



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-02C01BX-W

Product Name: Antenna

Specification For Approval

Date: 2024.9.30

Version: 2.0

客户名称

Customer:

九安

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-02C01BX-W

规格描述

Description :

2.4G/5G 白色天线 1.13mm 黑色线 L=240mm+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	祁志鹏	Q.C.DEPT. 品管	
APPROVED BY 核准	韦佳	APPROVEDBY 核准	



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Index:

- 1. Specification (规格)
- 2. Characteristics and Reliability Test (产品特性和可靠性测试标准)
- 3. Antenna - S Parameter Test Data (样品测试数据)
- 4. Antenna - Radiation Pattern Test Data (辐射模式测试数据)
- 5. Mechanical and Packing Drawing (图纸包装规范)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.8.16	初版	
2.0	2024.9.30	B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	2.17dBi / 2.19dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	TPE/ABS/PC+PBT/POM
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
Antenna Color Storage life 天线颜色存储寿命	< 2 year

Product Number: AN2450-02C01BX-W

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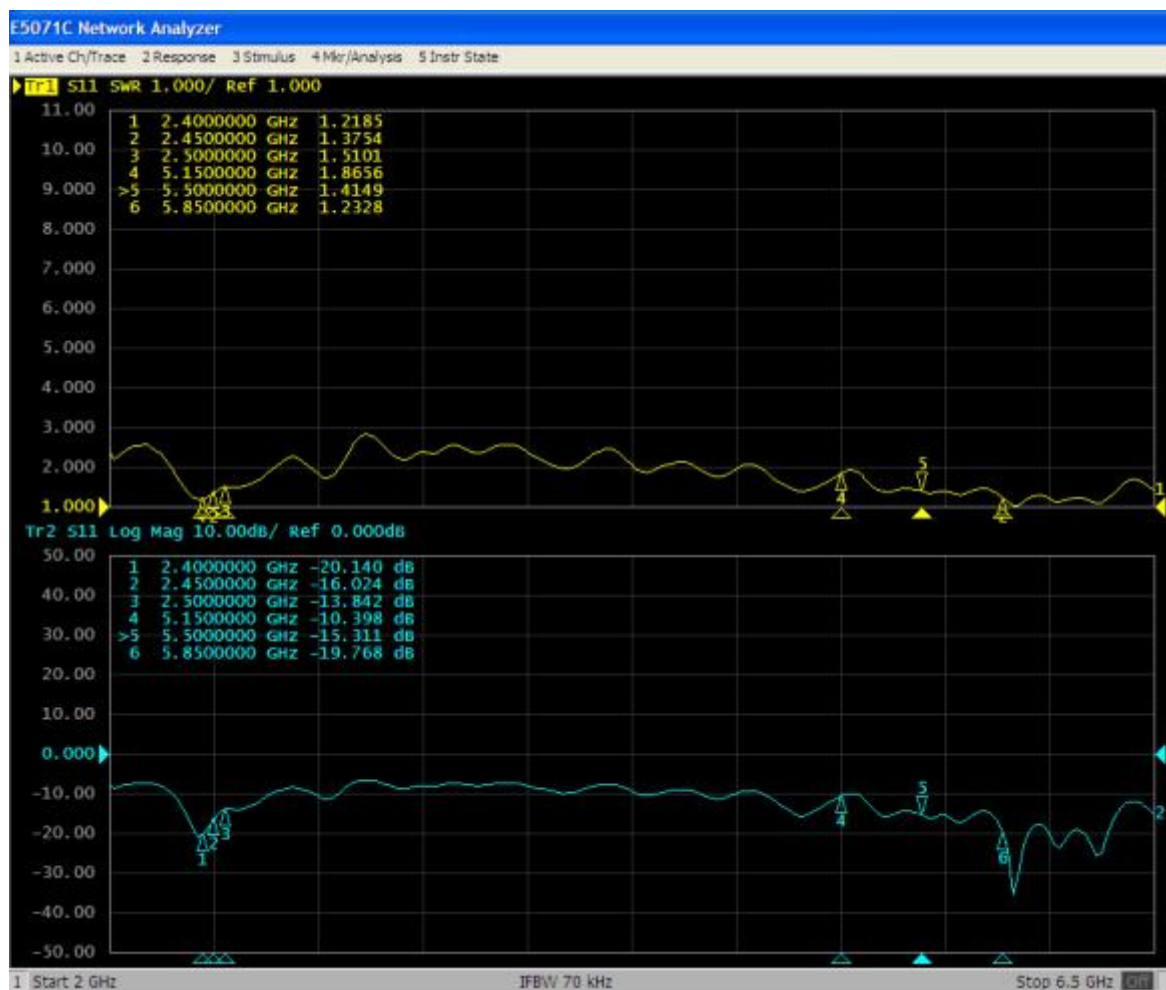
2. Characteristics and Reliability Test

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

Product Number: AN2450-02C01BX-W

Product Name: Antenna

3. Antenna - S Parameter Test Data



Product Number:AN2450-02C01BX-W

Product Name: Antenna

4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0
Gain (dBi)	1.66	1.77	1.70	1.83	1.93	2.17	2.01	1.98	1.51	1.27	1.62	1.59
Efficiency (%)	61.19	62.46	60.26	61.22	62.60	67.32	66.95	69.92	66.73	65.37	61.85	52.14

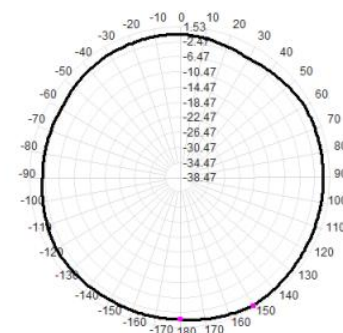
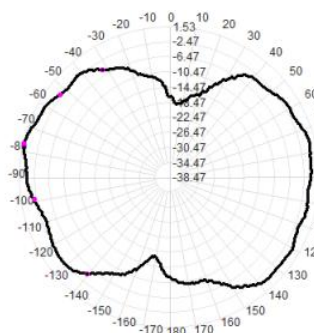
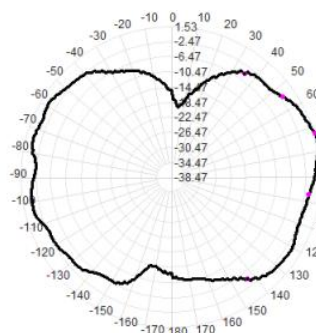
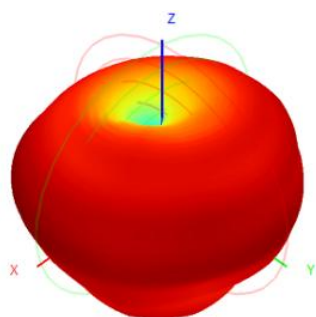
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
1.59	1.72	1.59	1.66	1.59	1.55	2.15	1.43	1.75	1.67	2.09	1.70	2.03	2.19	1.68
52.14	53.27	53.98	54.25	53.38	54.66	52.31	53.18	56.87	53.96	51.24	50.92	51.12	50.08	52.51

XZ

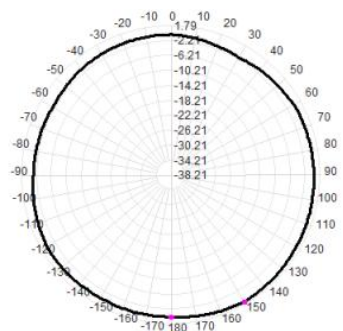
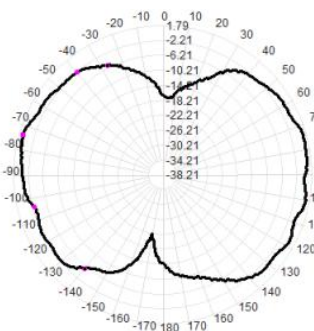
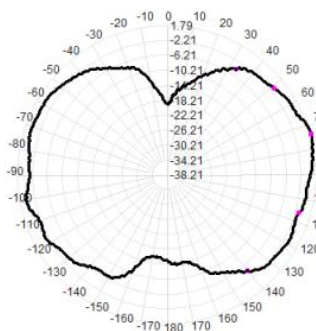
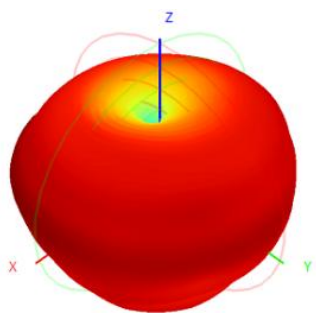
YZ

XY

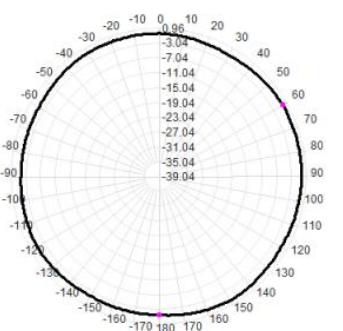
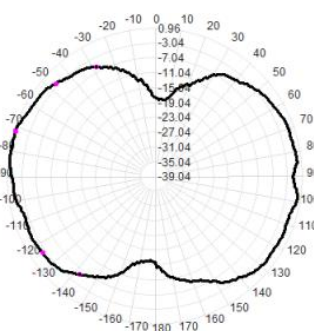
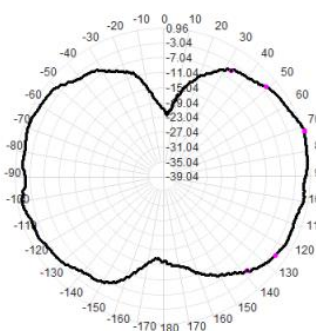
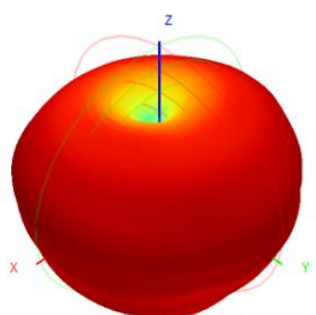
2400MHz



2450MHz



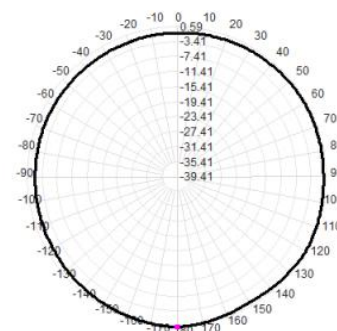
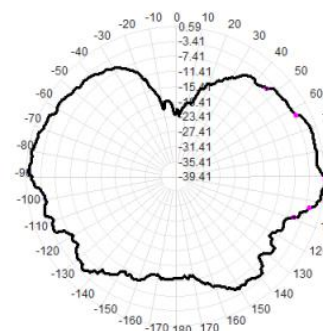
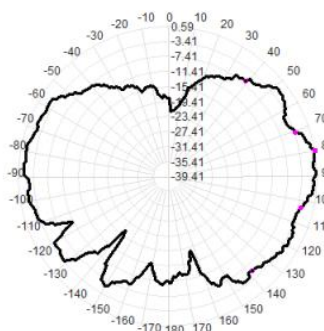
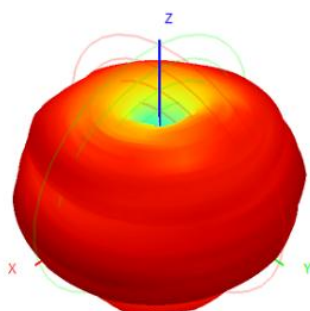
2500MHz



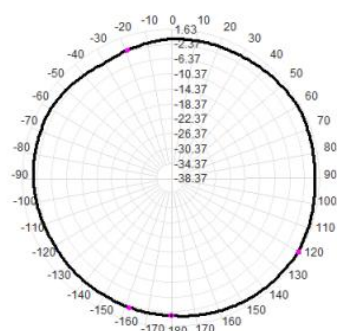
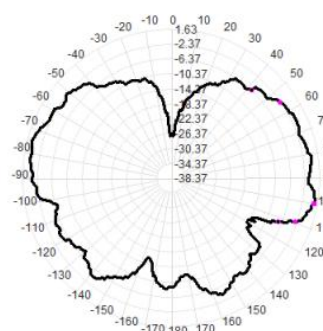
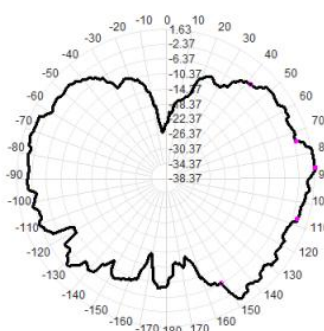
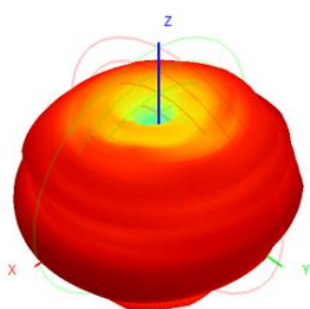
Product Number:AN2450-02C01BX-W

Product Name: Antenna

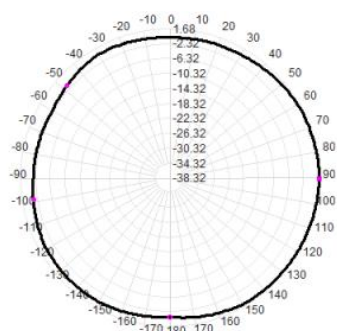
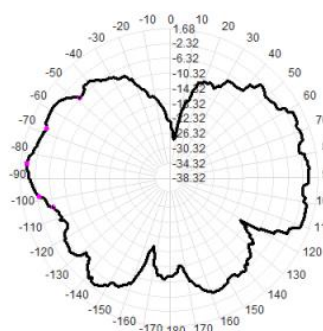
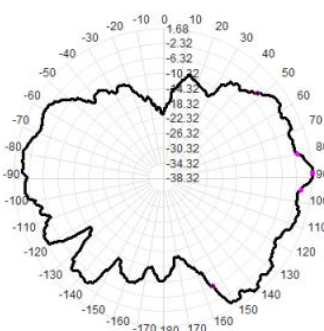
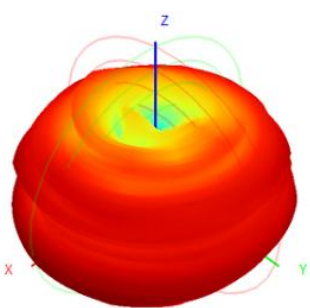
5150MHz



