



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-FPC490BX

Product Name: Antenna

Specification For Approval

Date: 2026.3.20

Version: 1.0

客户名称

Customer:

太川

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-FPC490BX

规格描述

Description : 2.4G/5G FPC 天线 1.13mm 黑色线 L=75mm+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	陈祖喜	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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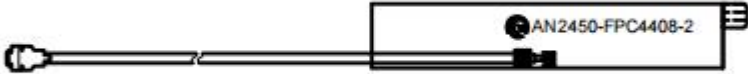
Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2026.3.20	初版	

Product Number:AN2450-FPC490BX

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500MHz/5150-5850MHz
S.W.R. 驻波比	参考波形
Antenna Gain 增益	1.72dBi /2.74dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	1.13mm ,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

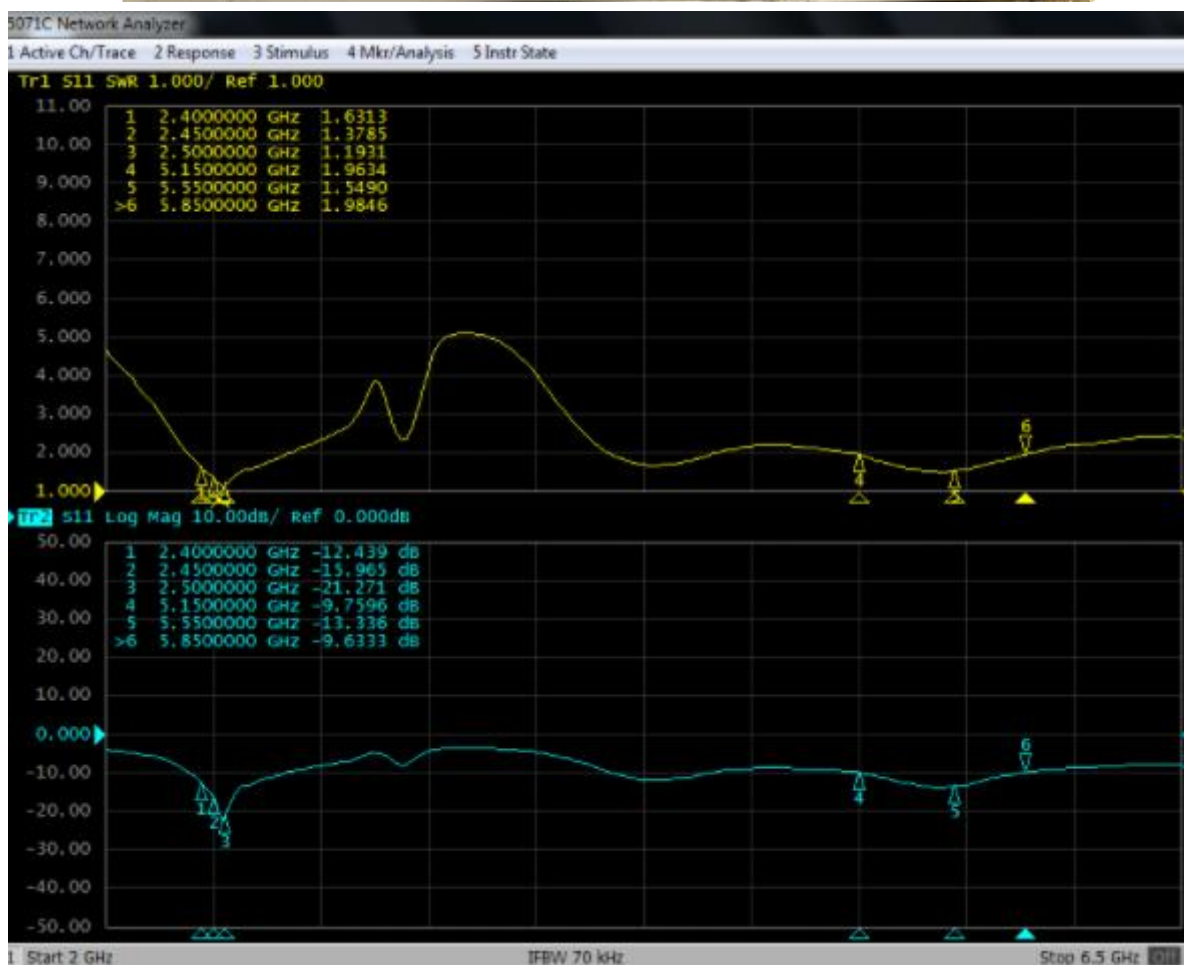
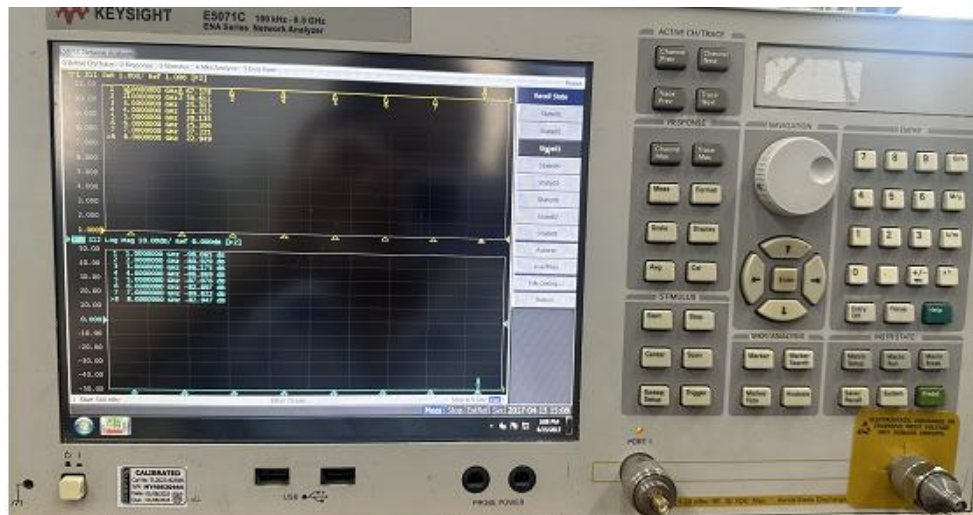
Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 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

测试仪器: VSWR 是使用安捷伦 E5071C 连接到治具来测试, 状态为自由空间。



Product Number:AN2450-FPC490BX

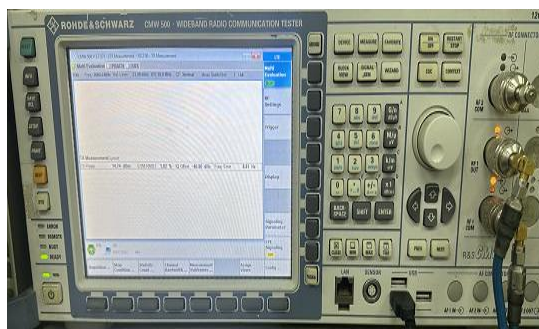
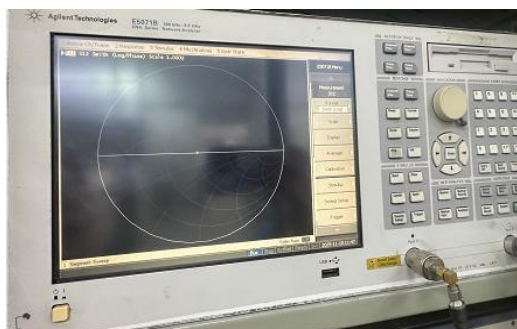
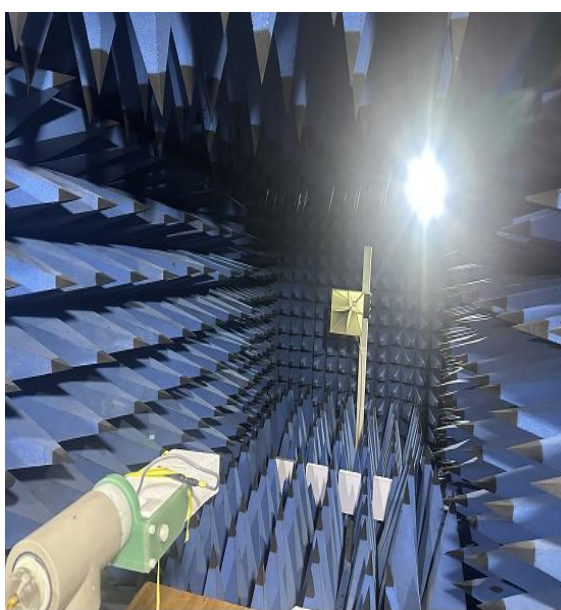
Product Name: Antenna

4. Test environment and equipment

暗室规格: 6m*6m*6m/7m*3m*3m

LTE-TDD/FDD-SCDMA 测试设备: ROHDE&SCHWARZ CMW500

无源效率测试设备:Agilent Technologies E5071B



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5. Antenna - Radiation Pattern Test Data

序号	1	2	3	4	5	6	7	8	9	10	11
频率(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
增益 (dBi)	1.40	1.45	1.57	1.63	1.67	1.72	1.69	1.60	1.50	1.47	1.43
效率 (%)	53.34	53.84	54.75	54.87	56.40	57.00	54.52	57.59	56.91	55.24	52.15

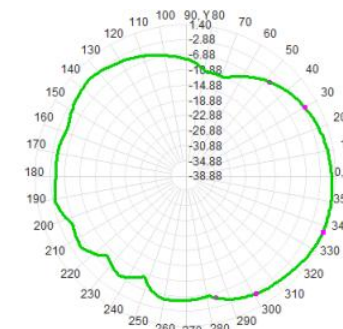
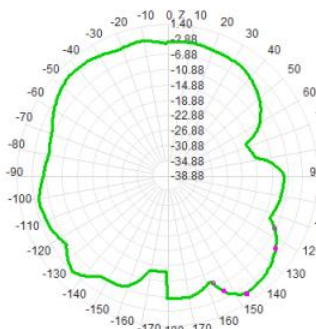
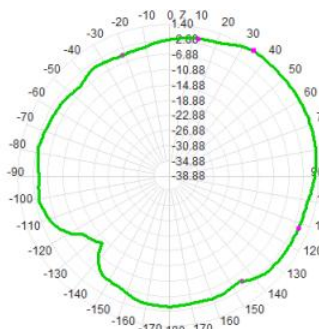
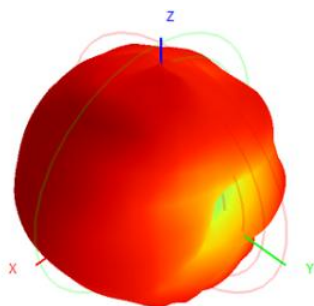
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
2.04	2.14	2.13	2.22	2.42	2.59	2.62	2.65	2.74	2.64	2.60	2.53	2.41	2.34	2.15
62.12	62.91	62.78	63.99	63.15	64.77	66.60	66.91	66.99	65.51	64.10	63.69	63.31	62.15	62.46

XZ

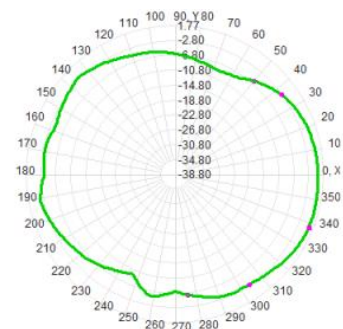
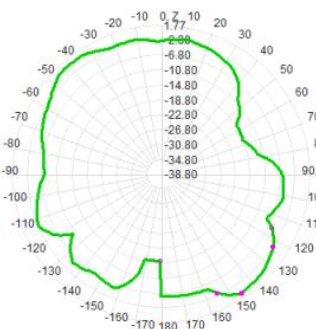
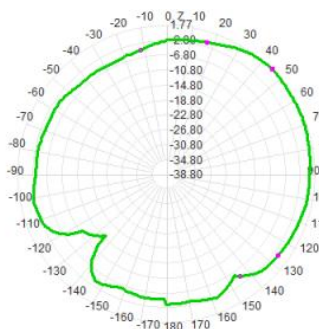
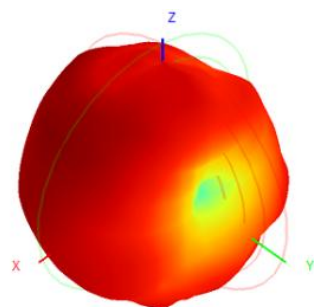
YZ

XY

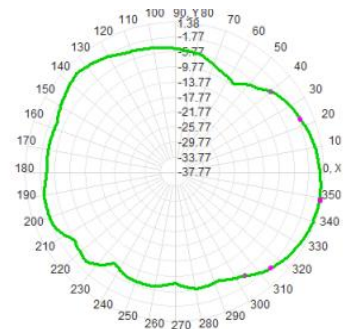
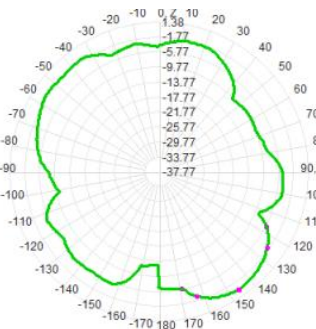
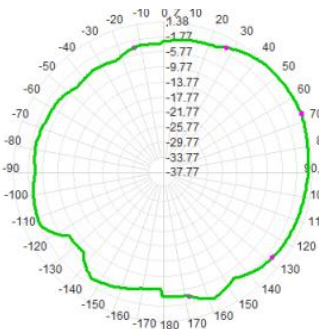
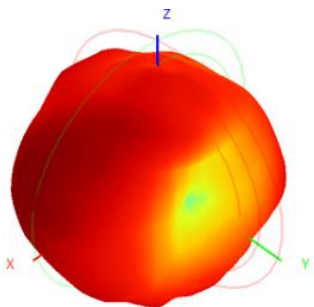
2400MHz



2450MHz



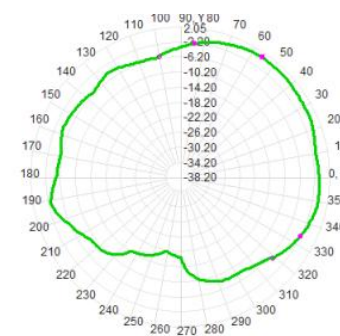
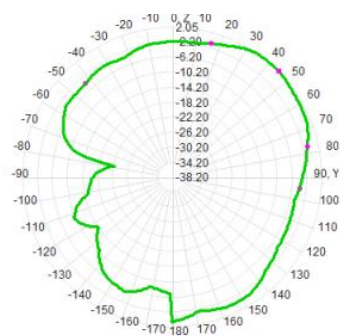
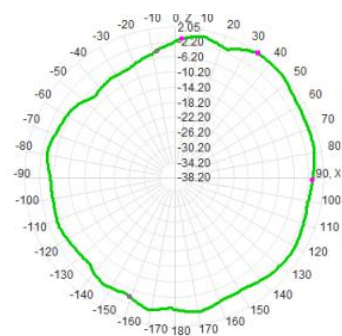
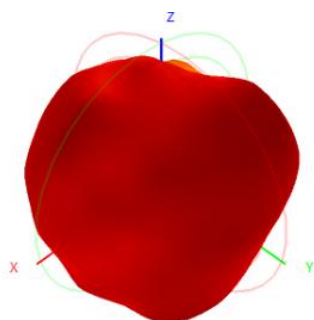
2500MHz



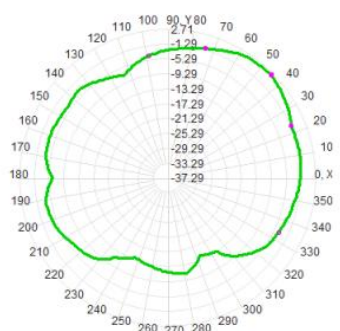
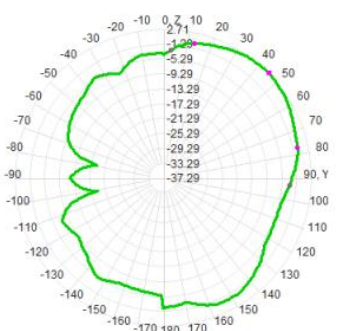
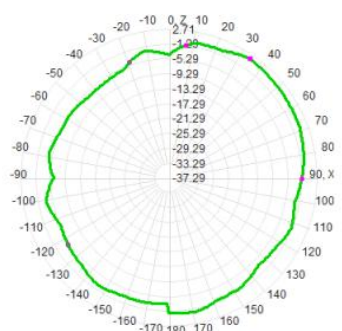
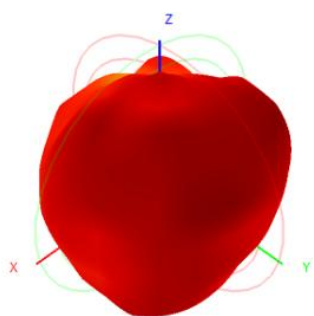
Product Number:AN2450-FPC490BX

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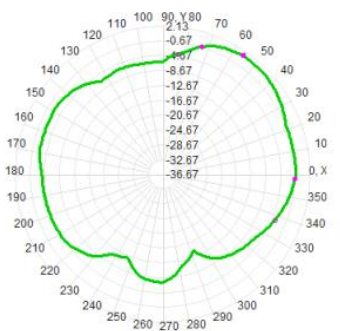
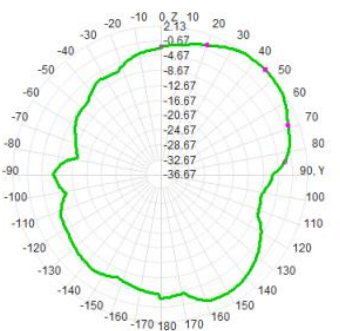
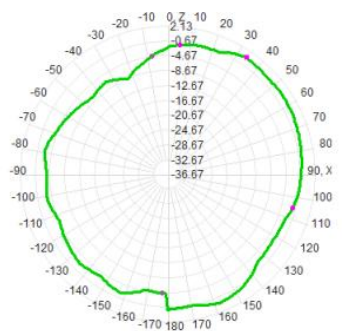
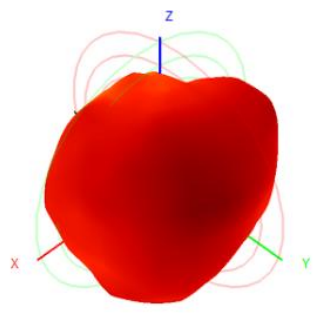
5150MHz



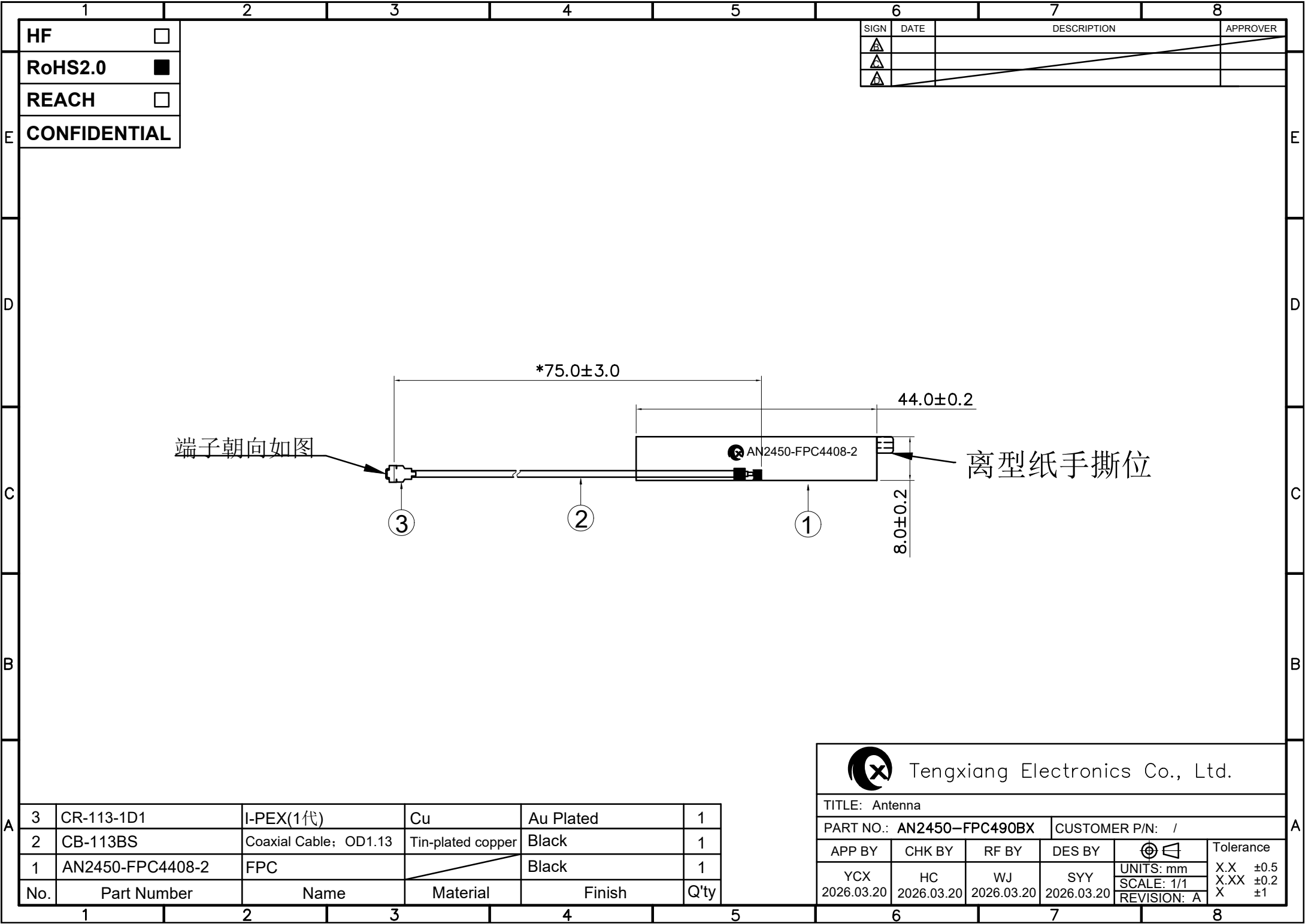
5550MHz



5850MHz



6.Mechanical Drawing See attached files



HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER

3	CR-113-1D1	I-PEX(1代)	Cu	Au Plated	1
2	CB-113BS	Coaxial Cable; OD1.13	Tin-plated copper	Black	1
1	AN2450-FPC4408-2	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

Tengxiang Electronics Co., Ltd.					
TITLE: Antenna					
PART NO.: AN2450-FPC490BX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	SY	UNITS: mm	X.X ±0.5
2026.03.20	2026.03.20	2026.03.20	2026.03.20	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X ±1

产品包装规范

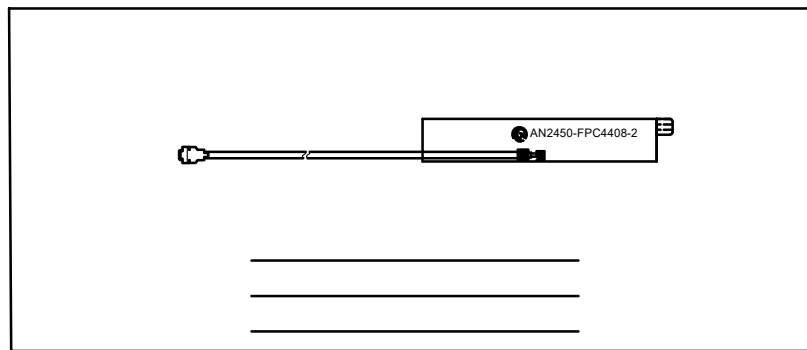
PACKING CRITERION

Date: 2026.03.20

Page: 1 of 1

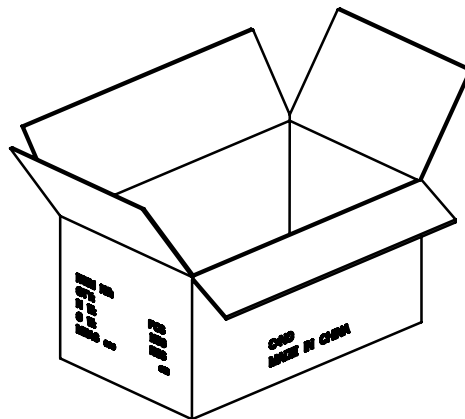
Part Number : AN2450-FPC490BX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



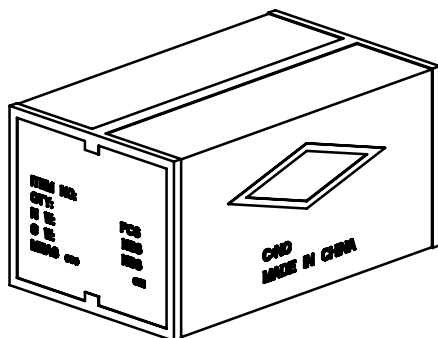
100pcs/ PE bag

2.PACKING 。

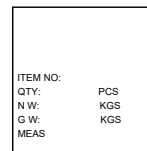


8000pcs/Carton

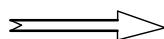
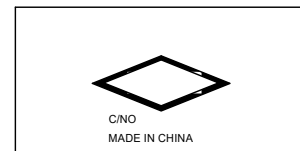
3. SEALING 。



SIDE



FRONT



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