APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

ELEMENT

DUT: Dipole 6500.0 MHz; Type: D6.5GHzV2 - SN1019

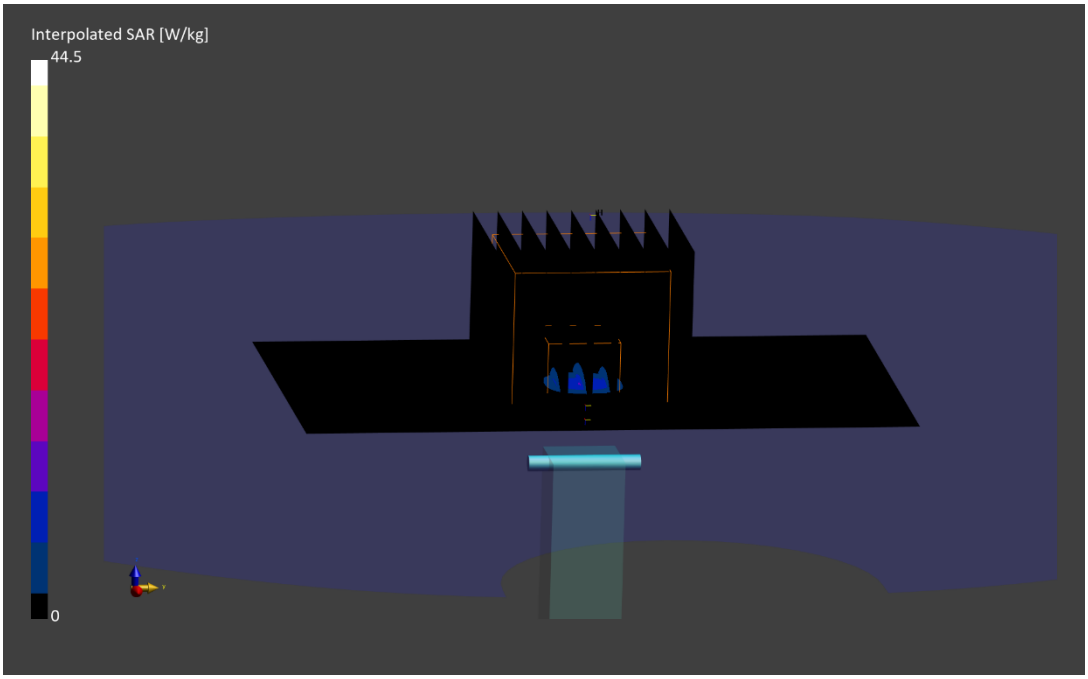
Communication System: UID: 0, CW; Frequency: 6500.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.0 MHz; cond = 6.35 S/m; perm = 33.7; density = 1000 kg/m3
Phantom Section: Flat; Space: 5 mm

Test Date: 05/01/2023; Ambient Temp: 22.1°C; Tissue Temp: 19.5°C

Probe: EX3DV4 - SN7532; ConvF:(5.3,5.3,5.3); Calibrated: 2023-04-18
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2023-04-14
Phantom: Twin-SAM V8.0; Serial: 2067
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) = 44.5 W/kg
SAR(1 g) = 6.80 W/kg; APD (4 cm^2) = 30.5 W/m^2
Deviation (1 g) = -7.80%; Deviation (4 cm^2) = -6.87%



ELEMENT

DUT: Dipole 6500.0 MHz; Type: D6.5GHzV2 - SN1019

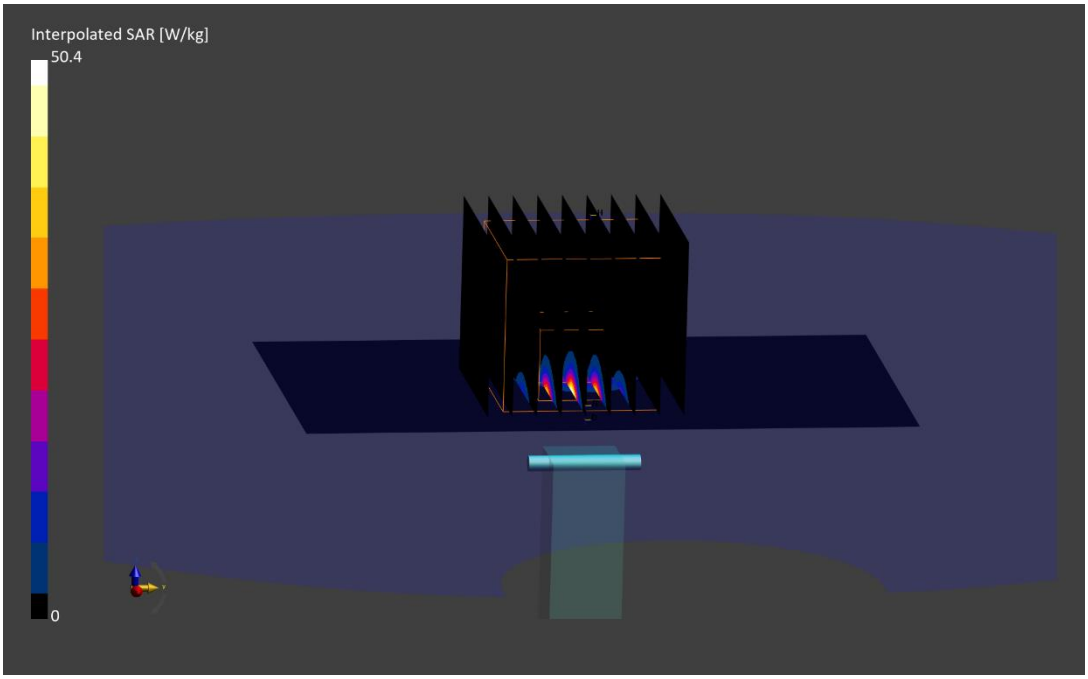
Communication System: UID: 0, CW; Frequency: 6500.0 MHz
Medium: 6000 Head; Medium parameters used:
f = 6500.0 MHz; cond = 6.35 S/m; perm = 34.1; density = 1000 kg/m3
Phantom Section: Flat; Space: 5 mm

Test Date: 05/08/2023; Ambient Temp: 21.0°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7532; ConvF:(5.3,5.3,5.3); Calibrated: 2023-04-18
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn501; Calibrated: 2023-04-14
Phantom: Twin-SAM V8.0; Serial: 2067
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) = 50.4 W/kg
SAR(1 g) = 7.55 W/kg; APD (4 cm^2) = 33.5 W/m^2
Deviation (1 g) = 2.37%; Deviation (4 cm^2) = 2.29%



ELEMENT

Date: 05/08/2023

10 GHz System 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

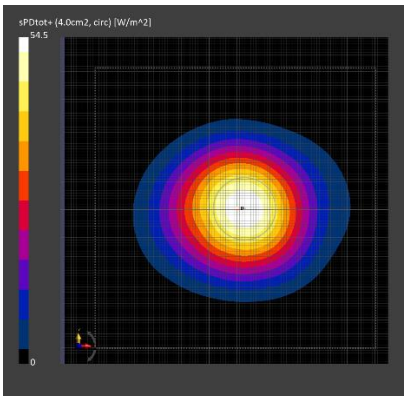
Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9364_F1-55GHz, 2022-06-16	DAE4 Sn1646, 2022-11-10

Scans Setup

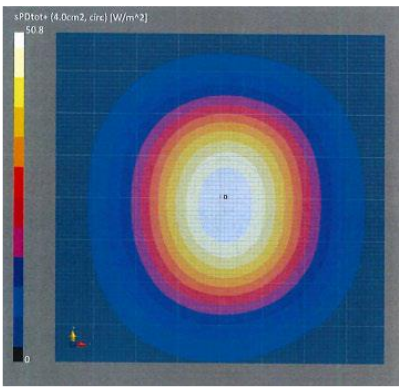
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

Measurement Results

Scan Type	5G Scan
Date	2023-05-08, 11:27
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	54.2
psPDn+ [W/m²] Deviation (dB)	0.226
psPDtot+ [W/m²]	54.5
psPDtot+ [W/m²] Deviation (dB)	0.280
E_{max} [V/m]	155



10 GHz System Verification



Calibration Certificate

ELEMENT

Date: 05/09/2023

10 GHz System 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

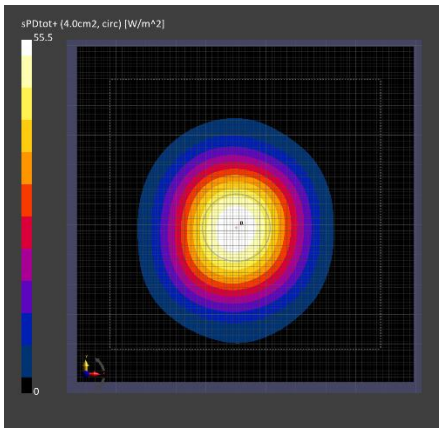
Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9364_F1-55GHz, 2022-06-16	DAE4 Sn1646, 2022-11-10

Scans Setup

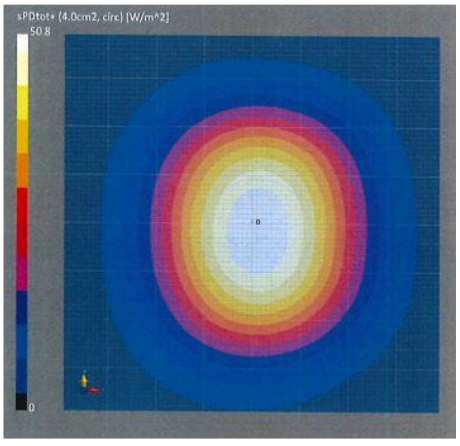
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

Measurement Results

Scan Type	5G Scan
Date	2023-05-09, 19:12
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	55.3
psPDn+ [W/m²] Deviation (dB)	0.343
psPDtot+ [W/m²]	55.5
psPDtot+ [W/m²] Deviation (dB)	0.359
E_{max} [V/m]	154



10 GHz System Verification



Calibration Certificate

ELEMENT

Date: 05/11/2023

10 GHz System 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

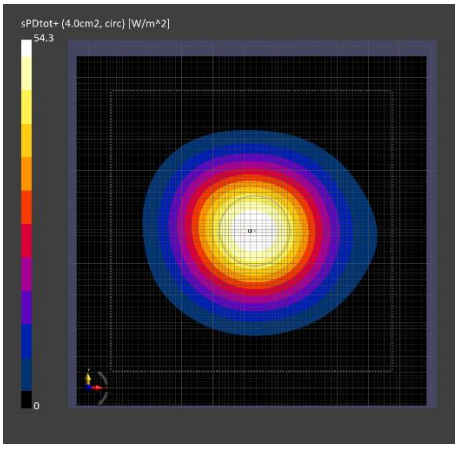
Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9364_F1-55GHz, 2022-06-16	DAE4 Sn1646, 2022-11-10

Scans Setup

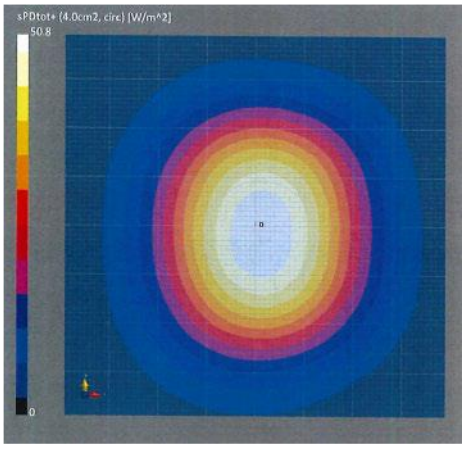
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

Measurement Results

Scan Type	5G Scan
Date	2023-05-11, 14:30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	54.1
psPDn+ [W/m²] Deviation (dB)	0.248
psPDtot+ [W/m²]	54.3
psPDtot+ [W/m²] Deviation (dB)	0.264
E_{max} [V/m]	153



10 GHz System Verification



Calibration Certificate