



Report No.: XCL-AC202412-0008

TEST REPORT

Product Name: Balance Flex Antenna

Model: 146153

Test Sort: External Commission Test

Client: 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 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

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Province, China,528100

Tel: 0086-(0757)-87744743

Post Code: 528100

Test Report

Product Name		Balance Flex Antenna		Manufacture Date		/	
Product Model		146153		Brand Name		/	
Client	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) °C		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:		Checked by:		Approved by:			
Date:		Date:		Date:			
				(Authorized signatory)			

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	/

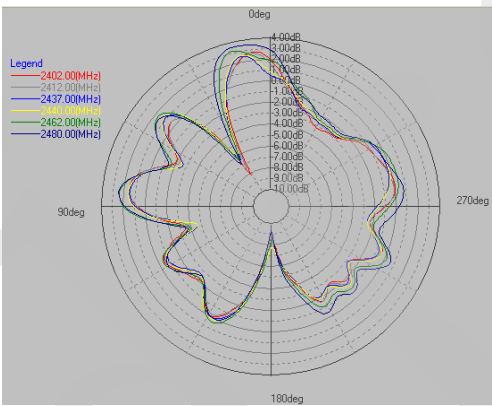
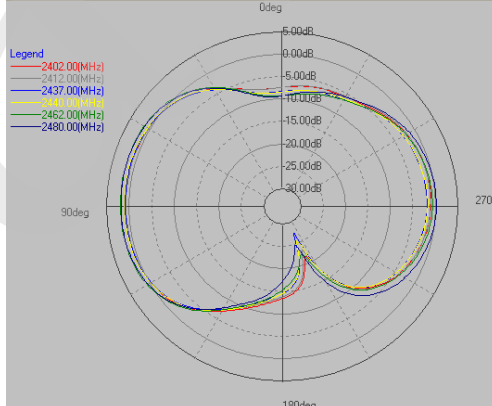
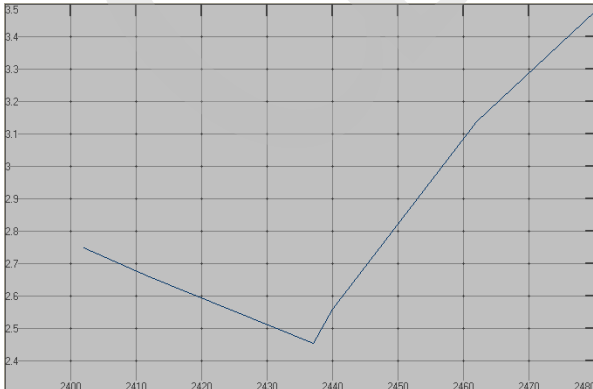
Electrical Performance Test Result

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

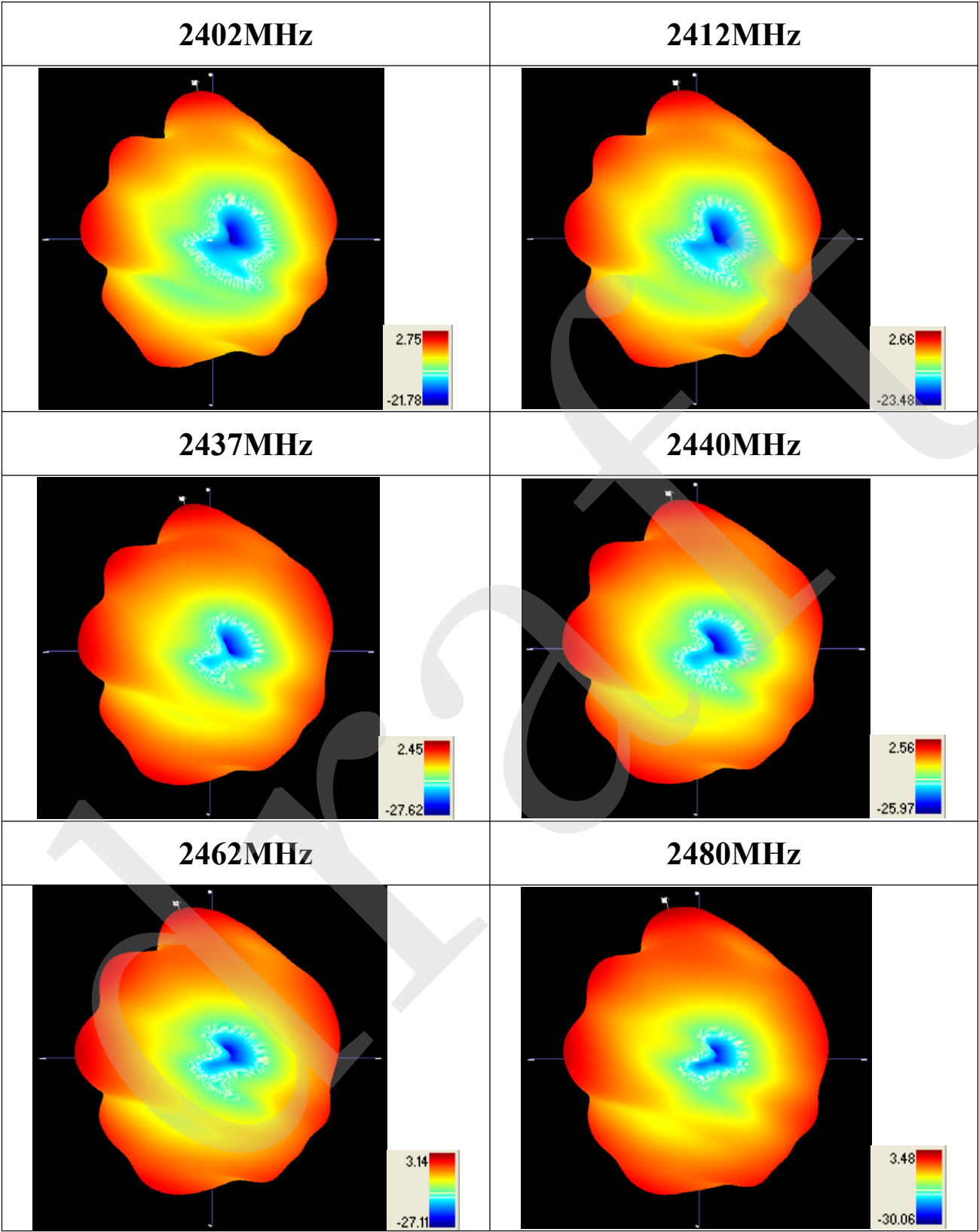
Note:Test Method: Near Field Measurement Method.

Radiation Pattern

2D

Vertical Radiation Pattern	Horizontal Radiation Pattern
	
Gain	/
	/

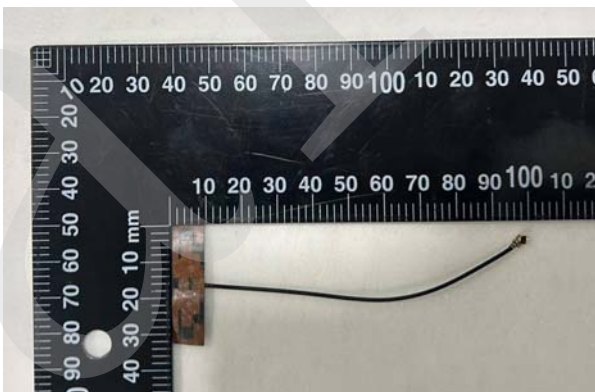
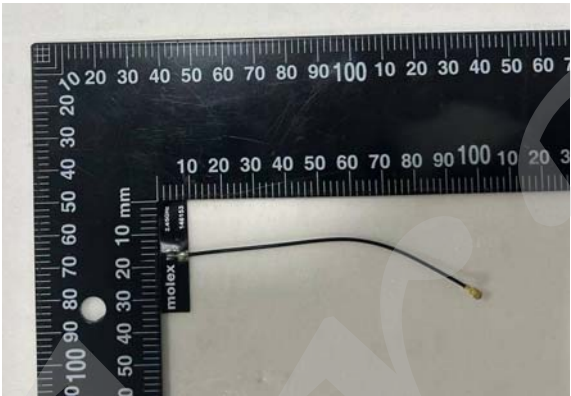
3D



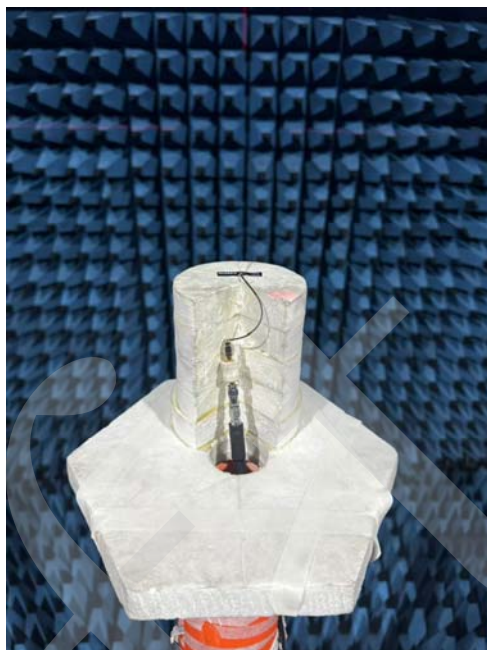
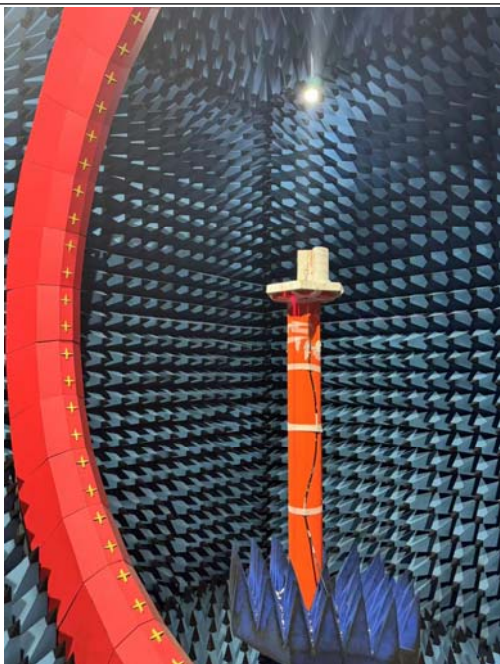
VSWR



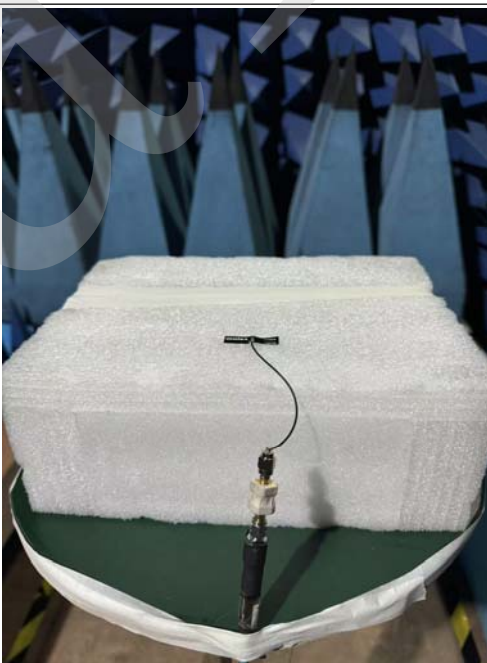
Sample photo



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-----