



Shenzhen DEWEIMA Communication Equipment Co.Ltd

# SPECIFICATION SHEET FOR APPROVAL

|                         |             |
|-------------------------|-------------|
| CUSTOMER NAME<br>(客户名称) | 阿戈斯         |
| CUSTOMER P/N<br>(客户料号)  |             |
| PART NAME<br>(品 名)      | 2.4G FPC 天线 |
| DWM P/N<br>(料 号)        |             |
| APPROVAL REV.<br>版次     | DWM-V1.0    |

| CONTRACTOR    |               |               | DATE: 2024-09-13   |
|---------------|---------------|---------------|--------------------|
| QA<br>CHECKED | ME<br>CHECKED | RF<br>CHECKED | MANAGER<br>CHECKED |
| 高鑫            | 陈裕            | 余奇学           | 高春彦                |

| CUSTOMER    |            | DATE:       |
|-------------|------------|-------------|
| Approved By | Checked By | Prepared By |
|             |            |             |

|                                                                                   |                              |            |       |
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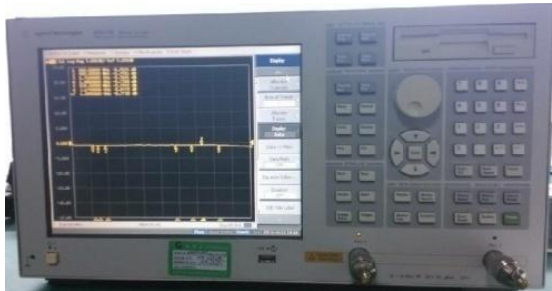
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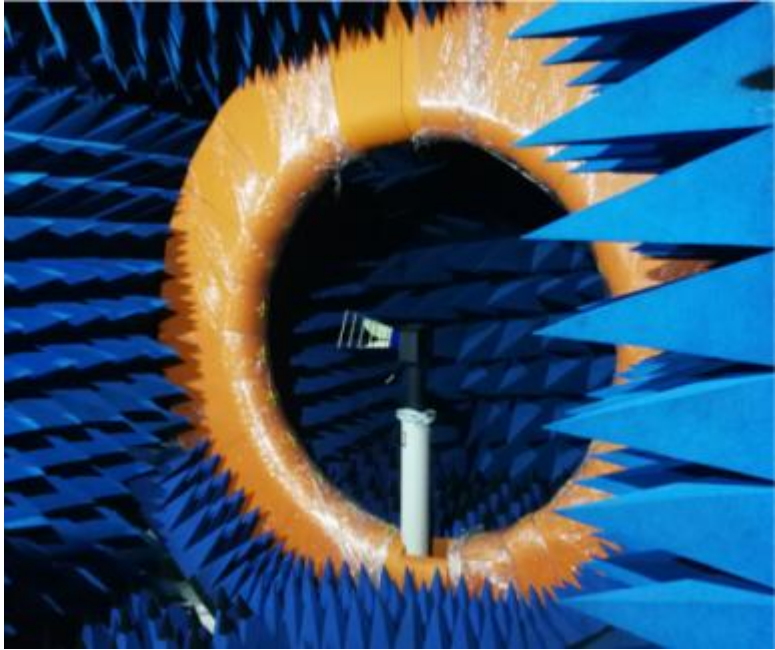
## 1. Product Application/产品应用

This antenna product is used for the transmission of 2.4G signals  
该天线产品用于 2.4G 信号的传输。

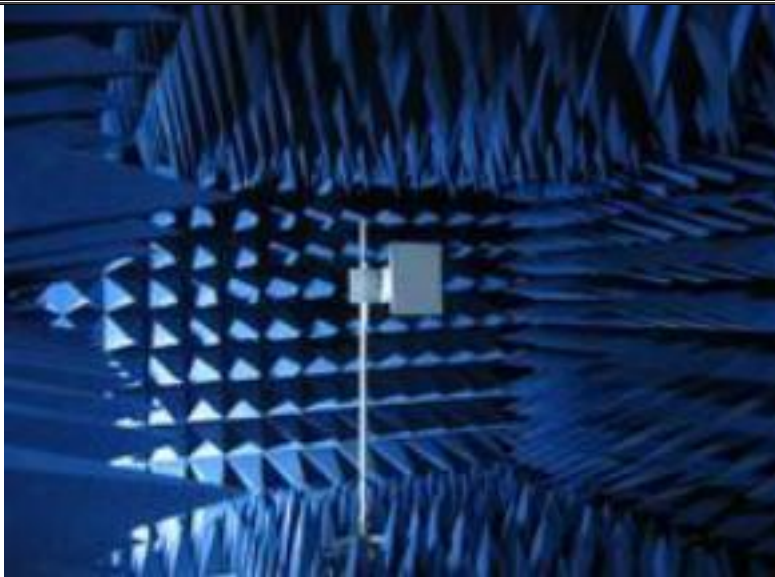
## 2. The test environment, equipment/测试环境、设备

| Item<br>项目 | Description<br>项目描述      | Test Condition/测试条件                                                                                                                                                                      | Requirement /规格要求                                           |
|------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 2.1        | Passive testing<br>/无源测试 | The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices. (VSWR 测量装置依次连接：网络分析仪测量电缆 agilent5071B → 客户提供终端。) | VSWR 驻波比：<br>2400-2500MHz < 2<br><br>Impedance 阻抗：<br>50 oh |
|            |                          | Test equipment/测试设备                                                                                                                                                                      |                                                             |
|            |                          |                                                                                                      |                                                             |
| Item<br>项目 | Description<br>项目描述      | Test Condition/测试条件                                                                                                                                                                      | Requirement /规格要求                                           |

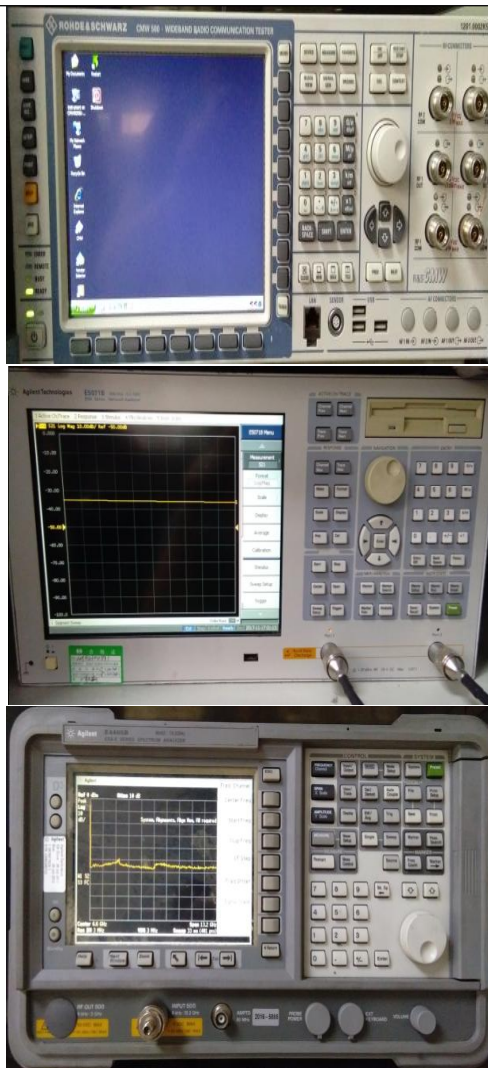
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|     |                                               |                                                                                                                                                                                                                |                                                                                             |
|-----|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 2.2 | Gain and Efficiency 增益及效率测试                   | <p>Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.<br/>(以下图片显示的天线的测量条件被放在测量装置,它是用于所有的测量电性能。)</p> | <p>Gain 天线增益:<br/>2400-2500MHz: 1±1dBi</p> <p>Efficiency 天线效率:<br/>2400-2500MHz &gt;30%</p> |
| 2.3 | Microwave Anechoic (Satimo&ETS)<br>)<br>/微波暗室 | <p>Test equipment/测试设备</p>                                                                                                  |                                                                                             |

|                                                                                   |                              |                   |              |
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CMW500  
 Agilent5071B  
 2.4 AgilentE4405B  
 Agilent8960



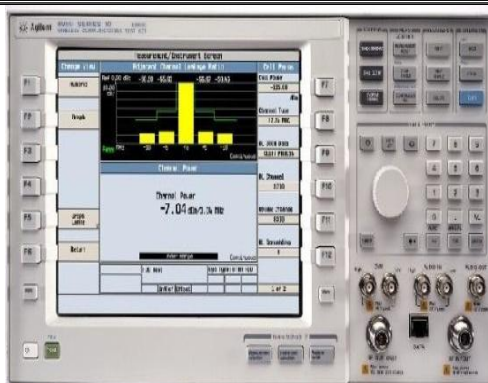


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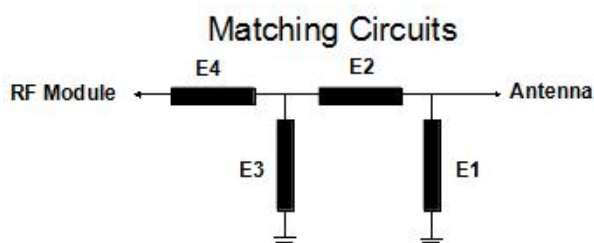
### 3. Technology Parameters/技术参数

|                          |               |
|--------------------------|---------------|
| Frequency Range/频率范围:    | 2400-2500MHz  |
| Operating Humidity/工作湿度: | 85% R.H.MAX   |
| Temperature Rating/温度范围: | -40°C ~ +85°C |

#### 3.1 The matching test value/调试匹配值

我司没有对天线的匹配电路做调试

| Element  | Value |
|----------|-------|
| E1(0402) |       |
| E2(0402) |       |
| E3(0402) |       |
| E4(0402) |       |
|          |       |





## Product Specification

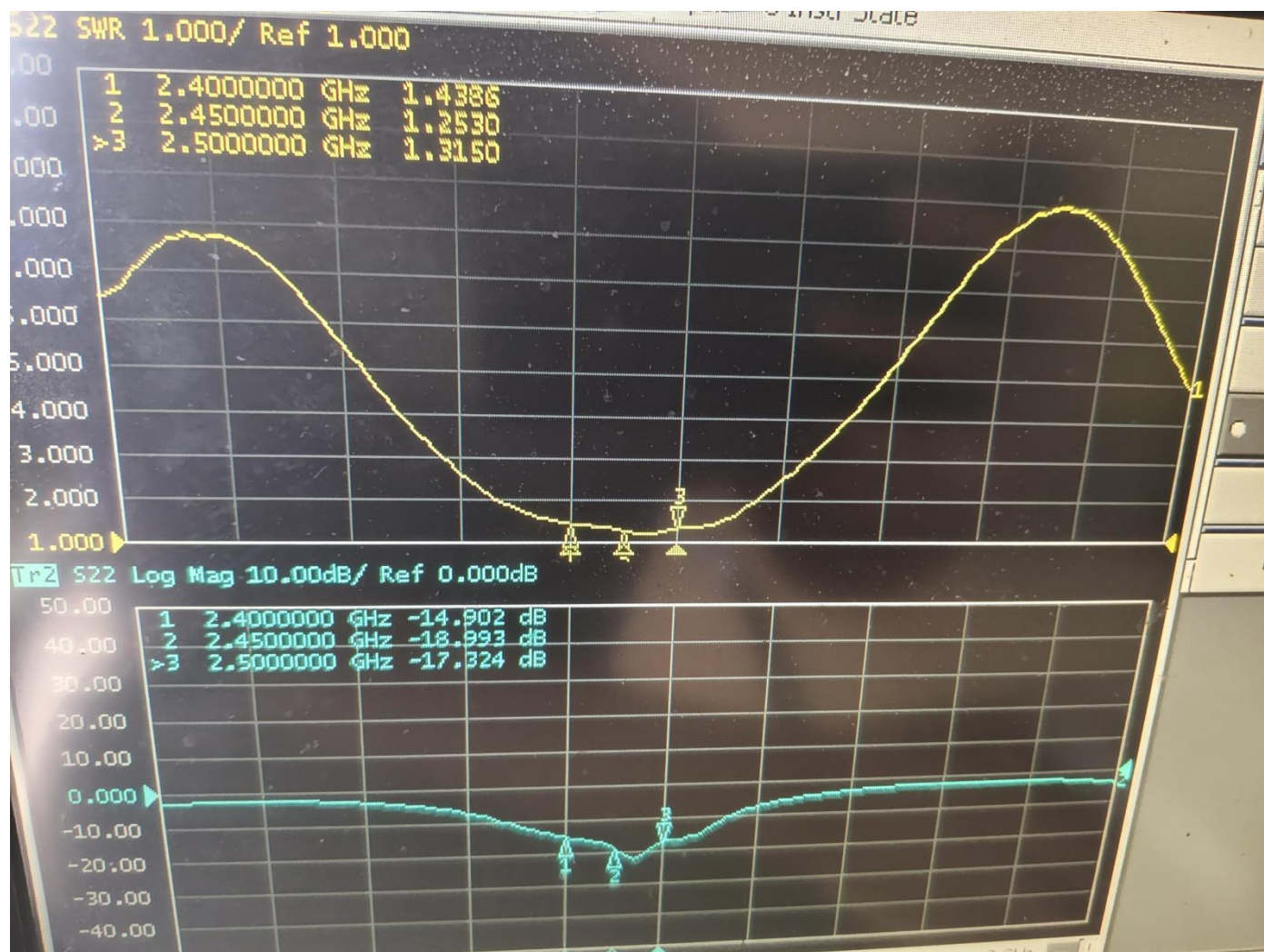
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### 3.2 VSWR/驻波比:



### 3.3. Efficiency And Gain/效率和增益

| Frequency/Mhz | MaxGain/dBi | Efficiency / % |
|---------------|-------------|----------------|
| 2400.00       | 0.26        | 30.05          |
| 2410.00       | 1.43        | 38.83          |
| 2420.00       | 1.03        | 42.02          |
| 2430.00       | 1.88        | 42.17          |
| 2440.00       | 1.02        | 44.71          |
| 2450.00       | 1.07        | 40.02          |
| 2460.00       | 1.42        | 43.86          |
| 2470.00       | 1.40        | 43.74          |
| 2480.00       | 1.45        | 42.60          |
| 2490.00       | 1.05        | 45.65          |
| 2500.00       | 1.86        | 45.67          |



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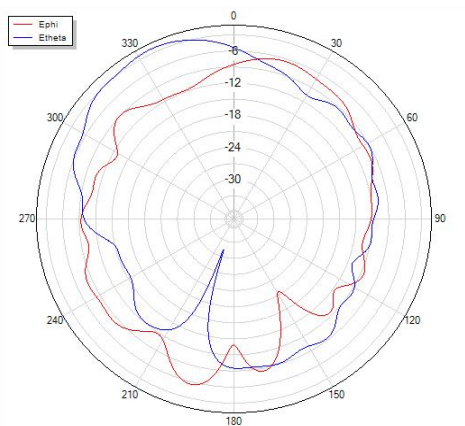
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## 3.4. 2D Pattern

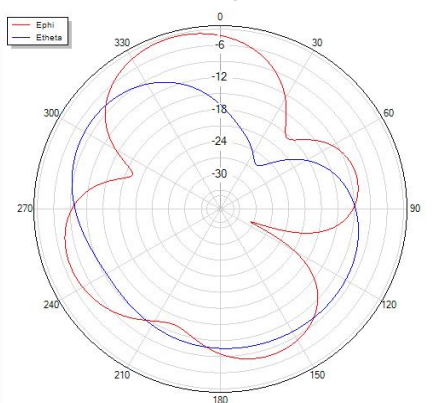
### Phi90°2D

Phi=90 freq=2400MHz



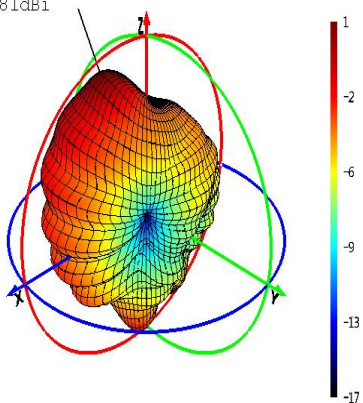
### Theta90°2D

Theta=90 freq=2400MHz

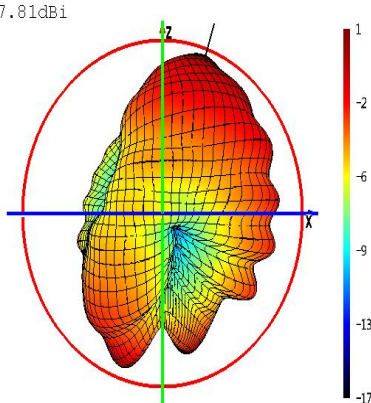


### 3D Pattern

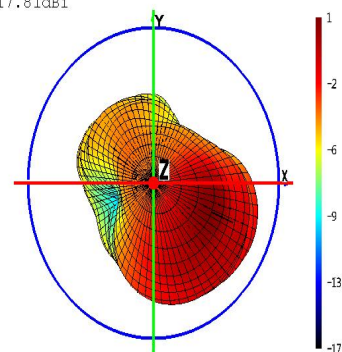
MAX:0.26dBi  
MIN:-17.81dBi



MAX:0.26dBi  
MIN:-17.81dBi



MAX:0.26dBi  
MIN:-17.81dBi





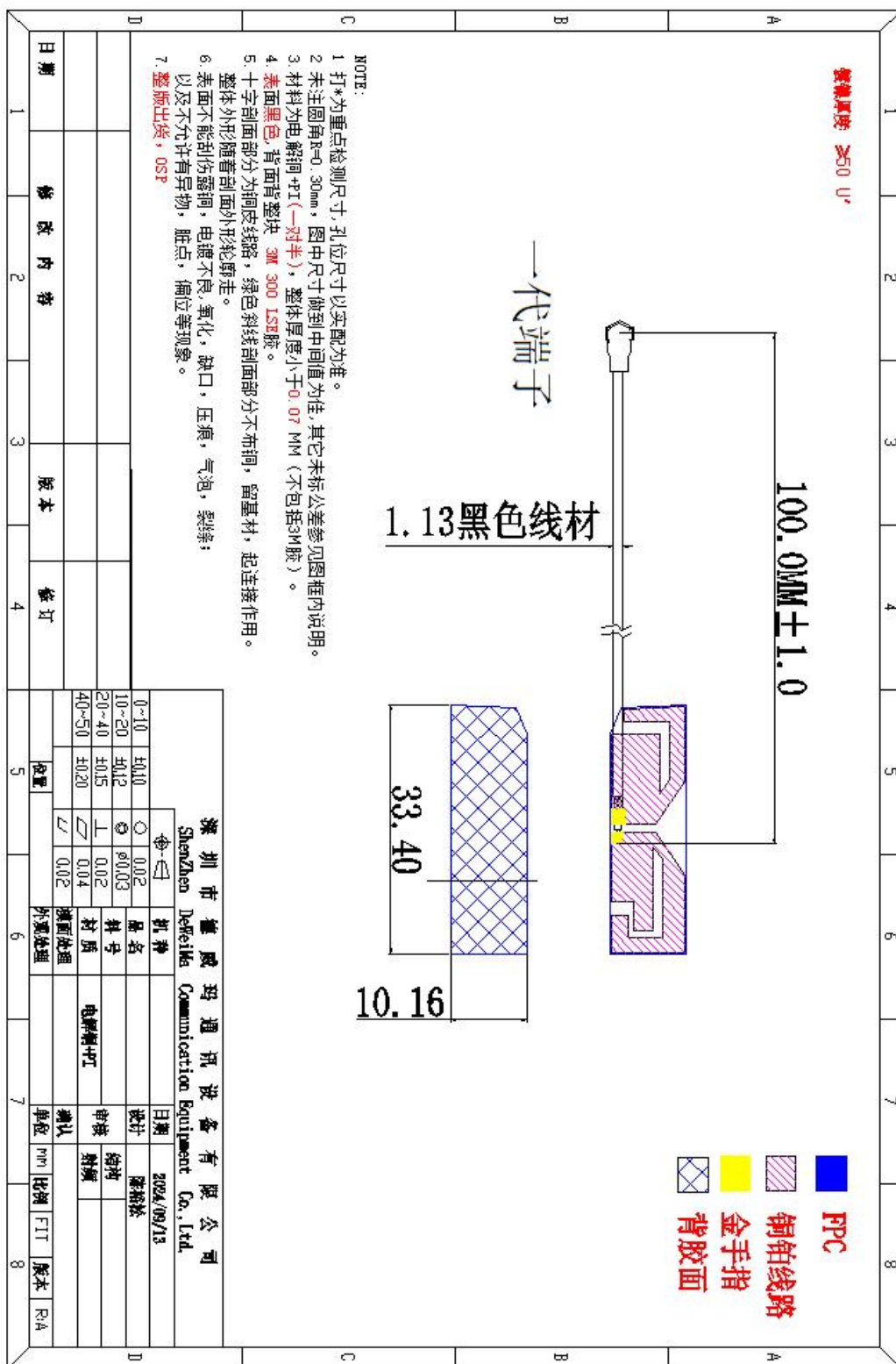
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## 4. Antenna Engineer drawing/工程图纸



|                                                                                   |                              |            |       |
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## 5.Environmental Performance/环境性能

| Item<br>项目 | Description<br>项目描述                    | Test Condition 测试条件                                                        | Requirement 规格要求                                                                                    |
|------------|----------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 5.1        | High and low temperature test<br>高低温测试 | Temp.: -40 °C<br>Time: 48 hours<br><br>Temp.: 85°C<br>Time: 48 hours       | 1. No visible damage.<br>(无可见损伤)<br>2. The electric performances reach the standard.<br>(电气性能达标)    |
| Item<br>项目 | Description<br>项目描述                    | Test Condition 测试条件                                                        | Requirement 规格要求                                                                                    |
| 5.2        | Salt Spray<br>盐雾测试                     | 5±0.1% Nad salt fog<br>PH Value: 6.5-7.2<br>Temp: 35±1 °C<br>Time:24 hours | 1. No color change.<br>(无颜色变化)<br>2. the appearance of the antenna does not flake off.<br>(天线无外观脱落) |

## 6.Usage Precaution/使用禁忌或注意事项

| No  | Items 项目                    | Matter 事项                                                                                                                                         |
|-----|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1 | Precautions<br>禁忌           | a)Please avoid the cleaning of this product<br>a)请避免清洁此产品                                                                                         |
| No  | Items 项目                    | Matter 事项                                                                                                                                         |
| 6.2 | Stockpile condition<br>存储条件 | Use this product within 6 months after receipt<br>Condition : Temp: 5~30°C Humidity:≤70%<br><br>有效期: 请在产品接收后的 6 个月内使用<br>存储环境: 温度:5~30°C; 湿度:≤70% |