

APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

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 = 1.78 S/m; perm = 39.7; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/20/2025; Ambient Temp: 20.5°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7551; ConvF:(6.98,6.91,7.1); Calibrated: 2025-04-16

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

Electronics: DAE4 Sn1323; Calibrated: 2025-04-15

Phantom: Twin-SAM V4.0; Serial: 1447

Measurement SW: DASY Module SAR V16.4.0.5005

2450.0 MHz System Verification at 20.0 dBm (100 mW)

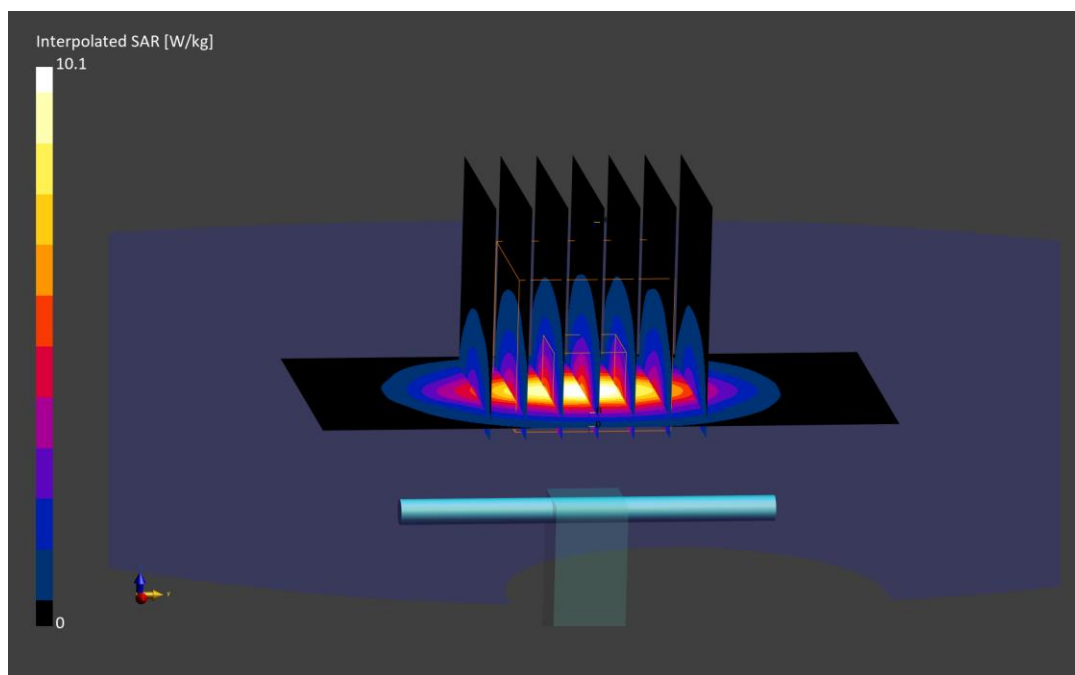
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

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) = 10.1 W/kg

SAR(1 g) = 5.04 W/kg

Deviation (1 g) = -3.82%



ELEMENT

DUT: Dipole 5250.0 MHz; Type: D5GHzV2 - SN1066

Communication System: UID: 0, CW; Frequency: 5250.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

f = 5250.0 MHz; cond = 4.68 S/m; perm = 35.2; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/16/2025; Ambient Temp: 20.5°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7499; ConvF:(5.42,5.54,5.73); Calibrated: 2025-01-14

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

Electronics: DAE4 Sn1465; Calibrated: 2025-01-08

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.4.0.5005

5250.0 MHz System Verification at 17.0 dBm (50 mW)

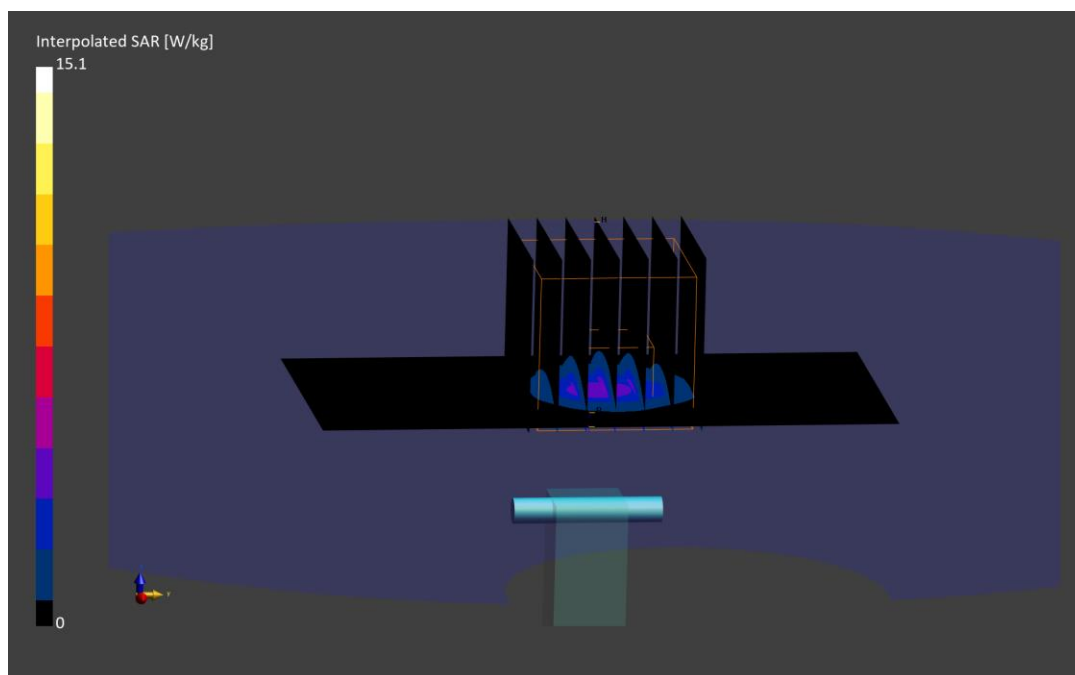
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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) = 15.1 W/kg

SAR(1 g) = 3.69 W/kg

Deviation (1 g) = -5.26%



ELEMENT

DUT: Dipole 5600.0 MHz; Type: D5GHzV2 - SN1066

Communication System: UID: 0, CW; Frequency: 5600.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

f = 5600.0 MHz; cond = 5.08 S/m; perm = 34.5; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/16/2025; Ambient Temp: 20.5°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7499; ConvF:(4.83,4.94,5.11); Calibrated: 2025-01-14

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

Electronics: DAE4 Sn1465; Calibrated: 2025-01-08

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.4.0.5005

5600.0 MHz System Verification at 17.0 dBm (50 mW)

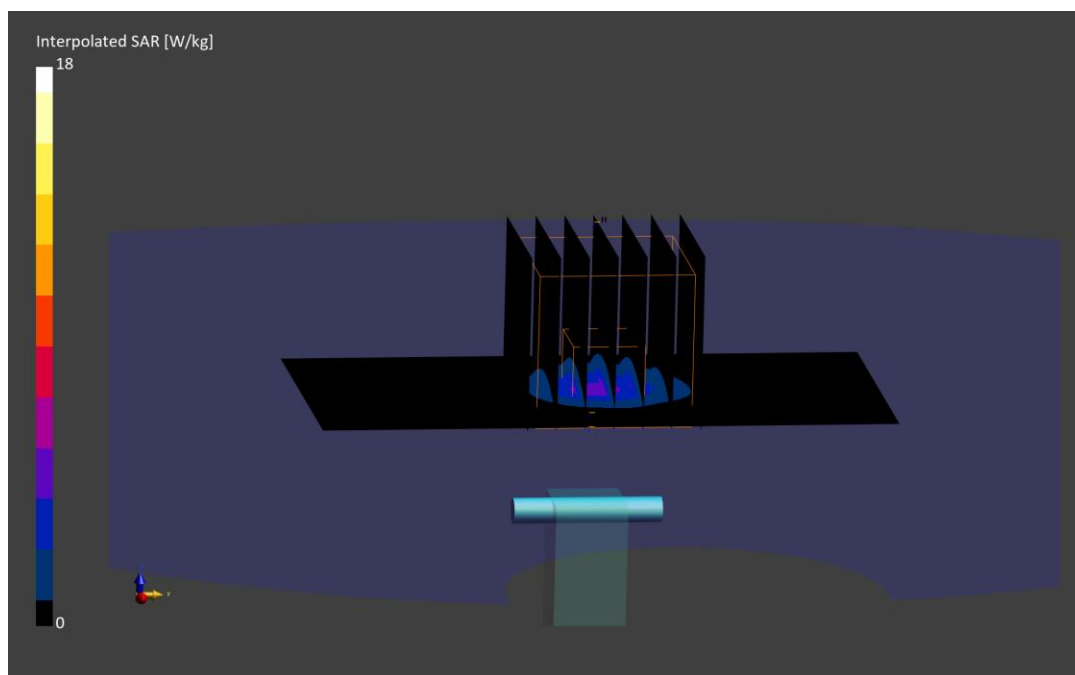
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (24.0 x 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) = 18.0 W/kg

SAR(1 g) = 4.10 W/kg

Deviation (1 g) = 0.24%



ELEMENT

DUT: Dipole 5750.0 MHz; Type: D5GHzV2 - SN1066

Communication System: UID: 0, CW; Frequency: 5750.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

$f = 5750.0$ MHz; $\text{cond} = 5.26$ S/m; $\text{perm} = 34.2$; $\text{density} = 1000$ kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/16/2025; Ambient Temp: 20.5°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7499; ConvF:(4.93,5.05,5.22); Calibrated: 2025-01-14

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

Electronics: DAE4 Sn1465; Calibrated: 2025-01-08

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.4.0.5005

5750.0 MHz System Verification at 17.0 dBm (50 mW)

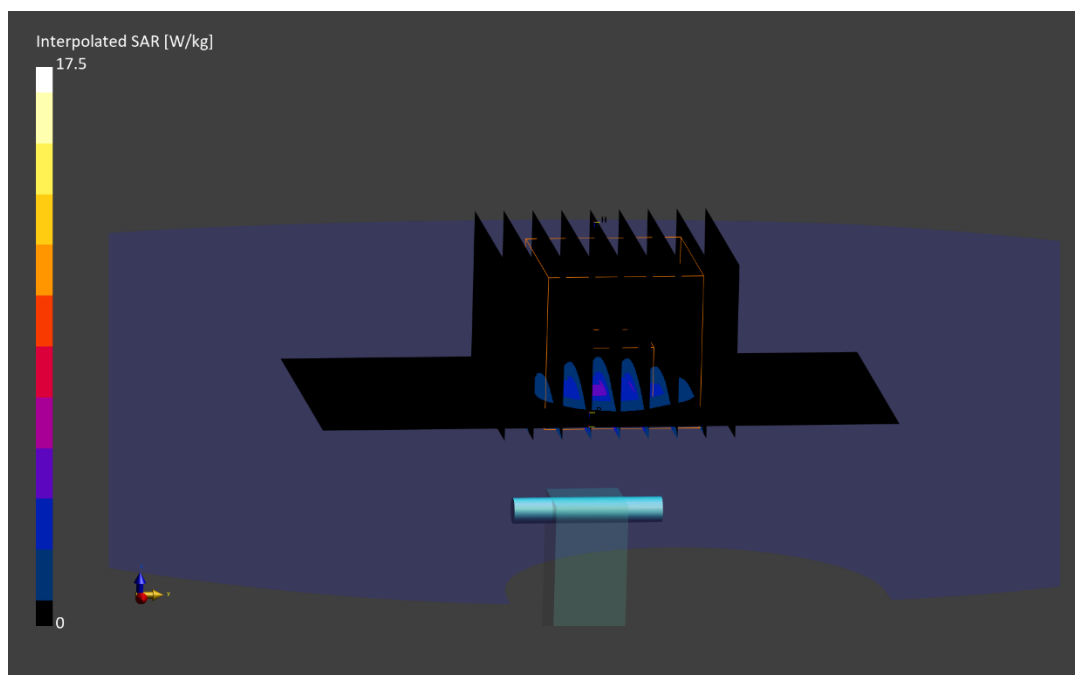
Area Scan (40.0 x 80.0): Measurement grid: $dx=10.0$ mm, $dy=10.0$ mm

Zoom Scan (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) = 17.5 W/kg

SAR(1 g) = 3.90 W/kg

Deviation (1 g) = -3.35%



ELEMENT

DUT: Dipole 5850.0 MHz; Type: D5GHzV2 - SN1066

Communication System: UID: 0, CW; Frequency: 5850.0 MHz

Medium: 5200-5800 Head; Medium parameters used:

f = 5850.0 MHz; cond = 5.37 S/m; perm = 34.0; density = 1000 kg/m³

Phantom Section: Flat; Space: 10 mm

Test Date: 07/16/2025; Ambient Temp: 20.5°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7499; ConvF:(4.9,5.02,5.19); Calibrated: 2025-01-14

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

Electronics: DAE4 Sn1465; Calibrated: 2025-01-08

Phantom: Twin-SAM V8.0; Serial: 2070

Measurement SW: DASY Module SAR V16.4.0.5005

5850.0 MHz System Verification at 17.0 dBm (50 mW)

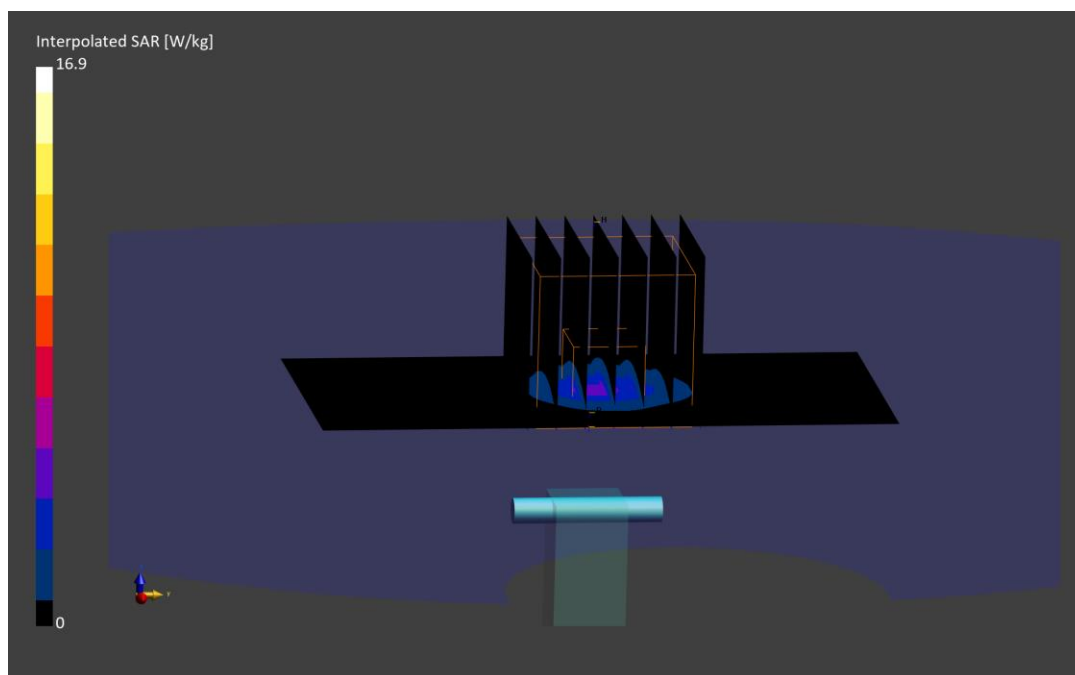
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (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) = 16.9 W/kg

SAR(1 g) = 3.73 W/kg

Deviation (1 g) = -3.62%



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 = 5.84 S/m; perm = 34.7; density = 1000 kg/m³

Phantom Section: Flat; Space: 5 mm

Test Date: 08/11/2025; Ambient Temp: 22.1°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN3949; ConvF:(5.23,5.7,5.57); 2024-09-09

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

Electronics: DAE4 Sn1684; 2024-09-04

Phantom: Twin-SAM V4.0; Serial: 1275

Measurement SW: DASY Module SAR V16.4.0.5005

6500.0 MHz System Verification at 14.0 dBm (25 mW)

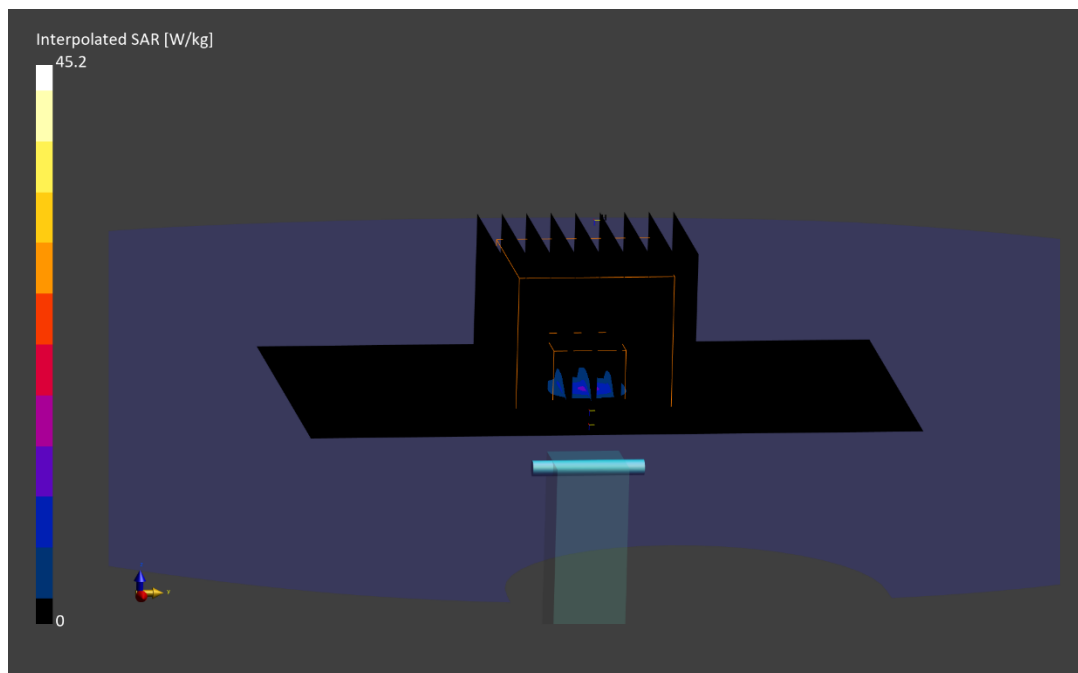
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

Zoom Scan (23.8 x 27.2 x 22.9): Measurement grid: dx=3.4 mm, dy=3.4 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 45.2 W/kg

SAR(1 g) = 7.34 W/kg; APD (4cm²) = 32.7 W/m²

Deviation (1 g) = -2.13%; Deviation (APD) = -2.39%



Date: 2025-08-13

10 GHz Verification

Device Under Test Properties

DUT	Serial Number
10 GHz Verification Source	1006

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
EUmmWV3 - SN9407, 2024-10-09	DAE4 - SN1402, 2025-04-10

Software Setup

Software	Software Version
cDASY6 Module mmWave	3.2.0.1840

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	62.6
pSn avg [W/m²]	62.4
Epeak [V/m]	161
Deviation [dB] pStot	0.32
Deviation [dB] pSn	0.33

