



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2450-FPC328202

Product Name: Antenna

Specification For Approval

Date: 2025.5.19

Version: 1.0

客户名称

Customer:

客户料号

Customer P/N:

腾祥料号

TX P/N:

AN2450-FPC328202

规格描述

Description:

2.4G/5G FPC 天线

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	APPROVEDBY 核准	



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东莞市腾祥电子有限公司

Product Number: AN2450-FPC328202

Product Name: Antenna

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- 4. Mechanical and Packing Drawing (图纸包装规范)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.5.19	初版	

Product Number: AN2450-FPC328202

Product Name: Antenna

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	1.91dBi /2.73dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	/
Connector Type 连接器规格	/
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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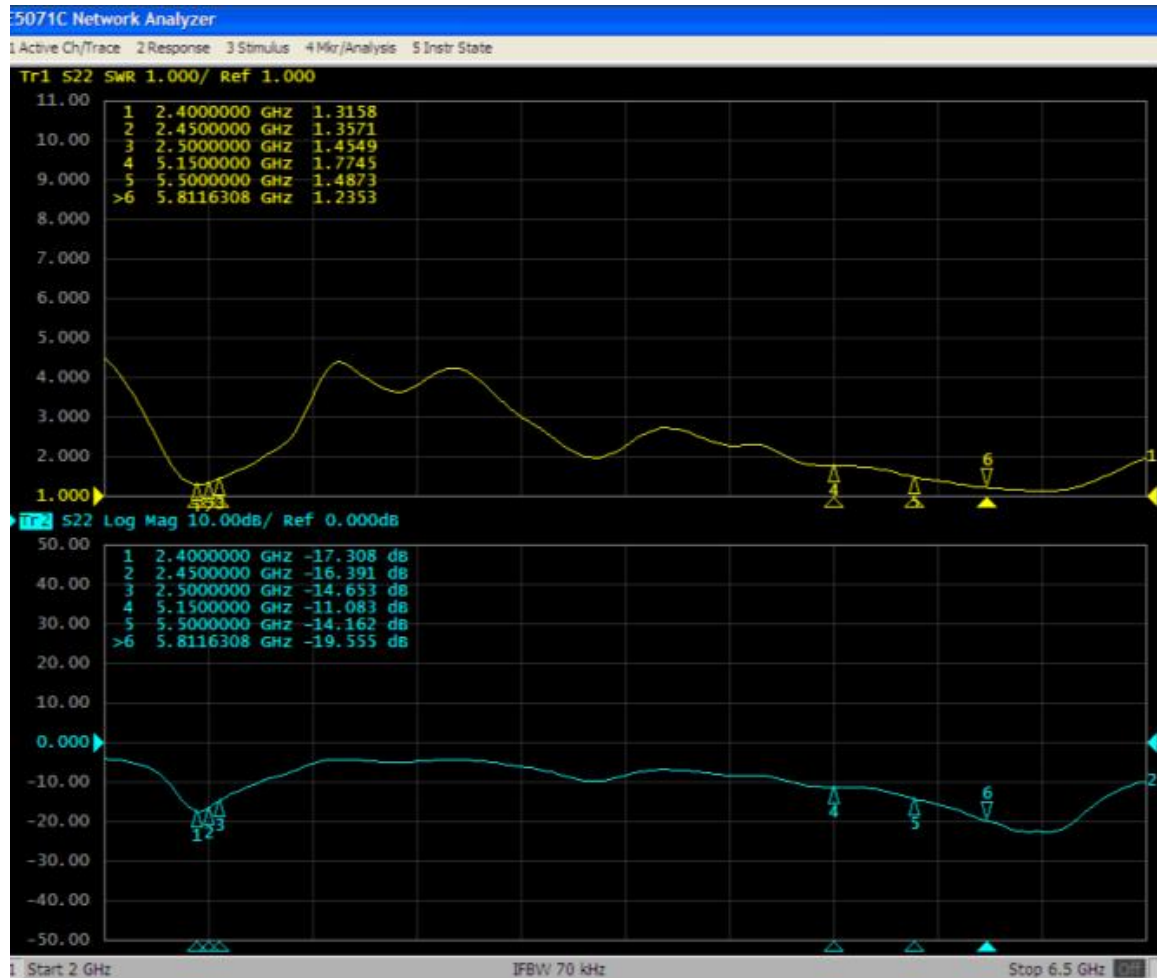
2. Characteristics and Reliability Test

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	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
6	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



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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)	1.39	1.42	1.52	1.62	1.74	1.91	1.85	1.72	1.62	1.51	1.31
Efficiency (%)	42.36	43.58	44.16	43.05	44.16	45.39	44.06	43.61	42.58	42.92	41.93

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
2.65	2.48	2.58	2.73	2.64	2.70	2.61	2.43	2.22	2.13	2.30	2.35	2.21	2.10	1.93
46.59	47.16	48.16	51.18	49.82	52.48	56.02	54.36	53.35	54.76	55.36	55.21	54.10	51.76	51.50

有源

802.11b 11Mbps				802.11g 54Mbps			
Test Chnanel	ch1	ch6	ch11	Test Chnanel	ch1	ch6	ch11
TRP (dBm)	18.15	19.25	18.27	TRP (dBm)	18.15	19.63	18.31
TIS (dBm)	-80.25	-81.81	-82.08	TIS (dBm)	-67.75	-68.8	-68.98

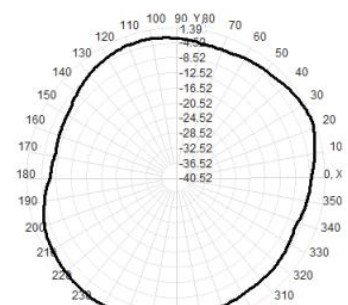
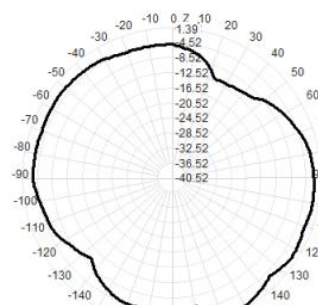
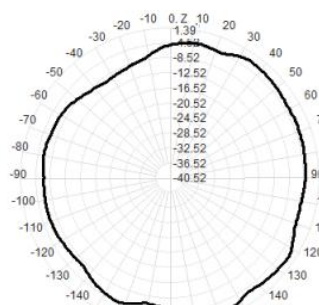
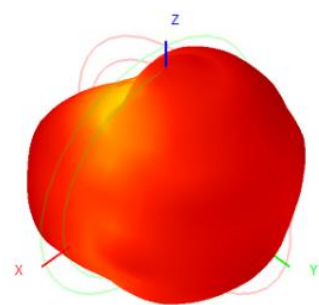
802.11n MCS7				802.11a 54Mbps			
Test Chnanel	ch1	ch6	ch11	Test Chnanel	ch36	ch120	ch132
TRP (dBm)	18.06	19.15	18.09	TRP (dBm)	17.77	18.75	18.39
TIS (dBm)	-64.27	-65.42	-65	TIS (dBm)	-72.68	-74.72	-72.15

XZ

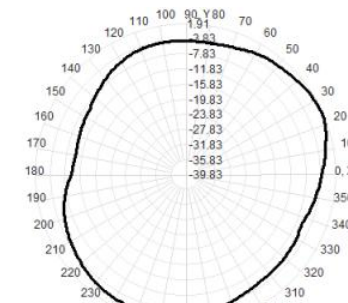
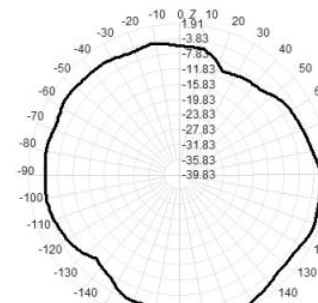
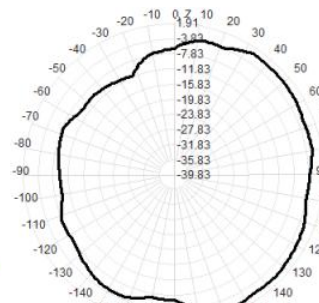
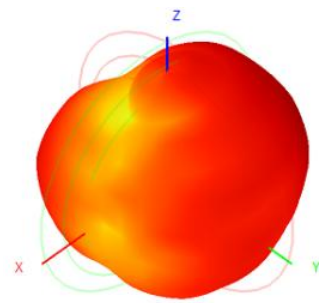
YZ

XY

2400MHz



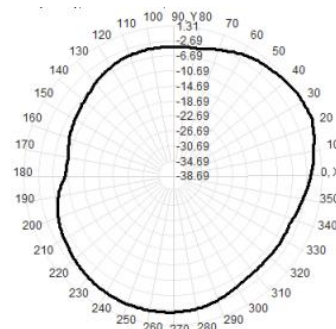
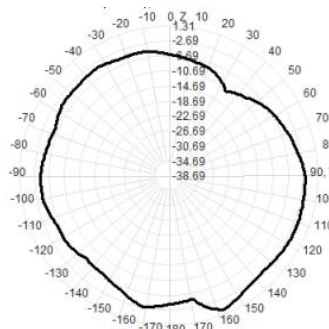
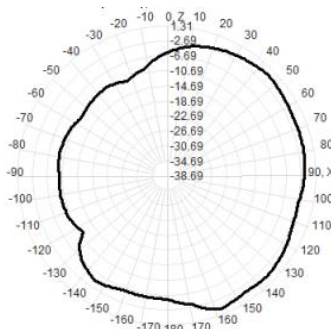
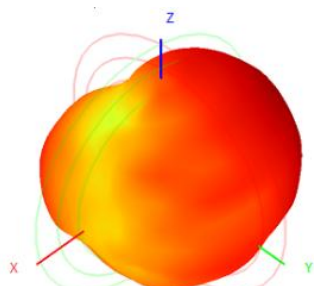
2450MHz



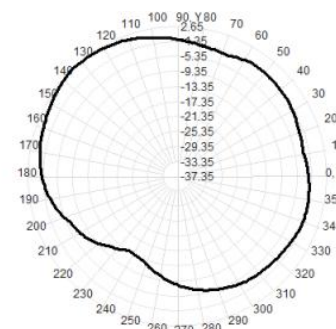
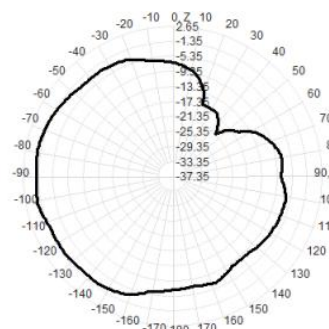
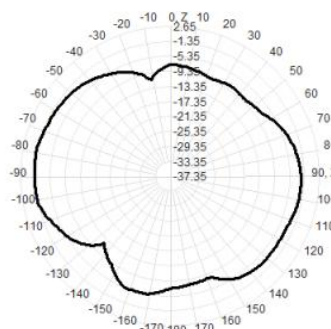
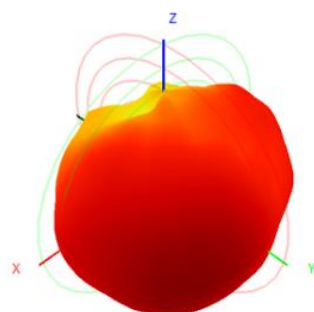
Product Number: AN2450-FPC328202

Product Name: Antenna

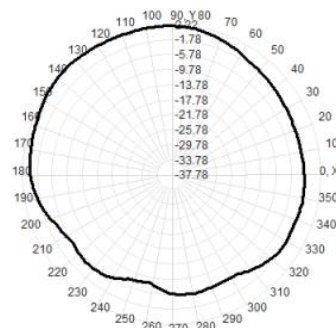
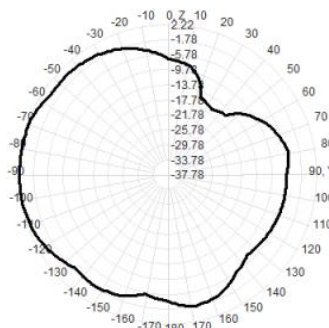
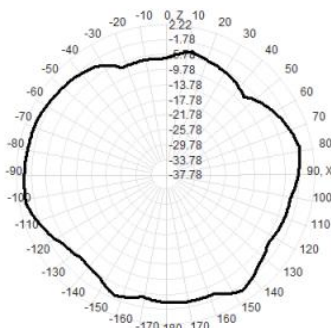
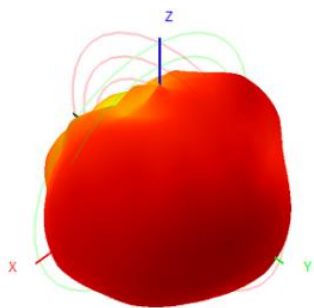
2500MHz



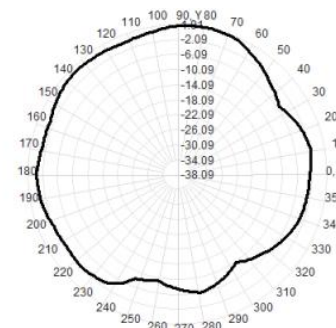
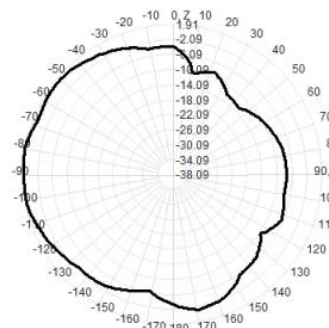
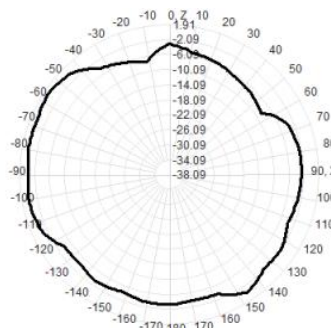
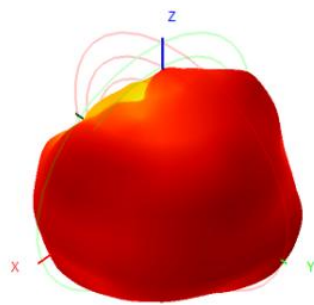
5150MHz



5550MHz



5850MHz



5. Mechanical Drawing See attached files

1 2 3 4 5 6 7 8

HF

RoHS

REACH

CONFIDENTIAL

焊接區 (OSP)

布線區

SIGN	DATE	DESCRIPTION	APPROVER

32.8±0.2

20.2±0.2

AN2450-FPC328202

覆盖膜 0.0275mm

ED铜 0.018mm

压敏胶 0.02mm

PI 0.025mm

3M300LSE 0.05mm

0.133mm MIN(不包括离型纸厚度)

离型纸刀口

备注:

1.材质: FPC T=0.133mm MIN (不包括离型纸厚度)

2.颜色/表面处理: OSP; 正面过黑油;白色印字

3.尺寸: 带*为重点尺寸;带Cpk尺寸需做制程能力管控(≥1.33)

4.公差: 未标注公差请参照标准公差.

Tengxiang Electronics Co., Ltd.

TITLE: FPC

PART NO.: AN2450-FPC328202

CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY		Tolerance
			SY	UNITS: mm	X.X ±0.1
			2025.04.15	SCALE: 1/1	X.XX ±0.05
				REVISION: A	X° ±1

1 2 3 4 5 6 7 8

A

产品包装规范

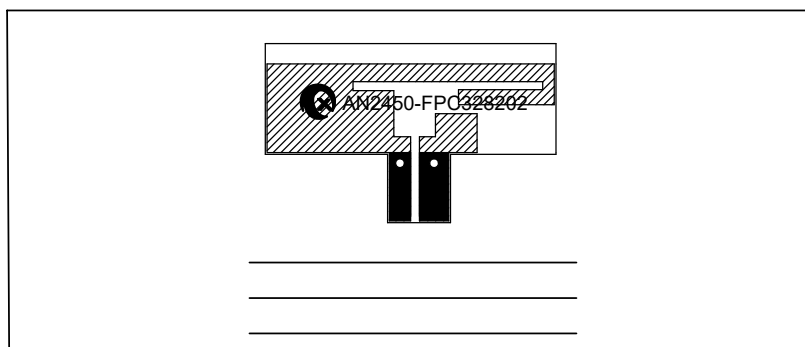
PACKING CRITERION

Date: 2025.05.19

Page: 1 of 1

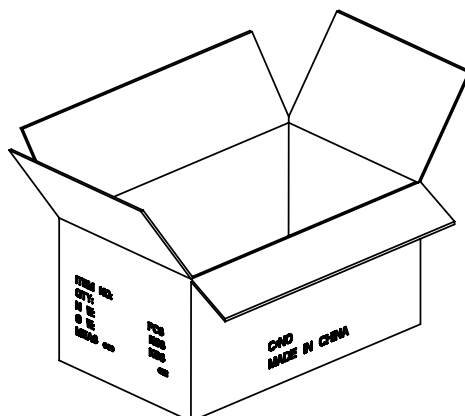
Part Number : AN2450-FPC328202	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



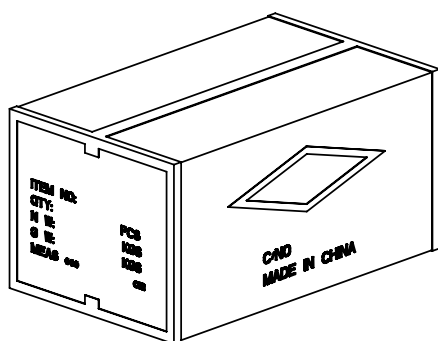
以实际数量为准

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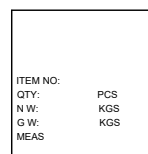


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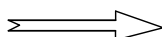
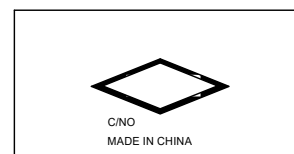
3. SEALING。



SIDE



FRONT



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