Antenna report for TR Module with Desk and IAQ sensors

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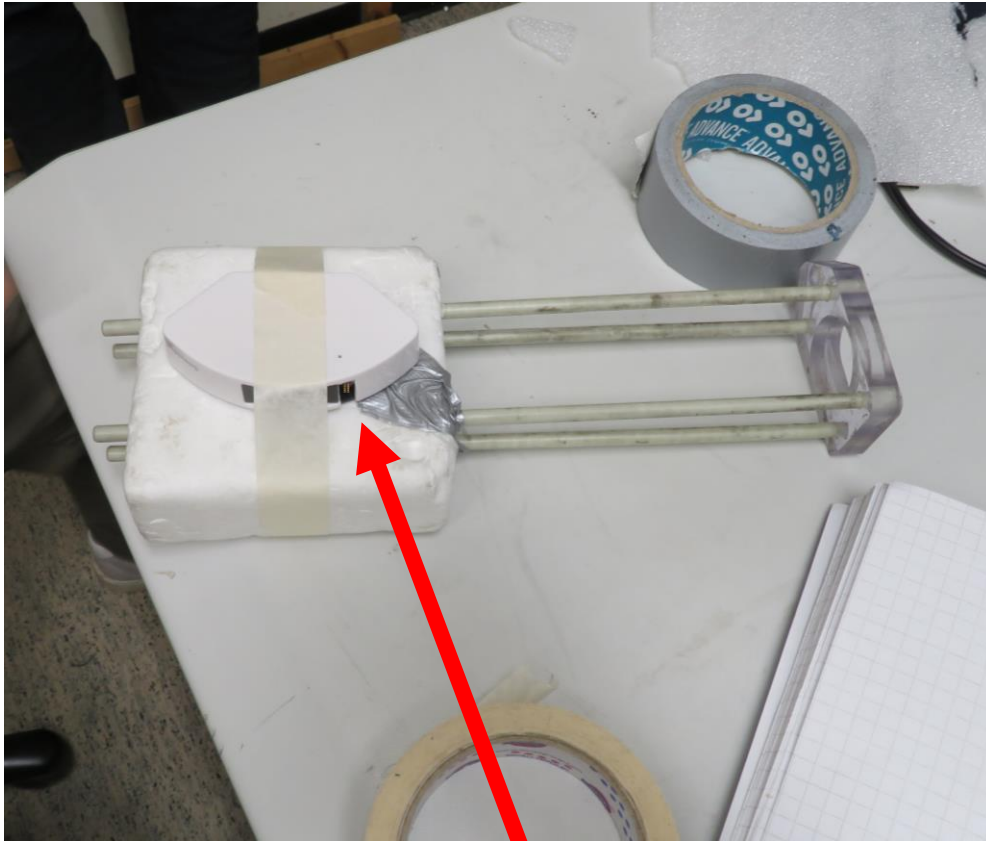
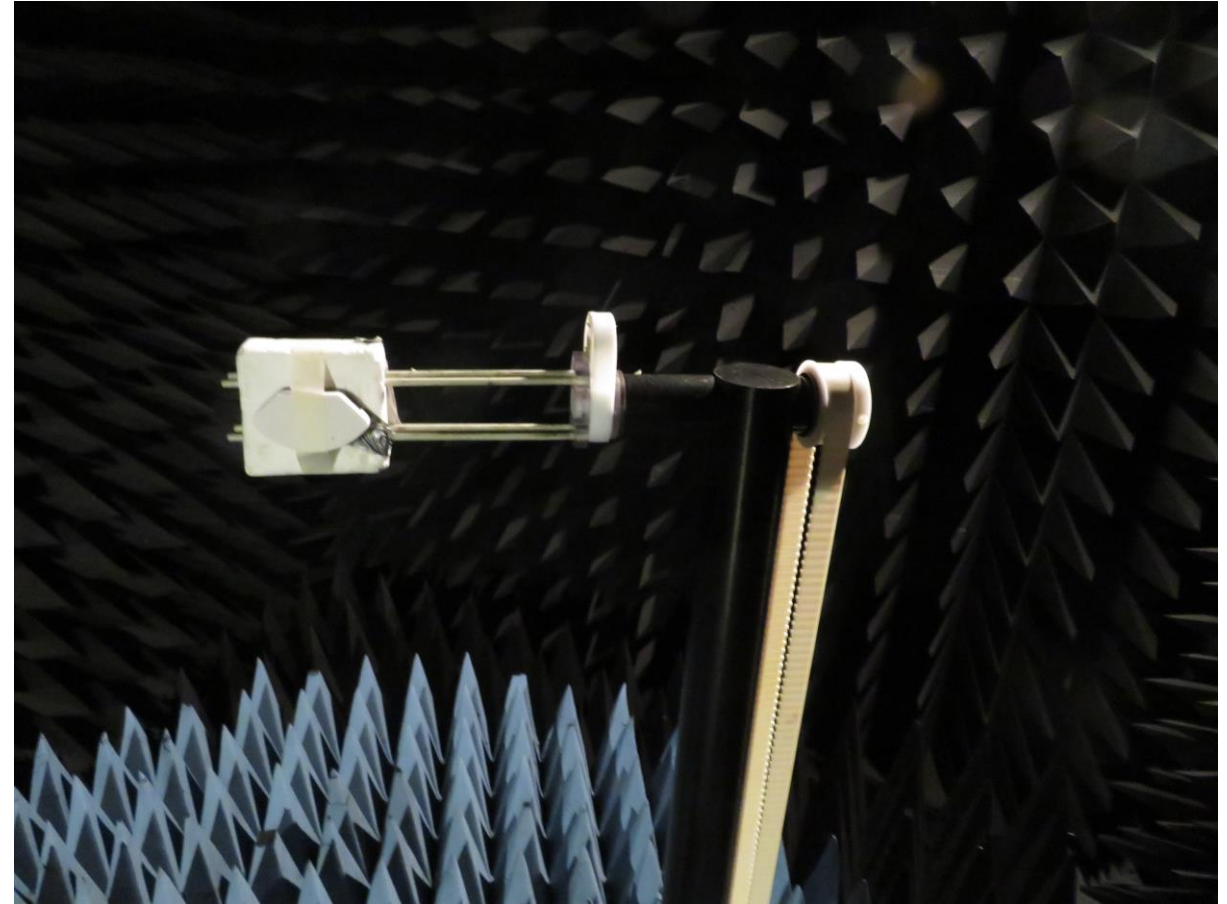YOUR PARTNER IN ANTENNA SIMUALTION, DESIGN & TESTING

12/09/2022

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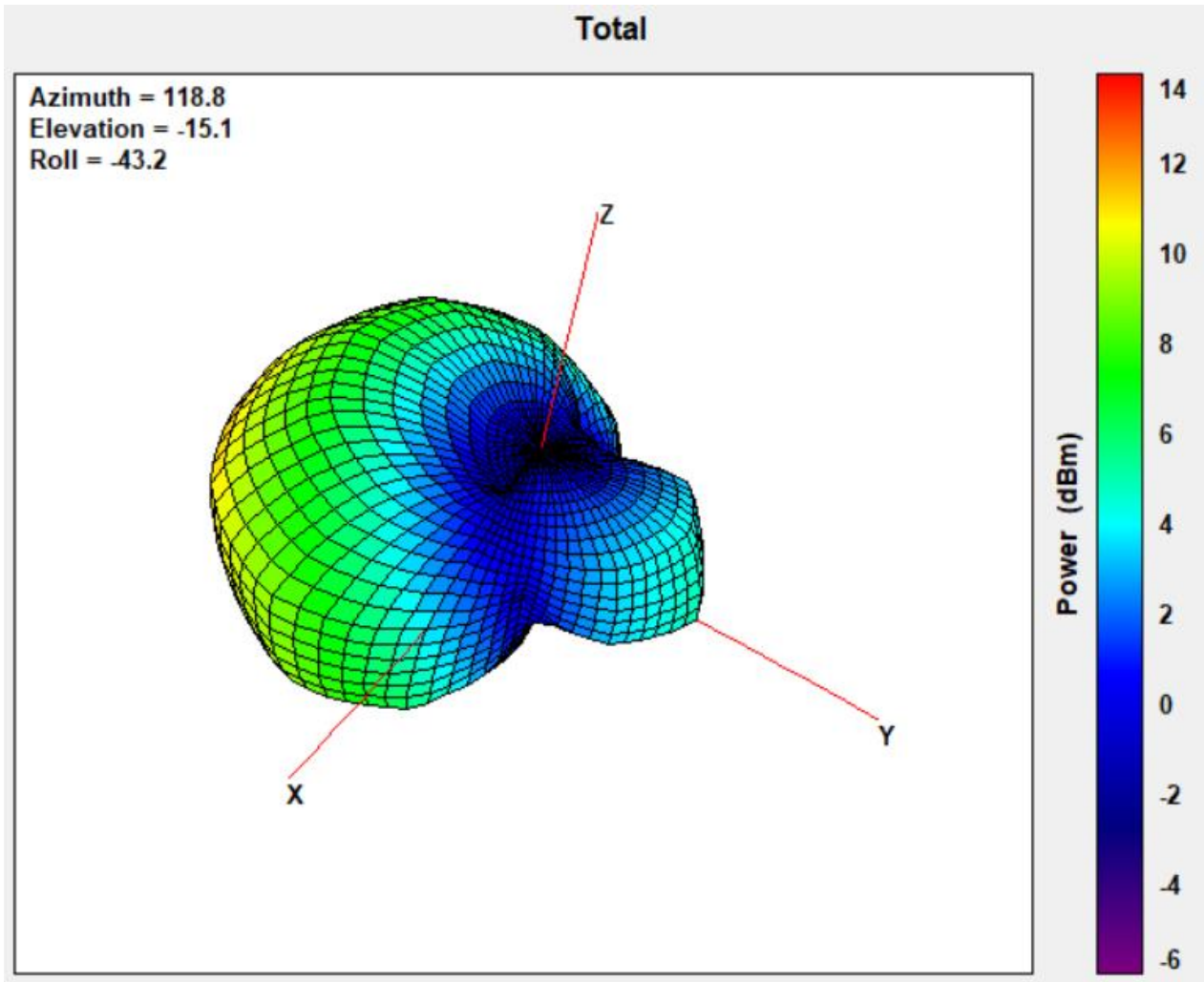# Measurement Setup

