



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2450-FPC332GX

Product Name: Antenna

Specification For Approval

Date: 2025.3.17

Version: 1.0

客户名称

Customer:

九安

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-FPC332GX

规格描述

Description:

2.4G/5G FPC 天线 1.13mm 灰色线 L=125mm +IPEX

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制作	路婷	TESTED BY 检测	
CHECKED BY 审核	胡超	CHECKED BY 审核	
Q.C.DEPT. 品管	周志红	Q.C.DEPT. 品管	
APPROVED BY 核准	韦佳	APPROVED BY 核准	



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Product Number: AN2450-FPC332GX

Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.3.17	初版	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz/5150-5850MHz
S.W.R. 驻波比	≤ 2.0
Antenna Gain 增益	4.81dBi /4.76dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	OD1.13mm , gray
Connector Type 连接器规格	I-PEX
C. Environmental	
Storage Temperature 存储温度	- 40°C ~ +80 °C
Operation Temperature 工作温度	- 40°C ~ +80 °C

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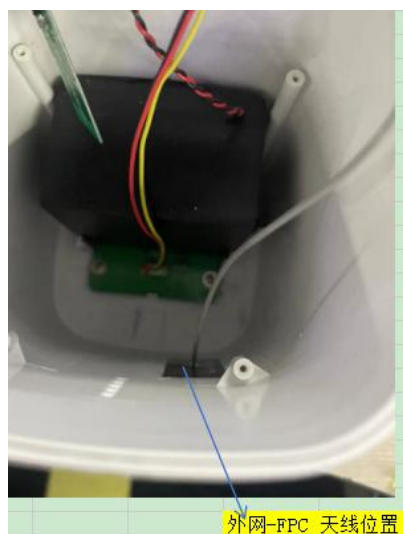
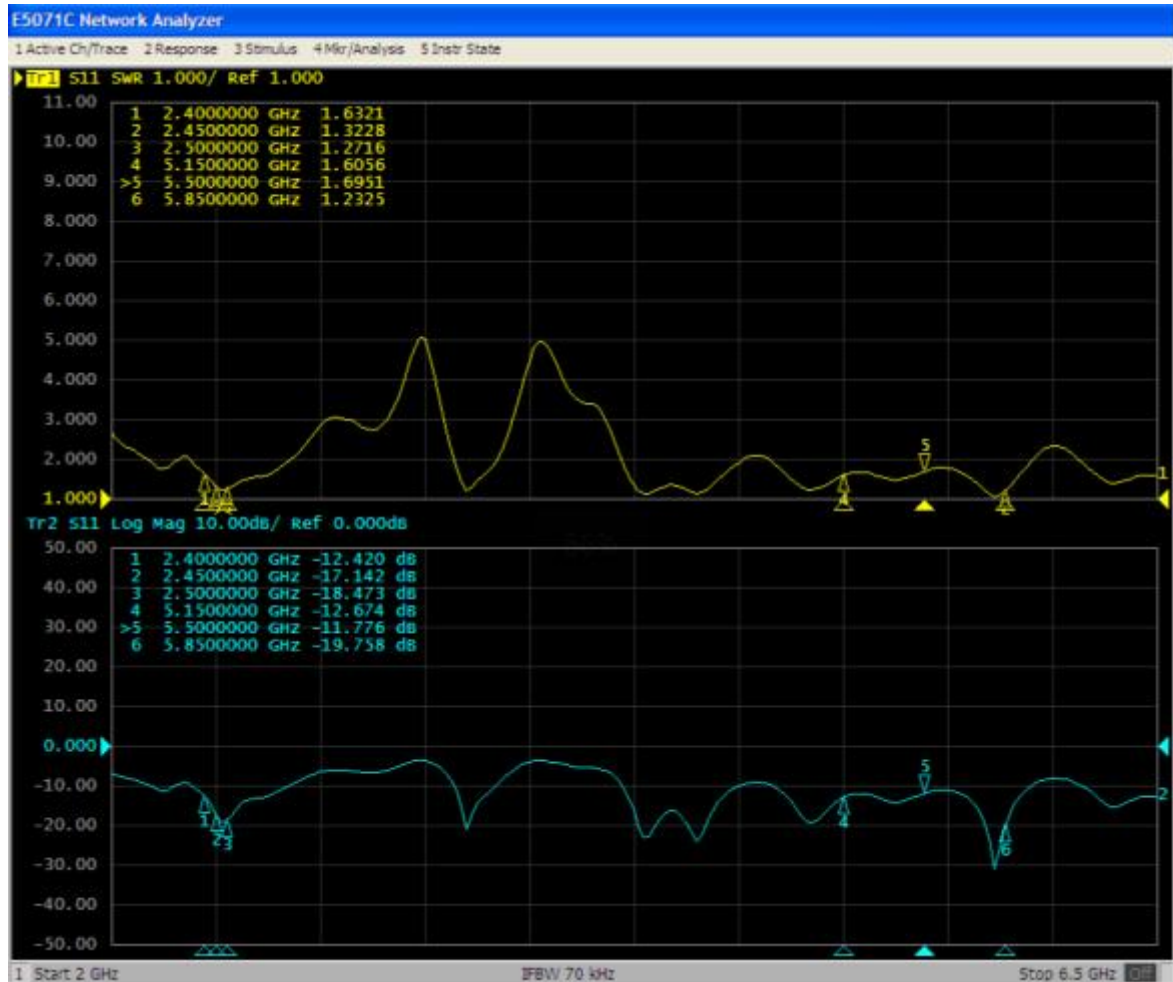
2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4	Solderability 可焊性	GB / T2423.28-2005 Temp: 260±5° C;Duration: 5 seconds 温度 260±5° C;持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
5	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal .单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol.≤5% 符合待测物规范;频率偏移≤5%	PASS
6	Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
7	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2015/863/EU 符合 RoHS 2015/863/EU 标准	PASS

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3. Antenna - S Parameter Test Data



外网-FPC 天线位置

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4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	4.46	4.52	4.60	4.68	4.79	4.81	4.75	4.70	4.68	4.63	4.60
Efficiency (%)	64.40	65.86	66.85	67.12	68.67	69.13	70.67	68.52	68.69	67.20	65.98

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
4.66	4.29	4.48	4.76	4.32	3.90	3.65	3.61	3.79	3.65	3.47	3.26	3.41	3.38	3.41
64.70	64.29	65.29	67.28	67.96	68.02	69.69	68.20	67.35	68.46	67.24	63.61	62.29	60.94	62.30

有源

802.11b 11Mbps				802.11g 54Mbps			
Test Chnanel	ch1	ch6	ch11	Test Chnanel	ch1	ch6	ch11
TRP (dBm)	20.96	20.53	20.66	TRP (dBm)	20.58	20.68	20.41
TIS (dBm)	-85.39	-85.66	-86.93	TIS (dBm)	-73.87	-74.15	-73.34

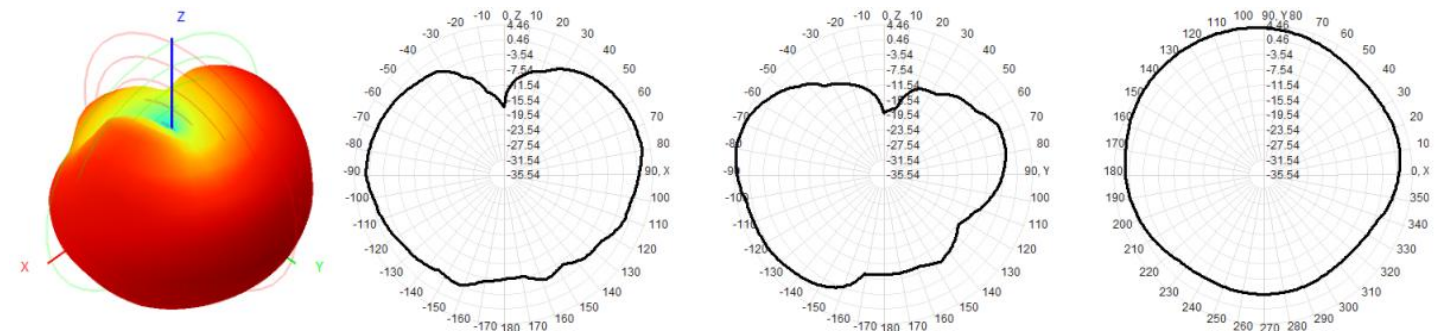
802.11n MCS7				802.11a 54Mbps				
Test Chnanel	ch1	ch6	ch11	Test Chnanel	ch36	ch120	ch132	ch149
TRP (dBm)	20.05	20.33	20.89	TRP (dBm)	18.05	17.25	18.33	17.85
TIS (dBm)	-69.51	-70.17	-69.24	TIS (dBm)	-75.45	-71.55	-73.34	-72.41

XZ

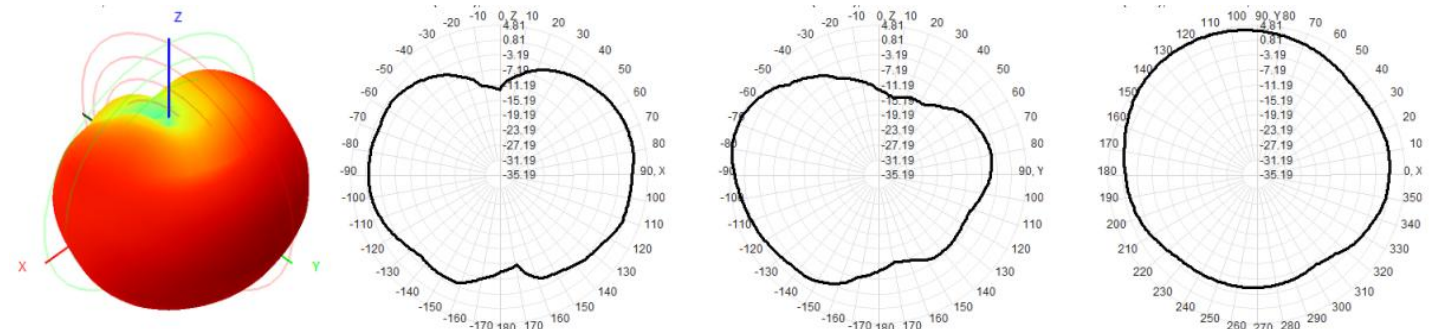
YZ

XY

2400MHz



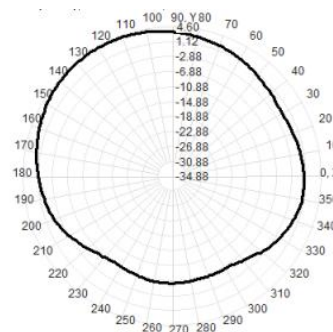
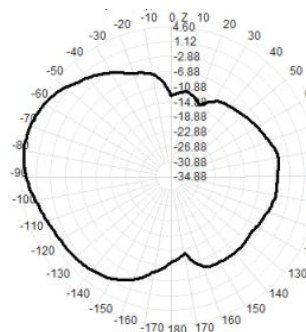
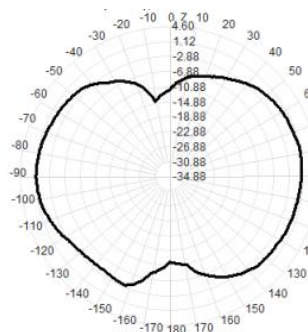
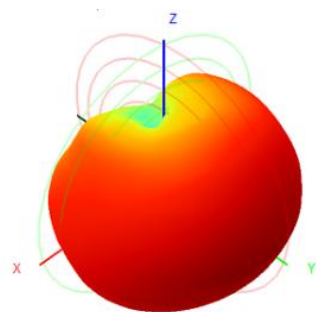
2450MHz



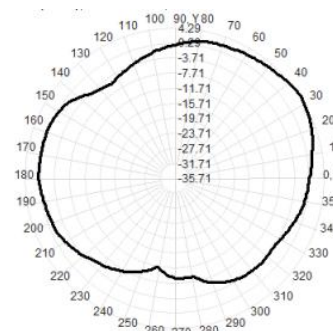
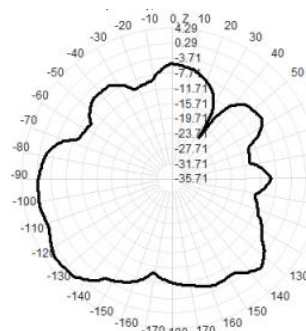
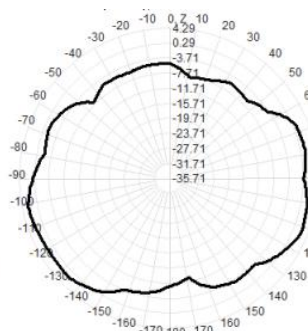
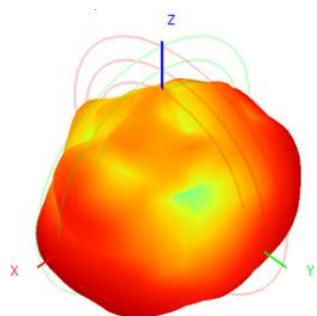
Product Number: AN2450-FPC332GX

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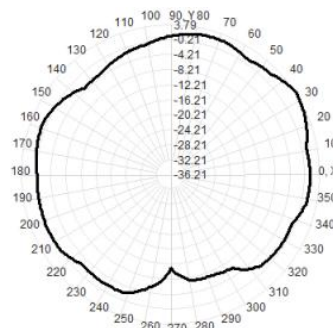
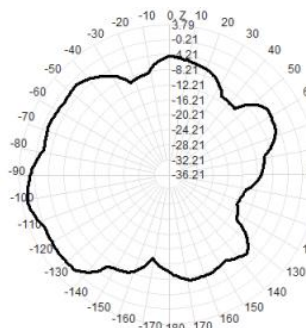
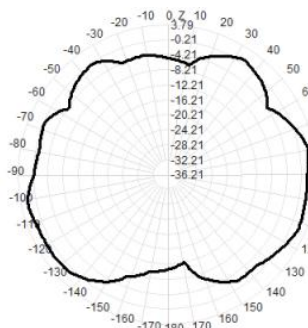
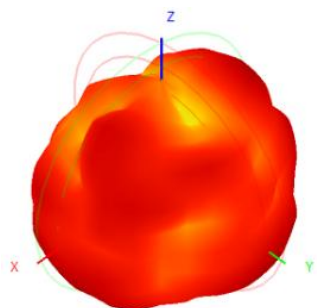
2500MHz



