

Antenna Gain and Pattern Measurement Report

Model Name: WTS800

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Test Report Revision History				
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Reviewed and Approved By: 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	106670	7/26/2022
OTA Test Chamber	R&S	TS8991		2/5/2023
OTA Test Software	R&S	AMS32 Version 10.60.10		

3. Device Under Test Information

- Model name: WTS800
- Test Frequency (MHz): 2412, 2437, 2462.
- Antenna type: Printed PCB antenna

4. Result Summary

WTS800 PCB Antenna1	Frequency		
	2412 MHz	2437 MHz	2462 MHz
TRP (dBm)	-2.07	-2.09	-2
EIRP (dBm)	1.98	2.26	2.59
Efficiency (dB)	-2.07	-2.09	-2
Efficiency (%)	62.1	61.79	63.16
Gain (dBi)	1.98	2.26	2.59

WTS800 PCB Antenna2	Frequency		
	2412 MHz	2437 MHz	2462 MHz
TRP (dBm)	-1.61	-1.51	-1.6
EIRP (dBm)	2.06	2.29	1.93
Efficiency (dB)	-1.61	-1.51	-1.6
Efficiency (%)	69.07	70.68	69.26
Gain (dBi)	2.06	2.29	1.93

5. Plots

5.1 Antenna – Ant1 2412 MHz 3D Passive

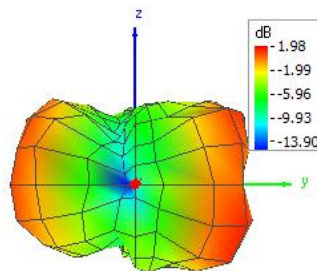


Figure 1. WTS800 Antenna1 2412 MHz Front View

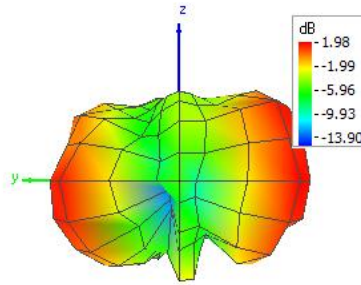


Figure 2.WTS800 Antenna1 2412 MHz Back View

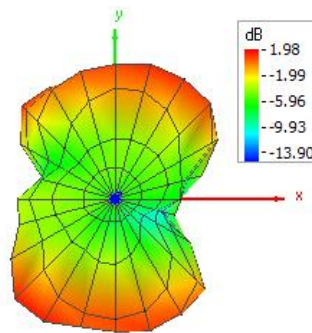


Figure 3.WTS800 Antenna1 2412 MHz Top View

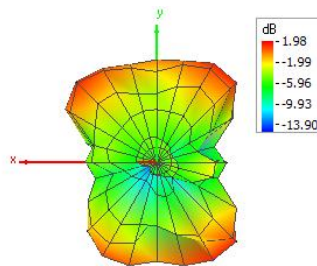


Figure 4.WTS800 Antenna1 2412 MHz Bottom View

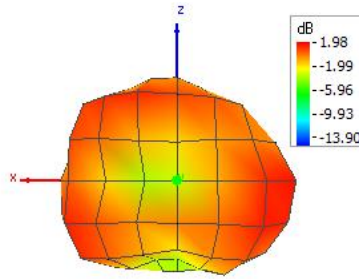


Figure 5.WTS800 Antenna1 2412 MHz Left Side View

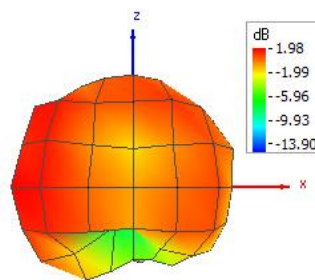


Figure 6.WTS800 Antenna1 2412 MHz Right Side View

5.2 Antenna 1– 2437 MHz 3D Passive

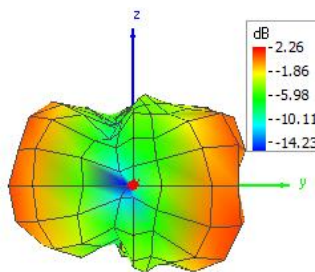


Figure 7.WTS800 Antenna1 2437 MHz Front View

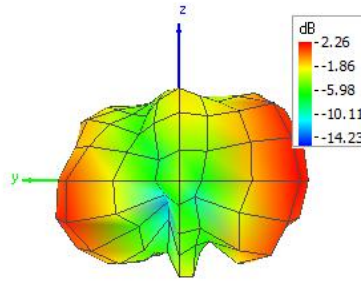


Figure 8.WTS800 Antenna1 2437 MHz Back View

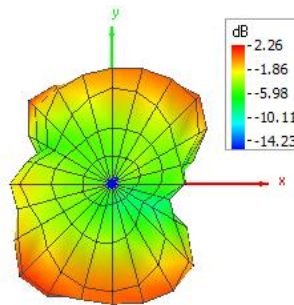


Figure 9.WTS800 Antenna1 2437 MHz Top View

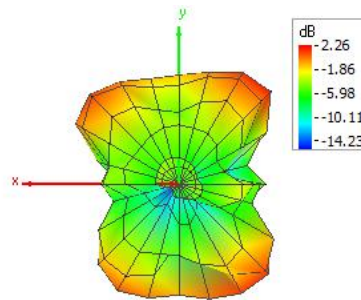


Figure 10.WTS800 Antenna1 2437 MHz Bottom View

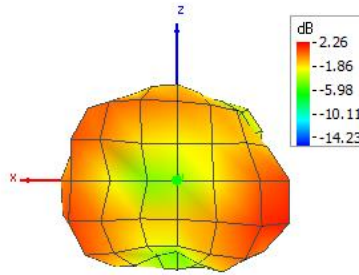


Figure 11.WTS800 Antenna1 2437 MHz Left View

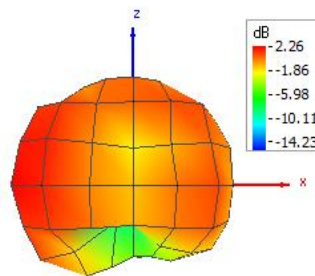


Figure 12.WTS800 Antenna1 2437 MHz Right View

5.3 Antenna1 – 2462 MHz 3D Passive

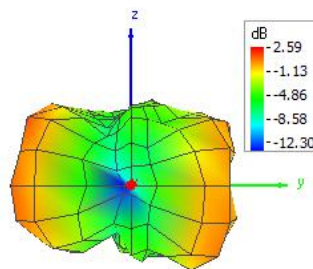


Figure 13.WTS800 Antenna1 2462 MHz Front View

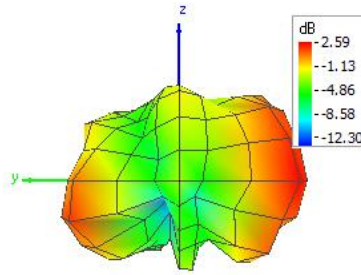


Figure 14. WTS800 Antenna1 2462 MHz Back View

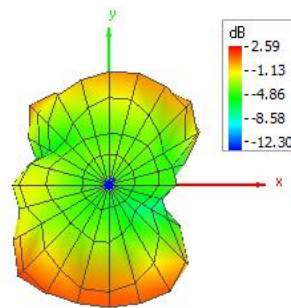


Figure 15. WTS800 Antenna1 2462 MHz Top View

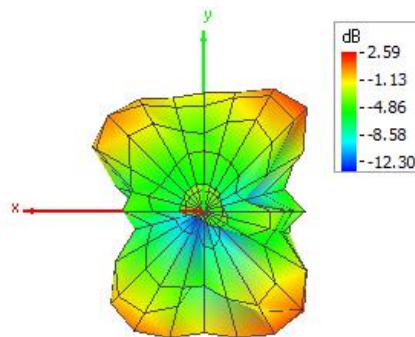


Figure 16. WTS800 Antenna1 2462 MHz Bottom View

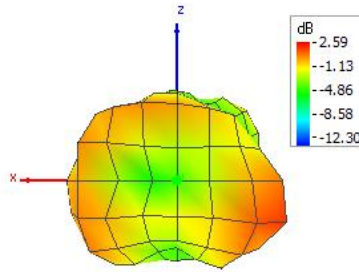


Figure 17. WTS800 Antenna1 2462 MHz Left View

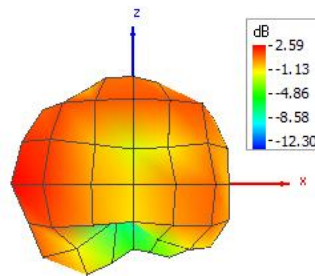


Figure 18. WTS800 Antenna1 2462 MHz Right View

5.4 Antenna – Ant2 2412 MHz 3D Passive

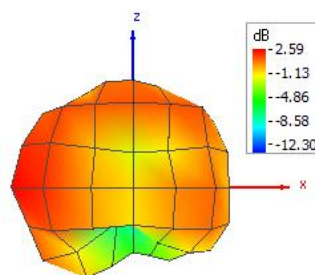


Figure 19. WTS800 Antenna2 2412 MHz Front View

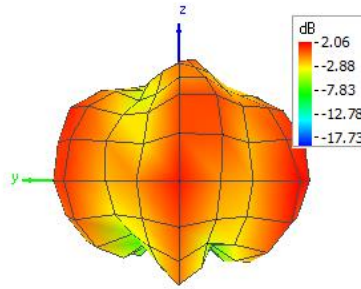


Figure 20. WTS800 Antenna2 2412 MHz Back View

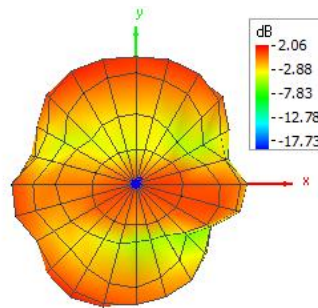


Figure 21. WTS800 Antenna2 2412 MHz Top View

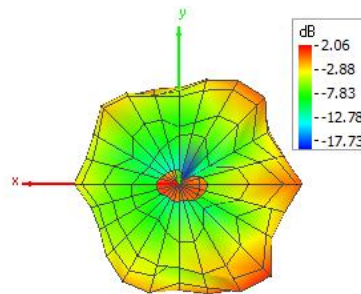


Figure 22. WTS800 Antenna2 2412 MHz Bottom View

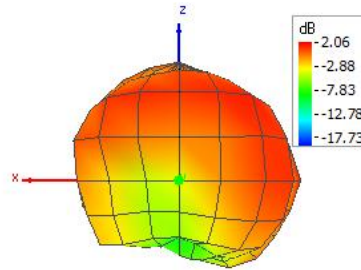


Figure 23. WTS800 Antenna2 2412 MHz Left Side View

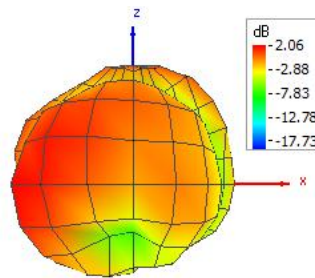


Figure 24. WTS800 Antenna2 2412 MHz Right Side View

5.5 Antenna 2– 2437 MHz 3D Passive

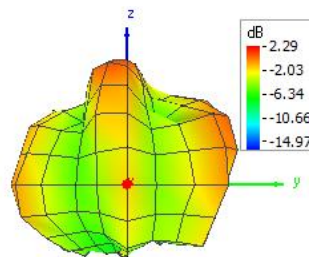


Figure 25. WTS800 Antenna2 2437 MHz Front View

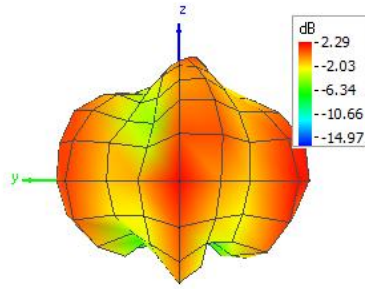


Figure 26. WTS800 Antenna2 2437 MHz Back View

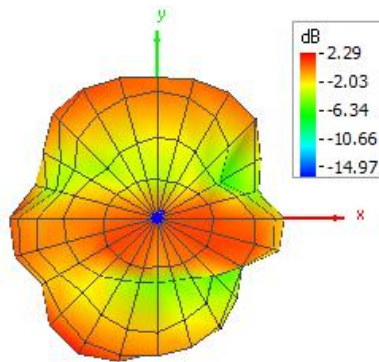


Figure 27. WTS800 Antenna2 2437 MHz Top View

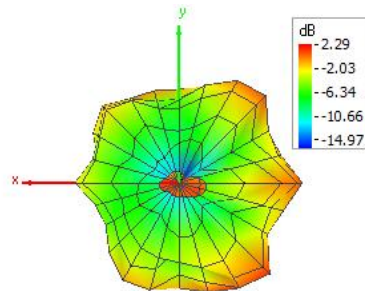


Figure 28. WTS800 Antenna2 2437 MHz Bottom View

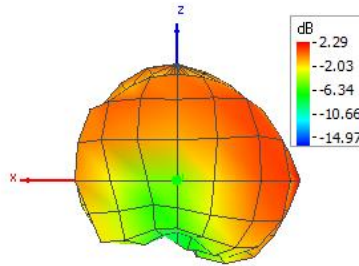


Figure 29. WTS800 Antenna2 2437 MHz Left View

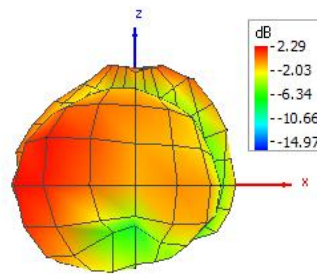


Figure 30. WTS800 Antenna2 2437 MHz Right View

5.6 Antenna2 – 2462 MHz 3D Passive

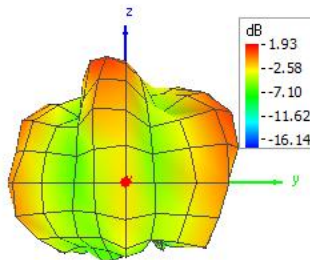


Figure 31. WTS800 Antenna2 2462 MHz Front View

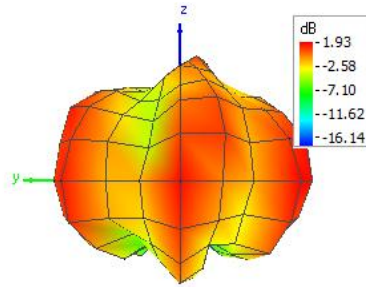


Figure 32. WTS800 Antenna2 2462 MHz Back View

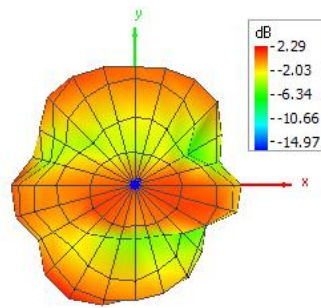


