

承 认 书

APPROVAL SHEET

客户名称

CUSTOMER NAME:

产品名称

PRODUCT NAME: 2.4G W71 白色天线 L=230mm+端子

客户料号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C225W3D2171A REV: B

| | MANUFACTURER SIGNATURE | CUSTOMER SIGNATURE |
|--------------|---|-----------------------|
| CHECKED BY: |  | |
| APPROVED BY: | | |
| DATE: | 2022/9/28 | |

Modification History

| Version | Content Revision | Issued by | Date |
|---------|------------------|-----------|------------|
| A | Original version | Dillon | 2022-09-28 |
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Content

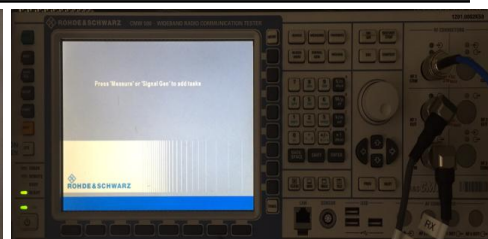
| <i>Item</i> | <i>Description</i> |
|-------------|--------------------------|
| 1.----- | Electrical Specification |
| 2.----- | Test Items and Equipment |
| 3.----- | S Parameter |
| 4.----- | Efficiency and Gain |
| 5.----- | Radiation Pattern |
| 6.----- | Mechanical Specification |
| 7.----- |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

1. Electrical Specification:

| Characteristics | Specifications | Unit |
|-----------------------|-----------------------------------|----------|
| Outline Dimensions | 12.9x104.9,L230 | mm |
| Frequency | 2400-2500 | MHz |
| Impedance | 50 | Ω |
| VSWR | ≤ 2.0 | |
| Polarization | Linear Polarization | |
| Gain | 2.43 (max) | dBi |
| Efficiency | >60 | % |
| Connector Type | 1.13 MHF-1-Plug | |
| Operating temperature | -20 $^{\circ}$ C~+70 $^{\circ}$ C | |
| Storage Temp | -20 $^{\circ}$ C~+70 $^{\circ}$ C | |

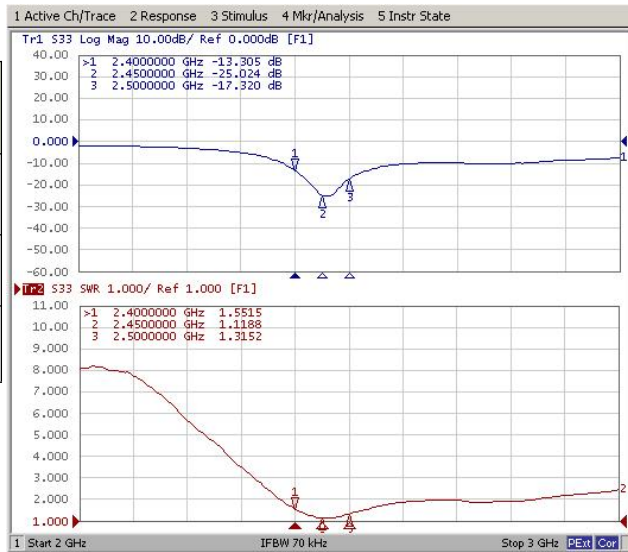
2. Test Items and Equipment

| | 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 | -13 | 1.55 |
| 2450 | -25 | 1.11 |
| 2500 | -17.32 | 1.31 |



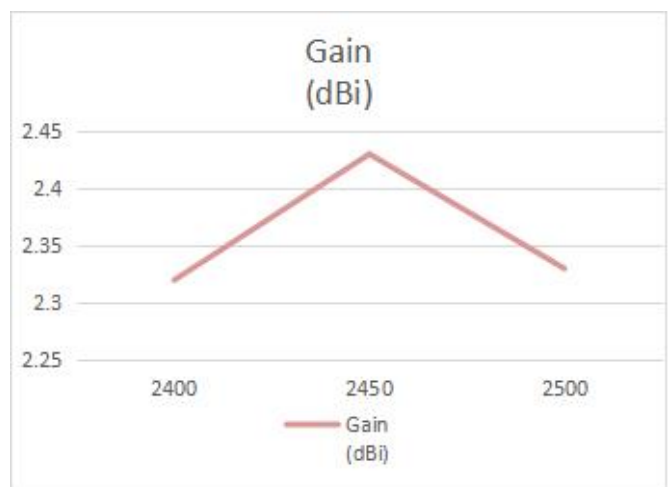
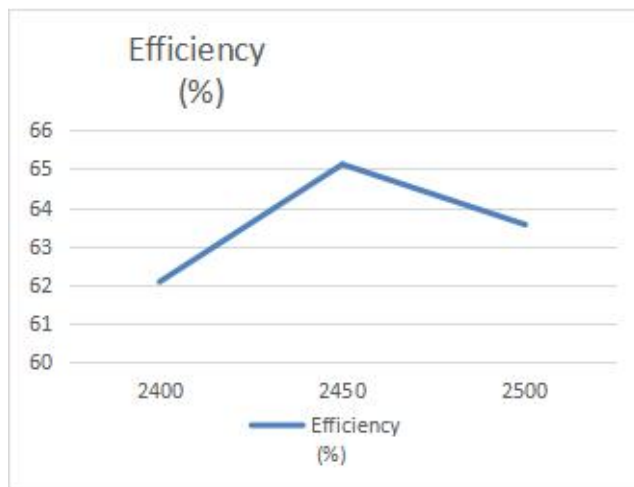
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

$$RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$$

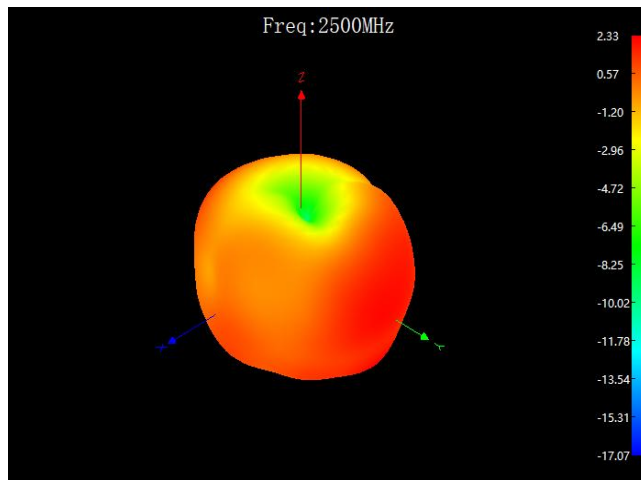
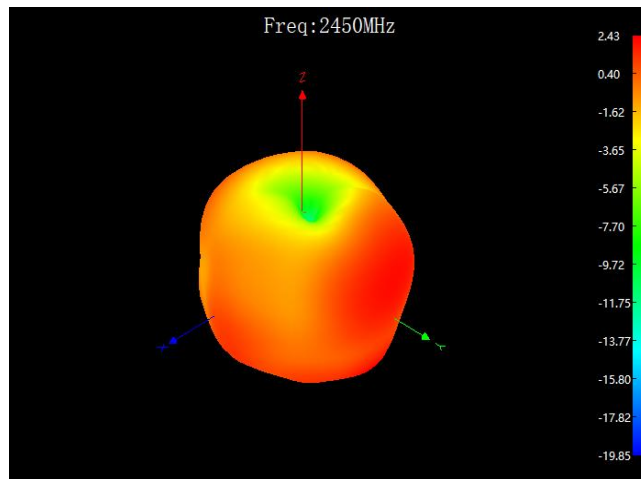
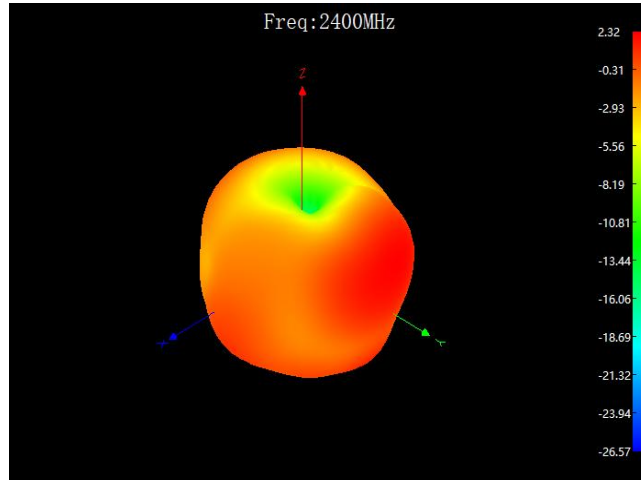
4. Efficiency and Gain

| Frequency (MHz) | 2400 | 2450 | 2500 |
|-----------------|-------|-------|-------|
| Efficiency (%) | 62.08 | 65.12 | 63.56 |
| Gain (dBi) | 2.32 | 2.43 | 2.33 |

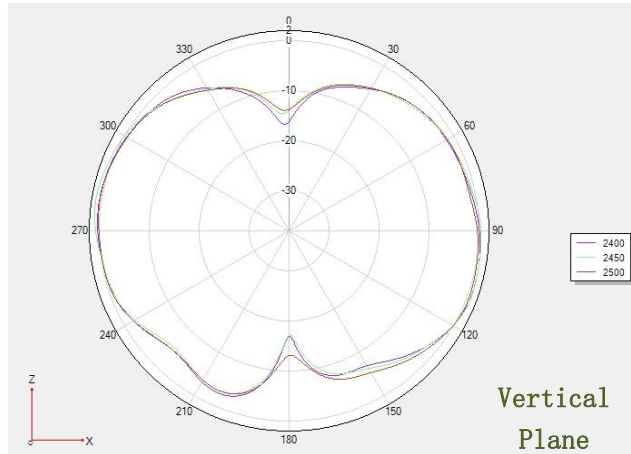


5. Radiation Pattern

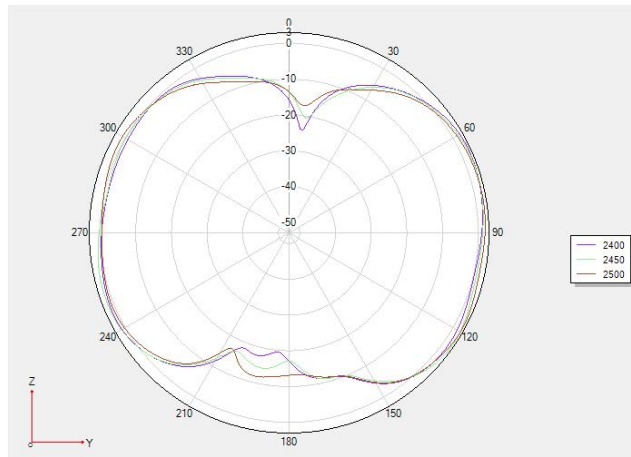
5-1 Antenna 3D Radiation Pattern



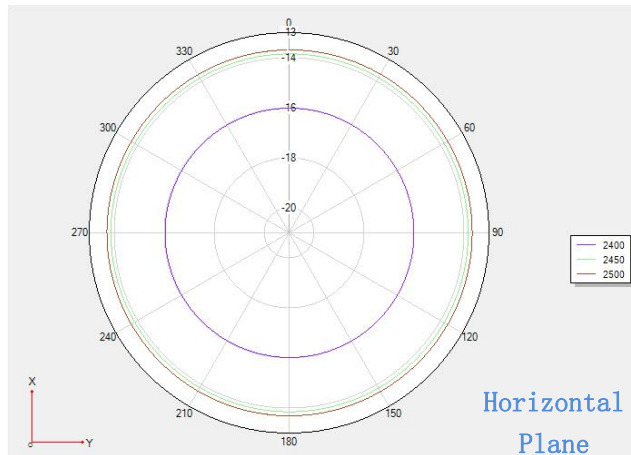
5-2 Antenna 2D Radiation Pattern



