



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: 2024.8.16

Version: 1.0

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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Product Number:AN2450-02C01BX-W

Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.8.16	初版	

Product Number:AN2450-02C01BX-W

Product Name: Antenna

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

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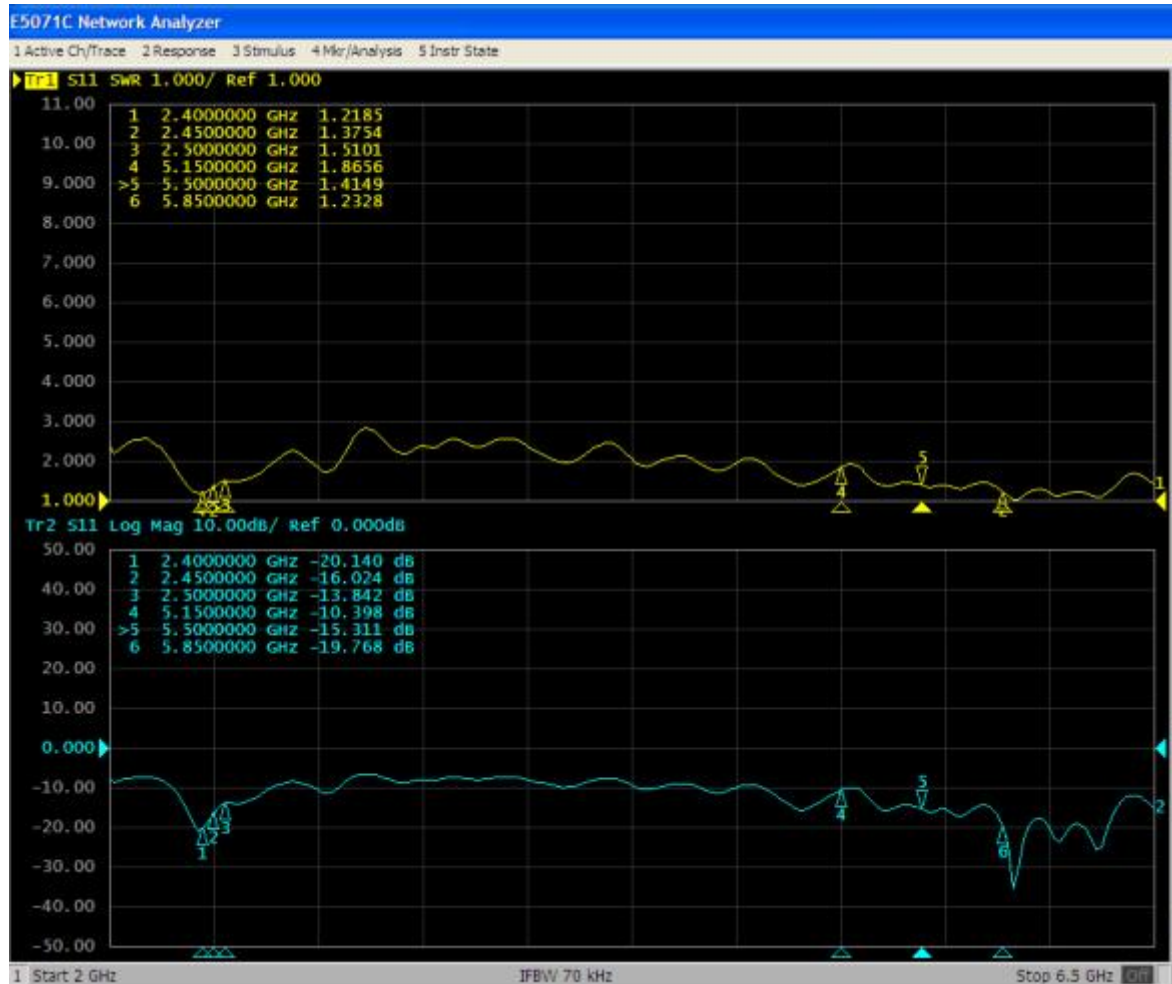
2. Characteristics and Reliability Test

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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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

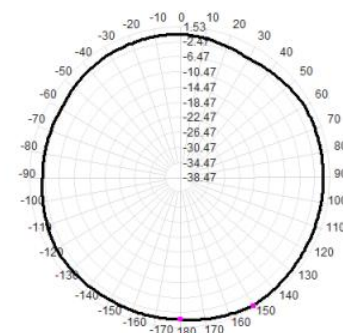
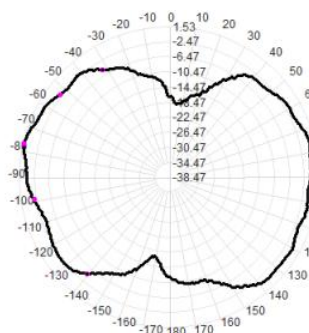
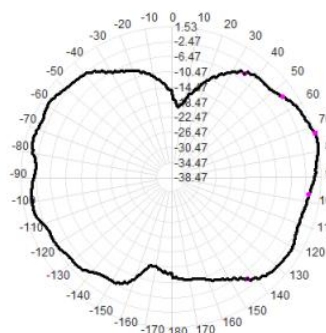
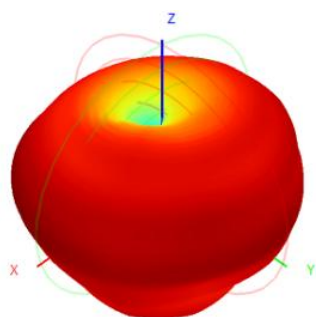
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1.59	1.72	1.59	1.66	1.59	1.55	2.15	1.43	1.75	1.67	2.09	1.70	2.03	2.19	1.68
52.14	53.27	53.98	54.25	53.38	54.66	52.31	53.18	56.87	53.96	51.24	50.92	51.12	50.08	52.51

XZ

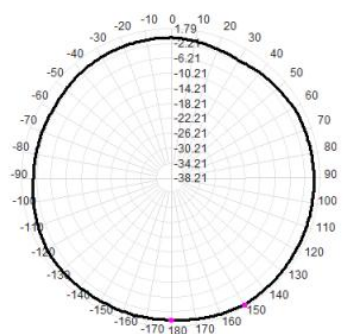
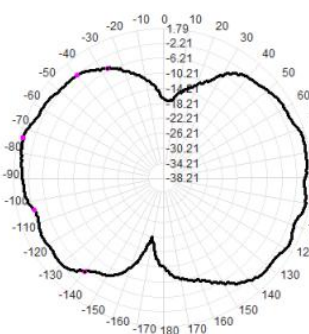
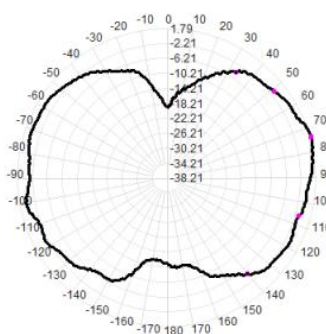
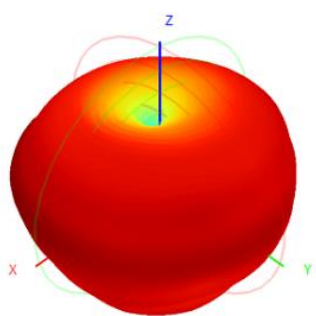
YZ

XY

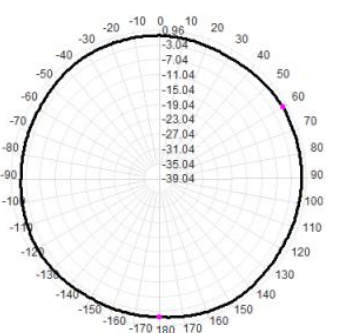
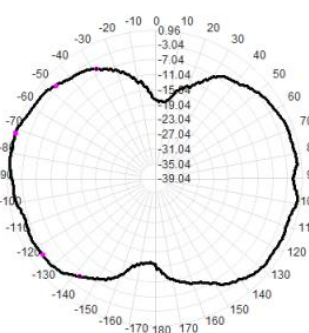
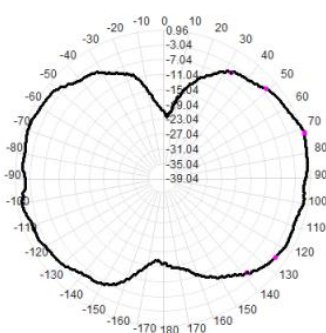
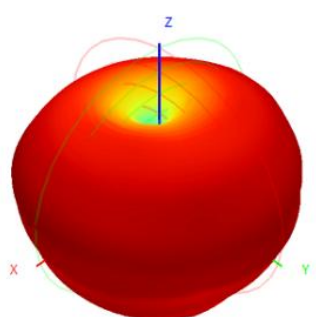
2400MHz



2450MHz



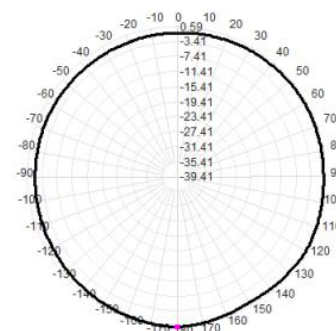
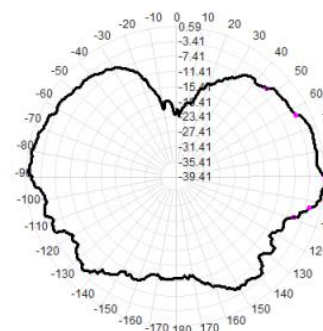
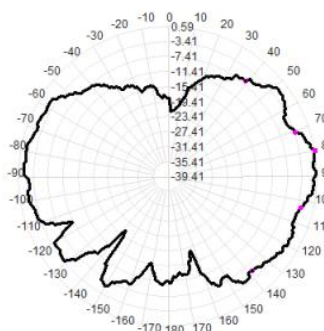
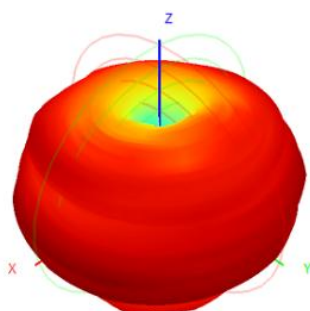
2500MHz



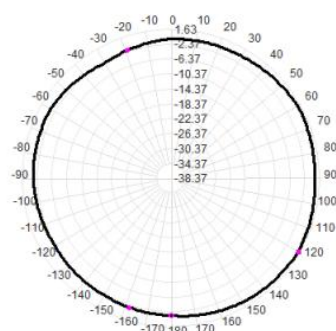
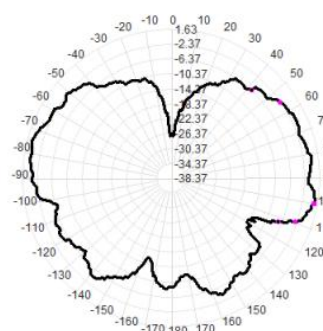
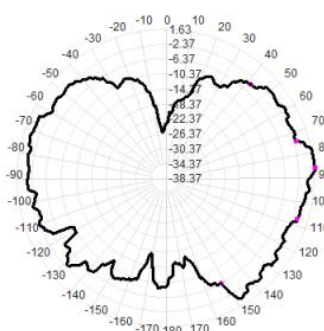
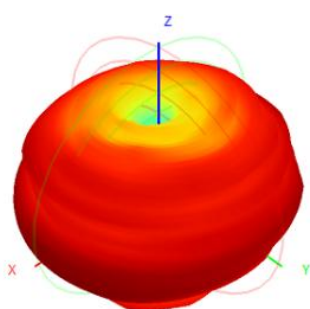
Product Number:AN2450-02C01BX-W

Product Name: Antenna

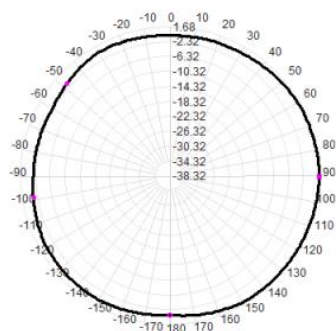
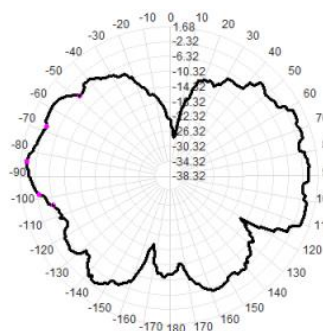
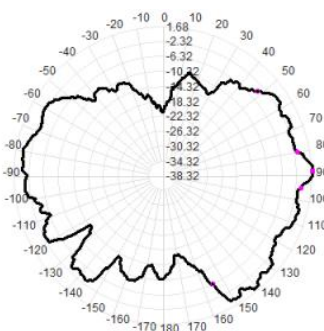
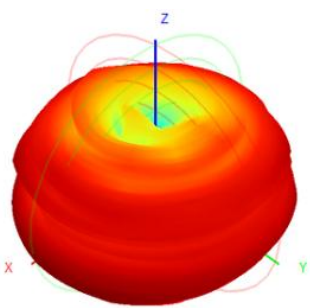
5150MHz



5550MHz



5850MHz



5. Mechanical Drawing See attached files

1	2	3	4	5	6	7	8																																										
HF☐ RoHS 2.0☒ REACH☐ CONFIDENTIAL					<table><tr><td>SIGN</td><td>DATE</td><td>DESCRIPTION</td><td>APPROVER</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>			SIGN	DATE	DESCRIPTION	APPROVER																																						
SIGN	DATE	DESCRIPTION	APPROVER																																														
Note: 1. Dimension: Take * is the important dimension 2. Tolerance: Unmarked tolerance refer to the standard tolerance please																																																	
<table><tr><td>6</td><td>CR-113-ZP-A</td><td>I-PEX</td><td>Cu</td><td>Au Plating</td><td>1</td></tr><tr><td>5</td><td>CB-113BS</td><td>Cable</td><td></td><td>Ø1.13mm,BLACK</td><td>1</td></tr><tr><td>4</td><td>AN01-1215-PW-1</td><td>PIN</td><td>POM</td><td>White</td><td>2</td></tr><tr><td>3</td><td>AN0201-01WT198</td><td>Body3</td><td>PC+PBT</td><td>White</td><td>1</td></tr><tr><td>2</td><td>AN58-02WT198-C</td><td>Body2</td><td>ABS</td><td>White</td><td>1</td></tr><tr><td>1</td><td>ANT02-03WT198-1</td><td>Body1</td><td>TPE</td><td>White</td><td>1</td></tr><tr><td>No.</td><td>Part Number</td><td>Name</td><td>Material</td><td>Finish</td><td>Q'ty</td></tr></table>								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
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																																												
1	2	3	4	5	6	7	8																																										

Tengxiang Electronics Co., Ltd.

TITLE: 2.4GHz Antenna			
PART NO.: AN2450-02C01BX-W		DWG NAME:	
APP BY	CHK BY	RF BY	DES BY
YCX	HC	WJ	DWF
2024.08.16	2024.08.16	2024.08.16	2024.08.16
UNITS: mm			Tolerance
SCALE: 1/1			X.X ±0.5
REVISION: A			X.XX ±0.2
			X° ±1

產品包裝規範

PACKING CRITERION

Date: 2024.08.16

Page: 1 of 1

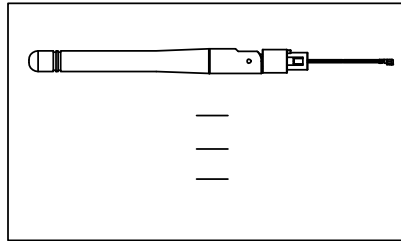
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Revision : A

Name: Antenna

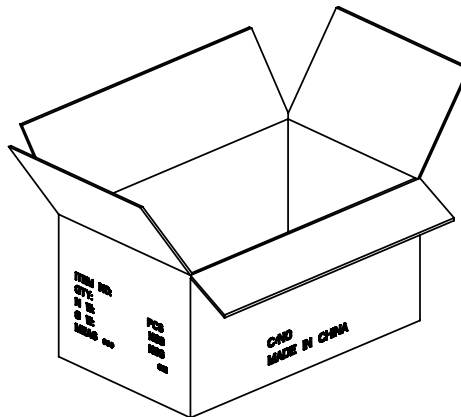
Customer : ALL

1 . Enter PE bag。



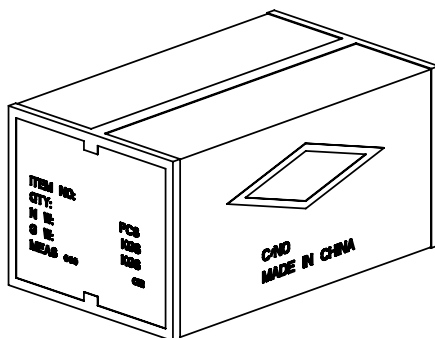
50pcs/ PE bag

2.PACKING 。

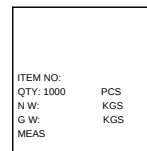


1000pcs/Carton

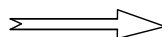
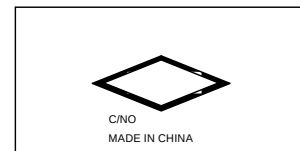
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF