



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2400-143F02GX-W

Product Name: Antenna

Specification For Approval

Date: 2025.3.14

Version: 1.2

客户名称

Customer:

东莞市安冉智能科技有限公司

客户料号

Customer P/N:

110060029

腾祥料号

TX P/N:

AN2400-143F02GX-W

规格描述

Description:

2.4G 白色天线 1.13mm 灰色线 L=290mm+ IPEX

TESTED BY 检测	路
TESTED BY 检测	



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中国广东省东莞市长安镇沙头区沙涌路 53 号

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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)

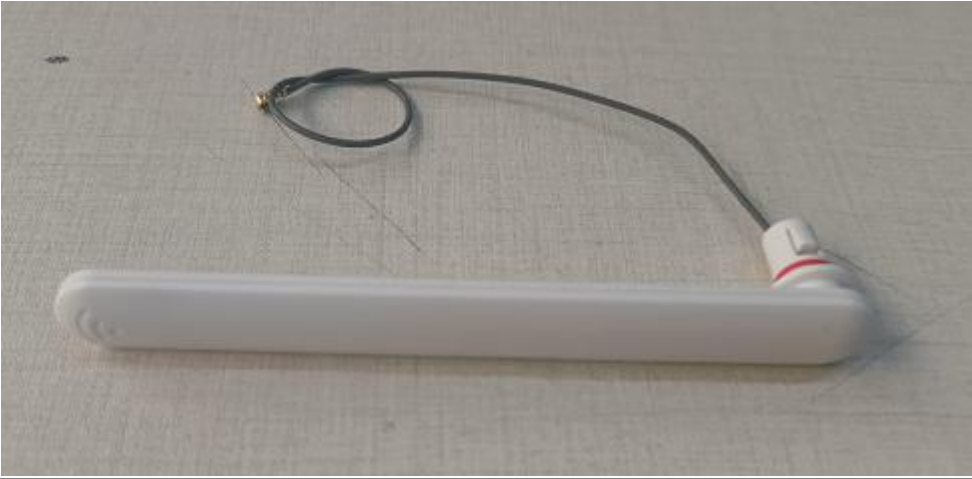
Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.3.22	1.0	
1.1	2024.9.9	1.1	增加上下盖间隙管控标准，0.25mm 以下
1.2	2025.3.14	1.2	上下盖换塑胶原材料厂商

Product Number: AN2400-143F02GX-W

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500MHz
S.W.R. 驻波比	<= 2.0
Antenna Gain 增益	2.45dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	ABS+PC
Cable Type 线材规格	OD1.13mm ,gray
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

Product Number: AN2400-143F02GX-W

Product Name: Antenna

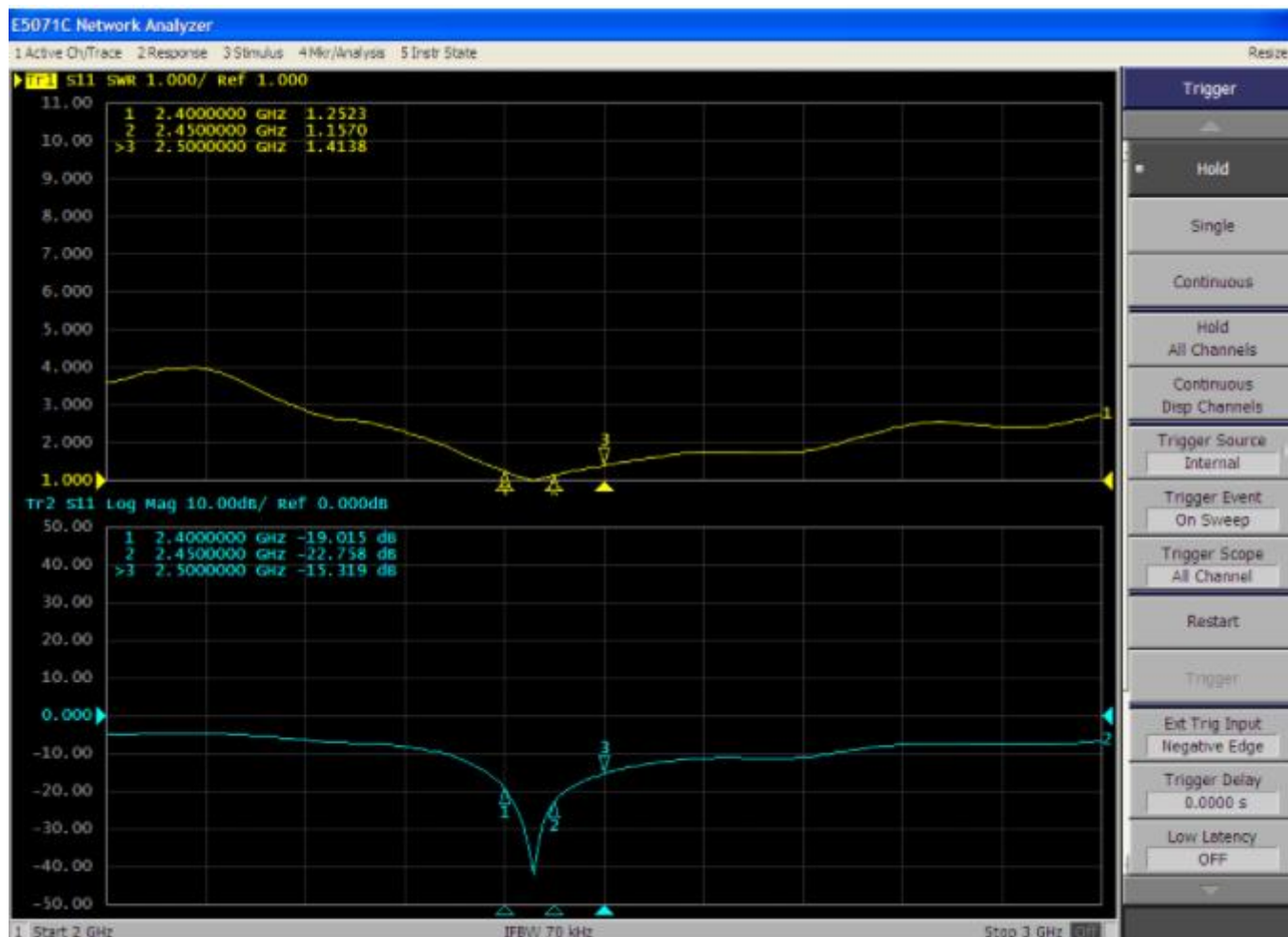
2. Characteristics and Reliability Test

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: AN2400-143F02GX-W

Product Name: Antenna

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)	2.31	2.45	2.22	2.24	2.40	2.28	2.13	2.21	2.25	2.08	2.19
Efficiency (%)	55.18	58.02	58.32	59.25	61.29	61.63	59.66	59.95	56.67	56.88	55.92

Product Number: AN2400-143F02GX-W

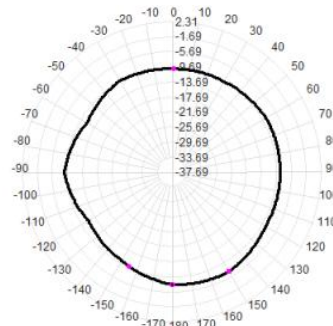
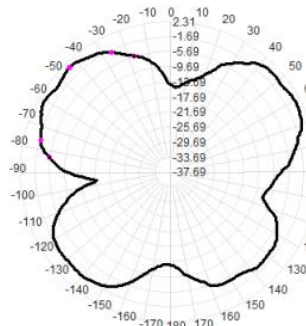
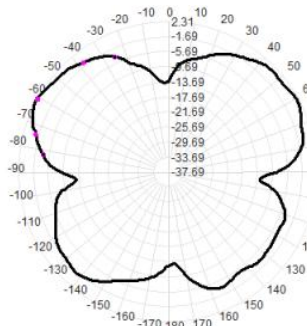
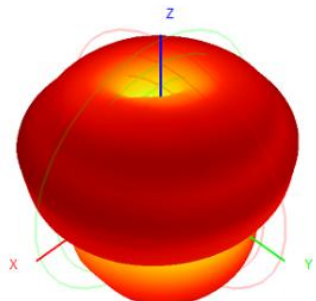
Product Name: Antenna

XZ

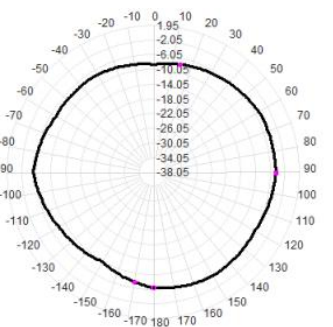
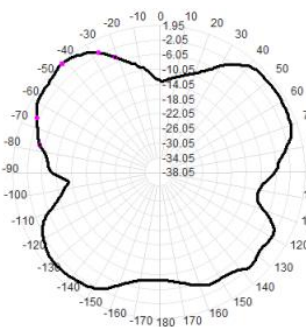
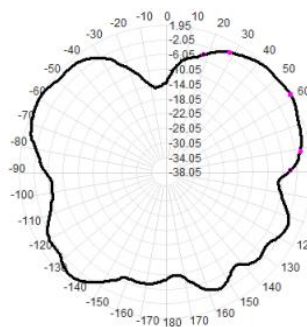
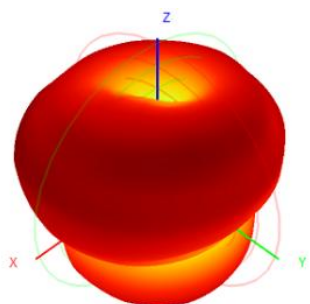
YZ

XY

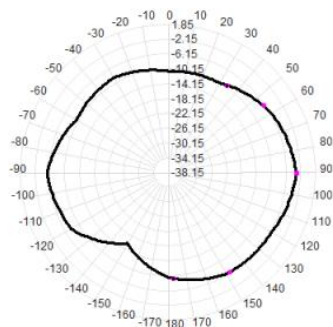
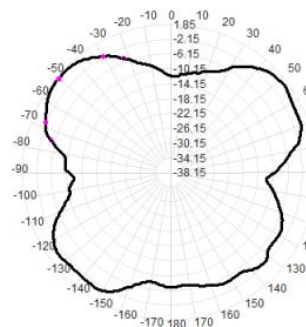
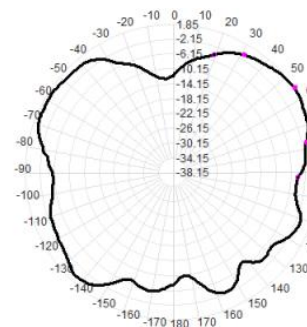
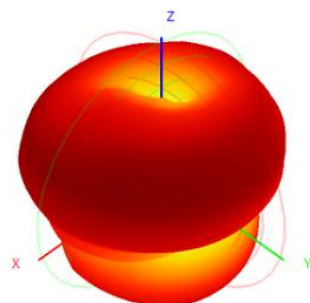
2400MHz



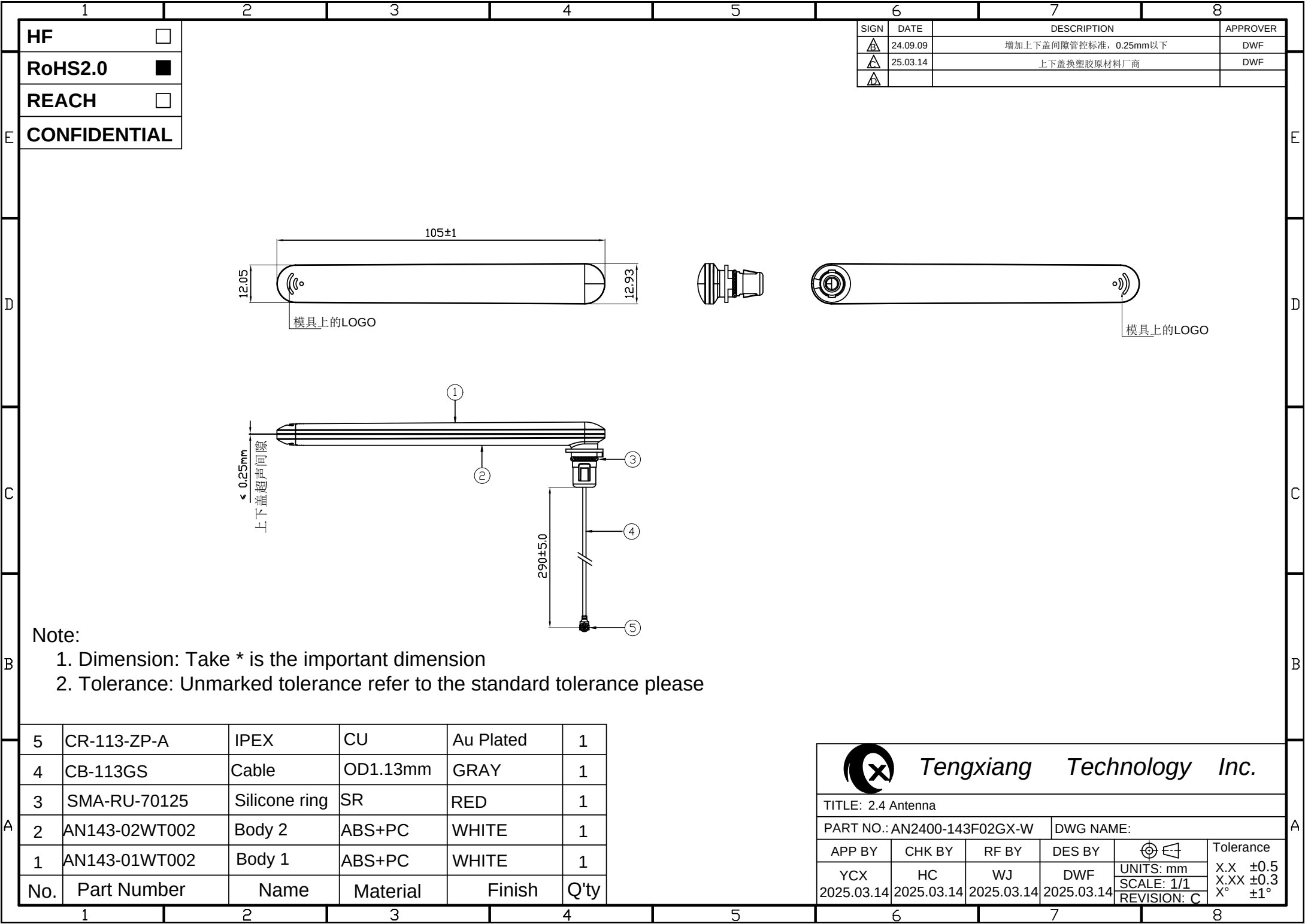
2450MHz



2500MHz



5. Mechanical Drawing See attached files



HF ☐

RoHS2.0 ☒

REACH ☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER
	24.09.09	增加上下盖间隙管控标准，0.25mm以下	DWF
	25.03.14	上下盖换塑胶原材料厂商	DWF

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-113GS	Cable	OD1.13mm	GRAY	1
3	SMA-RU-70125	Silicone ring	SR	RED	1
2	AN143-02WT002	Body 2	ABS+PC	WHITE	1
1	AN143-01WT002	Body 1	ABS+PC	WHITE	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: 2.4 Antenna					
PART NO.: AN2400-143F02GX-W			DWG NAME:		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWF	UNITS: mm	X.X ±0.5
2025.03.14	2025.03.14	2025.03.14	2025.03.14	SCALE: 1/1	X.XX ±0.3
				REVISION: C	X° ±1°

產品包裝規範

PACKING CRITERION

Date: 2025.03.14

Page: 1 of 1

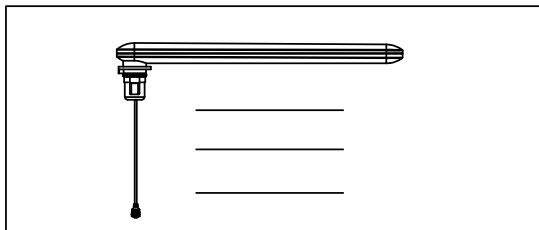
Part Number : AN2400-143F02GX-W

Revision : C

Name: Antenna

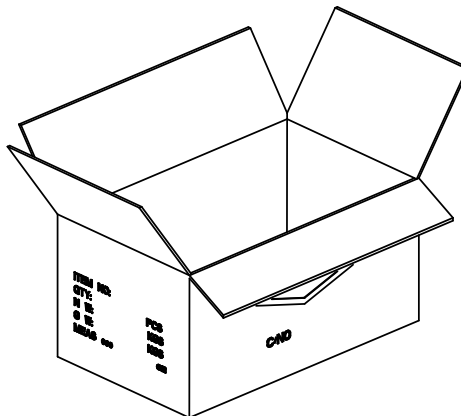
Customer : ALL

1 . Enter PE bag。



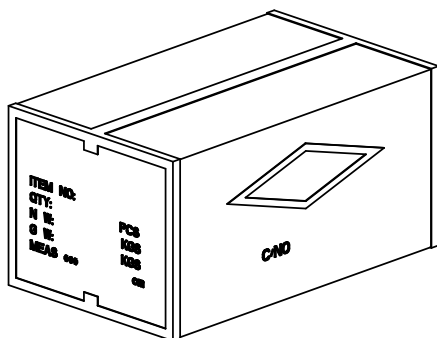
50pcs/ PE bag

2.PACKING 。

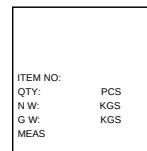


700pcs/Carton

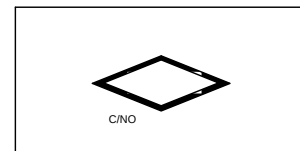
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF