Report No.: XCL-AC202407-0036

TEST REPORT

Product Name: Environmental Sensor/Asset Monitor

Model: Mental Sensor/Asset

Test Sort: External Commission Test

Client: PowerFleet inc

Test by: Xingci Lab

GUANGDONG XINGCI TESTING TECHNOLOGY RESEARCH Co.,Ltd.

Announcement

1. This report is invalid without seal.

2. This report must not be partially duplicated without permission.

3. The manufacturer would be responsible for the test samples.

4. Xingci Lab would be only responsible for report items of the test sample，this test result is only used for scientific research, teaching, and internal control, and does not have a proof function to the society.

5. If the client has any question about the test report, please contact our lab as agreed within 15 days. Disagreement couldn't be accepted over 15 days.

6. Test report inquires telephone No.:+ 86-757-87744743

Add: No#4, Jinye 2nd road, Yundonghai street, Sanshui, Foshan,Guangdong Province, China,528100

Tel：0086-(0757)-87744743

Post Code：528100

Test Report

Product Name		Environmental Sensor/Asset Monitor	Manufacture Date	/
Product Model		Mental Sensor/Asset	Brand Name	/
Client	Name	PowerFleet inc		
	Address	123 Tice Blvd. Suite 101 Woodcliff Lake, NJ 07677		
Test Type		External Commission Test		
Test Place		SG64 Anechoic Chamber (Guangdong Xingci testing technology research Co.,Ltd.)		
Sample Qty		1pc	Test Date	Jul 11, 2024
Test Environment		Temperature：（21～22）℃	Relative Humidity：（63～66）%	
Test Item		Electrical performance：Radiation Pattern, Gain,Efficiency,VSWR		
Test Standard		According to the client's requirements, refer to the following standard：IEEE Std 149™-2021 IEEE Recommended Practice for Antenna Measurements		
Test Description		Guangdong Xingci testing technology research Co., Ltd. tested the electrical performance of 1pc of Environmental Sensor/Asset Monitor under the guideline of relevant standard. Please see test result in page 5, Radiation Patterns in page 6, VSWR in page 6.		
Remarks				

Tested by: Date：	Checked by： Date：	Approved by： （Authorized signatory） Date：

Sample Description

Accessories	☑ No □ Yes:
Outlook/Appearance	☑ Qualified □ Unqualified：
Status at the beginning of Test	☑ Working Normally □ Working Abnormally：
Status after Test	☑ Working Normally □ Other：
Photograph	□ No ☑ In pages 7-8
Remarks（Provided by the customer）	Antenna size：23.57mm×5.5mm Device size：56mm×23mm Device weight：7.5402g

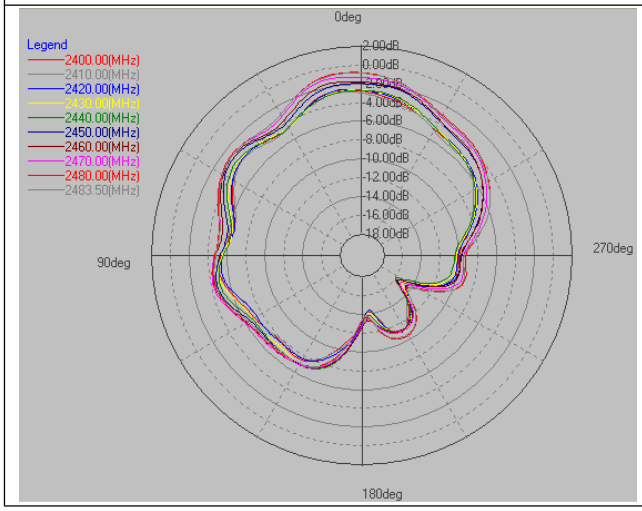
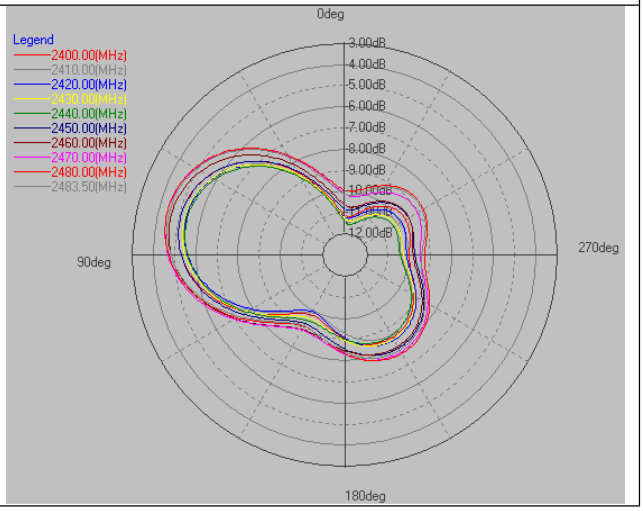
Sample Number

