

# ANTENNA TEST REPORT

*TP: Shenzhen Ugoos Technology Co., Ltd*

*MN: PCB\_ANT\_PA-110*

*RF: XINGYUANCHUANG TECHNOLOGY*

## ***Purpose***

This report is to measure the performance of SLK for Master Antenna . All measure date are showed below.

## ***Content***

1. Product Overview

2. Test Result

2.1 WIFI Antenna VSWR

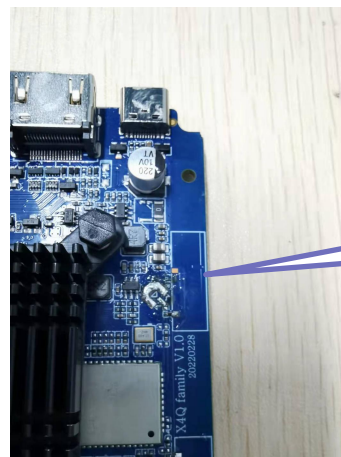
2.2 Antenna parameters

2.3 WIFI 1/2 Antenna Gain/Efficiency/3D DATE

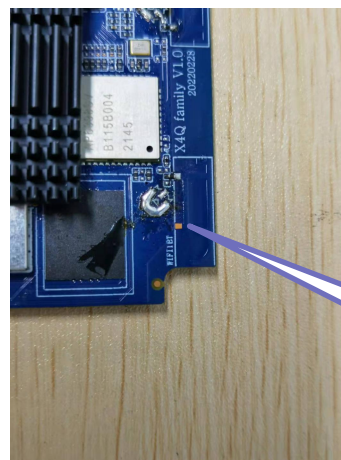
2.4 Antenna Throughput data

3. Conclusions

# 1. Product Overview & Dimension



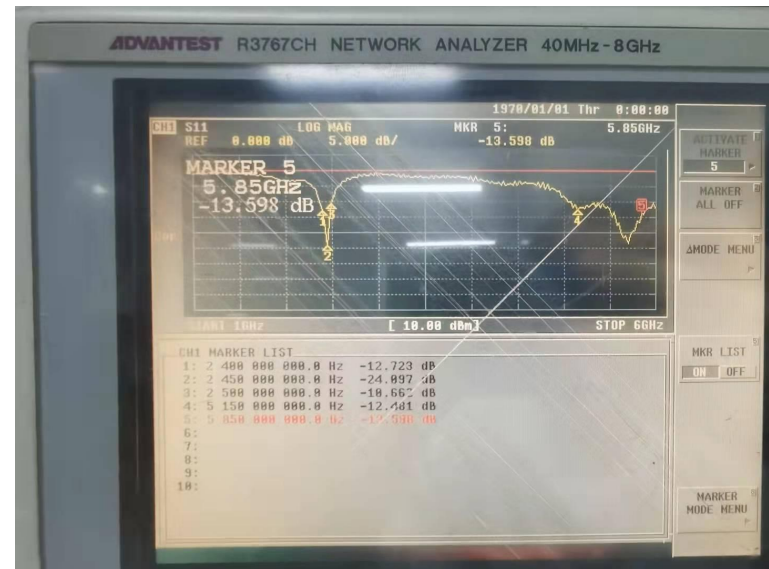
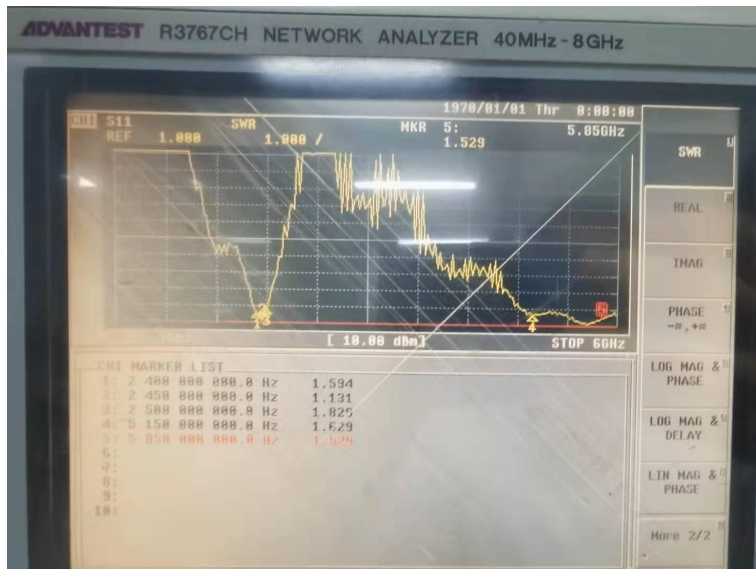
WIFI 1 天线



WIFI 2 天线

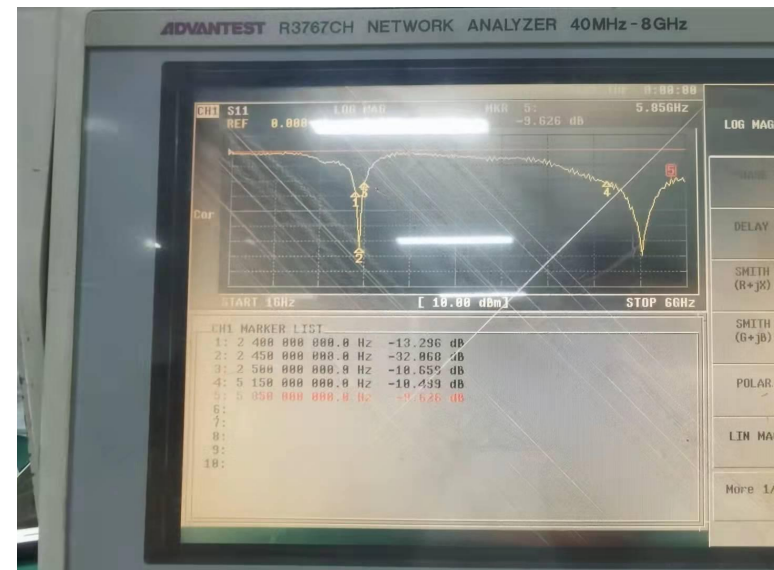
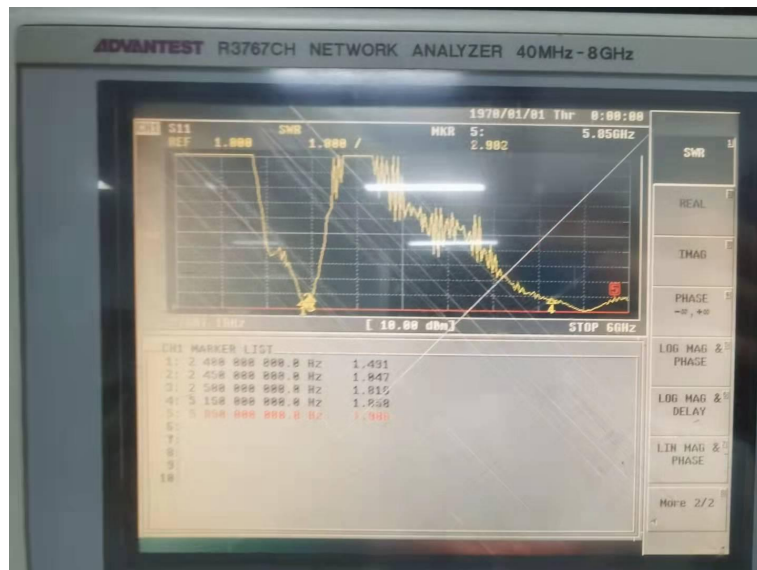
## 2. Test Result

### 2.1 WIFI 1 Antenna VSWR/S11



## 2. Test Result

### 2.1 WIFI 2 Antenna VSWR/S11



## 2. Test Result

### 2.2 Antenna parameters



## 2. Test Result

### 2.3 WIFI Antenna Gain/Efficiency/3D DATE

#### WIFI 1

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 52.71       | -2.78        | 1.18          |
| 2410          | 64.46       | -1.91        | 2.06          |
| 2420          | 60.39       | -2.19        | 1.9           |
| 2430          | 67.47       | -1.71        | 2.5           |
| 2440          | 60.82       | -2.16        | 2.18          |
| 2450          | 69.92       | -1.55        | 2.92          |
| 2460          | 63.43       | -1.98        | 2.41          |
| 2470          | 67.16       | -1.73        | 2.72          |
| 2480          | 67.51       | -1.71        | 2.83          |
| 2490          | 70.19       | -1.54        | 3.11          |
| 2500          | 71.22       | -1.47        | 3.39          |
| 5150          | 49.83       | -3.02        | 1.85          |
| 5250          | 60.26       | -2.2         | 2.84          |
| 5550          | 62.77       | -2.02        | 3.16          |
| 5750          | 66.25       | -1.79        | 3.41          |
| 5850          | 69.3        | -1.59        | 3.96          |

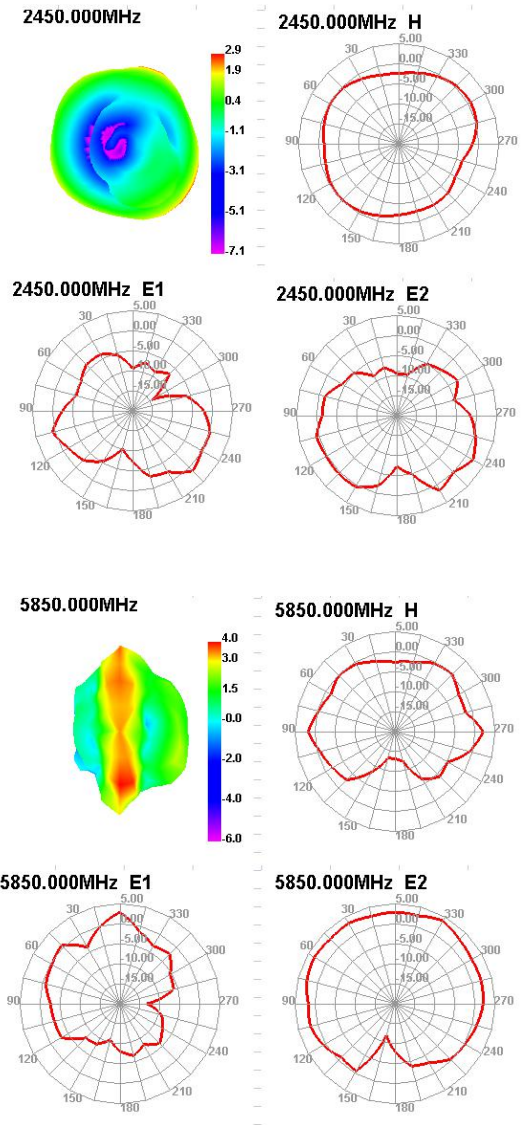
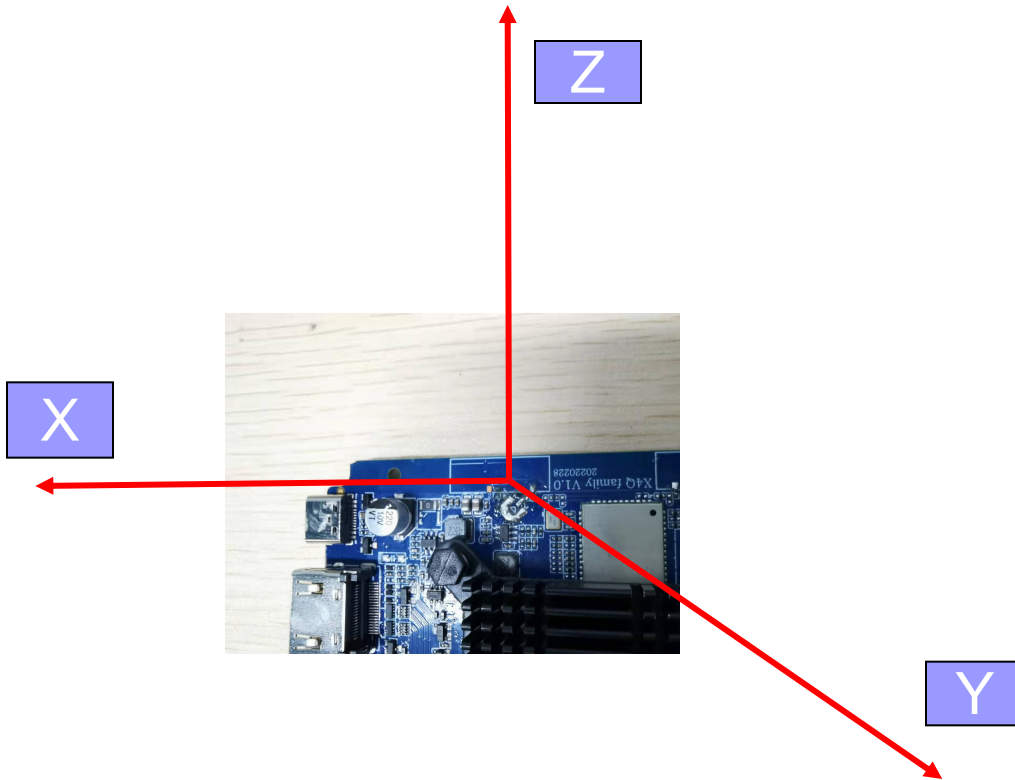
#### WIFI 2

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 33.84       | -4.71        | -0.34         |
| 2410          | 45.05       | -3.46        | 0.87          |
| 2420          | 40.96       | -3.88        | 0.47          |
| 2430          | 44.42       | -3.52        | 0.7           |
| 2440          | 40.62       | -3.91        | 0.29          |
| 2450          | 45.62       | -3.41        | 0.9           |
| 2460          | 46.04       | -3.37        | 0.91          |
| 2470          | 42.22       | -3.75        | 0.61          |
| 2480          | 45.32       | -3.44        | 1             |
| 2490          | 38.02       | -4.2         | 0.3           |
| 2500          | 45.82       | -3.39        | 1.26          |
| 5150          | 49.56       | -3.05        | 0.61          |
| 5250          | 58.77       | -2.31        | 1.8           |
| 5550          | 58.65       | -2.32        | 1.94          |
| 5750          | 65.22       | -1.86        | 2.67          |
| 5850          | 69.58       | -1.58        | 2.78          |



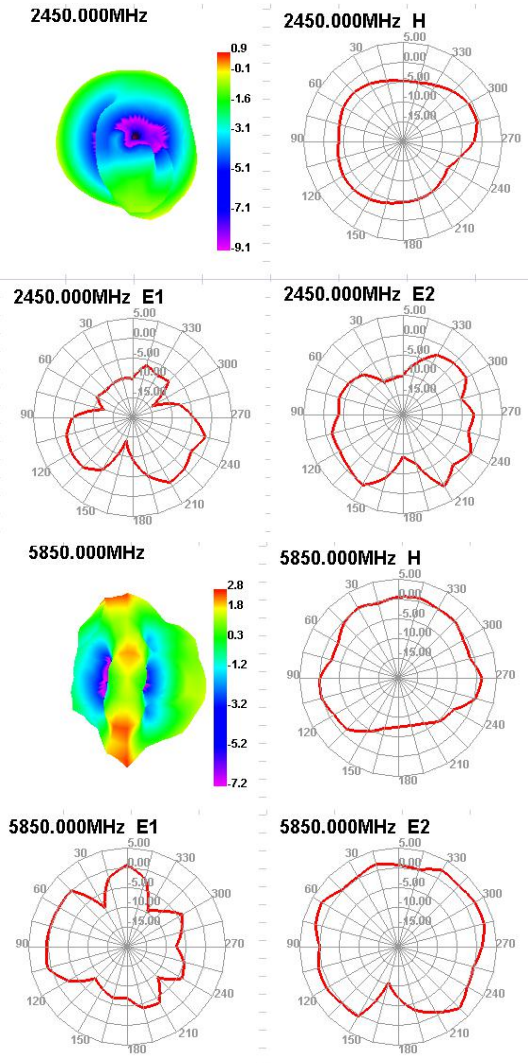
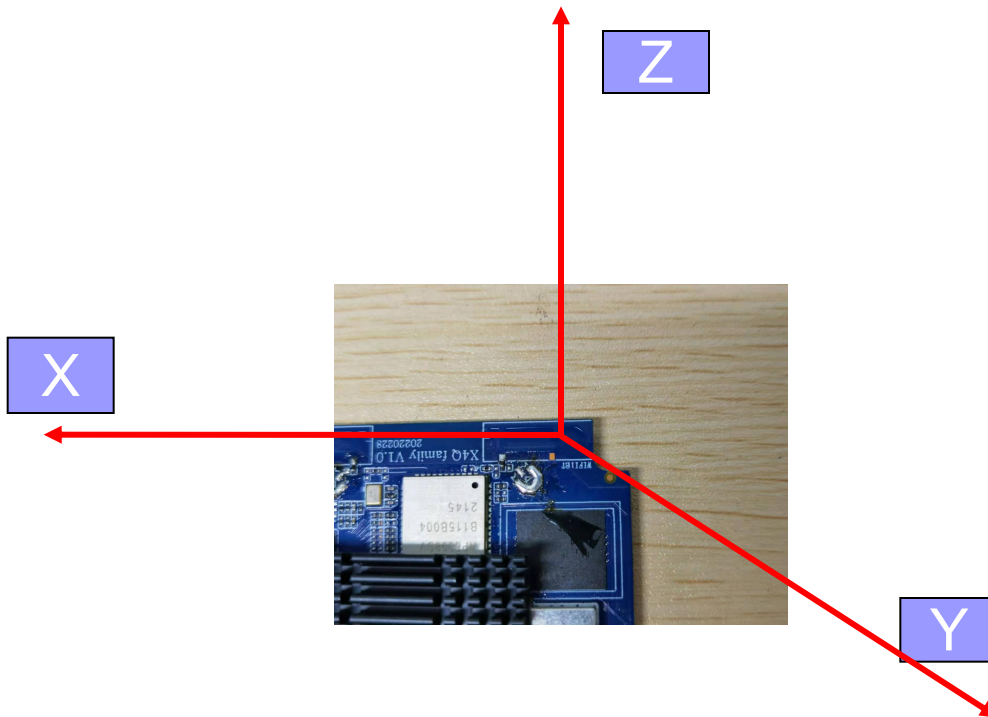
## 2. Test Result

### 2.3 WIFI 1 Antenna Gain/Efficiency/3D DATE



## 2. Test Result

### 2.3 WIFI 2 Antenna Gain/Efficiency/3D DATE





## 2. Test Result

### 2.4 Antenna Throughput data

艾科板载吞吐量数据：

| 2.4G 20M |      | 上传   | 下载  |
|----------|------|------|-----|
|          | 自动   | 94.8 | 105 |
|          | CH1  | 88.1 | 76  |
|          | CH6  | 56.4 | 96  |
|          | CH11 | 100  | 113 |

| 5G 80M |       | 上传  | 下载  |
|--------|-------|-----|-----|
|        | 自动    | 330 | 365 |
|        | CH36  | 318 | 339 |
|        | CH149 | 333 | 323 |
|        | CH161 | 331 | 347 |