TR Module / Desk sensor

- The picture shows measurement setup of Desk sensor.

Low 2402 MHz

3D Radiation Pattern

Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	6.03942
Peak EIRP (dBm)	12.1435
Directivity (dBi)	6.1041
Efficiency (dB)	6.03942
Efficiency (%)	401.737
Gain (dBi)	12.1435

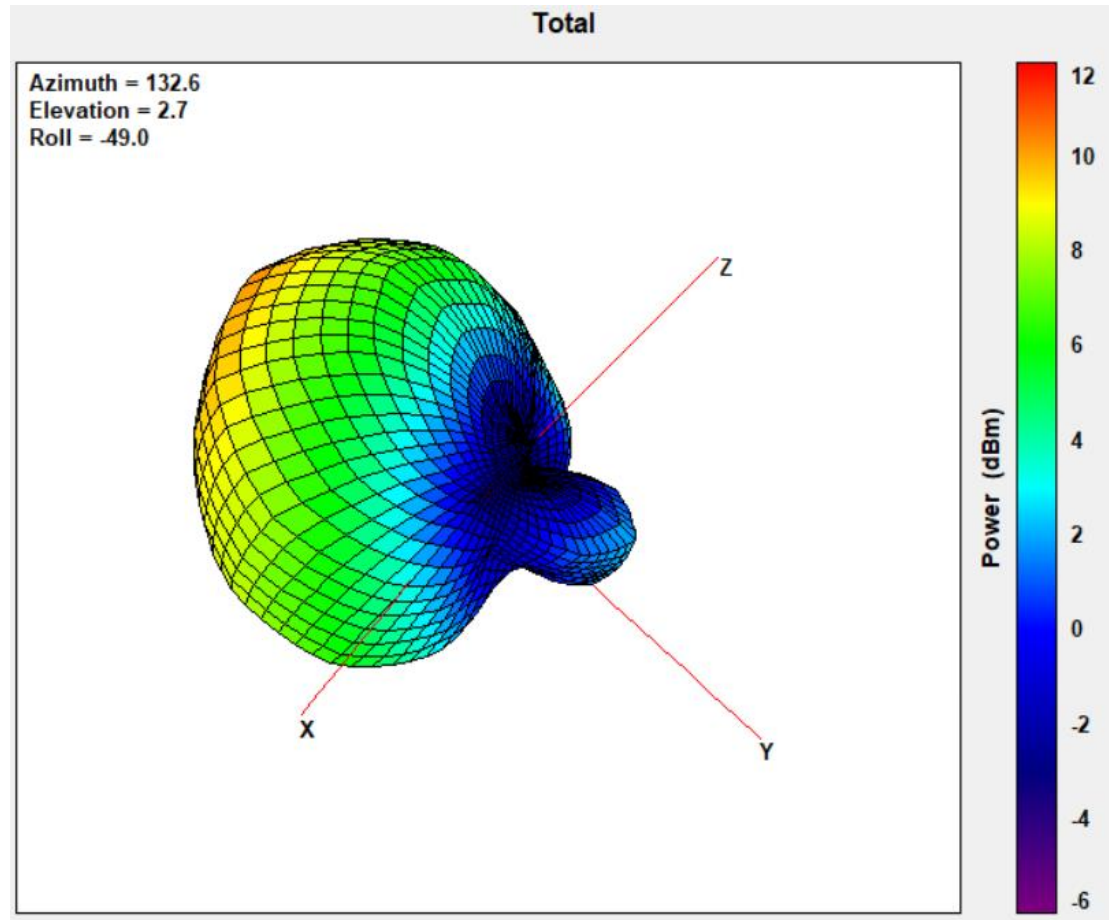Note: Conducted power used was 7.3 dBm.

mid 2440 MHz

Total

Azimuth = 118.6
Elevation = -18.5
Roll = -46.6

Power (dBm): 12, 10, 8, 6, 4, 2, 0, -2, -4, -6, -8, -10
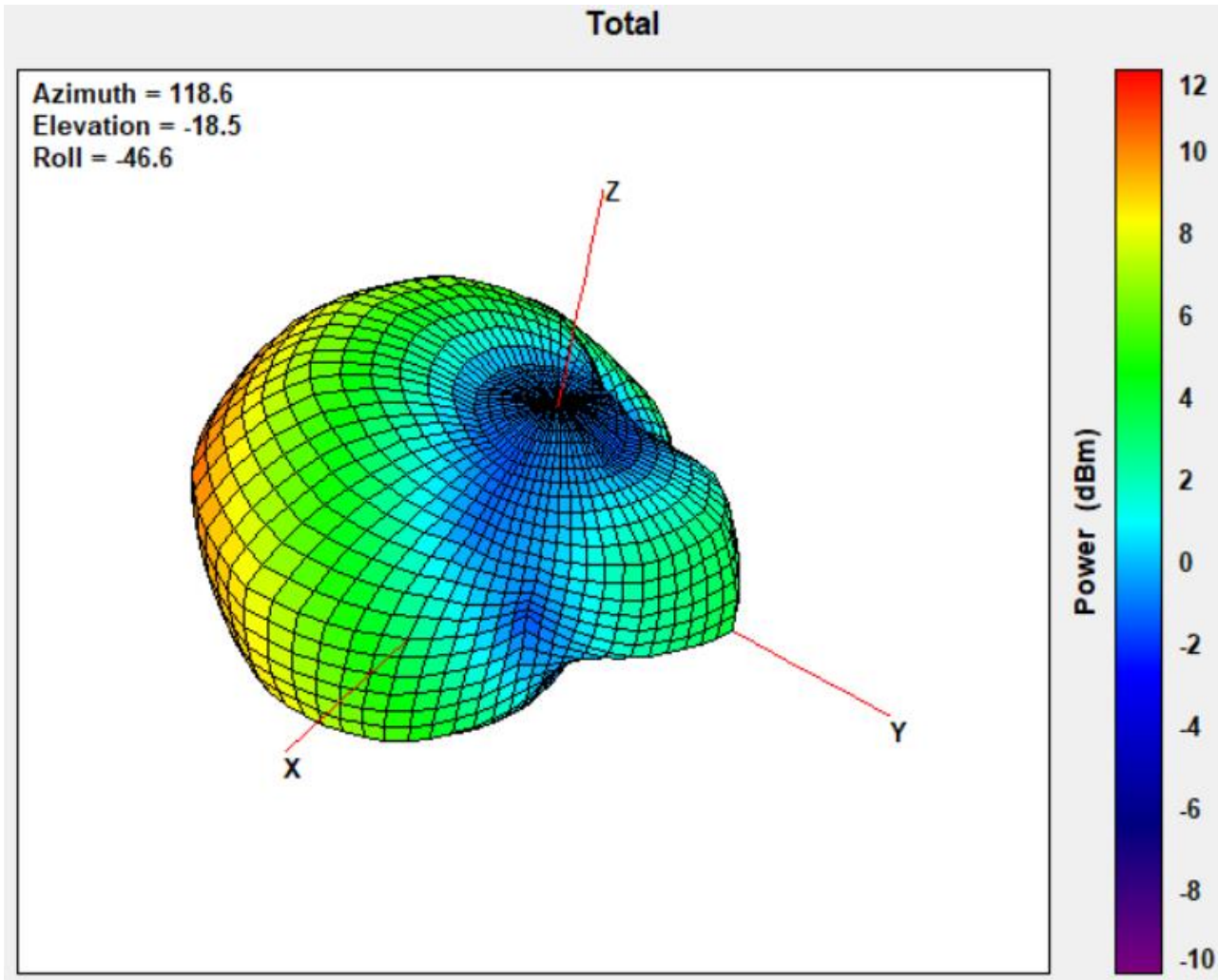
3D Radiation Pattern

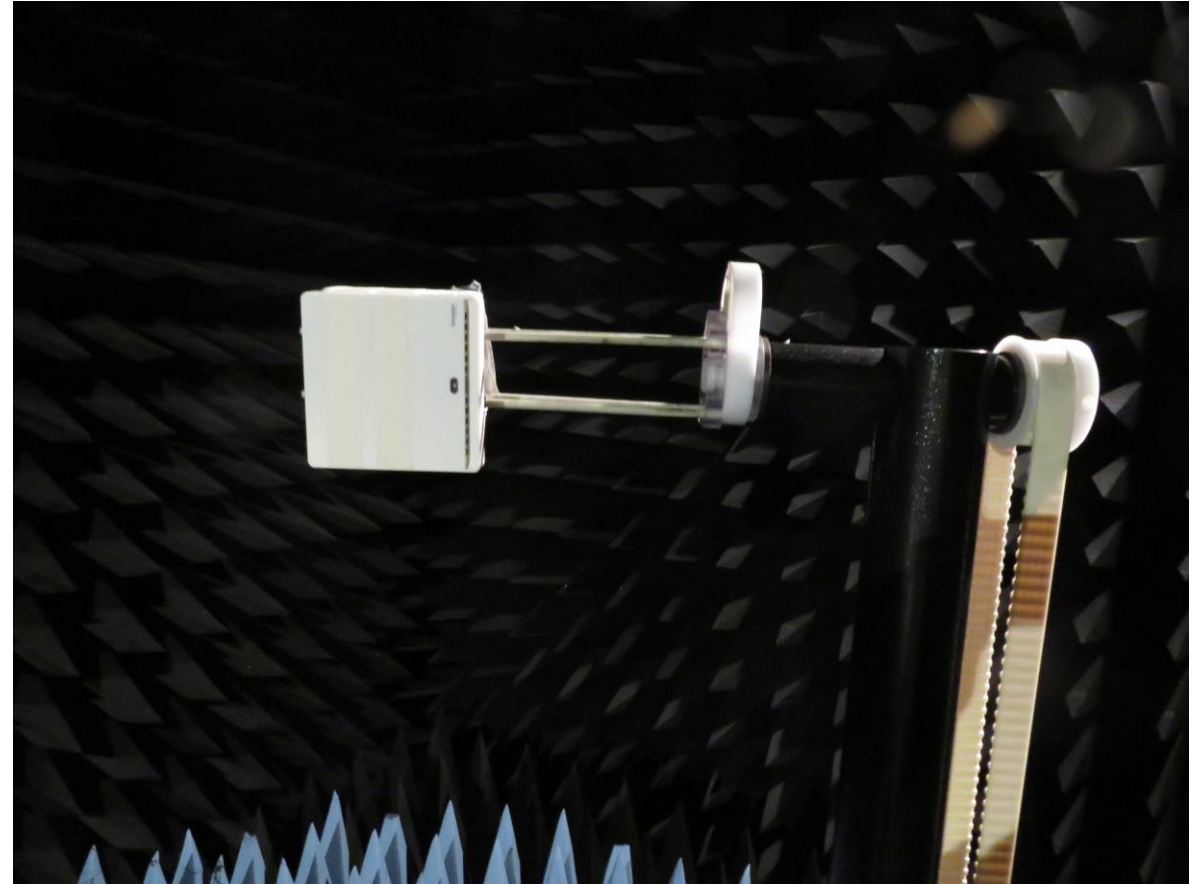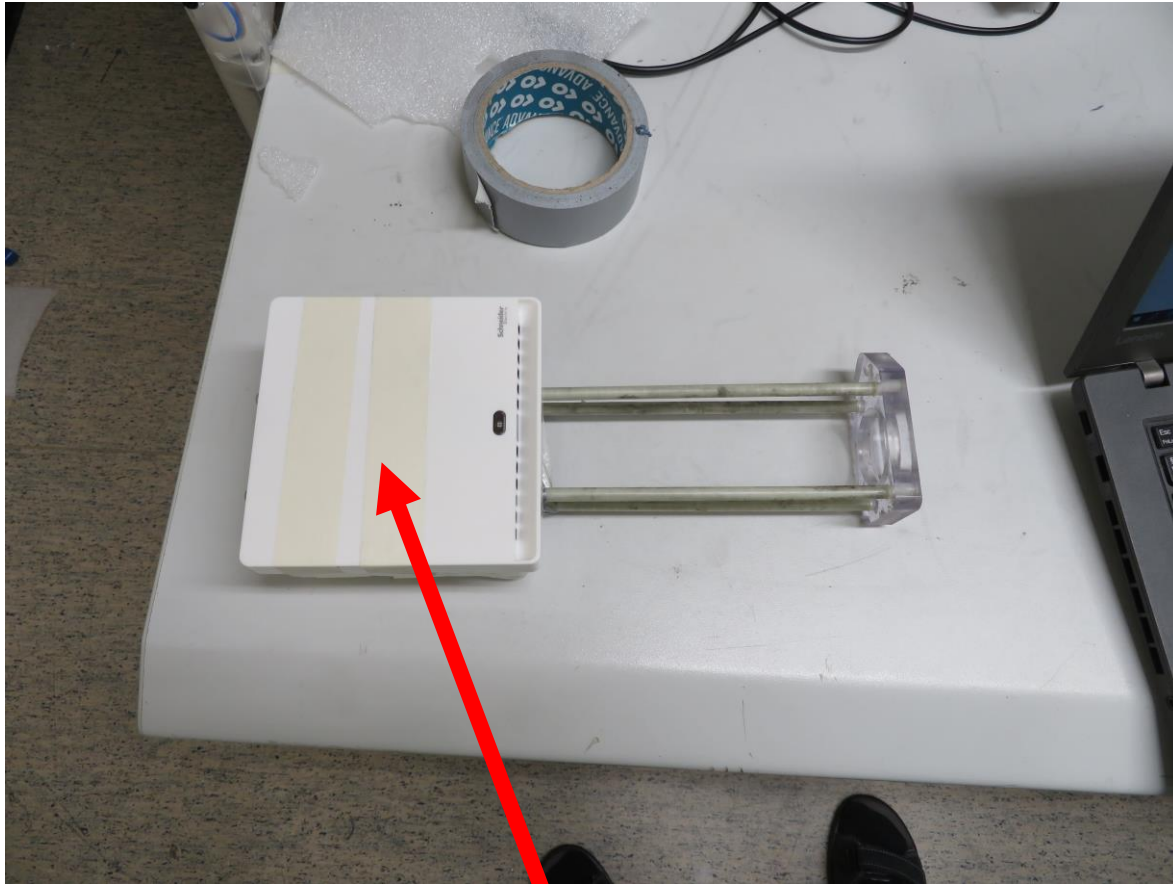| Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	5.56287
Peak EIRP (dBm)	11.762
Directivity (dBi)	6.19913
Efficiency (dB)	5.56287
Efficiency (%)	359.987
Gain (dBi)	11.762

Note: Conducted power used was 7.0 dBm.

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High 2480 MHz

3D Radiation Pattern

Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	4.61731
Peak EIRP (dBm)	10.6397
Directivity (dBi)	6.02244
Efficiency (dB)	4.61731
Efficiency (%)	289.555
Gain (dBi)	10.6397

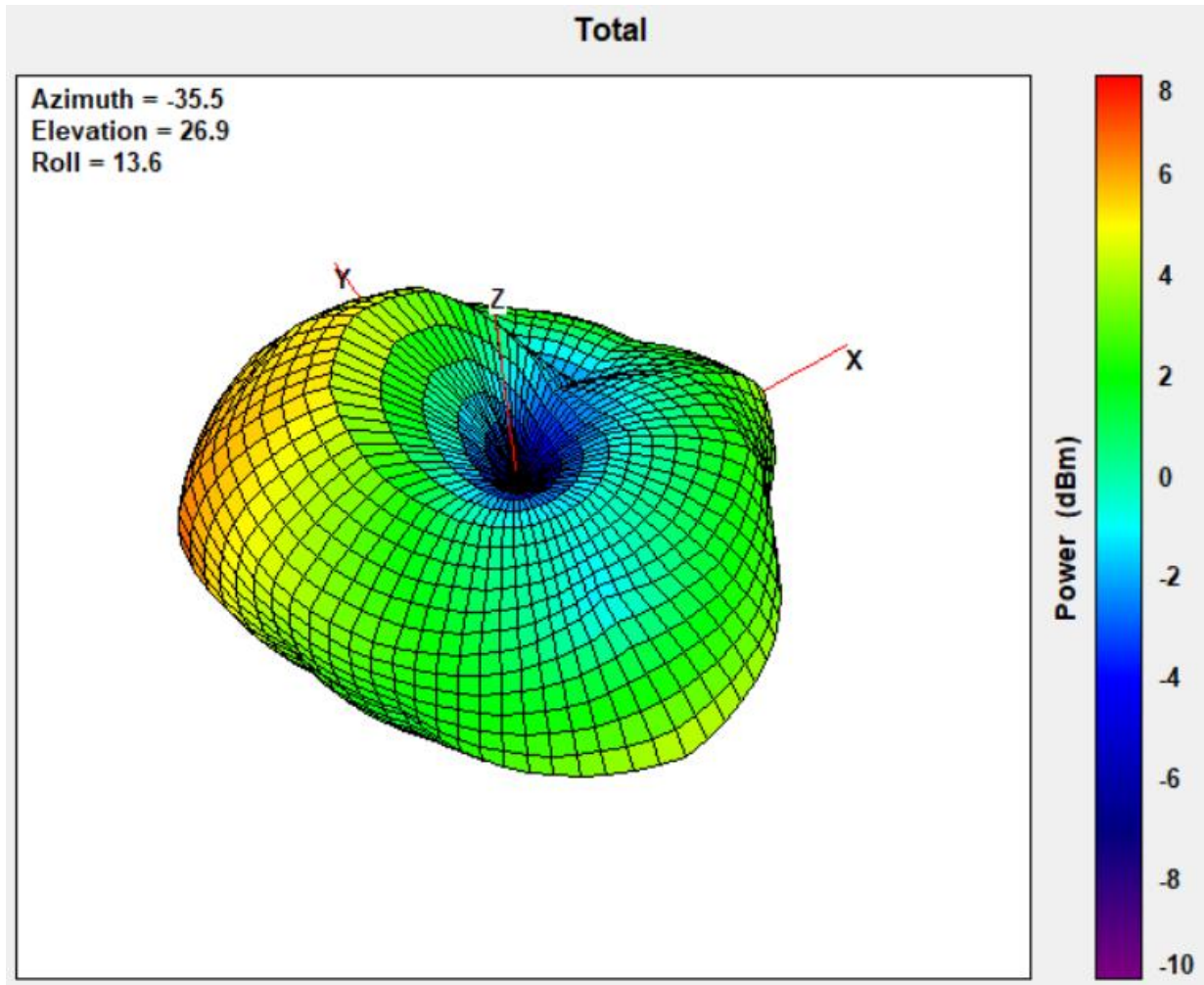Note: Conducted power used was 6.9 dBm.

Measurement Setup

IAQ sensor

- The picture shows measurement setup of IAQ sensor.

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Low 2402 MHz

3D Radiation Pattern

Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	2.79545
Peak EIRP (dBm)	7.31302
Directivity (dBi)	4.51757
Efficiency (dB)	2.79545
Efficiency (%)	190.346
Gain (dBi)	7.31302

Note: Conducted power used was 7.3 dBm.

MID 2440 MHz
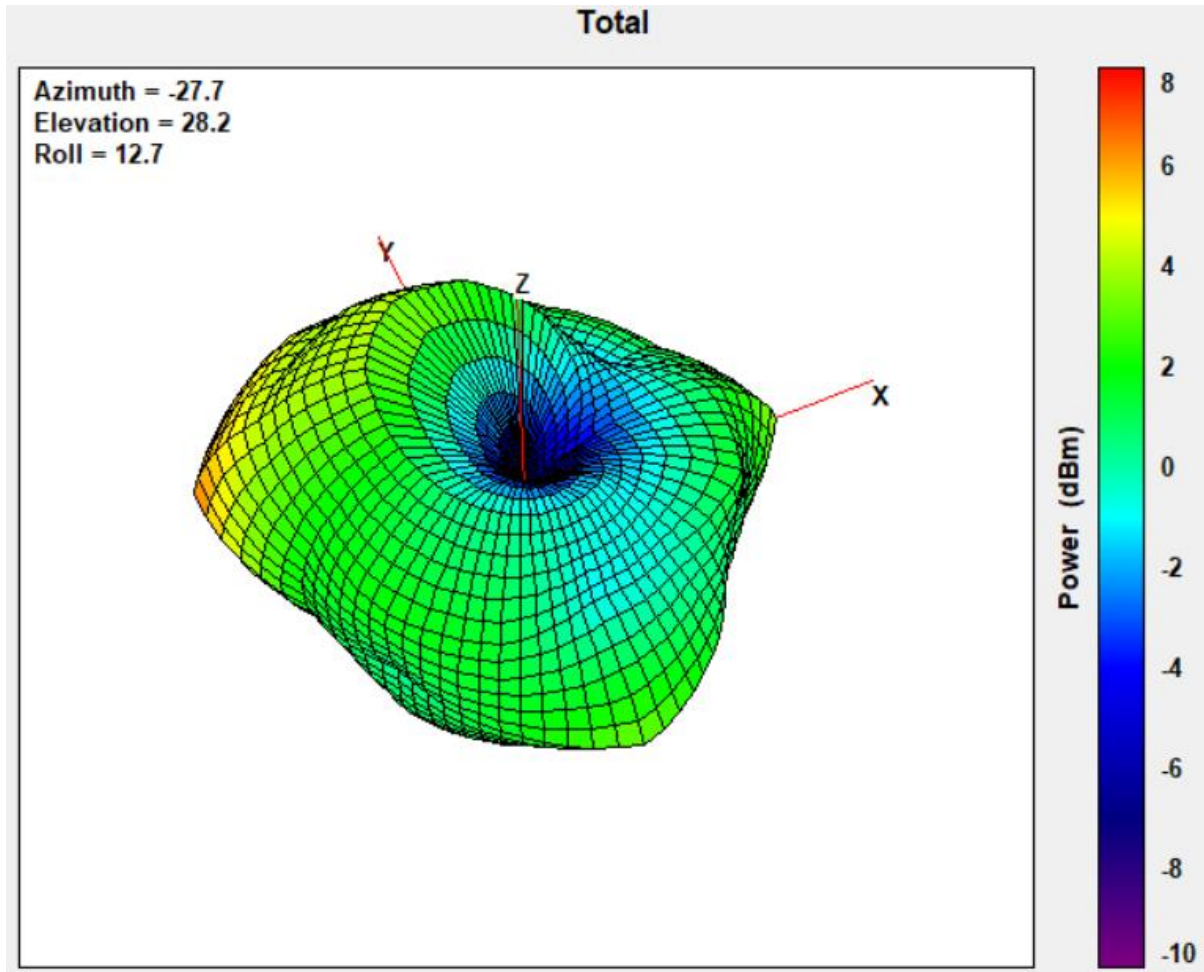
3D Radiation Pattern

Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	1.98185
Peak EIRP (dBm)	6.91264
Directivity (dBi)	4.93079
Efficiency (dB)	1.98185
Efficiency (%)	157.828
Gain (dBi)	6.91264

Note: Conducted power used was 7.0 dBm.

