



# Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-12F06BX-B

Product Name: Antenna

## Specification For Approval

Date: 2023.11.23

Version: 1.0

客户名称

Customer:

赛腾

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2450-12F06BX-B

规格描述

Description :

2.4G/5G 白色天线 1.13mm 黑色线 L=220mm+IPEX

|                               |     |                               |  |
|-------------------------------|-----|-------------------------------|--|
| Tengxiang Checked By:<br>腾祥审核 |     | Customer Approved By:<br>客户审核 |  |
| DRAWN<br>制作                   | 路婷  | TESTED BY<br>检测               |  |
| CHECKED BY<br>审核              | 胡超  | CHECKED BY<br>审核              |  |
| Q.C.DEPT.<br>品管               | 梁凤珍 | Q.C.DEPT.<br>品管               |  |
| APPROVED BY<br>核准             | 韦佳  | APPROVEDBY<br>核准              |  |



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Product Number:AN2450-12F06BX-B

Product Name: Antenna

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5. Mechanical and Packing Drawing (图纸包装规范)

## Revision History (变更履历)

| Revision | Date       | Change Notification | Description |
|----------|------------|---------------------|-------------|
| 1.0      | 2023.11.23 | 初版                  |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |

Product Number: AN2450-12F06BX-B

Product Name: Antenna

## 1. Specification

|                                                                                    |                           |
|------------------------------------------------------------------------------------|---------------------------|
| Sample Photo                                                                       |                           |
|  |                           |
| <b>A. Electrical Characteristics</b>                                               |                           |
| Frequency 频率                                                                       | 2400-2500MHz/5150-5850MHz |
| S.W.R. 驻波比                                                                         | <= 2.0                    |
| Antenna Gain 增益                                                                    | 3.91dBi / 3.86dBi         |
| Polarization 极化方式                                                                  | Linear                    |
| Impedance 阻抗                                                                       | 50 Ohm                    |
| <b>B. Material &amp; Mechanical Characteristics</b>                                |                           |
| Material of Plastic 塑胶材质                                                           | TPE/ABS                   |
| Cable Type 线材规格                                                                    | OD1.13mm , Black          |
| Connector Type 连接器规格                                                               | I-PEX                     |
| <b>C. Environmental</b>                                                            |                           |
| Storage Temperature<br>存储温度                                                        | - 30 °C ~ +65 °C          |
| Operation Temperature<br>工作温度                                                      | - 30 °C ~ +65 °C          |
| Antenna Color Storage life<br>天线颜色存储寿命                                             | < 2 year                  |

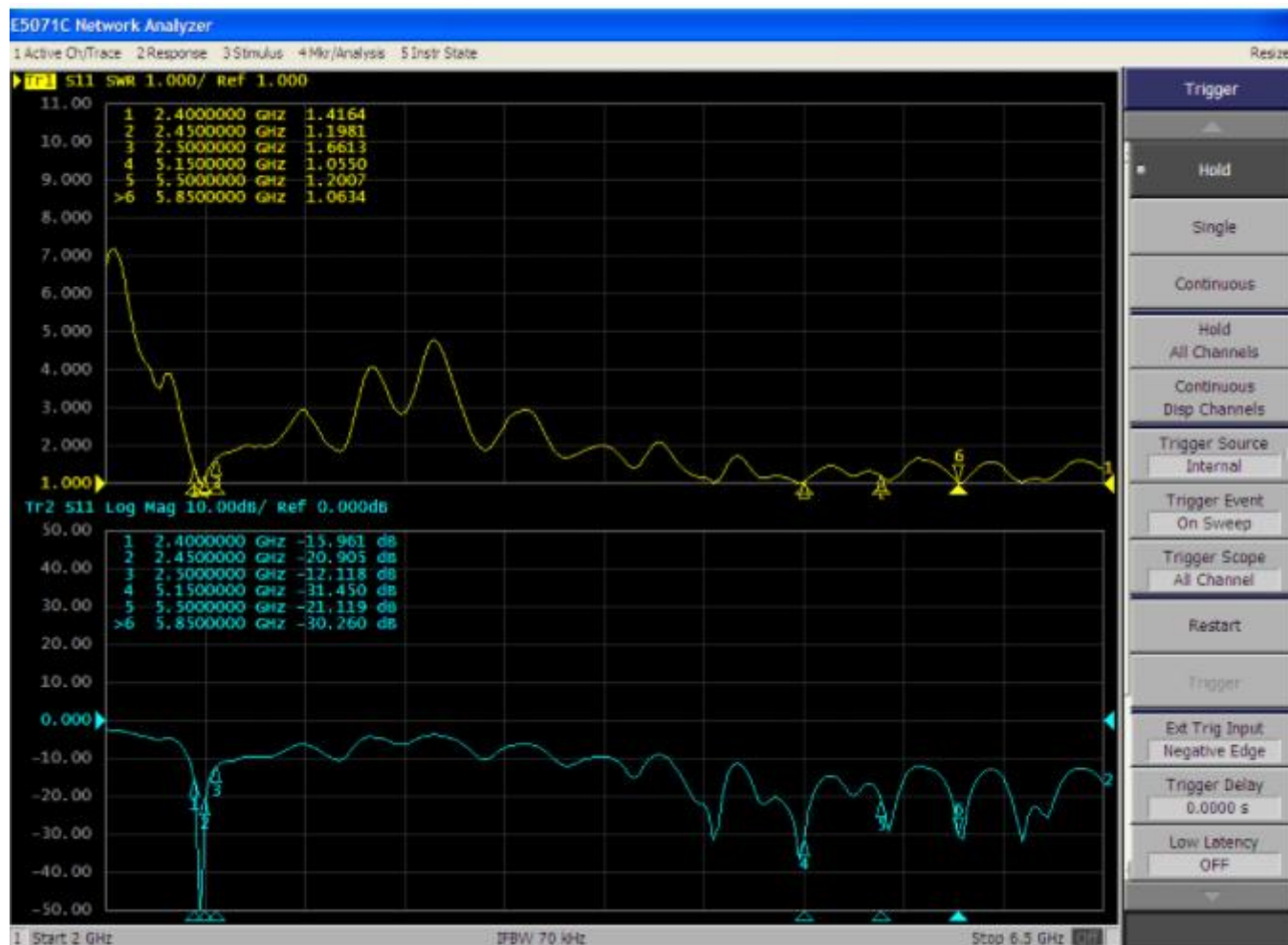
## 2. Characteristics and Reliability Test

| 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.<br>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<br>符合待测物规范                                                                             | PASS      |
| 2               | Antenna Gain<br>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<br>符合待测物规范                                                                             | PASS      |
| 3               | Pull Test<br>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<br>2. Frequency Tol. $\leq 5\%$<br>符合待测物规范; 频率偏移 $\leq 5\%$                         | PASS      |
| 4               | Dimension<br>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<br>符合待测物规范                                                                             | PASS      |
| 5               | Salt Spray 盐雾                            | GB / T 2423.17-2008<br>Temp: 35°C; RH: $\geq 95\%$ ; NaCl solution: $\geq 5\%$ ; Time: 24H<br>温度 35°C; 湿度 $\geq 95\%$ ; 盐水浓度 $\geq 5\%$ ; 测试 24H | 1. No Visual Damage<br>2. Frequency Tol. $\leq 5\%$<br>无明显外观不良; 频率偏移 $\leq 5\%$                                    | PASS      |
| 6               | Temperature and Humidity Chamber<br>恒温恒湿 | GB / T 2423.3-2006<br>Temp: 65°C / 12 H; -30°C / 12H RH: $\geq 90\%$ ; Time: 24H<br>温度 65°C 测试 12H 转 -30°C 测试 12H; 湿度 $\geq 90\%$ ; 时间 24H       | After 2 Hours Recovery<br>1. No Visual Damage<br>2. Frequency Tol. $\leq 5\%$<br>恢复 2H 后, 无明显外观不良; 频率偏移 $\leq 5\%$ | PASS      |
| 7               | Aging test<br>老化                         | GB / T 2423.2 - 2008<br>Temp: 65°C; Time: 24 hours<br>温度 65°C, 测试 24H                                                                            | After 2 Hours Recovery<br>1. No Visual Damage<br>2. Frequency Tol. $\leq 5\%$<br>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<br>参考 IEC 62321 测试流程                                                                            | Directive RoHS 2011/65/EU<br>符合 RoHS 2015/863/EU 标准                                                                | PASS      |

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Product Name: Antenna

## 3. Antenna - S Parameter Test Data



## 4. Antenna - Radiation Pattern Test Data

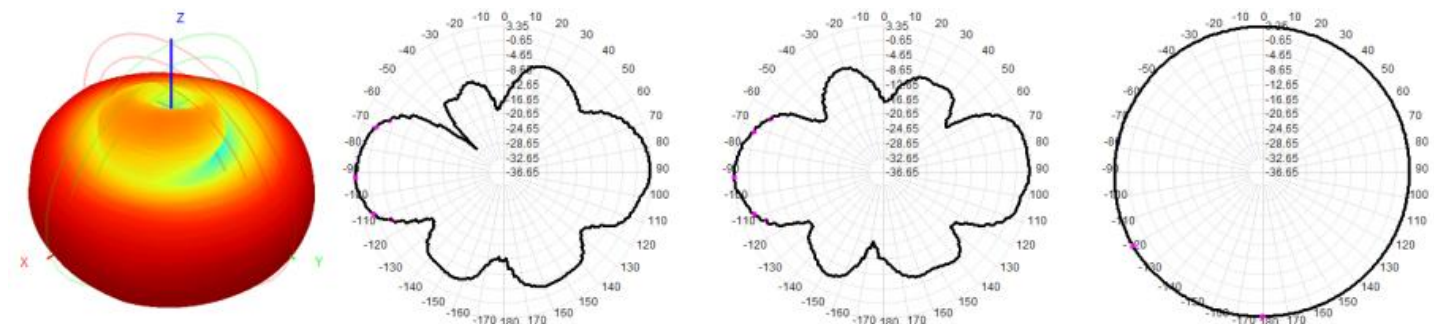
| Frequency ID    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Gain (dBi)      | 3.35   | 3.74   | 3.87   | 3.91   | 3.88   | 3.78   | 3.35   | 3.15   | 3.55   | 3.68   | 3.50   |
| Efficiency (%)  | 58.98  | 59.12  | 58.82  | 58.22  | 61.40  | 60.25  | 60.61  | 60.97  | 59.25  | 58.89  | 57.73  |

| 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 |
| 3.32   | 3.25   | 3.36   | 3.30   | 3.27   | 3.86   | 3.86   | 3.56   | 3.59   | 3.61   | 3.14   | 3.55   | 3.61   | 3.46   | 3.32   |
| 50.74  | 51.31  | 53.19  | 51.35  | 53.89  | 56.00  | 56.20  | 51.93  | 57.39  | 58.13  | 58.01  | 51.75  | 54.67  | 53.72  | 51.26  |

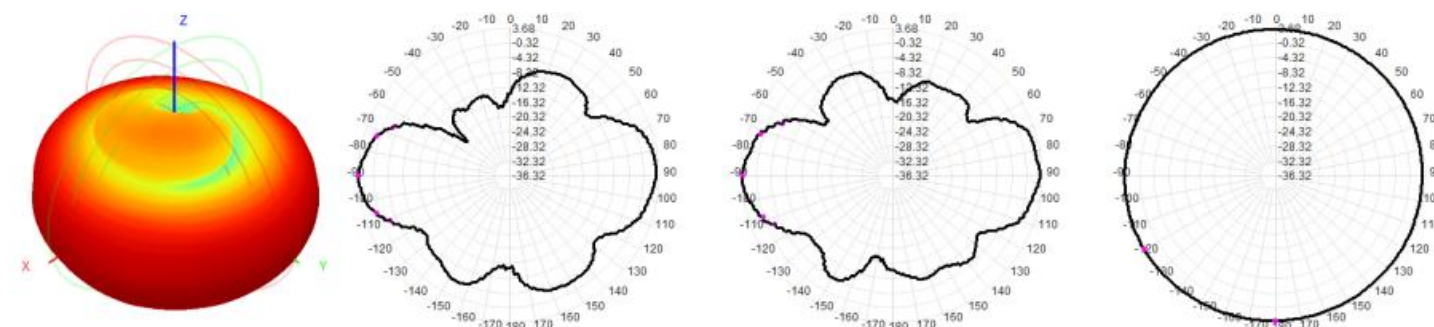
Product Number:AN2450-12F06BX-B

Product Name: Antenna

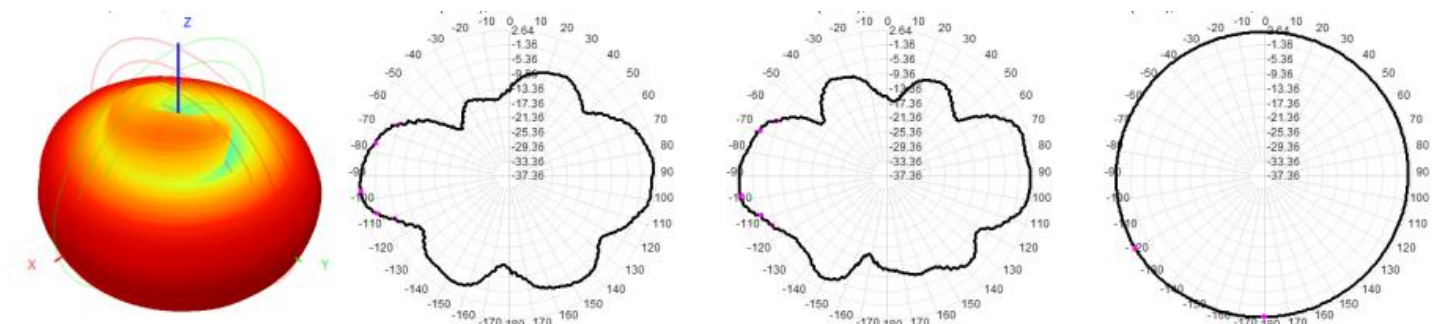
2400MHz



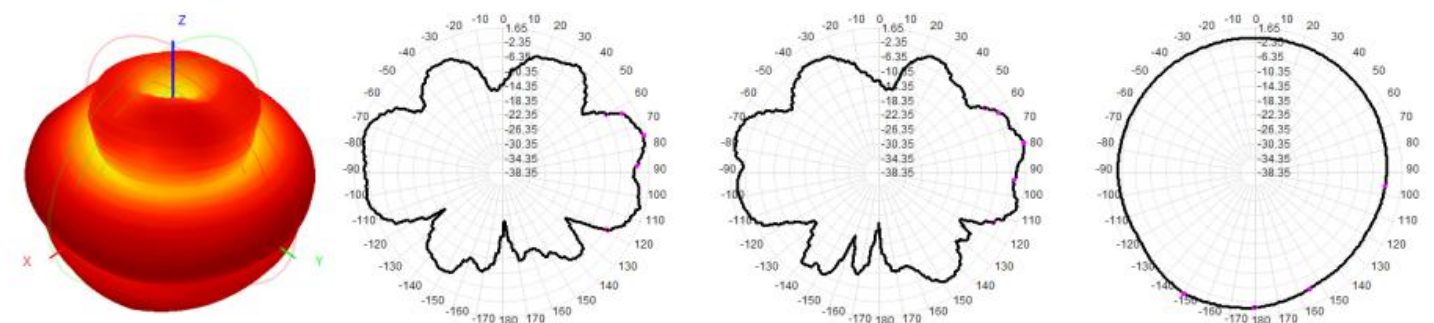
2450MHz



2500MHz



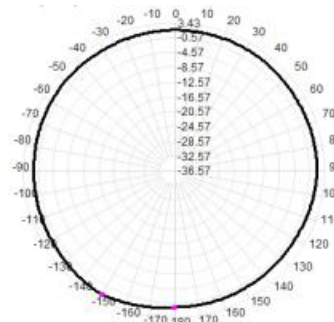
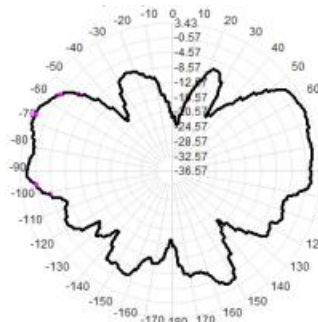
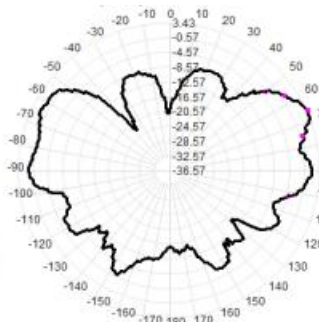
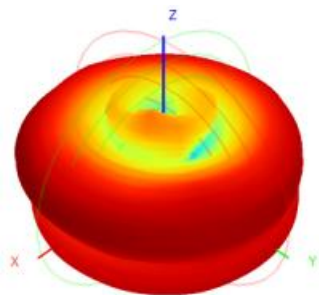
5150MHz



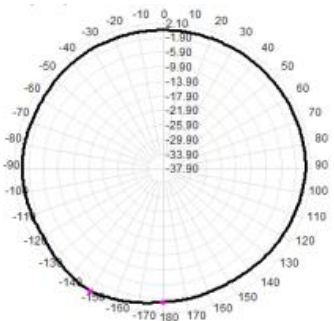
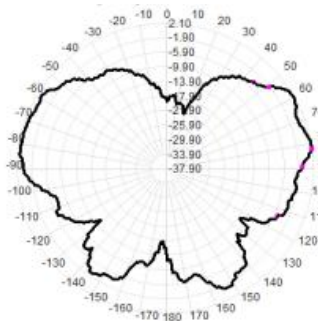
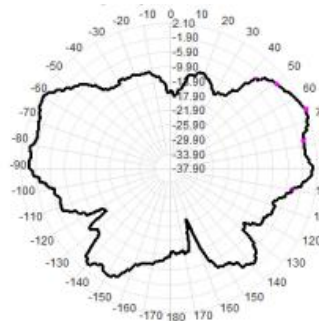
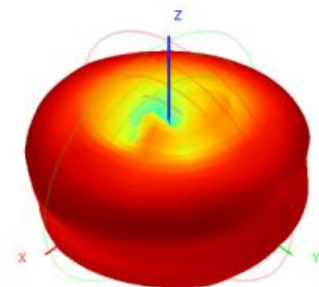
Product Number:AN2450-12F06BX-B

Product Name: Antenna

5550MHz



5850MHz

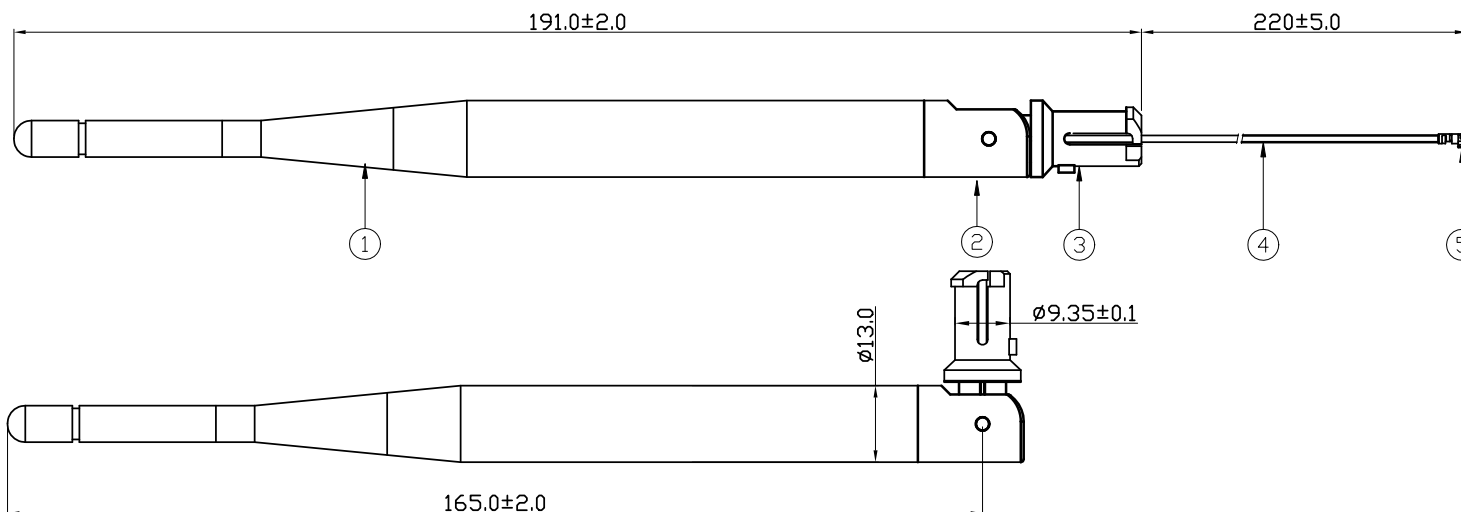


5. Mechanical Drawing See attached files

RoHS

Compatible

| SIGN | DATE | DESCRIPTION | APPROVER |
|------|------|-------------|----------|
|      |      |             |          |
|      |      |             |          |
|      |      |             |          |



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-113BS    | Cable  | OD1.13   | Black     | 1    |
| 3   | AN9201-09B  | Body 3 | ABS      | Black     | 1    |
| 2   | AN9201-06B  | Body 2 | ABS      | Black     | 1    |
| 1   | AN9201-04B  | Body 1 | TPE      | Black     | 1    |
| No. | Part Number | Name   | Material | Finish    | Q'ty |



Tengxiang Technology Inc.

TITLE: 2.4/5.8GHz Antenna

PART NO.: AN2450-12F06BX-B

Customer P/N:

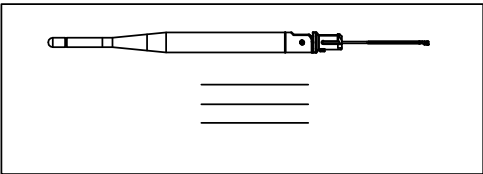
| APP BY     | CHK BY     | RF BY      | DES BY     |             | Tolerance |
|------------|------------|------------|------------|-------------|-----------|
| YCX        | HC         | WJ         | DWF        | UNITS: mm   | X.X ±0.5  |
| 2023.11.23 | 2023.11.23 | 2023.11.23 | 2023.11.23 | SCALE: 1/1  | X.XX ±0.2 |
|            |            |            |            | REVISION: B | X° ±1     |

PACKING CRITERION

Date:2023.11.23

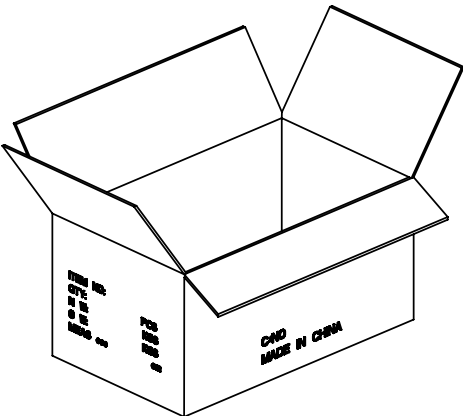
|                                |                |
|--------------------------------|----------------|
| Part Number : AN2450-12F06BX-W | Revision : A   |
| Name: Antenna                  | Customer : ALL |

1 . Enter PE bag。



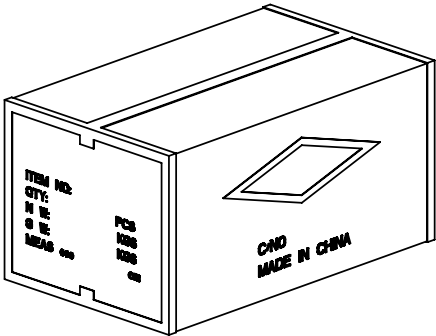
20pcs/ PE bag

2.PACKING 。

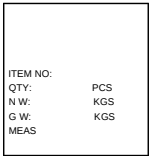


1000pcs/Carton

3. SEALING 。



SIDE



FRONT

