

承 认 书

APPROVAL SHEET

客户名称

CUSTOMER NAME:

产品名称

PRODUCT NAME: 2.4G FPC 内置天线 L=51mm+端子

客户料号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C51F2D3319A REV: A

| | MANUFACTURER SIGNATURE | CUSTOMER SIGNATURE |
|--------------|---|-----------------------|
| CHECKED BY: | Eddy  | |
| APPROVED BY: | 工程专用章 Changxing. Liu | |
| DATE: | 2022/11/9 | |

Modification History

| Version | Content Revision | Issued by | Date |
|---------|------------------|-----------|-----------|
| A | Original version | Eddy | 2022-11-9 |
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Content

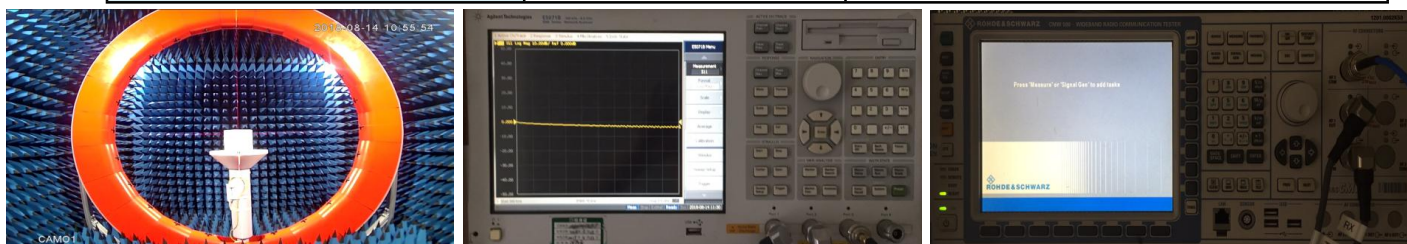
| <i>Item</i> | <i>Description</i> |
|-------------|------------------------------|
| 1.----- | Electrical Specification |
| 2.----- | Test Items and Equipment |
| 3.----- | S Parameter |
| 4.----- | Efficiency and Gain |
| 5.----- | Radiation Pattern |
| 6.----- | Antenna installation diagram |
| 7.----- | Mechanical Specification |
| 8.----- | Packaging |

1. Electrical Specification:

| Characteristics | Specifications | Unit |
|-----------------------|---------------------|----------|
| Outline Dimensions | 32.4x20.1,L51 | mm |
| Frequency | 2400-2500 | MHz |
| Impedance | 50 | Ω |
| VSWR | < 2.5 | |
| Polarization | Linear Polarization | |
| Gain | 1 REF | dBi |
| Efficiency | < 40 | % |
| Connector Type | MHF-2-Plug | |
| Operating temperature | -20°C~+85°C | |
| Storage Temp | -20°C~+50°C | |

2. Test Items and Equipment

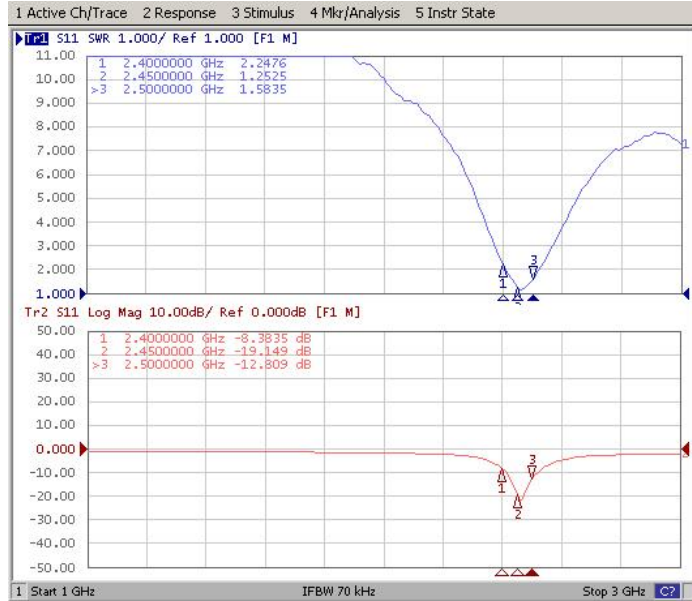
| | Test items | Test equipment |
|---|--|--|
| S Parameter | 1.Return Loss 2.VSWR | Network analyzer (Agilent E5071B) |
| The whole machine of Passive parameters | 1.Frequency 2.Gain 3.Radiation Pattern | 1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B) |
| The whole machine of Active parameters | 1.TRP 2.TIS | 1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500) |



3. S Parameter

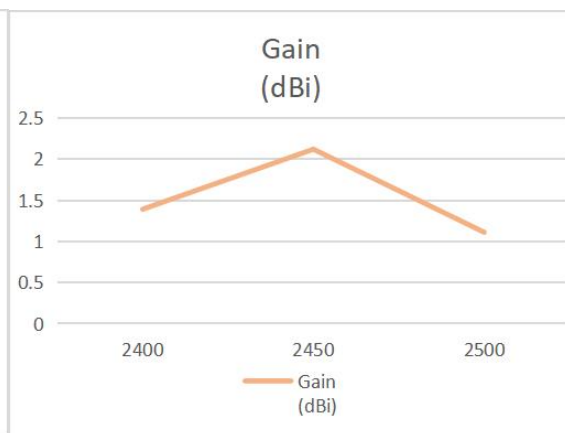
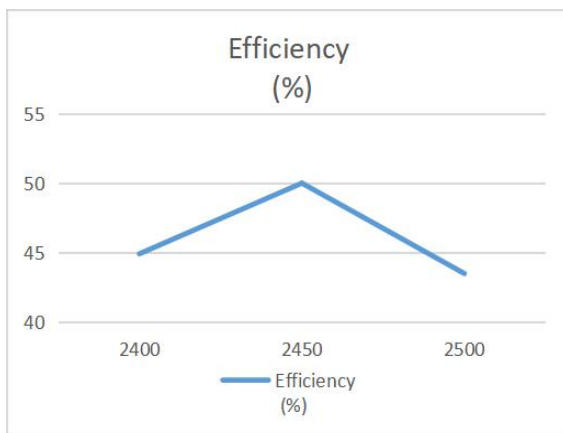
| Frequency (MHz) | Return Loss (dB) | VSWR |
|-----------------|------------------|------|
| 2400 | -8.38 | 2.24 |
| 2450 | -19.14 | 1.25 |
| 2500 | -12.80 | 1.58 |

* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
 $RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$



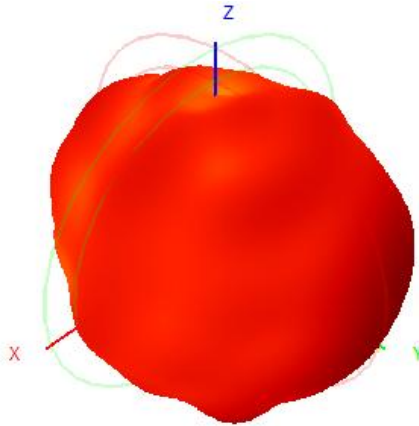
4. Efficiency and Gain

| Frequency (MHz) | 2400 | 2450 | 2500 |
|-----------------|-------|-------|-------|
| Efficiency (%) | 44.93 | 50.01 | 43.51 |
| Gain (dBi) | 1.39 | 2.12 | 1.11 |

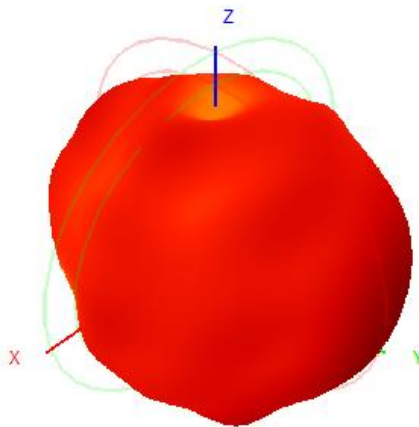


5. Radiation Pattern

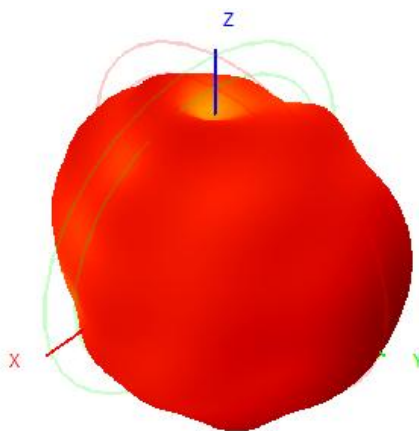
5-1 Antenna 3D Radiation Pattern



2400MHz

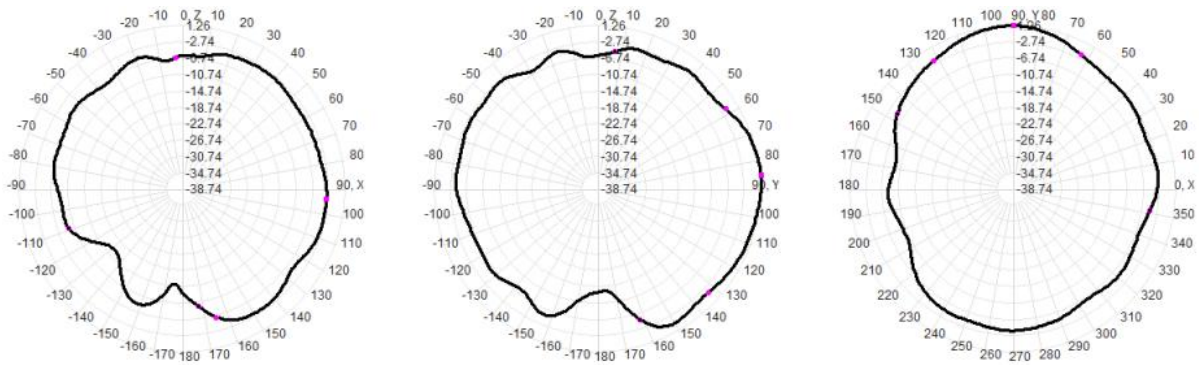


2450MHz

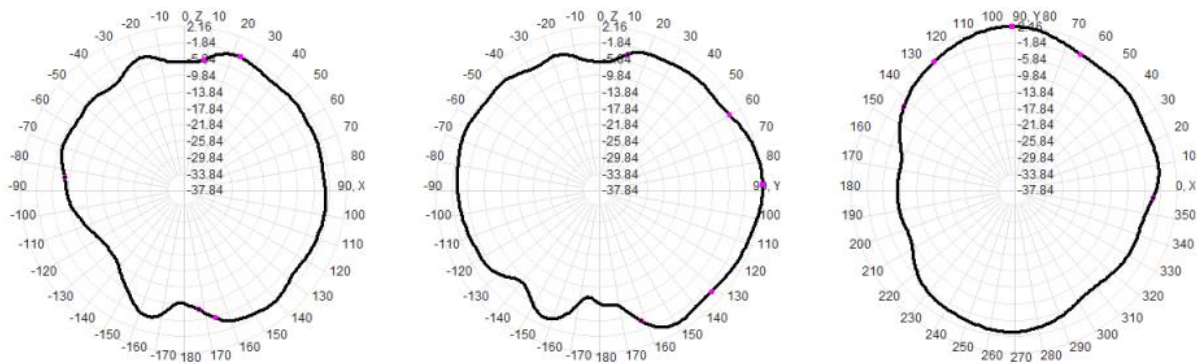


2500MHz

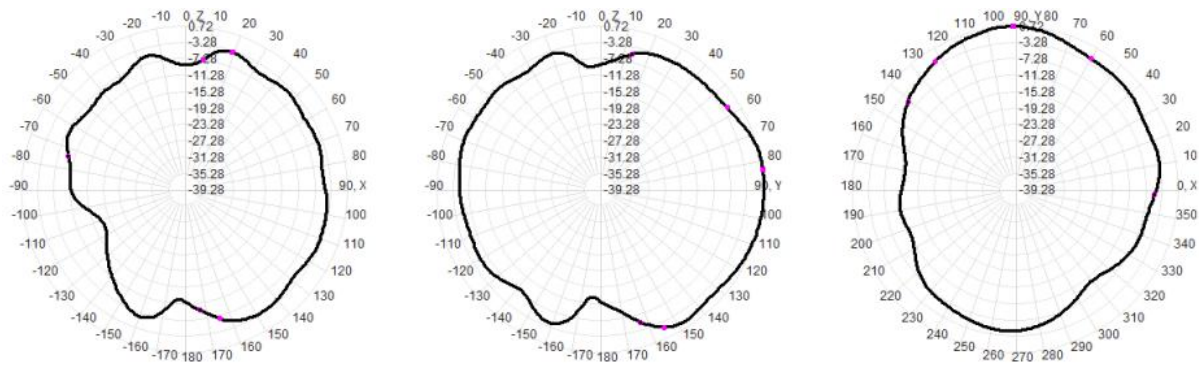
5-2 Antenna 2D Radiation Pattern



2400MHz

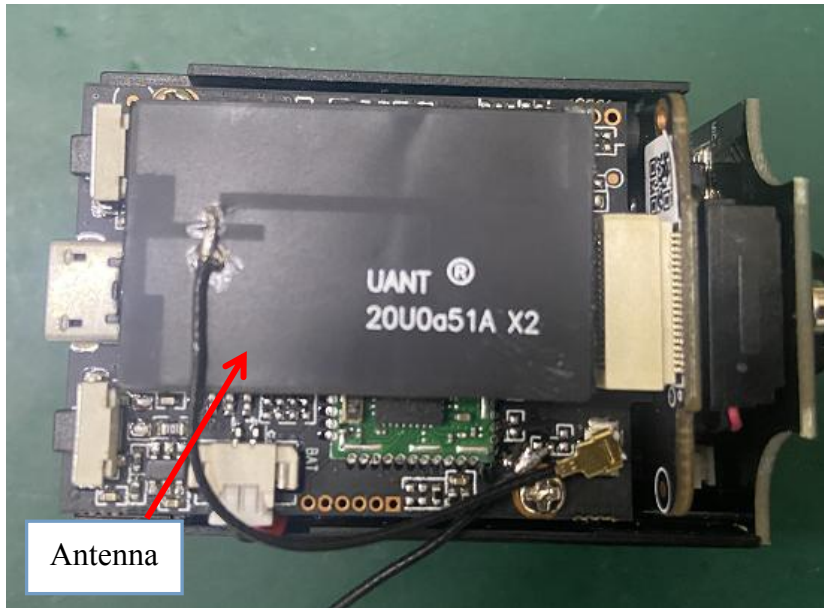


2450MHz

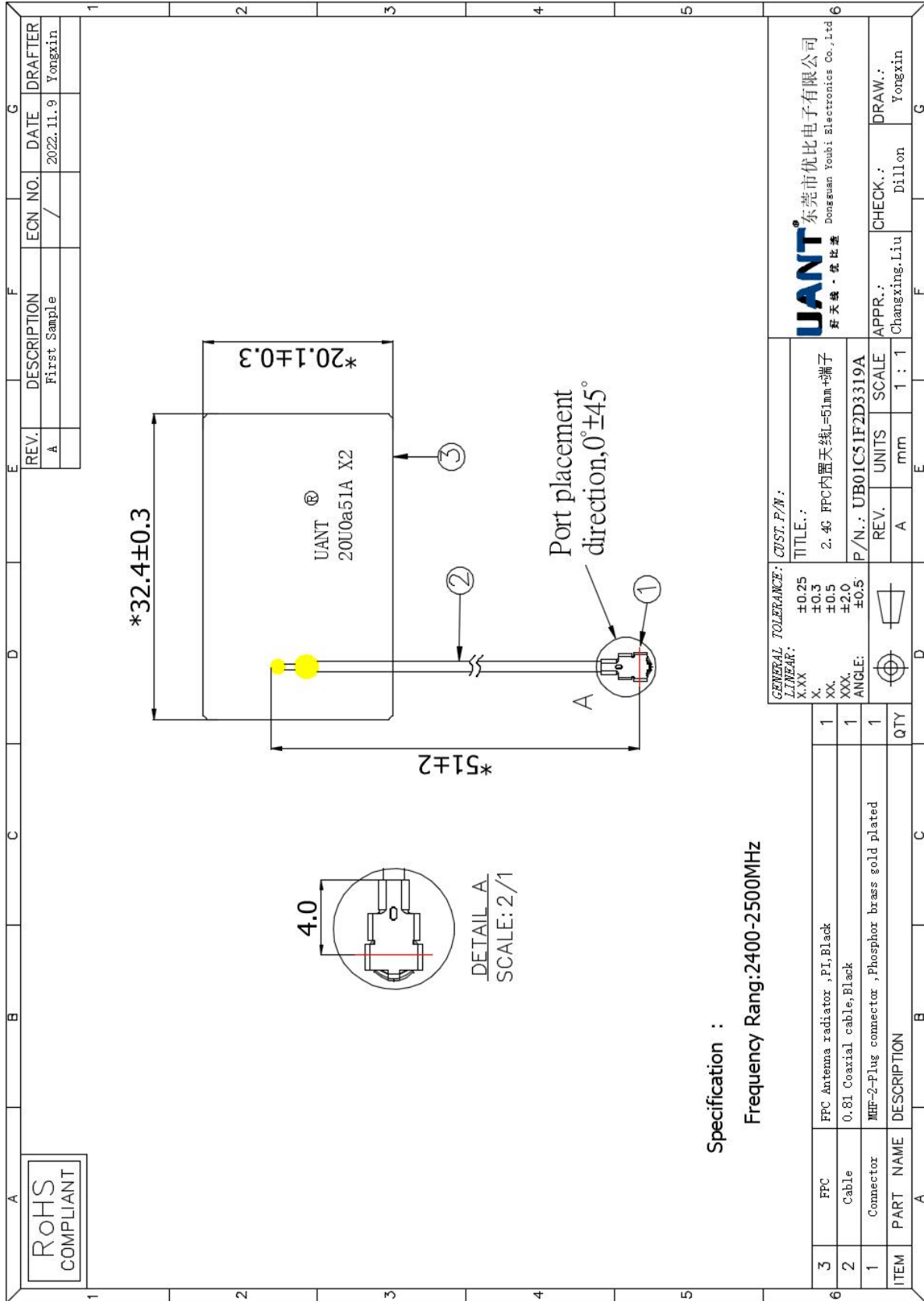


2500MHz

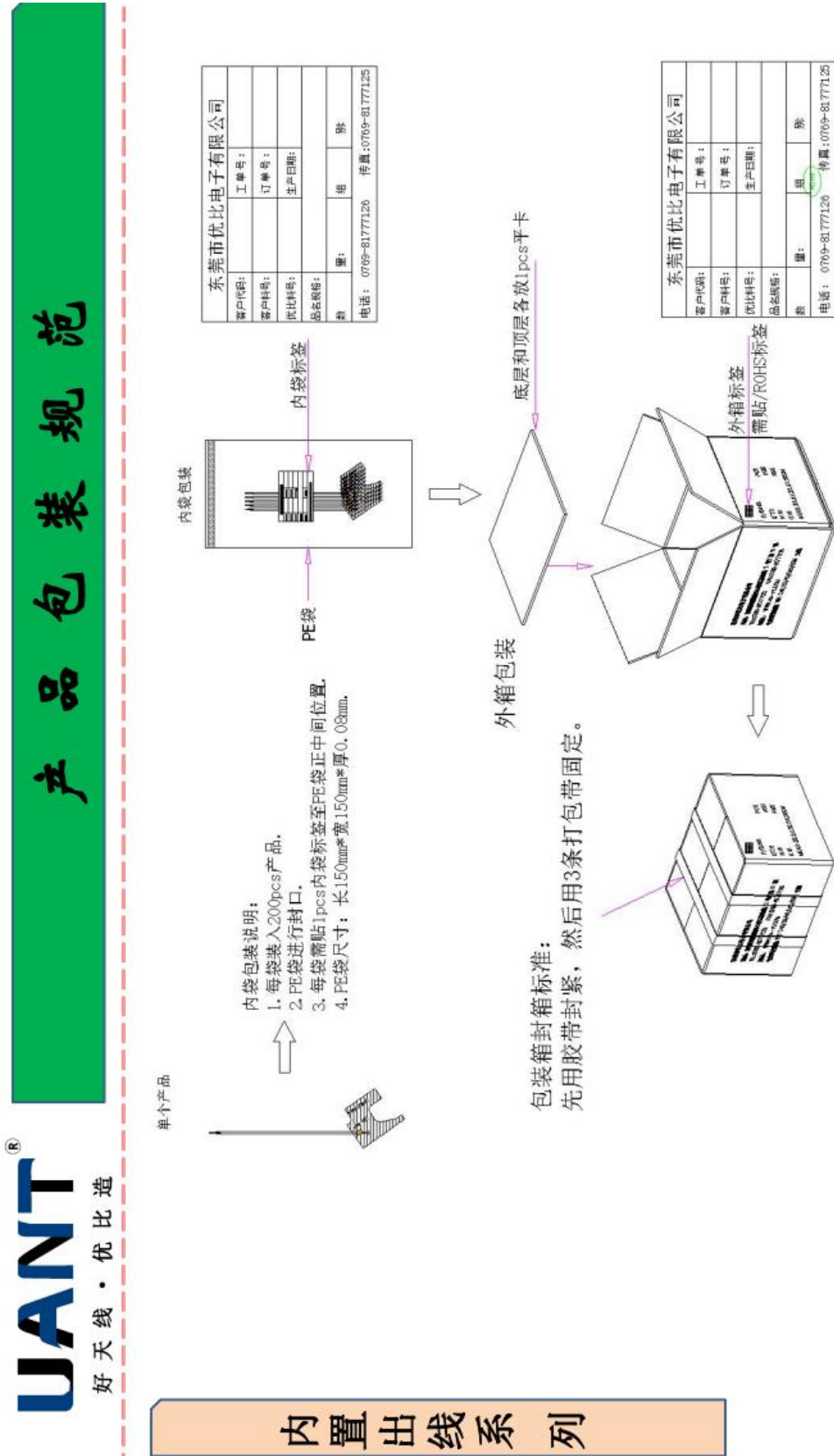
6. Antenna installation diagram



7. Mechanical Specification



8. Packaging



注: 此份包装规范适用于FPC, PCB天线类的线材总长<90mm带ipex和不带ipex产品, 属于通用类型.

1. 中号纸箱装10000pcs产品每箱.

内置出线系列