High 2480 MHz
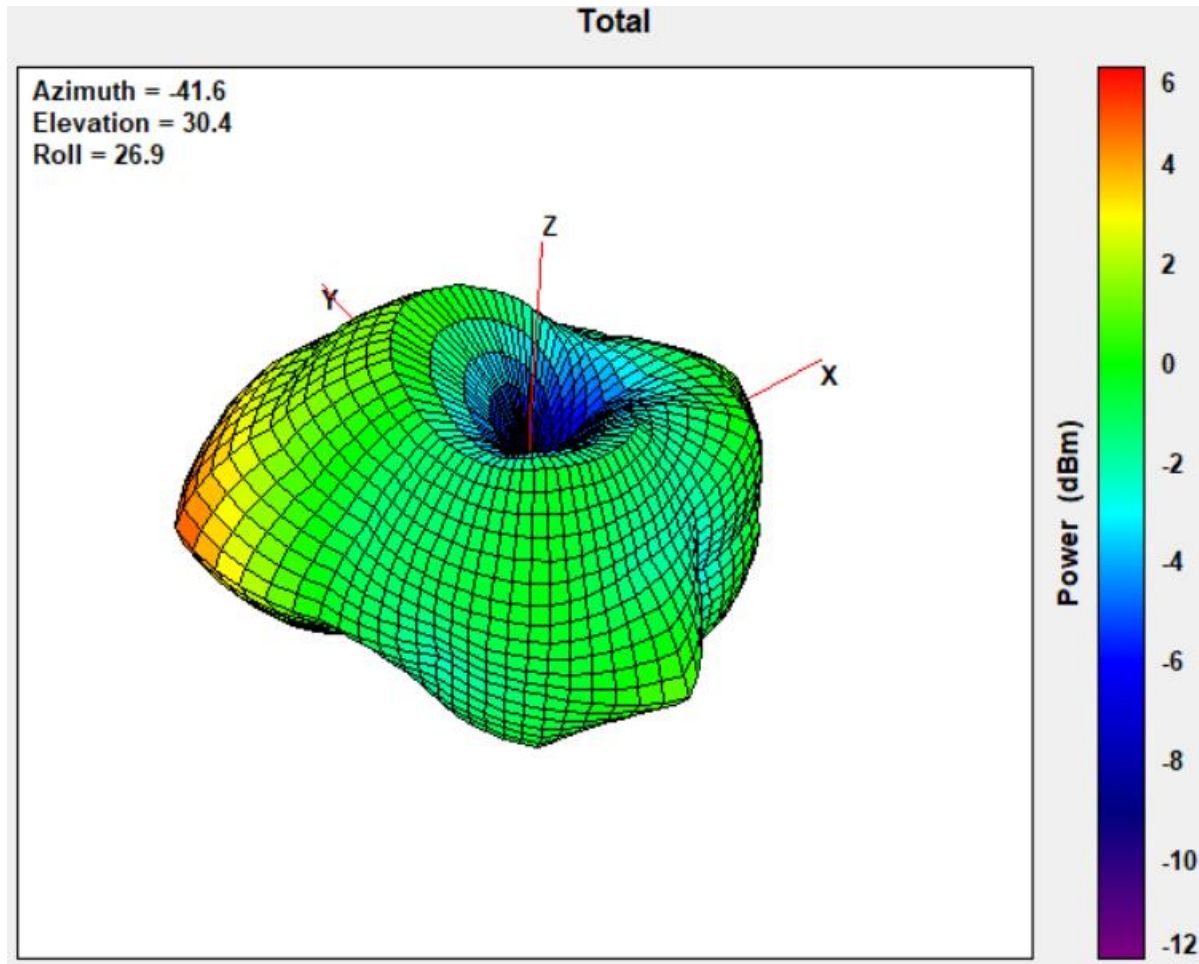
3D Radiation Pattern

Point Values	
Ant. Port Input Pwr. (dBm)	0
Tot. Rad. Pwr. (dBm)	0.208166
Peak EIRP (dBm)	5.55639
Directivity (dBi)	5.34822
Efficiency (dB)	0.208166
Efficiency (%)	104.91
Gain (dBi)	5.55639

Note: Conducted power used was 6.9 dBm.

Summary

- In this document 3D antenna measurement results for TR Module, DESK and IAQ sensors are shown
- Measured conducted power in use (8 dBm setting) is shown in this summary table.

Device	Conducted power dBm	TR Module / DESK Sensor		IAQ Sensor	
	Both in IAQ and Desk	Peak EIRP in dBm	GAIN in dBi	Peak EIRP in dBm	GAIN in dBi
2402	7.3	12.1	4.8	7.3	0
2440	7	11.8	4.7	6.9	-0.1
2480	6.9	10.6	3.7	5.6	-1.3

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