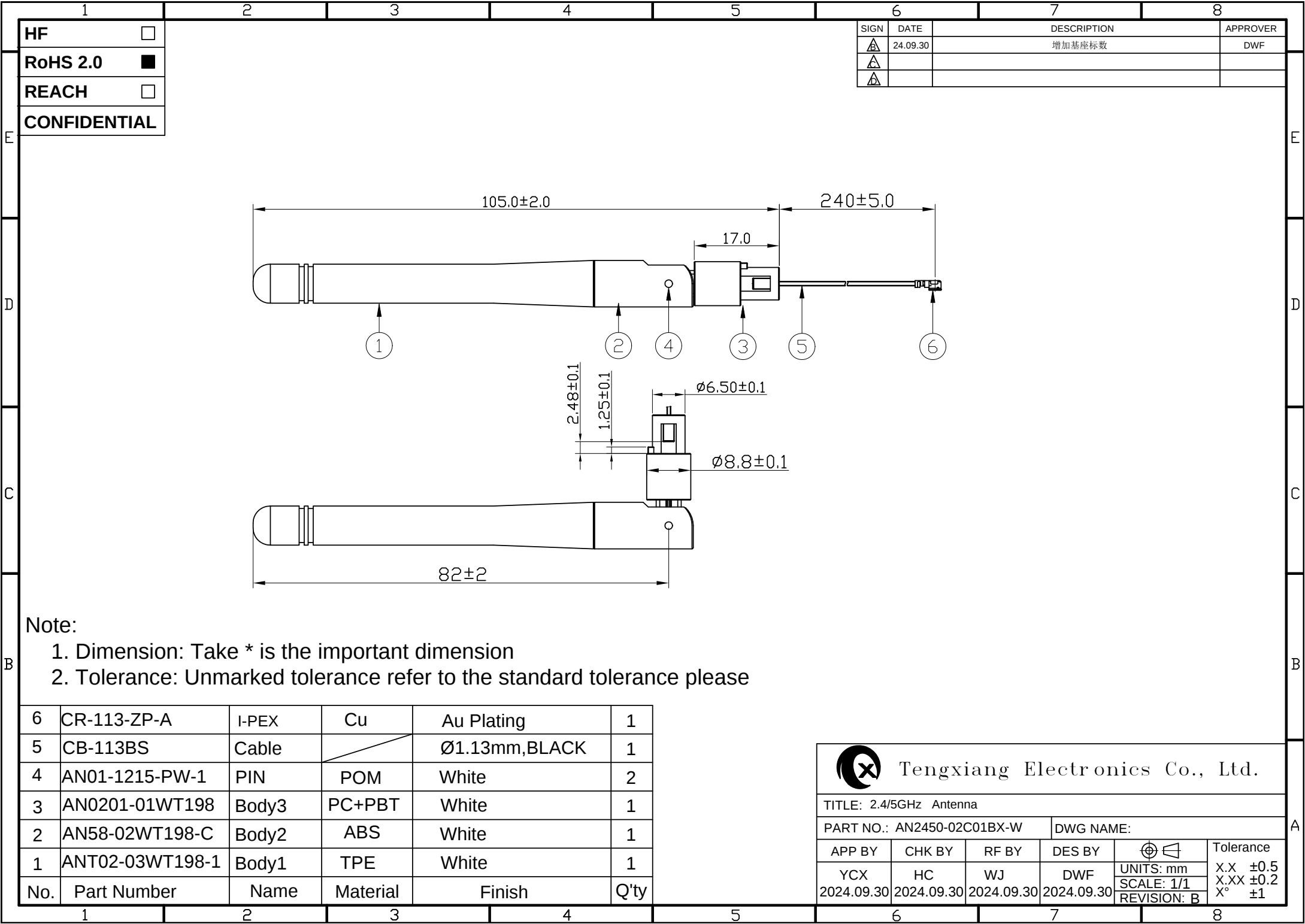
5550MHz



5850MHz



5. Mechanical Drawing See attached files



HF ☐

RoHS 2.0 ☒

REACH ☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER
	24.09.30	增加基座标数	DWF

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

6	CR-113-ZP-A	I-PEX	Cu	Au Plating	1
5	CB-113BS	Cable		Ø1.13mm,BLACK	1
4	AN01-1215-PW-1	PIN	POM	White	2
3	AN0201-01WT198	Body3	PC+PBT	White	1
2	AN58-02WT198-C	Body2	ABS	White	1
1	ANT02-03WT198-1	Body1	TPE	White	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: 2.4/5GHz Antenna					
PART NO.: AN2450-02C01BX-W			DWG NAME:		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWF	UNITS: mm	X.X ±0.5
2024.09.30	2024.09.30	2024.09.30	2024.09.30	SCALE: 1/1	X.XX ±0.2
				REVISION: B	X° ±1

產品包裝規範

PACKING CRITERION

Date: 2024.09.30

Page: 1 of 1

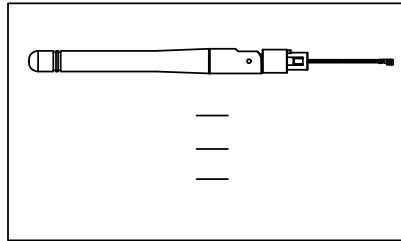
Part Number : AN2450-02C01BX-W

Revision : B

Name: Antenna

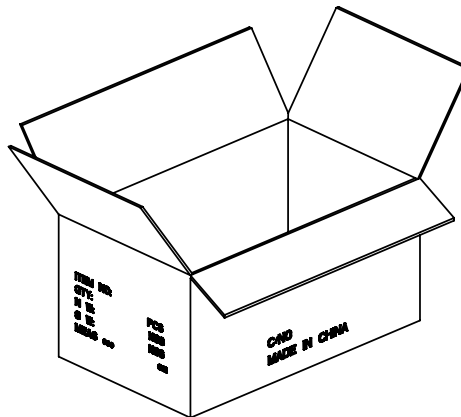
Customer : ALL

1 . Enter PE bag。



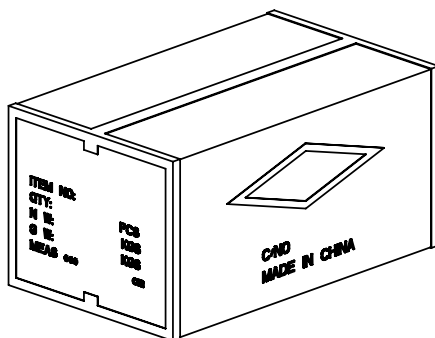
50pcs/ PE bag

2.PACKING 。

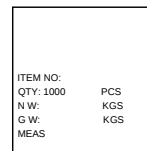


1000pcs/Carton

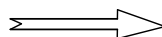
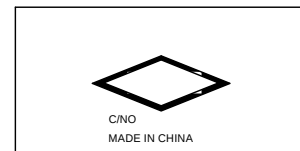
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF