Report No.: XCL-AC202412-0008

TEST REPORT

Product Name: Balance Flex Antenna

Model: 146153

Test Sort: External Commission Test

Factory: Molex, LLC

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 factory 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		Balance Flex Antenna	Manufacture Date	/
Product Model		146153	Brand Name	/
Factory	Name	Molex, LLC		
	Address	2222 Wellington Court Lisle, IL 60532 USA		
Test Type		External Commission Test		
Test Place		SG64 Anechoic Chamber (Guangdong Xingci testing technology research Co.,Ltd.)		
Sample Qty		1pc	Test Date	Dec. 3, 2024
Test Environment		Temperature: (20~22) ℃	Relative Humidity: (62~65) %	
Test Item		Electrical performance: Radiation Pattern, Gain,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 Balance Flex Antenna under the guideline of relevant standard. Please see test result in page 5, Radiation Patterns in pages 5-6, VSWR in page 7.		
Remarks				

Tested by: Guan Zhiqiang Date: Dec. 3, 2024	Checked by: Wu Meisu Date: Dec. 26, 2024	Approved by: (Authorized signatory) Yang Shuangxiong Date: Dec. 26, 2024

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: 34mm×10mm Antenna weight: 0.48g

Sample Number

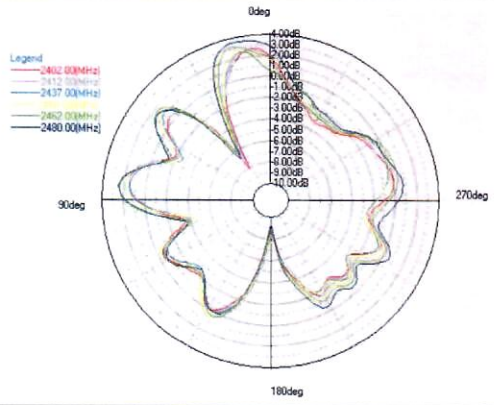
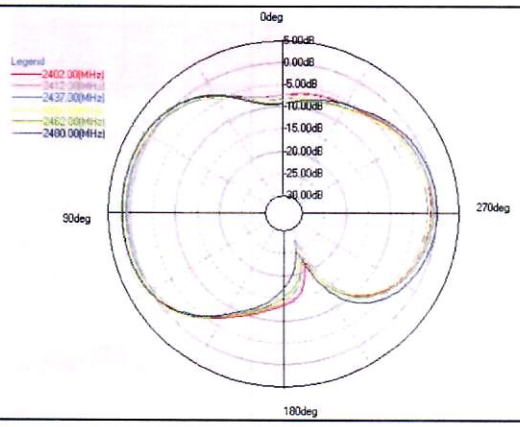
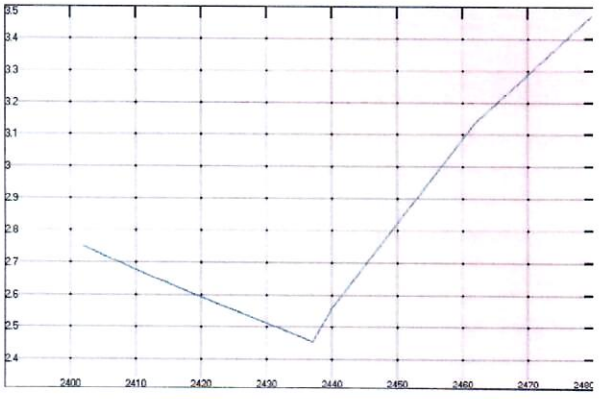
Item	Sample Number	Serial Number
1	AC2024120304	/

Electrical Performance Test Result

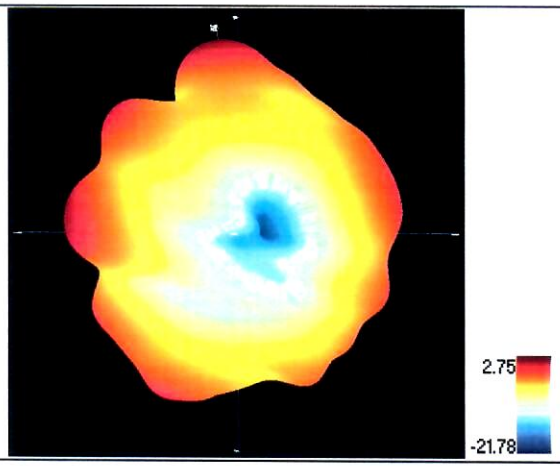
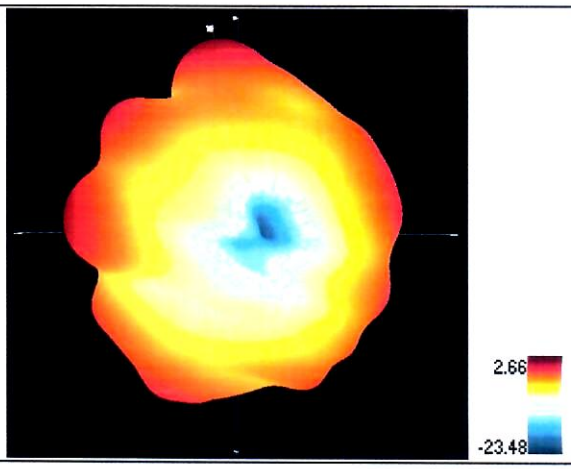
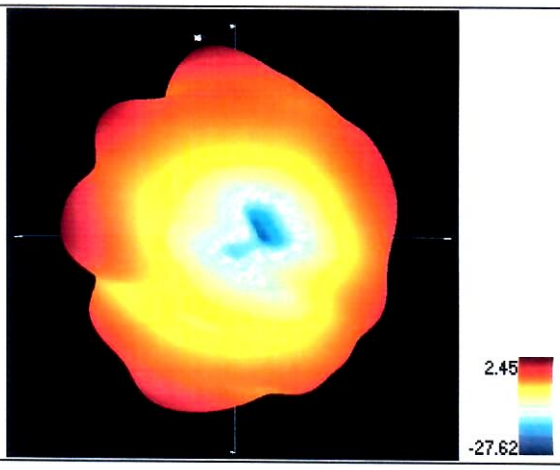
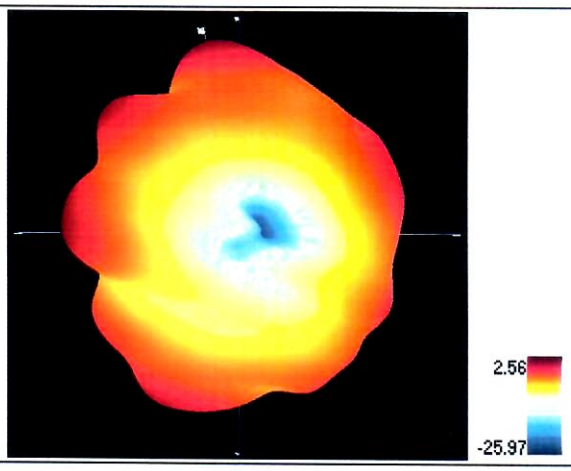
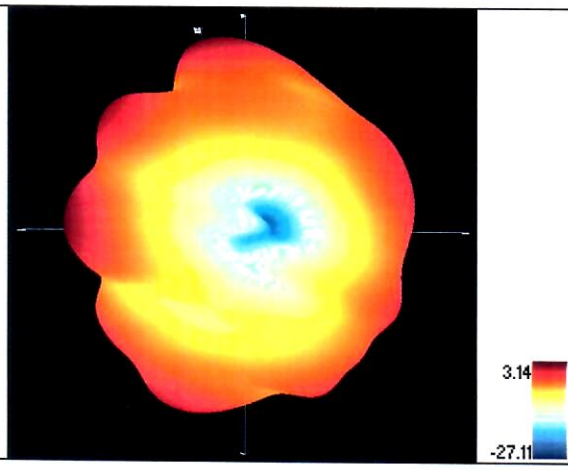
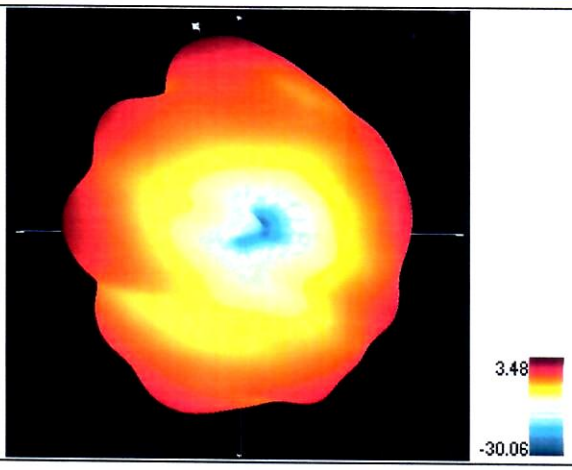
Item	Test Item	Technical Requirement	Unit	Test Frequency (MHz)	Test Result
1	Gain	/	dBi	2402	2.75
				2412	2.66
				2437	2.45
				2440	2.56
				2462	3.14
				2480	3.48
2	VSWR	/	/	2402-2480	3.60
3	Radiation Pattern	/	/	2402-2480	Pages 5-6
Note:Test Method: Near Field Measurement Method.					

Radiation Pattern

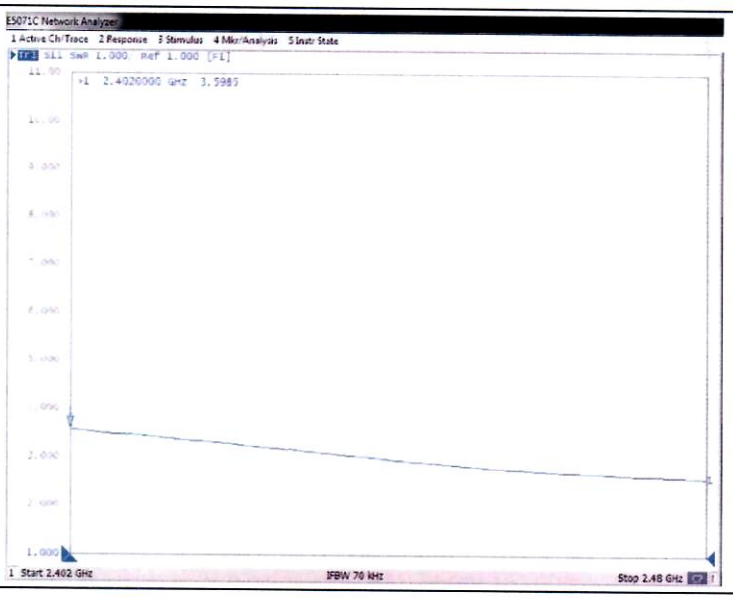
2D

Vertical Radiation Pattern	Horizontal Radiation Pattern
	
Gain	/
	/

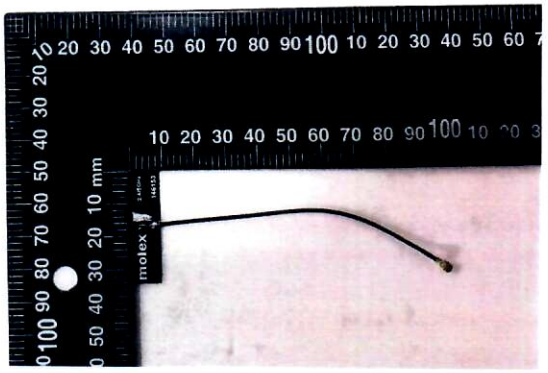
3D

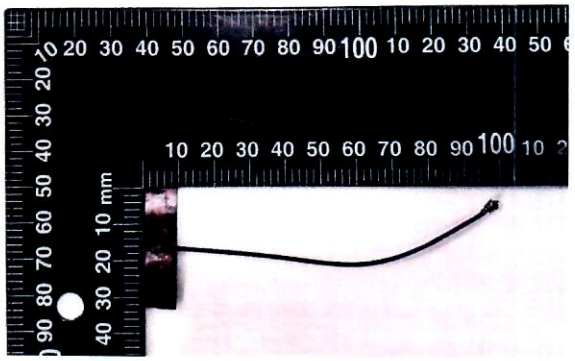
2402MHz	2412MHz
	
2437MHz	**2440MHz**
	
2462MHz	**2480MHz**
	

VSWR

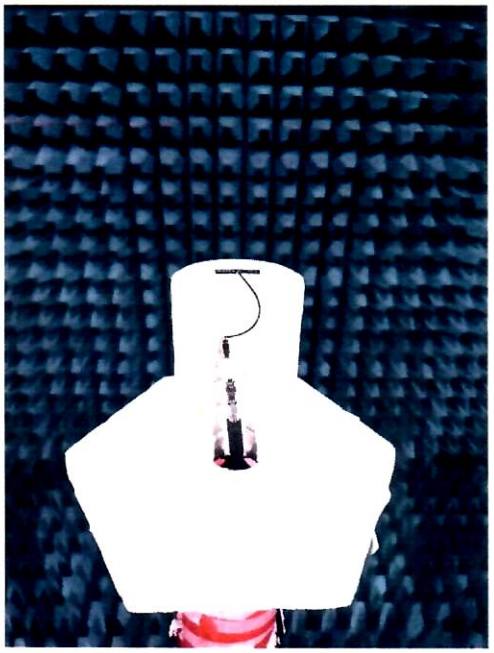


Sample photo

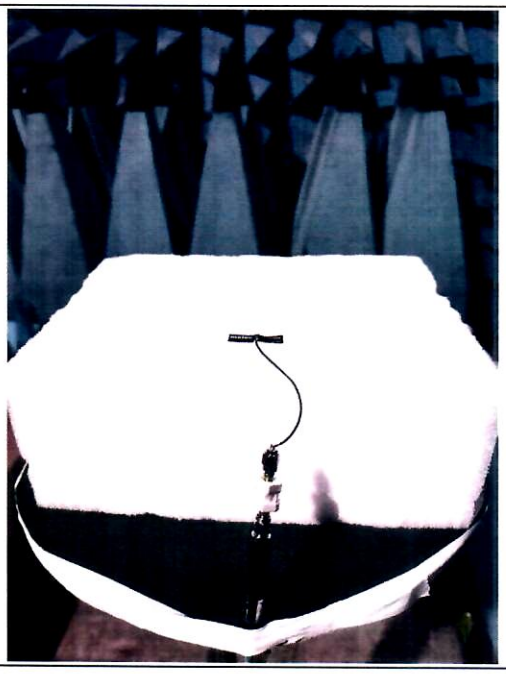




Radiation Pattern Test site



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	XCRE096	05/03/2025
2	Analog Signal Generator	N5181A	XCRE034	05/03/2025
3	Standard Gain Antenna	SH400-440	XCA014	21/11/2025
4	ENA Series Network Analyzer	E5071C	XCRE044	28/09/2025
5	Microwave Anechoic Chamber	5m×5m×5m	XCC03	22/08/2025
6	SG64 Antenna Test System	SATENV 2.0.1.5 Build12	XCXT03	N/A

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