

## 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 = 5.92 S/m; perm = 33.6; density = 1000 kg/m<sup>3</sup>  
Phantom Section: Flat; Space: 5 mm

Test Date: 04/04/2022; Ambient Temp: 21.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7551; ConvF:(5.54,5.54,5.54); Calibrated: 2021-10-26  
Sensor-Surface: 1.4mm (VMS + 6p)  
Electronics: DAE4 Sn1449; Calibrated: 2021-09-15  
Phantom: Twin-SAM V8.0 Right; Serial: 1981  
Measurement SW: DASY Module SAR V16.0.0.116

## 6500 MHz System Verification at 17 dBm (50 mW)

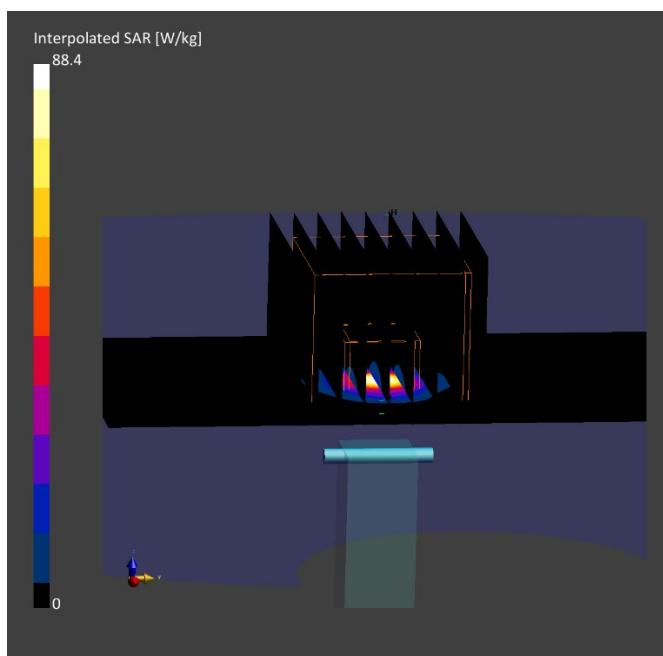
**Area Scan (51.0 x 85.0):** Measurement grid: dx=8.5 mm, dy=8.5 mm

**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) = 88.4 W/kg

**SAR(1 g) = 13.7 W/kg; SAR(10 g) = 2.55 W/kg; APD(4 cm<sup>2</sup>) = 62.1 W/m<sup>2</sup>**

Deviation (1 g) = -5.52%; Deviation (10 g) = -4.14%; Deviation (4 cm<sup>2</sup>) = -5.19%



# 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 = 6.12 S/m; perm = 33.7; density = 1000 kg/m<sup>3</sup>  
Phantom Section: Flat; Space: 5 mm

Test Date: 04/07/2022; Ambient Temp: 22.5°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7551; ConvF:(5.54,5.54,5.54); Calibrated: 2021-10-26  
Sensor-Surface: 1.4mm (VMS + 6p)  
Electronics: DAE4 Sn1449; Calibrated: 2021-09-15  
Phantom: Twin-SAM V8.0 Right; Serial: 1981  
Measurement SW: DASY Module SAR V16.0.0.116

## 6500 MHz System Verification at 17 dBm (50 mW)

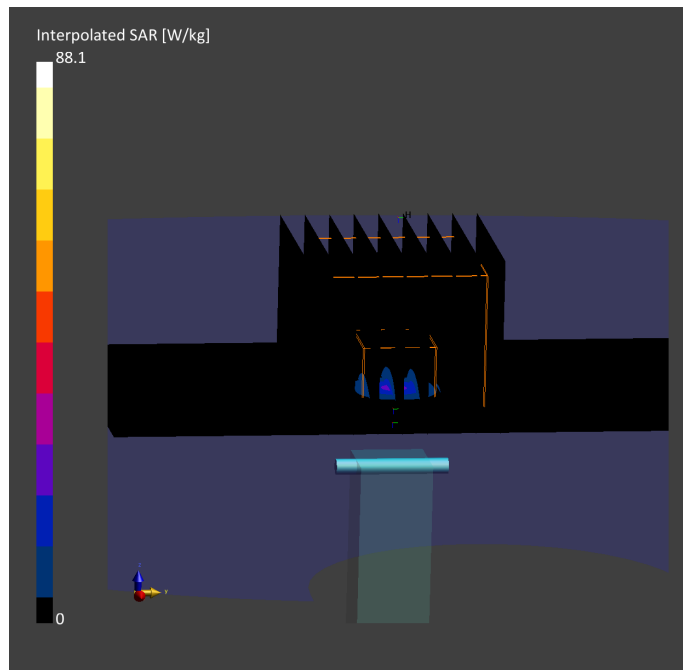
**Area Scan (51.0 x 85.0):** Measurement grid: dx=8.5 mm, dy=8.5 mm

**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) = 88.1 W/kg

**SAR(1 g) = 14.0 W/kg; SAR(10 g) = 2.60 W/kg; APD(4 cm<sup>2</sup>) = 63.3 W/m<sup>2</sup>**

Deviation (1 g) = -3.45%; Deviation (10 g) = -2.26%; Deviation (4 cm<sup>2</sup>) = -3.36%



# 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 = 6.21 S/m; perm = 33.8; density = 1000 kg/m<sup>3</sup>  
Phantom Section: Flat; Space: 5 mm

Test Date: 04/11/2022; Ambient Temp: 21.7°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7551; ConvF:(5.54,5.54,5.54); Calibrated: 2021-10-26  
Sensor-Surface: 1.4mm (VMS + 6p)  
Electronics: DAE4 Sn1449; Calibrated: 2021-09-15  
Phantom: Twin-SAM V8.0 Right; Serial: 1981  
Measurement SW: DASY Module SAR V16.0.0.116

## 6500 MHz System Verification at 17 dBm (50 mW)

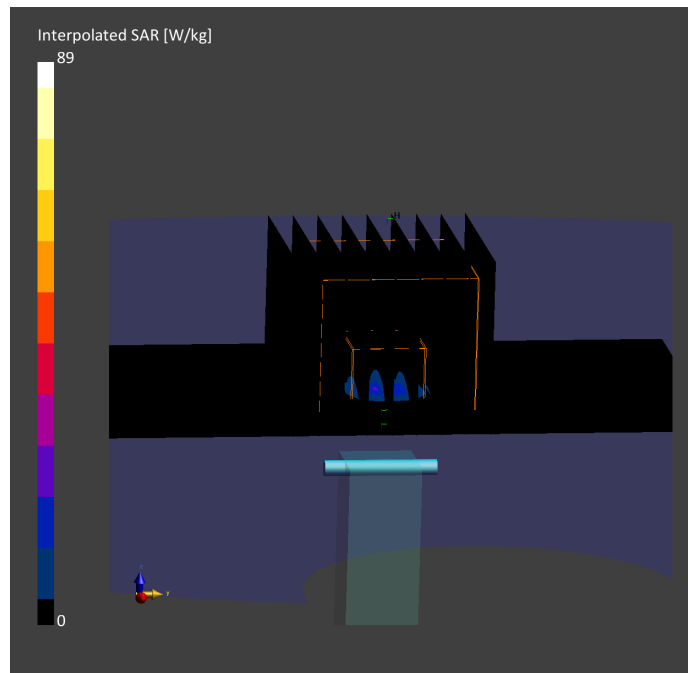
**Area Scan (51.0 x 85.0):** Measurement grid: dx=8.5 mm, dy=8.5 mm

**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) = 89.0 W/kg

**SAR(1 g) = 13.7 W/kg; SAR(10 g) = 2.54 W/kg; APD(4 cm<sup>2</sup>) = 61.9 W/m<sup>2</sup>**

Deviation (1 g) = -5.52%; Deviation (10 g) = -4.51%; Deviation (4 cm<sup>2</sup>) = -5.50%



# 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 = 6.16 S/m; perm = 33.9; density = 1000 kg/m<sup>3</sup>  
Phantom Section: Flat; Space: 5 mm

Test Date: 04/13/2022; Ambient Temp: 23.5°C; Tissue Temp: 23.5°C

Probe: EX3DV4 - SN7551; ConvF:(5.54,5.54,5.54); Calibrated: 2021-10-26  
Sensor-Surface: 1.4mm (VMS + 6p)  
Electronics: DAE4 Sn1449; Calibrated: 2021-09-15  
Phantom: Twin-SAM V8.0 Right; Serial: 1981  
Measurement SW: DASY Module SAR V16.0.0.116

## 6500 MHz System Verification at 17 dBm (50 mW)

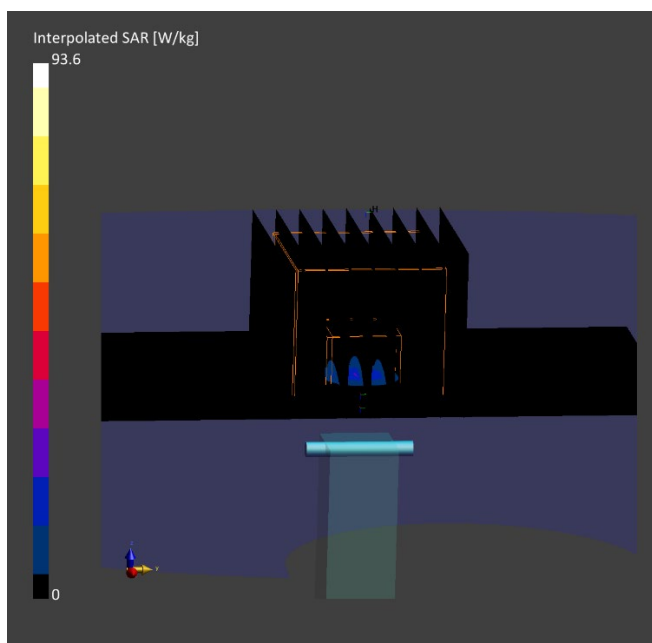
**Area Scan (51.0 x 85.0):** Measurement grid: dx=8.5 mm, dy=8.5 mm

**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) = 93.6 W/kg

**SAR(1 g) = 14.3 W/kg; SAR(10 g) = 2.63 W/kg; APD(4 cm<sup>2</sup>) = 64.5 W/m<sup>2</sup>**

Deviation (1 g) = -1.38%; Deviation (10 g) = -1.13%; Deviation (4 cm<sup>2</sup>) = -1.53%



# Element

Date: 03/31/2022

## 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
EUmWV3 - SN9389, 11/11/2021	DAE4ip SN1638, 11/11/2021

### Software Setup

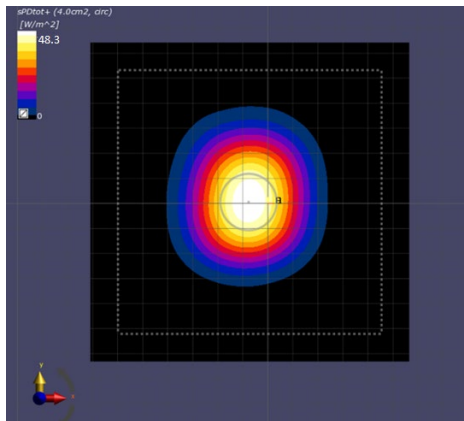
Software	Software Version
cDASY6 Module mmWave	3.0.0.841

### Scans Setup

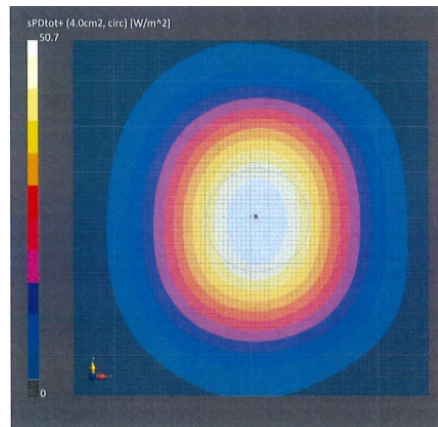
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

### Measurement Results

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
pS <sub>tot</sub> avg [W/m <sup>2</sup> ]	48.3
pS <sub>n</sub> avg [W/m <sup>2</sup> ]	47.4
E <sub>peak</sub> [V/m]	150
Deviation (dB)	-0.21



10 GHz System Verification



Calibration Certificate

# Element

Date: 04/07/2022

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
EUmWV3 - SN9407, 12/13/2021	DAE4ip SN1639, 01/21/2022

## Software Setup

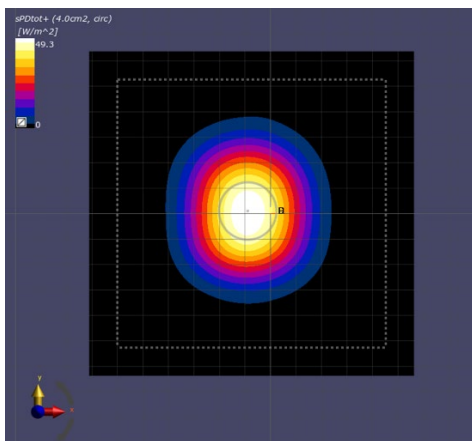
Software	Software Version
cDASY6 Module mmWave	3.0.0.841

## Scans Setup

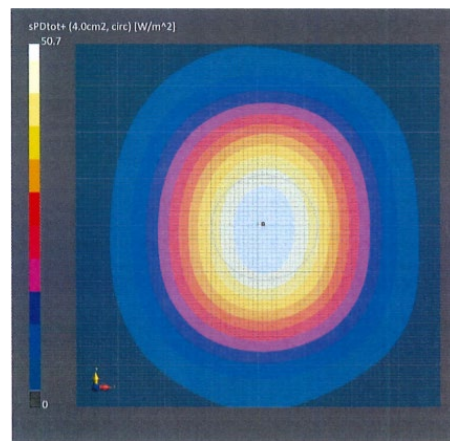
Scan Type	5G Scan
Grid Extents [mm]	120 x 120
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.00

## Measurement Results

Scan Type	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
pS <sub>tot</sub> avg [W/m <sup>2</sup> ]	49.3
pS <sub>n</sub> avg [W/m <sup>2</sup> ]	49.0
E <sub>peak</sub> [V/m]	144
Deviation (dB)	-0.12



10 GHz System Verification



Calibration Certificate