

# 承 认 书

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|---------------------------|---------------|----------------|
| 批准 Approved by            | 审核 Checked by | 制表 Prepared by |
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| 供方确认 SUPPLIER APPROVED BY |               |                |
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**供应商名称:** 欧智通科技股份有限公司  
**供应商地址:** 深圳市宝安区西乡街道共乐社区铁仔路50号凤凰智谷B座14层  
**供应商工厂:** 湖南省长沙市浏阳经济开发区利通路8号  
**供应商电话:** 86-755-2955-8186  
**供应商网址:** www.fn-link.com

## 天线测试报告

antenna testing

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| 客 户<br>Customer                | 科沃斯                                                                      |
| 项目名称<br>Project Name           | 4A8-1100-2300                                                            |
| 客 户 料 号<br>Customer NO.        |                                                                          |
| 规 格<br>specification           | FPC天线 4A8-1100-2300 哑黑油白字；尺寸<br>32X10MM；线长175MM线径1.13黑色；带1代IPEX；<br>ROHS |
| 供 方 料 号<br>Supplier NO.        | 1A4A8-1100-2300-00                                                       |
| 规 格 书 编 号<br>Specification NO. |                                                                          |
| 编写人<br>Write by                | 潘益林                                                                      |
| 版本<br>REV.                     | Ver.1                                                                    |
| 日 期<br>Date                    | 2024-7-10                                                                |
| 备 注<br>Note                    |                                                                          |

| 版本变更记录 |      |    |     |     |
|--------|------|----|-----|-----|
| 变更日期   | 变更内容 | 版本 | 变更人 | 批准人 |
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## 1. 承认书项目表 (Index)

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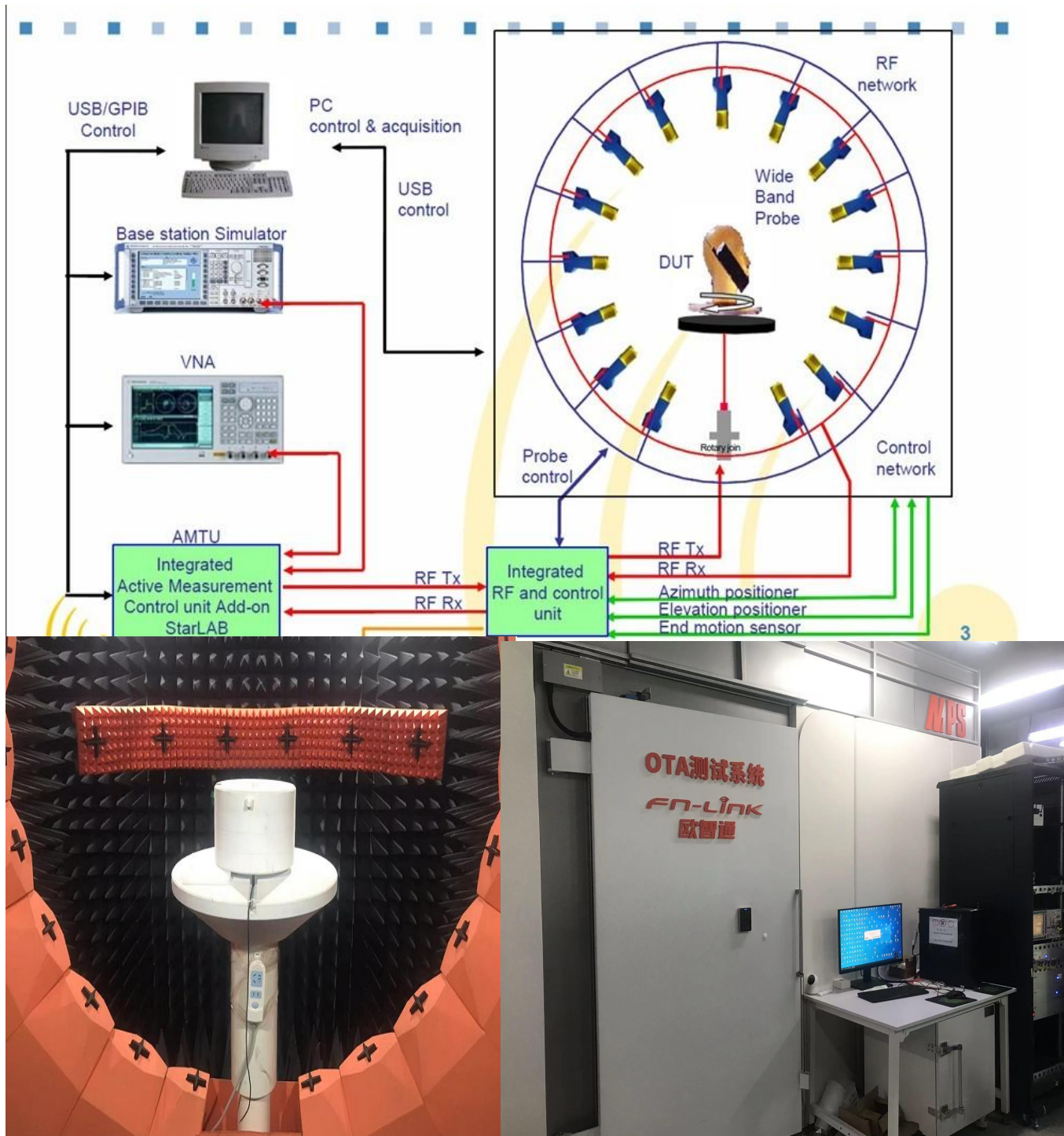
## 1. 试验设备和条件(Test Equipment & Conditions)

1.1 . Network Analyzers : KEYSIGHT P5002A

1.2 . Communications Test Set: R&S CMW 500

1.3 . 3D Chamber Test System: 24探头测试系统

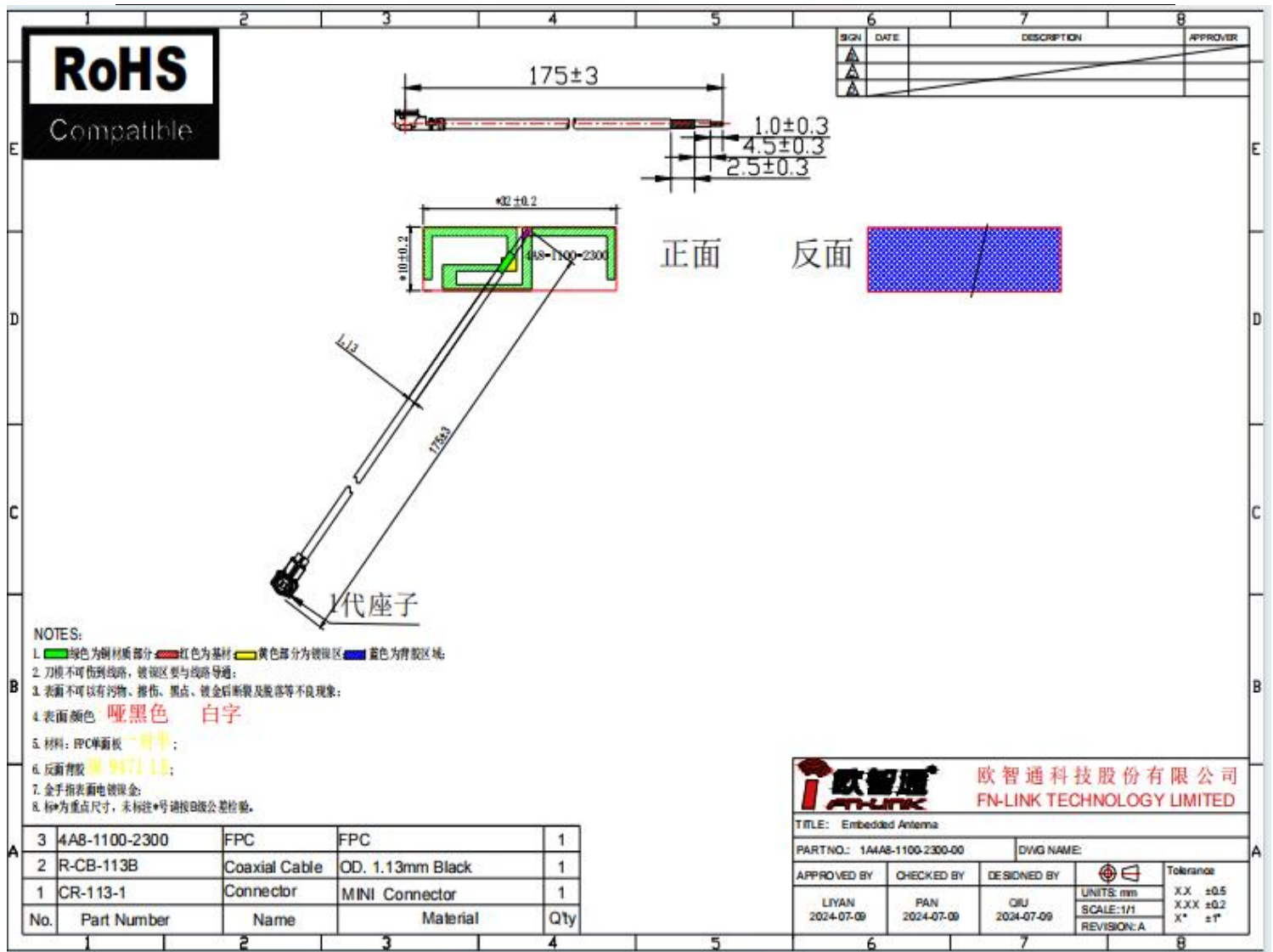
### 1. 微波暗室的测试原理图



## 2. 说明。

这份报告总结了该项目天线的电气性能结果，包括天线的S11 参数,Gain和Efficiency.

# 天线2D图



## 天线2D图

### Sample Photo



### A. Electrical Characteristics

|              |                                                      |
|--------------|------------------------------------------------------|
| Frequency    | 2400 ~ 2500 MHz<br>5150 ~ 5850 MHz                   |
| V.S.W.R.     | $\leq 2.0$                                           |
| Antenna Gain | 2400 ~ 2500 MHz ~ 2.5dBi<br>5150 ~ 5850 MHz ~ 3.9dBi |
| Efficiency   | 2400 ~ 2500 MHz ~ 67%<br>5150 ~ 5850 MHz ~ 51%       |
| Polarization | Linear                                               |
| Impedance    | 50 Ohm                                               |

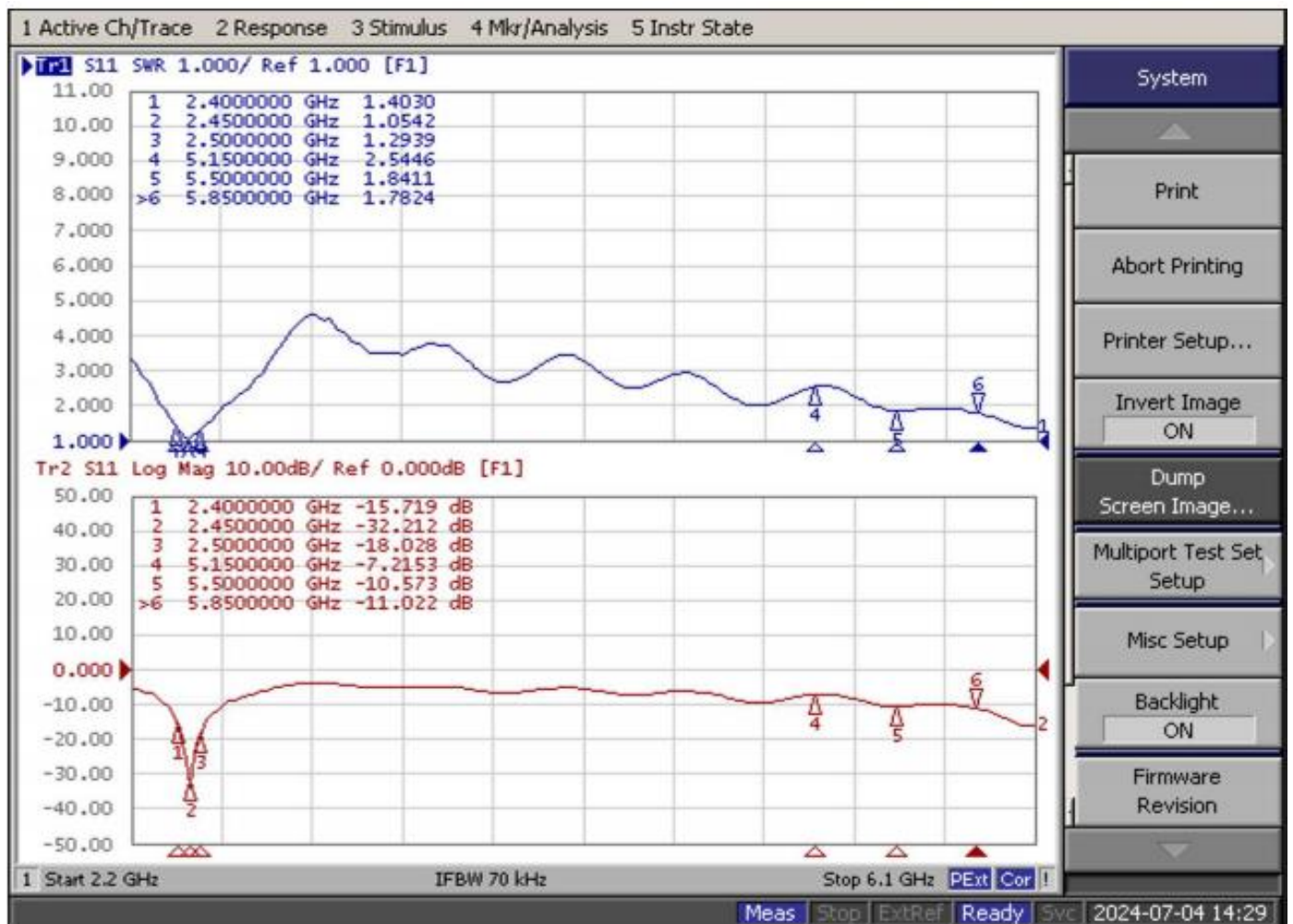
### B. Material & Mechanical Characteristics

|                      |              |
|----------------------|--------------|
| Material of Radiator | FPC          |
| Cable Type           | O.D. 1.13 mm |

### C. Environmental

|                       |                   |
|-----------------------|-------------------|
| Operation Temperature | - 40 °C ~ + 65 °C |
| Storage Temperature   | - 40 °C ~ + 80 °C |

## WiFi--天线S11



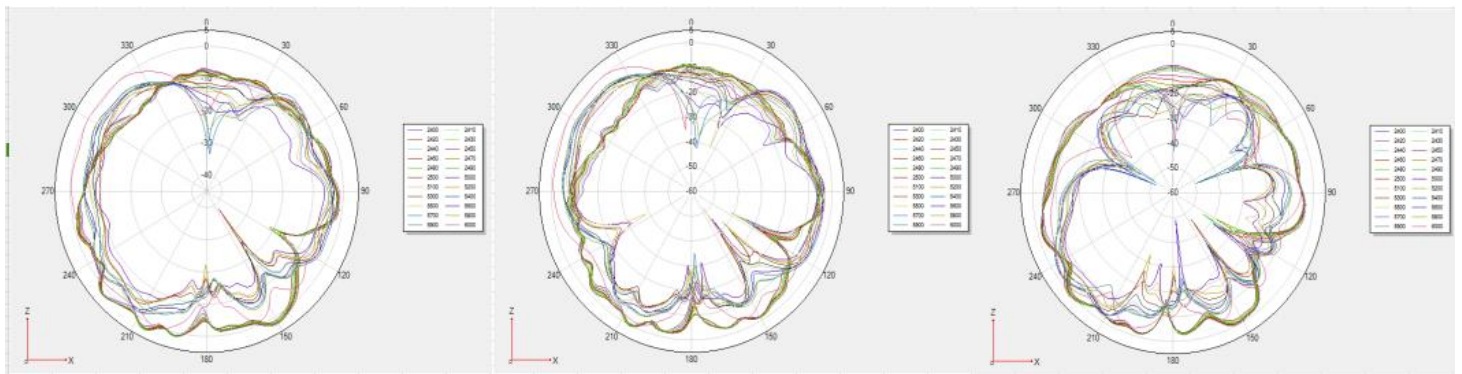
|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
| Freq/GHz | 2400 | 2450 | 2500 | 5100 | 5500 | 5850 |
| VSWR     | 1.3  | 1.0  | 1.2  | 2.5  | 1.8  | 1.7  |

## WiFi天线-测试数据:

| Frequency/Mhz | Efficiency / dB | Efficiency / % |
|---------------|-----------------|----------------|
| 2400          | -2.32           | 58.61          |
| 2410          | -2.39           | 57.68          |
| 2420          | -2.18           | 60.53          |
| 2430          | -1.96           | 63.68          |
| 2440          | -1.84           | 65.46          |
| 2450          | -1.86           | 65.16          |
| 2460          | -1.47           | 71.29          |
| 2470          | -1.42           | 72.11          |
| 2480          | -1.36           | 73.11          |
| 2490          | -1.02           | 79.07          |
| 2500          | -1.4            | 72.44          |
| 5150          | -2.67           | 54.08          |
| 5200          | -2.73           | 53.33          |
| 5250          | -3.23           | 47.53          |
| 5300          | -3.24           | 47.42          |
| 5350          | -3.15           | 48.42          |
| 5400          | -3.13           | 48.64          |
| 5450          | -3.09           | 49.09          |
| 5500          | -3.16           | 48.31          |
| 5550          | -2.82           | 52.24          |
| 5600          | -2.69           | 53.83          |
| 5650          | -2.64           | 54.45          |
| 5700          | -2.81           | 52.36          |
| 5750          | -2.75           | 53.09          |
| 5800          | -2.72           | 53.46          |

| Frequency/MHz | MaxGain/dBi | AvgGain/dBi |
|---------------|-------------|-------------|
| 2400          | 2.69        | -2.32       |
| 2410          | 2.37        | -2.39       |
| 2420          | 2.98        | -2.18       |
| 2430          | 2.67        | -1.96       |
| 2440          | 2.9         | -1.84       |
| 2450          | 2.53        | -1.86       |
| 2460          | 3.27        | -1.47       |
| 2470          | 3.39        | -1.42       |
| 2480          | 3.39        | -1.36       |
| 2490          | 3.93        | -1.02       |
| 2500          | 3.33        | -1.4        |
| 5150          | 3.38        | -2.67       |
| 5200          | 3.42        | -2.73       |
| 5250          | 3.07        | -3.23       |
| 5300          | 3.38        | -3.24       |
| 5350          | 3.67        | -3.15       |
| 5400          | 3.68        | -3.13       |
| 5450          | 3.95        | -3.09       |
| 5500          | 3.99        | -3.16       |
| 5550          | 4.36        | -2.82       |
| 5600          | 4.46        | -2.69       |
| 5650          | 4.3         | -2.64       |
| 5700          | 4.4         | -2.81       |
| 5750          | 4.26        | -2.75       |
| 5800          | 4.25        | -2.72       |
| 5850          | 4.67        | -2.42       |

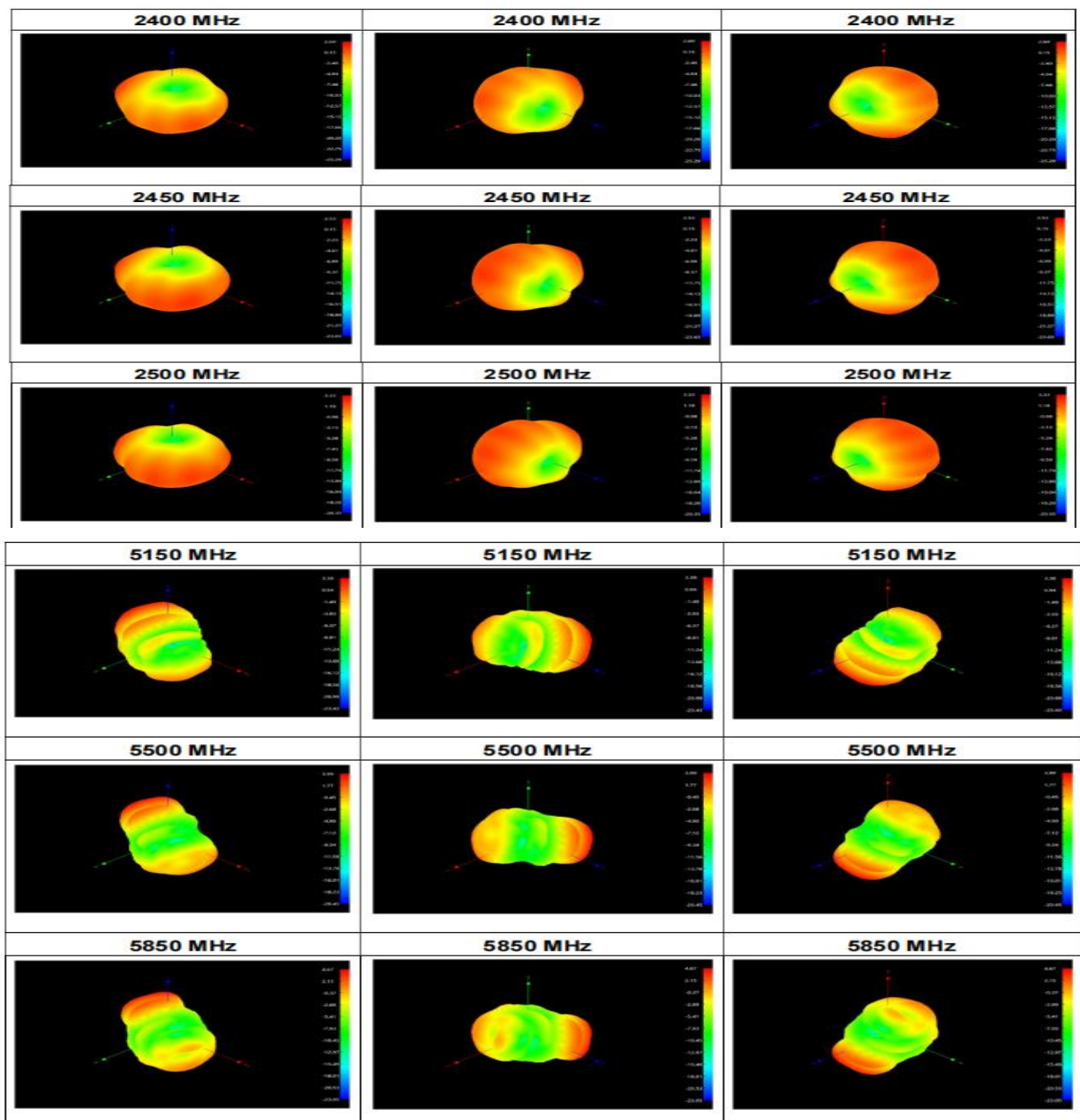
## WiFi天线-2.4G方向图苹果图：



Z-X

Z-Y

X-Y

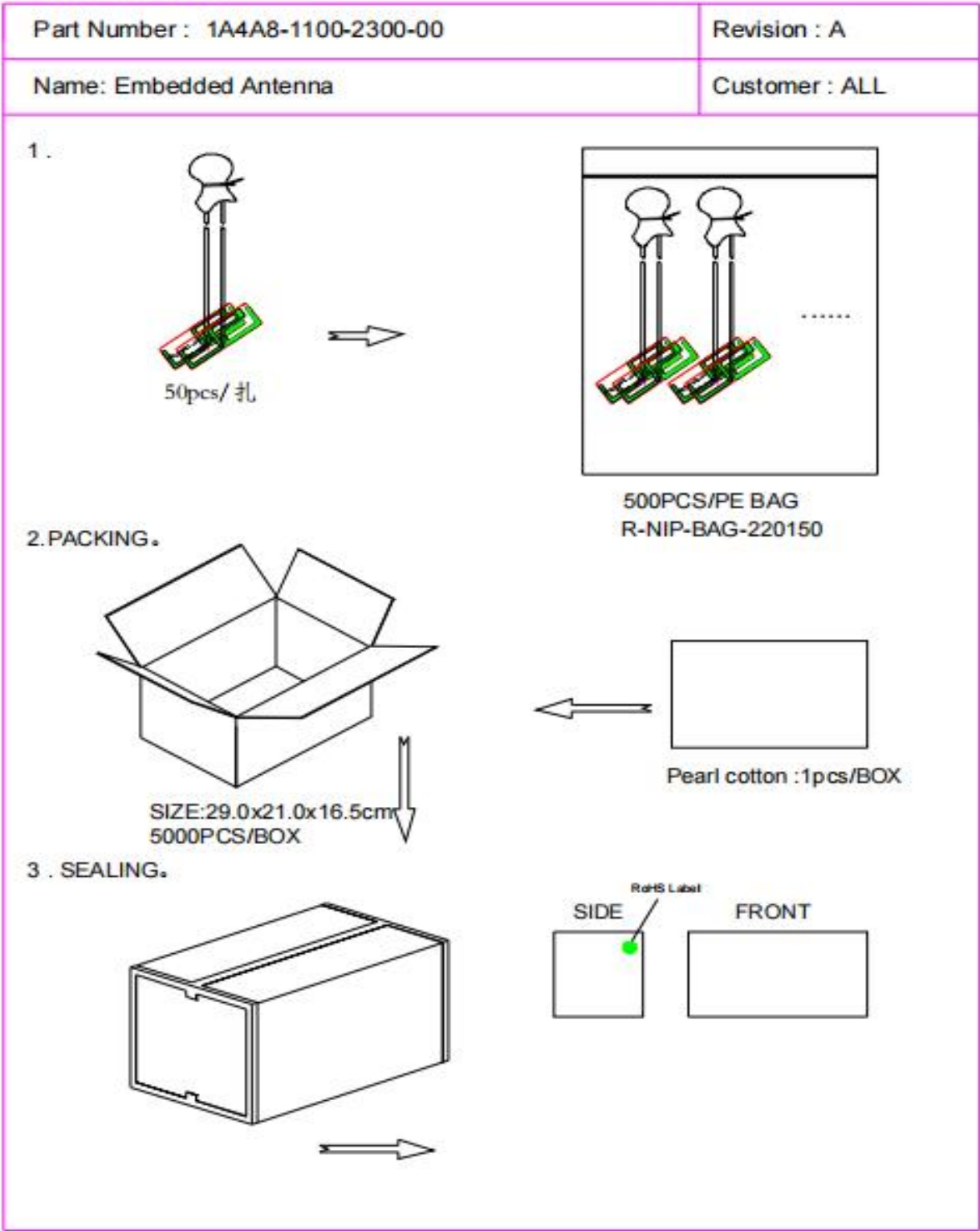


包装图

产品包装规范  
PACKING CRITERION

Date: 2024-07-09

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