

Antenna Gain and Pattern Measurement Report

Model Name: TOMCAT

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Test Report Revision History				
Revision	Tested and prepared by	Reviewed and Approved By	Revision Detail	Release Date
A	Luo Yi	Anthony Xu	Original Release	Feb 12th, 2026.

Tested and prepared by: Luo Yi

Reviewed and Approved By: Anthony xu.

Luo Yi

Anthony, xu

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1. Test Methodology

The 3D Passive antenna pattern is performed using Dual-Polarization Pattern Measurement system and phi step size is set to 15°, theta step size is set to 15°.

2. Test and Measurement Equipment

Description	Manufacturer	Model	Serial No.	Calibration Date
Vector Network Analyzer	R&S	ZNB8	106027	7/26/2022
OTA Test Chamber	GTS	Rayzone1800		10/21/2025
OTA Test Software	GTS	Maxsign1.5.7		

3. Device Under Test Information

- Model name: TOMCAT
- Test Frequency (MHz): 2402, 2440, 2480.
- Antenna type: Printed PCB antenna

4. Result Summary

TOMCAT PCB Antenna1	Frequency		
	2402 MHz	2440 MHz	2480 MHz
TRP (dBm)	-8.52	-9.79	-8.45
EIRP (dBm)	-3.61	-5.25	-2.78
Efficiency (dB)	-8.52	-9.79	-8.45
Efficiency (%)	14.06	10.5	14.3
Gain (dBi)	-3.61	-5.25	-2.78

5. Plots

5.1 Antenna – Ant1 2402 MHz 3D Passive

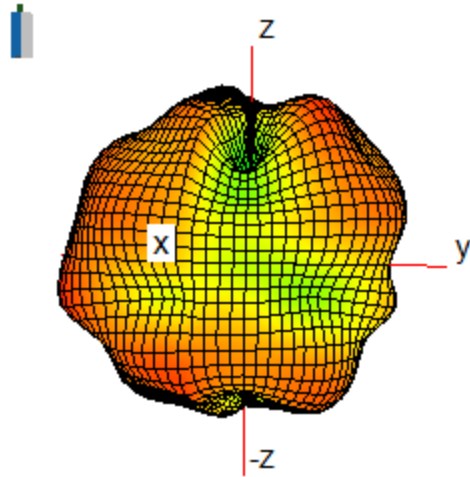


Figure 1.TOMCAT Antenna1 2402 MHz Front View

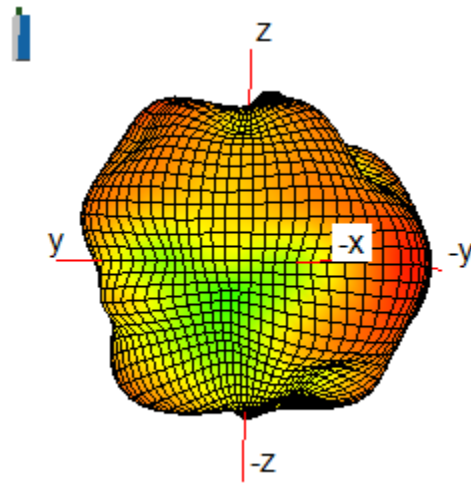


Figure 2.TOMCAT Antenna1 2402 MHz Back View

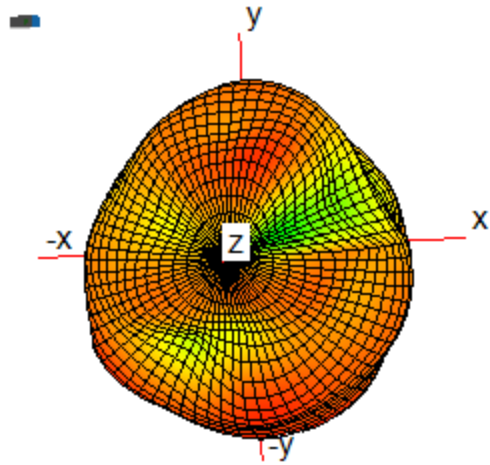


Figure 3.TOMCAT Antenna1 2402 MHz Top View

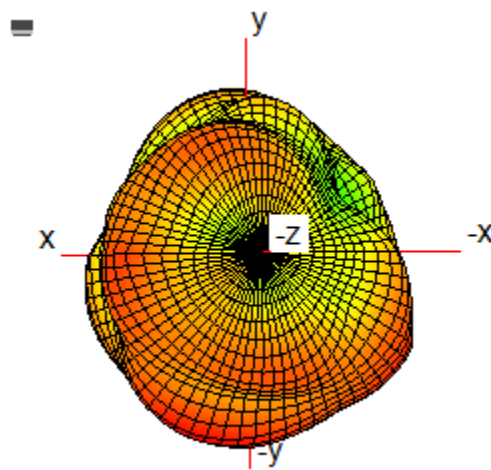


Figure 4.TOMCAT Antenna1 2402 MHz Bottom View

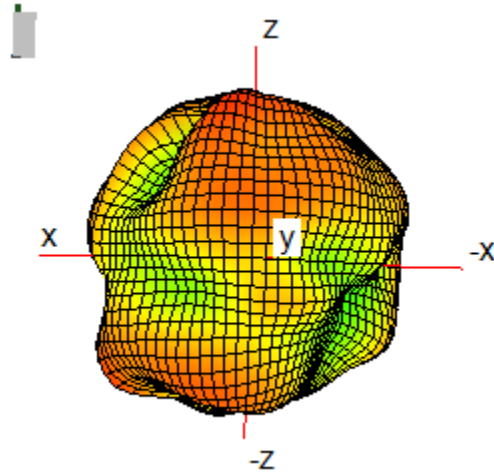


Figure 5. TOMCAT Antenna1 2402 MHz Left Side View

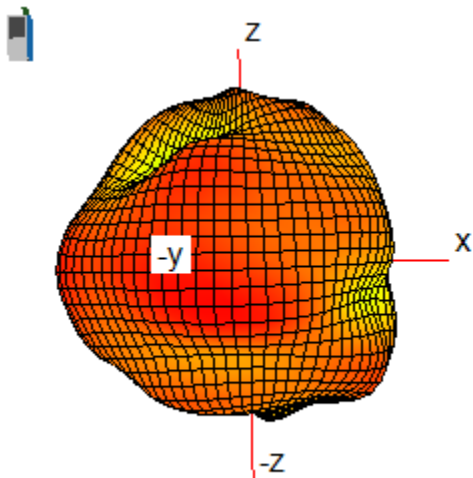


Figure 6. TOMCAT Antenna1 2402 MHz Right Side View

5.2 Antenna 1– 2440 MHz 3D Passive

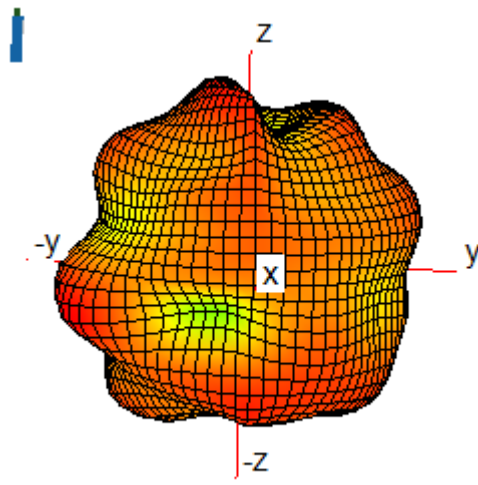


Figure 7. TOMCAT Antenna1 2440 MHz Front View

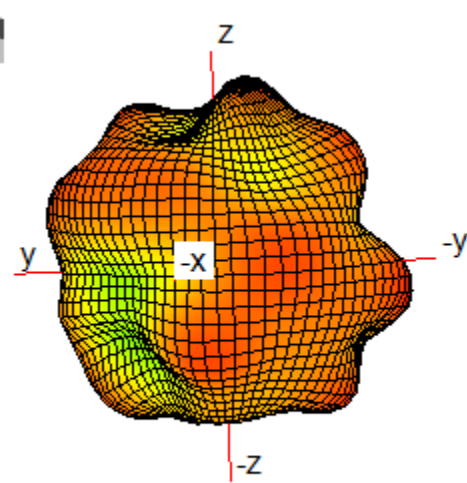


Figure 8. TOMCAT Antenna1 2440 MHz Back View

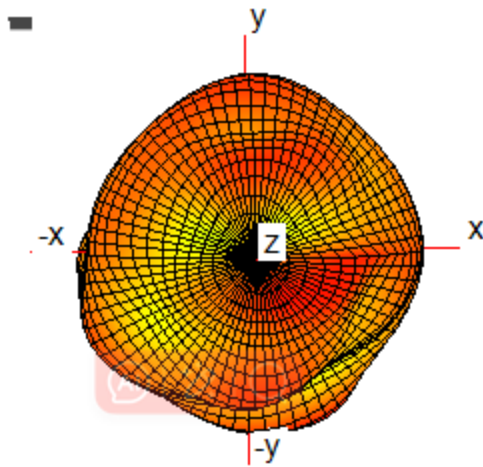


Figure 9. TOMCAT Antenna1 2440 MHz Top View

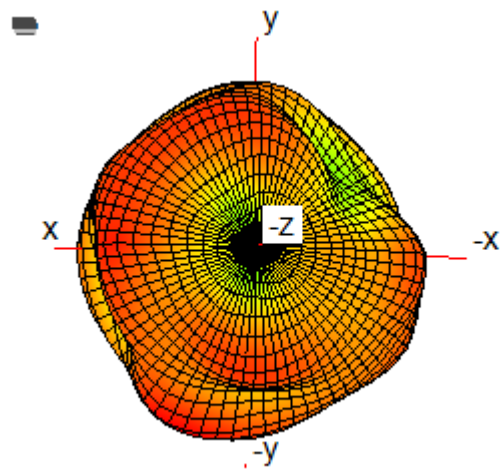


Figure 10. TOMCAT Antenna1 2440 MHz Bottom View

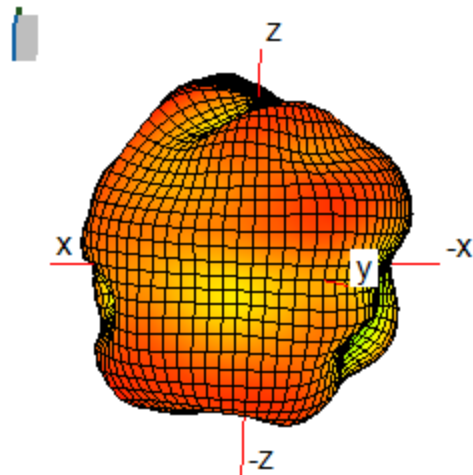


Figure 11. TOMCAT Antenna1 2440 MHz Left View

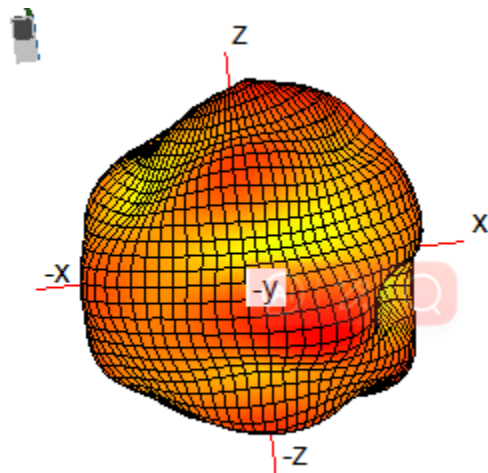


Figure 12. TOMCAT Antenna1 2440 MHz Right View

5.3 Antenna1 – 2480 MHz 3D Passive

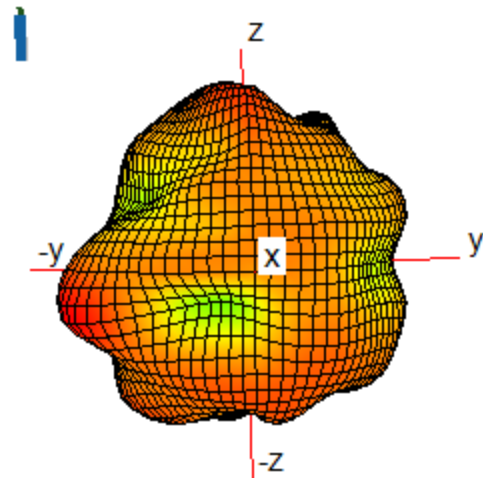


Figure 13. TOMCAT Antenna1 2480 MHz Front View

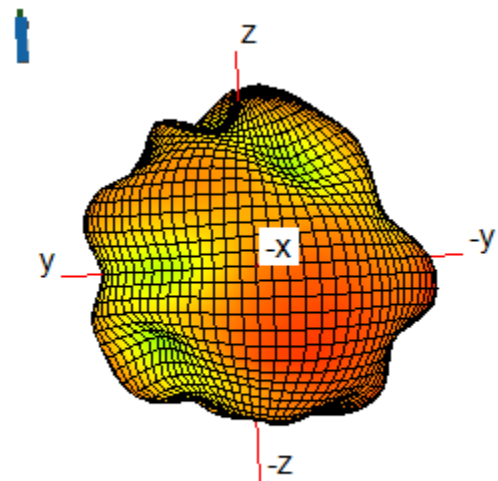


Figure 14. TOMCAT Antenna1 2480 MHz Back View

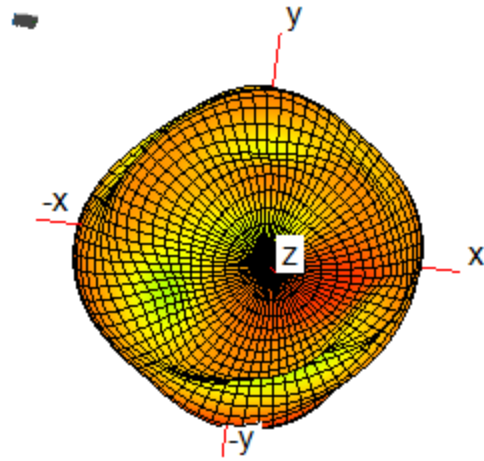


Figure 15. TOMCAT Antenna1 2480 MHz Top View

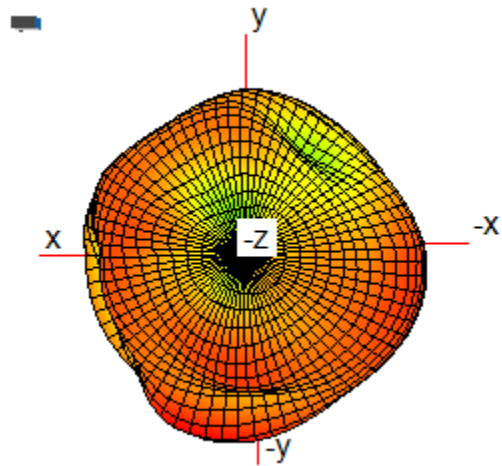


Figure 16. TOMCAT Antenna1 2480 MHz Bottom View

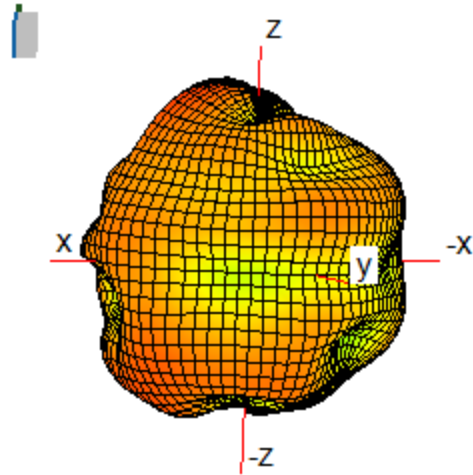


Figure 17. TOMCAT Antenna1 2480 MHz Left View

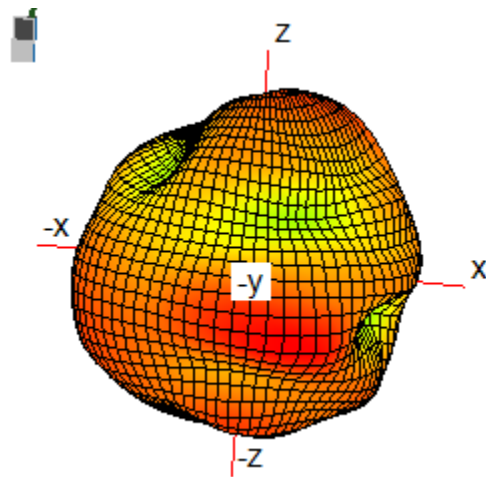


Figure 18. TOMCAT Antenna1 2480 MHz Right View

6. Test Setup

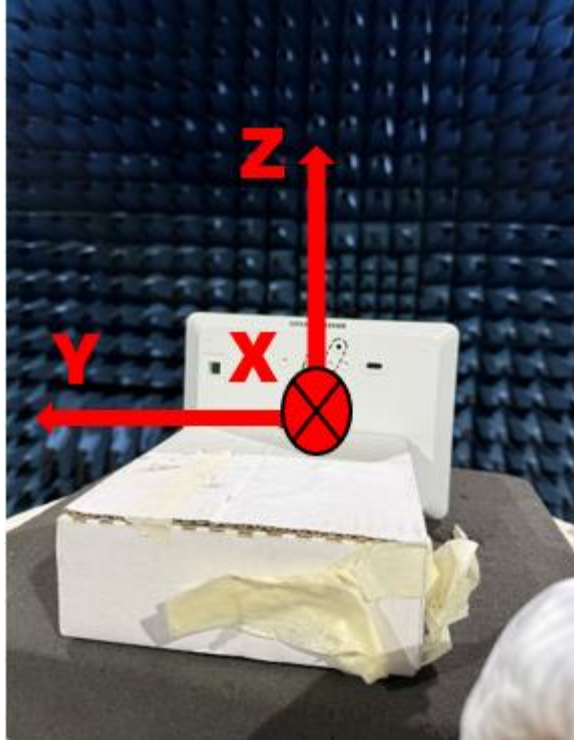


Figure19.TOMCAT Location reference definition

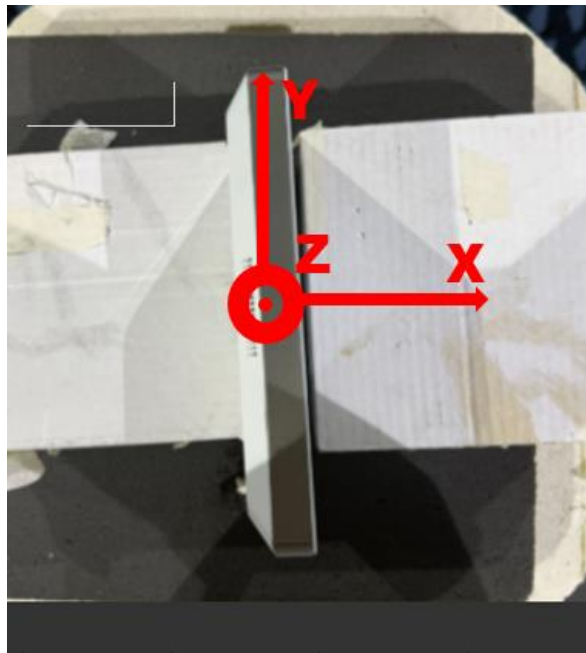


Figure20.TOMCAT TOP View definition

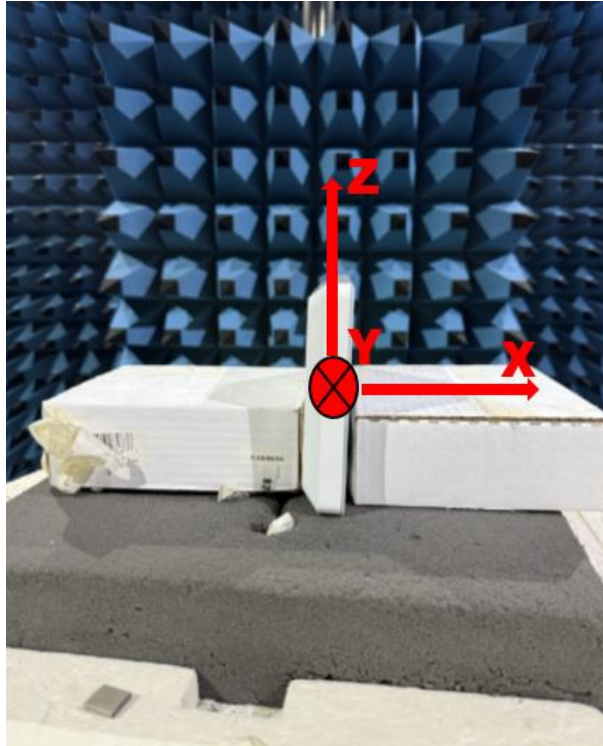


Figure21.TOMCAT right View definition

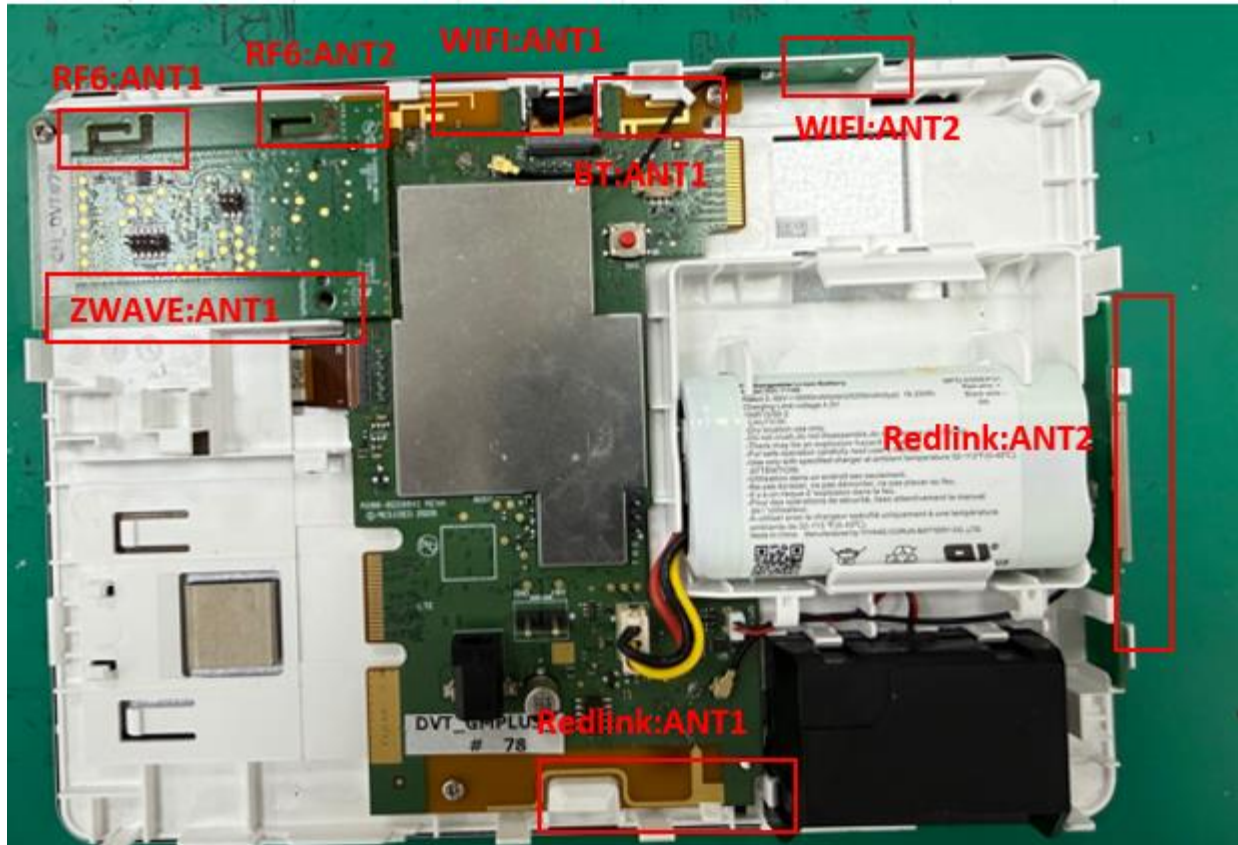


Figure22.TOMCAT ANT1/2 definition