

## *Appendix C - Highest Measurement Plots*

Date: 2023/11/6

**21\_WLAN 2.4 GHz\_802.11b\_Bottom Side\_0mm\_Ch11\_ANT 2**

**DUT: AX211D2W**

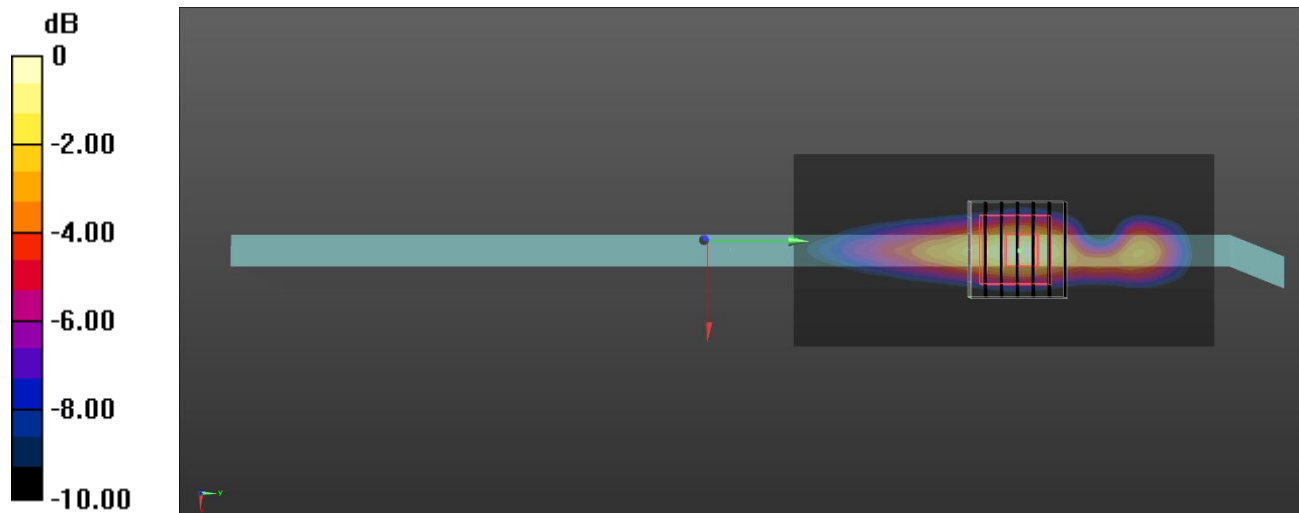
Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz; Duty Cycle: 1:1.009  
 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.785$  S/m;  $\epsilon_r = 39.545$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(8.05, 8.05, 8.05) @ 2462 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2022/12/16
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (51x111x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
 Maximum value of SAR (interpolated) = 1.12 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 24.86 V/m; Power Drift = -0.16 dB  
 Peak SAR (extrapolated) = 1.56 W/kg  
**SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.276 W/kg**  
 Smallest distance from peaks to all points 3 dB below = 7.2 mm  
 Ratio of SAR at M2 to SAR at M1 = 42.9%  
 Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

Date: 2023/11/6

**31\_Bluetooth\_GFSK\_Bottom of laptop\_0mm\_Ch0\_ANT 1**

**DUT: AX211D2W**

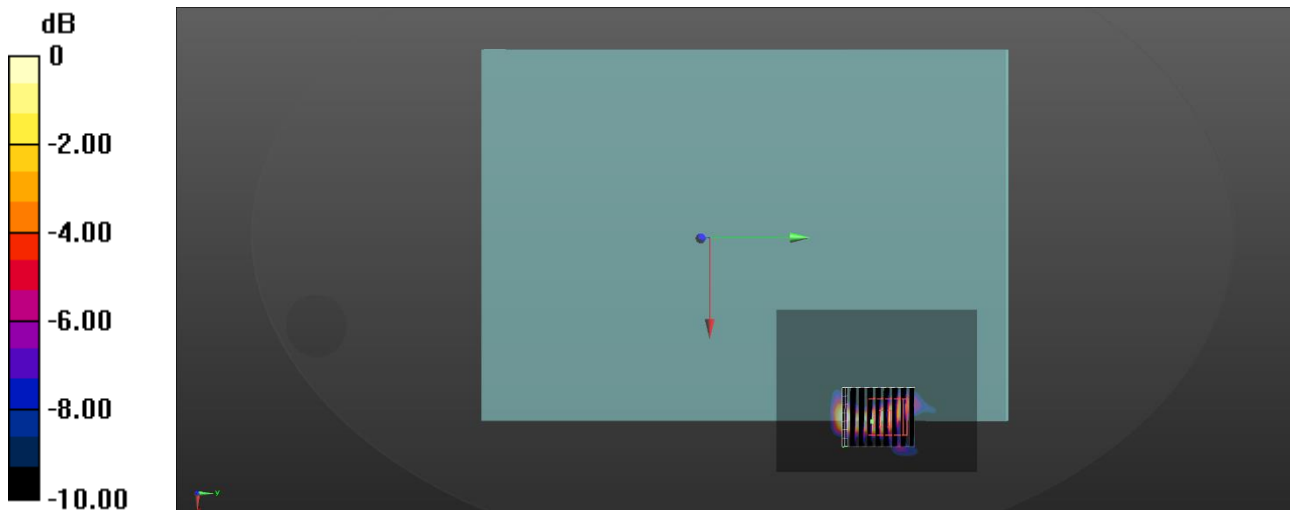
Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2402 MHz; Duty Cycle: 1:1.295  
Medium parameters used:  $f = 2402$  MHz;  $\sigma = 1.74$  S/m;  $\epsilon_r = 39.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(8.05, 8.05, 8.05) @ 2402 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2022/12/16
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (81x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 0.211 W/kg

**Zoom Scan (8x9x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 6.717 V/m; Power Drift = -0.10 dB  
Peak SAR (extrapolated) = 0.177 W/kg  
**SAR(1 g) = 0.077 W/kg; SAR(10 g) = 0.031 W/kg**  
Smallest distance from peaks to all points 3 dB below = 6.7 mm  
Ratio of SAR at M2 to SAR at M1 = 47.3%  
Maximum value of SAR (measured) = 0.137 W/kg



0 dB = 0.137 W/kg = -8.63 dBW/kg

Date: 2023/11/7

**36\_WLAN 5 GHz\_802.11ac\_VHT160\_Rear Face\_0mm\_Ch50\_ANT 2**

**DUT: AX211D2W**

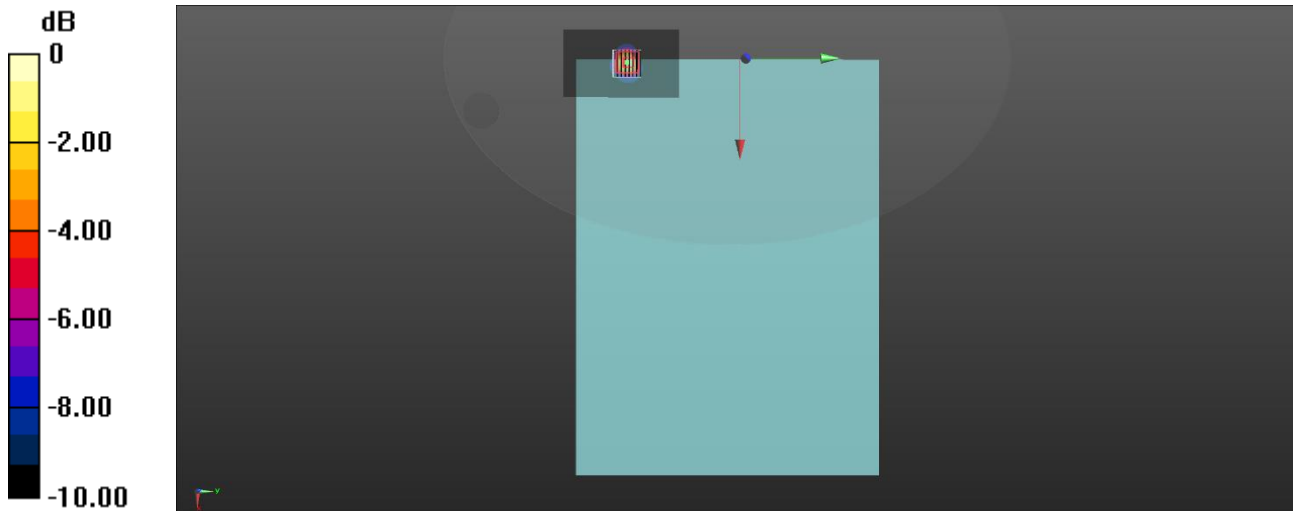
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5250 MHz;Duty Cycle: 1:1.01  
Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.545$  S/m;  $\epsilon_r = 34.54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.6, 5.6, 5.6) @ 5250 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2022/12/16
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 1.88 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 13.85 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 2.54 W/kg  
**SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.223 W/kg**  
Smallest distance from peaks to all points 3 dB below = 8.4 mm  
Ratio of SAR at M2 to SAR at M1 = 62.9%  
Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

Date: 2023/11/8

**58\_WLAN 5 GHz\_802.11ac\_VHT160\_Rear Face\_0mm\_Ch114\_ANT 2**

**DUT: AX211D2W**

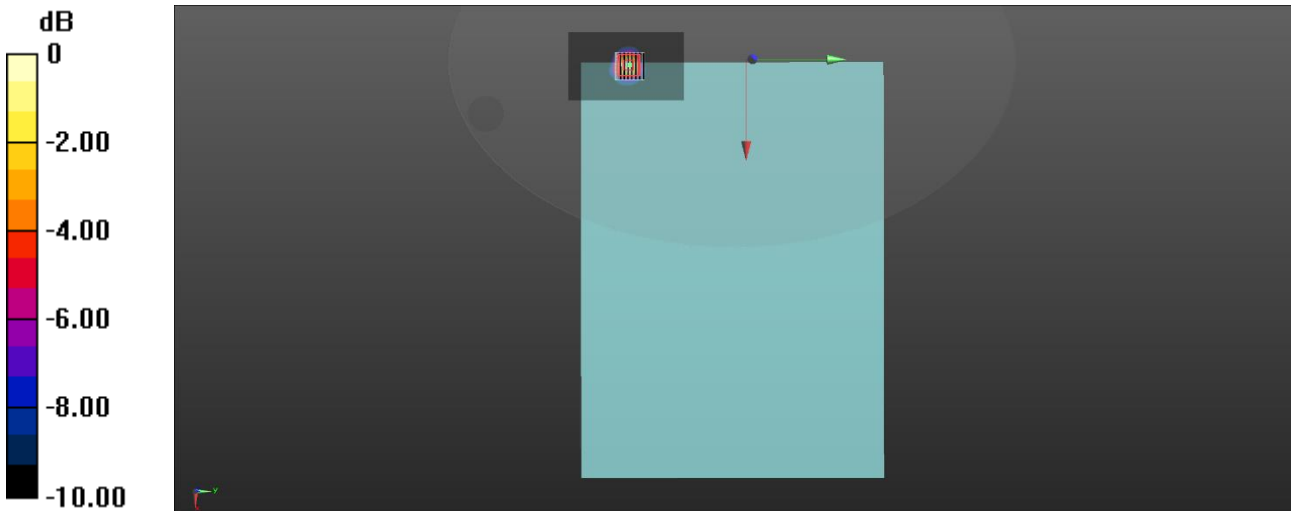
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5570 MHz;Duty Cycle: 1:1.01  
Medium parameters used:  $f = 5570$  MHz;  $\sigma = 4.849$  S/m;  $\epsilon_r = 34.49$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.08, 5.08, 5.08) @ 5570 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2022/12/16
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 1.60 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 10.16 V/m; Power Drift = 0.08 dB  
Peak SAR (extrapolated) = 2.49 W/kg  
**SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.204 W/kg**  
Smallest distance from peaks to all points 3 dB below = 8.6 mm  
Ratio of SAR at M2 to SAR at M1 = 60.4%  
Maximum value of SAR (measured) = 1.40 W/kg



