



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2457-23E01BO-B

Product Name: Antenna

Specification For Approval

Date: 2023.3.3

Version: 1.0

客户名称 四海伽蓝

Customer:

Shenzhen Sihaijialan Electronic Technology Co., Ltd.

客户料号

Customer P/N:

腾祥料号

TX P/N:

AN2457-23E01BO-B

规格描述

Description:

Black antenna 0.81mm Black thread L=30mm

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	梁凤珍	Q.C.DEPT. 品管	
APPROVED BY 核准	韦佳	APPROVEDBY 核准	



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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz /5150-5850MHz/5900-7125MHz
S.W.R. 驻波比	≤ 2.0 / ≤ 2.5
Antenna Gain 增益	1.90dBi / 1.86 dBi /3.87dBi
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	OD0.81mm ,Black
Connector Type 连接器规格	/
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

2. Characteristics and Reliability Test

Product Number: AN2457-23E01BO-B

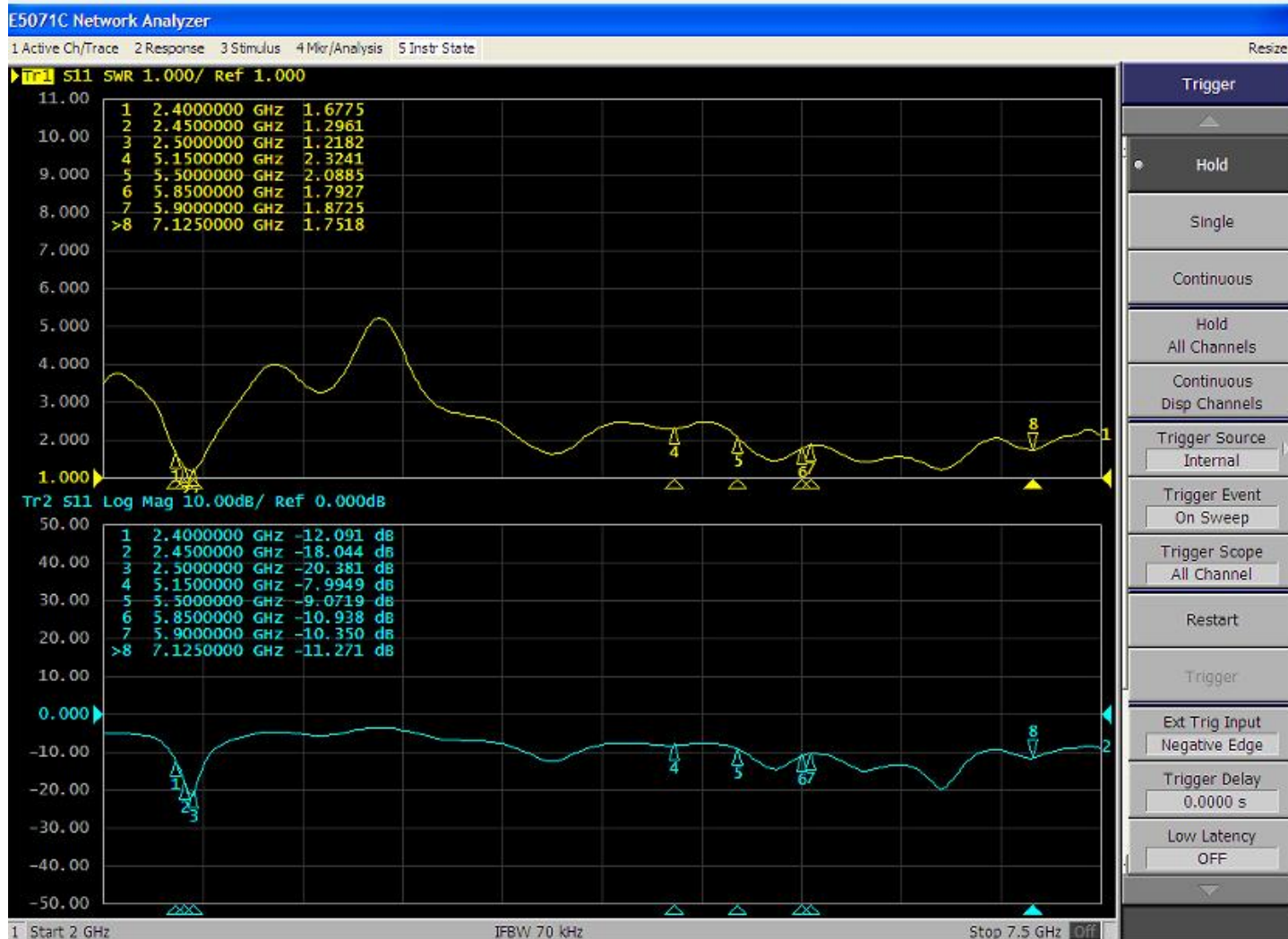
Product Name: Antenna

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	Torque Test 扭力	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal 单独定义产品端子之顺时针及逆时针扭力	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$ 符合待测物规范; 频率偏移 $\leq 5\%$	PASS
5	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
6	Waterproof 防水	With Reference to IEC 60529 // IP Code Definition 参考 IEC60529 IP 定义	Directive DUT specification 符合待测物规范	PASS
