

Antenna Gain and Pattern Measurement Report

Model Name: SMCO410

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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	Keysight	P5002A	MY58100491	6/27/2024
OTA Test Chamber	ETS-Lindgren	AMS8050		7/9/2024
OTA Test Software	ETS-Lindgren	EMQuest V1.16 Build 24230		

3. Device Under Test Information

- Model name: SMCO410
- Test Frequency (MHz): 908, 916.
- Antenna type: Printed PCB antenna.

4. Result Summary

SMCO410 PCB Antenna	Frequency	
	908 MHz	916 MHz
TRP (dBm)	-9.73	-9.79
EIRP (dBm)	-7.66	-7.59
Efficiency (dB)	-9.73	-9.79
Efficiency (%)	10.64	10.48
Gain (dBi)	-7.66	-7.59

5. Plots

5.1 Antenna – 908 MHz 3D Passive

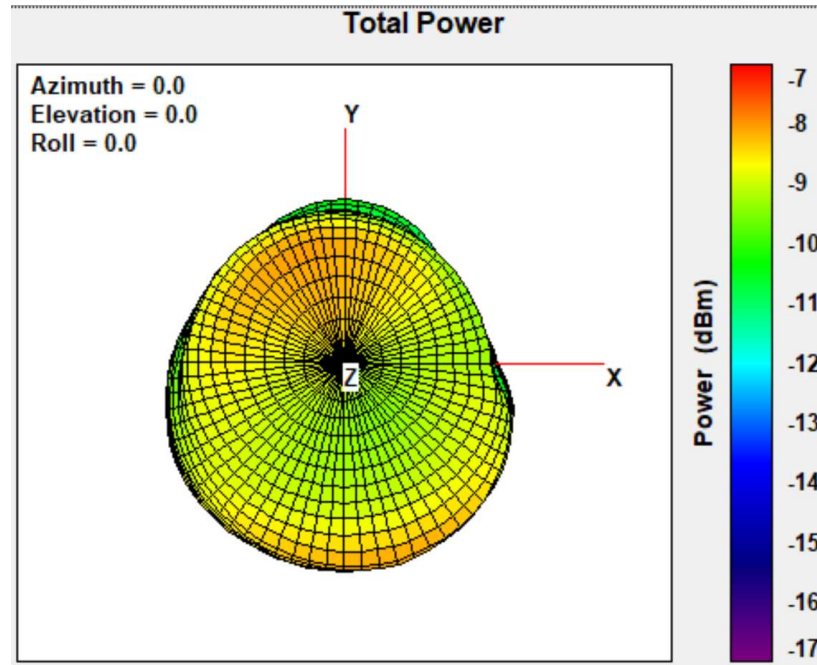


Figure 1. SMCO410 908 MHz Front View

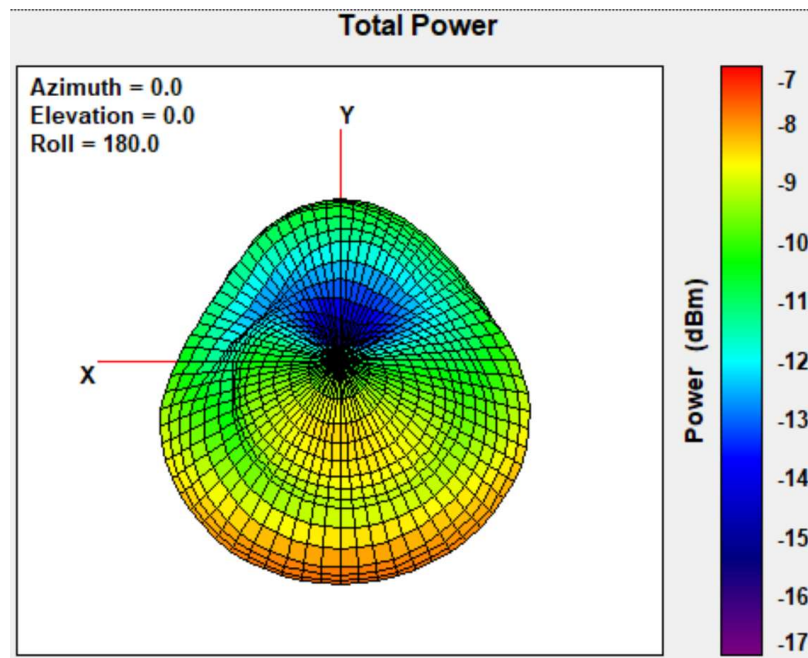


Figure 2. SMCO410 908 MHz Back View

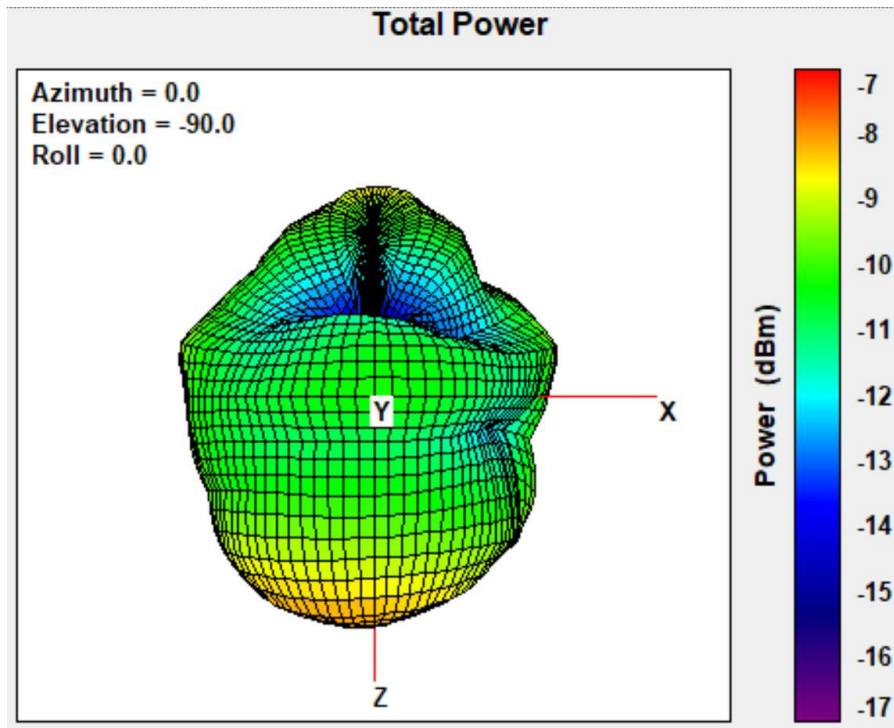


Figure 3. SMCO410 908 MHz Top View

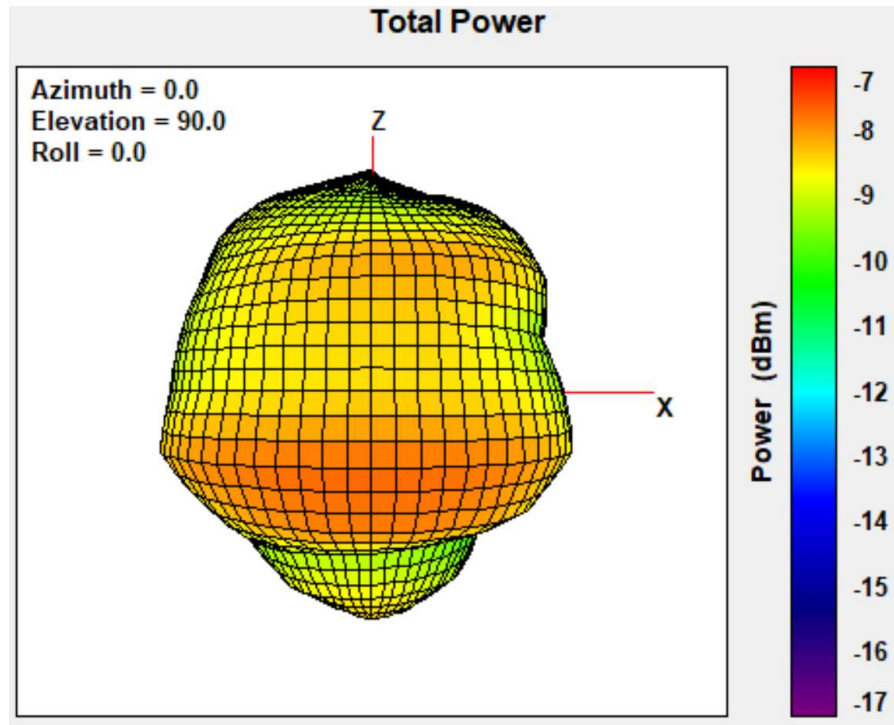


Figure 4 SMCO410 908 MHz Bottom View

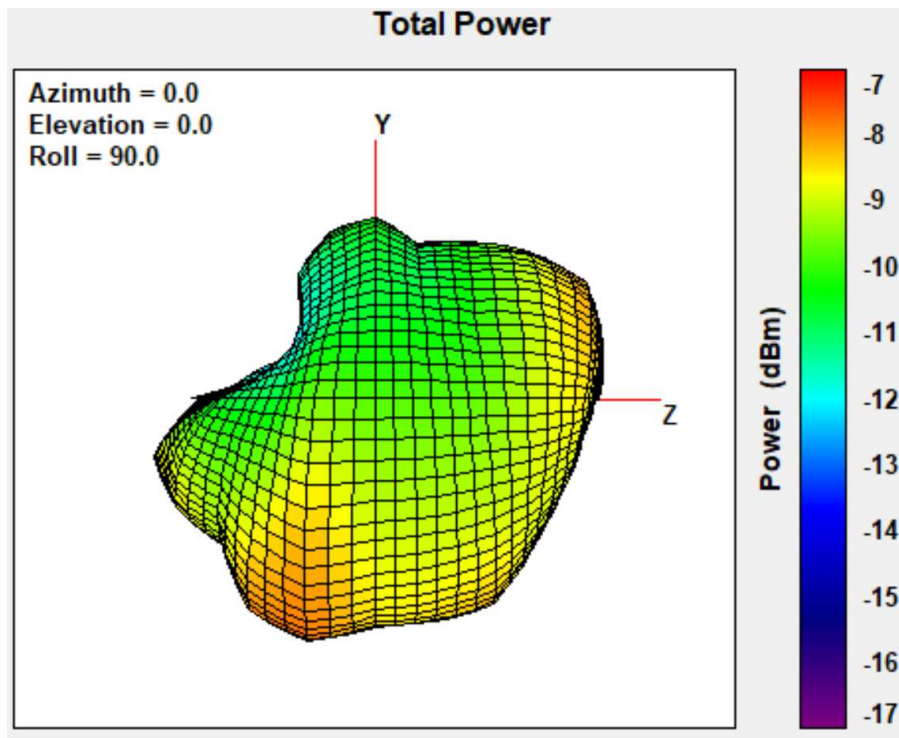


Figure 5. SMCO410 908 MHz Left Side View

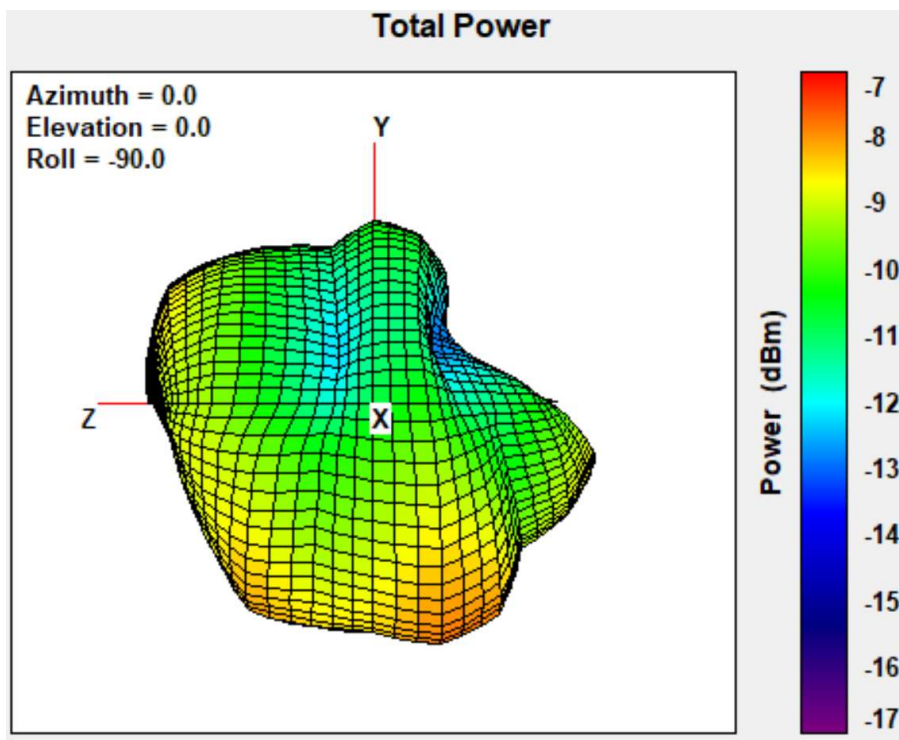


Figure 6. SMCO410 908 MHz Right Side View

5.2 Antenna – 916 MHz 3D Passive

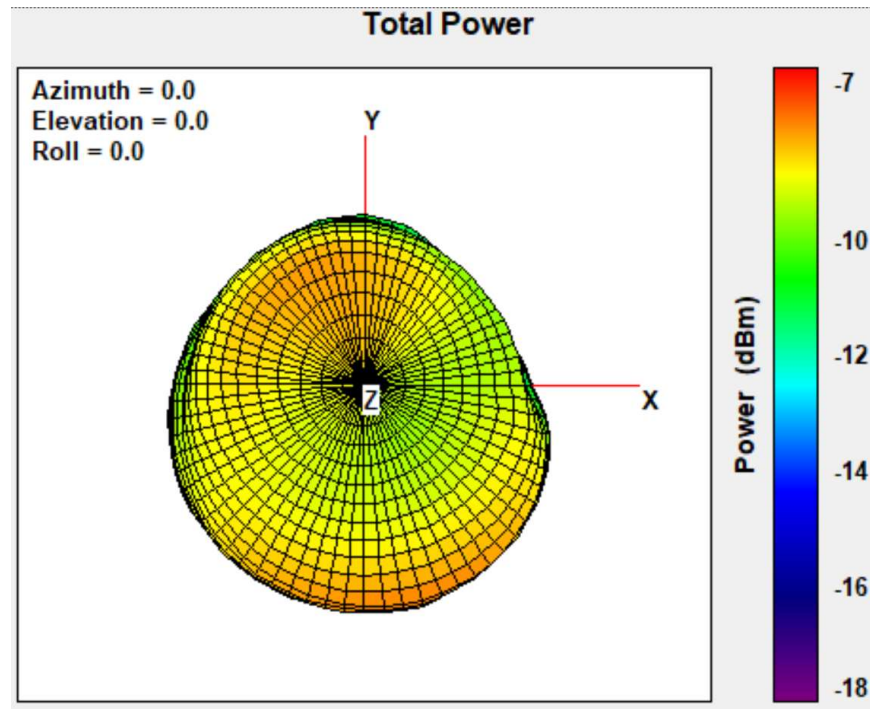


Figure 7. SMCO410 916 MHz Front View

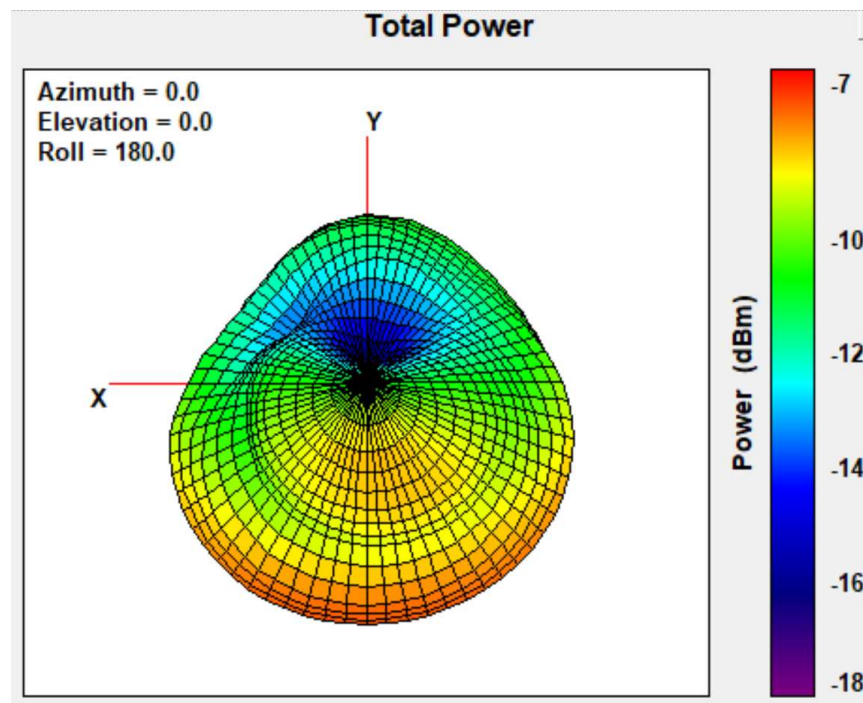


Figure 8. SMCO410 916 MHz Back View

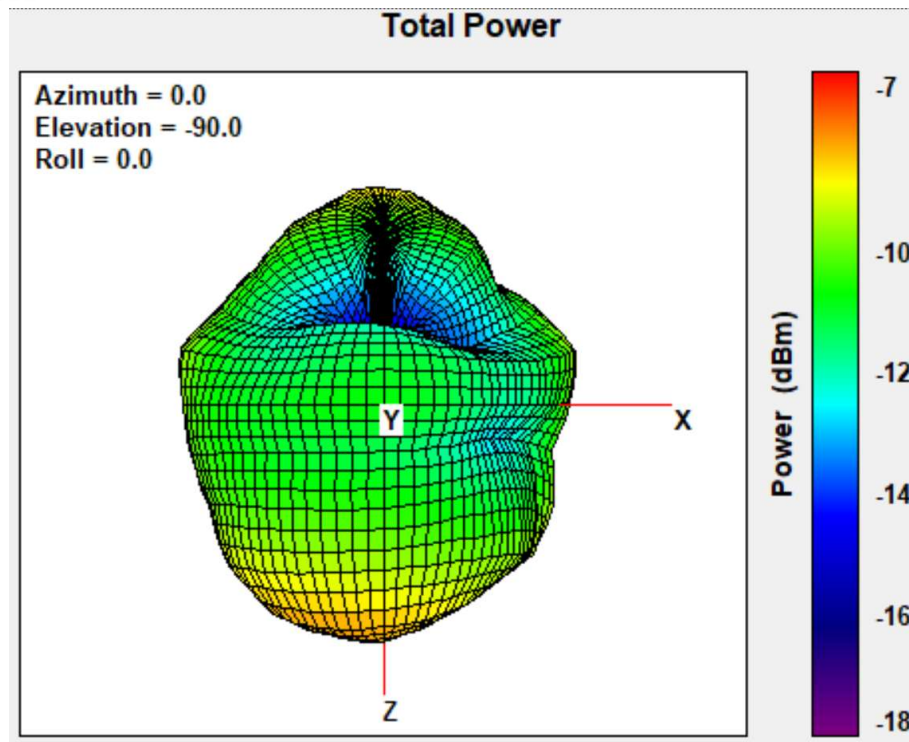


Figure 9. SMCO410 916 MHz Top View

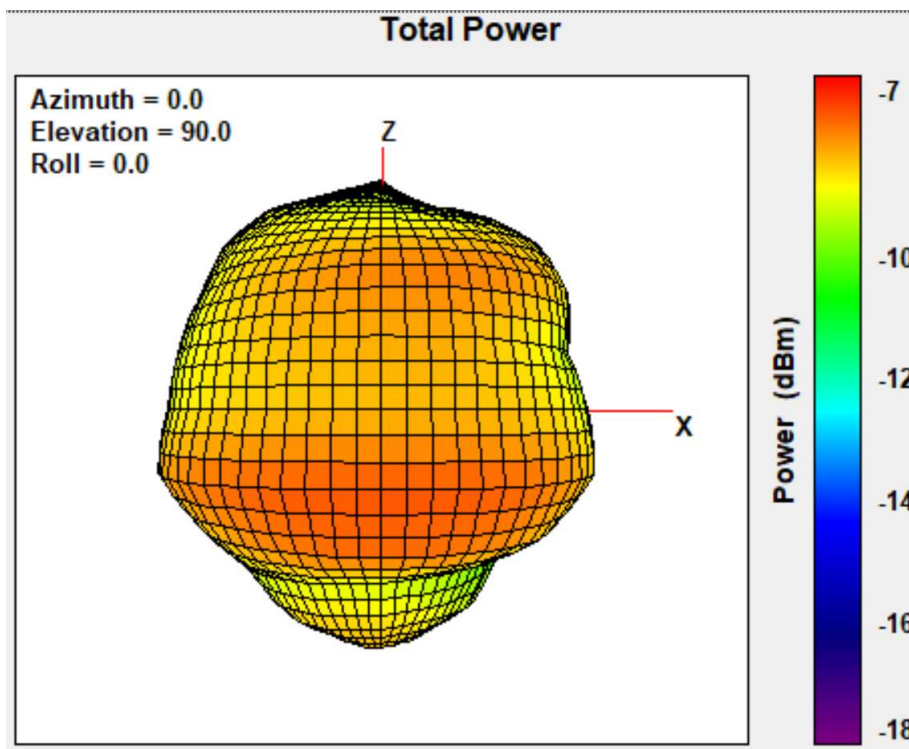


Figure 10. SMCO410 916 MHz Bottom View

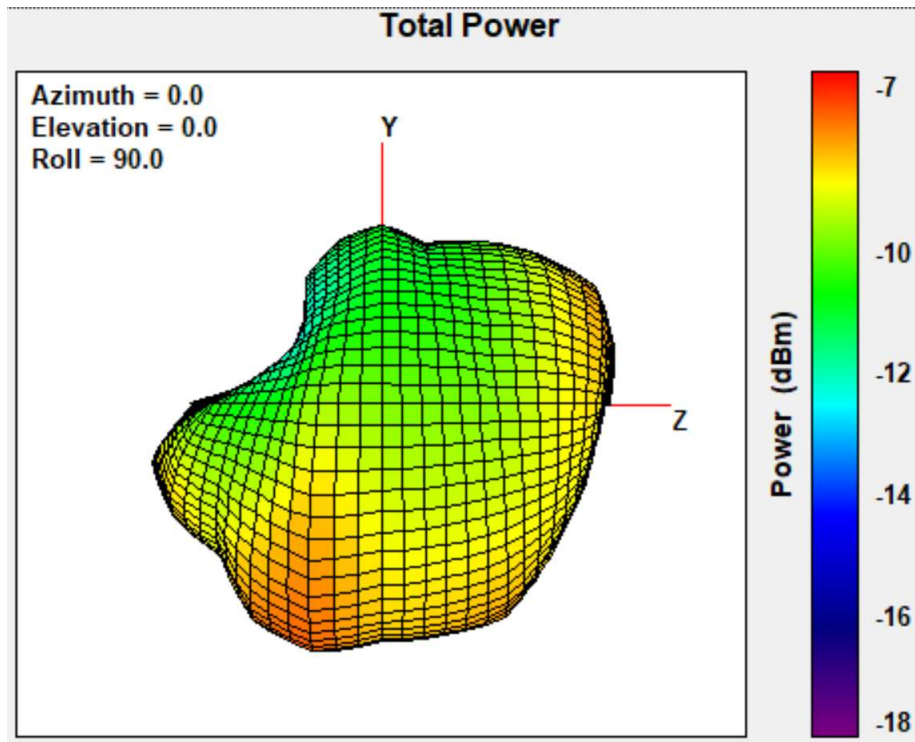


Figure 11. SMCO410 916 MHz Left View

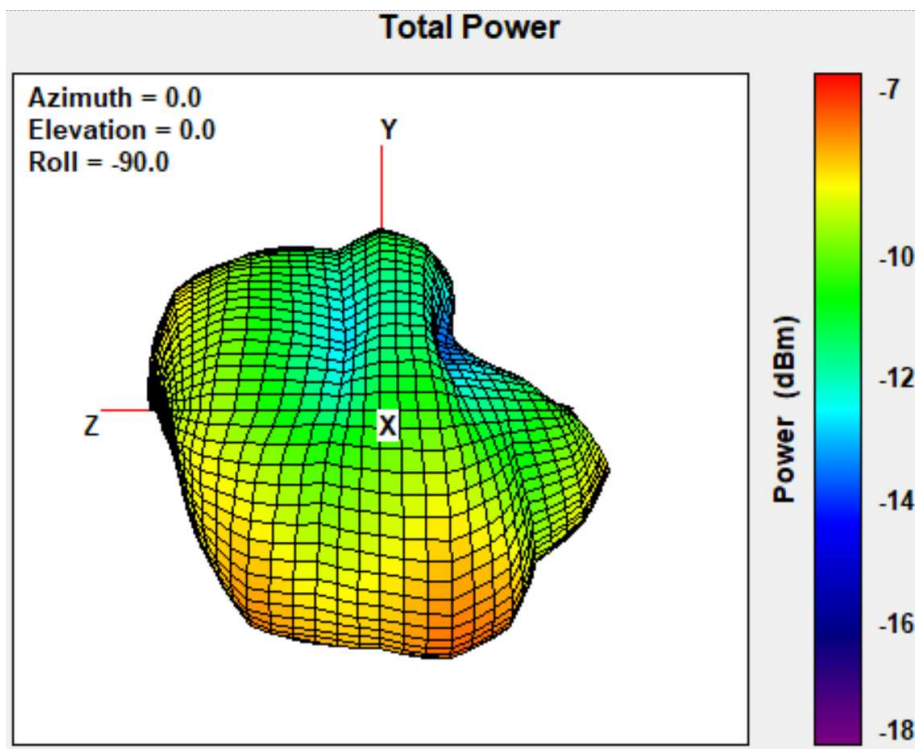


Figure 12. SMCO410 916 MHz Right View

6. Test Setup