0 dB = 1.40 W/kg = 1.46 dBW/kg

Date: 2023/11/9

**99\_WLAN 5 GHz\_802.11ac\_VHT160\_Rear Face\_0mm\_Ch163\_ANT 2**

**DUT: AX211D2W**

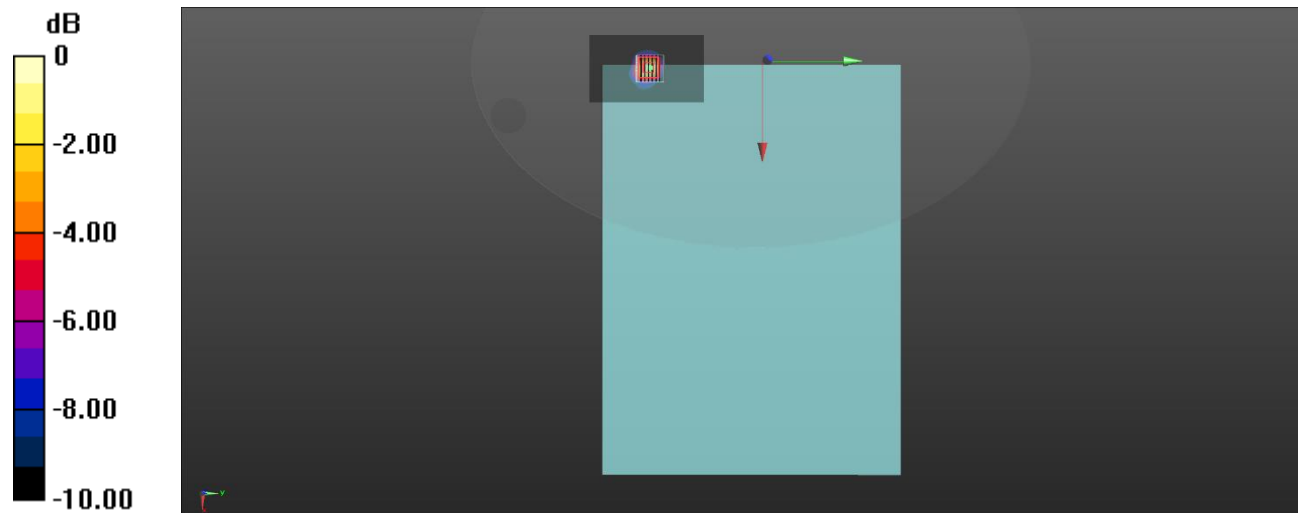
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5815 MHz;Duty Cycle: 1:1.01  
Medium parameters used:  $f = 5815$  MHz;  $\sigma = 5.097$  S/m;  $\epsilon_r = 34.218$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.05, 5.05, 5.05) @ 5815 MHz; Calibrated: 2023/4/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2022/12/16
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 1.76 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 13.31 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 2.82 W/kg  
**SAR(1 g) = 0.627 W/kg; SAR(10 g) = 0.219 W/kg**  
Smallest distance from peaks to all points 3 dB below = 8.8 mm  
Ratio of SAR at M2 to SAR at M1 = 58.9%  
Maximum value of SAR (measured) = 1.55 W/kg



Test Date : 2023-11-10 | Ambient Temp : 23.2 °C | Tissue Temp : 22.5 °C

**Test Mode**

**143\_WLAN 6 GHz\_802.11ax HE160\_Bottom of laptop\_0mm\_Ch47\_ANT 1**

**Device Under Test Properties**

Manufacturer or Brand	Model No. or Code Name	Sample No. or IMEI	DUT Type
Intel	AX211D2W	RANTCVN0003240A	Bottom of laptop

**Exposure Conditions**

Phantom Section	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	U-NII-5	WLAN, 10755 - AAC	6185.0, 47	5.65	5.43	32.6

**Hardware Setup**

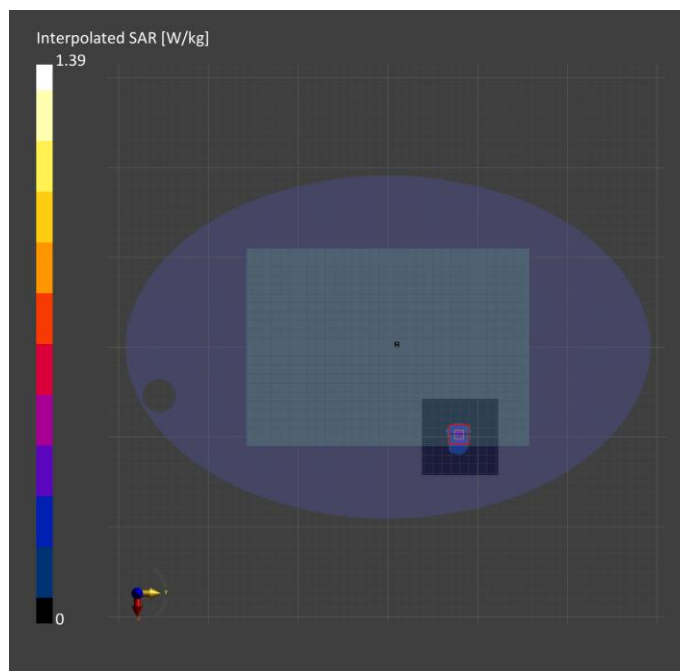
Phantom	Tissue Simulating Liquid	Probe   Calibration Date	DAE   Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	H51T71N2	EX3DV4 - SN7647   2023-04-26	DAE4 Sn1253   2022-12-16

**Scan Setup**

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

**Measurement Results**

	Area Scan	Zoom Scan
psSAR-1g [W/kg]	0.320	<b>0.327</b>
psSAR-10g [W/kg]	0.111	<b>0.109</b>
psAPD (1.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>3.27</b>
psAPD (4.0 cm <sup>2</sup> , sq) [W/m <sup>2</sup> ]		<b>2.53</b>
Power Drift [dB]		-0.10
TSL Correction	Positive only	Positive only
M2 / M1 [%]		57.7
Dist 3dB Peak [mm]		8.2



Test Date : 2023-11-11 | Ambient Temp : 23.0 °C

**Test Mode**

**1007\_WLAN 6 GHz\_802.11ax HE160\_Bottom of laptop\_2mm\_Ch47\_ANT 1**

**Device Under Test Properties**

Manufacturer or Brand	Model No. or Code Name	Sample No. or IMEI	DUT Type
Intel	AX211D2W	RANTCVN0003240A	Bottom of laptop

**Exposure Conditions**

Phantom Section	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	U-NII-5	WLAN, 10755 - AAC	6185.0, 47	1.0

**Hardware Setup**

Phantom	Medium	Probe   Calibration Date	DAE   Calibration Date
mmWave - 5G Phantom	Air	EUmmWV4 - SN9639_F1-55GHz / 2023-08-18	DAE4 Sn1253 / 2022-12-16

**Scan Setup**

	5G Scan
Grid Extents [mm]	97.0 x 97.0
Grid Steps [mm]	0.0515 x 0.0515
Sensor Surface [mm]	2.0

**Measurement Results**

	5G Scan
Avg. Area [cm <sup>2</sup> ]	4.00
psPD n+ [W/m <sup>2</sup> ]	<b>2.18</b>
psPD tot+ [W/m <sup>2</sup> ]	<b>4.99</b>
psPD mod+ [W/m <sup>2</sup> ]	15.9
E max [V/m]	74.0
Power Drift [dB]	-0.03

