

# 产品承认书 PART SPECIFICATION

料号 PART NO. : W7-2000YK-ZT01

物料描述 PART DESCRIBE: 2.4G-WIFI 天线 L:200MM

机型名称 MODEL NO. : 天线

## 客户签核栏 CUSTOMER SIGNATURE

| 研发 (RD SIGNATURE) | 研发审核 VERIFY |
|-------------------|-------------|
|                   |             |

## 供应商签核栏 SUPPLIER SIGNATURE

XXXXXXXXXX

| 业务部 (SALES) | 品质部 (QC) | 产品开发部 (RD) |
|-------------|----------|------------|
|             |          |            |

|                                                                              |           |              |                                  |
|------------------------------------------------------------------------------|-----------|--------------|----------------------------------|
| Project:                                                                     |           | Author:Wang  | File Name:<br><br><b>2.4G 天线</b> |
| Date: 2023-05-26                                                             |           |              |                                  |
| TEST:                                                                        | Language: | Check: Zhong |                                  |
| A                                                                            | English   |              |                                  |
|                                                                              |           |              |                                  |
| 地址： 深圳市光明区光明街道白花社区第一工业区丽霖工业园一栋厂房 4 楼<br>电话：0755-29195258    传真：0755-29590286 |           |              |                                  |

## Revision History

| Date       | Revision | Description of Changes       |
|------------|----------|------------------------------|
| 2023-05-26 | RA       | Measured with SUS301 sample. |

错误！未定义书签。

**2.4G 天线 PROJECT** ..... 错误！未定义书签。

**ANTENNA COMPONENTST** ..... 错误！未定义书签。

**1 TECHNICAL SUMMARY** ..... **3**

**2 GENERAL DESCRIPTION** ..... **3**

2.1 Components/Part revisions ..... 3

**3 MECHANICAL DESCRIPTION** ..... **3**

**4 ELECTRICAL PERFORMANCE** ..... **3**

4.1 Set-up ..... 3

4.1.1 VSWR ..... 3

4.1.2 Gain & Radiation Patterns ..... 3

4.1.3 Matching Circuit Description ..... 3

4.2 Measurement Data ..... 4

4.2.1 Active result (GSM) ..... 4

6 Mechanical drawing ..... 5

**7 RELIABILITY TESTS** ..... **6**

7.1 Test content ..... 6

7.2 Test results ..... 6

**8 CONCLUSION** ..... **9**

|                                                                              |           |              |                                  |
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# 1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the **2.4G 天线** program. We test the antenna with the latest version handset. And it seems to be acceptable.

# 2 General Description

## 2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

# 3 Mechanical Description

# 4 Electrical Performance

## 4.1 Set-up

### 4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

### 4.1.2 Gain & Radiation Patterns

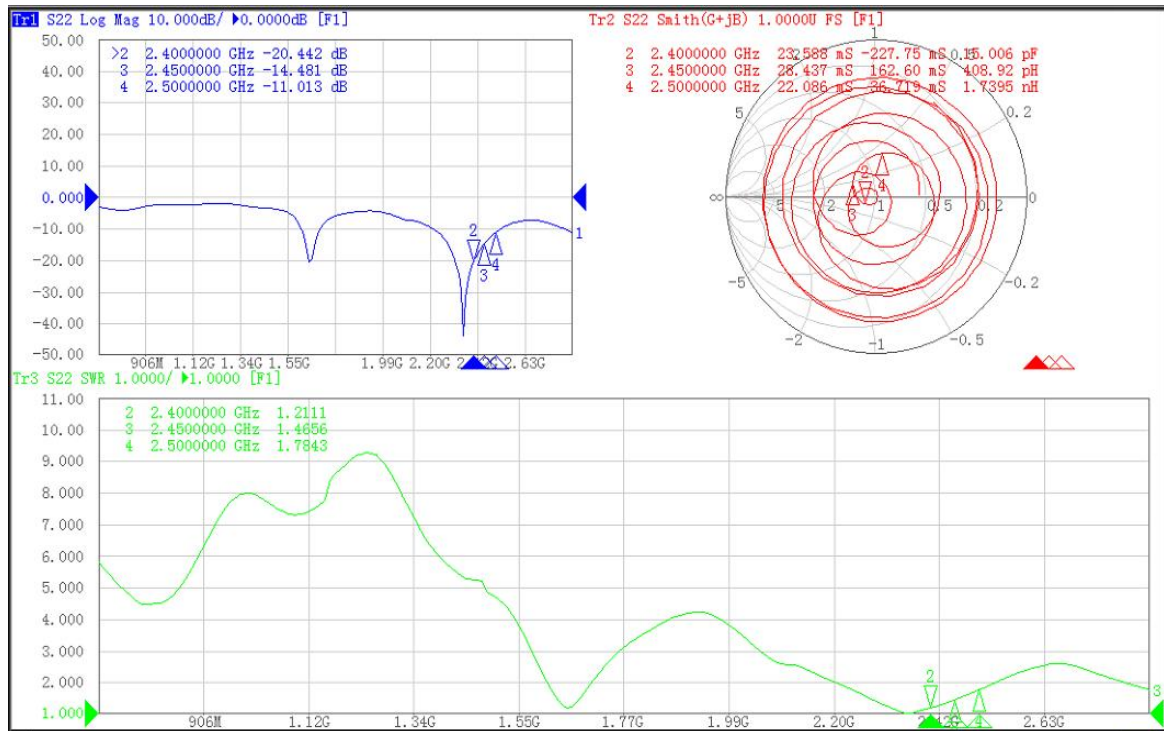
The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

### 4.1.3 Matching Circuit Description

|                                                                              |           |              |                                  |
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## 4.2 Measurement Data

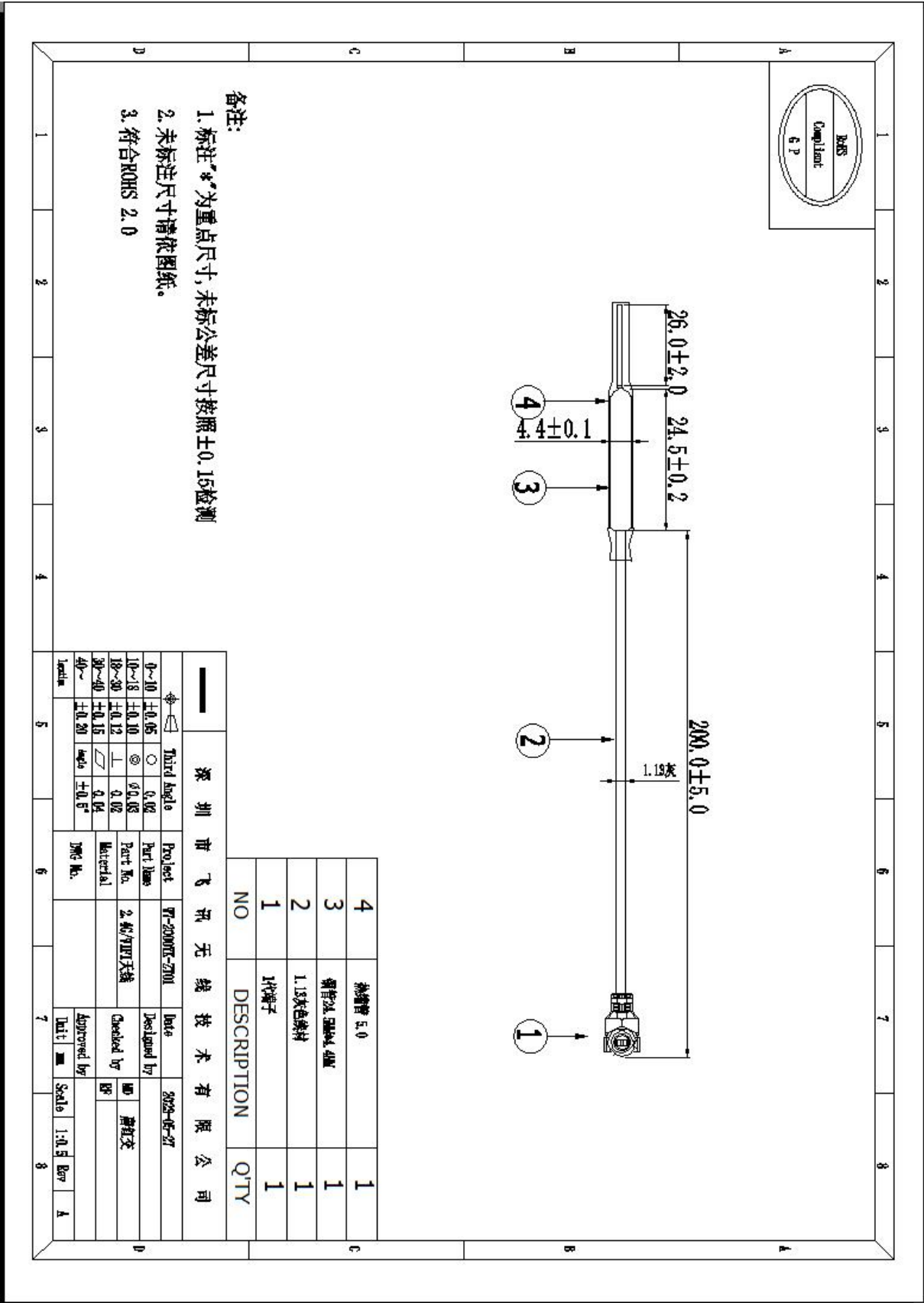
### 4.2.1 Active result (2.4WIFI)



| Passive Test For WIFI2.4 |          |           |            |            |         |         |          |
|--------------------------|----------|-----------|------------|------------|---------|---------|----------|
| Freq (MHz)               | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHS (%) | Max (dB) |
| 2400                     | 68.49    | -1.64     | 5.29       | 3.14       | 32.236  | 36.254  | 5.29     |
| 2410                     | 69.82    | -1.56     | 5.33       | 3.18       | 32.809  | 37.006  | 5.33     |
| 2420                     | 67.8     | -1.69     | 5.25       | 3.1        | 32.128  | 35.675  | 5.25     |
| 2430                     | 68.62    | -1.64     | 5.43       | 3.28       | 32.934  | 35.686  | 5.43     |
| 2440                     | 73.54    | -1.33     | 5.78       | 3.63       | 35.889  | 37.652  | 5.78     |
| 2450                     | 80.58    | -0.94     | 6.13       | 3.98       | 39.637  | 40.948  | 6.13     |
| 2460                     | 84.15    | -0.75     | 6.17       | 4.02       | 41.3    | 42.854  | 6.17     |
| 2470                     | 80.5     | -0.94     | 5.75       | 3.6        | 39.436  | 41.069  | 5.75     |
| 2480                     | 81.13    | -0.91     | 5.64       | 3.49       | 39.405  | 41.721  | 5.64     |
| 2490                     | 79.41    | -1        | 5.5        | 3.35       | 38.4    | 41.005  | 5.5      |
| 2500                     | 74.88    | -1.26     | 5.3        | 3.15       | 36.379  | 38.497  | 5.3      |

|                                                                             |           |              |                                  |
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6 Mechanical drawing



|                                                                                |           |              |                                  |
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## 7 Reliability tests

### 7.1 Test content

| No | 试验项目   | 试验方法              | 判定基准                       |
|----|--------|-------------------|----------------------------|
| 1  | 盐水喷雾试验 | 把盐浓度 5%的溶液喷雾 48HR | 不能有变色，歪（变形）脱落等的缺点 腐蚀面积不能过大 |
|    |        |                   |                            |

### 7.2 Test results

| NO | 样品数 | 试验期间  | 实验结果 | 备注                    |
|----|-----|-------|------|-----------------------|
| 1  | 50  | 24 小时 | OK   | 技术等级为 9 级<br>腐蚀<0.4mm |
| 2  | 50  | 48 小时 | OK   | 技术等级为 9 级<br>腐蚀<0.4mm |

## 8

### Conclusion

From the above test results, we can know the electrical performance of the antenna is seems good.

Shenzhen Lxc Electronics Technology Co ., Ltd ,look forward to your confirmation, thank you for your cooperation !

|                                                                              |           |              |                                  |
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