

Antenna Gain and Pattern Measurement Report

Model Name: Z2IO

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Test Report Revision History				
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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	Anritsu	MS46522B	1903101	2/27/2025
OTA Test Chamber	ETS-Lindgren	AMS8050		3/27/2025
OTA Test Software	ETS-Lindgren	EMQuest V1.16 Build 24230		

3. Device Under Test Information

- Model name: Z2IO.
- Test Frequency (MHz): 2405, 2440, 2480.
- Antenna type: Printed PCB antenna.

4. Result Summary

Z2IO PCB Antenna	Frequency		
	2405 MHz	2440 MHz	2480 MHz
Efficiency (dB)	-3.70	-4.09	-4.43
Efficiency (%)	42.6	38.9	36.0
Gain (dBi)	0.04	-0.78	-1.18

5. Plots

5.1 Antenna – 2405 MHz 3D Passive

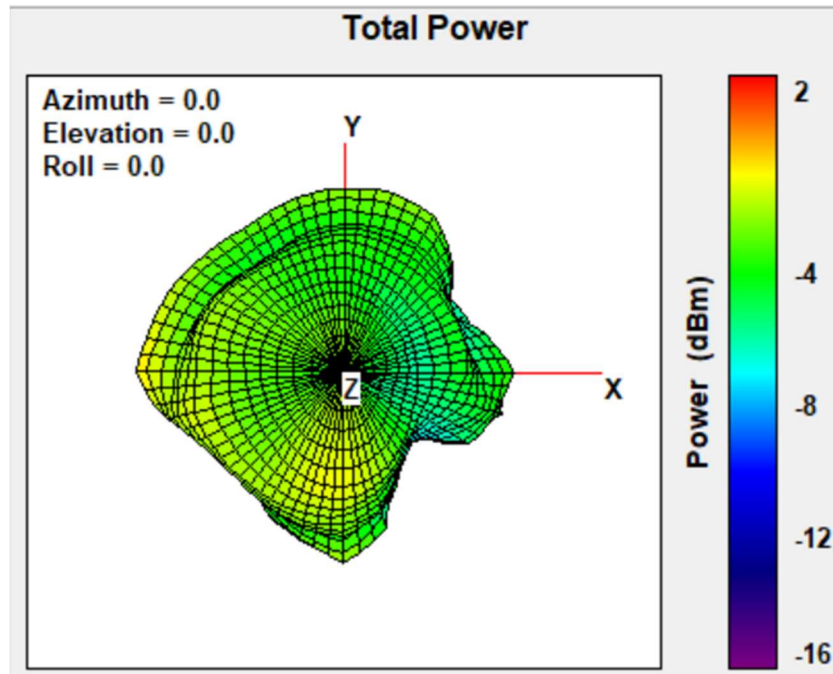


Figure 1. Z2IO 2405 MHz Front View

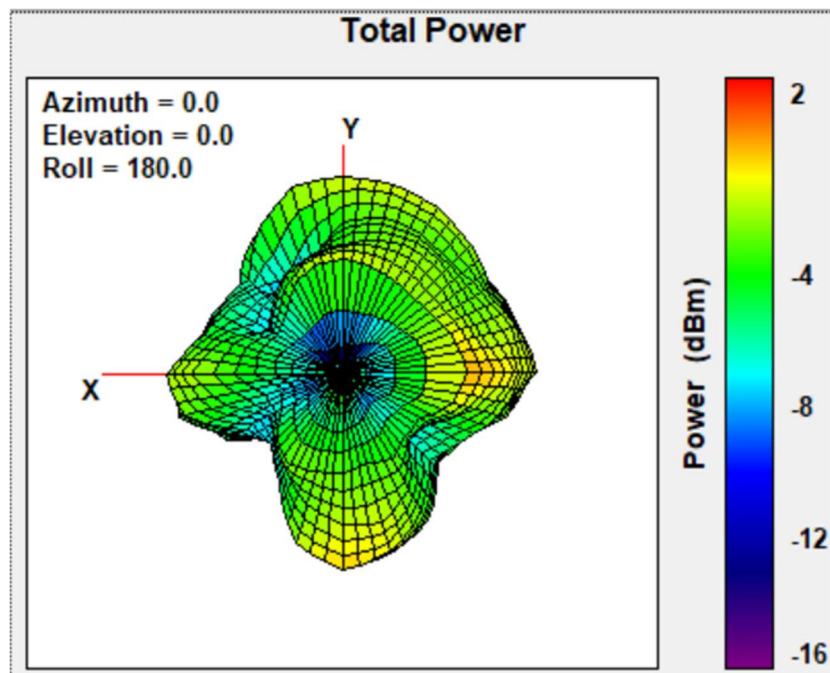


Figure 2. Z2IO 2405 MHz Back View

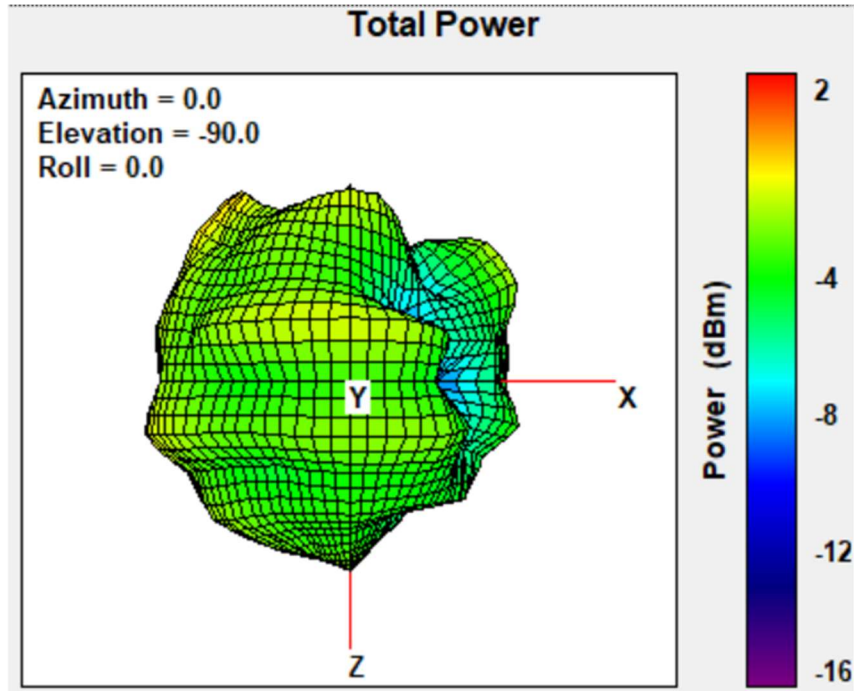


Figure 3. Z2IO 2405 MHz Top View

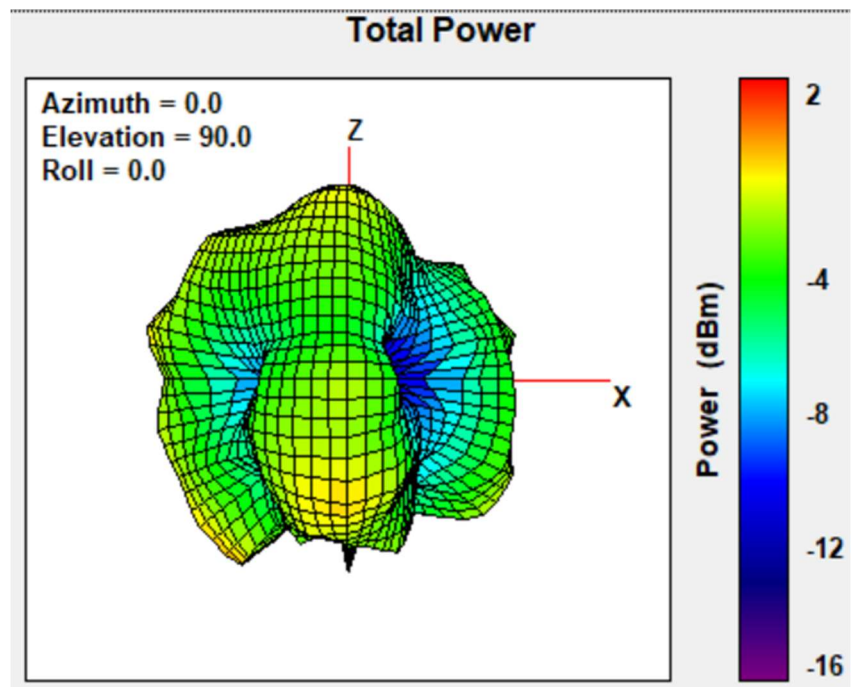


Figure 4. Z2IO 2405 MHz Bottom View

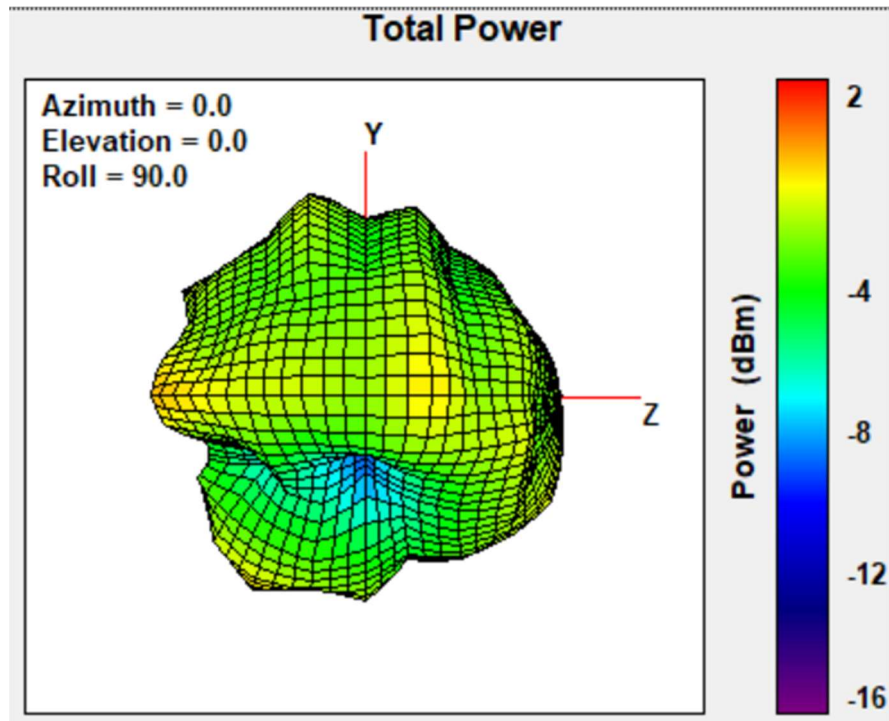


Figure 5. Z2IO 2405 MHz Left Side View

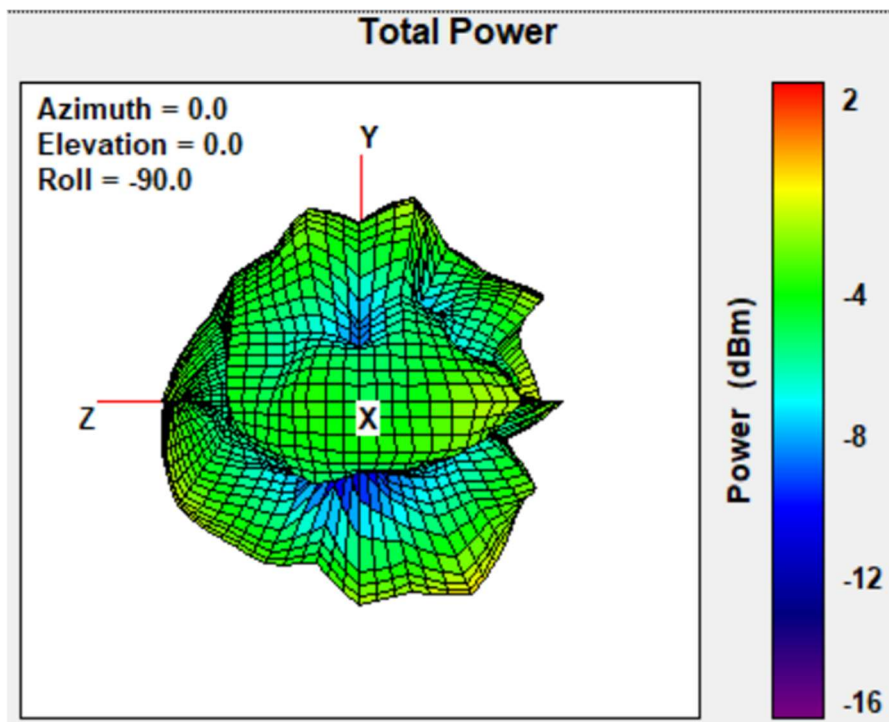


Figure 6. Z2IO 2405 MHz Right Side View



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5.2 Antenna – 2440 MHz 3D Passive

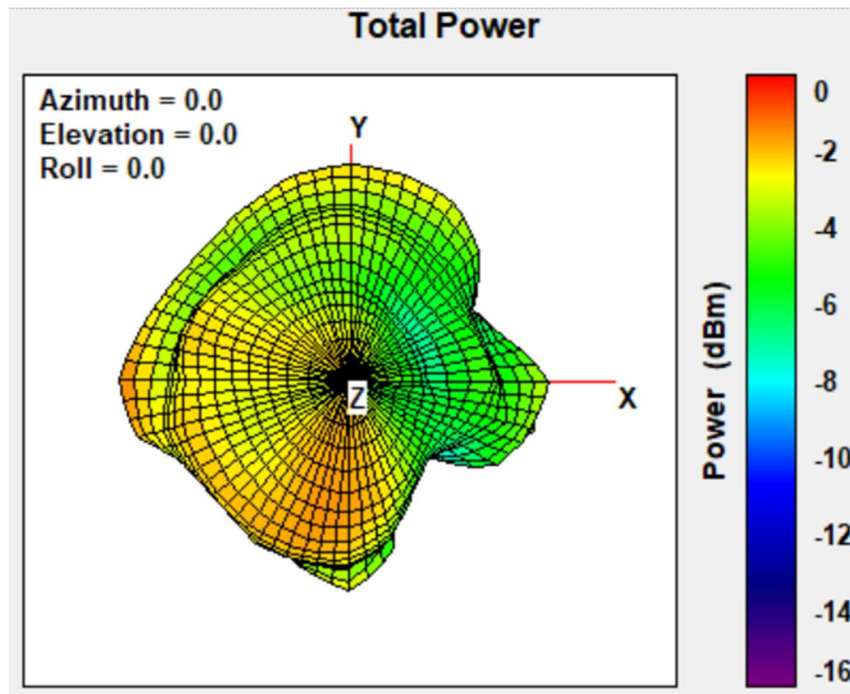


Figure 7. Z2IO 2440 MHz Front View

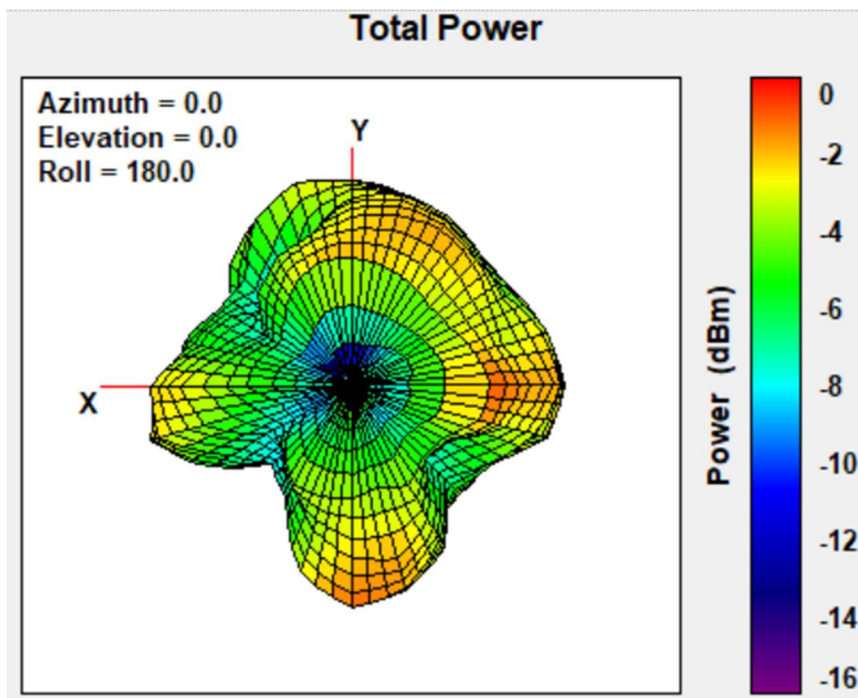


Figure 8. Z2IO 2440 MHz Back View

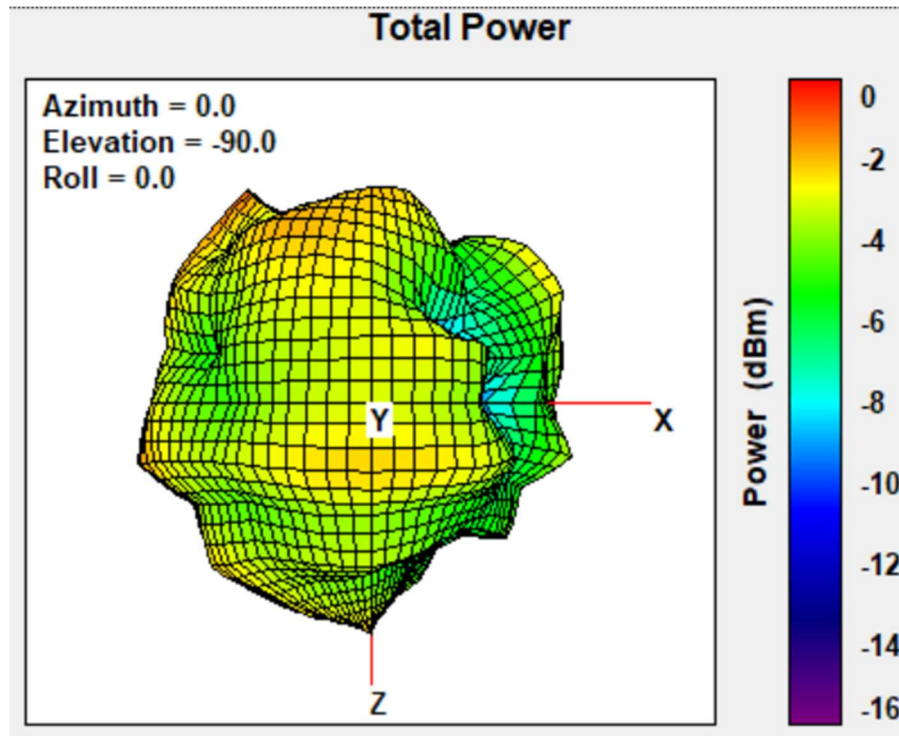


Figure 9. Z2IO 2440 MHz Top View

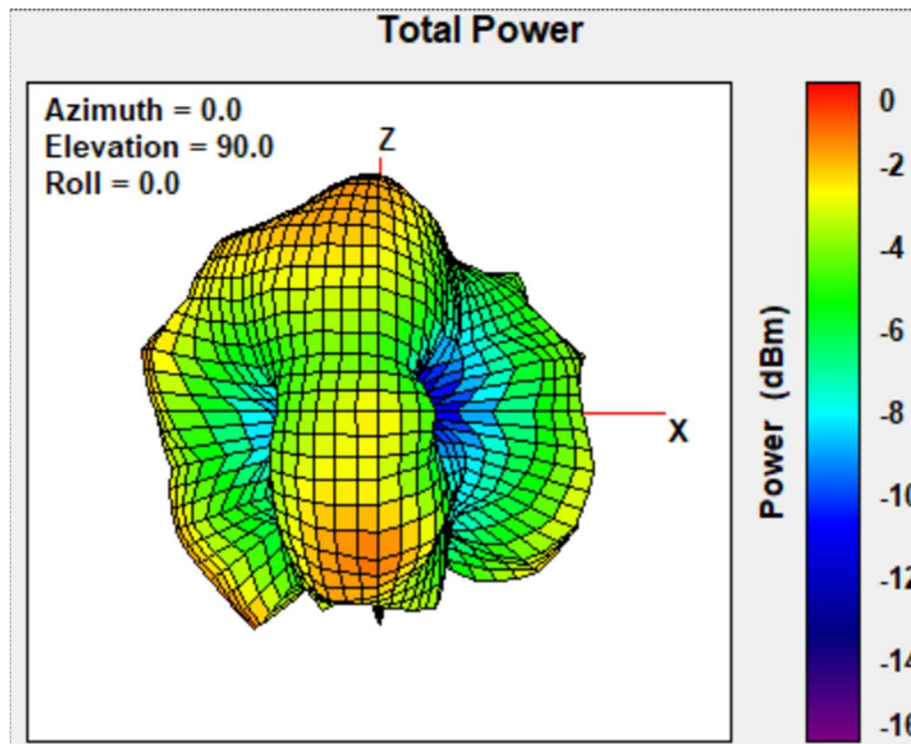


Figure 10. Z2IO 2440 MHz Bottom View

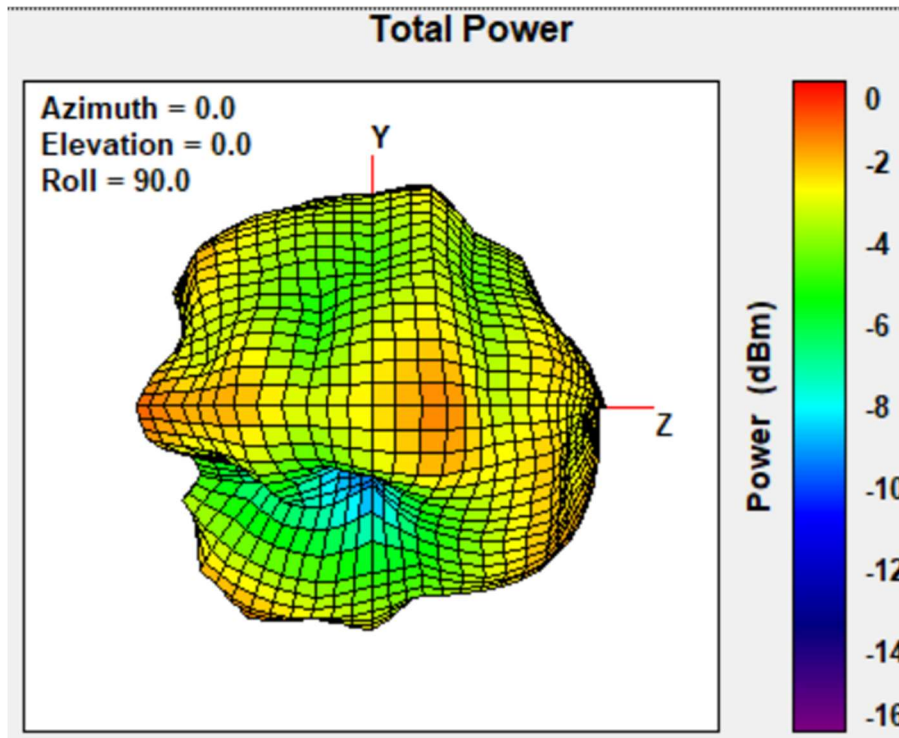


Figure 11. Z2IO 2440 MHz Left Side View

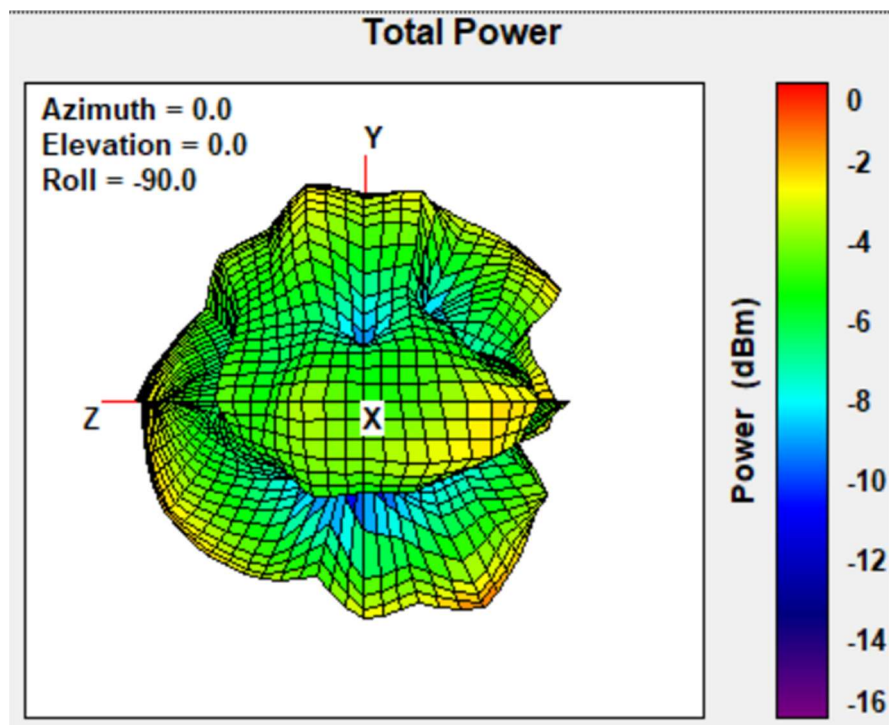


Figure 12. Z2IO 2440 MHz Right Side View



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5.3 Antenna – 2480 MHz 3D Passive

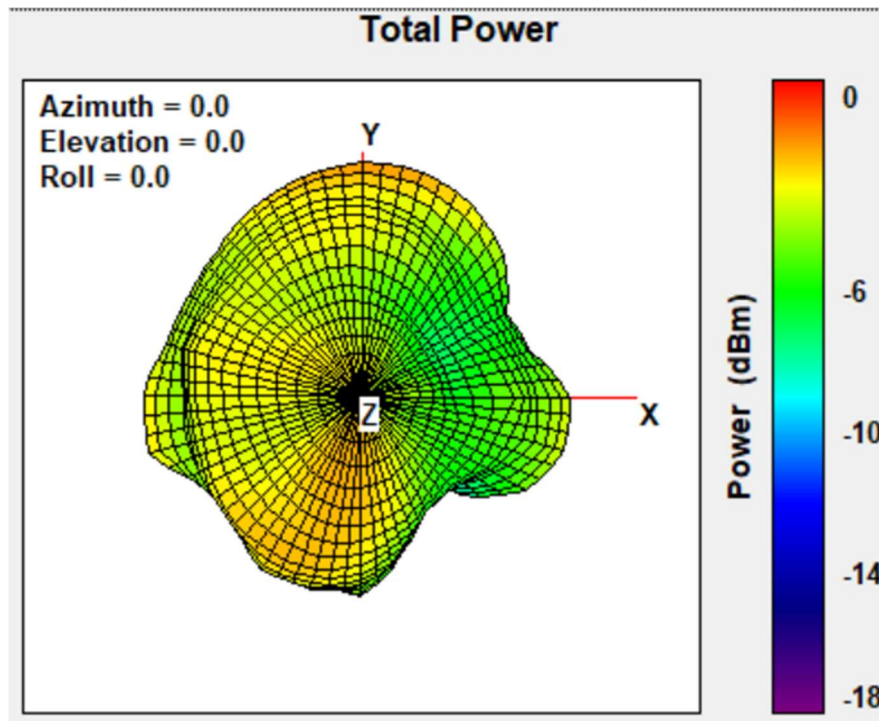


Figure 13. Z2IO 2480 MHz Front View

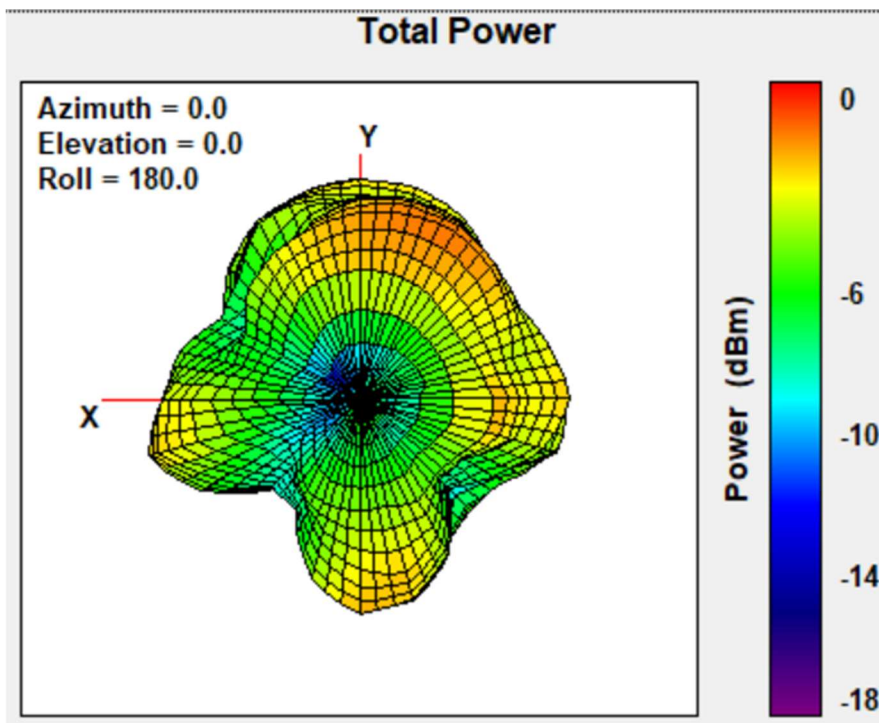


Figure 14. Z2IO 2480 MHz Back View

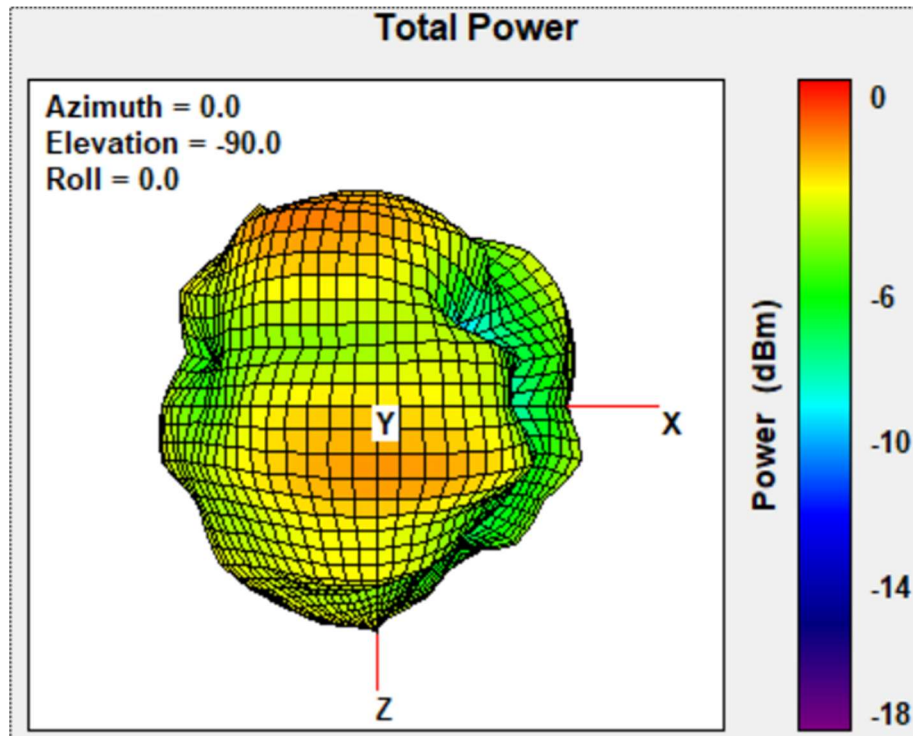


Figure 15. Z2IO 2480 MHz Top View

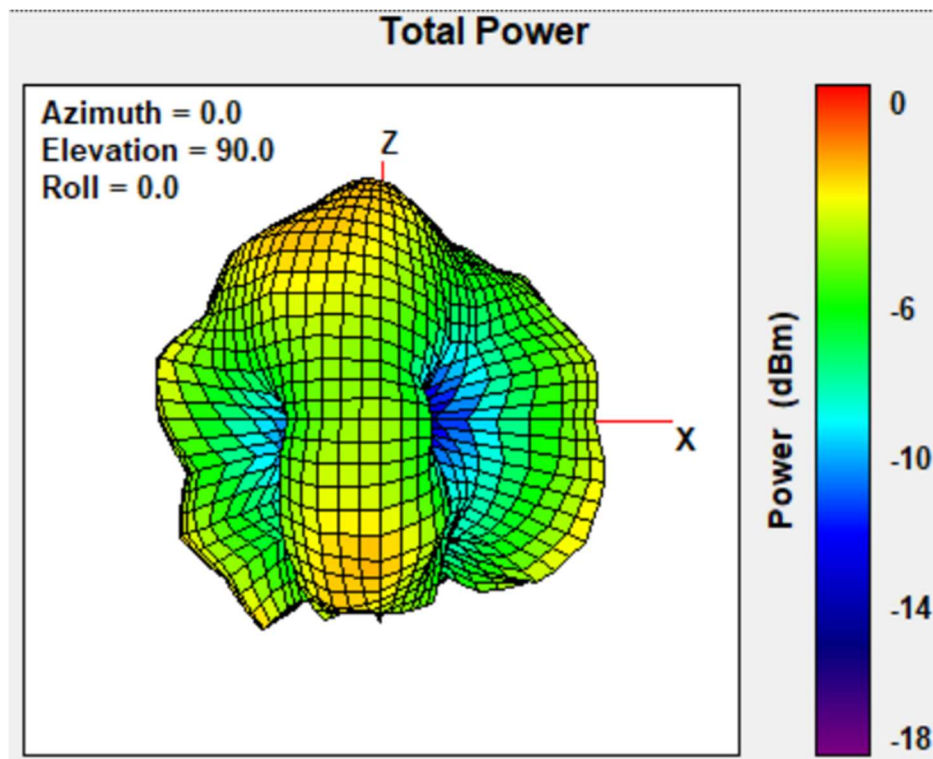


Figure 16. Z2IO 2480 MHz Bottom View

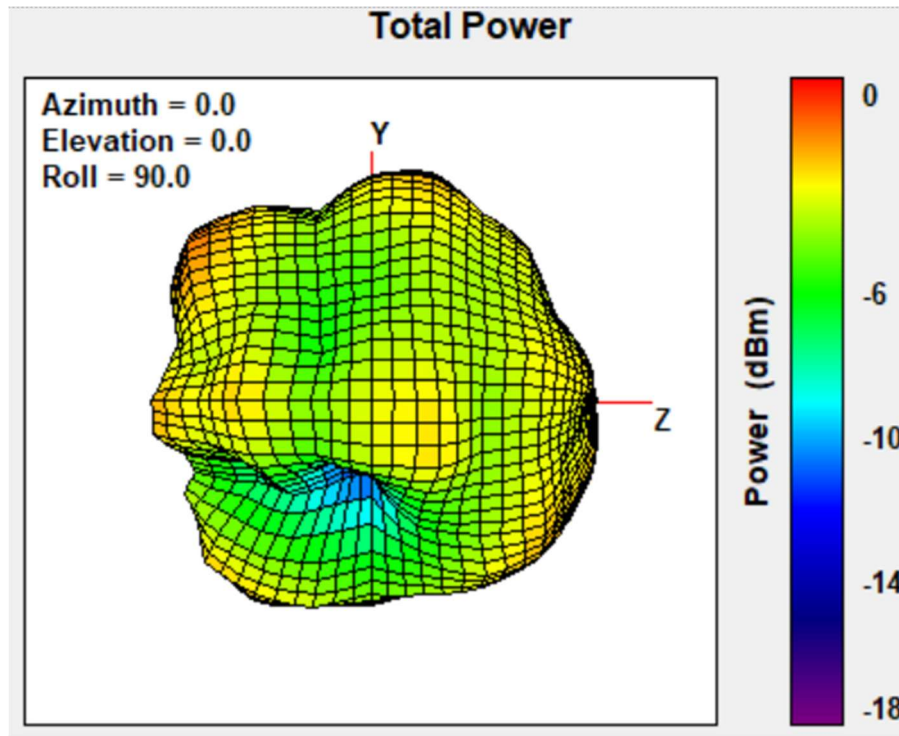


Figure 17. Z2IO 2480 MHz Left View

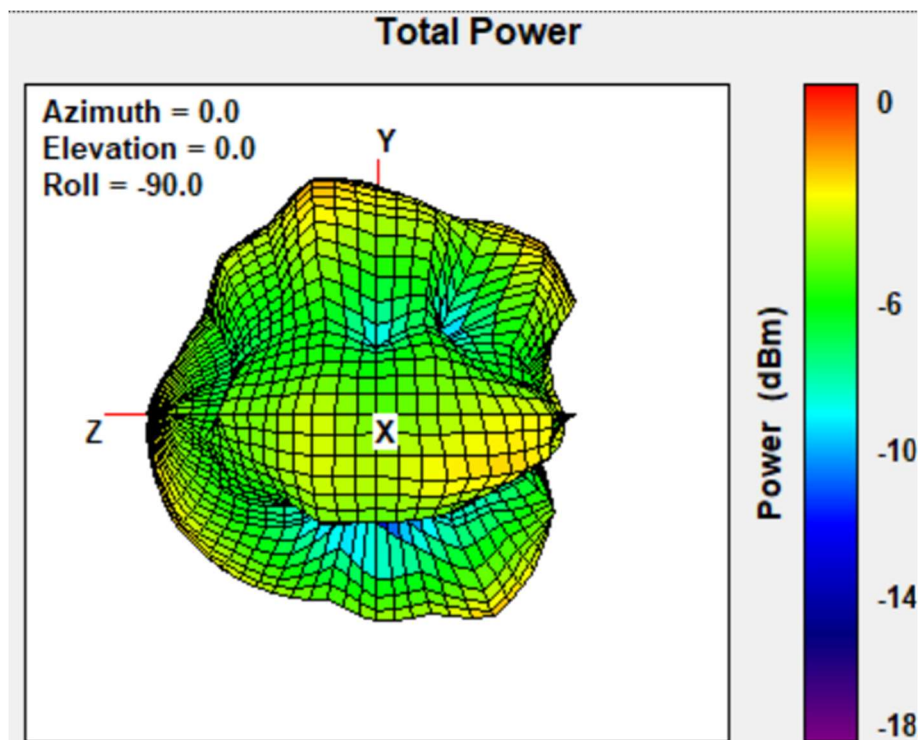


Figure 18. Z2IO 2480 MHz Right View

6. Test Setup