Item	Sample Number	Serial Number
1	AC2024071105	/

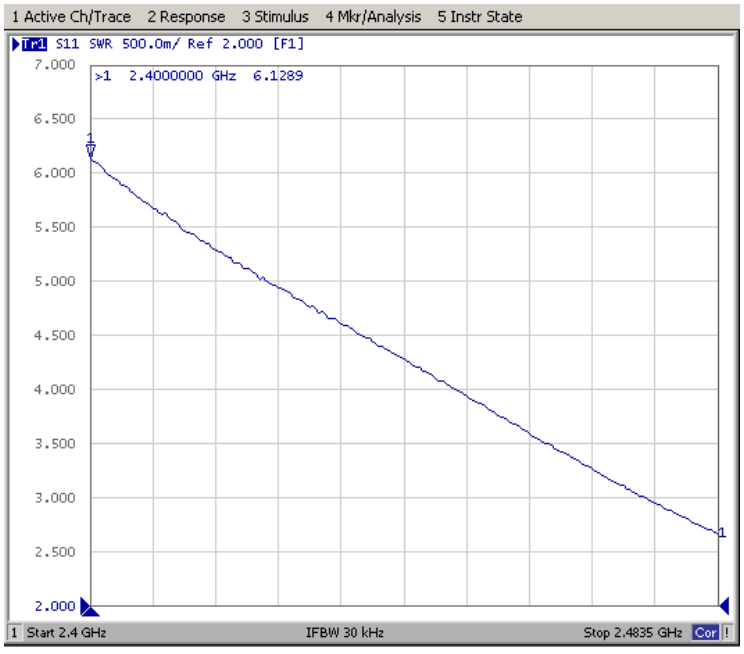
Electrical Performance Test Result

Item	Test Item	Technical Requirement	Unit	Test Frequency (MHz)	Test Result
1	Gain	/	dBi	2400	-2.67
				2410	-2.82
				2420	-2.55
				2430	-2.60
				2440	-2.76
				2450	-2.05
				2460	-1.76
				2470	-1.28
				2480	-0.86
				2483.5	-0.92
2	Efficiency	/	%	2400	16.88
				2410	16.17
				2420	17.03
				2430	17.50
				2440	17.59
				2450	19.99
				2460	20.89
				2470	22.33
				2480	23.14
				2483.5	22.74
3	VSWR	/	/	2400-2483.5	6.13
4	Radiation Pattern	/	/	2400-2483.5	Page 6
Note:Test Method: Near Field Measurement Method.					

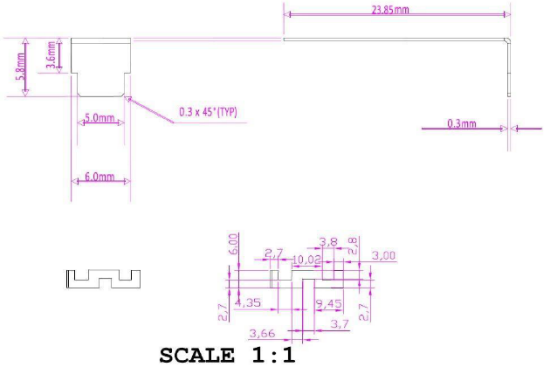
Radiation Pattern

Vertical Radiation Pattern	Horizontal Radiation Pattern
	

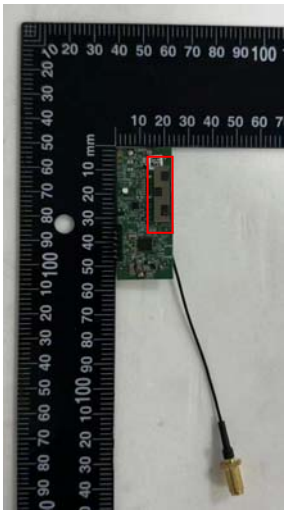
VSWR



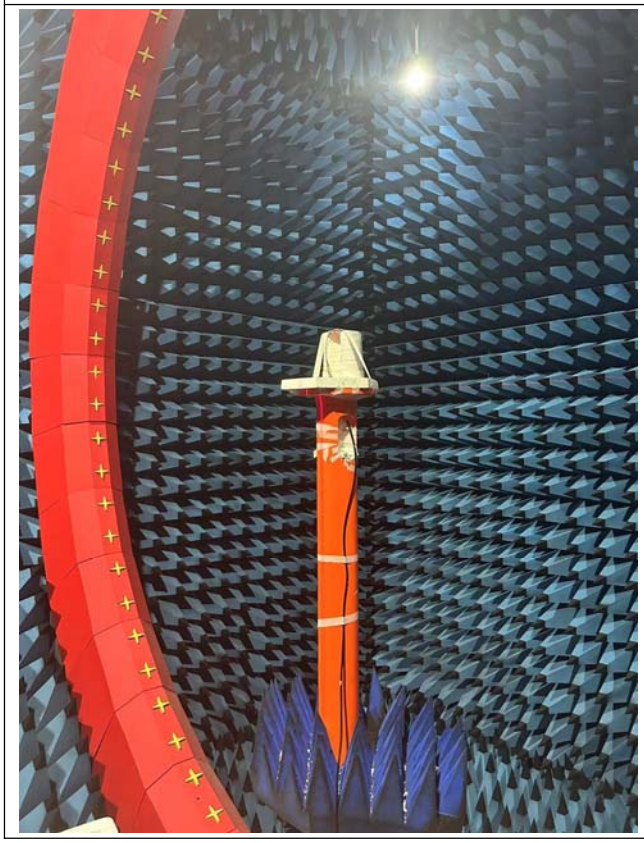
Antenna Layout

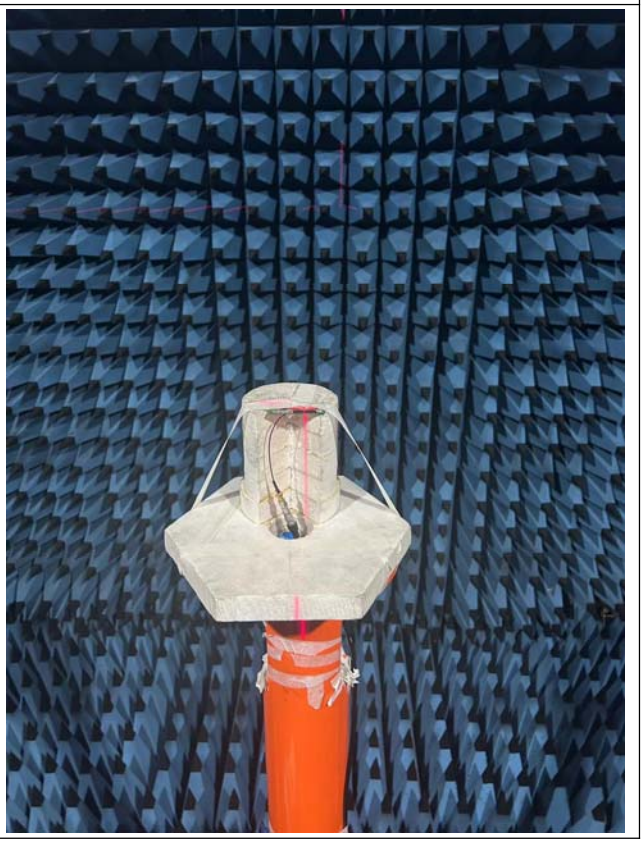


Sample photo

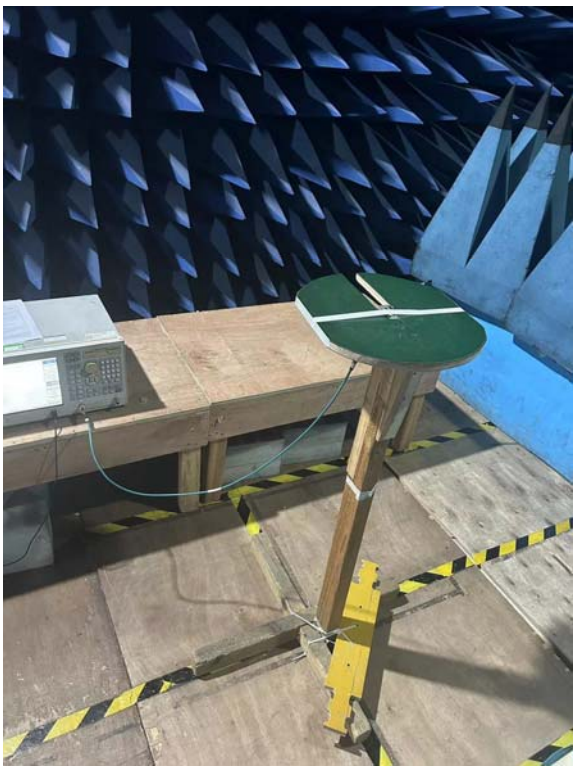


Radiation Pattern Test site





VSWR Test site



Main instruments and equipment for testing and test system

No.	NAME	Model	SERIAL NUMBER	VALIDITY DATE (DD/MM/YY)
1	Analog Signal Generator	N5172B	MY59100269	05/03/2025
2	Analog Signal Generator	N5181A	MY50140747	05/03/2025
3	Standard Gain Antenna	SH400-440	XCA014	22/11/2024
4	ENA Series Network Analyzer	E5062A	XCRE043	06/08/2024
5	Microwave Anechoic Chamber	5m×5m×5m	XCC03	23/08/2024
6	SG64 Antenna Test System	SATENV 2.0.1.5 Build12	XCXT03	N/A

----------End of Report----------