Phi 0 2D

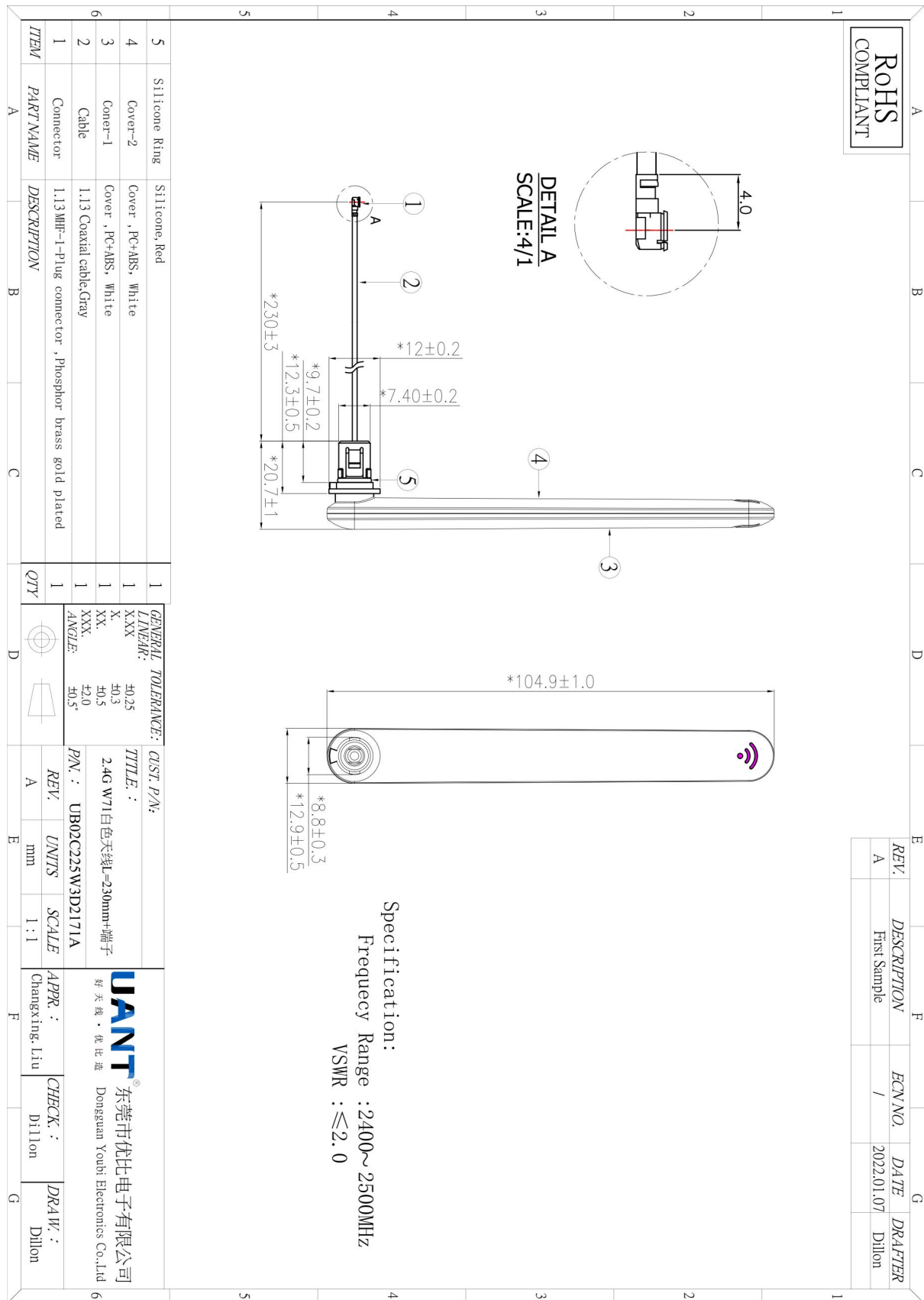


Phi 90 2D


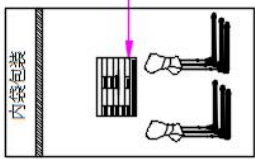
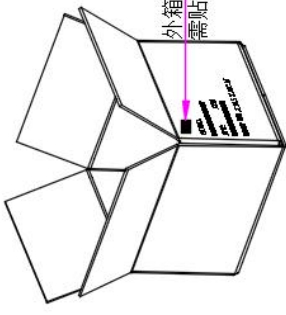
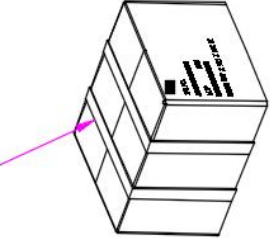


