



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-111F04BX-W

Product Name: Antenna

Specification For Approval

Date: 2025.3.18

Version: 1.0

客户名称

Customer:

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-111F04BX-W

规格描述

Description : 2.4G/5G 白色天线 1.13mm 黑色线 L=250mm+ 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	APPROVEDBY 核准	



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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.3.18	初版	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500MHz/ 5150-5850MHz
S.W.R. 驻波比	≤ 2.0 / ≤ 2.5
Antenna Gain 增益	2.24dBi / 1.97dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	ABS
Cable Type 线材规格	OD1.13mm ,Black
Connector Type 连接器规格	I-PEX
C. Environmental	
Storage Temperature 存储温度	- 30 °C ~ + 65°C
Operation Temperature 工作温度	- 30 °C ~ + 65°C

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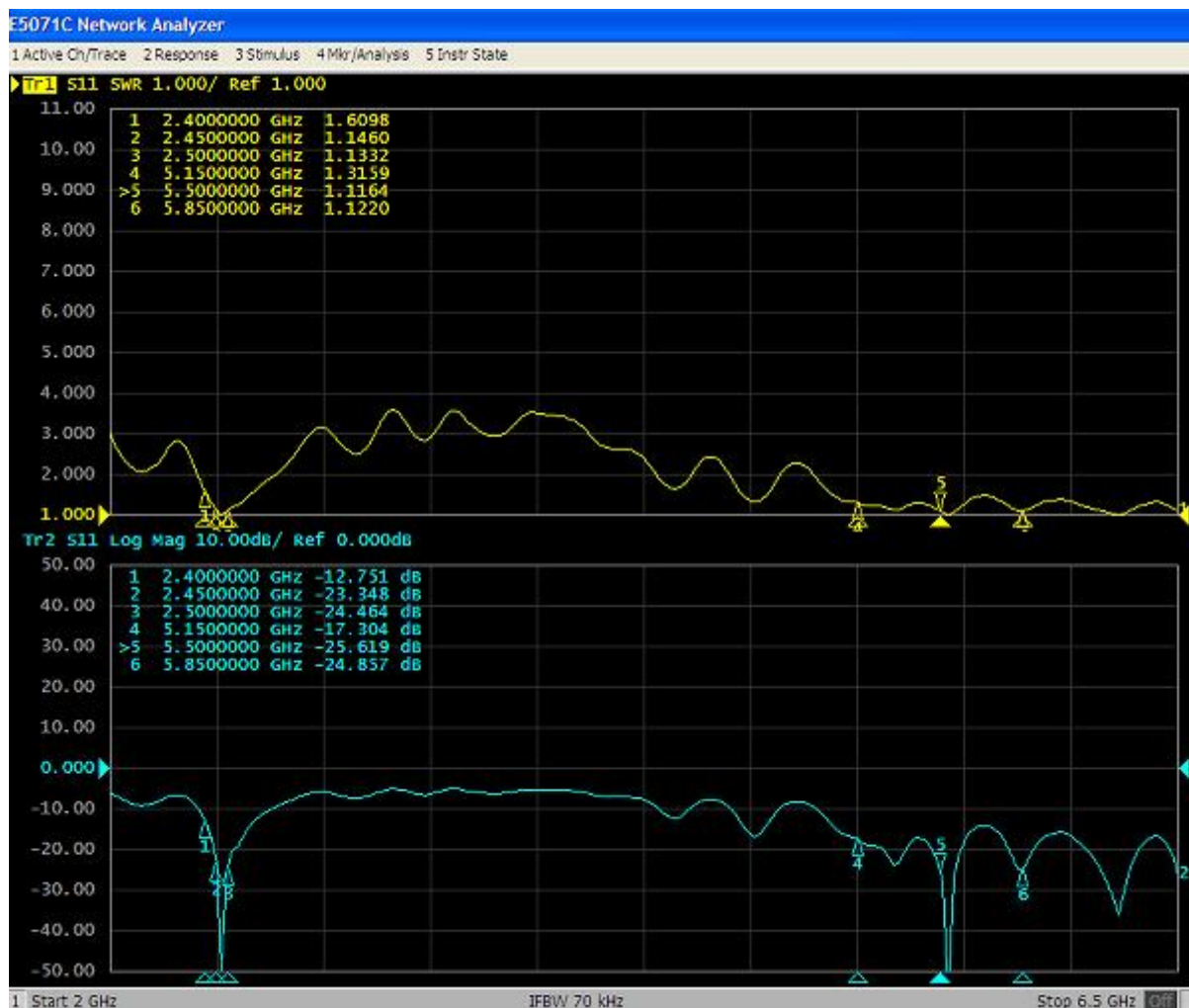
2. Characteristics and Reliability Test

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	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
3	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. $\leq 5\%$ 符合待测物规范; 频率偏移 $\leq 5\%$	PASS
4	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
5	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: $\geq 95\%$; NaCl solution: $\geq 5\%$; Time: 24H 温度 35°C; 湿度 $\geq 95\%$; 盐水浓度 $\geq 5\%$; 测试 24H	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
6	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 65°C / 12 H; -30°C / 12H RH: $\geq 90\%$; Time: 24H 温度 65°C 测试 12H 转 -30°C 测试 12H; 湿度 $\geq 90\%$; 时间 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 恢复 2H 后, 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
7	Aging test 老化	GB / T 2423.2 - 2008 Temp: 65°C; Time: 24 hours 温度 65°C, 测试 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2011/65/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)	2.24	2.22	1.99	1.73	1.49	1.86	1.72	1.76	1.51	1.53	1.37
Efficiency (%)	63.42	65.80	66.08	66.44	63.40	68.05	65.06	65.56	61.88	62.46	61.37

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
1.97	1.56	1.55	1.31	1.30	1.71	1.45	1.50	1.57	1.57	1.52	1.26	1.57	1.55	1.63
41.87	43.75	45.42	43.56	45.88	47.12	48.00	43.37	49.85	50.19	50.03	42.86	43.92	46.59	44.06

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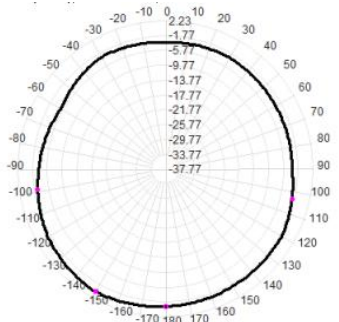
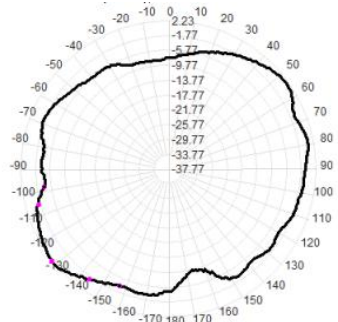
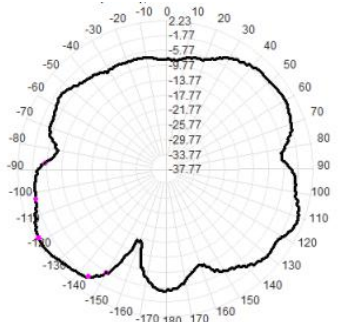
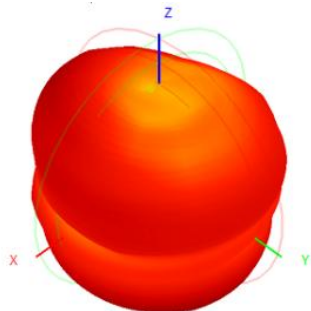
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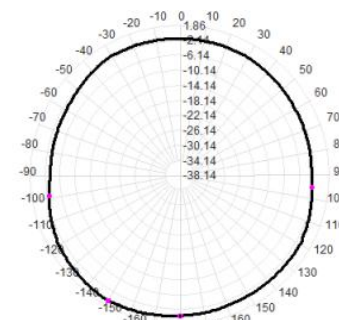
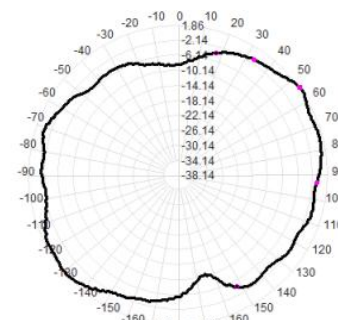
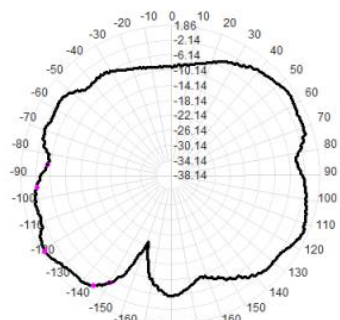
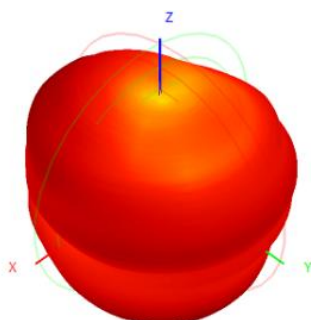
YZ

XY

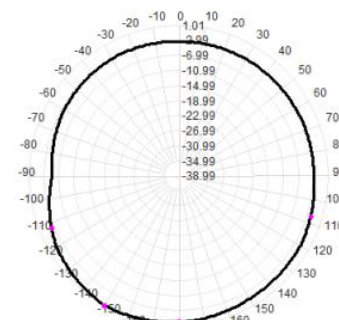
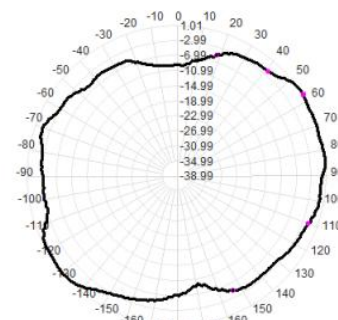
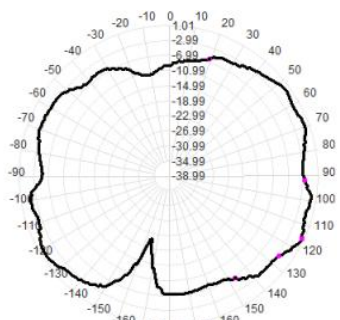
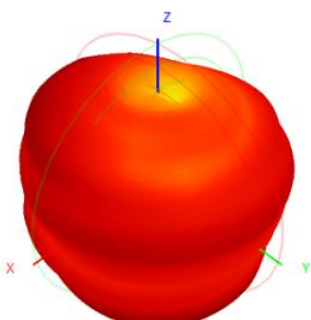
2400MHz



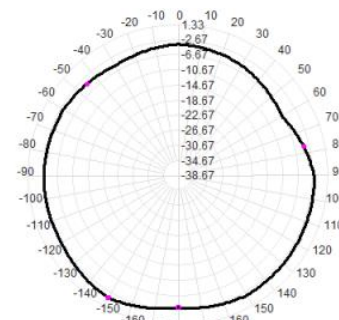
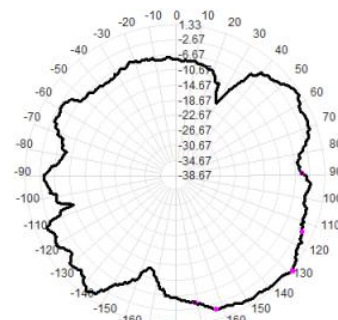
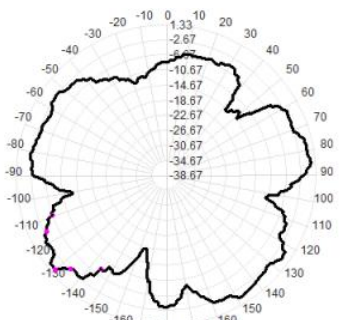
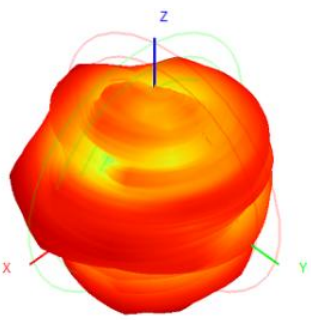
2450MHz



2500MHz



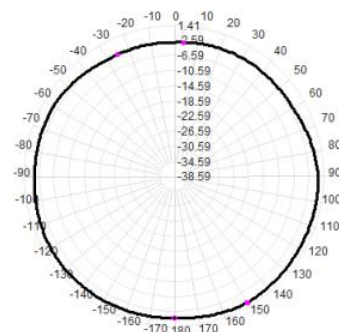
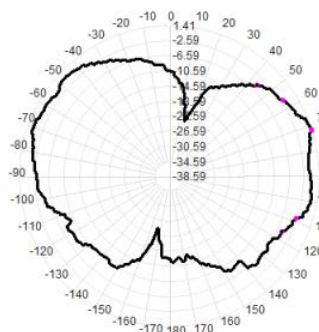
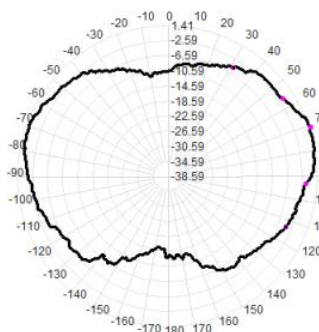
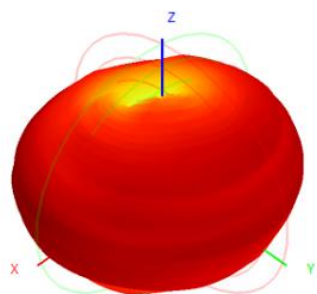
5150MHz



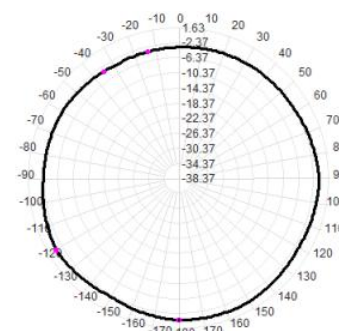
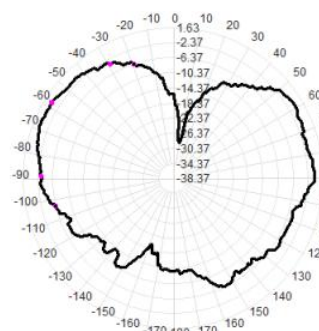
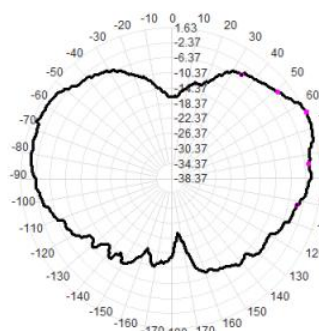
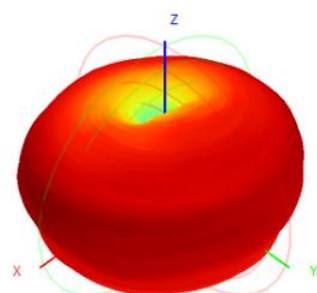
Product Number:AN2450-111F04BX-W

Product Name: Antenna

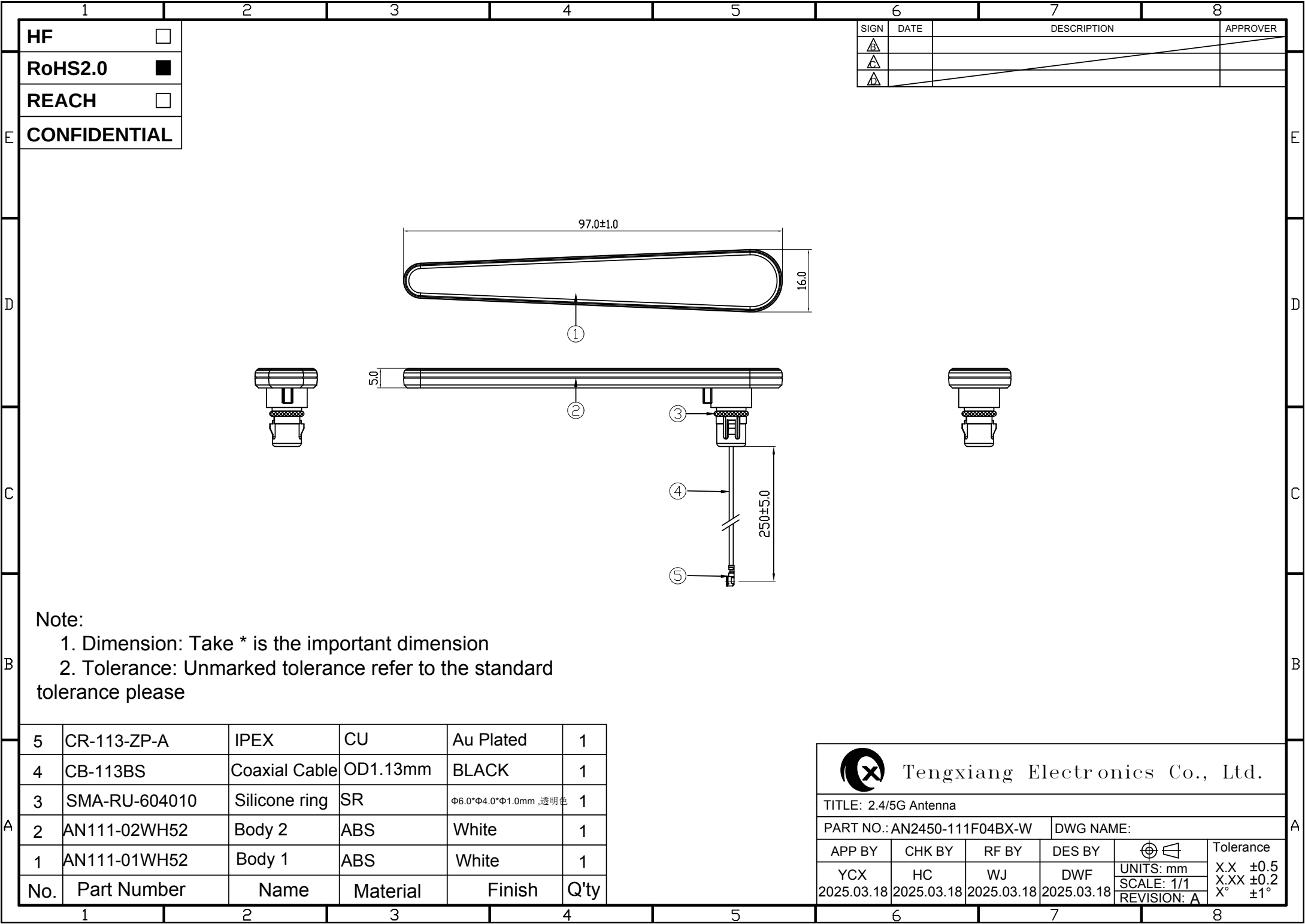
5550MHz



5850MHz



5. Mechanical Drawing See attached files



Note:

1. Dimension: Take * is the important dimension
2. Tolerance: Unmarked tolerance refer to the standard tolerance please

5	CR-113-ZP-A	IPEX	CU	Au Plated	1
4	CB-113BS	Coaxial Cable	OD1.13mm	BLACK	1
3	SMA-RU-604010	Silicone ring	SR	Φ6.0*Φ4.0*Φ1.0mm ,透明色	1
2	AN1111-02WH52	Body 2	ABS	White	1
1	AN1111-01WH52	Body 1	ABS	White	1
No.	Part Number	Name	Material	Finish	Q'ty

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

 Tengxiang Electronics Co., Ltd.					
TITLE: 2.4/5G Antenna					
PART NO.: AN2450-111F04BX-W				DWG NAME:	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWF		X.X ±0.5
2025.03.18	2025.03.18	2025.03.18	2025.03.18		X.XX ±0.2
				UNITS: mm	X° ±1°
				SCALE: 1/1	
				REVISION: A	

產品包裝規範

PACKING CRITERION

Date: 2025.03.18

Page: 1 of 1

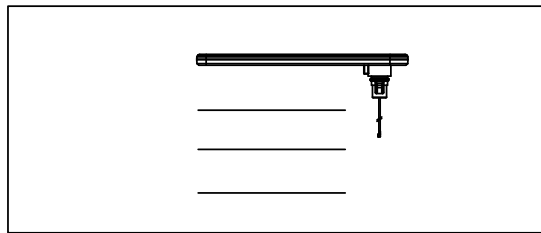
Part Number : AN2450-111F04BX-W

Revision : A

Name: Antenna

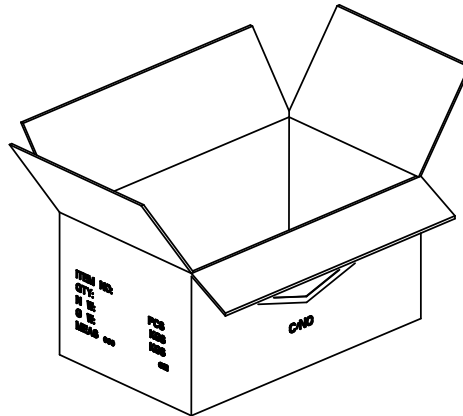
Customer : ALL

1 . Enter PE bag。



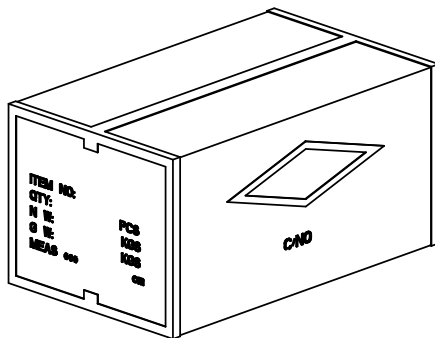
50pcs/ PE bag

2.PACKING 。

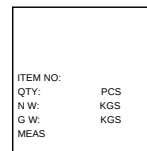


1000pcs/Carton

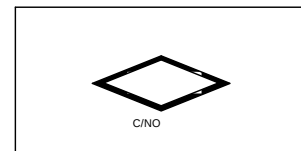
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF