



ShenZhen City FeiMin Technology CO.,LTD.

### SPECIFICATION FOR APPROVED

CUSTOMER: Shenzhen Ruijiang Technology Co., Ltd

PRODUCTS: 6710W FPC antenna

PART NO:

Spec. : FM-S2117-6710W (150mm)

Data: 2022. 12. 14

| SUPPLIER    |                |             |
|-------------|----------------|-------------|
| PREPARED BY | CHECKED BY     | APPROVED BY |
| marfan      | Yang Quansheng | Ma Dongdong |

| CUSTOMER    |            |             |
|-------------|------------|-------------|
| ACCEPTED BY | CHECKED BY | APPROVED BY |
|             |            |             |

REMARK: Please send us one (or copy) of this approval with stamp after accepting, other copies filed by the customer.

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# ANTENNA SPECIFICATION

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## Revision history

| edition | date       | state         |
|---------|------------|---------------|
| A1      | 2022-12-14 | First edition |
|         |            |               |
|         |            |               |
|         |            |               |

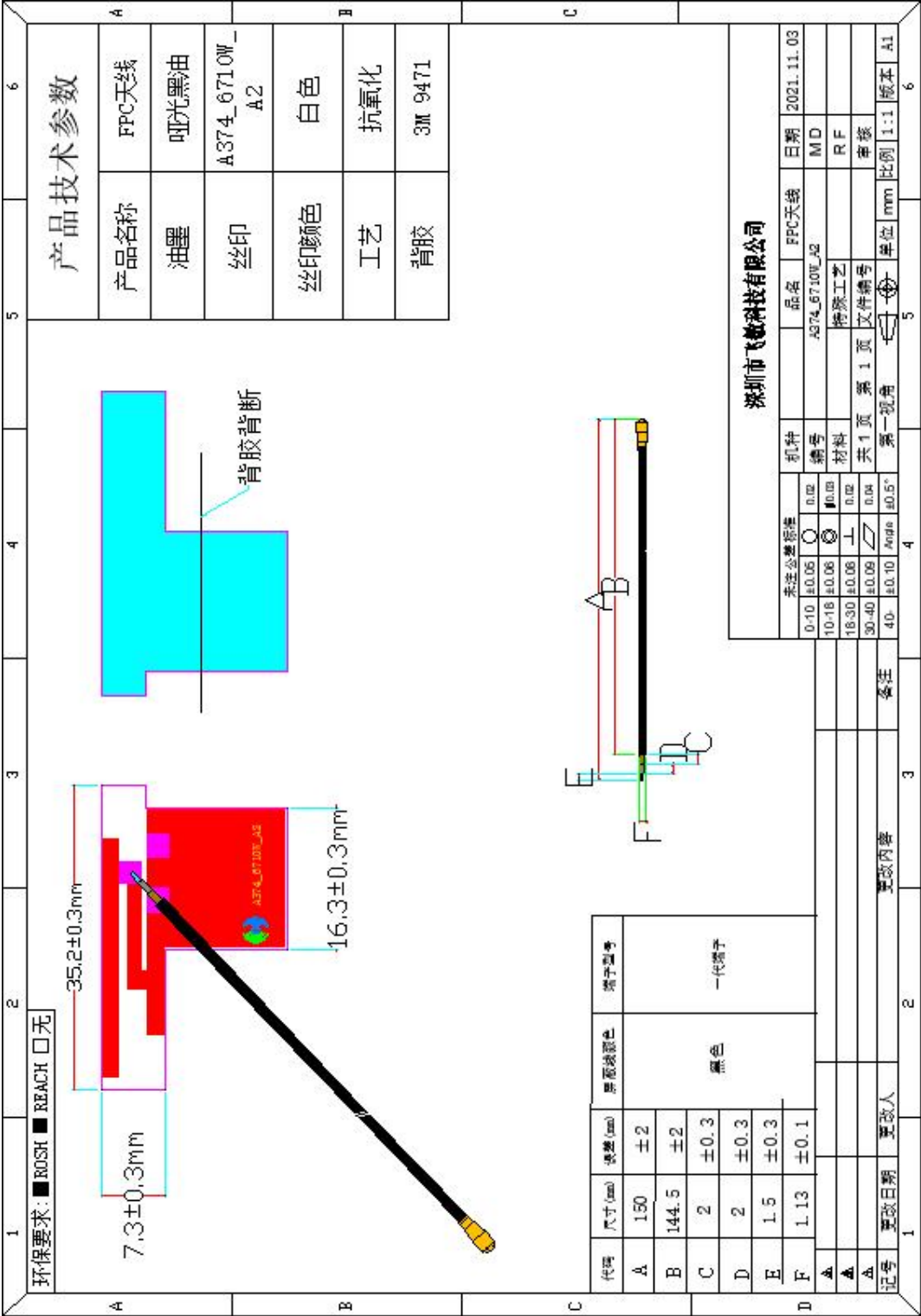
**Change content: the first change:**

**Before change:** (If necessary, please add corresponding pictures, and the change details here should be clearly described)

**After change:** (If necessary, please add corresponding pictures, and the change details here should be clearly described)

1. Project Information

1.1. Appearance and Dimensions

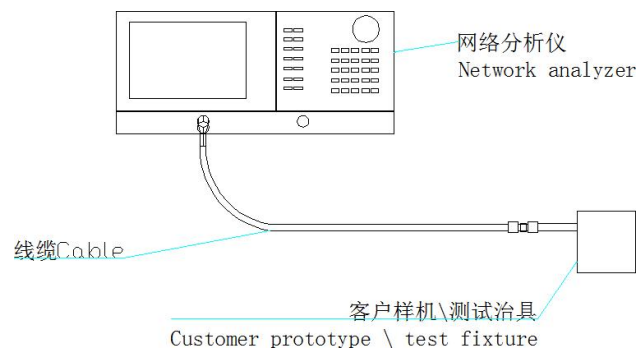


## 2. Electrical Characteristics

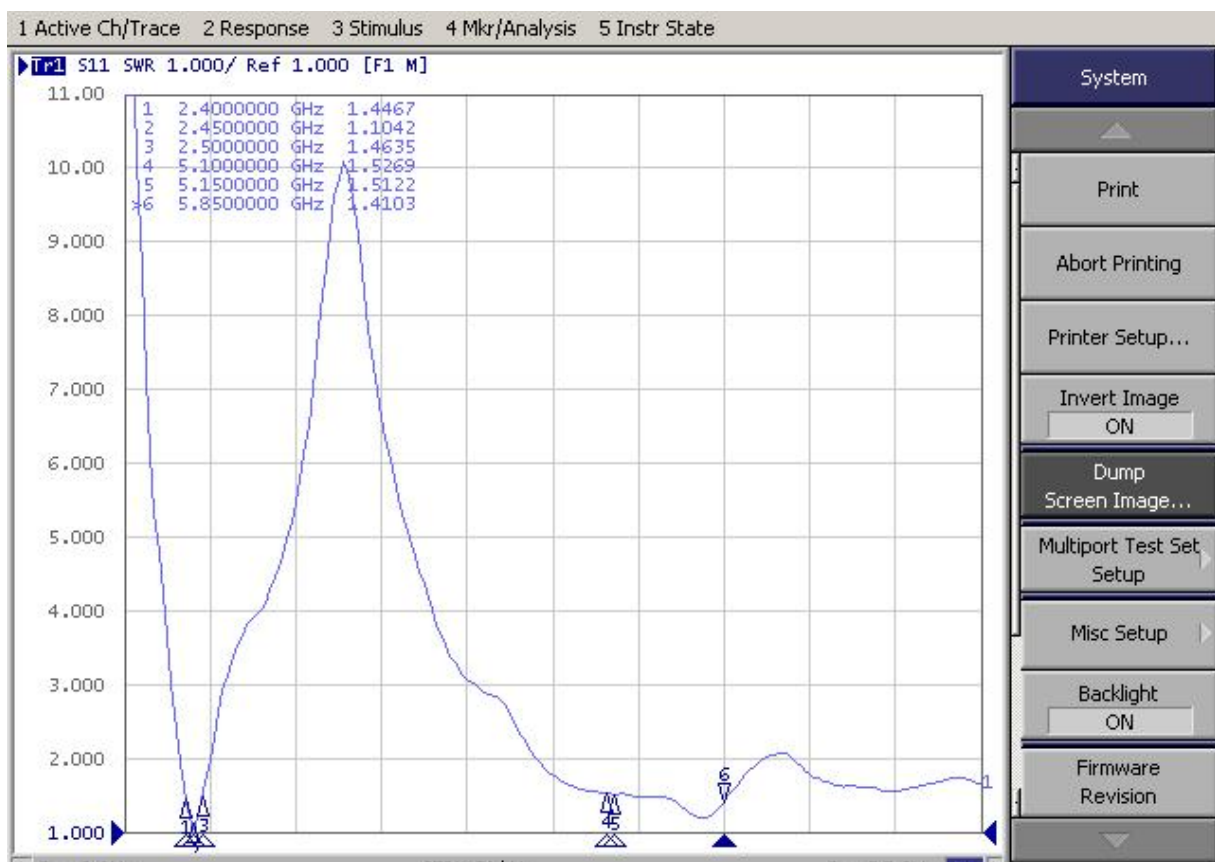
### 2.1. Test Environment Conditions

|             |                                  |
|-------------|----------------------------------|
| Temperature | Ordinary Temperature (5 to 35℃)  |
| Humidity    | Ordinary Humidity (25 to 85% RH) |

### 2.2. Measurement method

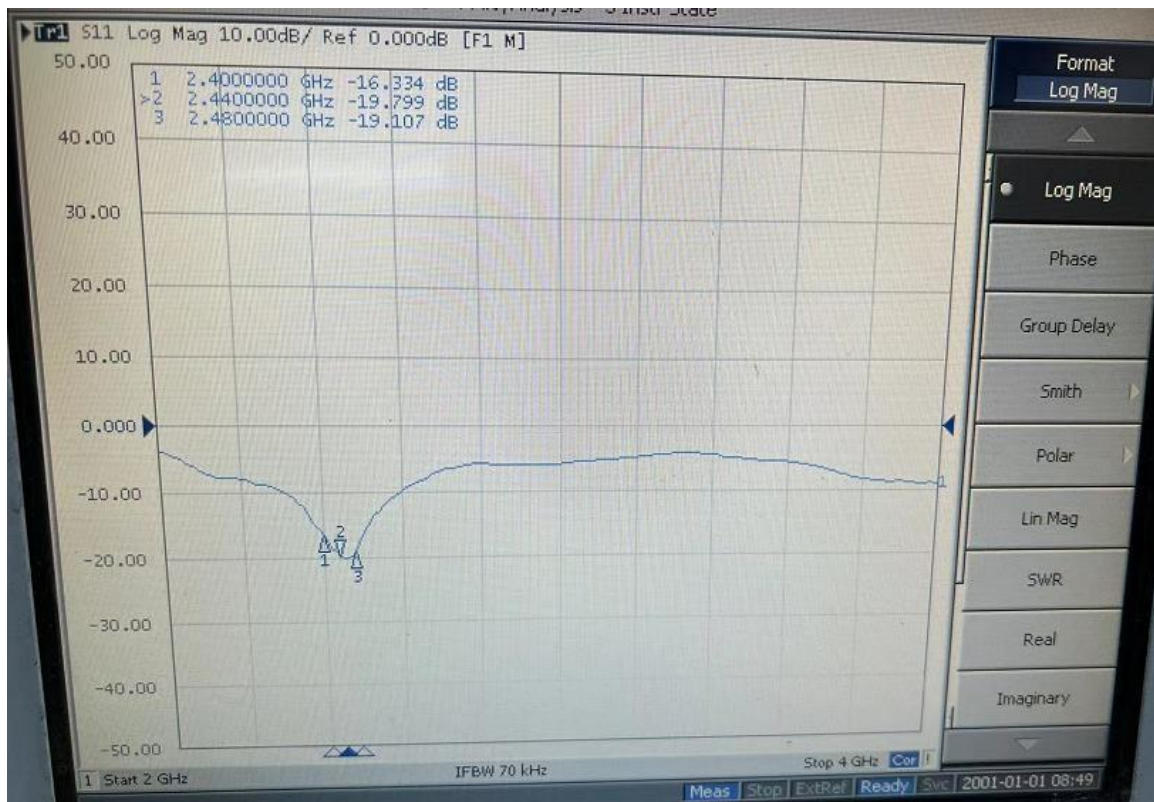


#### 2.2.1. Antenna VSWR



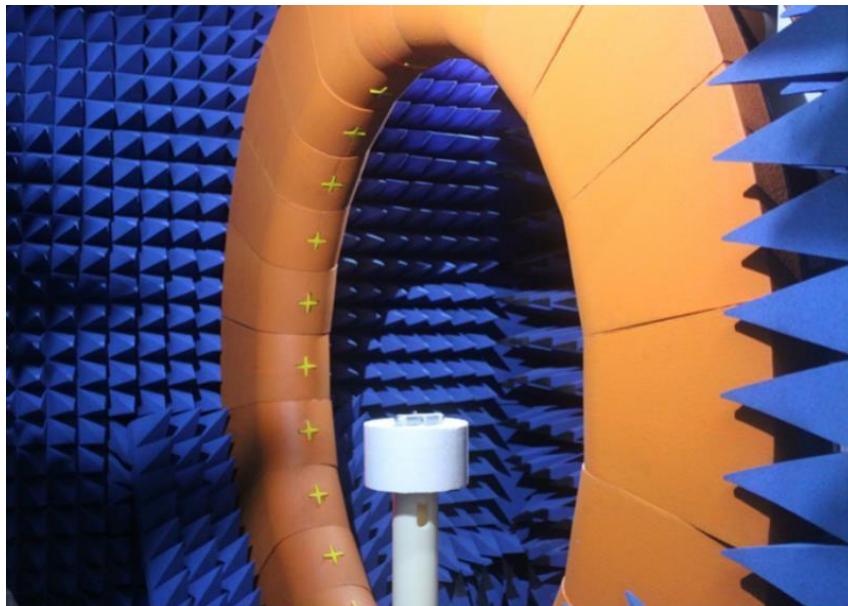
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### 2.2.2. Antenna Return loss



### 2.3. Antenna passive test data

#### 2.3.1. Test system



Shenzhen Feimin Technology Co., Ltd. (24 probe OTA microwave anechoic chamber)

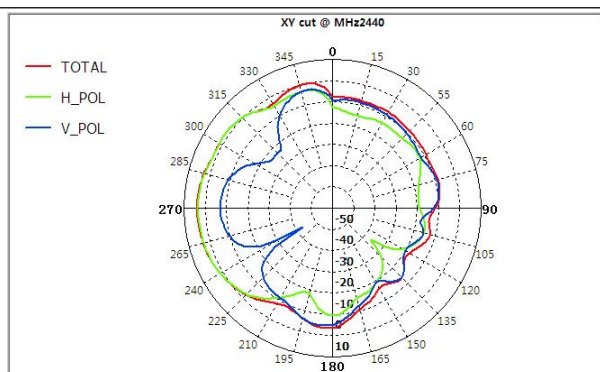
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### 2.3.2 Antenna efficiency and gain

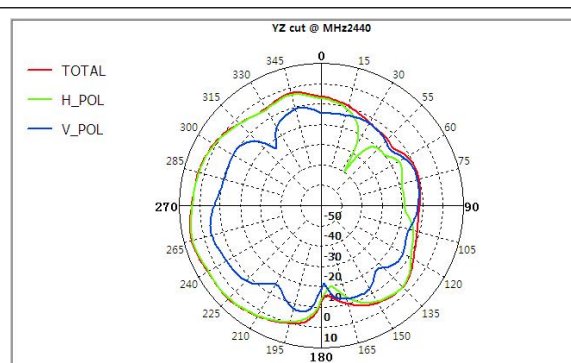
| Frequency (MHz) | Gain (dBi) | Efficiency (%) |
|-----------------|------------|----------------|
| 2400 MHz        | 2.34       | 42.37          |
| 2410 MHz        | 2.27       | 45.14          |
| 2420 MHz        | 2.4        | 45.5           |
| 2430 MHz        | 2.1        | 45.72          |
| 2440 MHz        | 2.84       | 43.43          |
| 2450 MHz        | 2.64       | 45.77          |
| 2460 MHz        | 3          | 47.41          |
| 2470 MHz        | 2.57       | 48.57          |
| 2480 MHz        | 2.44       | 46.47          |
| 2490 MHz        | 2.57       | 47.46          |
| 2500 MHz        | 2.51       | 45.57          |
| 5150 MHz        | 2.55       | 53.5           |
| 5200 MHz        | 2.9        | 55.7           |
| 5250 MHz        | 3.45       | 53.47          |
| 5300 MHz        | 4          | 55.64          |
| 5350 MHz        | 3.17       | 53.59          |
| 5400 MHz        | 3.27       | 52.27          |
| 5450 MHz        | 3.31       | 55.33          |
| 5500 MHz        | 3.27       | 54.18          |
| 5550 MHz        | 3.27       | 52.75          |
| 5600 MHz        | 3.28       | 50.69          |
| 5650 MHz        | 3.51       | 55.87          |
| 5700 MHz        | 3.74       | 53.96          |
| 5750 MHz        | 3.17       | 52.82          |
| 5800 MHz        | 3.23       | 52.45          |
| 5850 MHz        | 3.45       | 52.53          |

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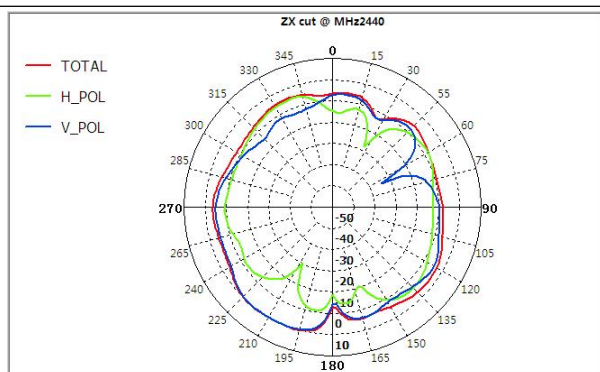
## 2.3.2. Antenna Radiation Pattern



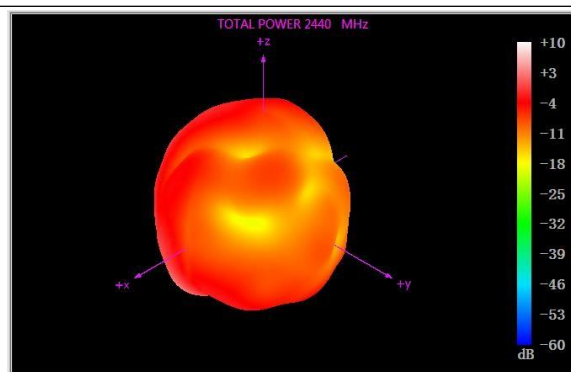
XOY-plane@2440MHz



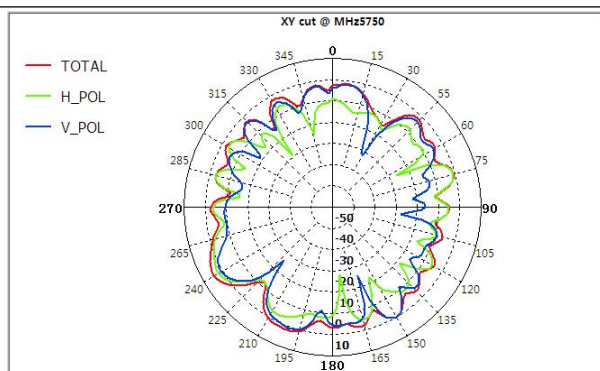
YOZ-plane@2440MHz



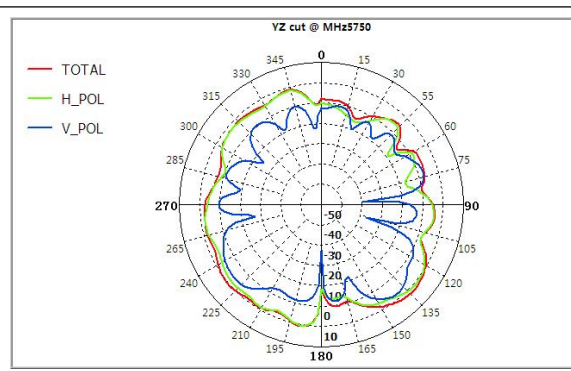
XOZ-plane@2440MHz



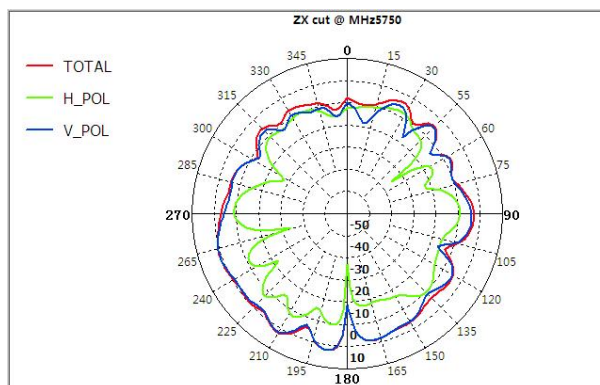
3D-plane @2440MHz



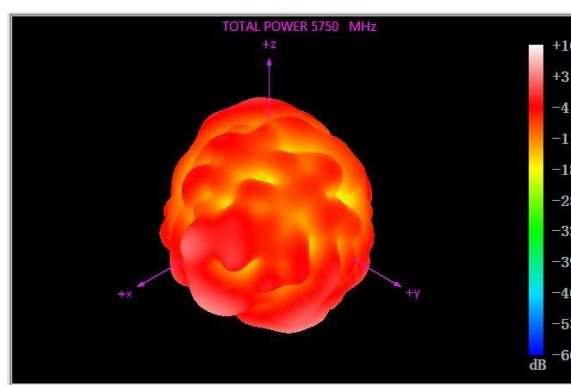
XOZ-plane@5750MHz



YOZ-plane@5750MHz



XOZ-plane@5750MHz



3D-plane @5750MHz

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## 3. Notes

1. Be careful not to be too close to the metal part during installation to avoid affecting the antenna performance.
2. This antenna is only applicable to this model, and the position of the antenna cannot be changed at will. If it is used on other machines, the effect will become worse, which has nothing to do with our company.
3. The data used in this acknowledgment (such as antenna efficiency, gain, etc.) are the data obtained from the test of the project/antenna in the laboratory of Shenzhen Feimin Technology Co., Ltd

## 4. Product packaging specification

Product name: 2.4G antenna

Antenna form: shielded wire+FPC

### 1、 Label requirements

The inner label is 7CM long and about 4CM wide

|                         |                                     |
|-------------------------|-------------------------------------|
| supplier                | Shenzhen Feimin Technology Co., Ltd |
| Product name            | *****                               |
| Material code           | *****                               |
| Specification and model | *****                               |
| quantity                | ***PCS                              |

The length of the outer label is 7cm. about 5cm

|                         |                                     |              |       |
|-------------------------|-------------------------------------|--------------|-------|
| Customer Name           |                                     |              |       |
| supplier                | Shenzhen Feimin Technology Co., Ltd |              |       |
| Order No                | *****                               |              |       |
| Material code           | *****                               |              |       |
| Specification and model | *****                               | Product name | ***** |
| quantity                | *****PCS                            | 检验           |       |
| Spare                   | ***PCS                              | 备注           |       |

### 2、 Packing process

#### 1 Job description:

Product PCS shall be packed in PE open bags, and each small bag shall be attached with an internal label; Put the small bag into the large PE sealing tape bag, except the mantissa and spare parts. Each box is packed with large bags of products, and the box is sealed with adhesive tape in the shape of "I".

Stick an external label on the upper right corner of the box to avoid missing or wrong filling.

#### 3、 Precautions

When packing, pay attention to the flat placement of the antenna. After sealing, there should be no serious shaking. If the whole box is not filled, it should be filled with foam to avoid bad products during transportation.