Figure 33. WTS800 Antenna2 2462 MHz Top View

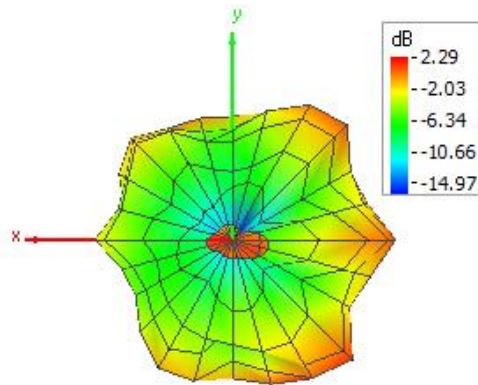


Figure 34. WTS800 Antenna2 2462 MHz Bottom View

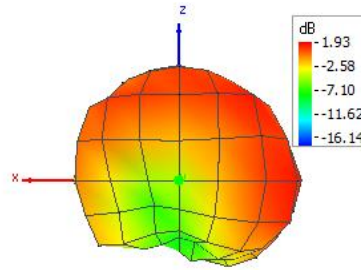


Figure 35. WTS800 Antenna2 2462 MHz Left View

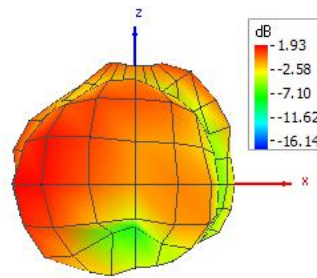


Figure 36. WTS800 Antenna2 2462 MHz Right View

6. Test Setup

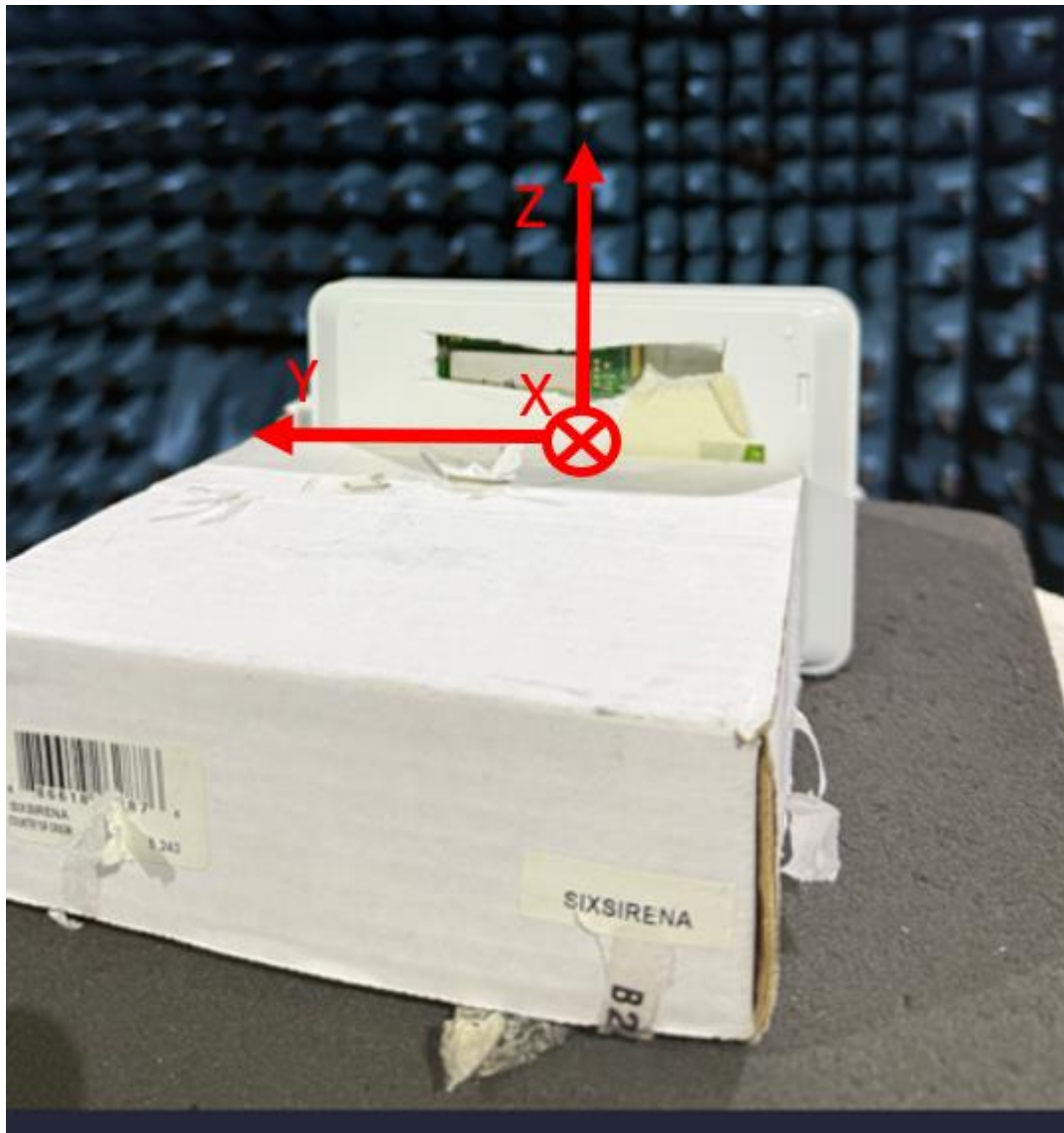


Figure 37.WTS800 Location reference definition

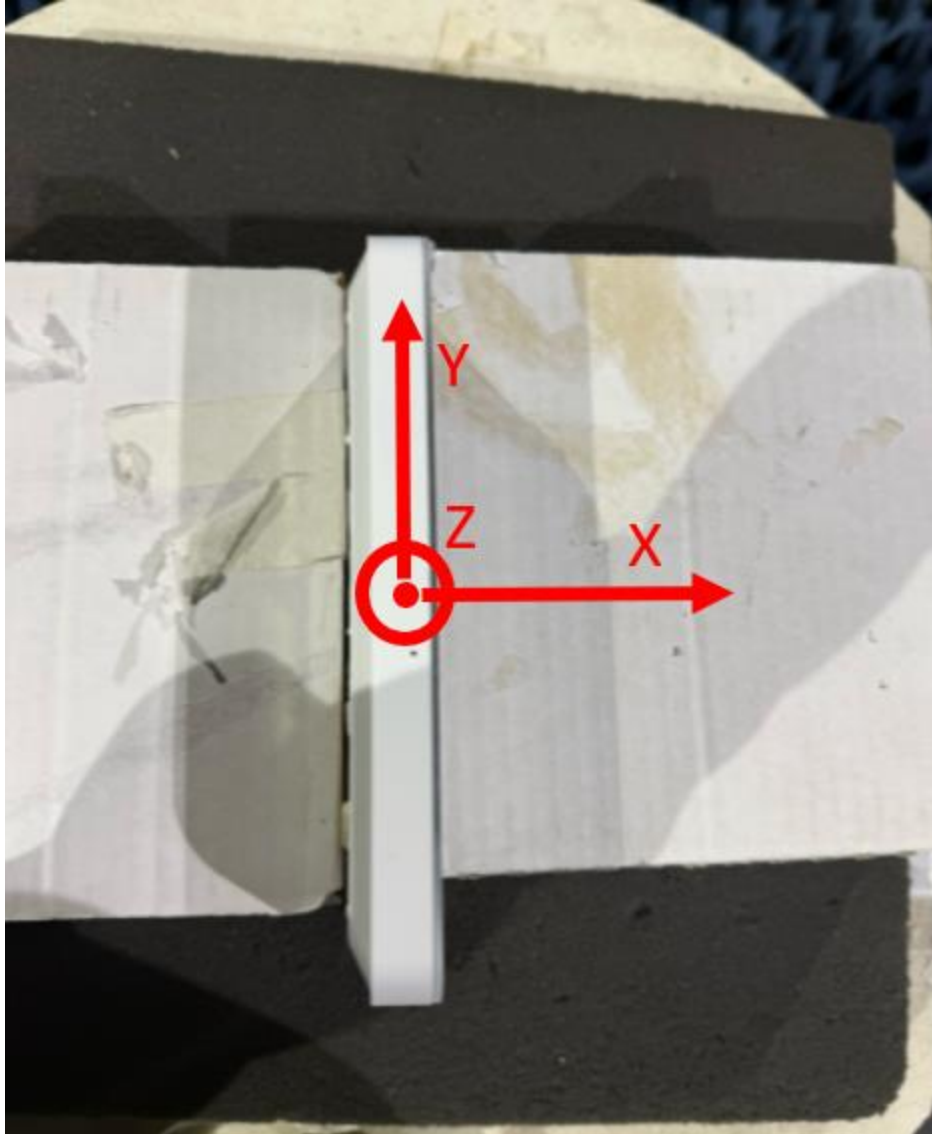


Figure 38.WTS800 TOP View definition

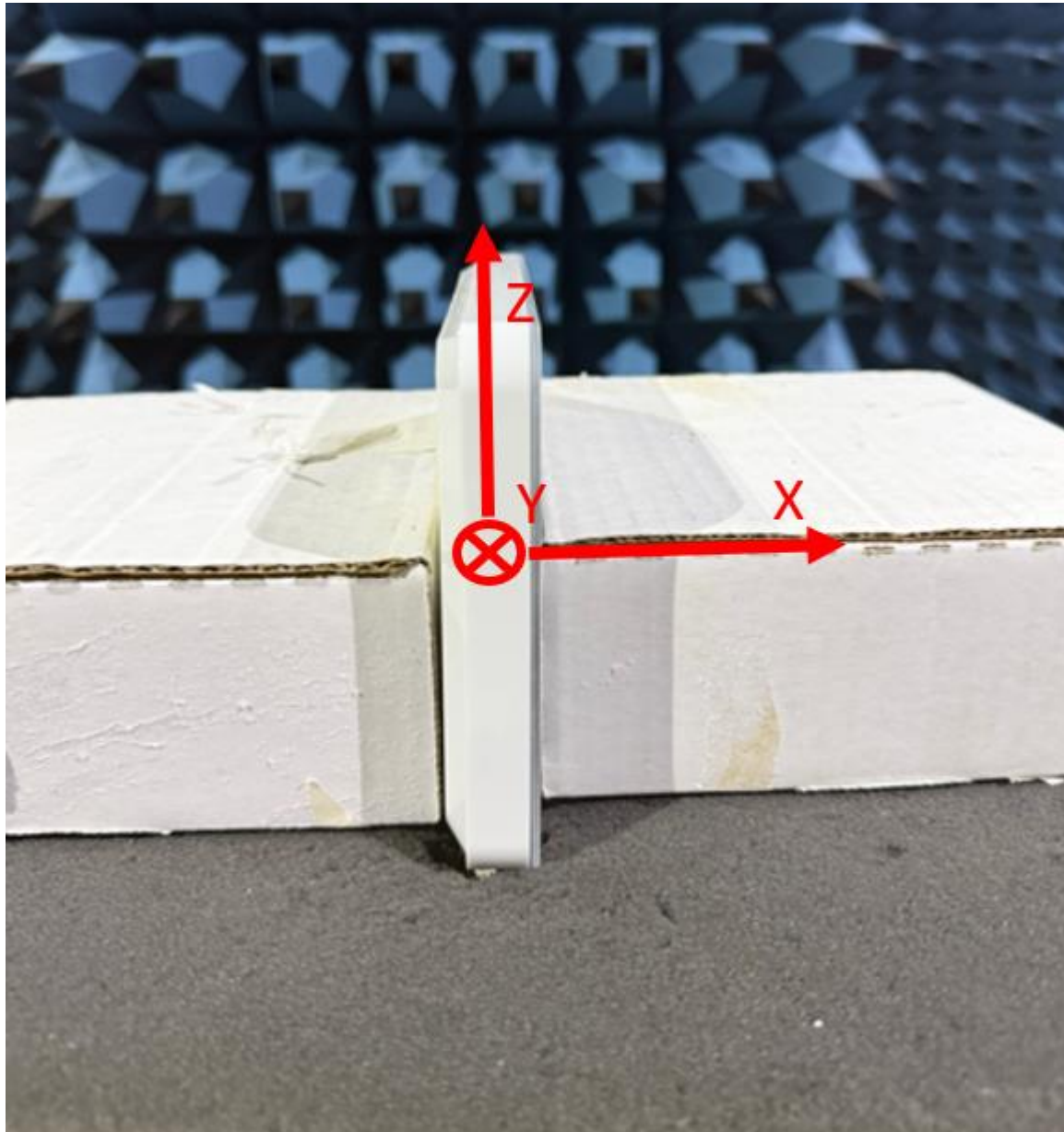


Figure 39. WTS800 left View definition

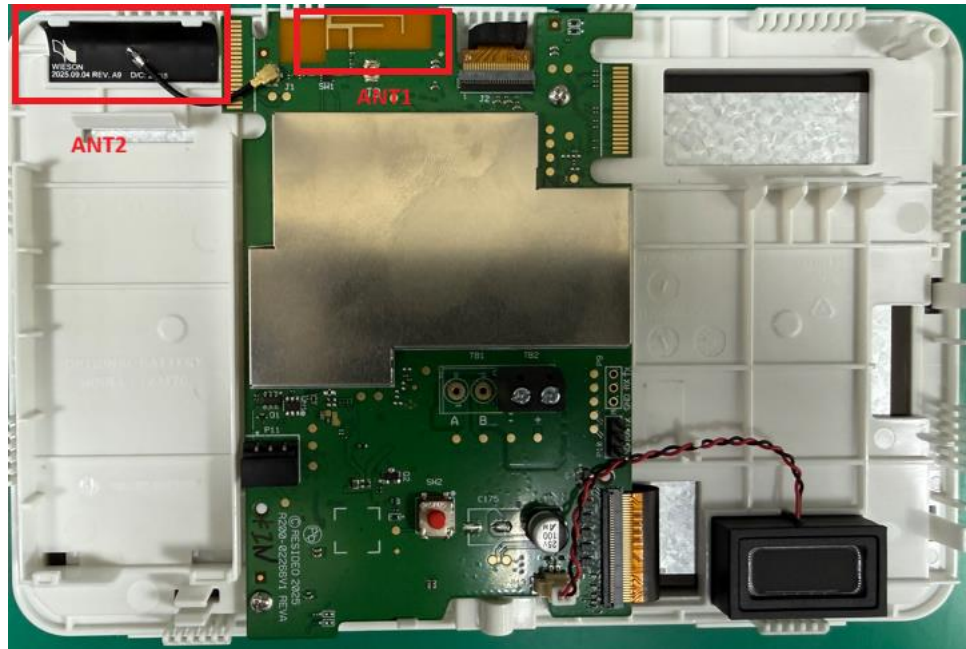


Figure 40.WTS800 ANT1/2 definition