

## 1 名词解释

|       |                                         |
|-------|-----------------------------------------|
| dBi   | Decibel relative isotropic antenna      |
| Tx    | Transmit frequency                      |
| Rx    | Receive frequency                       |
| TRP   | Total Radiated Power                    |
| TIS   | Total Isotropic Sensitivity             |
| VSWR  | Voltage Standing Wave Ratio             |
| GSM   | Global Service for Mobile communication |
| DCS   | Digital Communication System            |
| CDMA  | Code Division Multiple Access           |
| WCDMA | Wideband Code Division Multiple Access  |

## 2 测试设备

可根据实际情况自行增减 Can be increased or decreased according to the actual situation

矢量网络分析仪 Vector network analyzer

综合测试仪 Comprehensive tester

SATIMO64 位暗室 Satimo64-bit darkroom

## 3 适用频段 Applicable frequency band

将适用的频段用其他颜色标出。 Mark the applicable frequency bands with other colors.

| 制式        | 频段              |
|-----------|-----------------|
| BLE(2.4G) | 2400MHz~2500MHz |
| 5. 8G     | 5150MHz~5850MHz |

## 4 基本测试项目

4.1 驻波比图 Standing poppy chart

4.2 史密斯阻抗图 Smith impedance diagram

4.3 辐射方向图 Radiation pattern

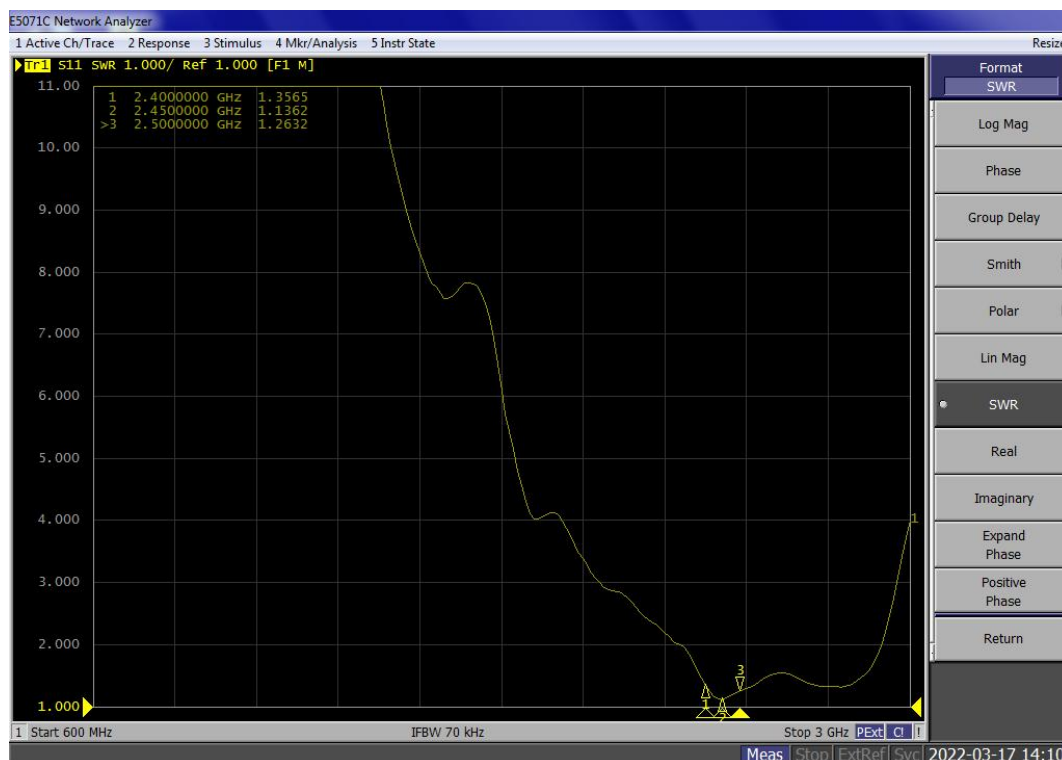
4.4 增益和效率 Gain and efficiency

4.5 TRP&TIS 测试 The TRP&TIS test

## 5 测试指标和数据图表 Test metrics and data charts

5.1 驻波比 Standing-wave ratio

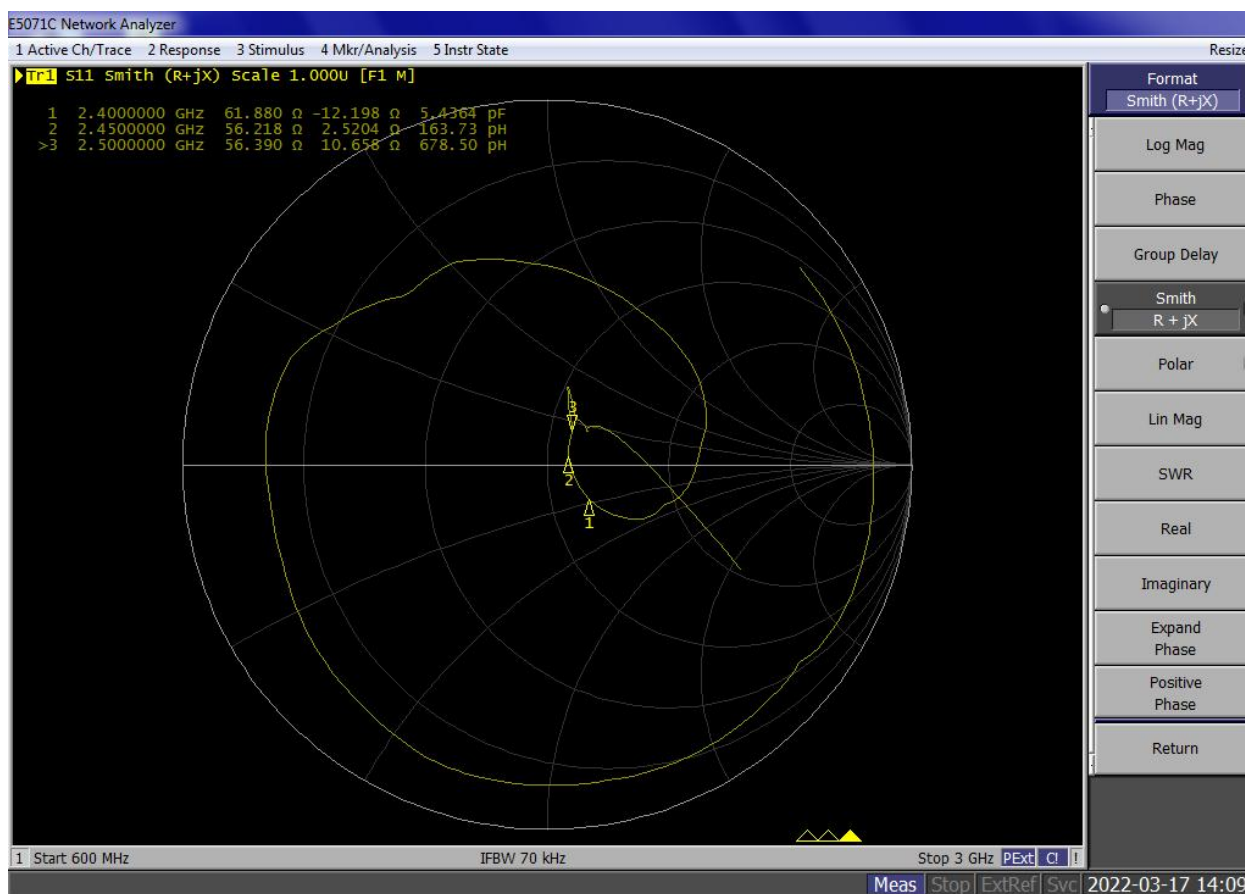
5.1.1 驻波比图 Standing poppy chart



### 5.1.2 驻波比数据 Standing wave ratio data

| Freq/MHz | 2400 | 2450 | 2500 |
|----------|------|------|------|
| VSWR     | 1.35 | 1.13 | 1.26 |

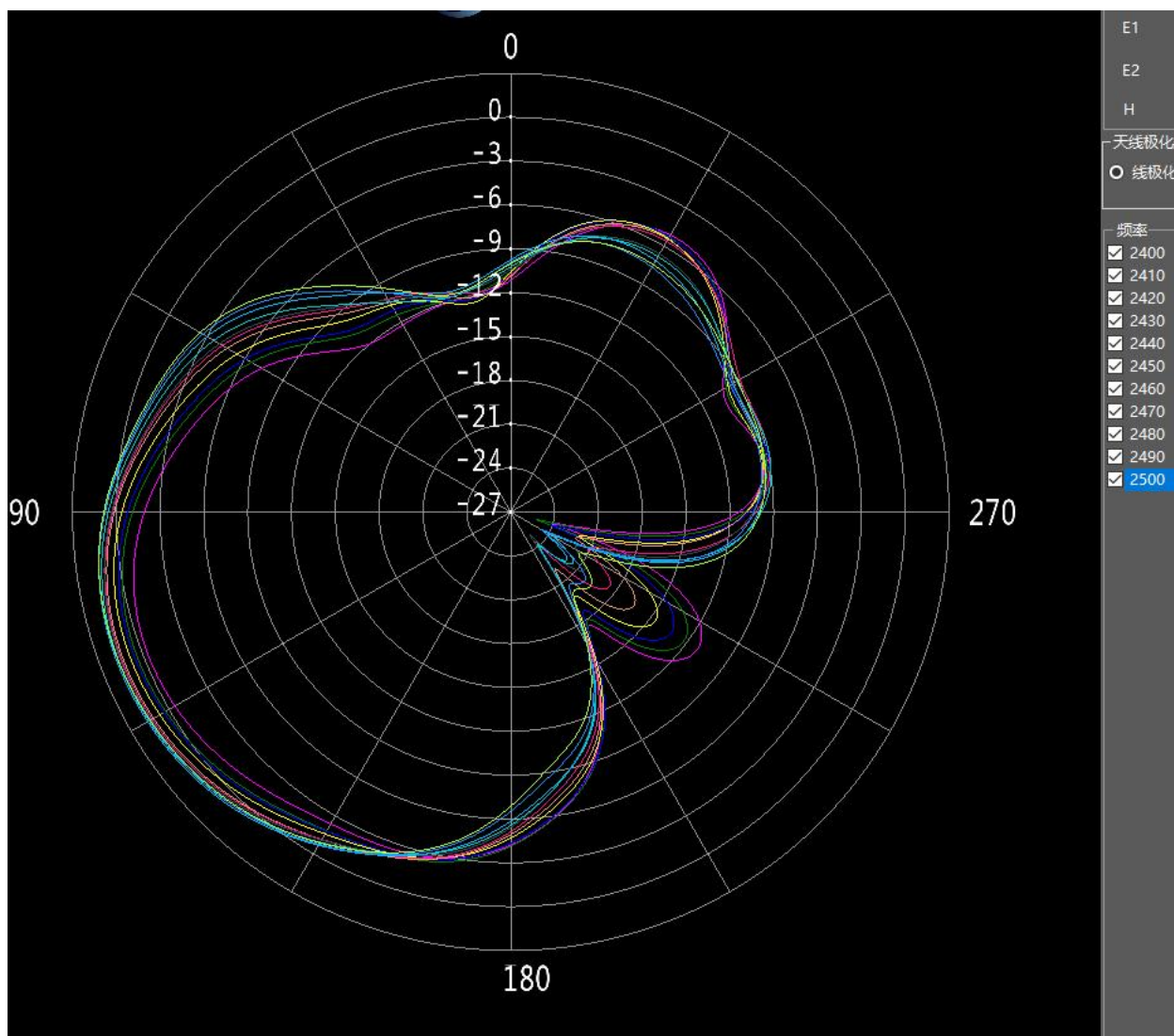
### 5.2 史密斯阻抗圆图 Smith impedance circle diagram



### 5.3 辐射方向图 Radiation pattern

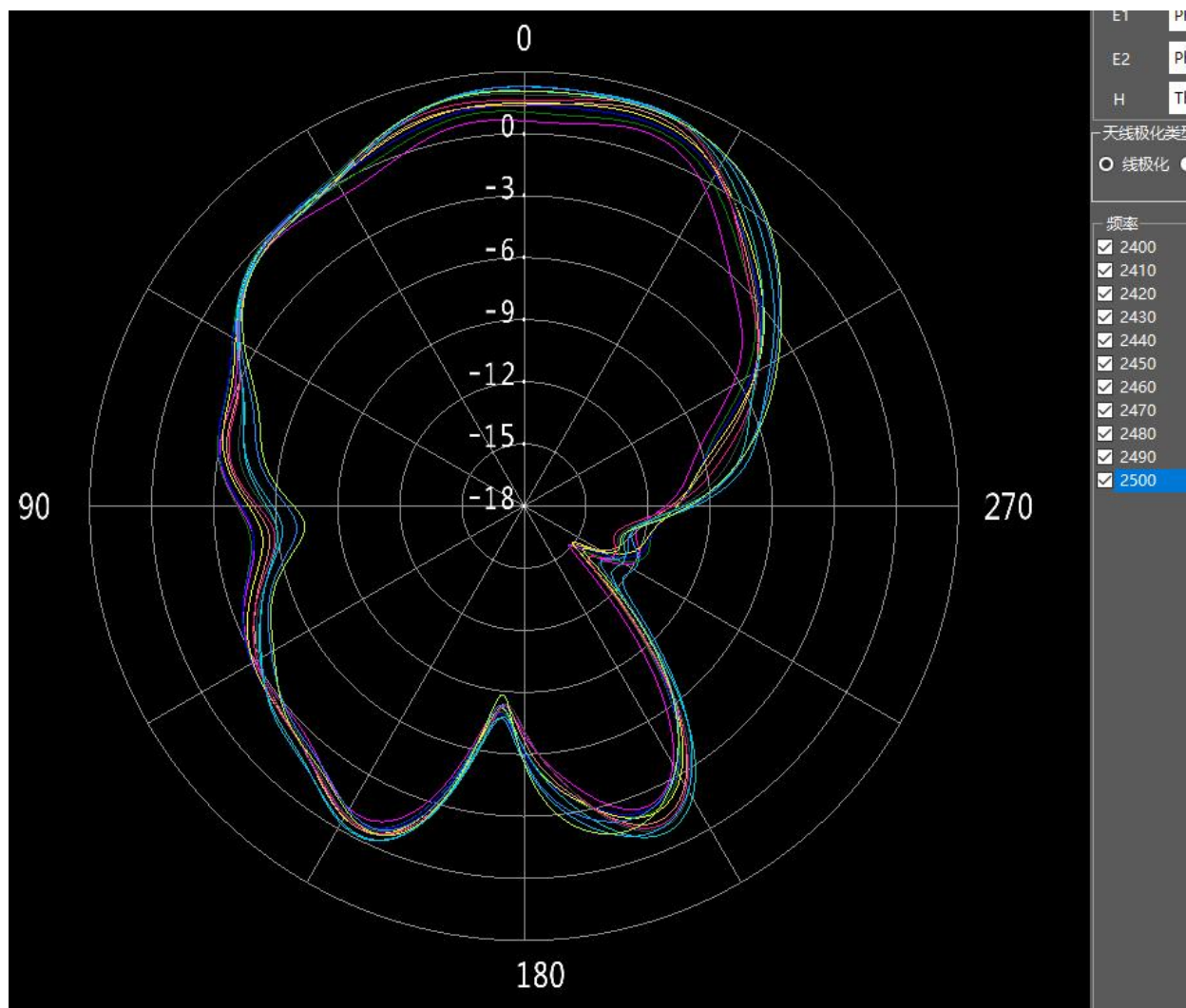
#### 5.3.1 H-plane

H

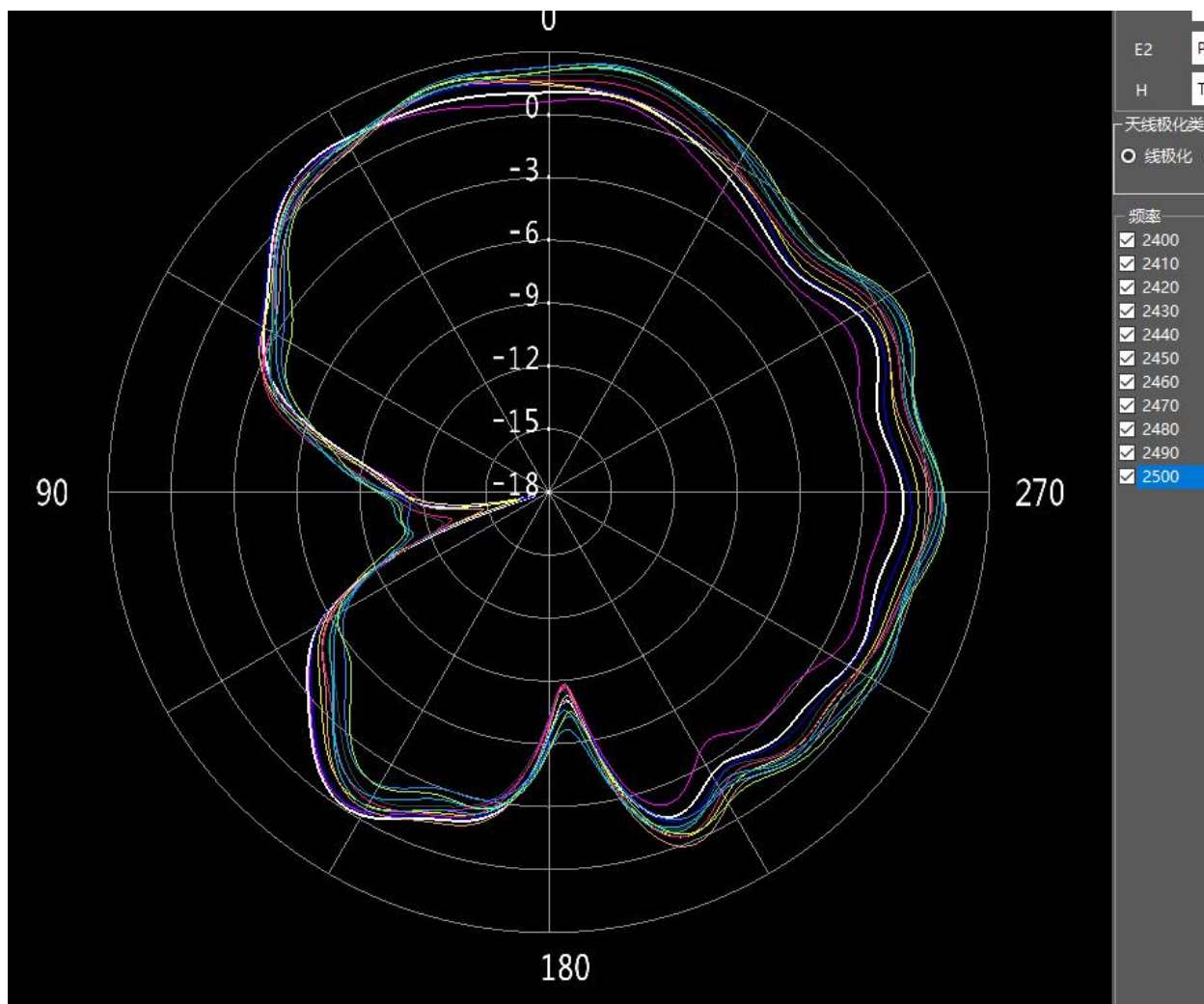


5.3.2 E-plane

E1



E2



#### 5.4 增益和效率 Gain and efficiency

| 频率 (MHz) | 增益 (dBi) | 效率 (%) |
|----------|----------|--------|
| 2400     | 1.91     | 49.23  |
| 2410     | 2.04     | 53.05  |
| 2420     | 2.04     | 55.06  |
| 2430     | 2.1      | 57.24  |
| 2440     | 2.13     | 58.42  |
| 2450     | 2.19     | 59.66  |
| 2460     | 2.29     | 60.9   |
| 2470     | 2.4      | 61.49  |
| 2480     | 2.45     | 62.08  |
| 2490     | 2.52     | 62.77  |
| 2500     | 2.44     | 62.74  |

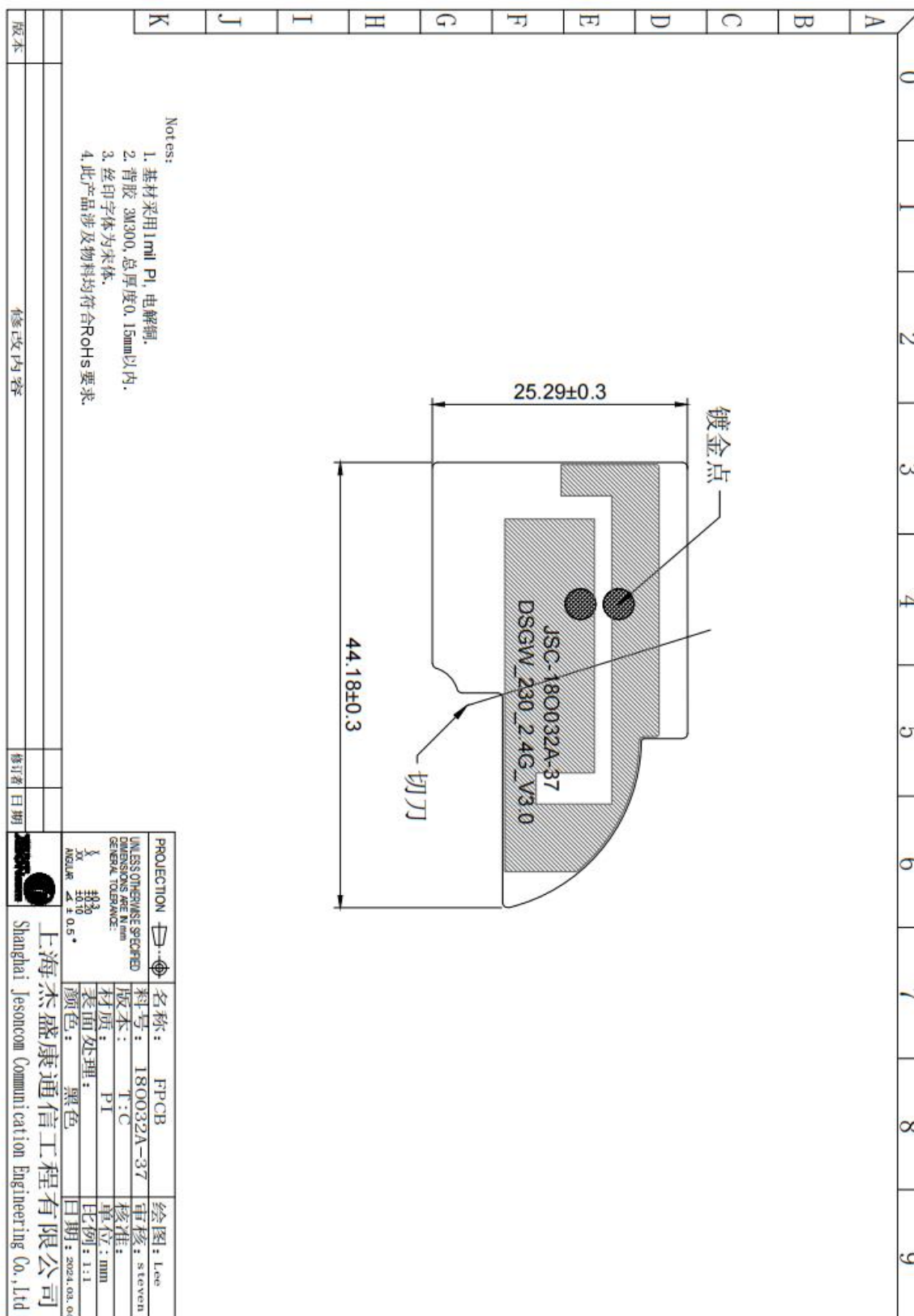
#### 6 环境处理建议 Environmental treatment suggestion

环境不需要做处理 The environment doesn't need to be treated

#### 7 阻抗匹配要求 Impedance matching requirement

匹配电路没有修改 The matching circuit is not modified

## 8 天线外形图



杰盛康机密，未经允许，请勿转载

## 9 天线安装指导 Antenna installation guide

### 9.1 天线安装位置说明 Antenna installation position description

## 10 其他 other