Theta 90 2D

6. Mechanical Specification:



7. Packaging

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|---|--------|---|----------------|--|-------------|--|--|-------|--|-----|--|-----|--|---|--|------|--|------|--|-------|--|-------|--|-----|--|-----|--|--|--|--------------------|------------|-------|--------|--------|--------|---------|--------|--------|--|---|----|-----|----------------|--------|-------------|---------|---------|-------------------------|--|--|--|--|--|---------|-------------------------|--|--|--|--|--|--|---------|--|--|--|--|--|--|--|--------------|--|--|--|--|--|--|--|
| A | B | C | D | E | F | G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>单个产品</p> | |  <p>内袋包装</p> | |  <p>外箱包装</p> | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>RoHS COMPLIANT</p> | | <p>内袋包装说明:</p> <ol style="list-style-type: none"> 25pcs 产品包扎成一扎, 每袋转入2扎产品, 共计50pcs. PE袋进行封口. 每袋需贴1pcs内袋标签至距袋正中间位置. | | <p>包装封箱标准:</p> <p>先用胶带封紧, 然后用2条打包带固定.</p> | | <p>1. 纸箱尺寸: 长320mm*宽320mm*高200mm.</p> <p>2. 每箱装16袋产品, 共计装800pcs产品每箱.</p> | | <p>电话: 0769-8177126 传真: 0769-8177125</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>REV. : A</p> <p>DESCRIPTION : First Sample</p> <p>ECN NO. : /</p> <p>DATE : 2021-09-10</p> <p>DRAFTER : Mark</p> | | <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>工单号:</td><td></td></tr> <tr><td>订单号:</td><td></td></tr> <tr><td>产品型号:</td><td></td></tr> <tr><td>品名规格:</td><td></td></tr> <tr><td>数量:</td><td></td></tr> <tr><td>日期:</td><td></td></tr> </table> <p>电话: 0769-8177126 传真: 0769-8177125</p> | | 工单号: | | 订单号: | | 产品型号: | | 品名规格: | | 数量: | | 日期: | | <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>工单号:</td><td></td></tr> <tr><td>订单号:</td><td></td></tr> <tr><td>产品型号:</td><td></td></tr> <tr><td>品名规格:</td><td></td></tr> <tr><td>数量:</td><td></td></tr> <tr><td>日期:</td><td></td></tr> </table> <p>电话: 0769-8177126 传真: 0769-8177125</p> | | 工单号: | | 订单号: | | 产品型号: | | 品名规格: | | 数量: | | 日期: | | <p>UANT[®] 东莞市优比电子有限公司</p> <p>好天线 · 优比造 Dongguan Youbi Electronics Co., Ltd</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>GENERAL TOLERANCE:</td> <td>CUST. P/N:</td> <td>REV.:</td> <td>UNITS:</td> <td>SCALE:</td> <td>APPR.:</td> <td>CHECK.:</td> <td>DRAW.:</td> </tr> <tr> <td>L: ±10</td> <td></td> <td>A</td> <td>mm</td> <td>1:1</td> <td>Changxing, Liu</td> <td>Dillon</td> <td>Mark, Liang</td> </tr> <tr> <td>X: ±0.3</td> <td>TITLE.:</td> <td colspan="6">2.4G W70 白色天线L=150mm+端子</td> </tr> <tr> <td>Y: ±0.5</td> <td colspan="7">P/N. : UB02C150W3D2311A</td> </tr> <tr> <td>Z: ±2.0</td> <td colspan="7"></td> </tr> <tr> <td>ANGLE: ±0.5°</td> <td colspan="7"></td> </tr> </table> | | GENERAL TOLERANCE: | CUST. P/N: | REV.: | UNITS: | SCALE: | APPR.: | CHECK.: | DRAW.: | L: ±10 | | A | mm | 1:1 | Changxing, Liu | Dillon | Mark, Liang | X: ±0.3 | TITLE.: | 2.4G W70 白色天线L=150mm+端子 | | | | | | Y: ±0.5 | P/N. : UB02C150W3D2311A | | | | | | | Z: ±2.0 | | | | | | | | ANGLE: ±0.5° | | | | | | | |
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| 订单号: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 产品型号: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 品名规格: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 数量: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| L: ±10 | | A | mm | 1:1 | Changxing, Liu | Dillon | Mark, Liang | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Y: ±0.5 | P/N. : UB02C150W3D2311A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z: ±2.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANGLE: ±0.5° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |