



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-120F15BX-W

Product Name: Antenna

Specification For Approval

Date:2025.3.24

Version: 1.0

客户名称

Customer:

九安 Jiu'an

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-120F15BX-W

规格描述

Description : 2.4G /5G white antenna1.13mm black lineL=250mm+ IPEX

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制作	Lu Ting 路婷	TESTED BY 检测	
CHECKED BY 审核	Hu Chao 胡超	CHECKED BY 审核	
Q.C.DEPT. 品管	Zhou Zhihong 周志红	Q.C.DEPT. 品管	
APPROVED BY 核准	Wei Jia 韦佳	APPROVEDBY 核准	



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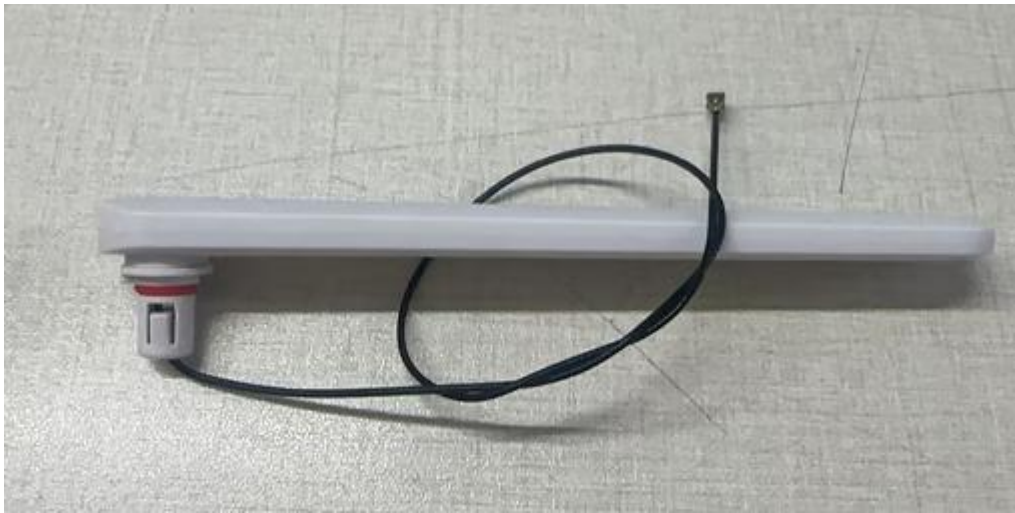
Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.3.24	first edition	

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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 / ≤ 2.5 (带线测试)
Antenna Gain 增益	1.69dBi / 1.62dBi
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

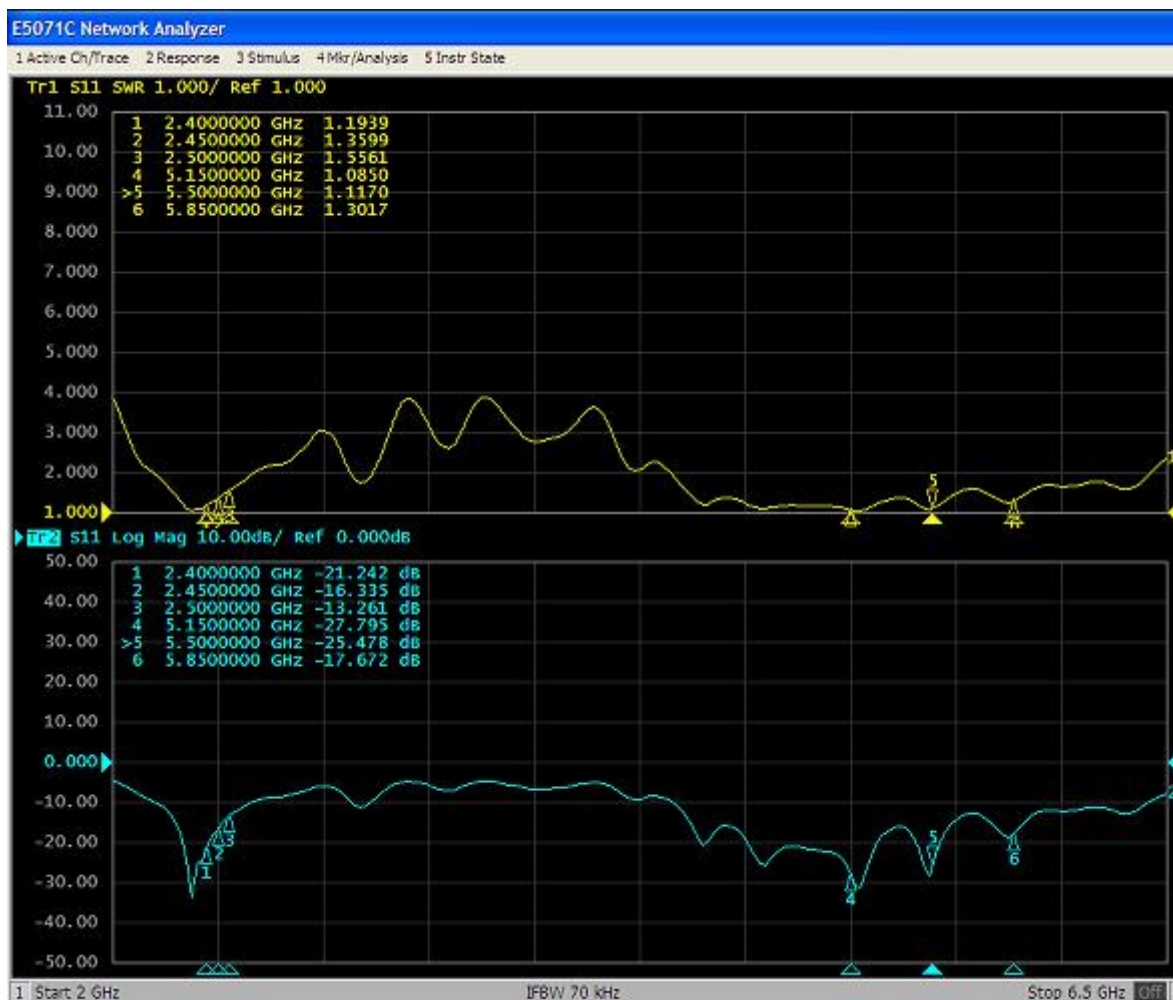
Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置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

带线测试 With line test



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)	1.20	1.36	1.34	1.69	1.51	1.38	1.18	1.04	1.00	1.12	1.17
Efficiency (%)	65.79	66.29	67.49	72.64	70.34	70.78	70.23	66.67	66.18	62.05	61.05

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
1.34	1.30	1.42	1.59	1.36	1.57	1.36	1.15	1.56	1.30	1.62	1.45	1.48	1.25	1.13
50.31	50.21	51.89	54.32	53.11	54.32	56.59	59.48	54.01	53.01	55.79	51.27	56.21	52.09	50.34

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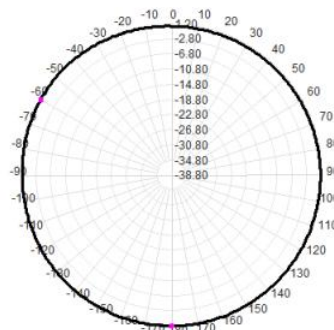
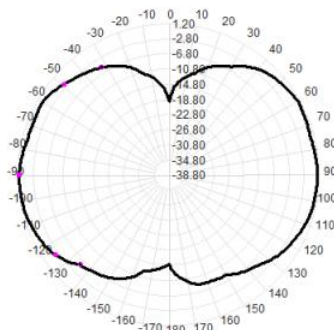
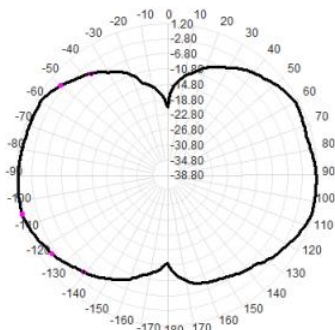
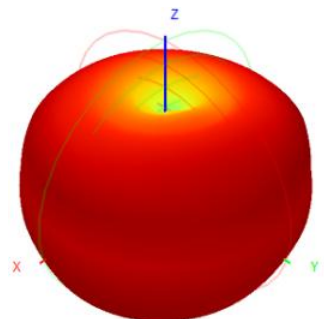
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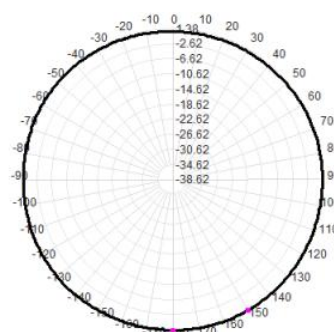
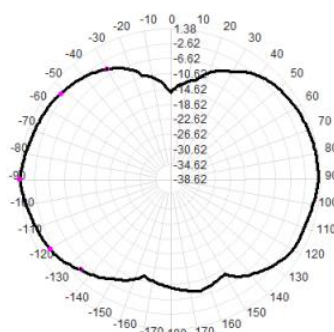
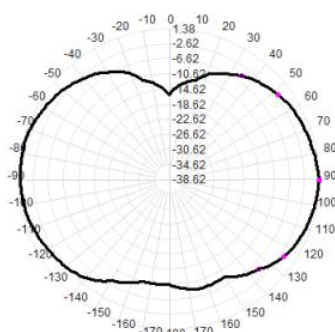
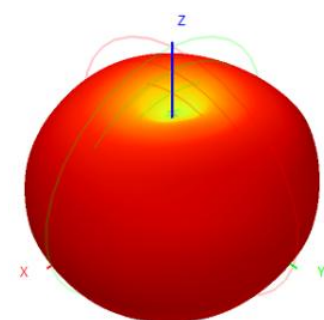
YZ

XY

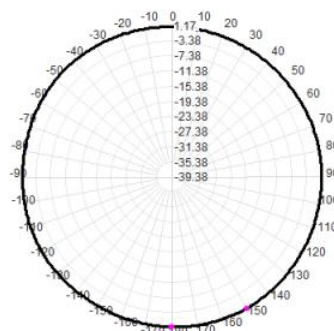
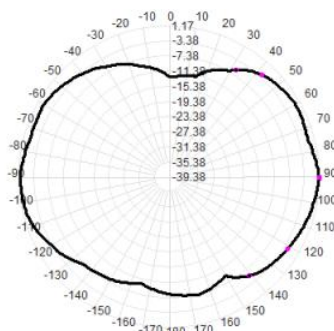
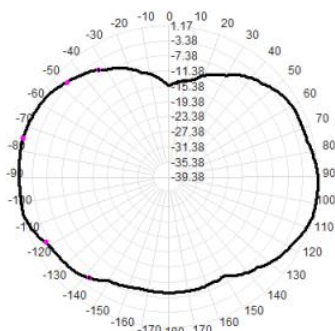
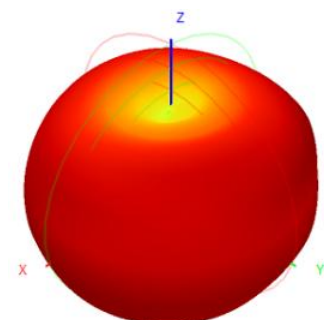
2400MHz



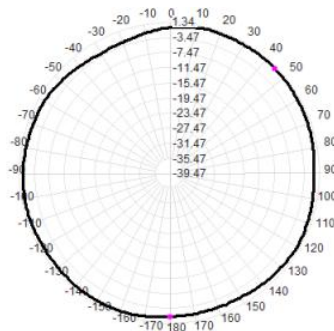
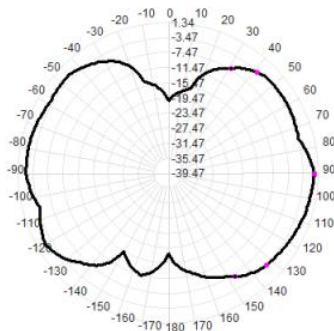
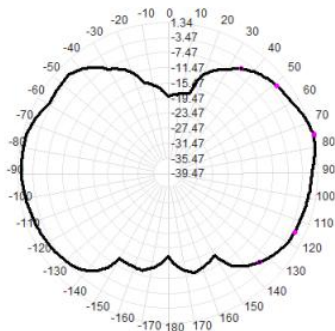
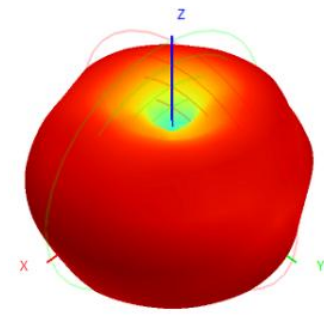
2450MHz



2500MHz



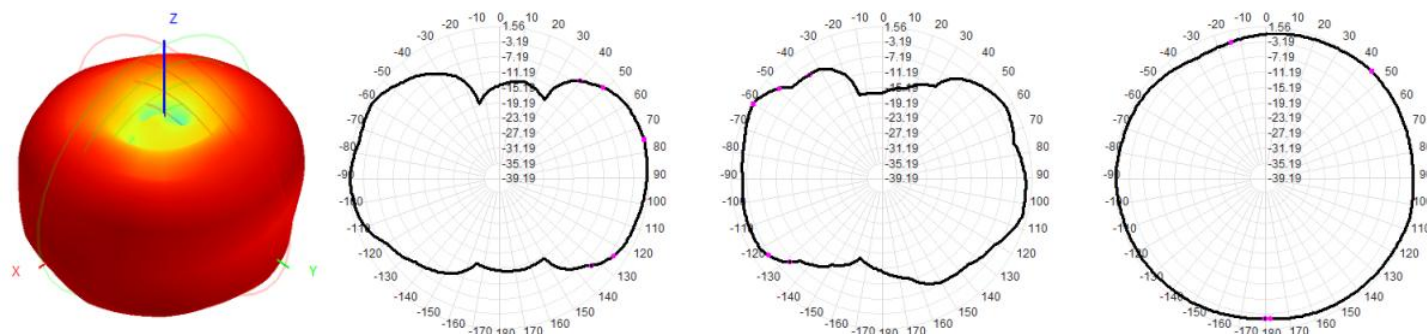
5150MHz



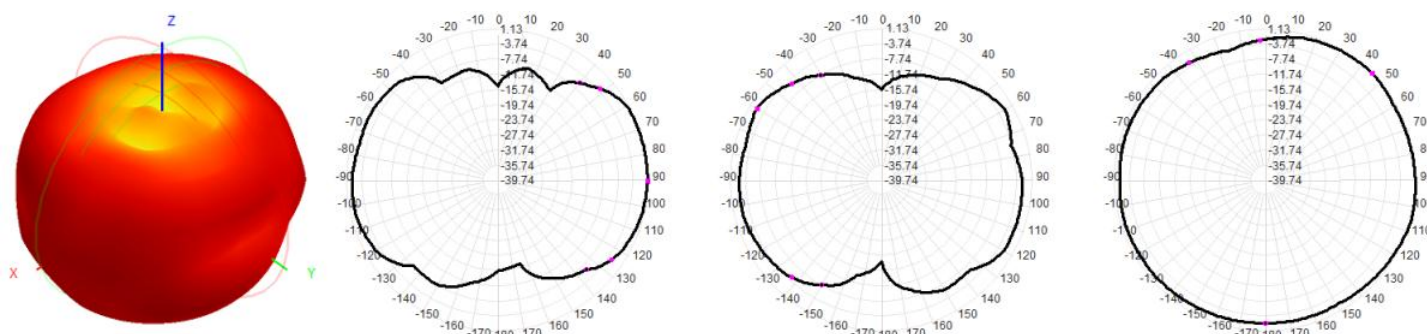
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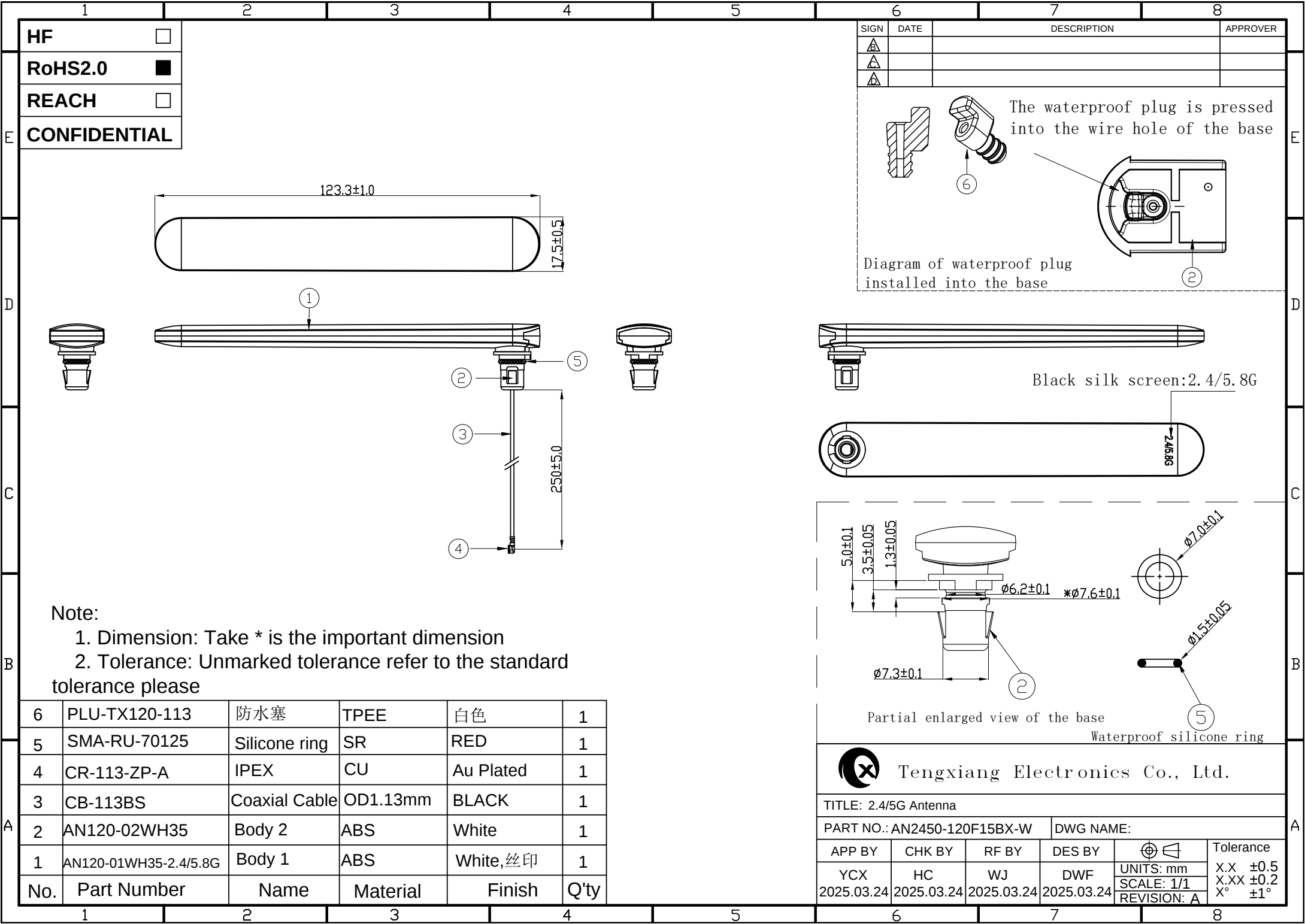
5550MHz



5850MHz

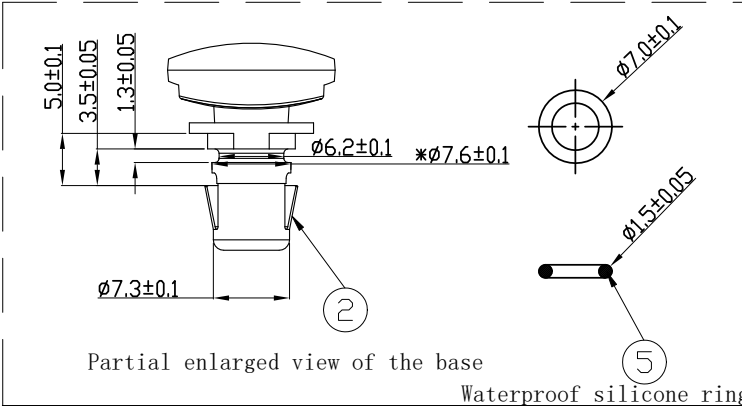
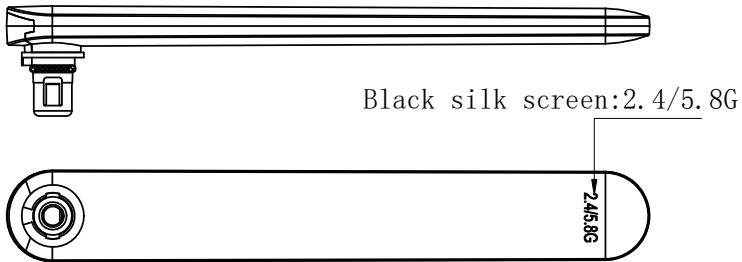
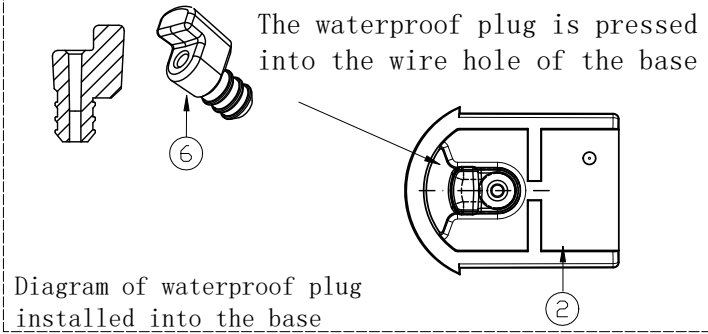


5. Mechanical Drawing See attached files



HF ☐
RoHS2.0 ☒
REACH ☐
CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER



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

6	PLU-TX120-113	防水塞	TPEE	白色	1
5	SMA-RU-70125	Silicone ring	SR	RED	1
4	CR-113-ZP-A	IPEX	CU	Au Plated	1
3	CB-113BS	Coaxial Cable	OD1.13mm	BLACK	1
2	AN120-02WH35	Body 2	ABS	White	1
1	AN120-01WH35-2.4/5.8G	Body 1	ABS	White,丝印	1
No.	Part Number	Name	Material	Finish	Q'ty

Tengxiang Electronics Co., Ltd.					
TITLE: 2.4/5G Antenna					
PART NO.: AN2450-120F15BX-W			DWG NAME:		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWF	UNITS: mm	X.X ±0.5
2025.03.24	2025.03.24	2025.03.24	2025.03.24	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1°

產品包裝規範

PACKING CRITERION

Date: 2025.03.24

Page: 1 of 1

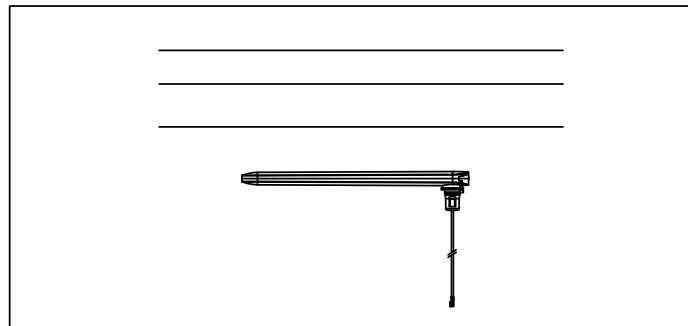
Part Number : AN2450-120F15BX-W

Revision :A

Name: Antenna

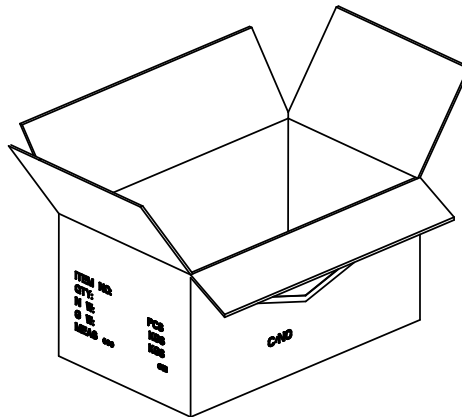
Customer : ALL

1 . Enter PE bag。



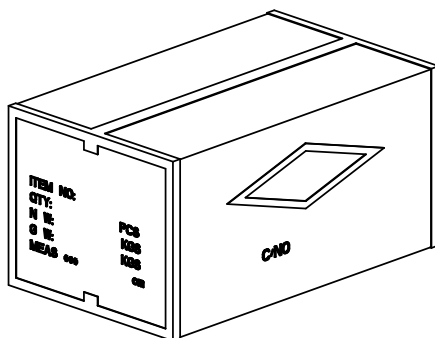
50pcs/ PE bag

2.PACKING 。

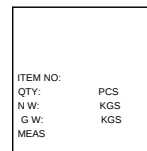


1000pcs/Carton

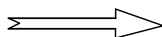
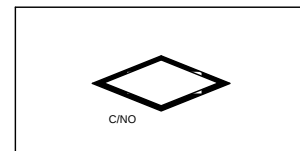
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF