

# 深圳市天联凌科技有限公司

## Antenna Test Report

项目名称: Q01  
料 号: Q01

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版本: V1

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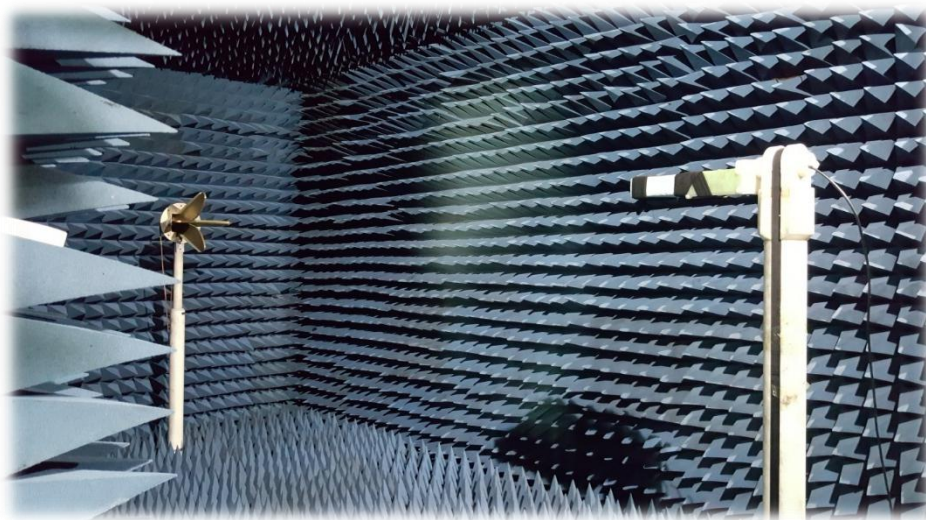
公司网址: <http://www.tll-skylink.com>

# 研发环境

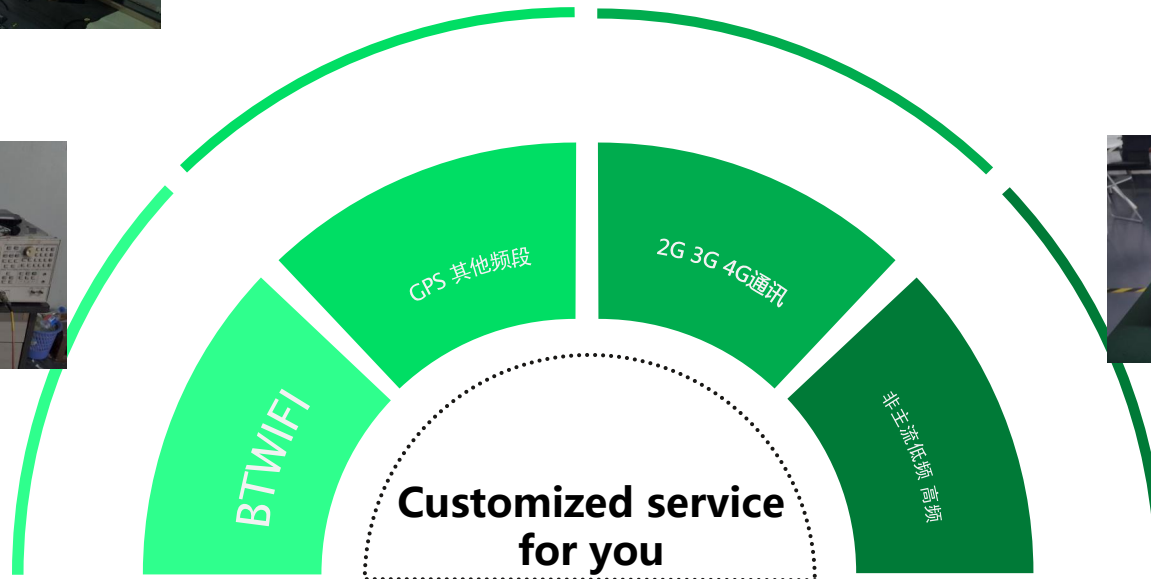
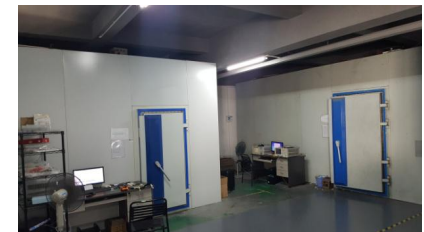
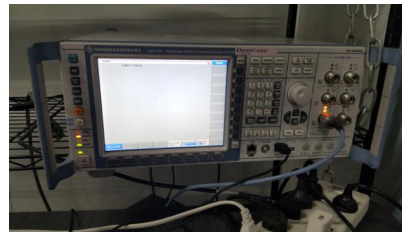
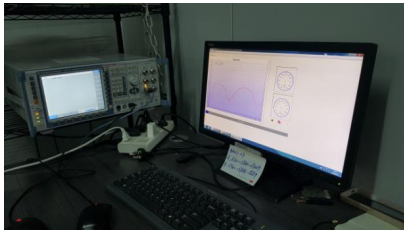
## 微波暗室