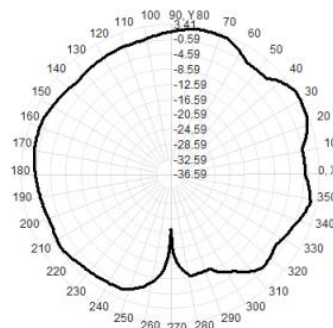
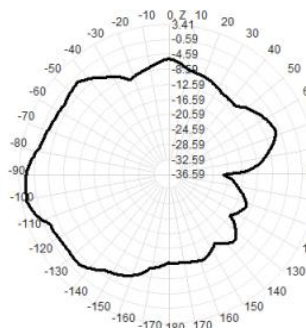
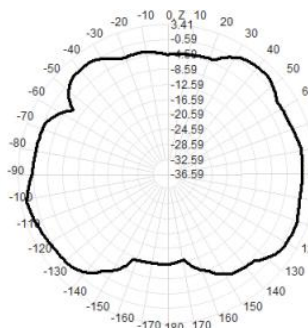
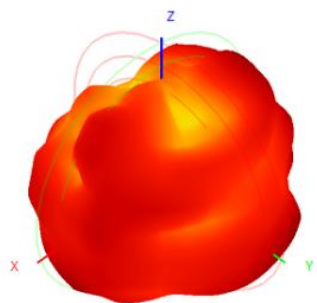
5150MHz



5550MHz



5850MHz



5. Mechanical Drawing See attached files

产品包装规范

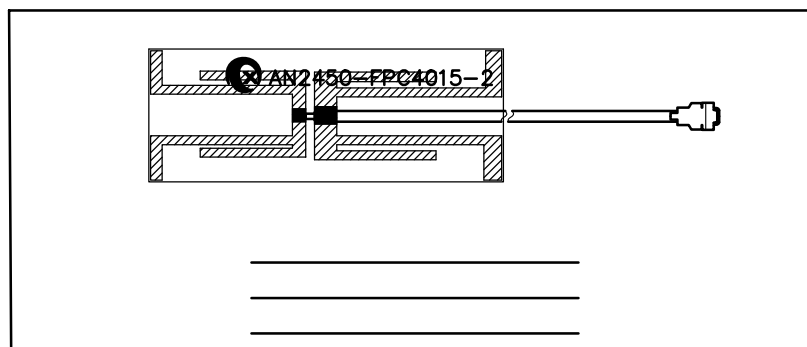
PACKING CRITERION

Date: 2025.03.17

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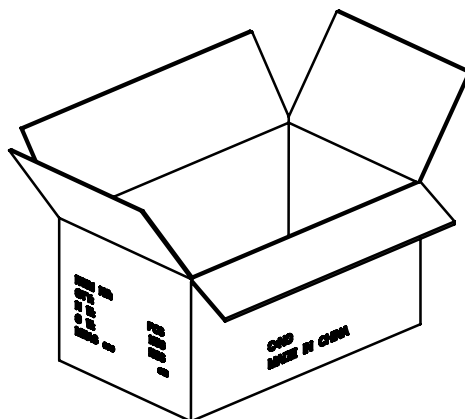
Part Number : AN2450-FPC332GX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



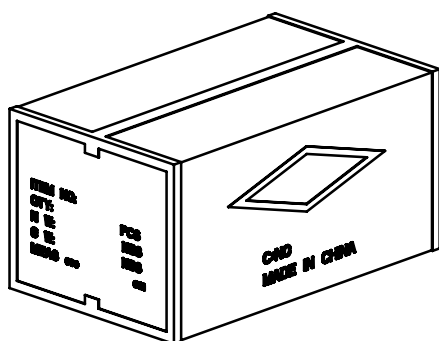
100pcs/ PE bag

2.PACKING。

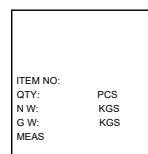


8000pcs/Carton

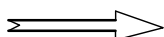
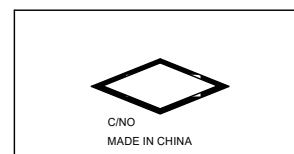
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX CHECKED BY : HC DESIGNED BY : SY Y