

Antenna Gain and Pattern Measurement Report

Model Name: SIXPIRA

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Test Report Revision History				
Revision	Prepared By	Reviewed and Approved By	Revision Detail	Release Date
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1. Test Methodology

The 3D Passive antenna pattern is performed using Two-Axis Dual-Polarization Pattern Measurement and set the step size for both axes to 15° and the axis measurement mode to stepped.

2. Test and Measurement Equipment

Description	Manufacturer	Model	Serial No.	Calibration Date
Vector Network Analyzer	Keysight	P5002A	MY58100491	4/16/2022
OTA Test Chamber	ETS-Lindgren	AMS8050		10/5/2022
OTA Test Software	ETS-Lindgren	EMQuest V1.16 Build 14361		

3. Device Under Test Information

- Model name: SIXPIRA
- Test Frequency (MHz): 2405, 2445, 2475
- Antenna type: Printed PCB antenna for two antennas.

4. Result Summary

SIXPIRA Antenna 1	Frequency		
	2405 MHz	2445 MHz	2475 MHz
TRP (dBm)	-3.98	-3.54	-2.87
EIRP (dBm)	0.66	1.05	1.93
Efficiency (dB)	-3.98	-3.54	-2.87
Efficiency (%)	39.97	44.21	51.57
Gain (dBi)	0.66	1.05	1.93

SIXPIRA Antenna 2	Frequency		
	2405 MHz	2445 MHz	2475 MHz
TRP (dBm)	-3.24	-2.81	-2.13
EIRP (dBm)	1.54	1.65	2.08
Efficiency (dB)	-3.24	-2.81	-2.13
Efficiency (%)	47.37	52.30	61.14
Gain (dBi)	1.54	1.65	2.08

5. Plots

5.1 Antenna 1 – 2405 MHz 3D Passive

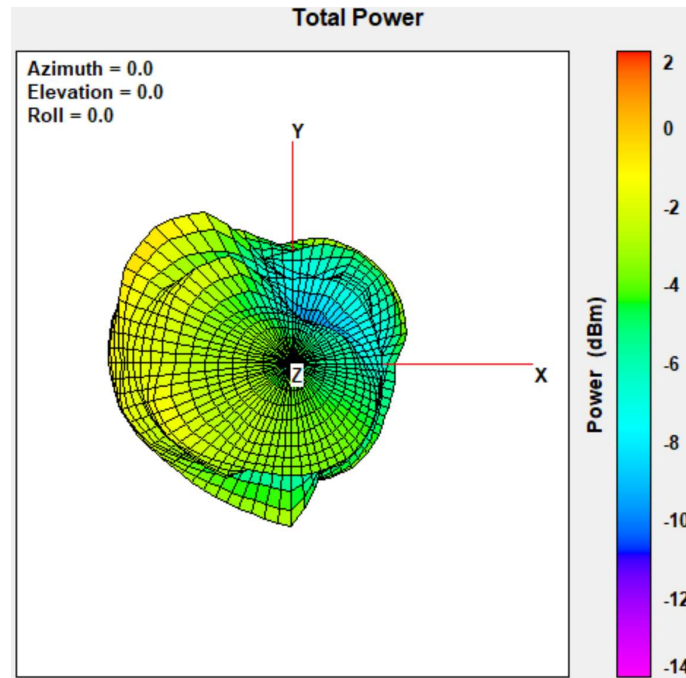


Figure 1. SIXPIRA Antenna 1 2405 MHz Front View

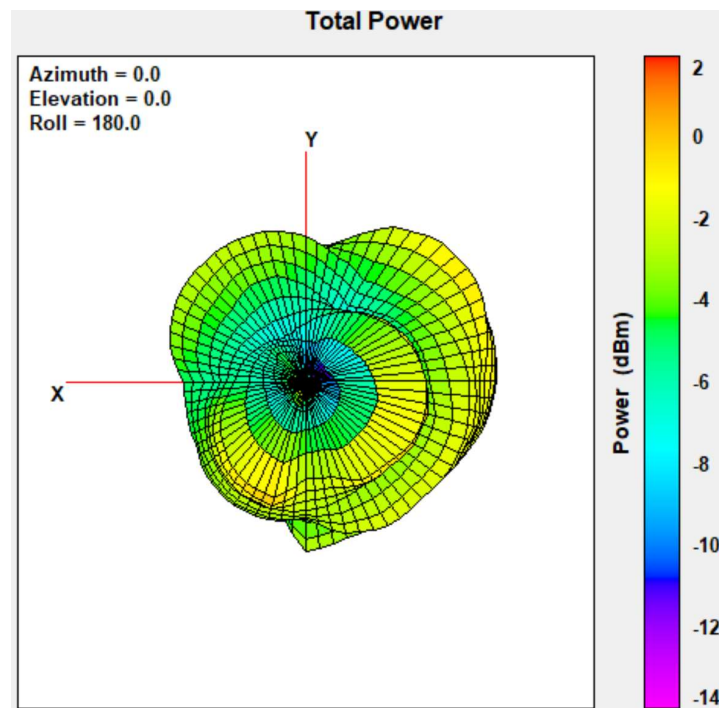


Figure 2. SIXPIRA Antenna 1 2405 MHz Back View

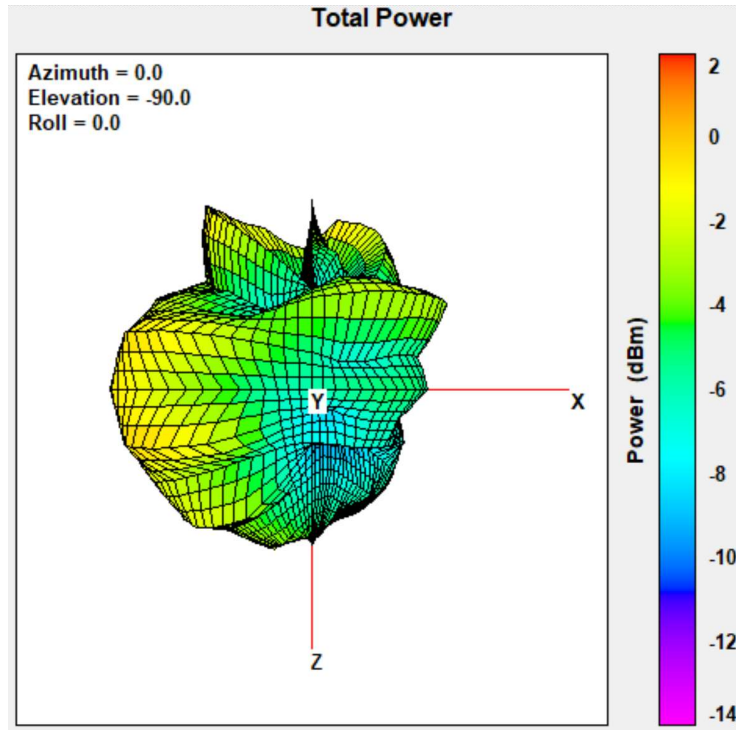


Figure 3. SIXPIRA Antenna 1 2405 MHz Top View

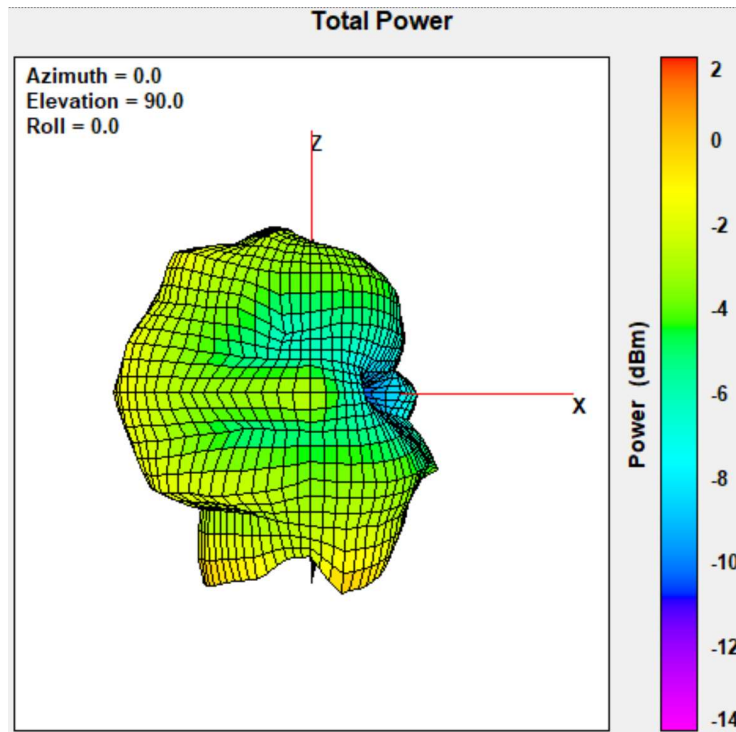


Figure 4. SIXPIRA Antenna 1 2405 MHz Bottom View

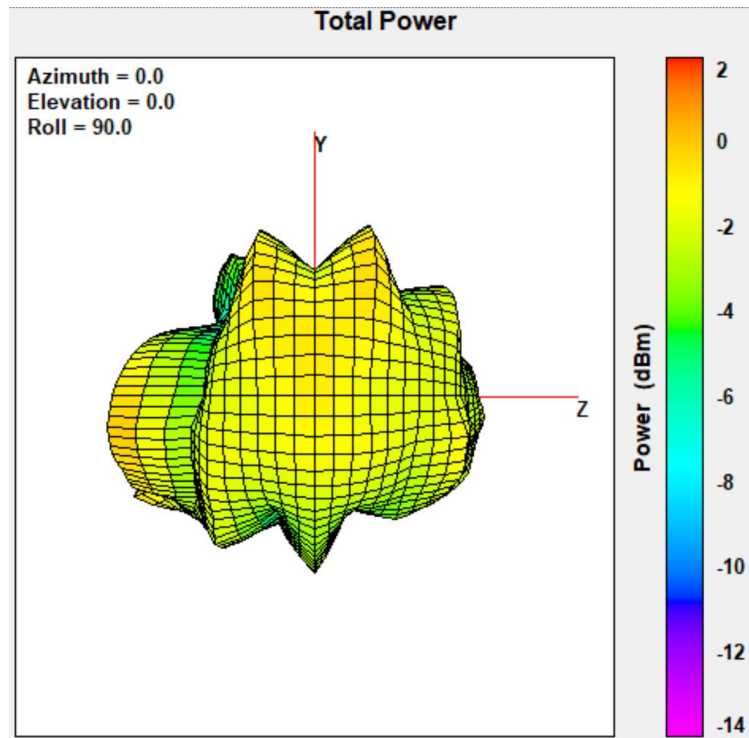


Figure 5. SIXPIRA Antenna 1 2405 MHz Left Side View

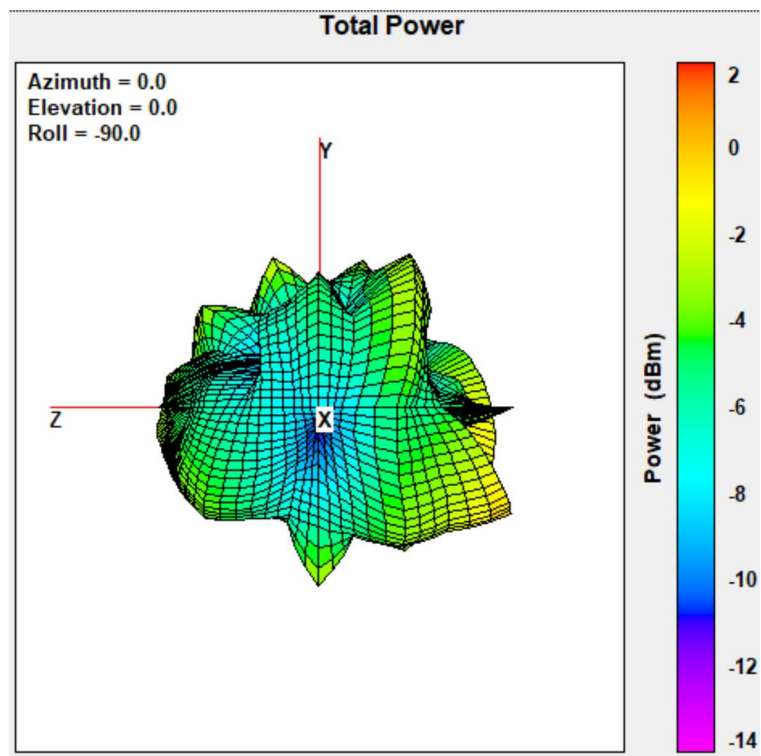


Figure 6. SIXPIRA Antenna 1 2405 MHz Right Side View

5.2 Antenna 1 – 2445 MHz 3D Passive

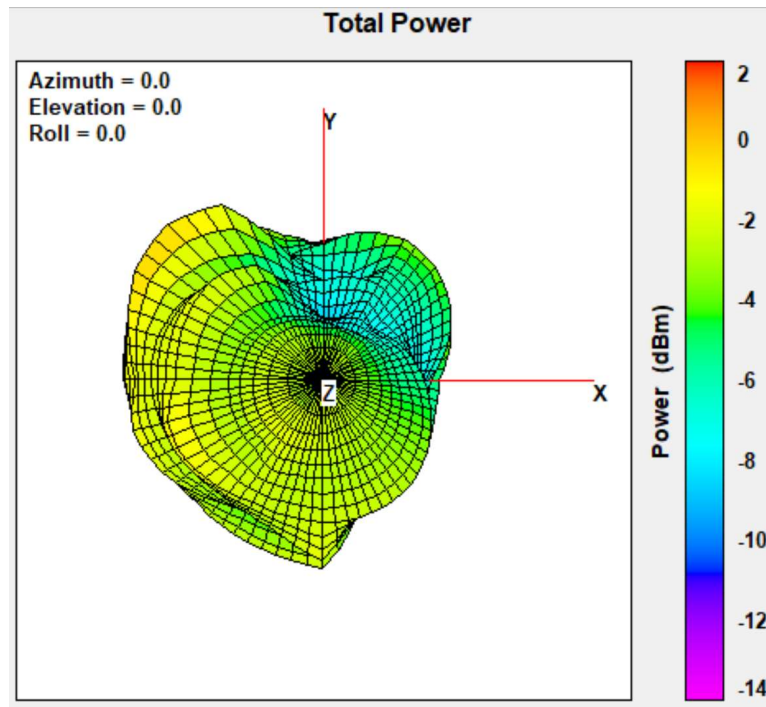


Figure 7. SIXPIRA Antenna 1 2445 MHz Front View

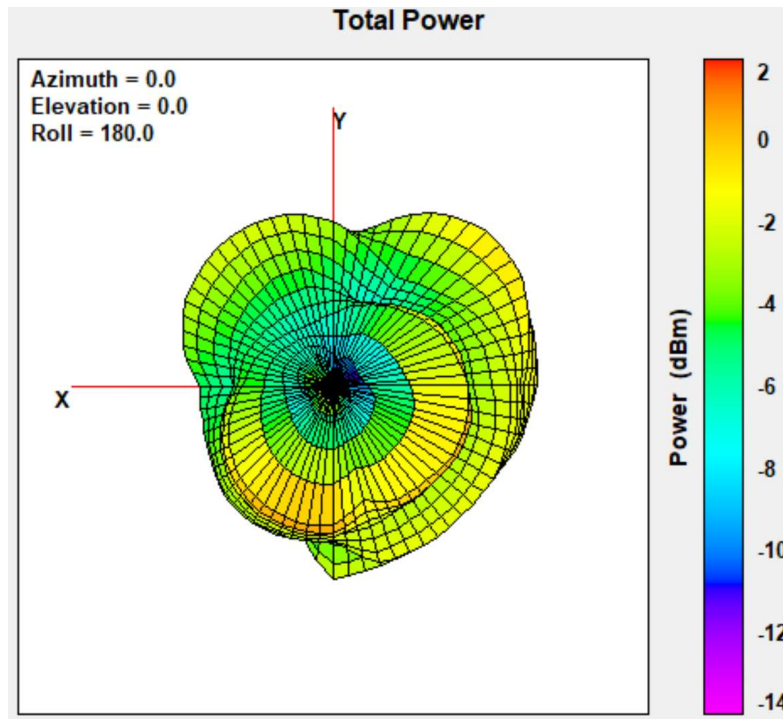


Figure 8. SIXPIRA Antenna 1 2445 MHz Back View

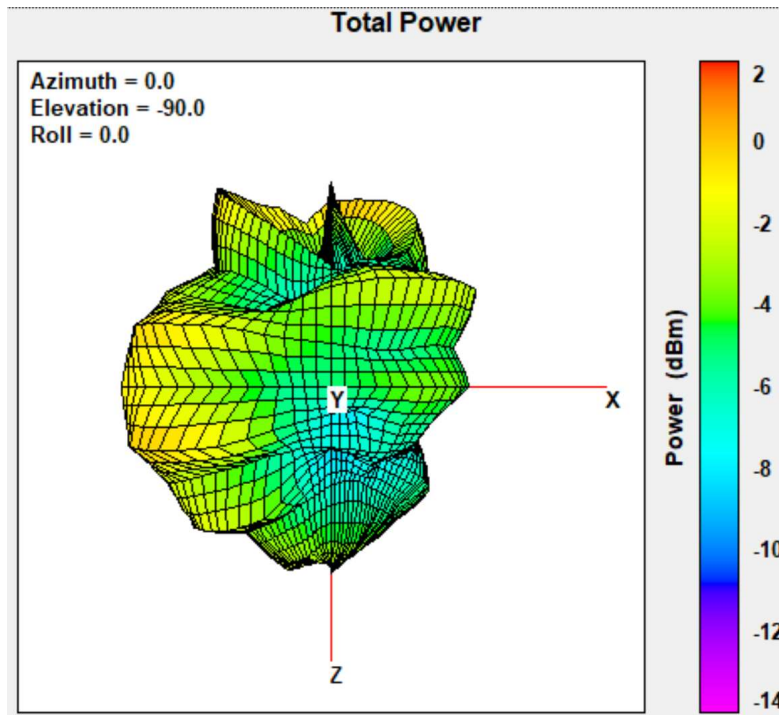


Figure 9. SIXPIRA Antenna 1 2445 MHz Top View

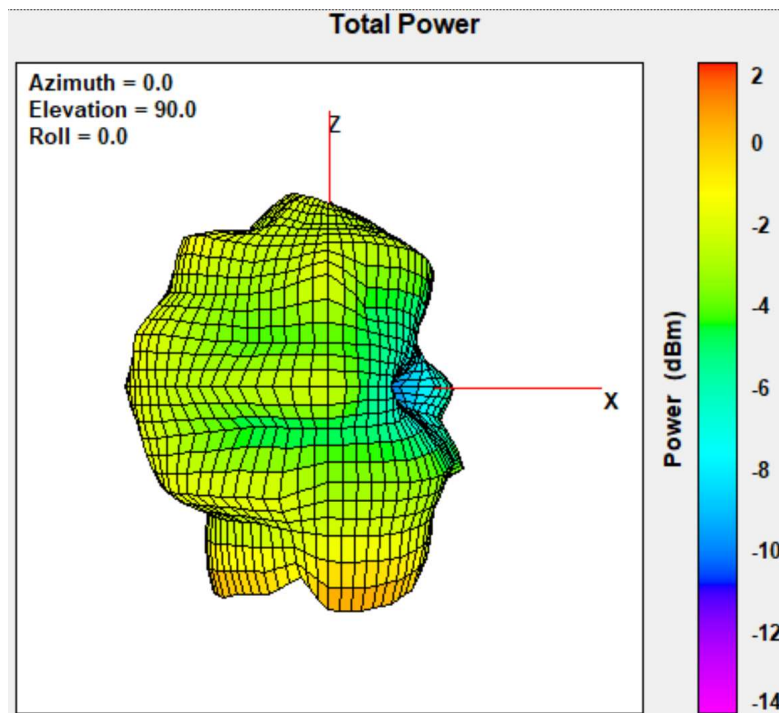


Figure 10. SIXPIRA Antenna 1 2445 MHz Bottom View

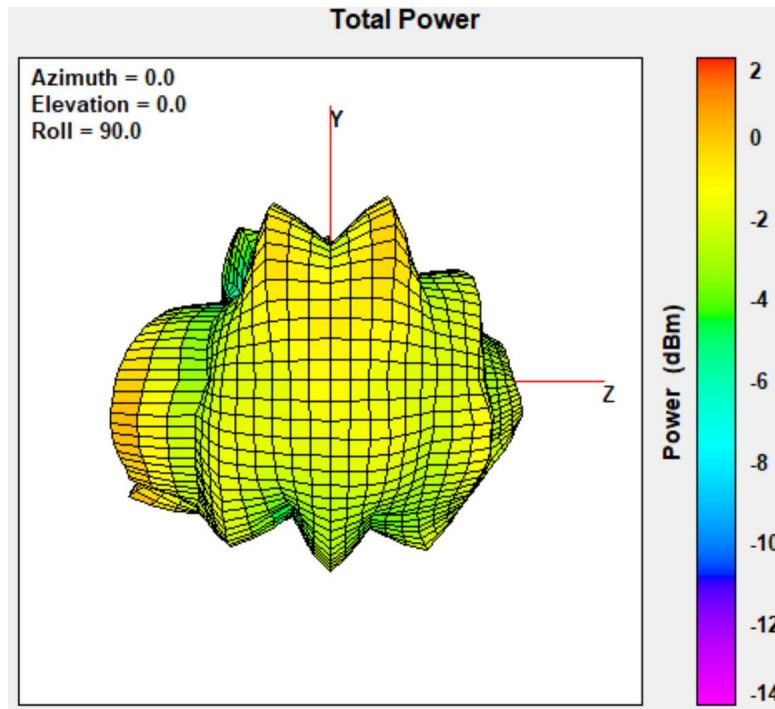


Figure 11. SIXPIRA Antenna 1 2445 MHz Left View

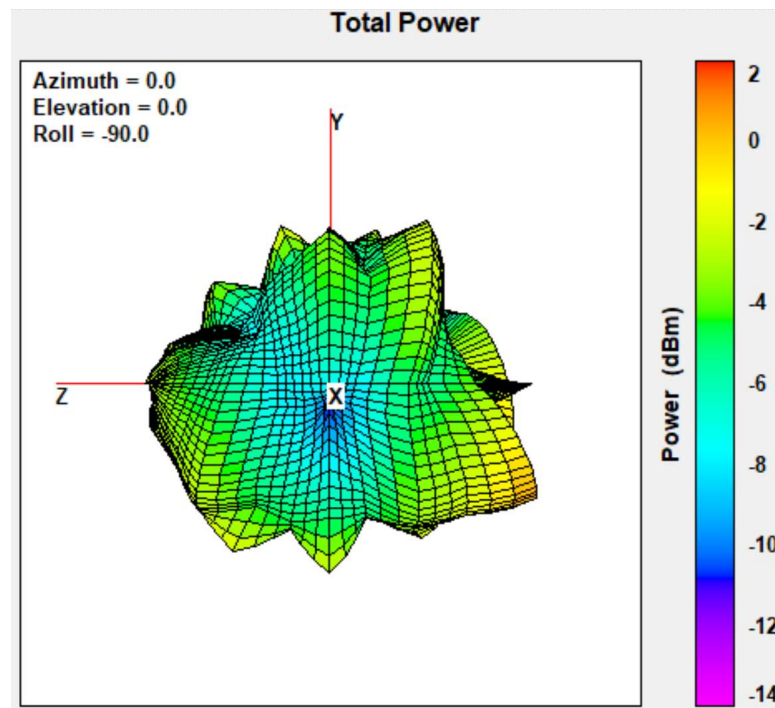


Figure 12. SIXPIRA Antenna 1 2445 MHz Right View

5.3 Antenna 1 – 2475 MHz 3D Passive

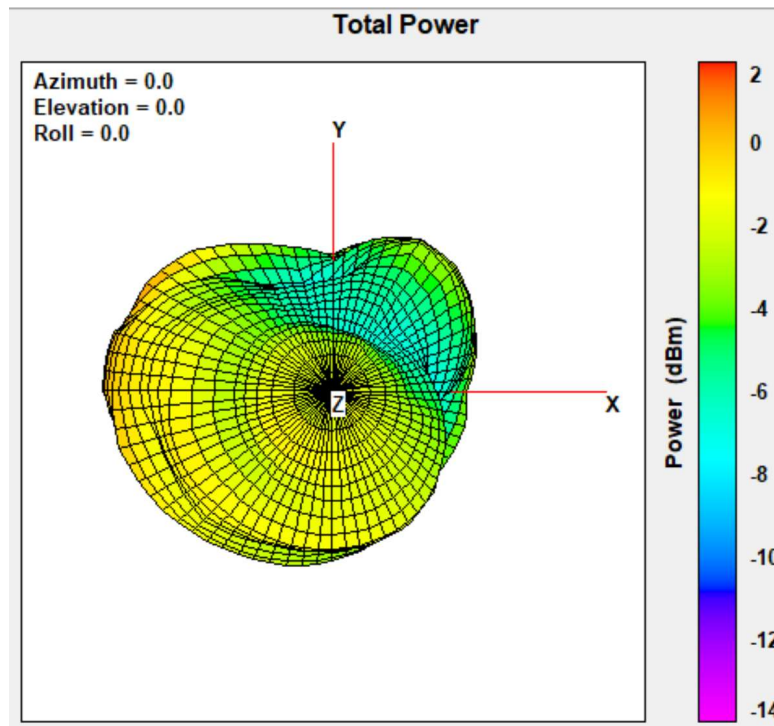


Figure 13. SIXPIRA Antenna 1 2475 MHz Front View

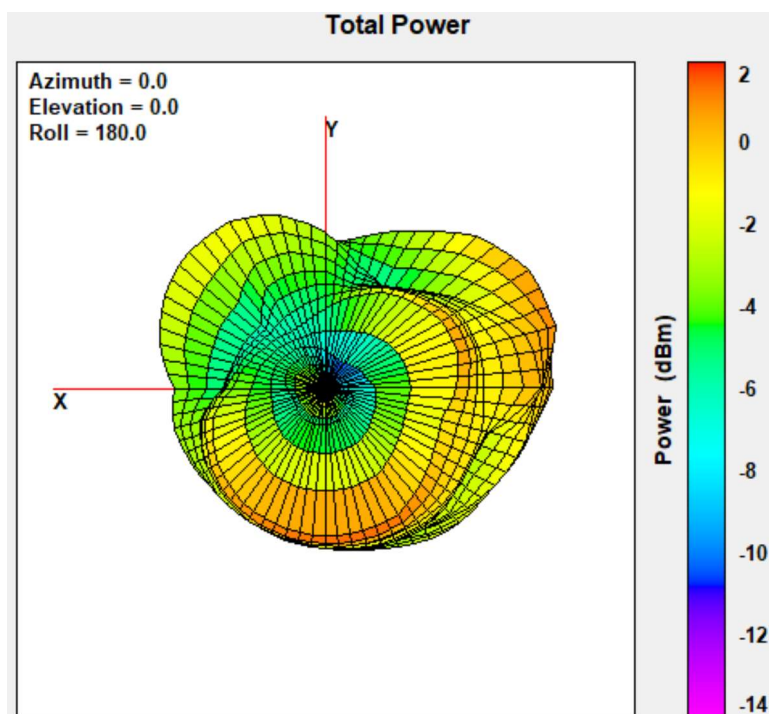


Figure 14. SIXPIRA Antenna 1 2475 MHz Back View

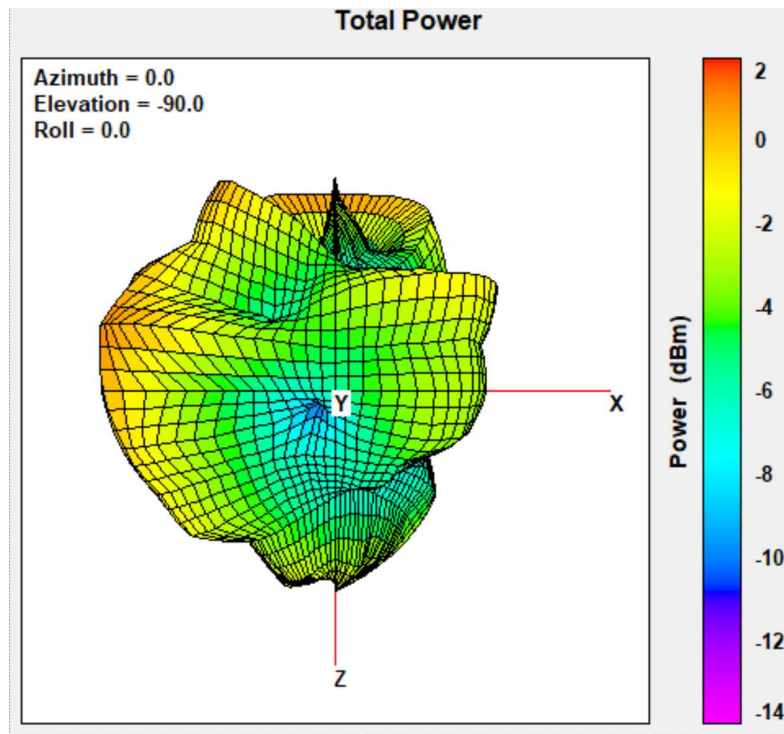


Figure 15. SIXPIRA Antenna 1 2475 MHz Top View

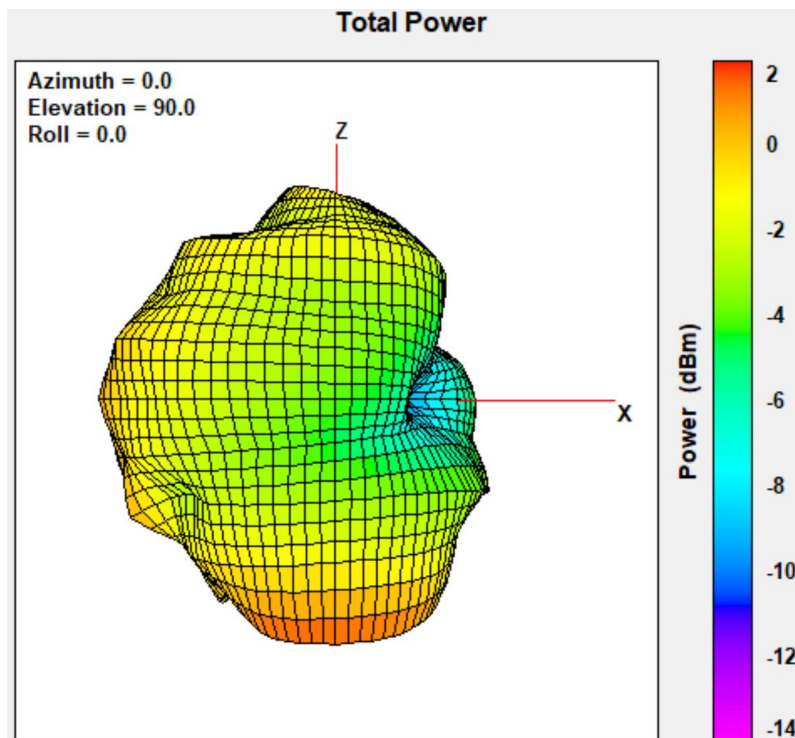


Figure 16. SIXPIRA Antenna 1 2475 MHz Bottom View

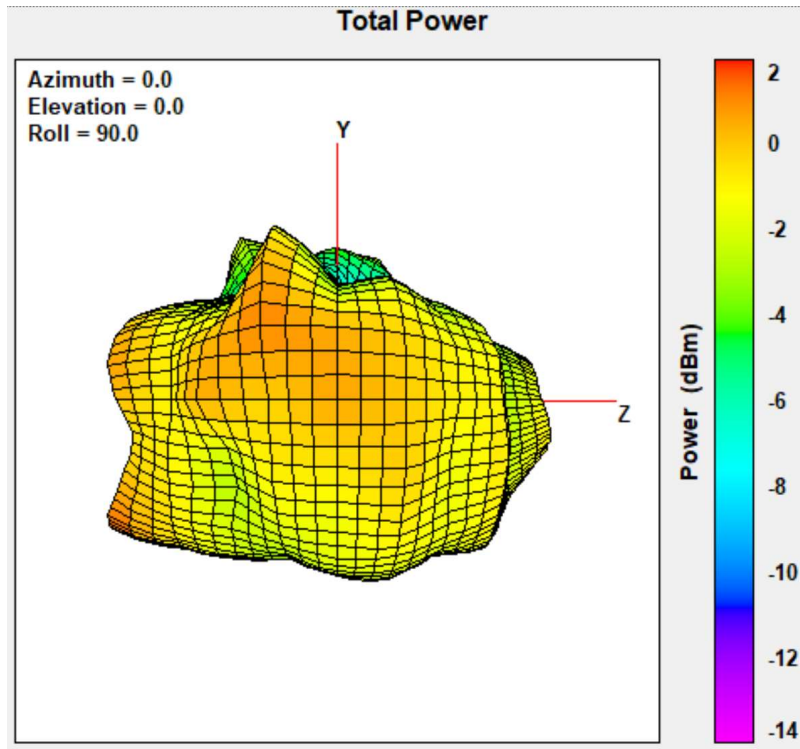


Figure 17. SIXPIRA Antenna 1 2475 MHz Left View

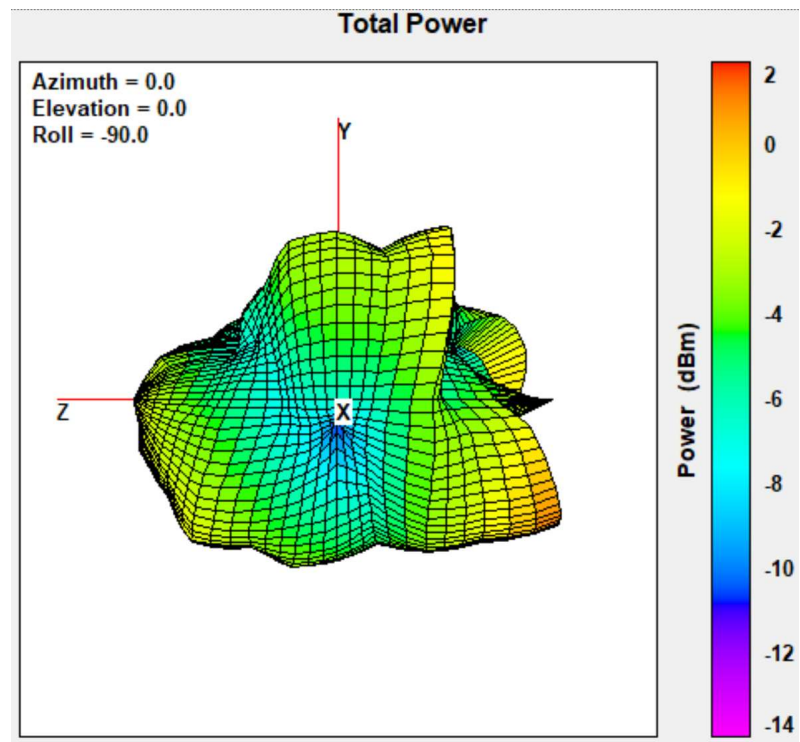


Figure 18. SIXPIRA Antenna 1 2475 MHz Right View

5.4 Antenna 2 – 2405 MHz 3D Passive

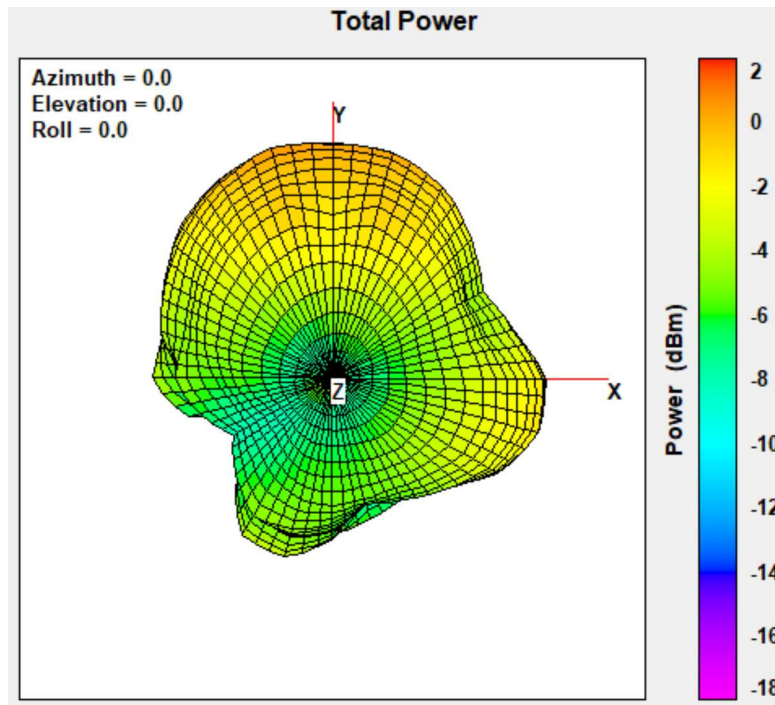


Figure 19. SIXPIRA Antenna 2 2405 MHz Front View

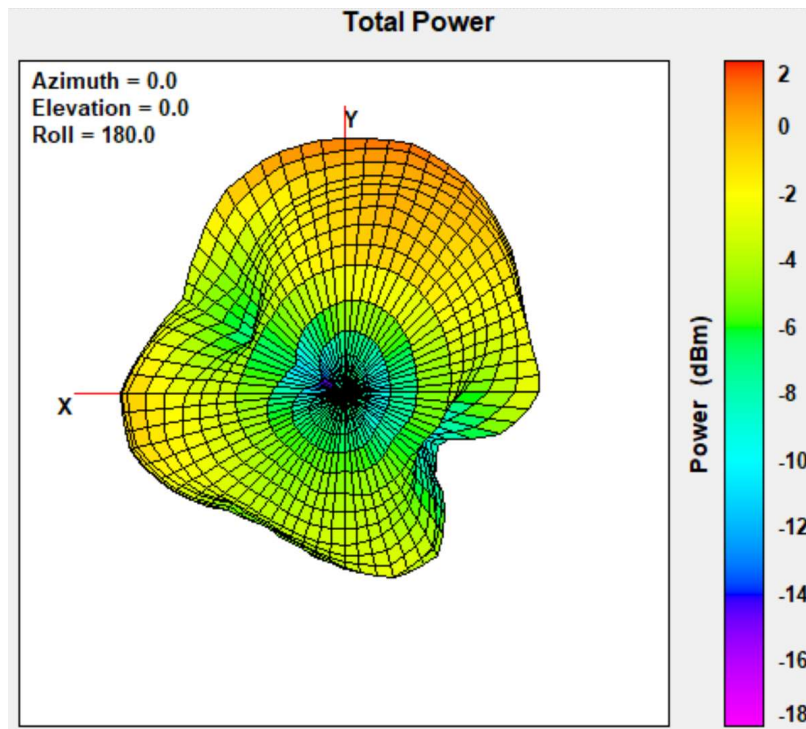


Figure 20. SIXPIRA Antenna 2 2405 MHz Back View

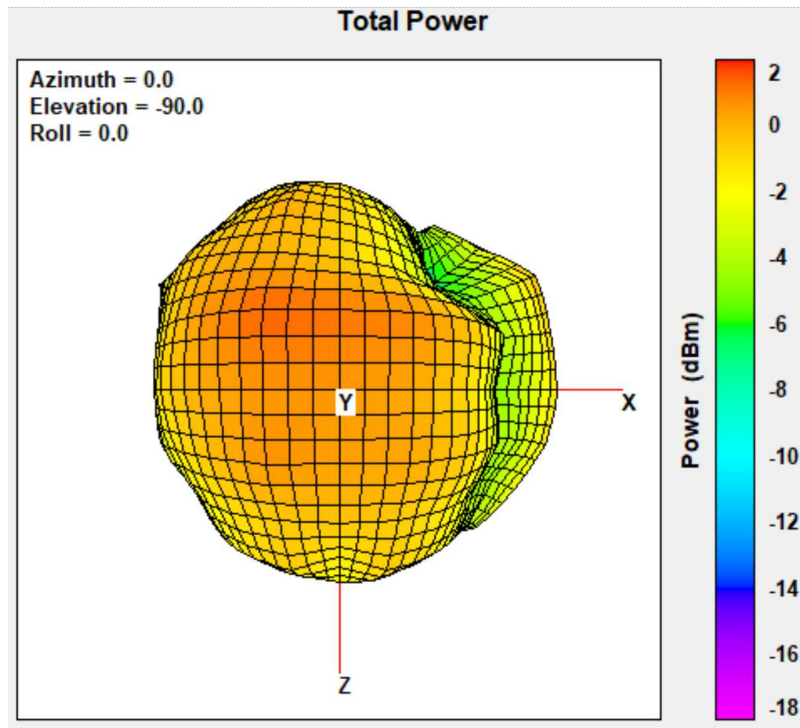


Figure 21. SIXPIRA Antenna 2 2405 MHz Top View

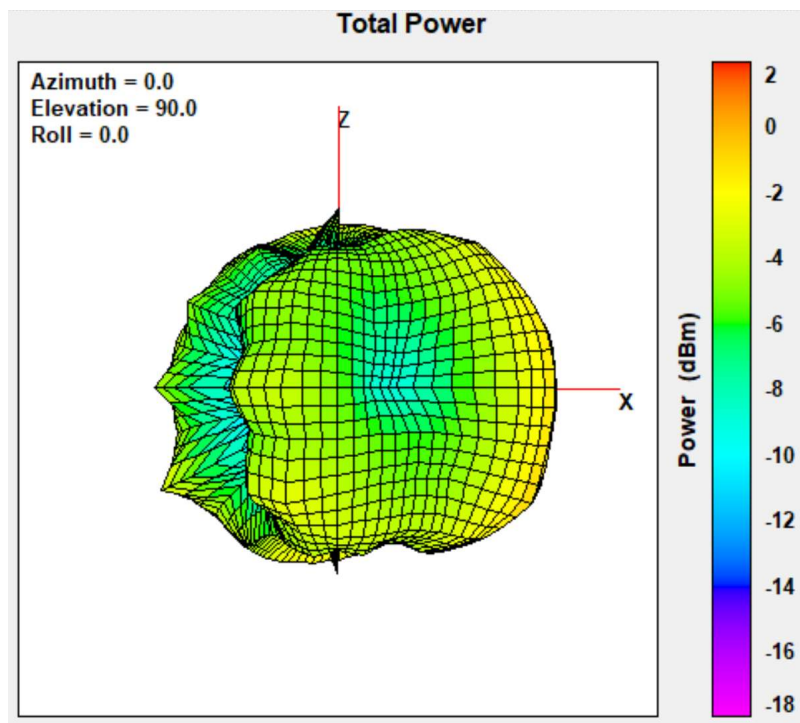


Figure 22. SIXPIRA Antenna 2 2405 MHz Bottom View

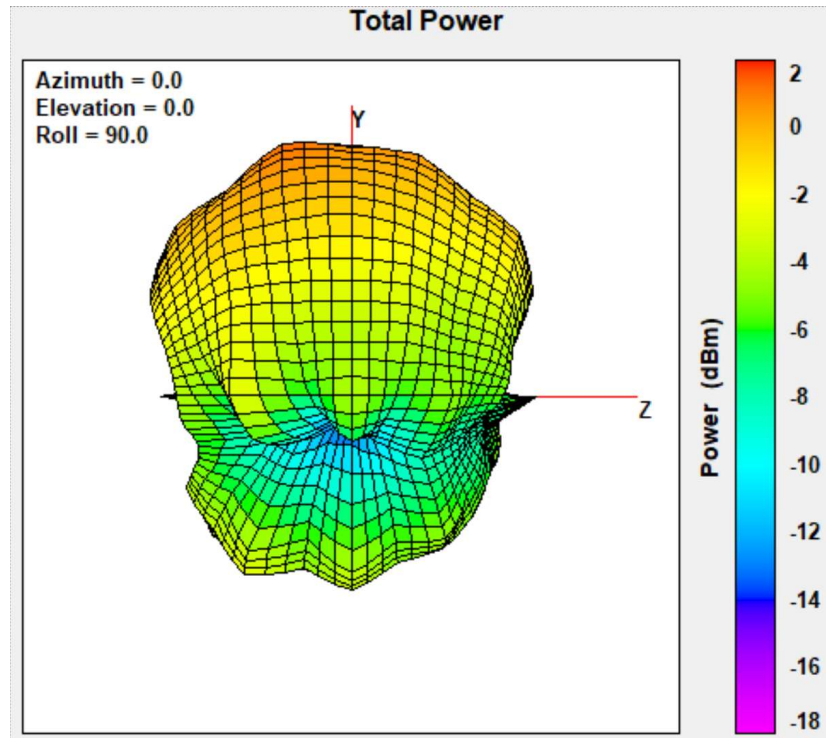


Figure 23. SIXPIRA Antenna 2 2405 MHz Left View

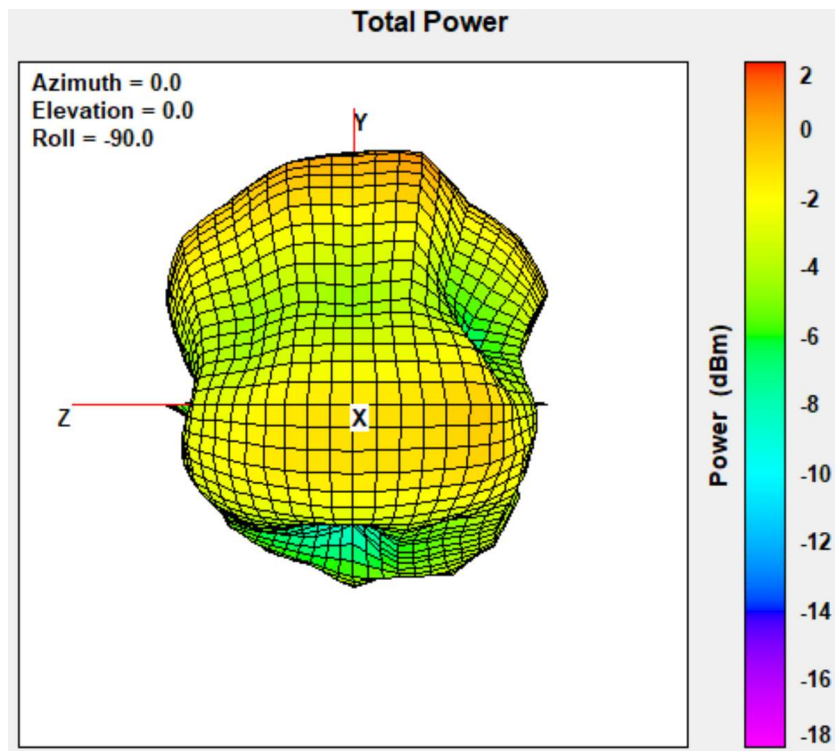


Figure 24. SIXPIRA Antenna 2 2405 MHz Right View

5.5 Antenna 2 – 2445 MHz 3D Passive

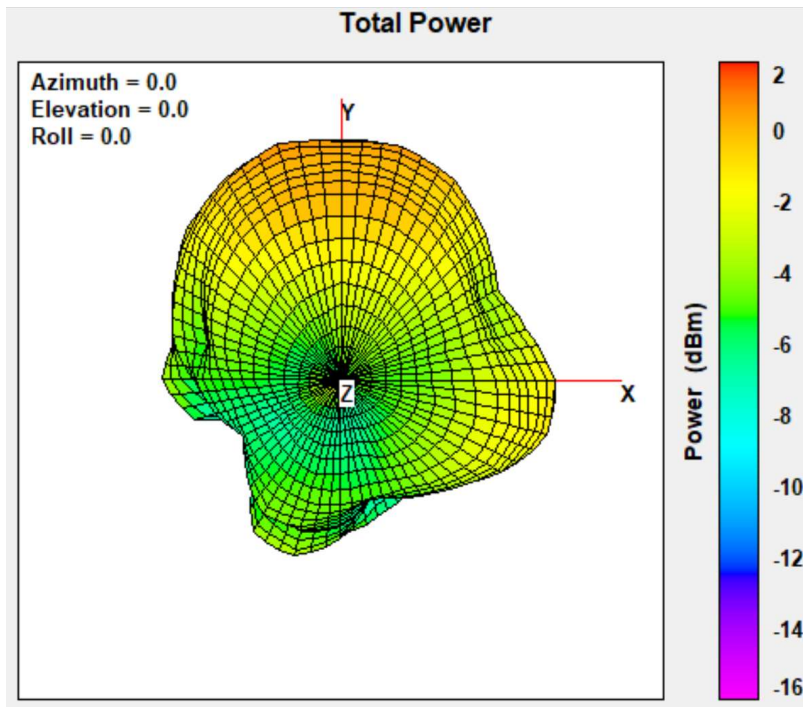


Figure 25. SIXPIRA Antenna 2 2445 MHz Front View

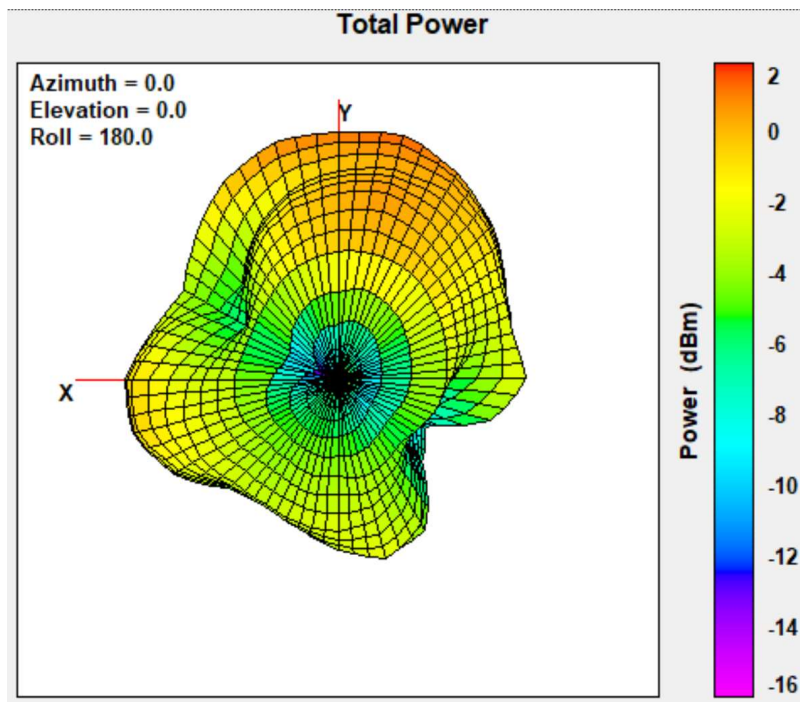


Figure 26. SIXPIRA Antenna 2 2445 MHz Back View

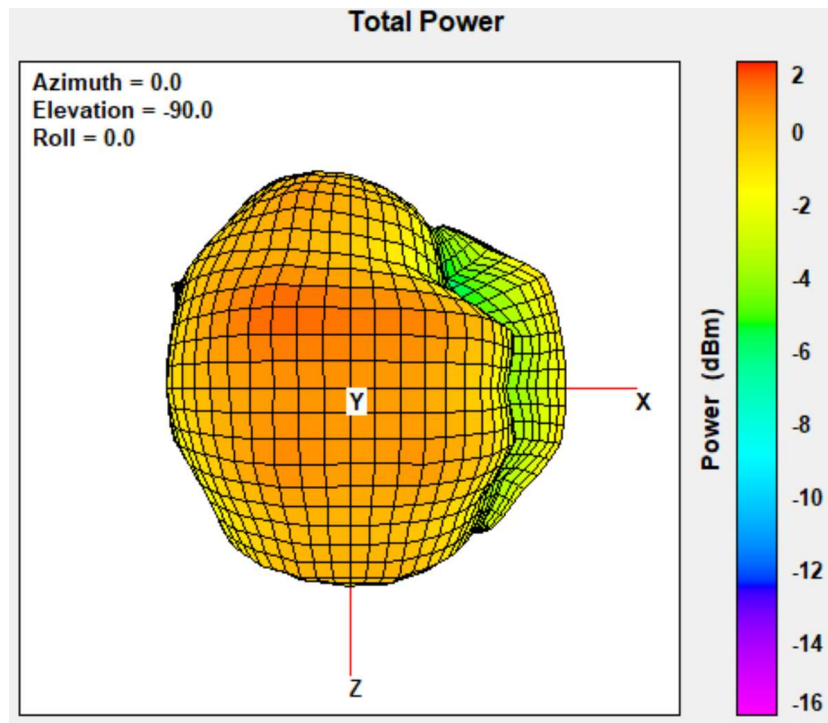


Figure 27. SIXPIRA Antenna 2 2445 MHz Top View

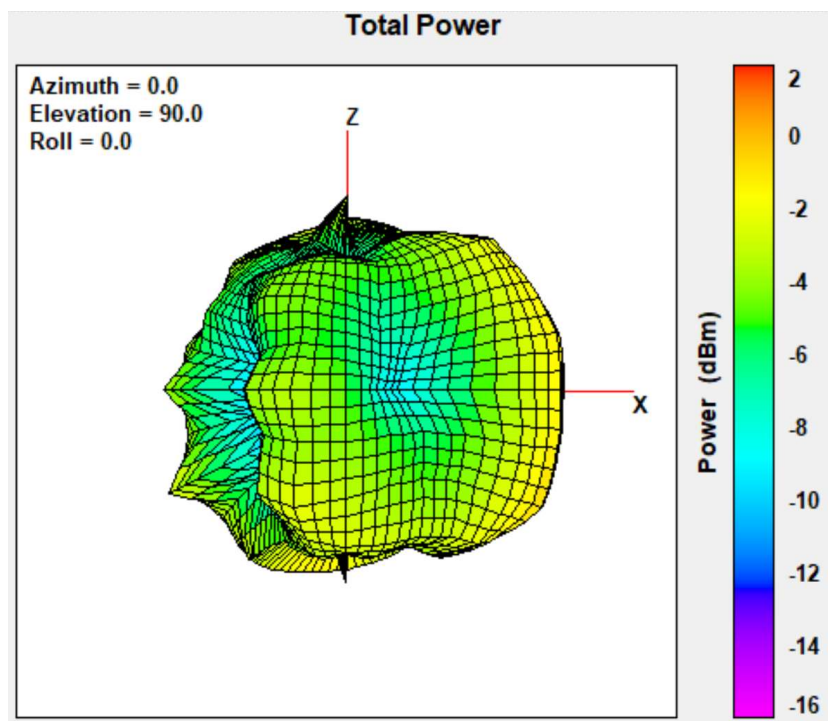


Figure 28. SIXPIRA Antenna 2 2445 MHz Bottom View

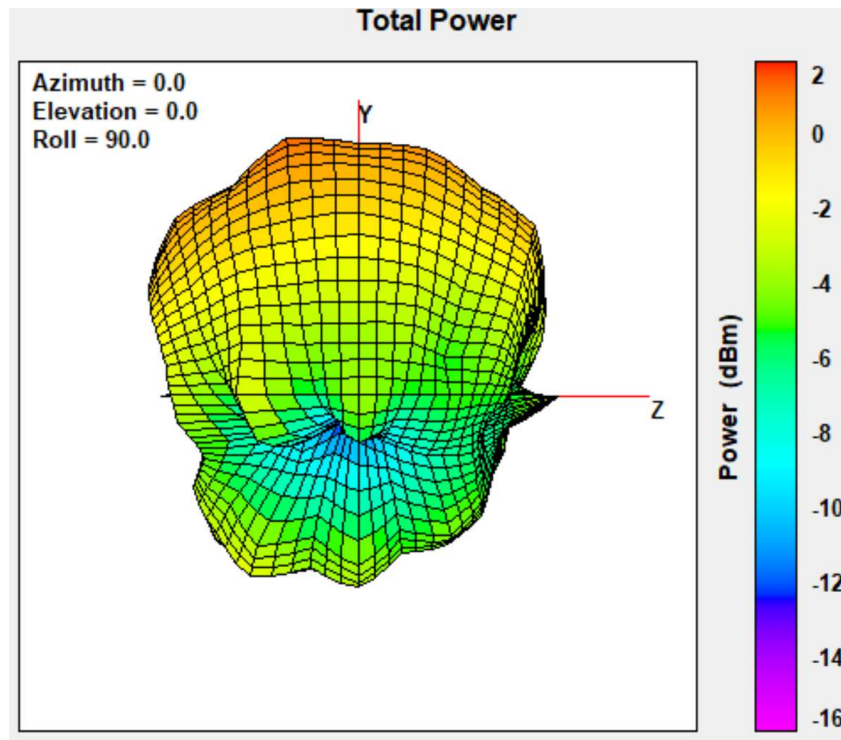


Figure 29. SIXPIRA Antenna 2 2445 MHz Left View

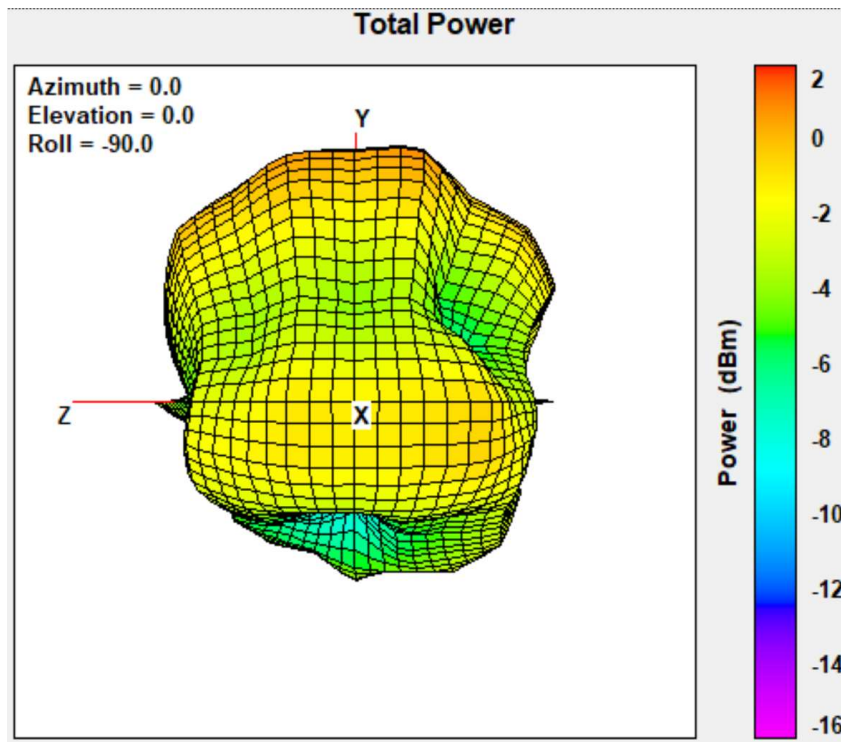


Figure 30. SIXPIRA Antenna 2 2445 MHz Right View

5.6 Antenna 2 – 2475 MHz 3D Passive

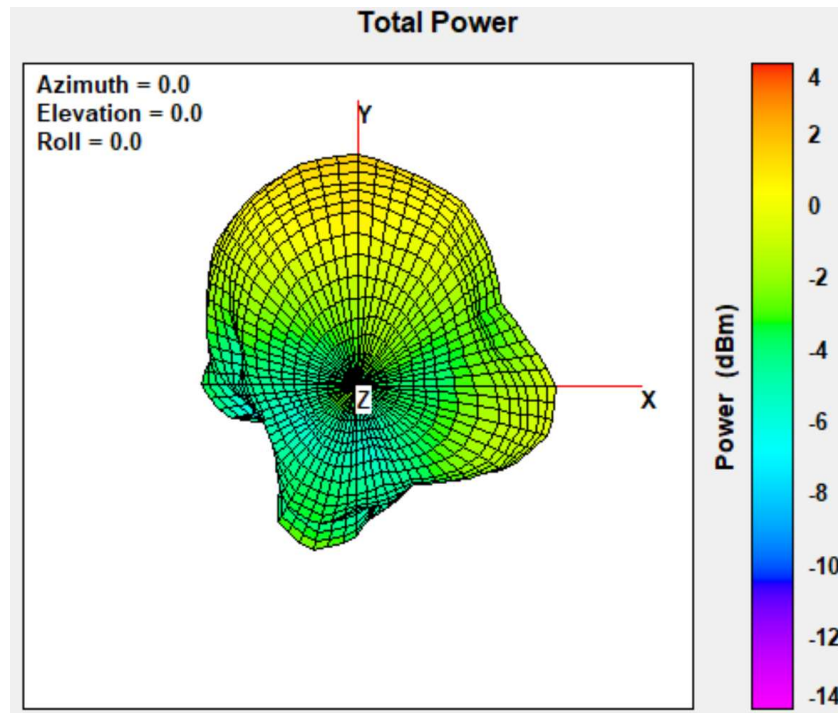


Figure 31. SIXPIRA Antenna 2 2475 MHz Front View

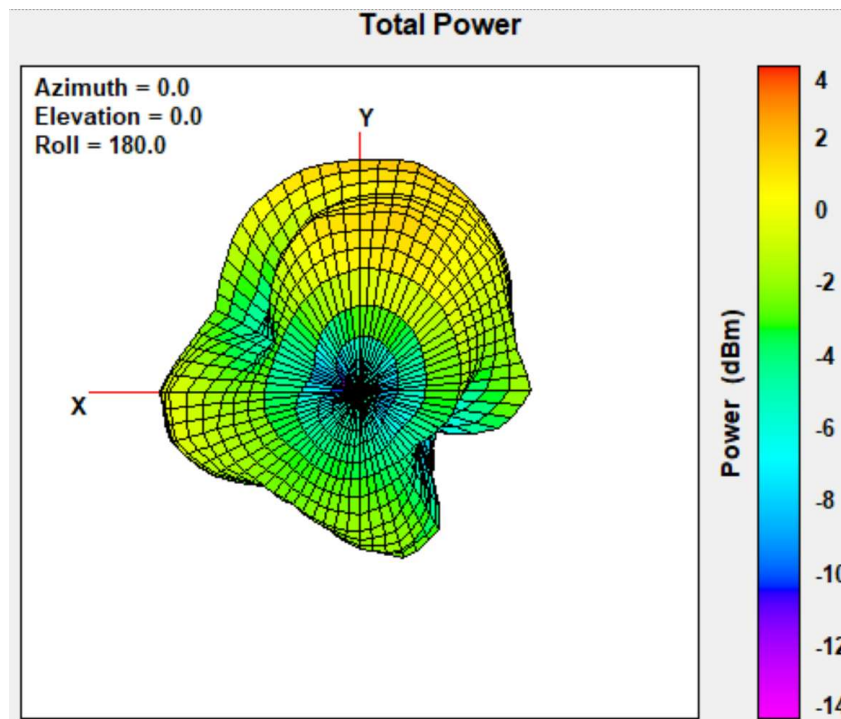


Figure 32. SIXPIRA Antenna 2 2475 MHz Back View

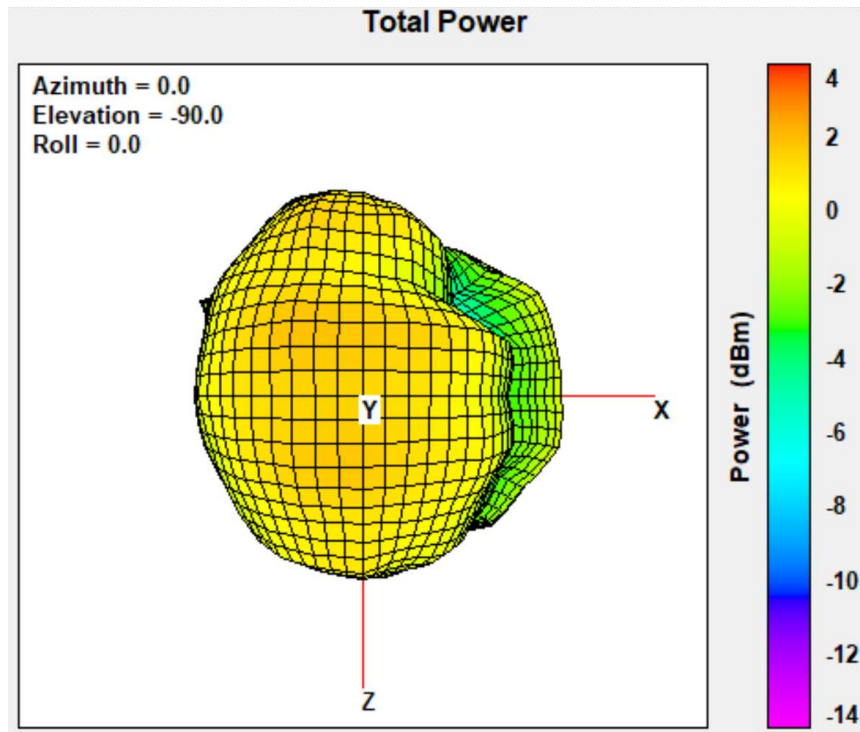


Figure 33. SIXPIRA Antenna 2 2475 MHz Top View

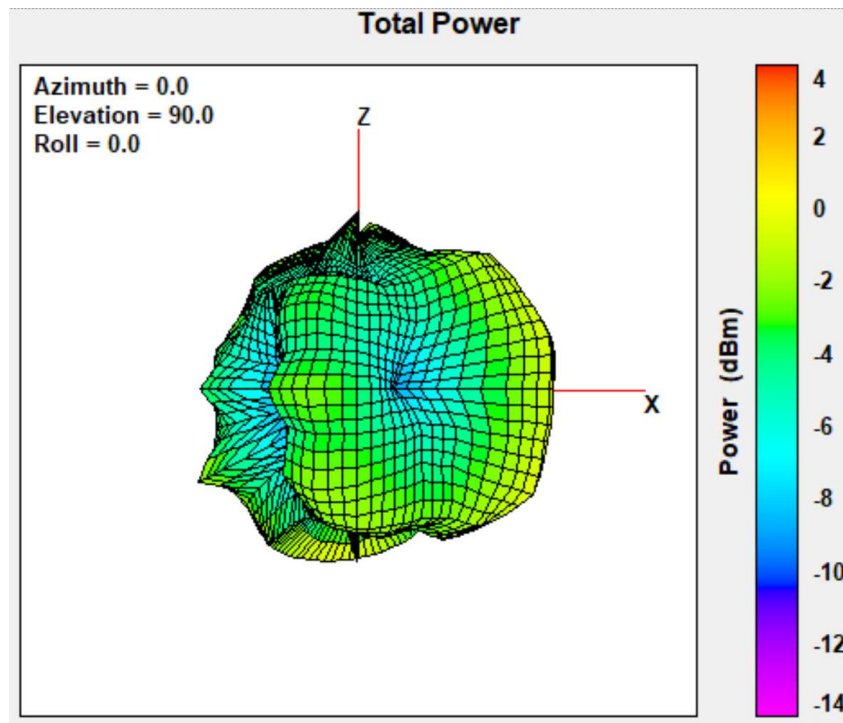


Figure 34. SIXPIRA Antenna 2 2475 MHz Bottom View

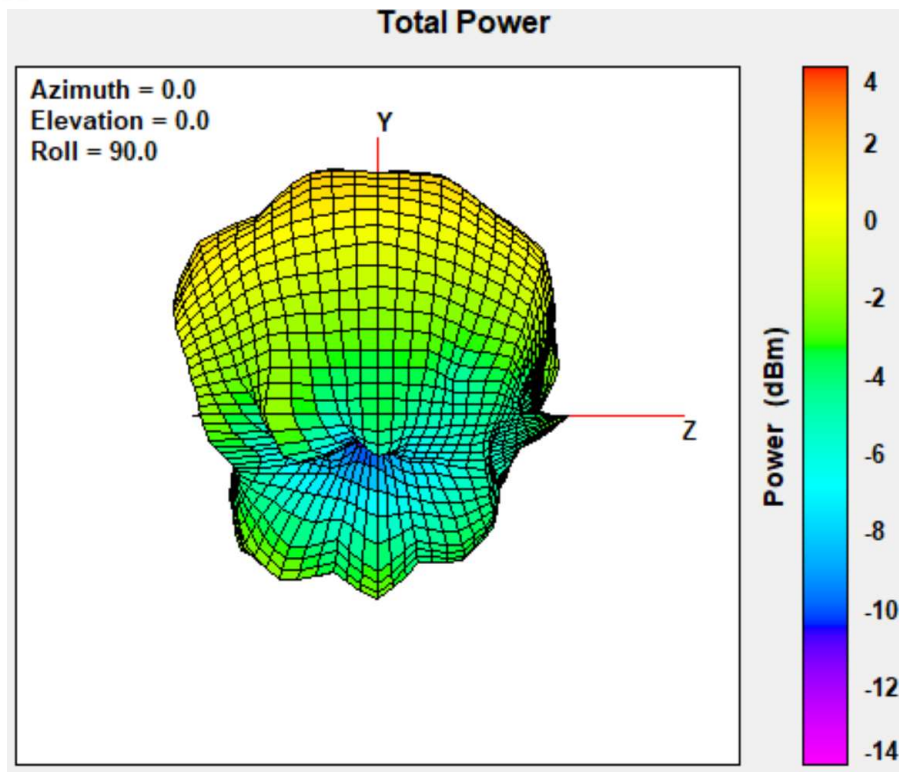


Figure 35. SIXPIRA Antenna 2 2475 MHz Left View

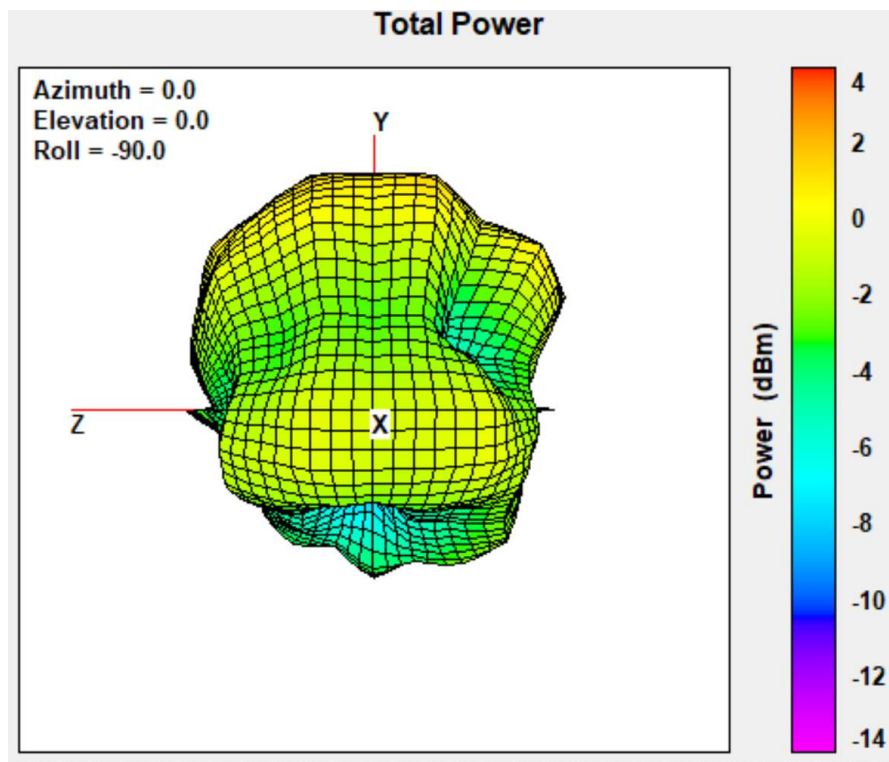


Figure 36. SIXPIRA Antenna 2 2475 MHz Right View

6. Test Setup

