

APPENDIX B: SYSTEM VERIFICATION PLOTS

ELEMENT

DUT: Dipole 6500.0 MHz; Type: D6.5GHzV2 - SN1018

Communication System: UID: 0, CW; Frequency: 6500.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.0 MHz; cond = 6.13 S/m; perm = 33.8; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 10/19/2022; Ambient Temp: 23.5°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN3914; ConvF:(5.5,5.5,5.5); Calibrated: 2022-05-17
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn728; Calibrated: 2022-05-10
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)

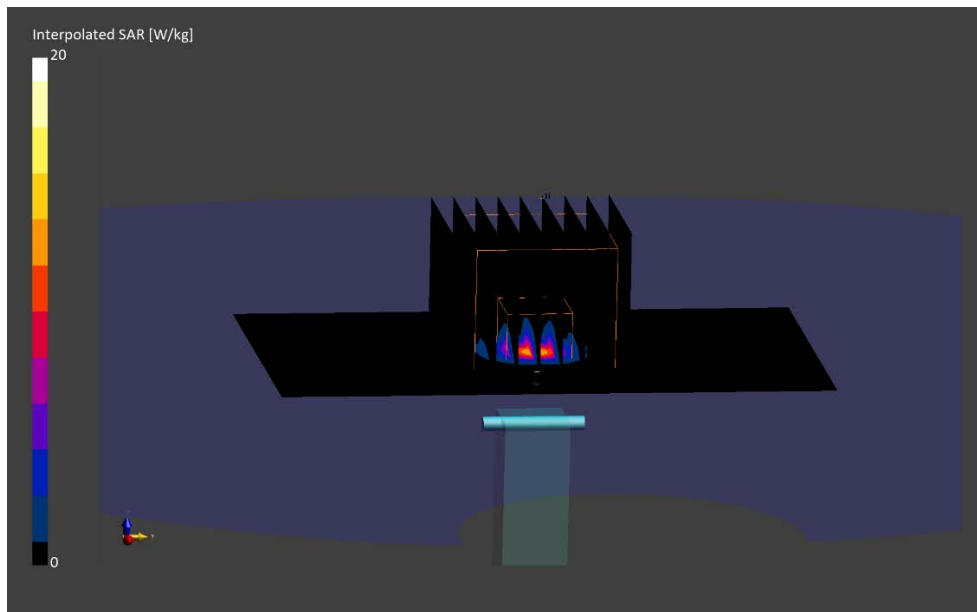
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

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) = 46.1 W/kg

SAR(1 g) = 7.13 W/kg; SAR(10 g) = 1.30 W/kg; APD(4cm²)=31.7 W/m²

Deviation (1 g) = -1.66%; Deviation (10 g) = 2.26%; Deviation (4cm²) = -3.21%



ELEMENT

DUT: Dipole 8000.0 MHz; Type: D8GHzV2 - SN1007

Communication System: UID: 0, CW; Frequency: 8000.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 8000.0 MHz; cond = 7.81 S/m; perm = 31.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 10/19/2022; Ambient Temp: 23.5°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN3914; ConvF:(5.4,5.4,5.4); Calibrated: 2022-05-17
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn728; Calibrated: 2022-05-10
Phantom: Twin-SAM V5.0; Serial: 1759
Measurement SW: DASY Module SAR V16.2.0.1425

8000.0 MHz System Verification at 14.0 dBm (25 mW)

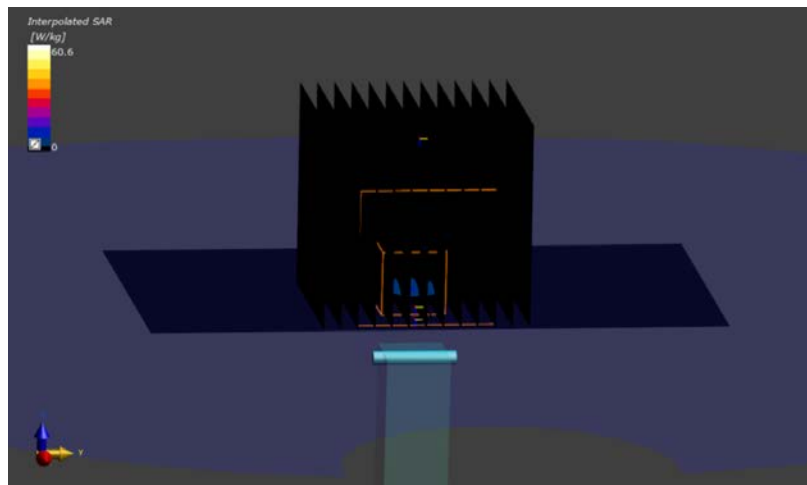
Area Scan (52.0 x 91.0): Measurement grid: dx=6.5 mm, dy=6.5 mm

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) = 61.3 W/kg

SAR(1 g) = 6.64 W/kg; SAR(10 g) = 1.08 W/kg; APD(4cm²)=26.7 W/m²

Deviation (1 g) = 1.37%; Deviation (10 g) = -2.04%; Deviation (4cm²) = -2.02%



ELEMENT

DUT: Dipole 6500.0 MHz; Type: D6.5GHzV2 - SN1018

Communication System: UID: 0, CW; Frequency: 6500.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.0 MHz; cond = 6.08 S/m; perm = 33.4; density = 1000 kg/m³
Phantom Section: Flat; Space: 5 mm

Test Date: 10/26/2022; Ambient Temp: 22.3°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN3914; ConvF:(5.5,5.5,5.5); Calibrated: 2022-05-17
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn728; Calibrated: 2022-05-10
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)

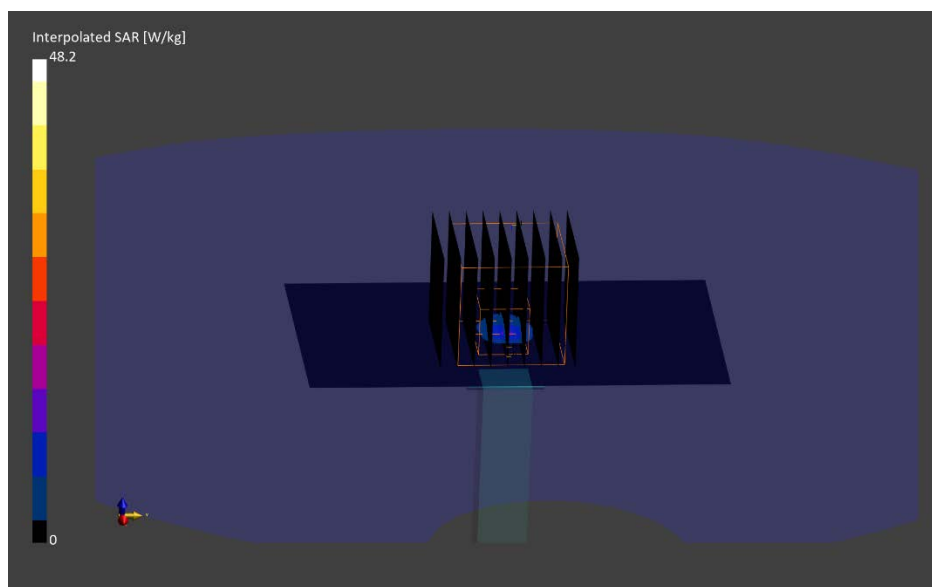
Area Scan (51.0 x 85.0): Measurement grid: dx=8.5 mm, dy=8.5 mm

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) = 48.2 W/kg

SAR(1 g) = 7.41 W/kg; SAR(10 g) = 1.36 W/kg; APD(4cm²)=33.2 W/m²

Deviation (1 g) = 2.21%; Deviation (10 g) = 2.26%; Deviation (4cm²) = 1.37%



Element

Date: 10/05/2022

10 GHz System Verification

Device Under Test Properties

DUT	Serial Number
10 GHz Verification Source	1004

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
EUmWV4 - SN9541, 05/19/2022	DAE4ip SN1639, 01/21/2022

Software Setup

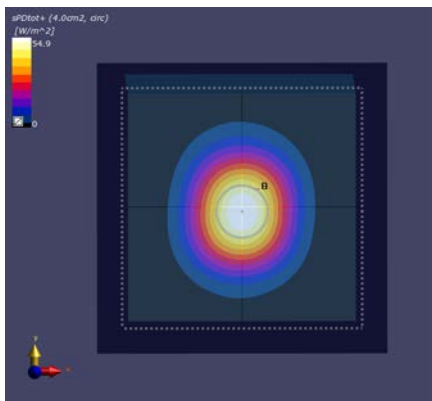
Software	Software Version
cDASY6 Module mmWave	3.0.0.841

Scans Setup

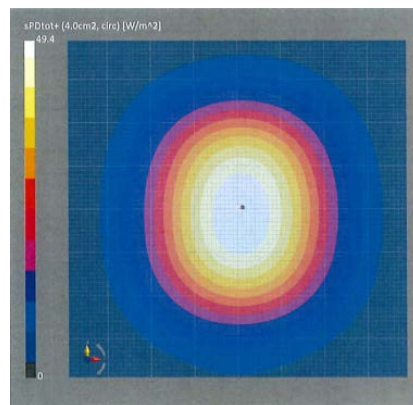
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS_{tot} avg [W/m²]	54.9
pS_n avg [W/m²]	54.7
E_{peak} [V/m]	152
Deviation pStot (dB)	0.46
Deviation pSn (dB)	0.44



10 GHz System Verification



Calibration Certificate