### 以及附属仪器设备

1. 2G/3G通讯微波暗室
2. 4G微波暗室通讯产品
2. CMW500
3. 安捷伦网络分析仪
4. 惠普网络分析仪
5. GPS101等



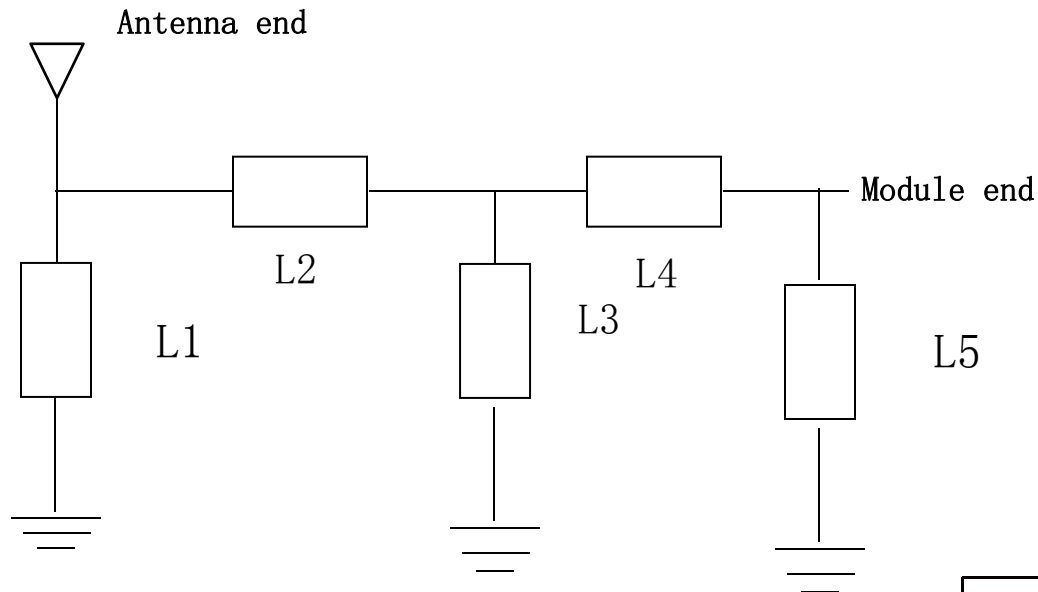
# Research and development equipment



# 信息说明:

| Customer name   | model           | Antenna mode |
|-----------------|-----------------|--------------|
| Lingan Wireless | Q01             | FPC          |
| Frequency       |                 |              |
| BT              | 2400MHz-2500MHz |              |

# 天线匹配电路



The original motherboard match remains unchanged

| L1 (0201) | / |
|-----------|---|
| L2 (0201) | / |
| L3 (0201) | / |
| L4 (0201) | / |
| L5 (0201) | / |

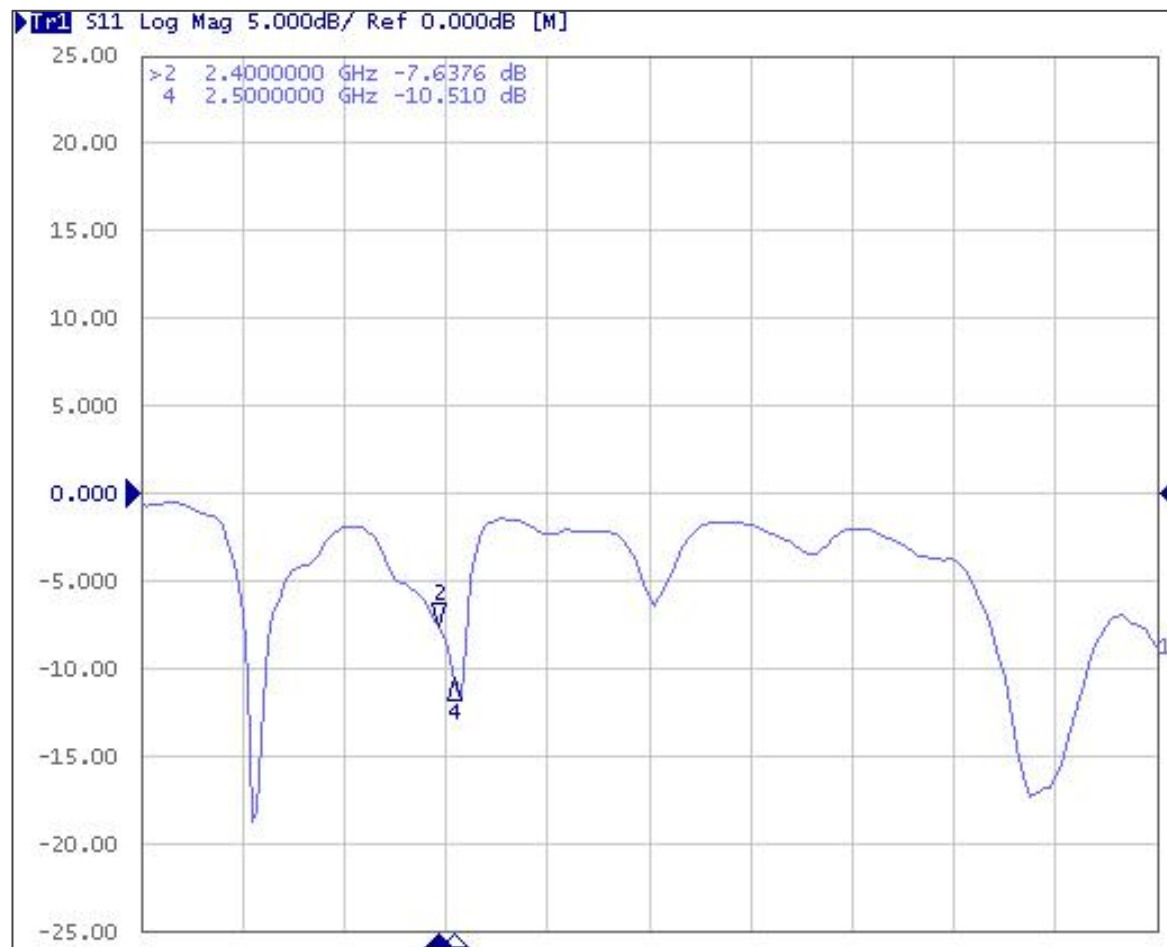
# 客户设备图示



# 室外天线测试环境照片



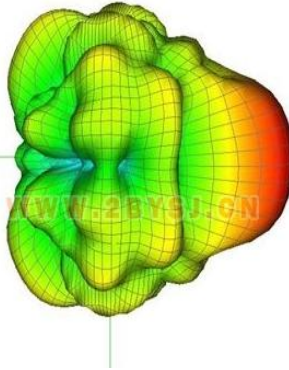
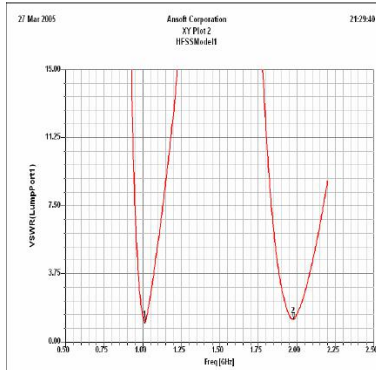
# 回波损耗



# 测试能力

## Passive test

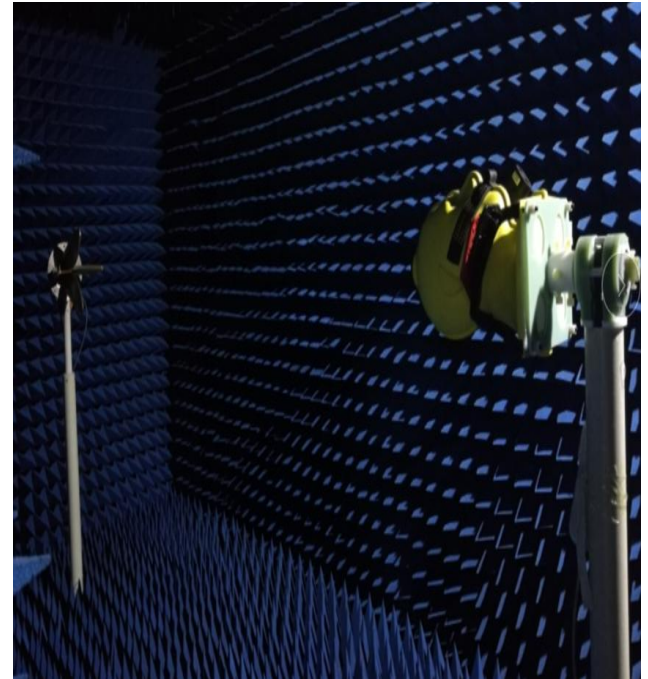
- Impedance
- VSWR
- Gain
- Efficiency
- Diagram of direction



## Active testing

- 2G 3G 4G
- WIFI 2.4G&5.8G
- BT
- GPS
- NB-IOT
- TRP
- 0~7.5G

Conduction test & TRP&TIS  
Conduction test & TRP&TIS



# 效率/增益

| Fre<br>(MHz) | Eff (%)<br>(dB) | Gain<br>(dB) |
|--------------|-----------------|--------------|
| 2400         | 29.98           | -2.36        |
| 2410         | 31.24           | -1.95        |
| 2420         | 32.69           | -1.53        |
| 2430         | 32.07           | -1.42        |
| 2440         | 31.37           | -1.4         |
| 2450         | 28.68           | -1.76        |
| 2460         | 29.55           | -1.54        |
| 2470         | 28.05           | -1.56        |
| 2480         | 27.91           | -0.00        |
| 2490         | 27.81           | -1.41        |
| 2500         | 28.92           | -1.38        |

# 天线定位图



The antenna is aligned along the red line

# 结论

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- 1: The antenna should be adhered as required
- 2: The measured distance of OPPO Reno5 Pro+ is more than 10 meters
- 3: The quality of the pin is very important



THANK  
YOU