



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2450-FPC343BX

Product Name: Antenna

Specification For Approval

Date: 2025.6.7

Version: 1.0

客户名称

Customer:

智路器

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-FPC343BX

规格描述

Description : 2.4G/5G/6G FPC 天线 0.81mm 黑色线 L=45mm +IPEX (4代)

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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<http://www.tenxiang.cn>



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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.6.7	初版	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz/5150-5850MHz/6000-7125MHz
S.W.R. 驻波比	参考波形
Antenna Gain 增益	2.95dBi /3.50dBi /3.30dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	OD0.81mm , Black
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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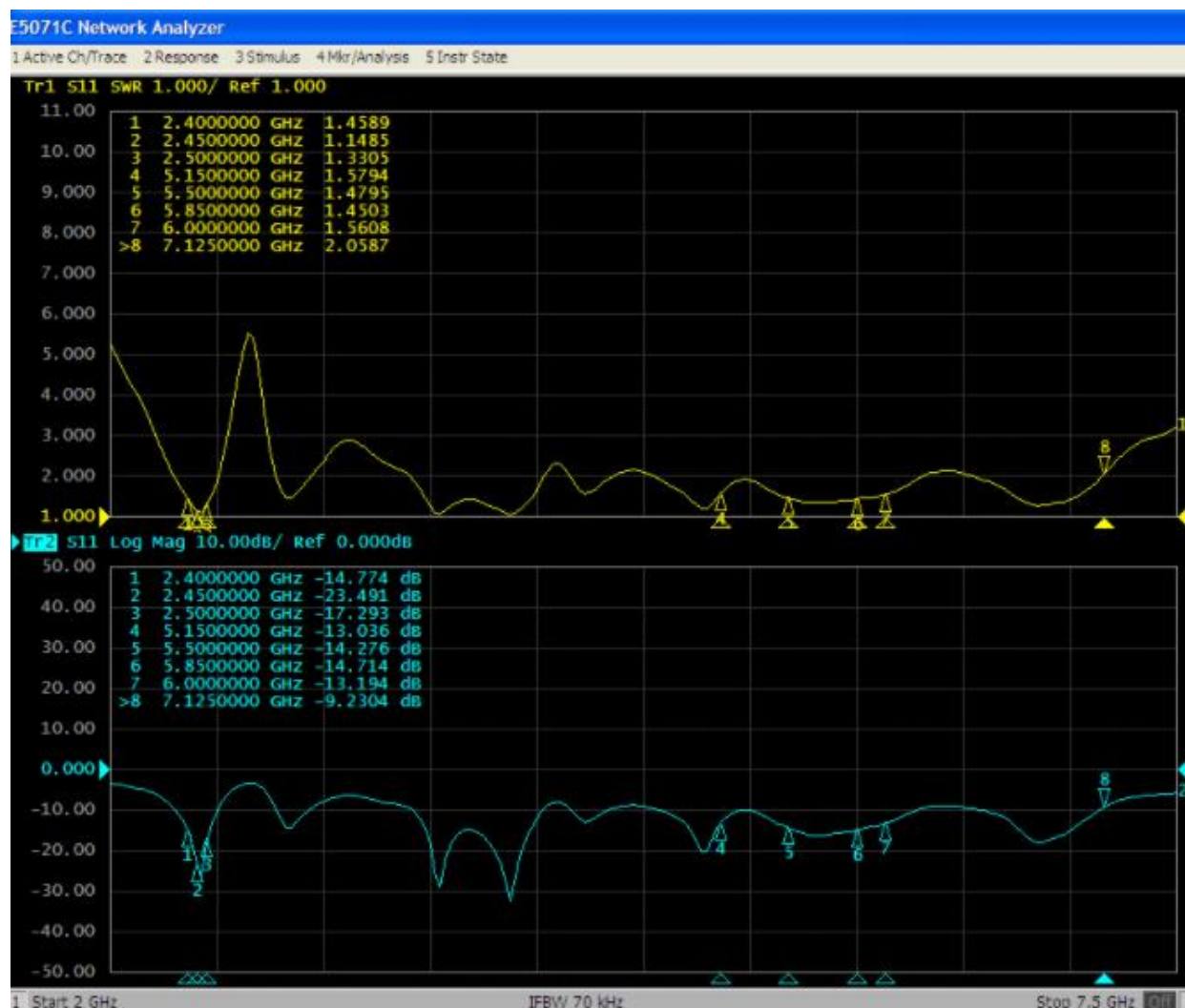
2. Characteristics and Reliability Test

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



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)	2.63	2.71	2.78	2.77	2.82	2.95	2.84	2.69	2.55	2.43	2.40
Efficiency (%)	58.18	59.49	59.67	58.74	58.63	61.00	61.43	62.85	61.63	58.78	58.34

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
2.42	2.94	3.08	3.30	3.35	3.50	3.46	3.38	3.30	3.38	3.35	3.21	3.35	3.11	3.03
66.13	66.13	64.40	68.12	65.57	65.64	64.26	67.06	62.16	61.24	59.85	53.92	54.99	52.15	51.37

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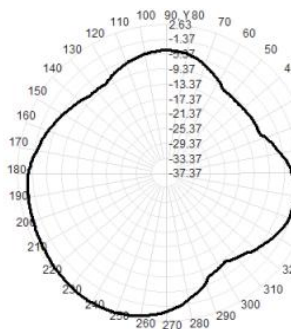
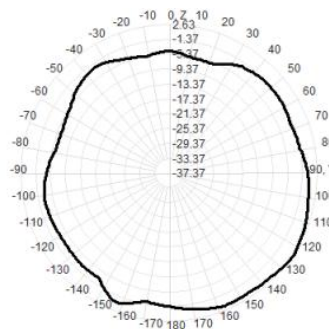
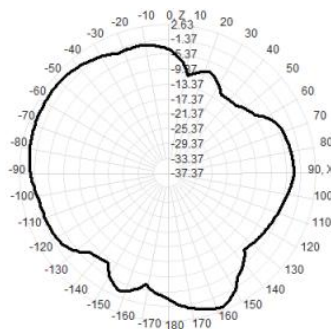
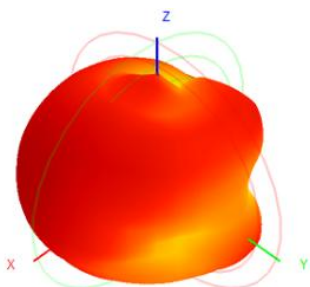
28	29	30	31	32	33	34	35	36	37	38	39
6000.0	6100.0	6200.0	6300.0	6400.0	6500.0	6600.0	6700.0	6800.0	6900.0	7000.0	7125.0
1.89	1.78	1.88	2.96	2.89	1.86	1.77	3.03	3.30	2.88	2.47	2.24
51.22	52.33	55.10	53.22	51.33	53.47	56.22	54.33	52.55	58.74	61.39	62.70

XZ

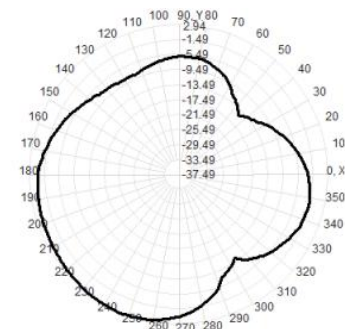
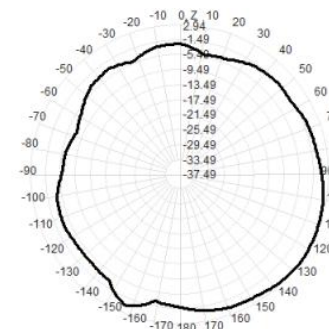
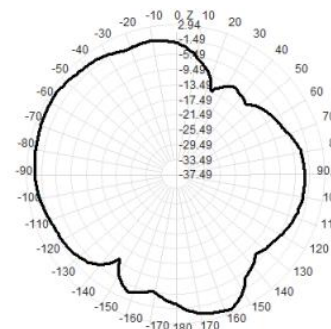
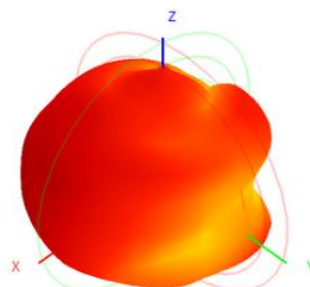
YZ

XY

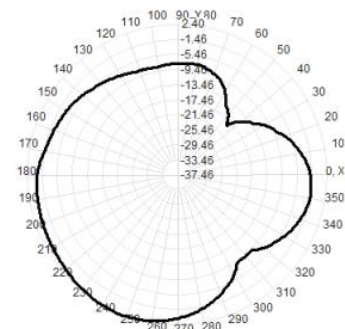
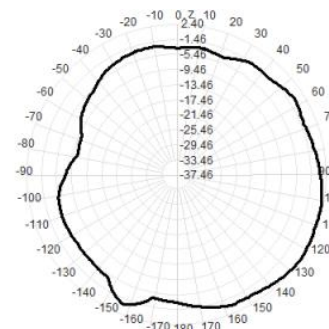
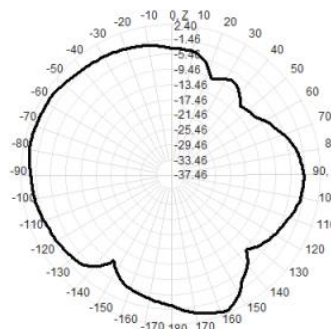
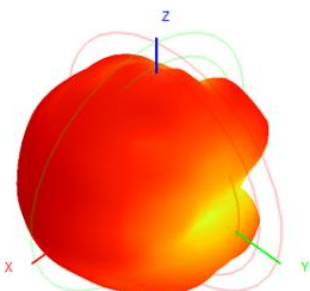
2400MHz



2450MHz



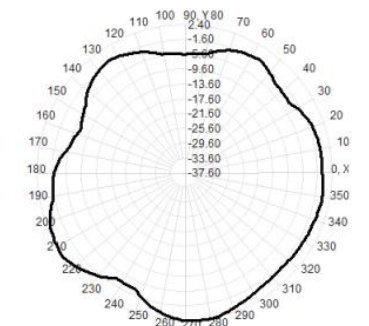
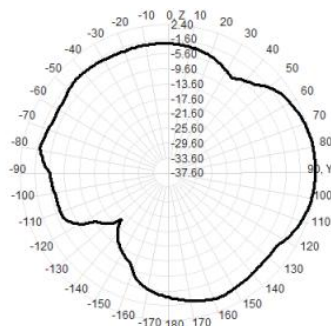
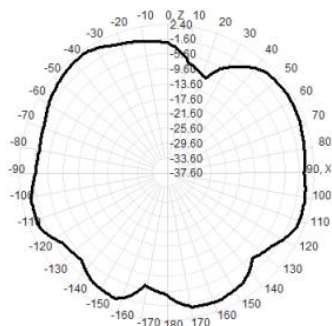
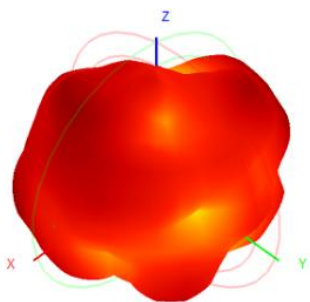
2500MHz



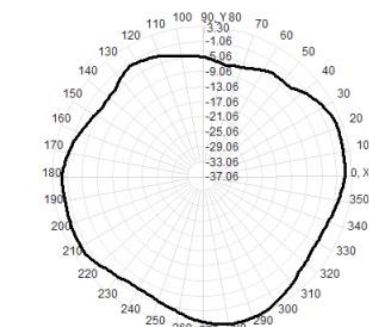
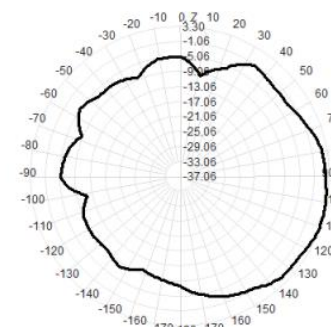
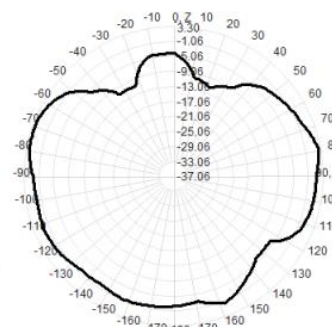
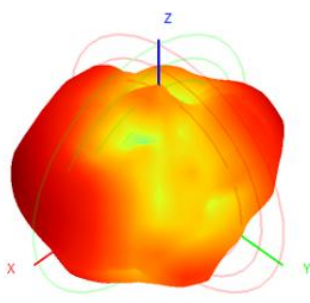
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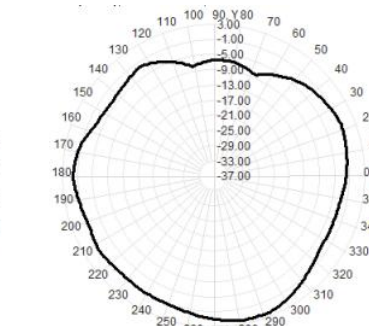
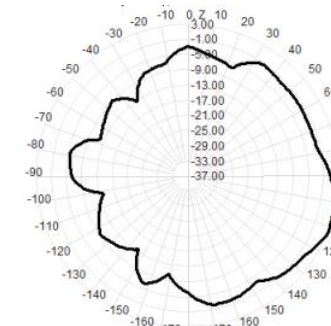
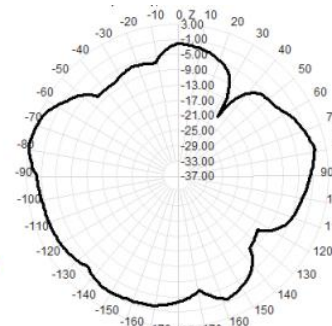
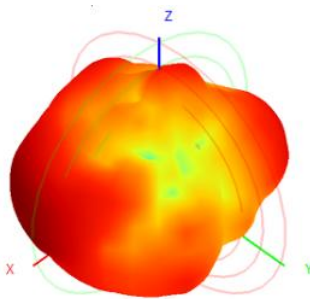
5150MHz



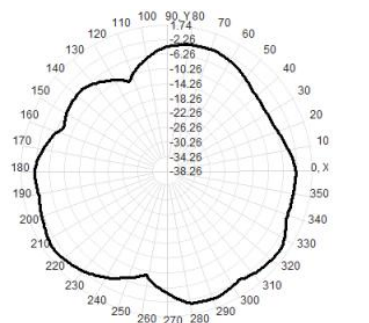
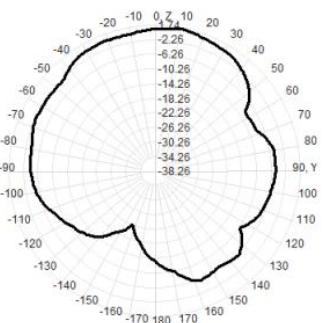
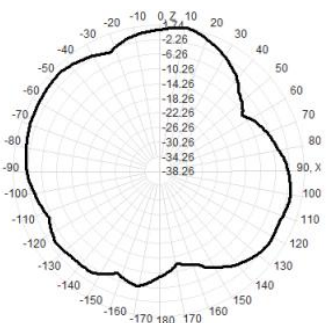
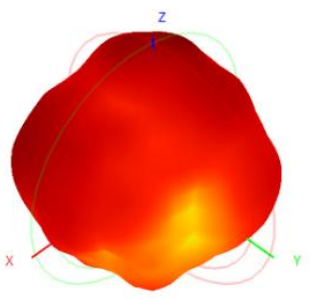
5550MHz



5850MHz



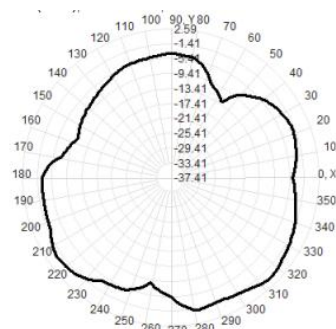
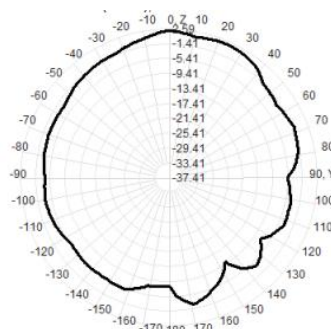
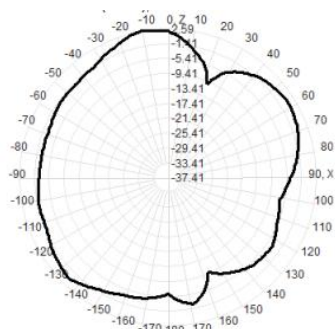
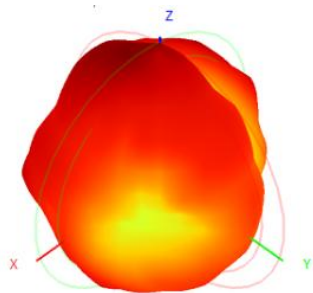
6000MHz



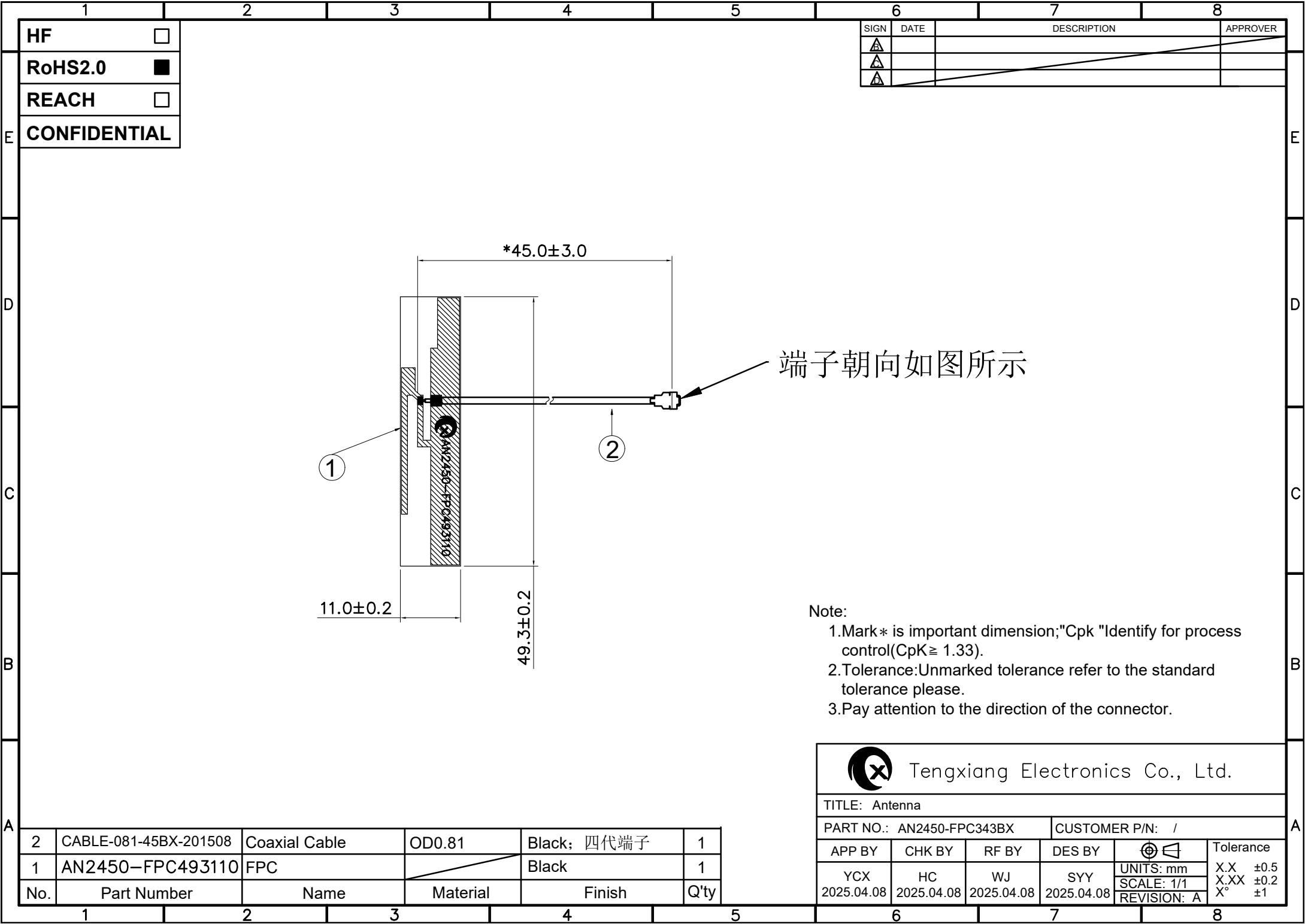
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7125MHz



5. Mechanical Drawing See attached files



HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER

- Note:
- 1.Mark* is important dimension;"Cpk "Identify for process control(CpK≥ 1.33).
 - 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
 - 3.Pay attention to the direction of the connector.

Tengxiang Electronics Co., Ltd.					
TITLE: Antenna					
PART NO.: AN2450-FPC343BX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY	UNITS: mm	X.X ±0.5
2025.04.08	2025.04.08	2025.04.08	2025.04.08	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1

2	CABLE-081-45BX-201508	Coaxial Cable	OD0.81	Black; 四代端子	1
1	AN2450-FPC493110	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

产品包装规范

PACKING CRITERION

Date: 2025.04.08

Page: 1 of 1

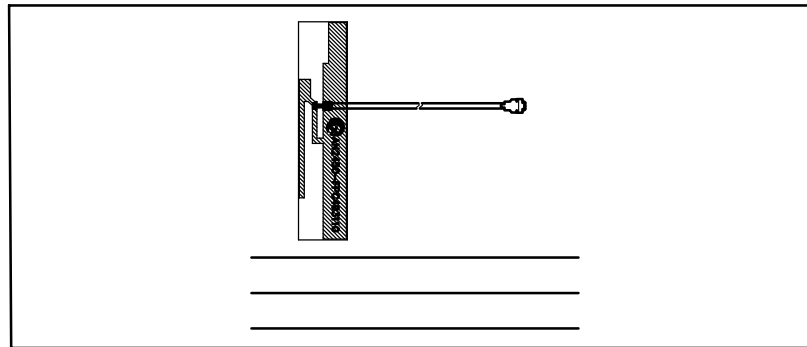
Part Number : AN2450-FPC343BX

Revision : A

Name: Antenna

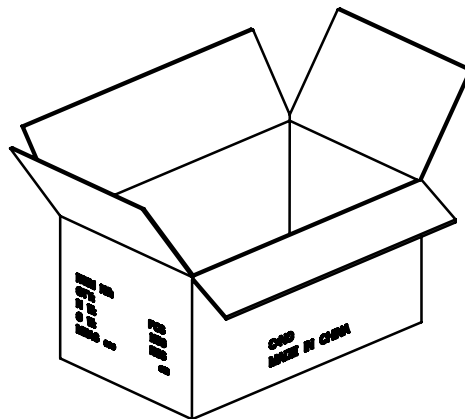
Customer : ALL

1 . Enter PE bag。



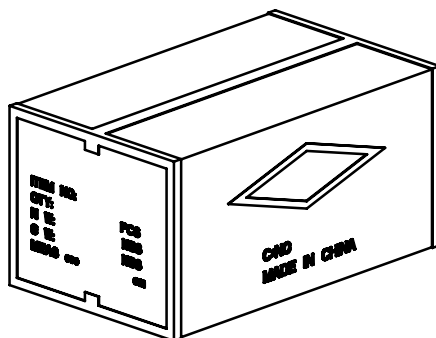
100pcs/ PE bag

2.PACKING。

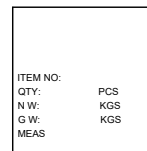


8000pcs/Carton

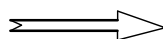
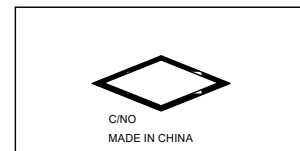
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : SY Y