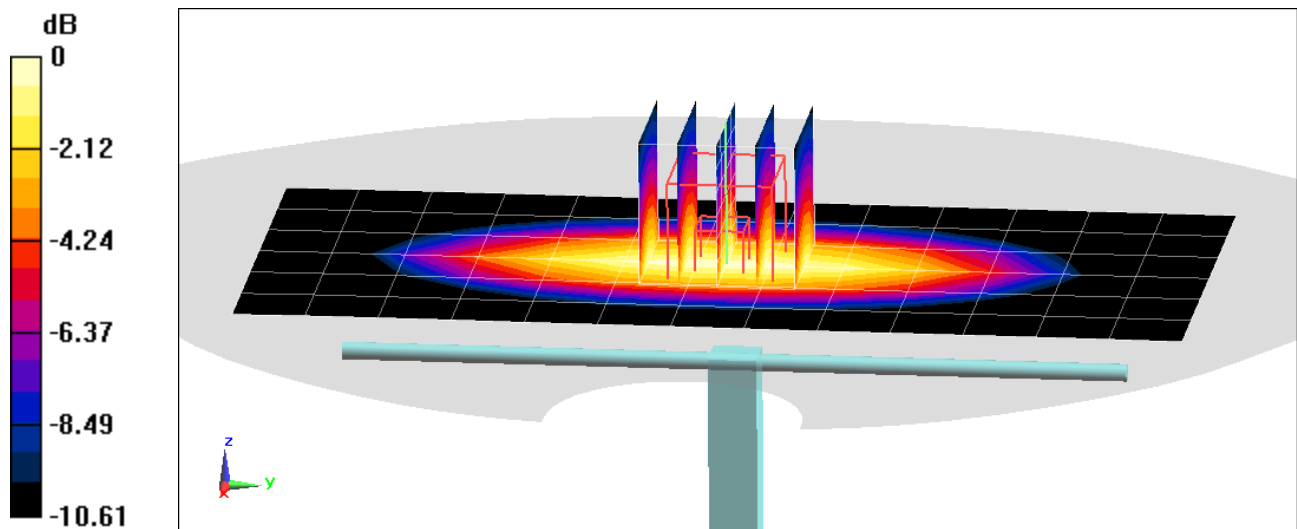
Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 3.09 W/kg

SAR(1 g) = 1.96 W/kg

Deviation(1 g) = 3.48%



0 dB = 2.68 W/kg = 4.28 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.535$ S/m; $\epsilon_r = 51.102$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/02/2021; Ambient Temp: 20.9°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

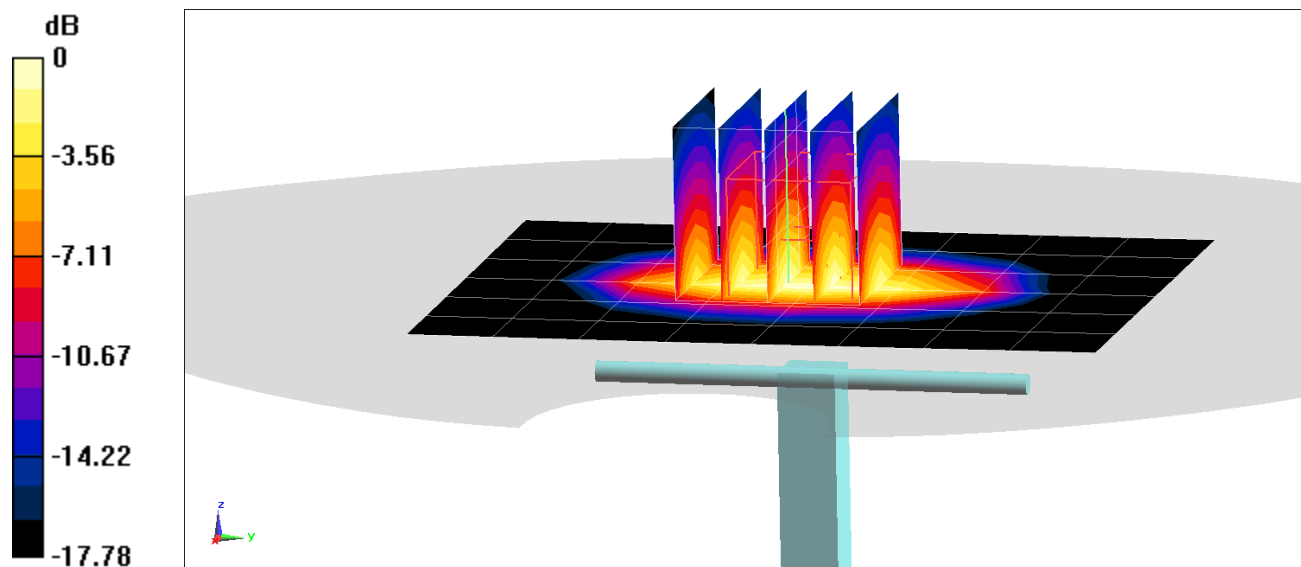
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.1 W/kg

SAR(1 g) = 3.88 W/kg; SAR(10 g) = 2.05 W/kg

Deviation(1 g) = 6.01%; Deviation(10 g) = 5.67%



0 dB = 5.93 W/kg = 7.73 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.496$ S/m; $\epsilon_r = 51.704$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/11/2021; Ambient Temp: 20.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

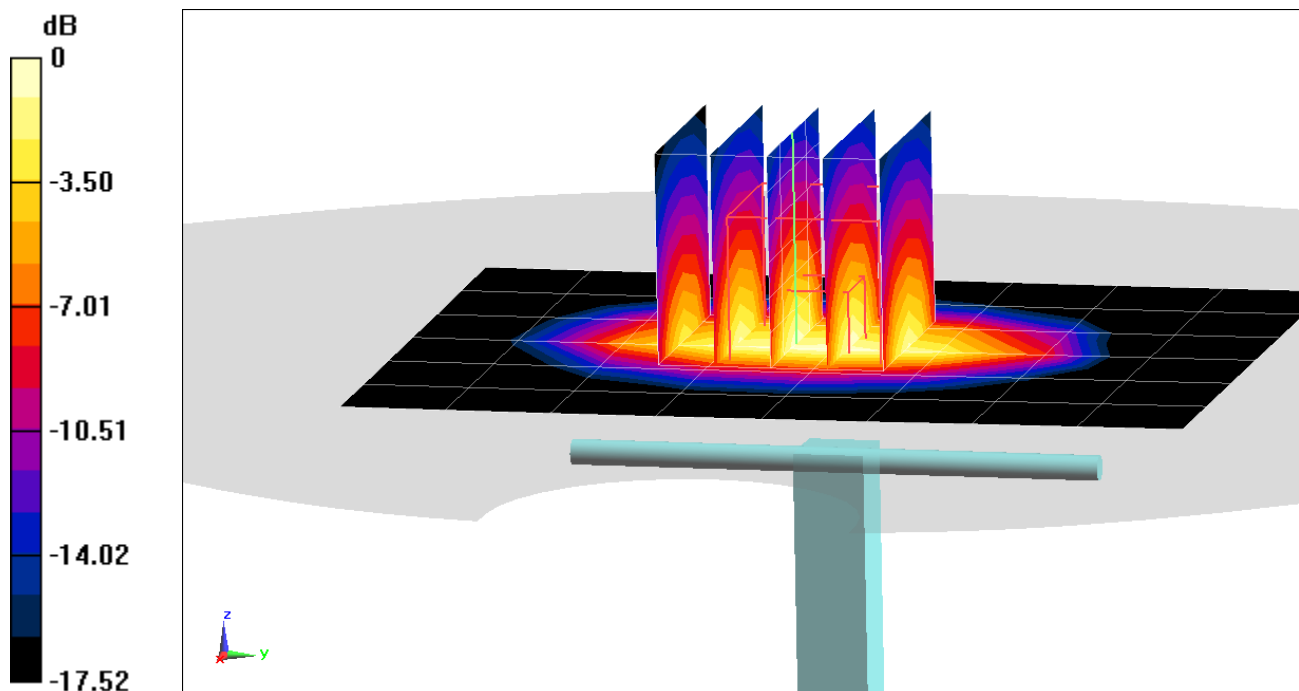
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.65 W/kg

SAR(1 g) = 3.65 W/kg

Deviation(1 g) = 0.55%



0 dB = 5.53 W/kg = 7.43 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.49 \text{ S/m}$; $\epsilon_r = 52.066$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/28/2021; Ambient Temp: 23.5°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

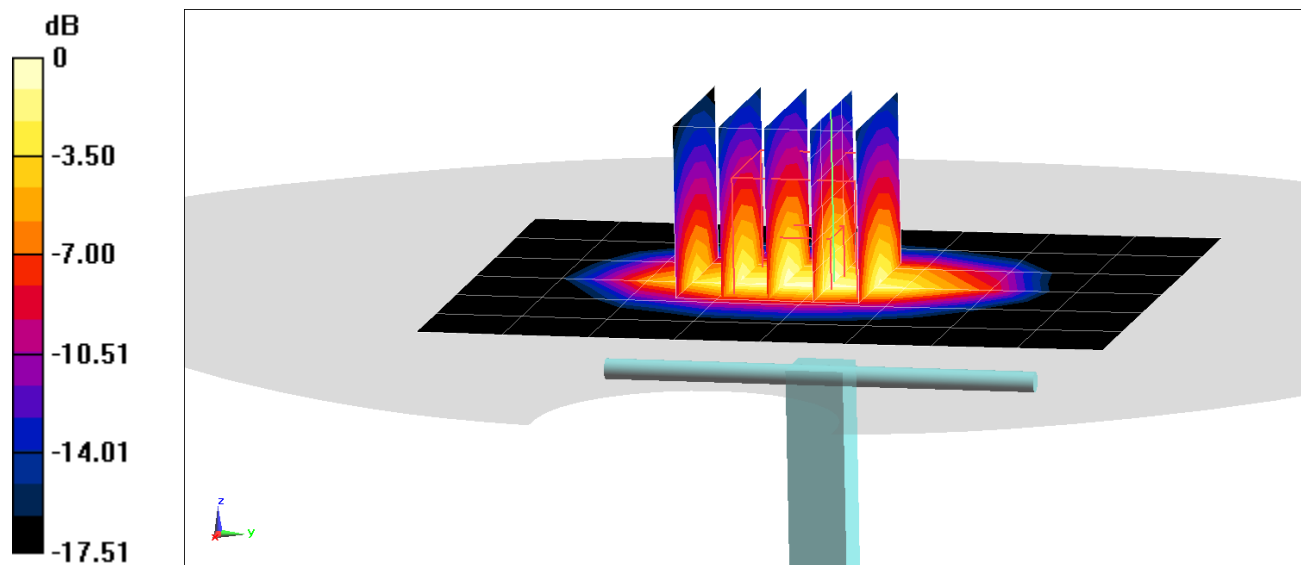
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.97 W/kg

SAR(10 g) = 2.02 W/kg

Deviation(10 g) = 4.12%



0 dB = 5.77 W/kg = 7.61 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.507$ S/m; $\epsilon_r = 52.081$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/01/2021; Ambient Temp: 23.2°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

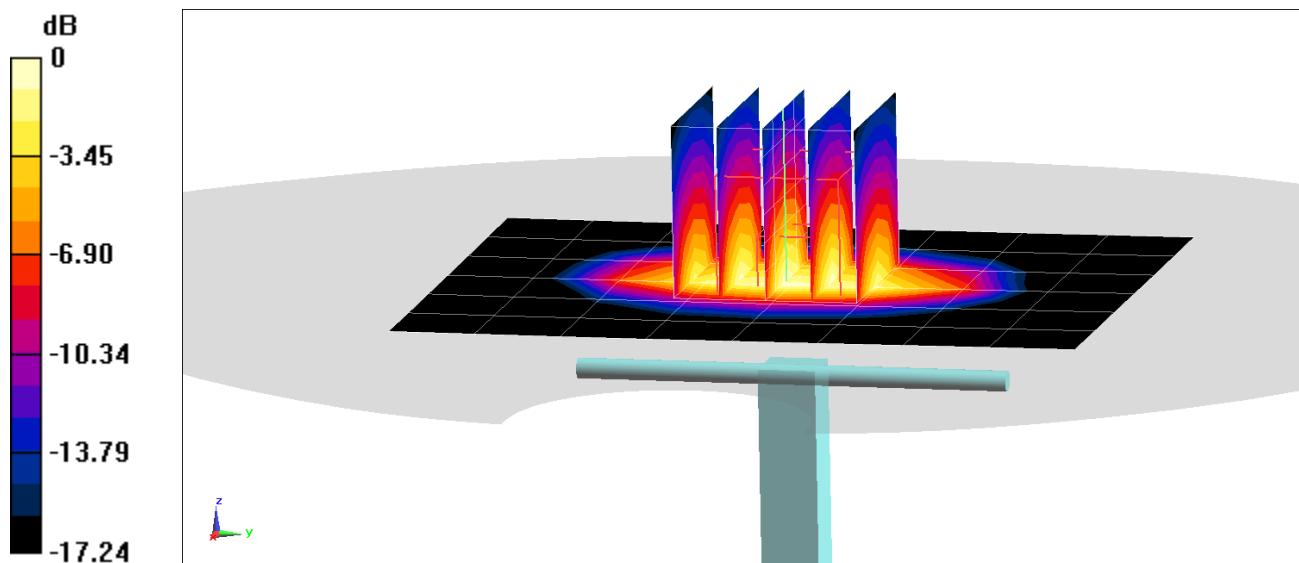
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.19 W/kg

SAR(1 g) = 3.9 W/kg; SAR(10 g) = 2.06 W/kg

Deviation(1 g) = 6.56%; Deviation(10 g) = 6.19%



0 dB = 6.02 W/kg = 7.80 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.473$ S/m; $\epsilon_r = 50.984$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/03/2021; Ambient Temp: 23.0°C; Tissue Temp: 23.4°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

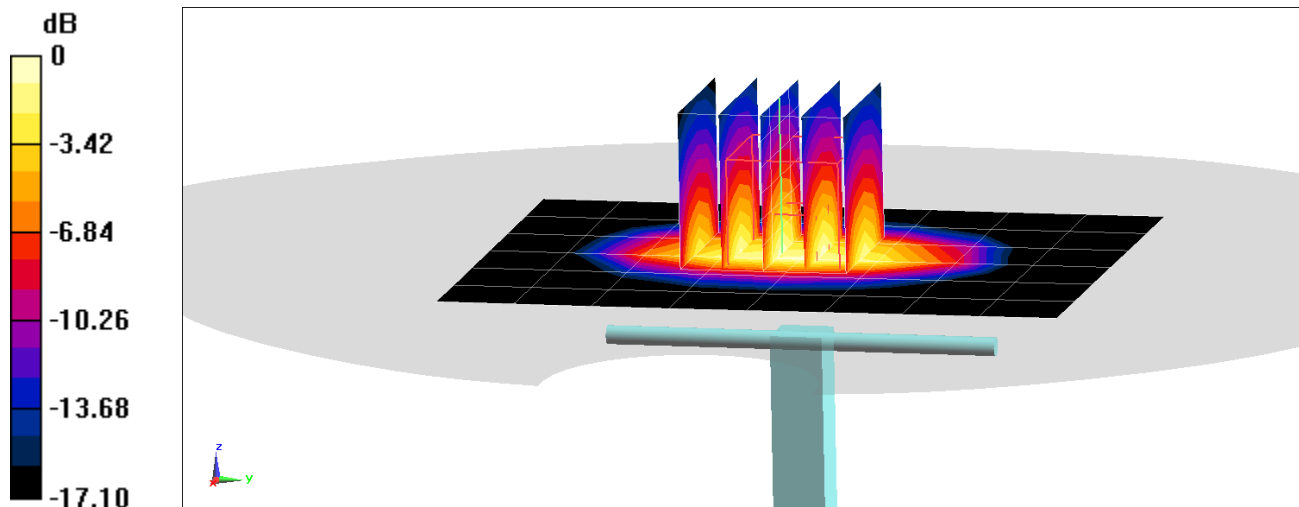
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.39 W/kg

SAR(1 g) = 3.56 W/kg

Deviation(1 g) = -1.93%



0 dB = 5.37 W/kg = 7.30 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.483$ S/m; $\epsilon_r = 51.577$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/05/2021; Ambient Temp: 22.6°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

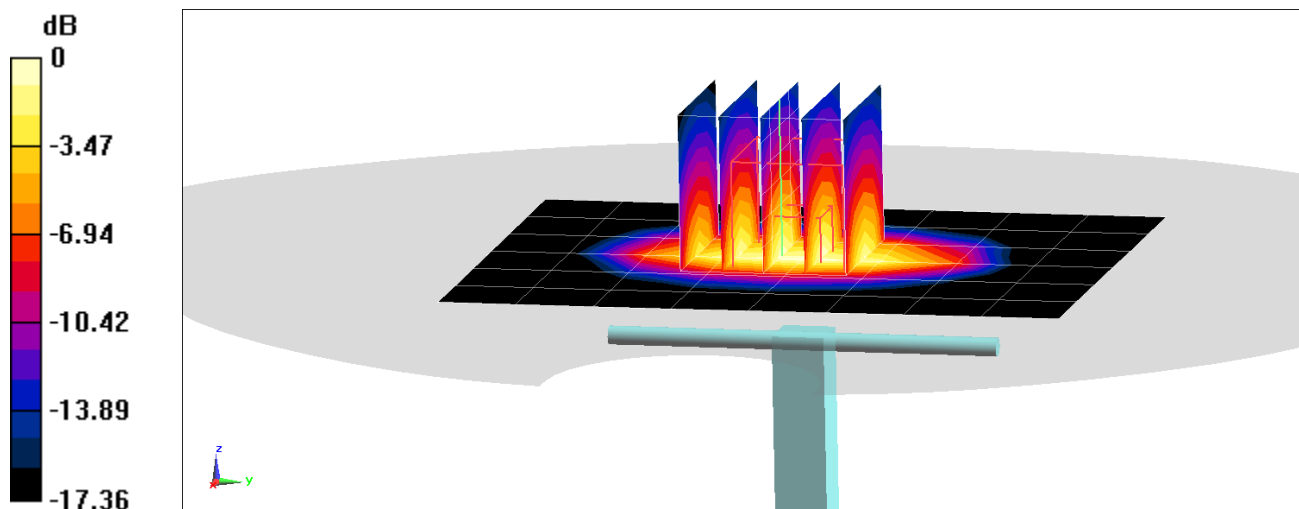
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.77 W/kg

SAR(10 g) = 1.98 W/kg

Deviation(10 g) = 2.06%



0 dB = 5.65 W/kg = 7.52 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$ MHz; $\sigma = 1.539$ S/m; $\epsilon_r = 51.582$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/14/2021; Ambient Temp: 22.2°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1750 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

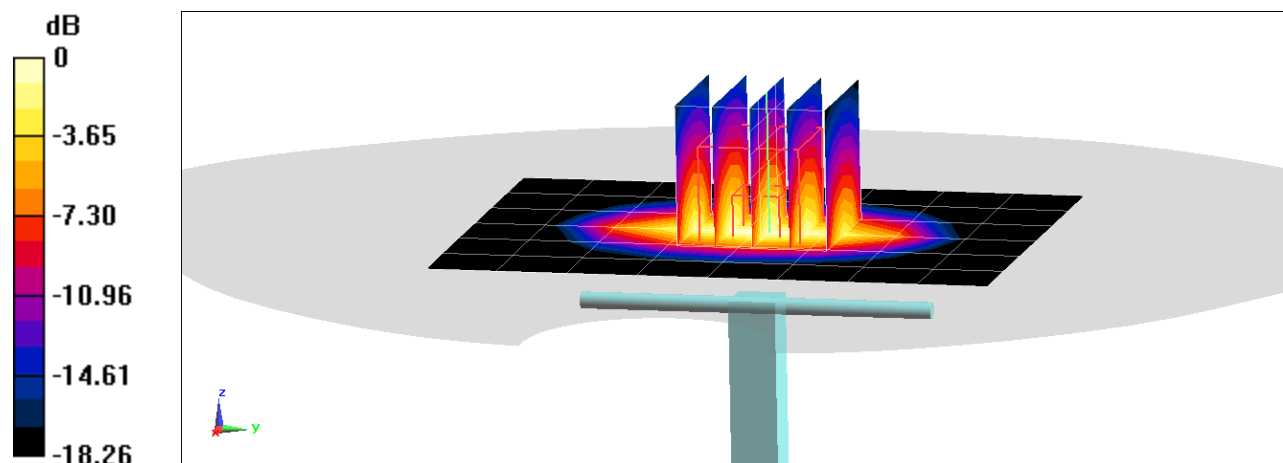
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 3.63 W/kg

Deviation(1 g) = 0.00%



0 dB = 5.71 W/kg = 7.57 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.53 \text{ S/m}$; $\epsilon_r = 51.423$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/16/2021; Ambient Temp: 24.5°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1750 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

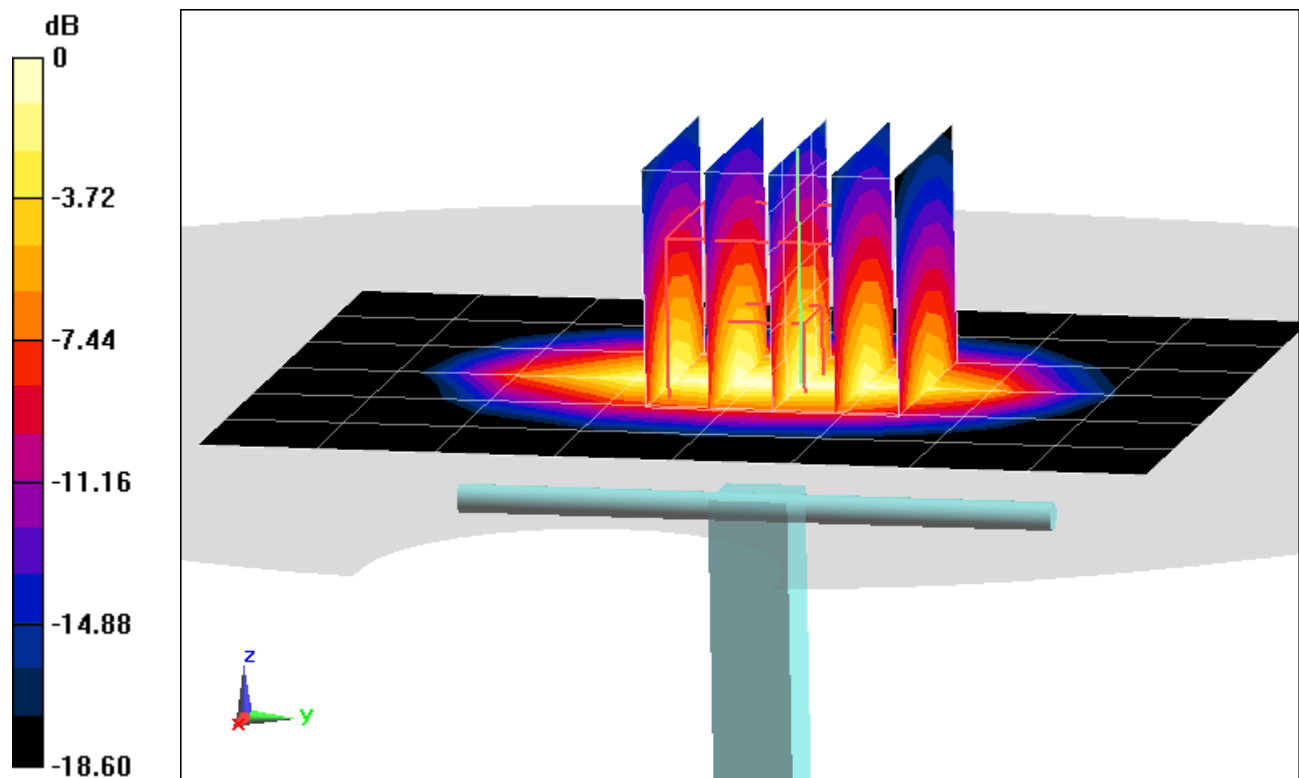
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.08 W/kg

SAR(1 g) = 3.73 W/kg

Deviation(1 g) = 2.75%



0 dB = 5.77 W/kg = 7.61 dBW/kg

PCTEST

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$; $\sigma = 1.542 \text{ S/m}$; $\epsilon_r = 50.88$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/20/2021; Ambient Temp: 22.0°C; Tissue Temp: 21.2°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1750 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1750 MHz System Verification at 20.0 dBm (100 mW)

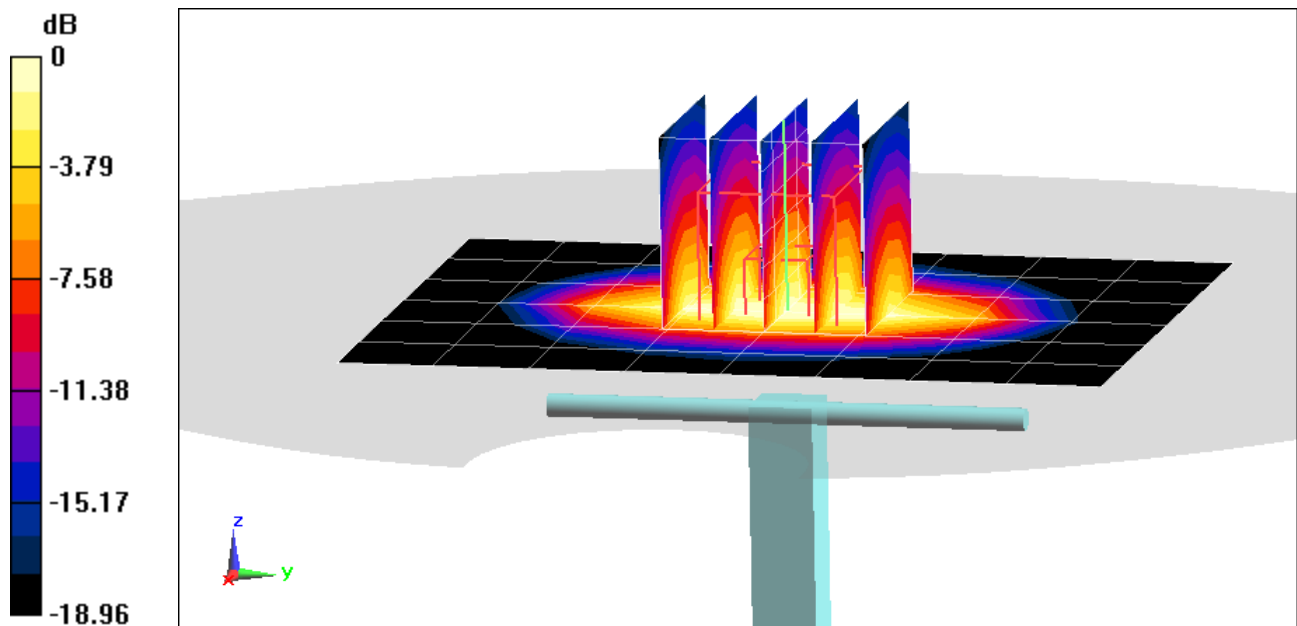
Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.04 W/kg

SAR(1 g) = 3.6 W/kg

Deviation(1 g) = -1.64%



0 dB = 5.59 W/kg = 7.47 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.499$ S/m; $\epsilon_r = 52.225$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/02/2021; Ambient Temp: 24.4°C; Tissue Temp: 23.4°C

Probe: EX3DV4 - SN7571; ConvF(7.67, 7.67, 7.67) @ 1900 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

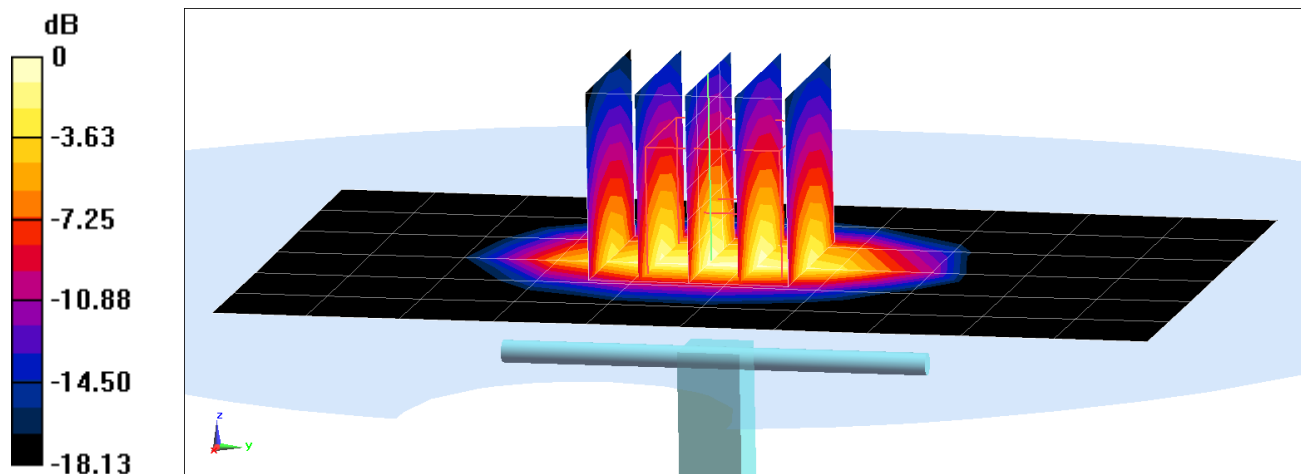
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.50 W/kg

SAR(1 g) = 4.12 W/kg

Deviation(1 g) = 5.10%



0 dB = 6.28 W/kg = 7.98 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.534$ S/m; $\epsilon_r = 52.082$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/06/2021; Ambient Temp: 23.6°C; Tissue Temp: 23.5°C

Probe: EX3DV4 - SN7571; ConvF(7.67, 7.67, 7.67) @ 1900 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: SAM 5.0 front; Type: QD000P40CD; Serial: 1648

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

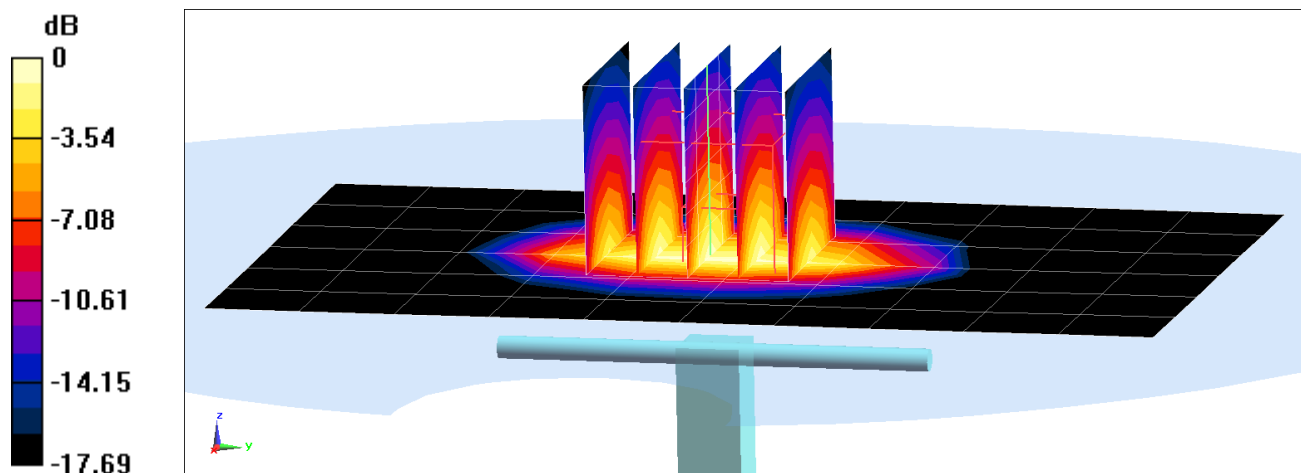
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.54 W/kg

SAR(10 g) = 2.19 W/kg

Deviation(10 g) = 5.80%



0 dB = 6.41 W/kg = 8.07 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$; $\sigma = 1.58 \text{ S/m}$; $\epsilon_r = 51.212$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/09/2021; Ambient Temp: 23.7°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN3589; ConvF(6.84, 6.84, 6.84) @ 1900 MHz; Calibrated: 1/20/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2021

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1646

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

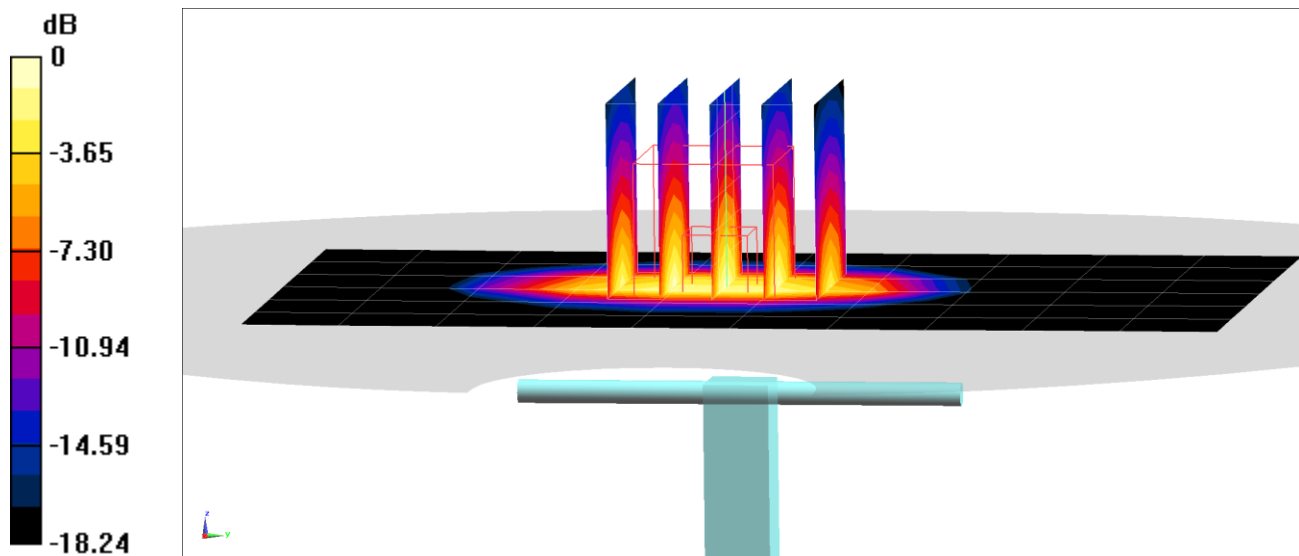
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.12 W/kg

SAR(1 g) = 3.75 W/kg; SAR(10 g) = 1.92 W/kg

Deviation(1 g) = -4.34%; Deviation(10 g) = -6.80%



PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.544$ S/m; $\epsilon_r = 53.001$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/13/2021; Ambient Temp: 25.0°C; Tissue Temp: 25.0°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1900 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

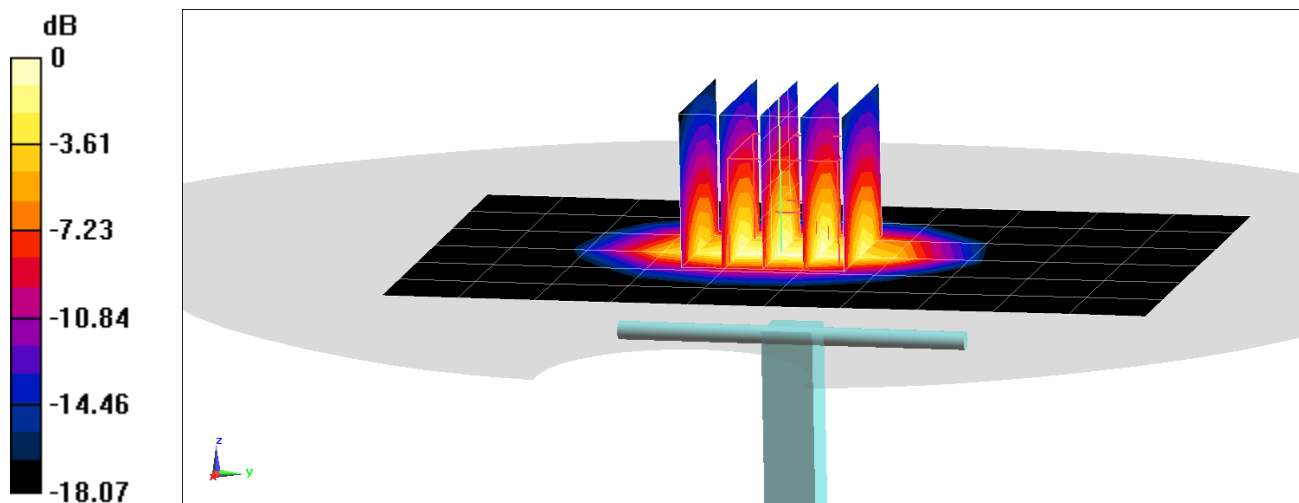
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.49 W/kg

SAR(1 g) = 4.2 W/kg

Deviation(1 g) = 7.14%



0 dB = 6.24 W/kg = 7.95 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.556$ S/m; $\epsilon_r = 51.84$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/17/2021; Ambient Temp: 23.6°C; Tissue Temp: 23.6°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1900 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

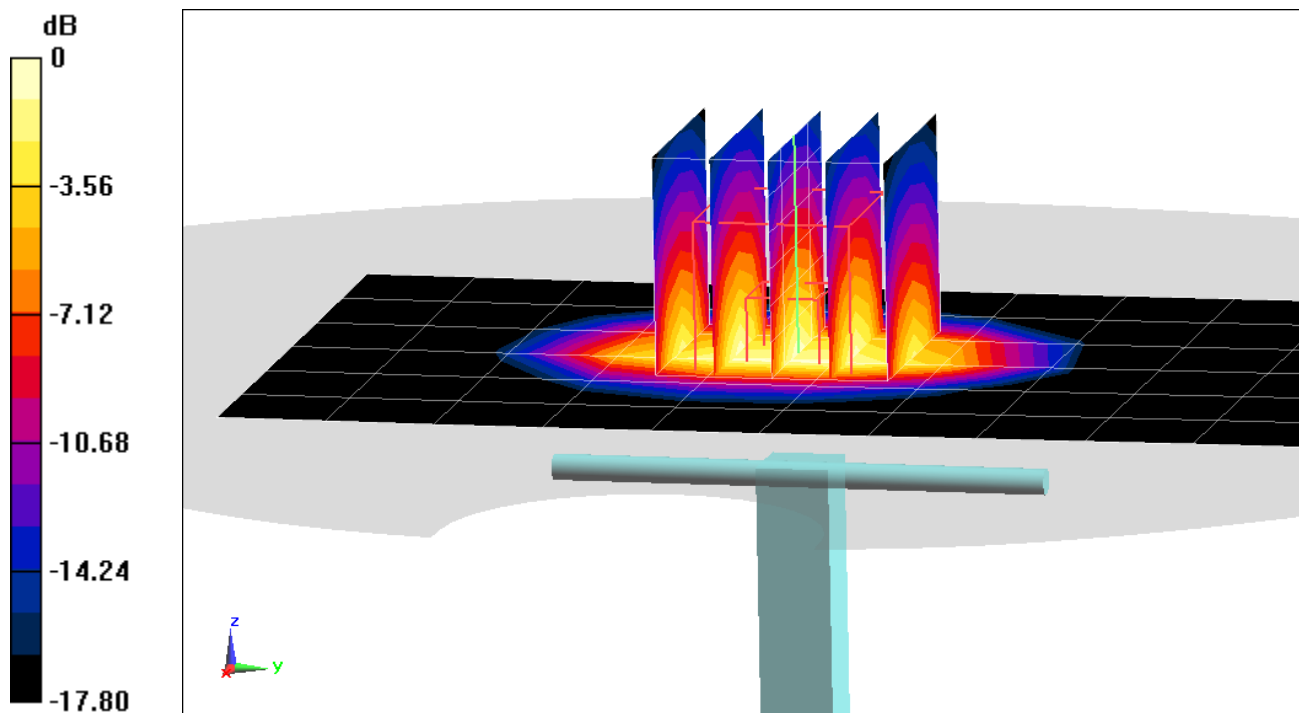
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.45 W/kg

SAR(10 g) = 2.11 W/kg

Deviation(10 g) = 1.93%



0 dB = 6.29 W/kg = 7.99 dBW/kg

PCTEST

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900$ MHz; $\sigma = 1.525$ S/m; $\epsilon_r = 51.164$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/20/2021; Ambient Temp: 22.4°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1900 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

1900 MHz System Verification at 20.0 dBm (100 mW)

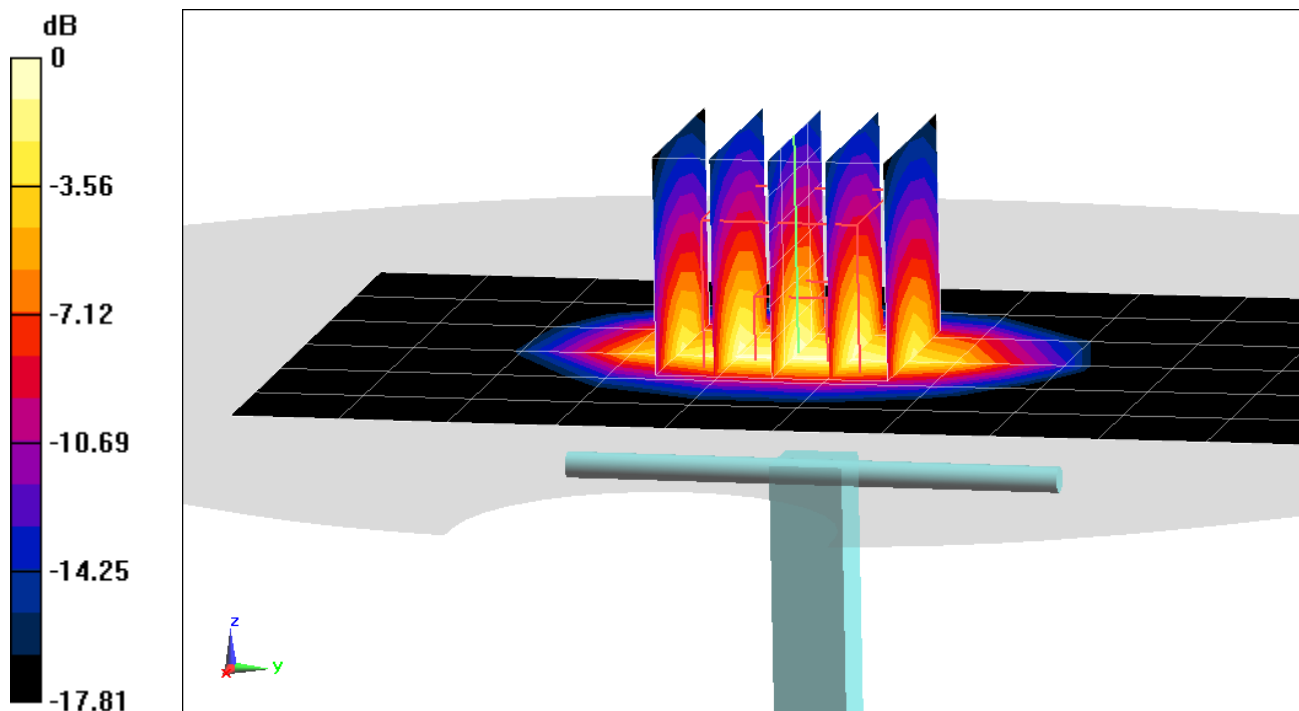
Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.26 W/kg

SAR(1 g) = 4.02 W/kg

Deviation(1 g) = 2.03%



0 dB = 6.18 W/kg = 7.91 dBW/kg

PCTEST

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN719

Communication System: UID: 0--, CW; Frequency: 2450 MHz
Medium: 2450 Body; Medium parameters used:
f = 2450 MHz; cond = 2.05 S/m; perm = 51.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 04/27/2021; Ambient Temp: 24.3°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN7538; ConvF:(7.44,7.44,7.44); Calibrated: 2020-11-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1449; Calibrated: 2020-09-10
Phantom: Twin-SAM V5.0 (Left); Serial: 1873
Measurement SW: cDASY6 Module SAR V6.14.0.959

2450 MHz System Verification at 20.0 dBm (100 mW)

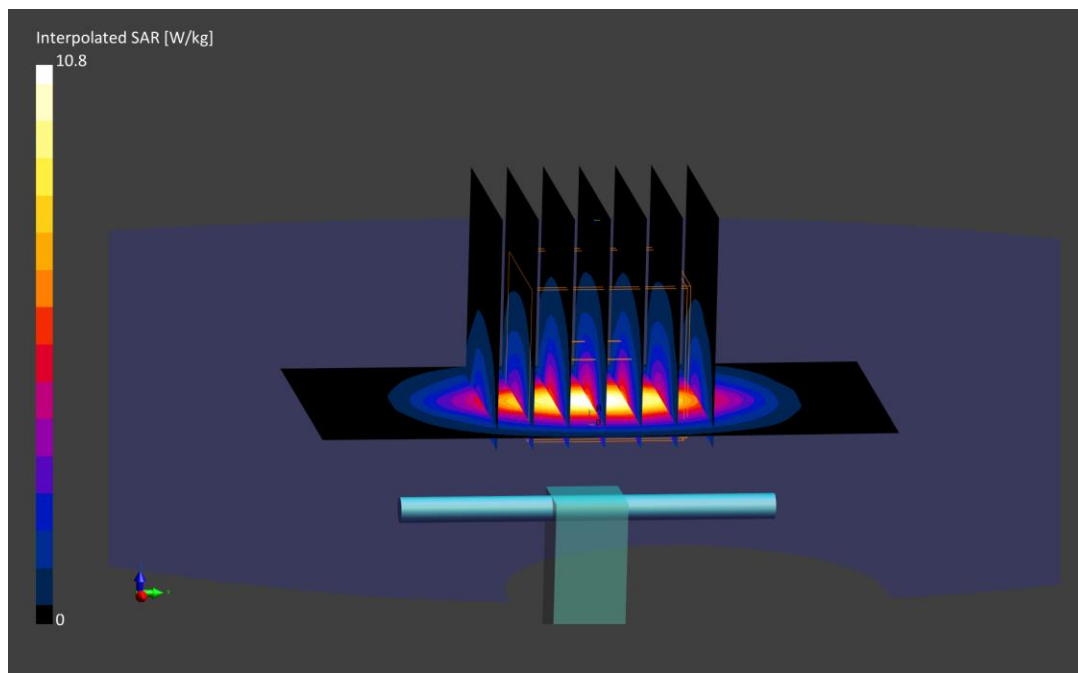
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0mm, dy=10.0mm

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

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 5.07 W/kg; SAR(10 g) = 2.33 W/kg

Deviation (1 g) = 0.00%; Deviation (10 g) = -2.51%;



PCTEST

DUT: Dipole 2450.0 MHz; Type: D2450V2 - SN719

Communication System: UID: 0--, CW; Frequency: 2450 MHz
Medium: 2450 Body; Medium parameters used:
f = 2450 MHz; cond = 2.04 S/m; perm = 50.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 05/02/2021; Ambient Temp: 23.5°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7538; ConvF:(7.44,7.44,7.44); Calibrated: 2020-11-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1449; Calibrated: 2020-09-10
Phantom: Twin-SAM V5.0 (Left); Serial: 1873
Measurement SW: cDASY6 Module SAR V6.14.0.959

2450 MHz System Verification at 20.0 dBm (100 mW)

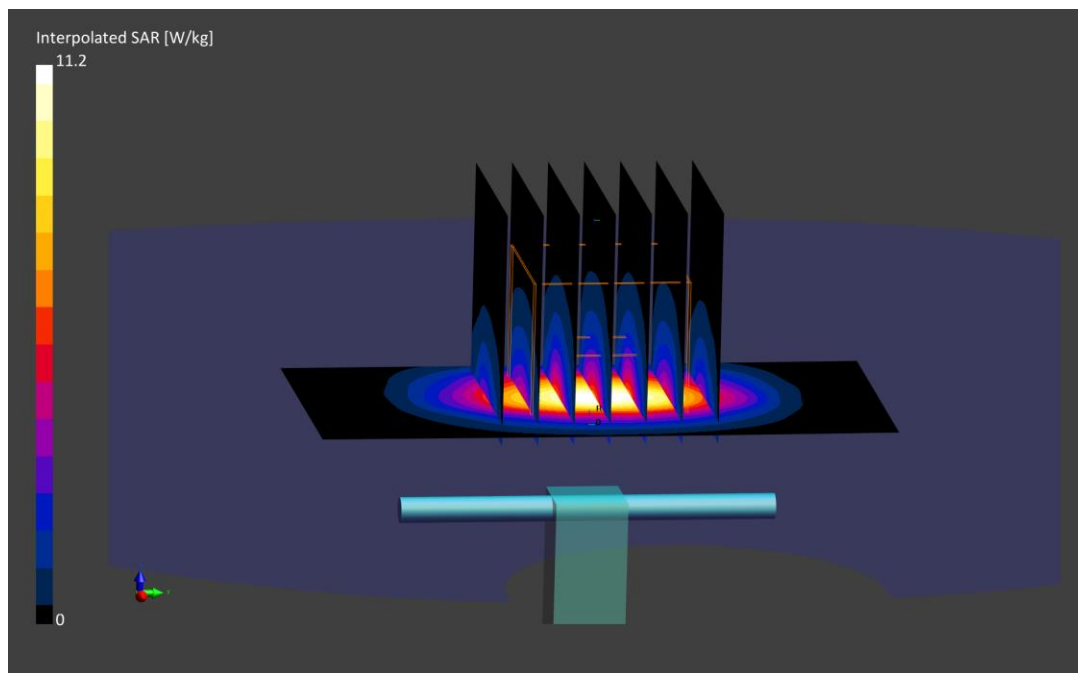
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0mm, dy=10.0mm

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

Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 5.17 W/kg

Deviation (1 g) = 1.97%



PCTEST

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: 882

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 Body Medium parameters used:
 $f = 2450$ MHz; $\sigma = 2.031$ S/m; $\epsilon_r = 51.538$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/17/2021; Ambient Temp: 20.6°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7527; ConvF(7.51, 7.51, 7.51) @ 2450 MHz; Calibrated: 3/16/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1466; Calibrated: 11/6/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1868
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

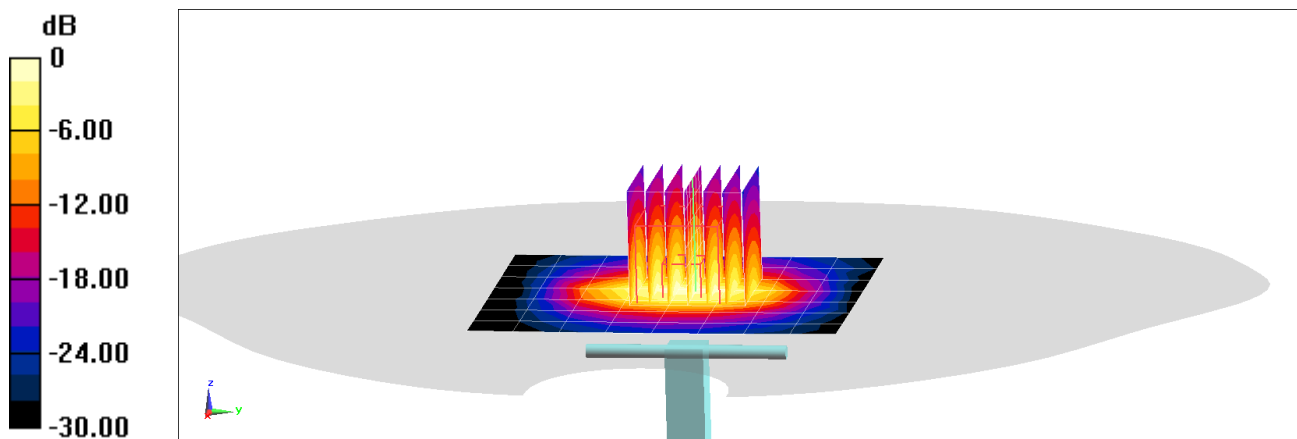
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 5.07 W/kg

Deviation(1 g) = 0.20%



0 dB = 8.64 W/kg = 9.37 dBW/kg

PCTEST

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: 882

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$ MHz; $\sigma = 2.044$ S/m; $\epsilon_r = 50.715$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2021; Ambient Temp: 20.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7527; ConvF(7.51, 7.51, 7.51) @ 2450 MHz; Calibrated: 3/16/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1466; Calibrated: 11/6/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1868

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

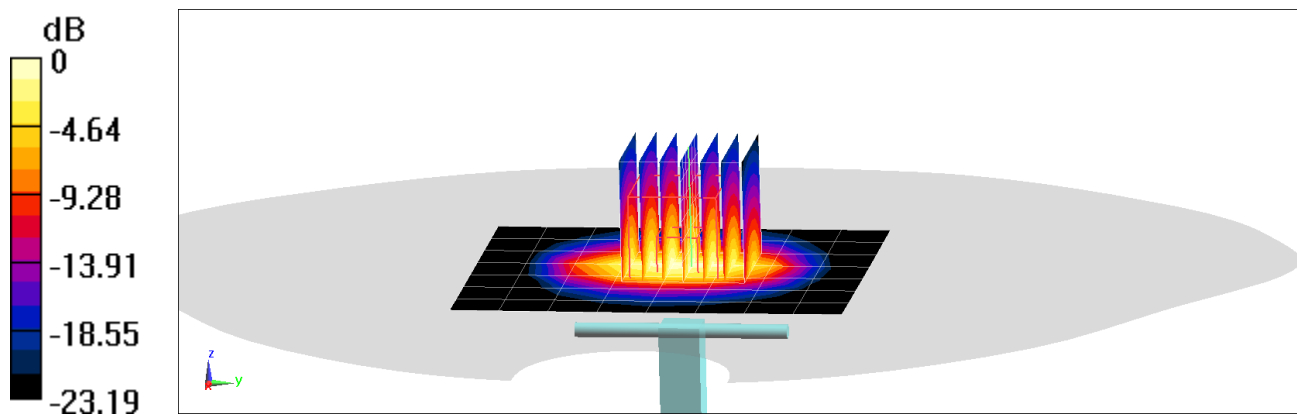
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 11.0 W/kg

SAR(1 g) = 5.11 W/kg

Deviation(1 g) = 0.99%



0 dB = 8.66 W/kg = 9.38 dBW/kg

PCTEST

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; SN:882

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450 Body Medium parameters used:
 $f = 2450 \text{ MHz}$; $\sigma = 2.04 \text{ S/m}$; $\epsilon_r = 53.127$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 06/13/2021; Ambient Temp: 21.0°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7527; ConvF(7.51, 7.51, 7.51) @ 2450 MHz; Calibrated: 3/16/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1466; Calibrated: 11/6/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1868
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

2450 MHz System Verification at 20.0 dBm (100 mW)

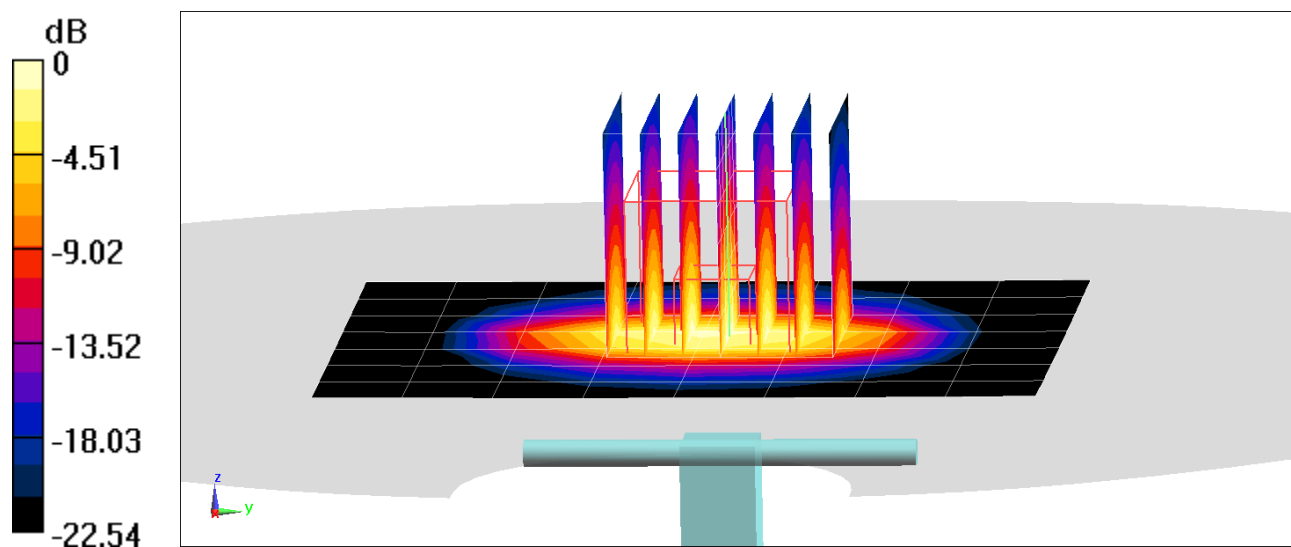
Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 10.9 W/kg

SAR(1 g) = 5.15 W/kg

Deviation(1 g) = 1.78%



0 dB = 8.63 W/kg = 9.36 dBW/kg

PCTEST

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1064

Communication System: UID: 0--, CW; Frequency: 2600 MHz
Medium: 2450 Body; Medium parameters used:
f = 2600 MHz; cond = 2.23 S/m; perm = 51.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 04/27/2021; Ambient Temp: 24.3°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN7538; ConvF:(7.25,7.25,7.25); Calibrated: 2020-11-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1449; Calibrated: 2020-09-10
Phantom: Twin-SAM V5.0 (Left); Serial: 1873
Measurement SW: cDASY6 Module SAR V6.14.0.959

2600 MHz System Verification at 20.0 dBm (100 mW)

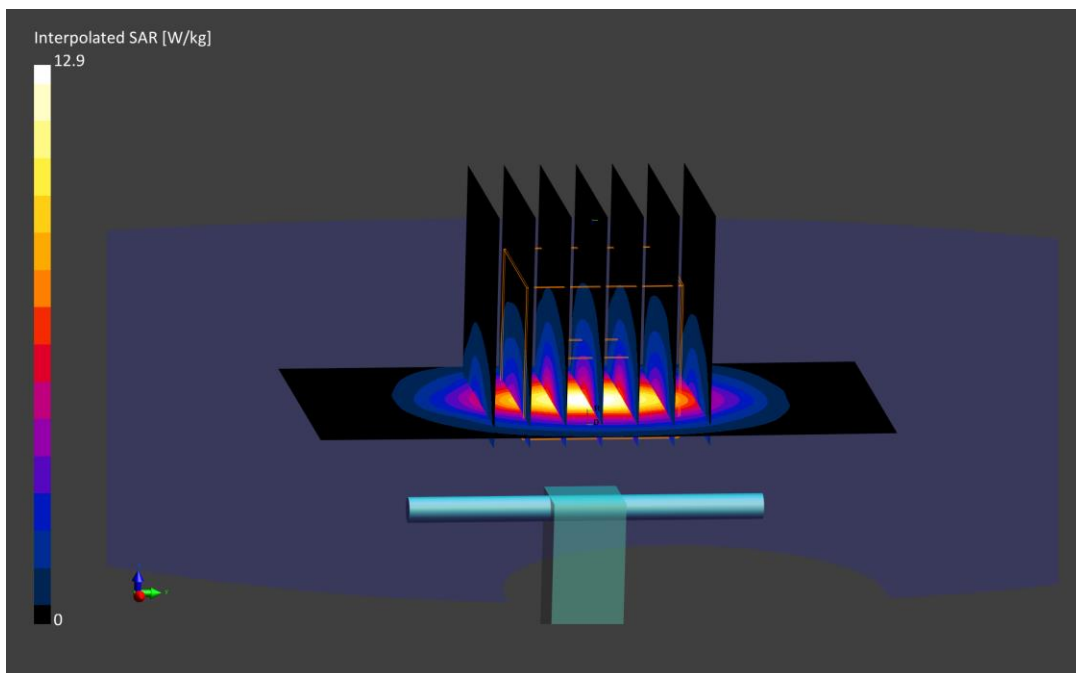
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0mm, dy=10.0mm

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

Peak SAR (extrapolated) = 12.9 W/kg

SAR(1 g) = 5.75 W/kg; SAR(10 g) = 2.54 W/kg

Deviation (1 g) = 3.42%; Deviation (10 g) = 1.60%;



PCTEST

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1064

Communication System: UID: 0--, CW; Frequency: 2600 MHz
Medium: 2450 Body; Medium parameters used:
f = 2600 MHz; cond = 2.22 S/m; perm = 50.2; density = 1000 kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 05/02/2021; Ambient Temp: 23.5°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7538; ConvF:(7.25,7.25,7.25); Calibrated: 2020-11-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1449; Calibrated: 2020-09-10
Phantom: Twin-SAM V5.0 (Left); Serial: 1873
Measurement SW: cDASY6 Module SAR V6.14.0.959

2600 MHz System Verification at 20.0 dBm (100 mW)

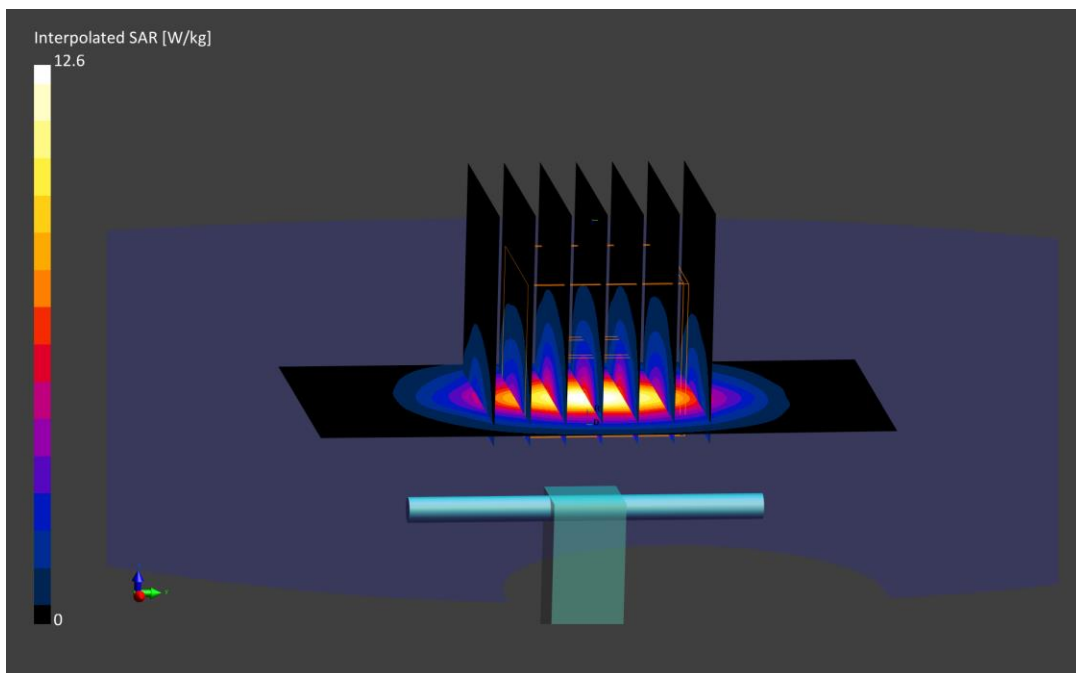
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0mm, dy=10.0mm

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

Peak SAR (extrapolated) = 12.6 W/kg

SAR(1 g) = 5.52 W/kg

Deviation (1 g) = -0.72%



PCTEST

DUT: Dipole 2600.0 MHz; Type: D2600V2 - SN1064

Communication System: UID: 0--, CW; Frequency: 2600 MHz
Medium: 2450 Body; Medium parameters used:
f = 2600 MHz; cond = 2.21 S/m; perm = 52.3; density = 1000 kg/m³
Phantom Section: Flat; Space: 1.0 cm

Test Date: 06/21/2021; Ambient Temp: 23.4°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7538; ConvF:(7.25,7.25,7.25); Calibrated: 2020-11-23
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1449; Calibrated: 2020-09-10
Phantom: Twin-SAM V5.0 (Left); Serial: 1873
Measurement SW: cDASY6 Module SAR V6.14.0.959

2600 MHz System Verification at 20.0 dBm (100 mW)

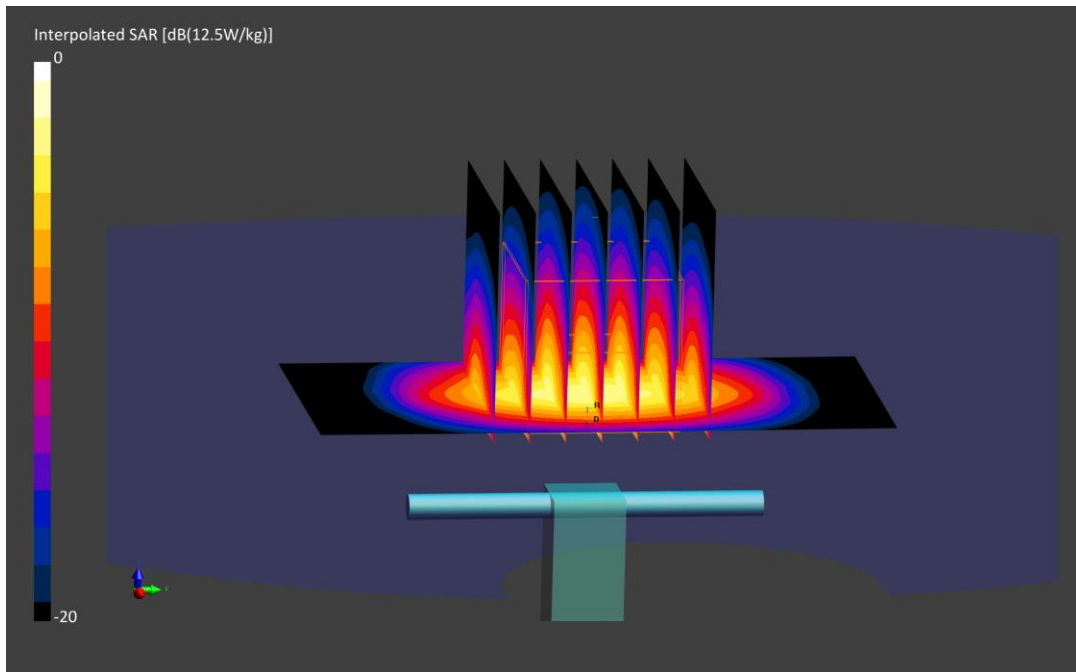
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0mm, dy=10.0mm

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

Peak SAR (extrapolated) = 12.5 W/kg

SAR(1 g) = 5.54 W/kg

Deviation (1 g) = -0.36%



PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Body Medium parameters used:
 $f = 5250$ MHz; $\sigma = 5.369$ S/m; $\epsilon_r = 47.336$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2021; Ambient Temp: 21.0°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7637; ConvF(4.73, 4.73, 4.73) @ 5250 MHz; Calibrated: 3/3/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 3/1/2021
Phantom: Twin-SAM V5.0 (20); Type: QD 000 P40 CD; Serial: 1626
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

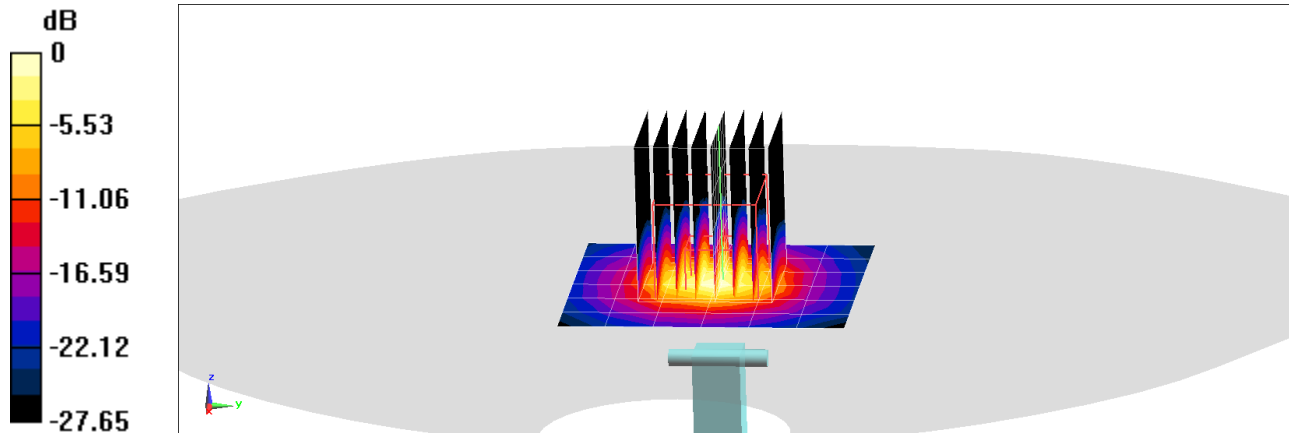
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 14.5 W/kg

SAR(1 g) = 3.6 W/kgg

Deviation(1 g) = -3.90%



0 dB = 8.52 W/kg = 9.30 dBW/kg

PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5600$ MHz; $\sigma = 5.868$ S/m; $\epsilon_r = 46.619$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2021; Ambient Temp: 21.0°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7637; ConvF(4.15, 4.15, 4.15) @ 5600 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1652; Calibrated: 3/1/2021

Phantom: Twin-SAM V5.0 (20); Type: QD 000 P40 CD; Serial: 1626

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

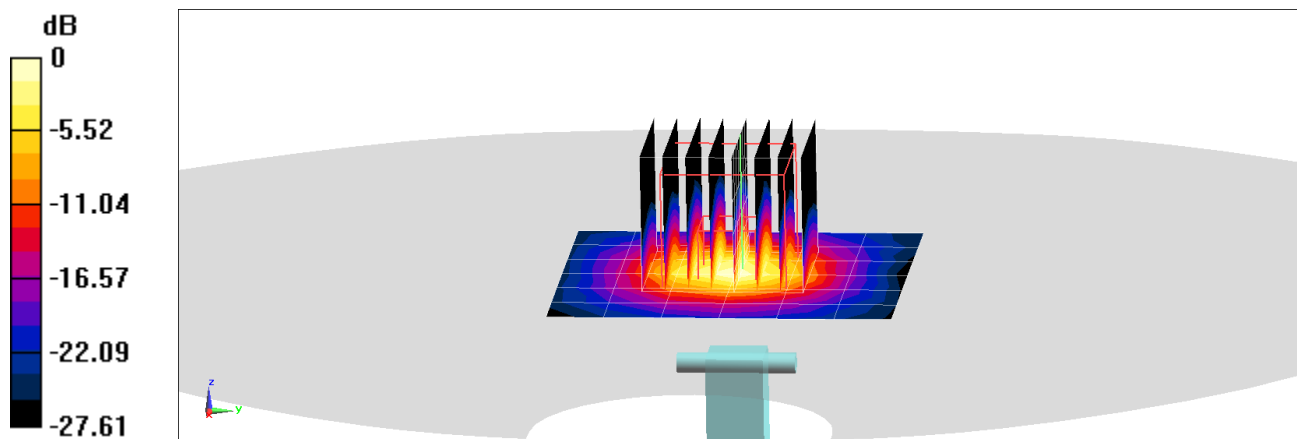
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 3.76 W/kg

Deviation(1 g) = 6.17%



0 dB = 9.25 W/kg = 9.66 dBW/kg

PCTEST

DUT: Dipole D5GHz; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Body Medium parameters used:
 $f = 5750$ MHz; $\sigma = 6.095$ S/m; $\epsilon_r = 46.351$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/23/2021; Ambient Temp: 21.0°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7637; ConvF(4.22, 4.22, 4.22) @ 5750 MHz; Calibrated: 3/3/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 3/1/2021
Phantom: Twin-SAM V5.0 (20); Type: QD 000 P40 CD; Serial: 1626
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

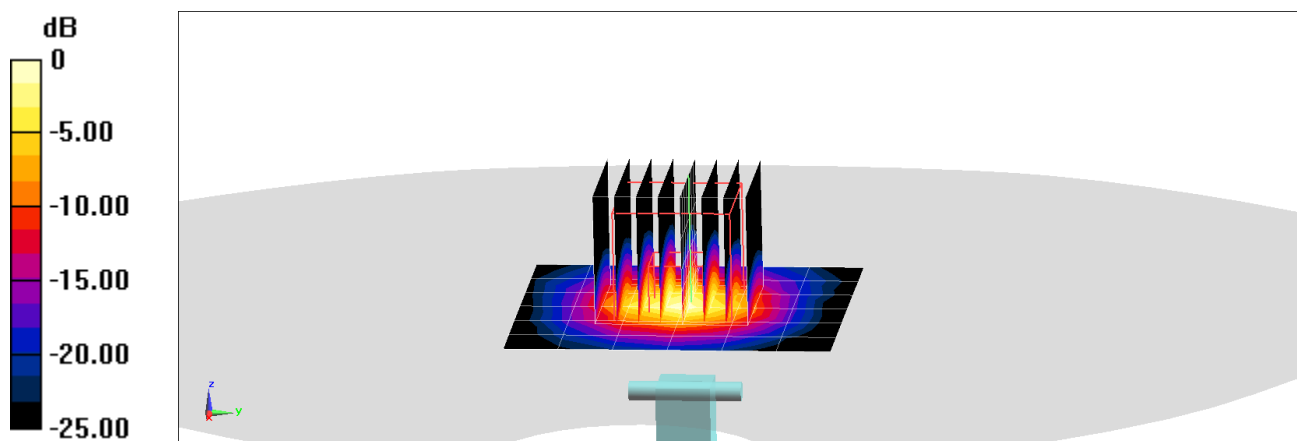
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 3.67 W/kg

Deviation(1 g) = 5.95%



0 dB = 9.24 W/kg = 9.66 dBW/kg

PCTEST

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Body Medium parameters used:
 $f = 5250$ MHz; $\sigma = 5.324$ S/m; $\epsilon_r = 47.108$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/30/2021; Ambient Temp: 22.0°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7637; ConvF(4.73, 4.73, 4.73) @ 5250 MHz; Calibrated: 3/3/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 3/1/2021
Phantom: Twin-SAM V5.0 (20); Type: QD 000 P40 CD; Serial: 1626
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5250 MHz System Verification at 17.0 dBm (50 mW)

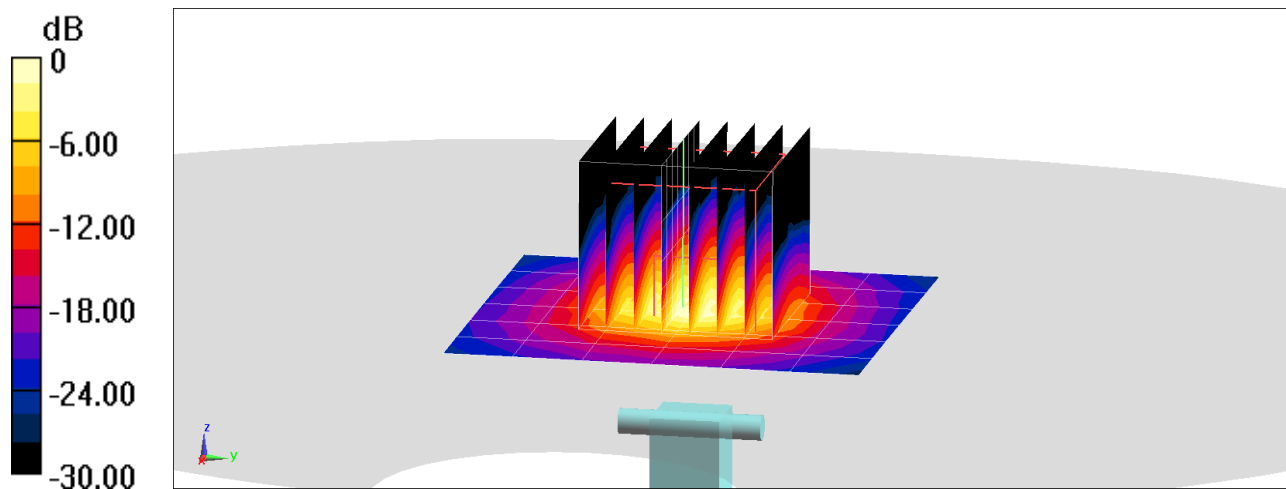
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.0 W/kg

SAR(10 g) = 1.02 W/kg

Deviation(10 g) = -1.92%



0 dB = 8.75 W/kg = 9.42 dBW/kg

PCTEST

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5600$ MHz; $\sigma = 5.805$ S/m; $\epsilon_r = 46.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/30/2021; Ambient Temp: 22.0°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7637; ConvF(4.15, 4.15, 4.15) @ 5600 MHz; Calibrated: 3/3/2021

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1652; Calibrated: 3/1/2021

Phantom: Twin-SAM V5.0 (20)Type: QD 000 P40 CD; Serial: 1626

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5600 MHz System Verification at 17.0 dBm (50 mW)

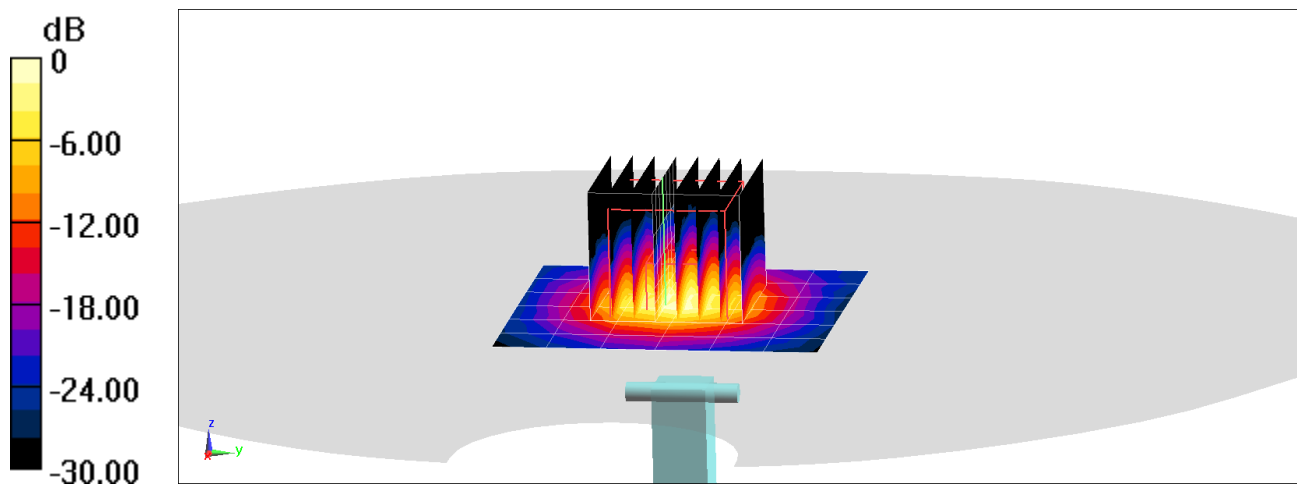
Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 18.3 W/kg

SAR(10 g) = 1.09 W/kg

Deviation(10 g) = 0.46%



0 dB = 9.68 W/kg = 9.86 dBW/kg

PCTEST

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: 1120

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1
Medium: 5200-5800 Body Medium parameters used:
 $f = 5750$ MHz; $\sigma = 6.051$ S/m; $\epsilon_r = 46.308$; $\rho = 1000$ kg/m³
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 05/30/2021; Ambient Temp: 22.0°C; Tissue Temp: 23.3°C

Probe: EX3DV4 - SN7637; ConvF(4.22, 4.22, 4.22) @ 5750 MHz; Calibrated: 3/3/2021
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1652; Calibrated: 3/1/2021
Phantom: Twin-SAM V5.0 (20); Type: QD 000 P40 CD; Serial: 1626
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

5750 MHz System Verification at 17.0 dBm (50 mW)

Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.6 W/kg

SAR(10 g) = 1.01 W/kg

Deviation(10 g) = 0.50%

