



深圳市东信通电子科技有限公司

ShenZhen Eastong Electronic technology Co., LTD

APPROVAL SHEET
FOR
鑫创锦
软板天线

Issued by		Checked by	
Confirmed by		Date	2025-07-26
Customer Confirm			

ShenZhen Eastong Electronic technology Co., LTD
深圳市东信通电子科技有限公司

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6栋501

Project:鑫创锦软板天线		Author: 许小荣	File Name: 鑫创锦软板天线-APP-RA
Date: 2025-07-26			
Rev:	Language:	Check:	
A	ENG		
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Revision History

Date	Revision	Description of Changes
2025-07-26	R:A	Antenna performance approved by customer

1 SUMMARY

2 GENERAL DESCRIPTION

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1 Summary

This report summarizes the electrical results of the proposed antenna to support the FPC program. We test the antenna with the latest version handset .

2 General Description

2.1 Definitions

VSWR: Voltage Standing Wave Rate

3 Mechanical Description

4 Electrical Performance

4.1 Set-up

4.1.1 VSWR and return loss

VSWR measurements (S_{11}) were performed using an Agilent E5070B Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

4.1.2 Efficiency, Gain and TRP/TIS

The gain of the antenna was measured in Dong Xin's 3D anechoic chamber in Shenzhen. The chamber is capable of doing tests from 380MHz to 6GHz. Coaxial chokes on the feed cable were used to mitigate surface currents. The measurement results are calibrated using dipole standards. For TRP and TIS the chamber uses a Agilent 8960 to establish the connection with the mobile device. During TRP tests the 8960 reads the power received through the chamber probes whilst during TIS tests the 8960 transmits through the probe. All data is afterwards corrected by a calibration table.

4.1.3 Matching Circuit Description

No matching.

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4.2 Measurement Data

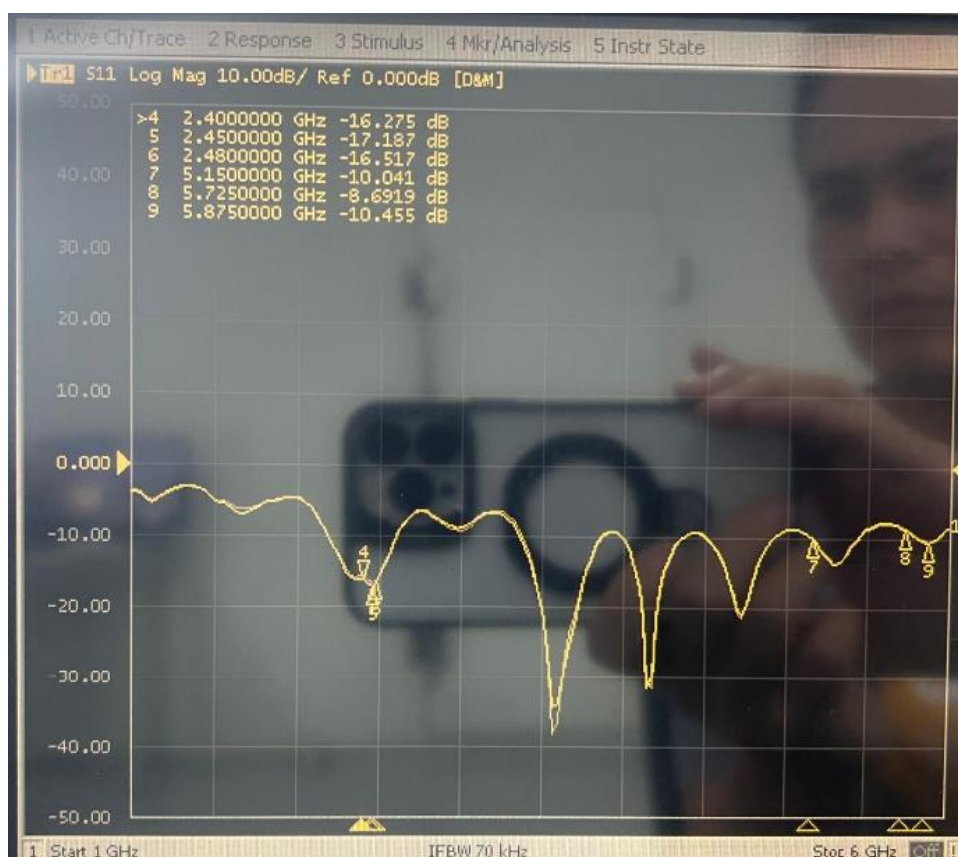
基本参数:

FPC 天线-WIFI 双频	
电性能指标	
Frequency range(频率)	2400-2500/5150-5850MHz
Impedance (特性阻抗)	50 Ω
V.S.W.R (电压驻波比)	参照下图
Gain (增益)	2.4GHz: 1.55dBi, WIFI5: 3.99dBi
Radiation (方向性)	Omni-directional
Polarization (线化方式)	linear Vertical
Admitted power (功率)	1W
Connector (接头型号)	/
Operating temp (工作温度)	-45℃~+85℃
Storage temp (储存温度)	-45℃~+85℃

V.S.W.R 驻波比:

Frequency range(频率)	2400	2450	2500	5150	5725	5875
V.S.W.R 驻波比	1.37	1.32	1.33	1.88	2.17	1.85

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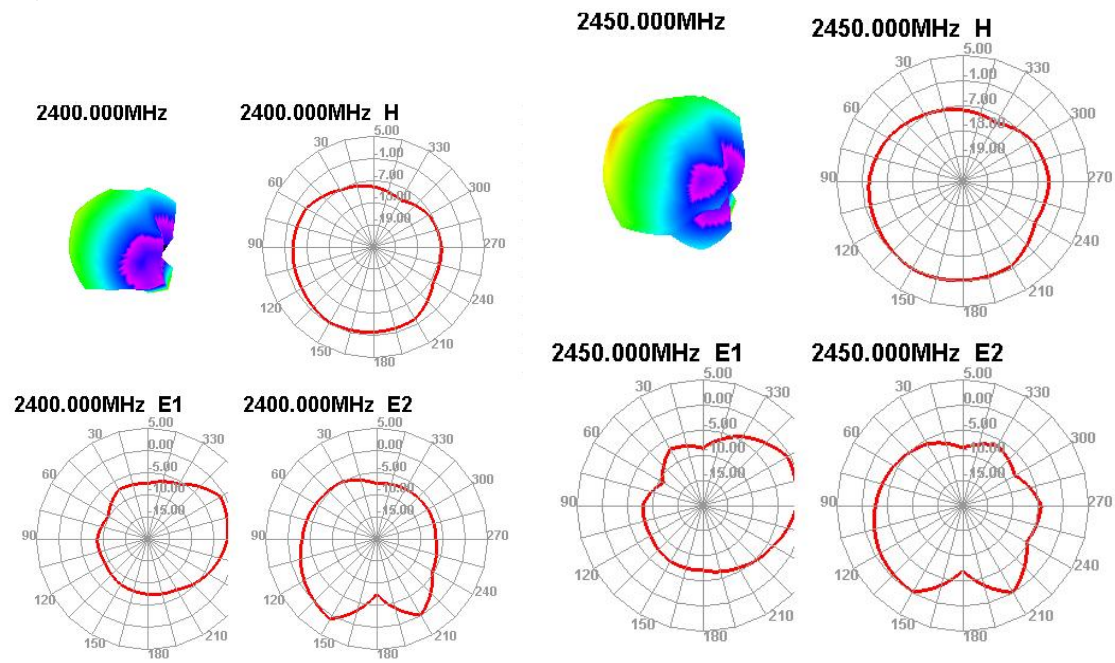
实物图：



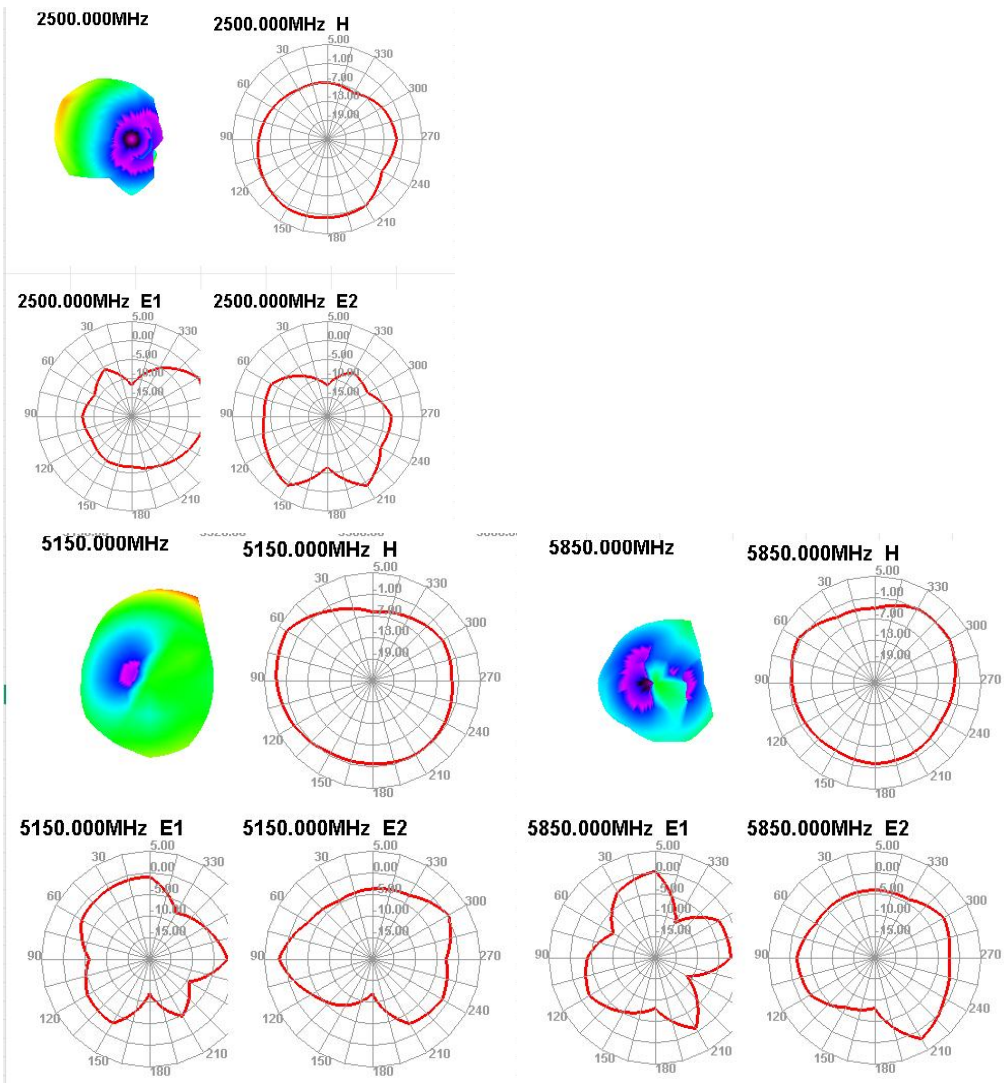
效率与增益：

(MHz)	Effi (%)	Gain (dBi)
2400	26.19	1.12
2450	28.46	0.84
2500	34.21	1.55
5150	35.77	2.82
5850	26.79	3.99

2D, 3D:



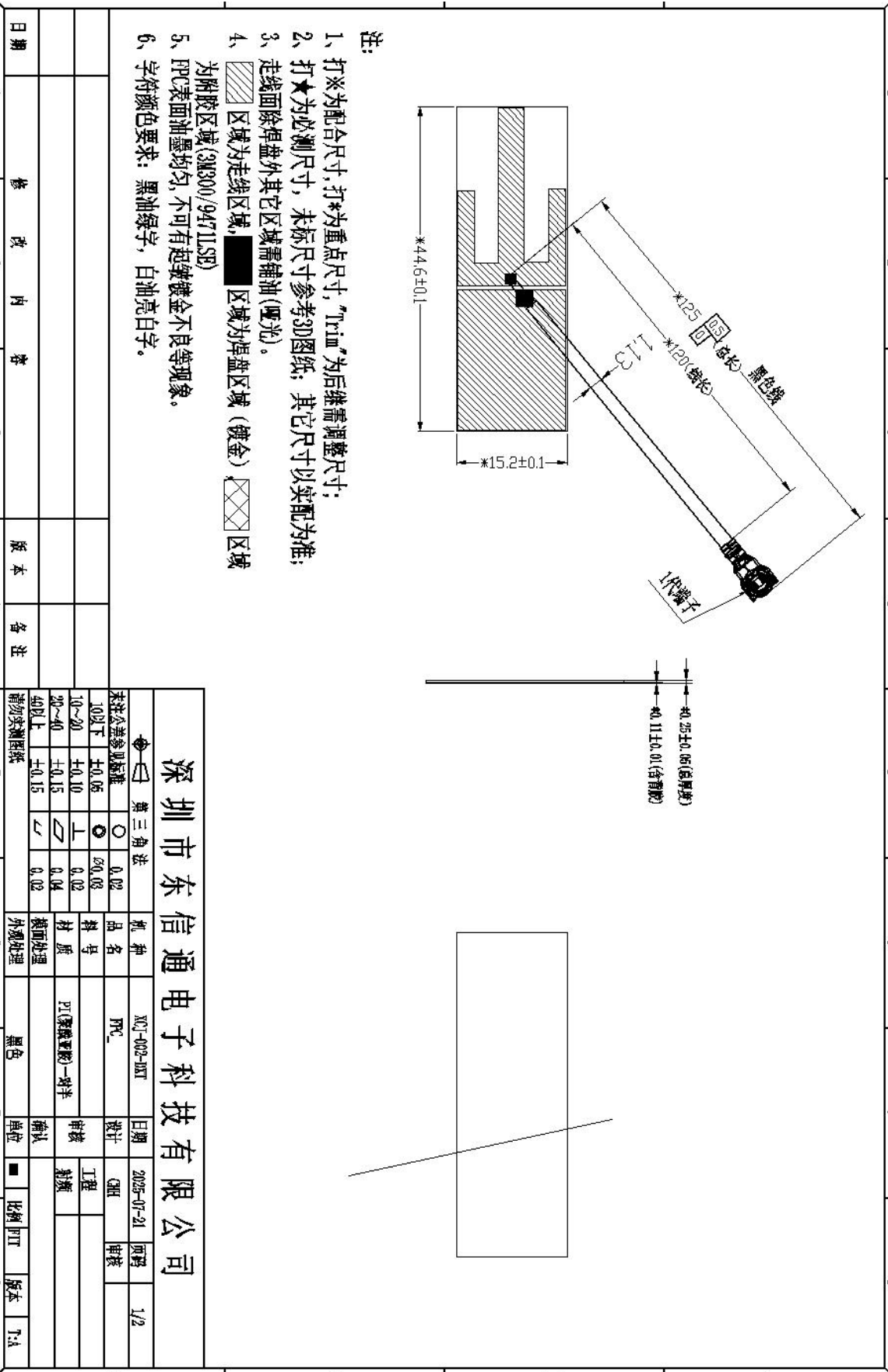
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项目	测试条件	规格
储存环境	在没有指定的情况下测试温度、湿度、气压如下： 1. 温度为-30℃~+80℃ 2. 相对湿度为45%-85% 3. 气压为86kpa-106kpa	电气机械性能正常
高低温试验	在70℃与40℃之间进行5次循环，然后在正常条件下1-2H，检查外观质量。	尺寸应满足规定并应满足满足于机械、电气性能
耐恒定湿热试验	相对湿度95±3%，试验温度：40℃.持续2H作用后，试品取出后5min之内测定电气性能，试品在正常条件下1-2H，检查外观质量	尺寸应满足规定并应满足满足于机械、电气性能
振动试验	振频范围10-55HZ，位移幅值：0.35MM，加速度幅值：50.0M/S，扫频循环次数：30次	电气机械性能正常
跌落试验	1M高空按照互相垂直的轴方向自由跌落3次	电气机械性能正常
拉力测试	通过治具固定被测物件，使用一定的力向反方向施力后，产品装配不可脱落，1. 产品装配不可脱落. 2. 最小拉力：1.2KG	电气机械性能正常
盐雾测试	所测样品应放置于一个固定环境中其要求下： NaCL 浓度：40-60g/1Kg PH 值：6.5-7.2 测试时间：24H	电气机械性能正常

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