

APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

ELEMENT

DUT: Dipole 2450.000 MHz; Type: D2450V2 - SN797

Communication System: UID: 0, CW; Frequency: 2450.000 MHz
Medium: 2450 Head; Medium parameters used:
f = 2450.000 MHz; cond = 1.84 S/m; perm = 39.2; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/15/2025; Ambient Temp: 22.4°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN7406; ConvF:(7.24,6.85,7.63); Calibrated: 2024-07-05
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1677; Calibrated: 2024-07-08
Phantom: Twin-SAM V5.0; Serial: 1800
Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

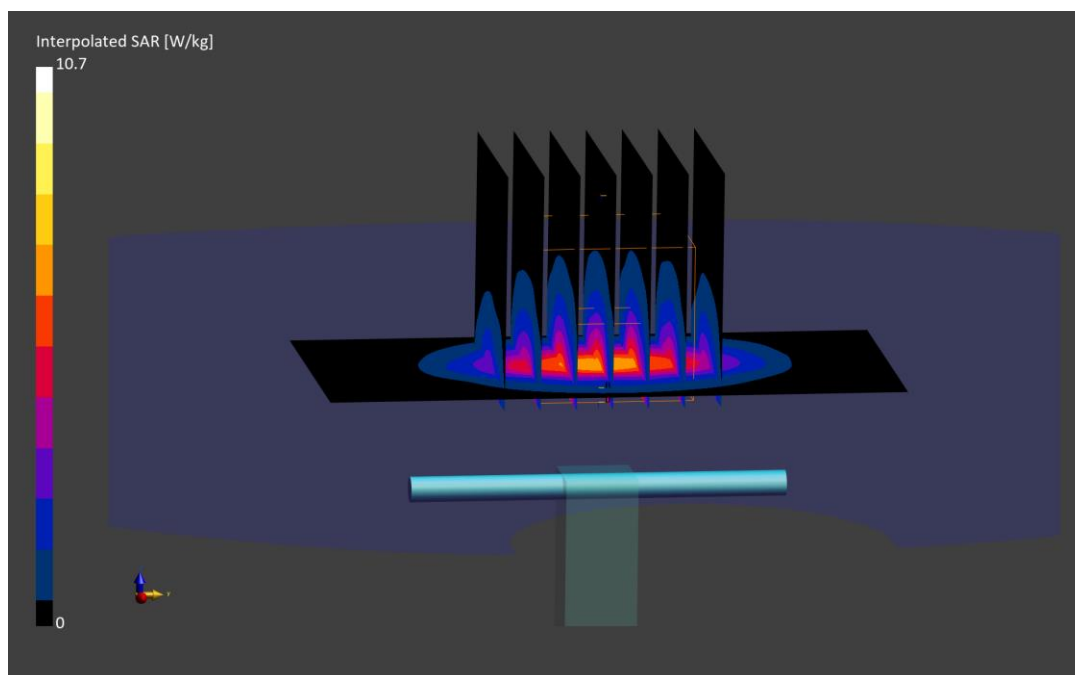
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 10.7 W/kg

SAR(1 g) = 5.31 W/kg; SAR(10 g) = 2.49 W/kg

Deviation (1 g) = 2.12%; Deviation (10 g) = 2.05%



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 = 1.82 S/m; perm = 37.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/22/2025; Ambient Temp: 24.5°C; Tissue Temp: 23.4°C

Probe: EX3DV4 - SN7406; ConvF:(7.24,6.85,7.63); Calibrated: 2024-07-05
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1677; Calibrated: 2024-07-08
Phantom: Twin-SAM V5.0; Serial: 1800
Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

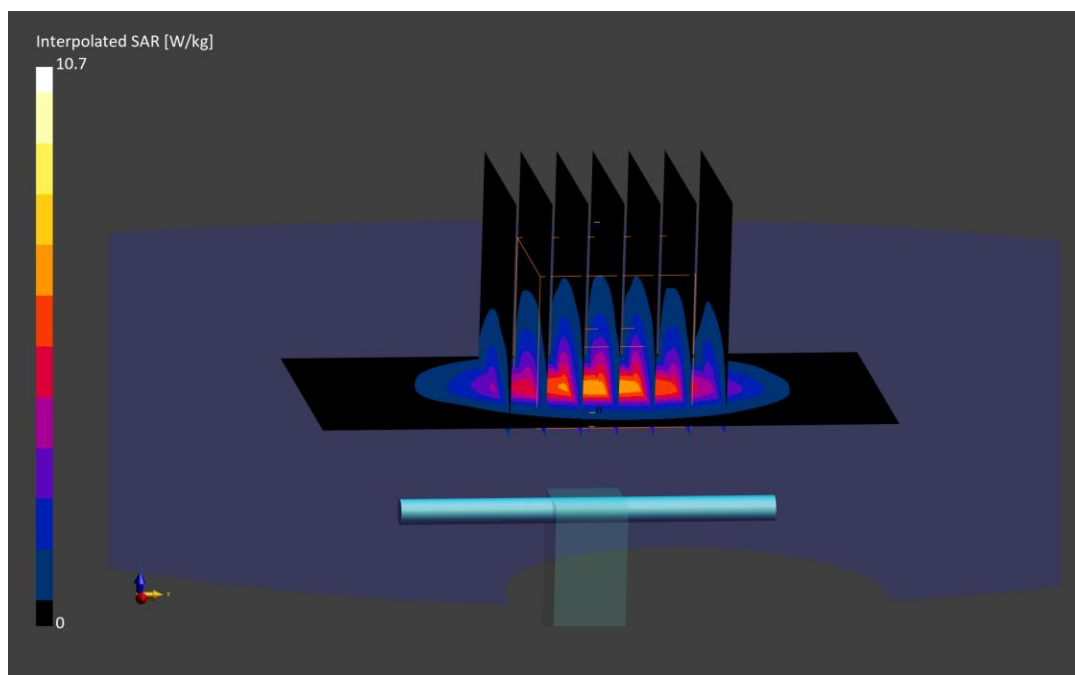
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 10.7 W/kg

SAR(1 g) = 5.23 W/kg; SAR(10 g) = 2.44 W/kg

Deviation (1 g) = 0.97%; Deviation (10 g) = 0.41%



ELEMENT

DUT: Dipole 5250.000 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5250.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5250.000 MHz; cond = 4.57 S/m; perm = 35.7; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/13/2025; Ambient Temp: 19.1°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7803; ConvF:(5.21,5.33,5.42); Calibrated: 2024-06-28
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1583; Calibrated: 2024-07-08
Phantom: Twin-SAM V8.0; Serial: 2065
Measurement SW: DASY Module SAR V16.4.0.5005

5250.0 MHz System Verification at 17.0 dBm (50 mW)

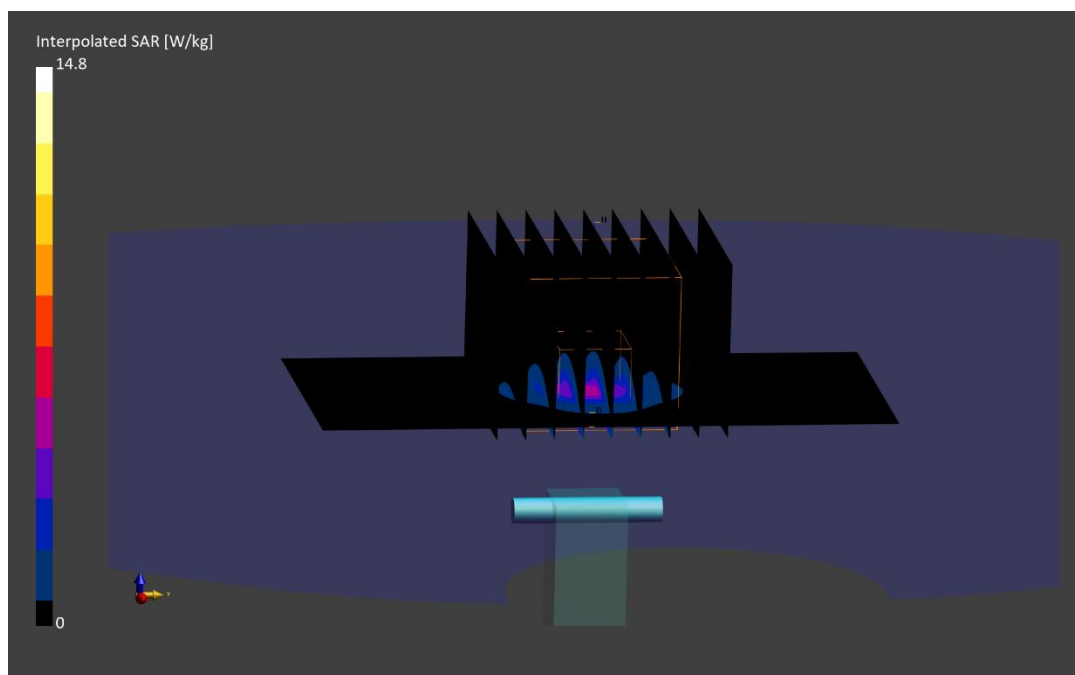
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 14.8 W/kg

SAR(1 g) = 3.73 W/kg; SAR(10 g) = 1.08 W/kg

Deviation (1 g) = -5.45%; Deviation (10 g) = -4.85%



ELEMENT

DUT: Dipole 5600.000 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5600.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5600.000 MHz; cond = 4.95 S/m; perm = 35.1; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/13/2025; Ambient Temp: 19.1°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7803; ConvF:(4.82,4.92,5.01); Calibrated: 2024-06-28
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1583; Calibrated: 2024-07-08
Phantom: Twin-SAM V8.0; Serial: 2065
Measurement SW: DASY Module SAR V16.4.0.5005

5600.0 MHz System Verification at 17.0 dBm (50 mW)

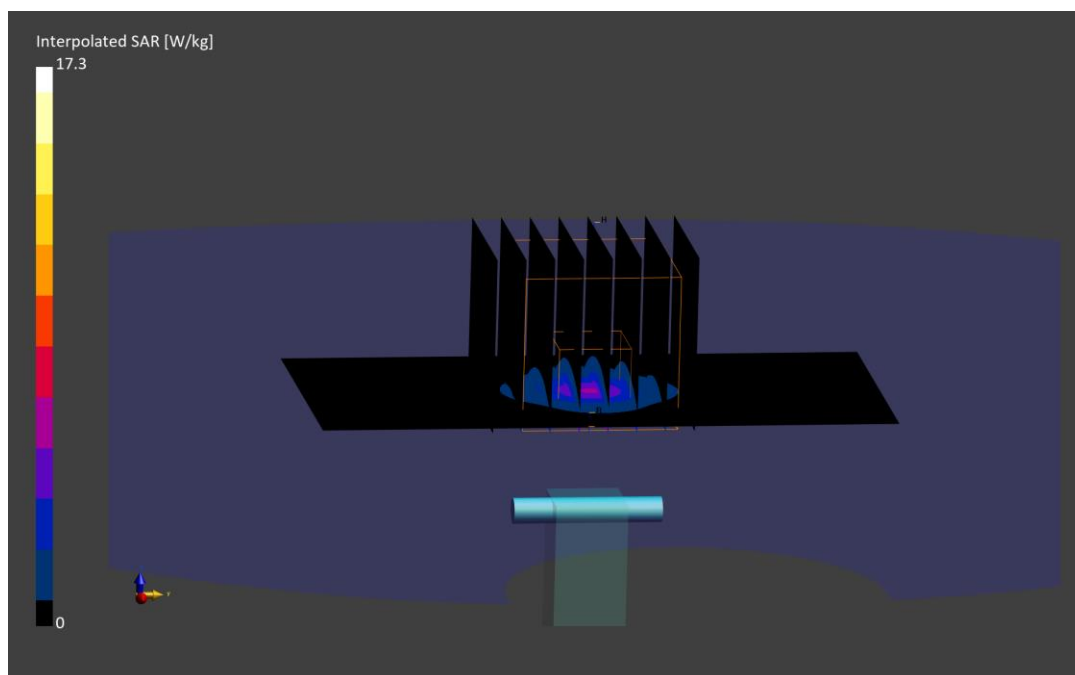
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (24.0 x 28.0 x 22.9): Measurement grid: dx=4.0 mm, dy=4.0 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 4.04 W/kg; SAR(10 g) = 1.17 W/kg

Deviation (1 g) = -2.65%; Deviation (10 g) = -2.09%



ELEMENT

DUT: Dipole 5750.000 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5750.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5750.000 MHz; cond = 5.12 S/m; perm = 34.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/13/2025; Ambient Temp: 19.1°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7803; ConvF:(4.79,4.89,4.98); Calibrated: 2024-06-28
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1583; Calibrated: 2024-07-08
Phantom: Twin-SAM V8.0; Serial: 2065
Measurement SW: DASY Module SAR V16.4.0.5005

5750.0 MHz System Verification at 17.0 dBm (50 mW)

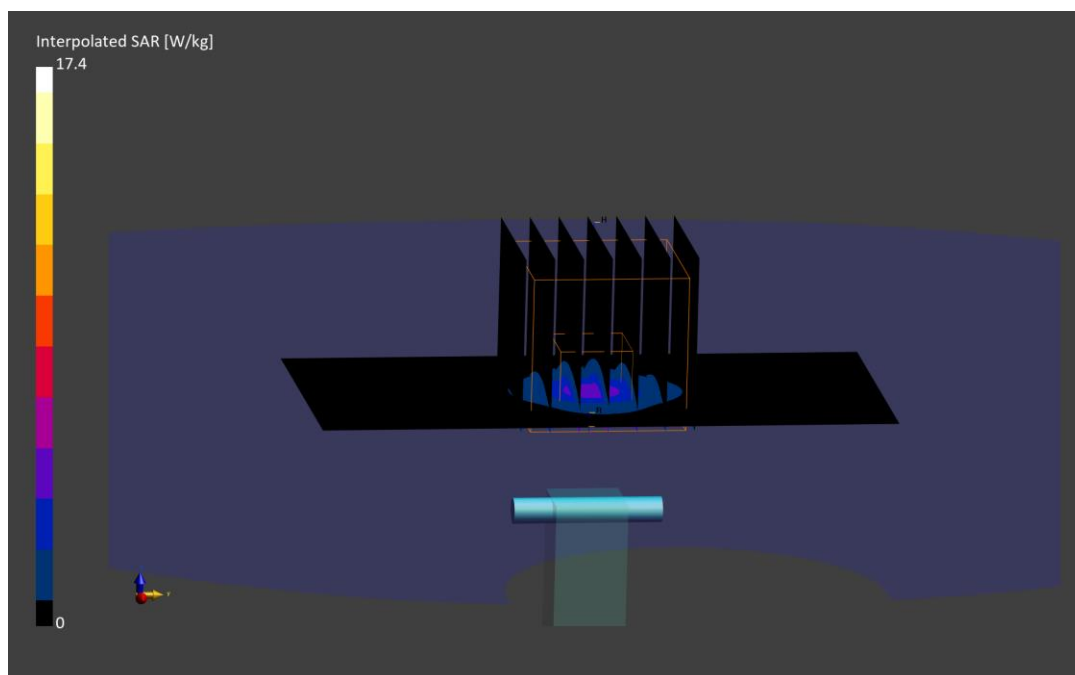
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 17.5 W/kg

SAR(1 g) = 3.93 W/kg; SAR(10 g) = 1.14 W/kg

Deviation (1 g) = -0.38%; Deviation (10 g) = 1.79%



ELEMENT

DUT: Dipole 5850.000 MHz; Type: D5GHzV2 - SN1191

Communication System: UID: 0, CW; Frequency: 5850.000 MHz
Medium: 5200-5800 Head; Medium parameters used:
f = 5850.000 MHz; cond = 5.24 S/m; perm = 34.6; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 01/13/2025; Ambient Temp: 19.1°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7803; ConvF:(4.78,4.89,4.97); Calibrated: 2024-06-28
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1583; Calibrated: 2024-07-08
Phantom: Twin-SAM V8.0; Serial: 2065
Measurement SW: DASY Module SAR V16.4.0.5005

5850.0 MHz System Verification at 17.0 dBm (50 mW)

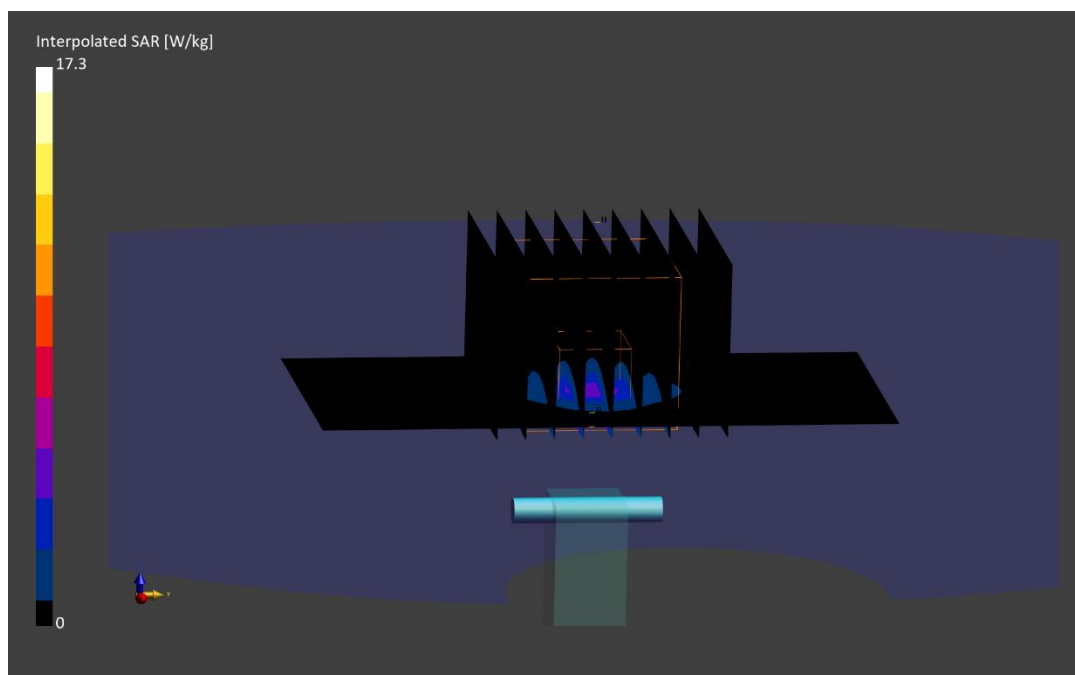
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 3.84 W/kg; SAR(10 g) = 1.11 W/kg

Deviation (1 g) = -2.54%; Deviation (10 g) = -1.33%



ELEMENT

DUT: Dipole 6500.000 MHz; Type: D6.5GHzV2 - SN1111

Communication System: UID: 0, CW; Frequency: 6500.000 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.000 MHz; cond = 5.95 S/m; perm = 33.9; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 01/20/2025; Ambient Temp: 19.2°C; Tissue Temp: 19.2°C

Probe: EX3DV4 - SN7527; ConvF:(5.15,4.68,5.36); Calibrated: 2024-03-08
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1272; Calibrated: 2024-03-12
Phantom: Twin-SAM V8.0; Serial: 1979
Measurement SW: DASY Module SAR V16.4.0.5005

6500.0 MHz System Verification at 14.0 dBm (25 mW)

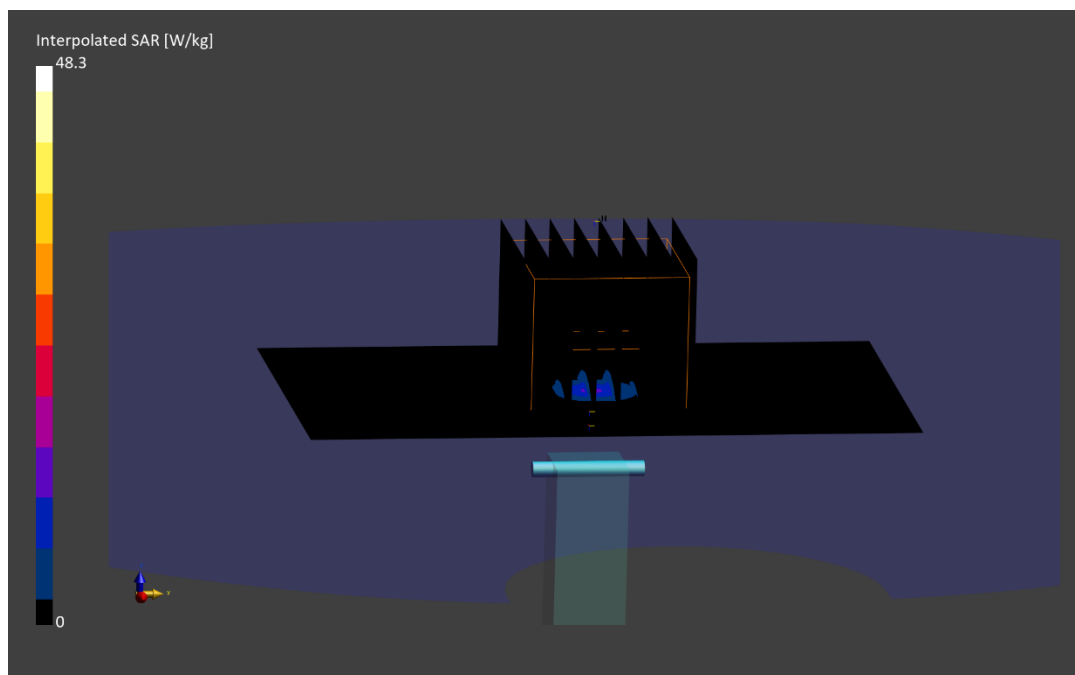
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

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

Peak SAR (extrapolated) = 48.3 W/kg

SAR(1 g) = 7.74 W/kg; SAR(10 g) = 1.45 W/kg; APD(4cm²) = 35.0 W/m²

Deviation (1 g) = 6.39%; Deviation (10 g) = 8.41%; Deviation (APD) = 7.69%



Date: 2025-01-20

Measurement Group

Device Under Test Properties

DUT	Serial Number
10 GHz Verification Source	1002

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, 2024-02-02	DAE4 - SN1449, 2024-09-10

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
pStot avg [W/m²]	60.9
pSn avg [W/m²]	60.5
Epeak [V/m]	163
Deviation [dB] pStot	0.45
Deviation [dB] pSn	0.45