7	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
8	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
9	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
10	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

3. Antenna - S Parameter Test Data

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Product Name: Antenna



4. Antenna - Radiation Pattern Test Data

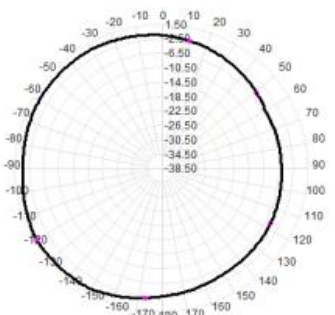
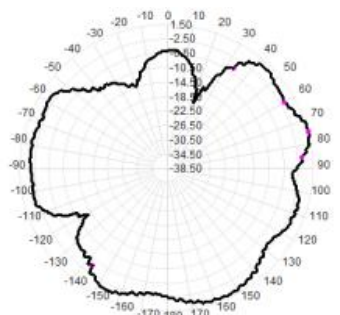
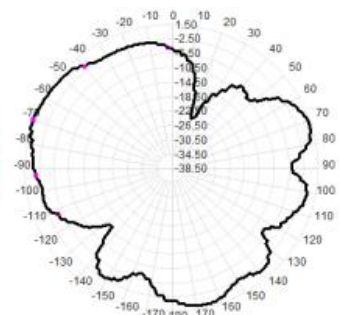
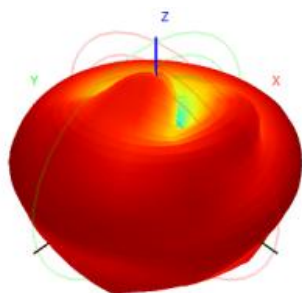
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5250.0	5350.0	5450.0
Gain (dBi)	1.85	1.76	1.80	1.62	1.77	1.89	1.90	1.82	1.81	1.68	1.57	1.68	1.86	1.53	1.59
Efficiency (%)	57.78	57.79	59.52	58.68	59.52	58.91	56.29	54.38	54.07	53.45	53.93	48.78	59.14	60.38	62.82

Frequency ID	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Frequency (MHz)	5550.0	5650.0	5750.0	5850.0	5900.0	6000.0	6100.0	6200.0	6300.0	6400.0	6500.0	6600.0	6700.0	6800.0	6900.0	7000.0	7100.0	7125.0
Gain (dBi)	1.49	1.28	1.12	1.41	1.01	1.51	2.18	2.98	2.86	2.91	3.06	3.37	3.19	3.87	2.94	3.03	2.96	3.22
Efficiency (%)	60.77	65.16	61.40	63.57	59.19	64.64	64.35	64.46	66.54	63.62	69.86	67.25	61.55	65.22	61.29	66.49	65.22	65.20

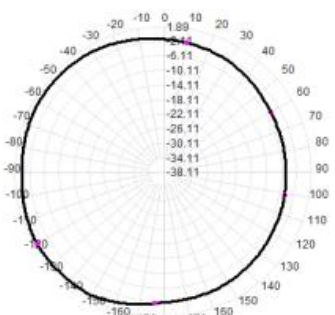
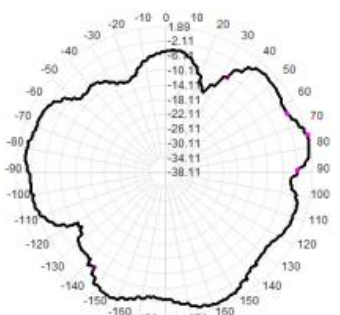
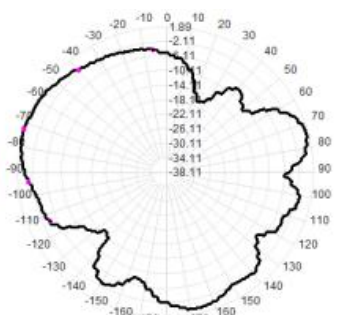
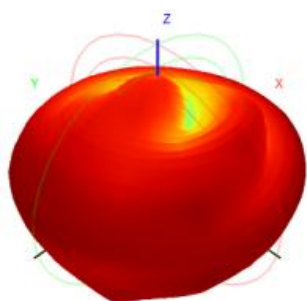
Product Number: AN2457-23E01BO-B

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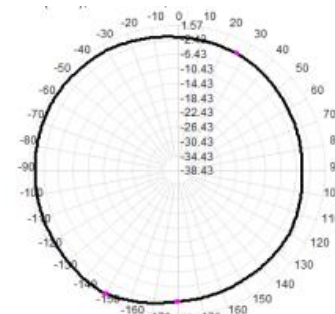
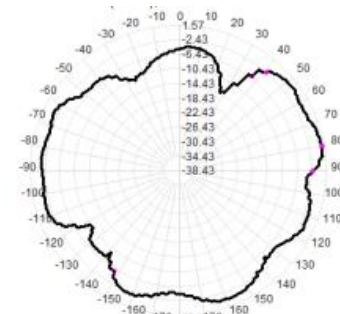
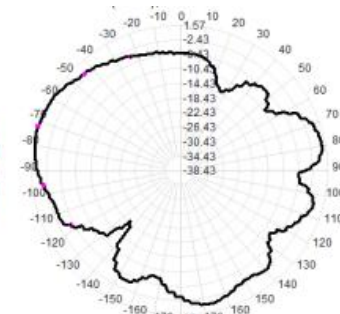
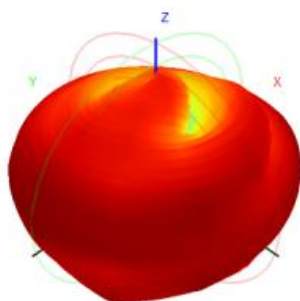
2400MHz



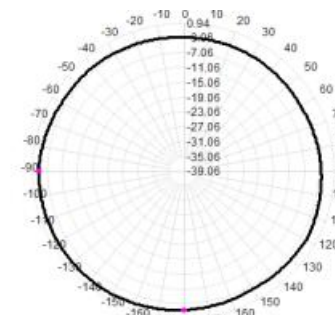
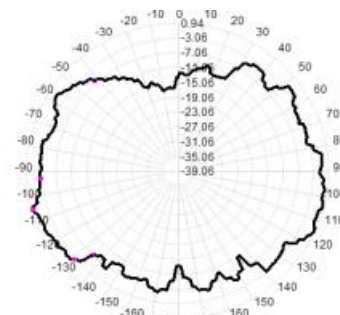
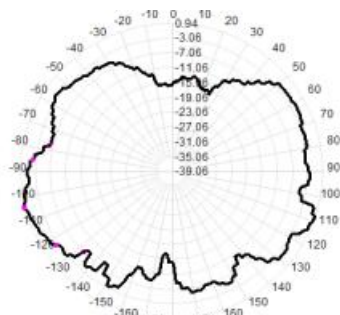
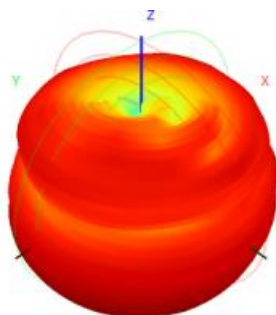
2450MHz



2500MHz



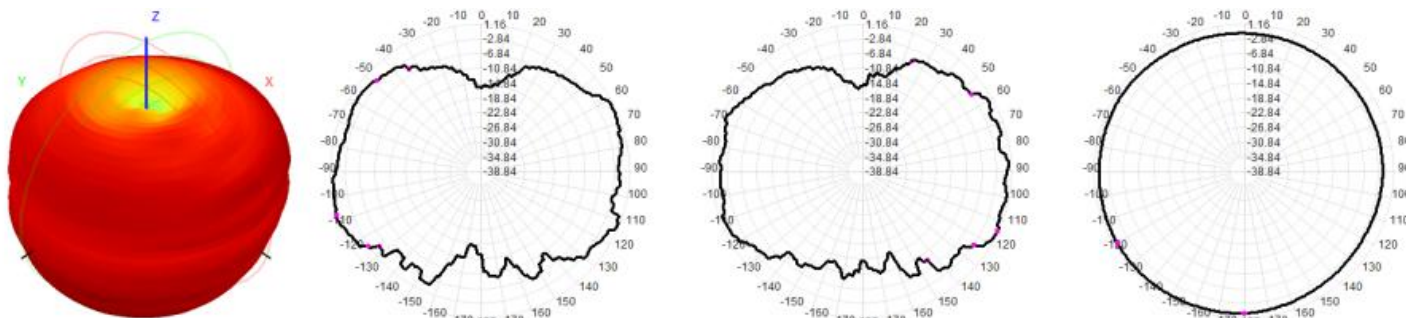
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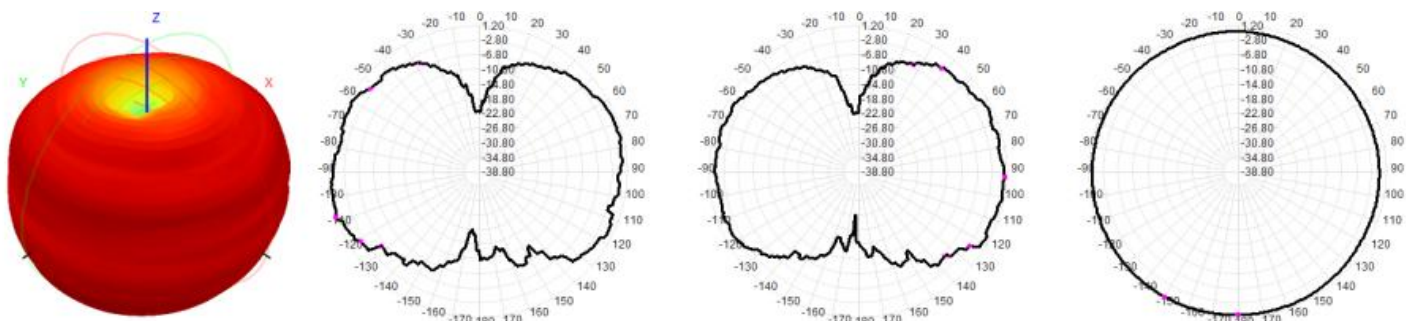
Product Number: AN2457-23E01BO-B

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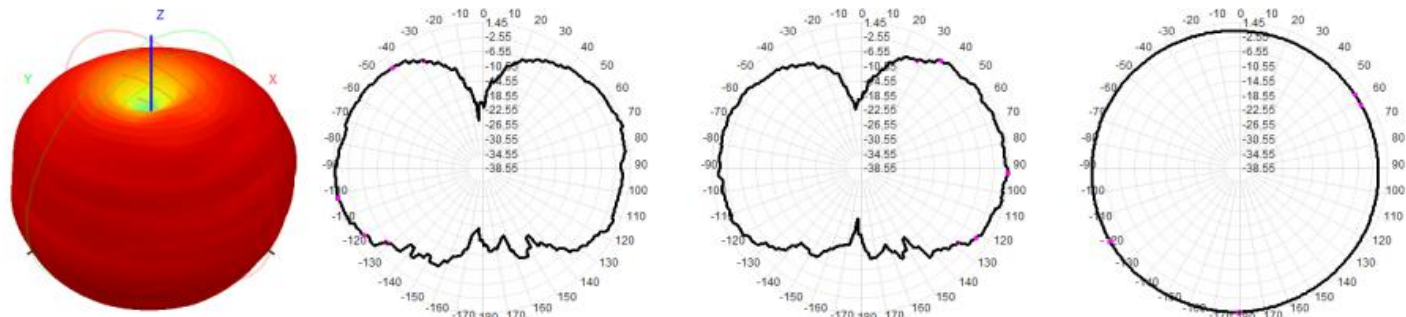
5550MHz



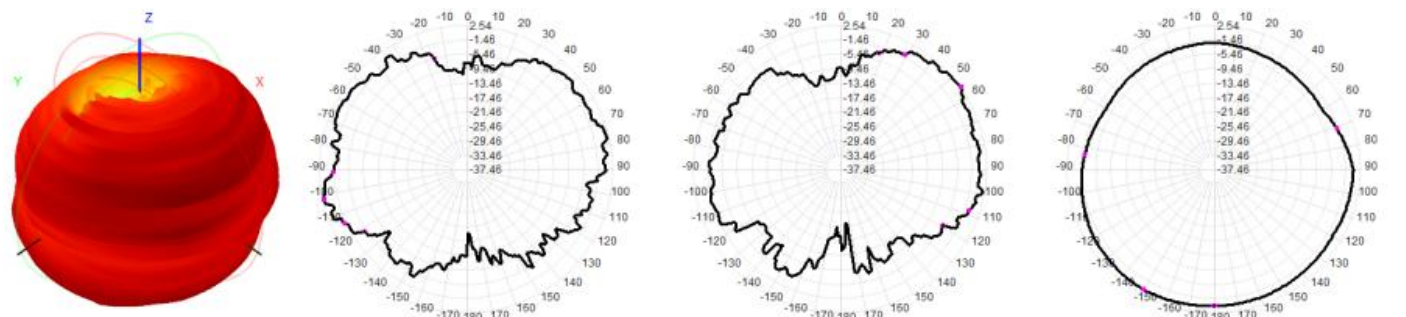
5850MHz



6000MHz



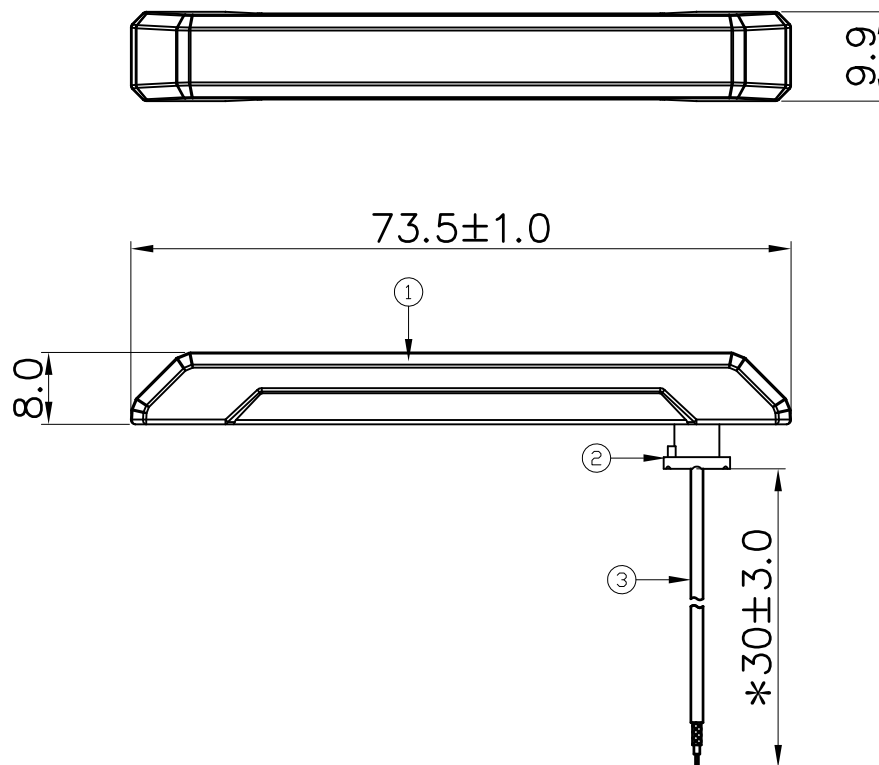
7125MHz



5. Mechanical Drawing See attached files

HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER
			
			
			



Note:

1. Mark * is important dimension;"Cpk "Identify for process control($CpK \geq 1.33$).
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.
3. Pay attention to the direction of the connector.

3	CABLE-081	Cable		OD0.81mm,Black	1
2	AN23E-02B	BODY2	ABS	Black	1
1	AN23E-01B	BODY1	ABS	Black	1
No.	Part Number	Name	Material	Finish	Q'ty



Tengxiang Electronics Co., Ltd.

TITLE: Antenna						
PART NO.: AN2457-23E01BO-B				CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance	
YCX 2023.03.03	HC 2023.03.03	WJ 2023.03.03	DWF 2023.03.03	UNITS: mm	X.X ±0.5	
				SCALE: 1/1	X.XX ±0.2	
				REVISION: A	X° ±1	

產品包裝規範

PACKING CRITERION

Date: 2023.03.03

Page: 1 of 1

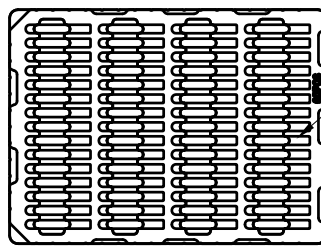
Part Number : AN2457-23E01BO-B

Revision : A

Name: Antenna

Customer : ALL

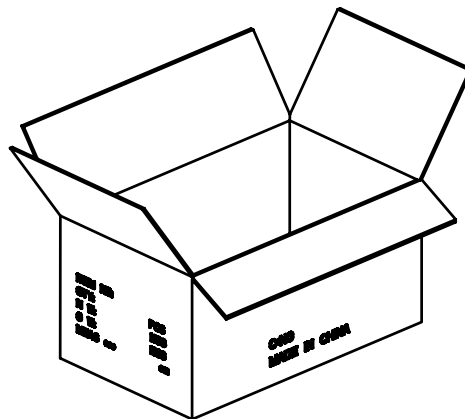
1 . Enter PE bag。



60pcs/层，共15层

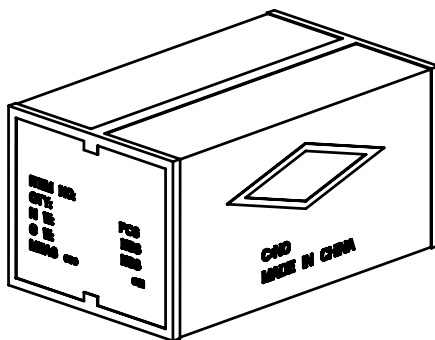
60pcs/ 吸塑

2.PACKING 。

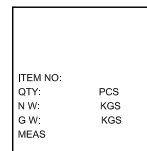


900pcs/Carton

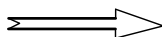
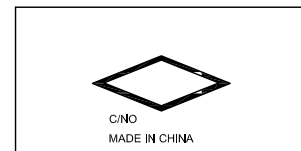
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : dwf