

# 深圳市云希科技有限公司

ShenZhen Yunxi Technology Co.,Ltd.

## *Antenna test Report*

Customer: 尚蓝柏

Project Name:

RF Engineer:Wu Gong

Testing Date:2024-11-28

Operating band: 2.4G WIFI/BT

Manufacturer: Soundlab Technology Company Limited

Address: No.6-2, Shangxia Middle Road, Shangxia Area,

Dongjiang Science Park,Zhongkai High-tech Zone, Huizhou P. R. China

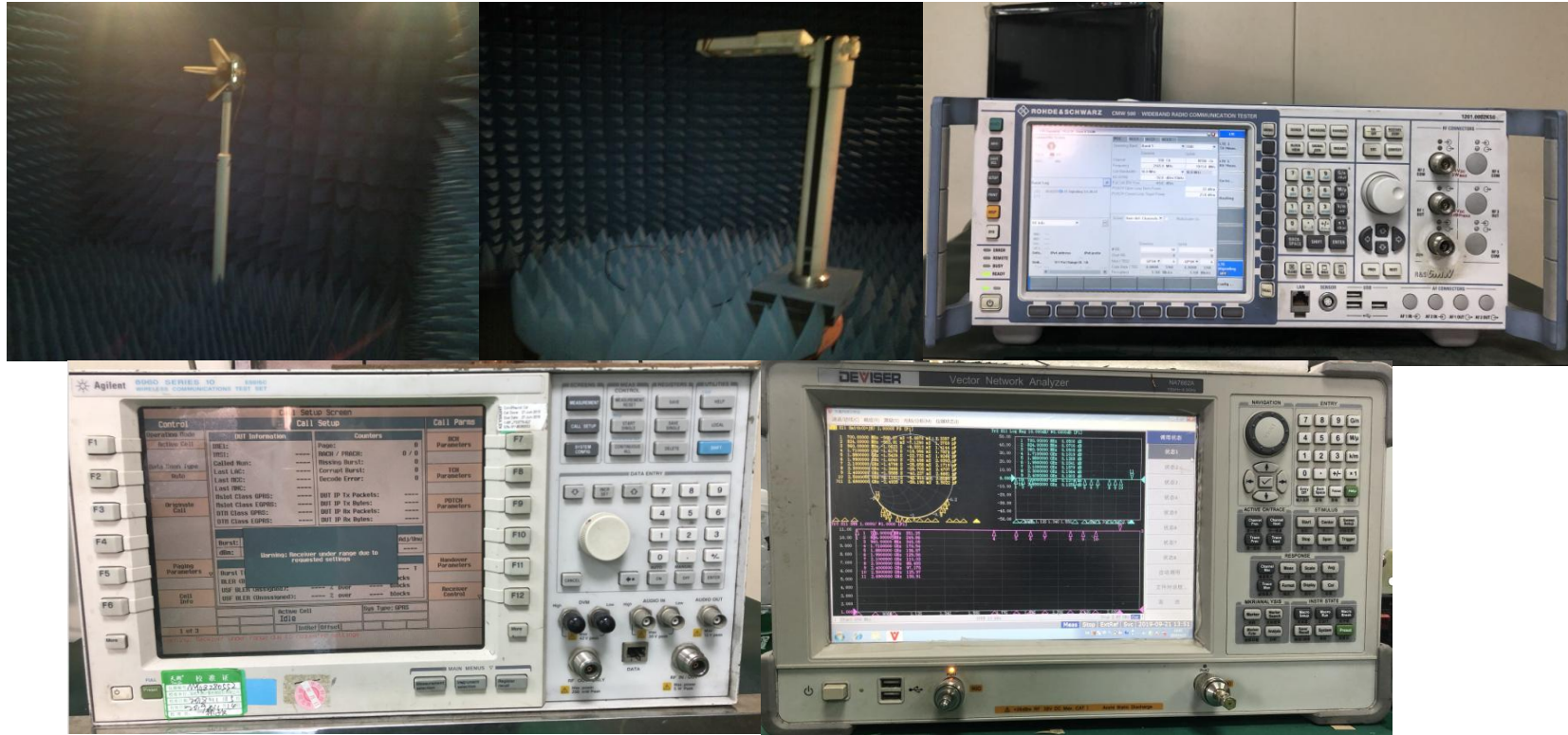


云希科技射频空间

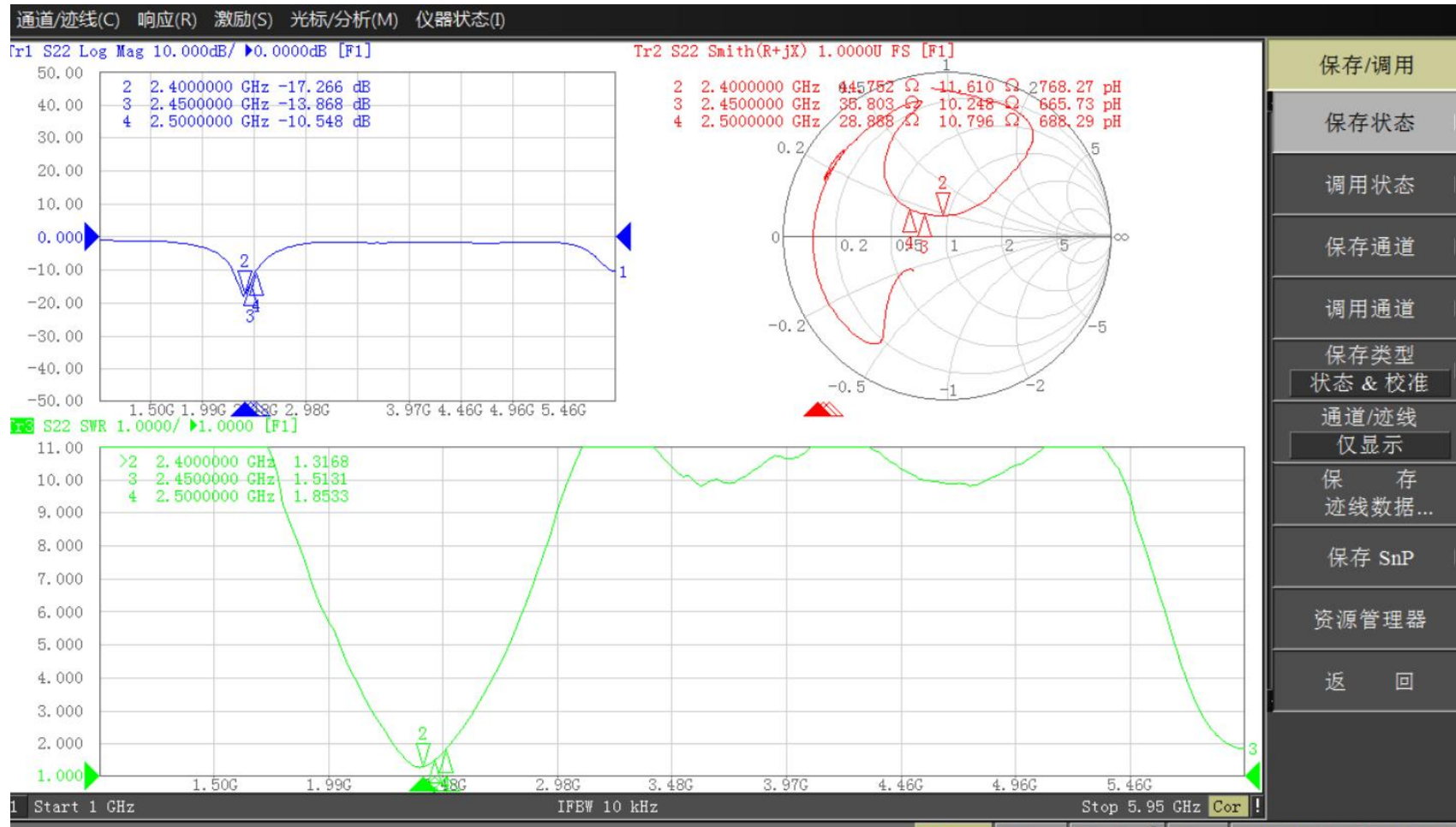
# 1.Project brief

| NO. | ITEMS                                                 | DETAILS                                             |
|-----|-------------------------------------------------------|-----------------------------------------------------|
| 1   | 工作频段<br>Operating band                                | 2.4GWIFI/BT                                         |
| 2   | 频率范围<br>Frequency range                               | (2400~2500MHz)                                      |
| 3   | 天线类型<br>Antenna Type                                  | PCB                                                 |
| 4   | 天线材质及实现形式<br>Antenna material and implementation form | The antenna is attached to the side shell using PCB |
| 5   | 天线料号<br>Antenna part number                           |                                                     |
|     | 天线料号<br>Antenna part number                           |                                                     |
| 6   | 输入阻抗<br>Input Impedance                               | 50（Ω）                                               |
| 7   | 增益<br>Gain                                            |                                                     |
|     | RF                                                    | 吴工                                                  |
|     | ME                                                    | 邹工                                                  |

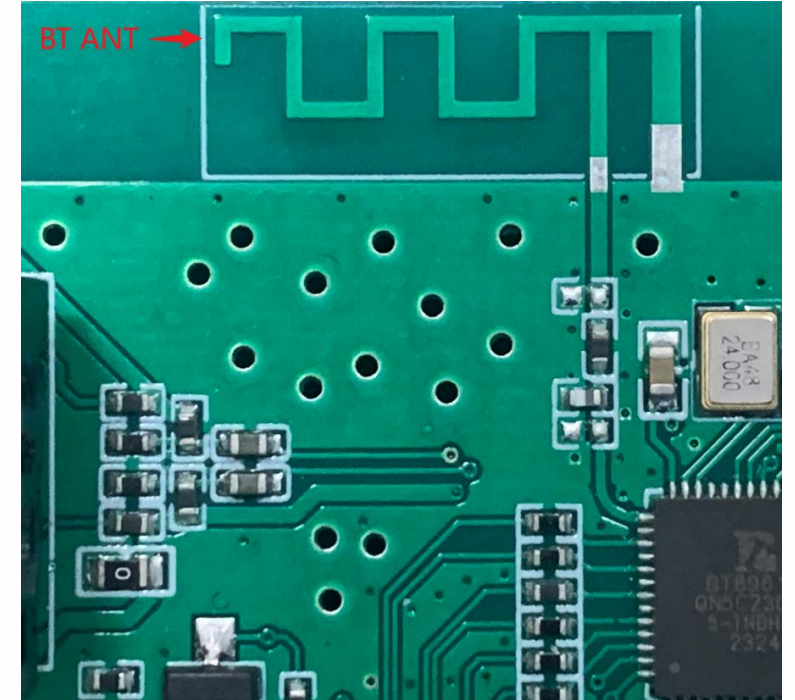
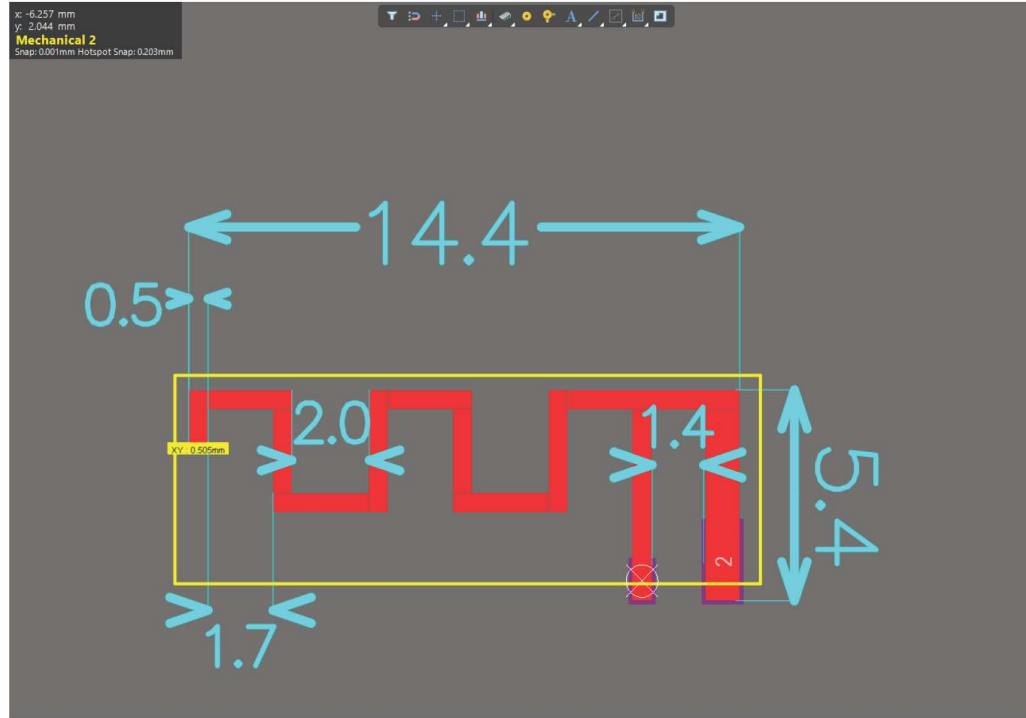
# 测试系统及测试设备



# Antenna Standing Wave Diagram



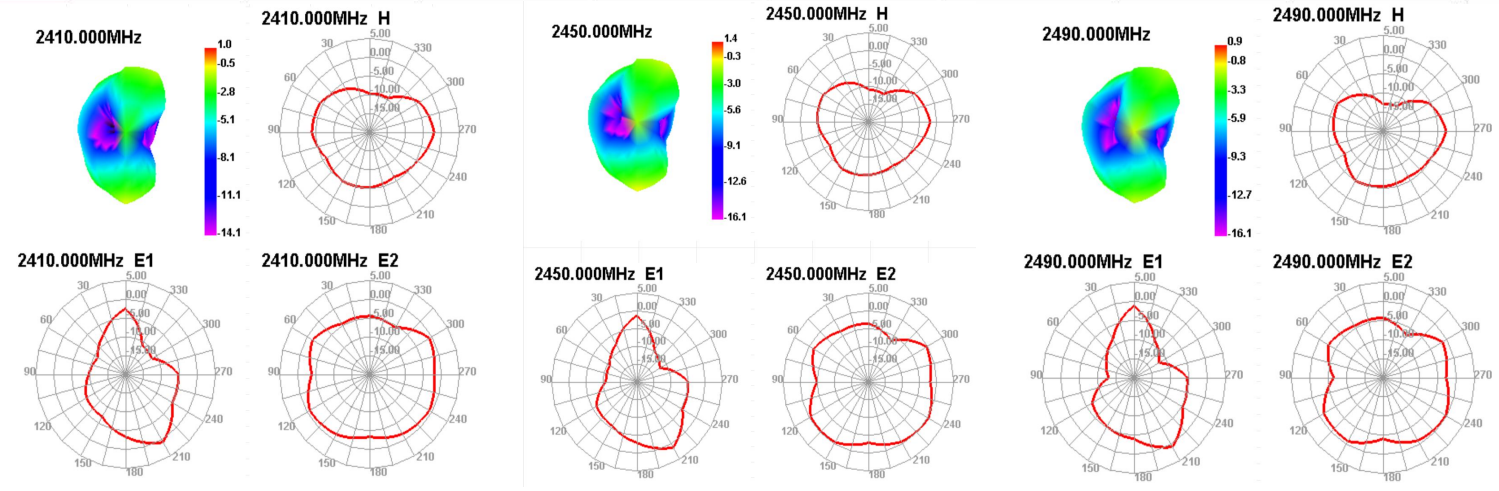
# Antenna assembly environment processing diagram



Note: antenna size unit mm.

# Antenna efficiency and gain

| Passive Test For WIFI2.4 |          |           |            |            |         |          |          |          |             |             |
|--------------------------|----------|-----------|------------|------------|---------|----------|----------|----------|-------------|-------------|
| Freq (MHz)               | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHIS (%) | Max (dB) | Min (dB) | Attenut Hor | Attenut Ver |
| 2400                     | 40.52    | -3.92     | 1.17       | -0.98      | 15.611  | 24.906   | 1.17     | -13.34   | 47.79       | 47.89       |
| 2410                     | 38.48    | -4.15     | 0.97       | -1.18      | 14.73   | 23.754   | 0.97     | -14.11   | 47.82       | 47.98       |
| 2420                     | 37.98    | -4.56     | 0.53       | -1.62      | 13.453  | 21.53    | 0.53     | -15.41   | 47.98       | 48.5        |
| 2430                     | 37.71    | -4.72     | 0.51       | -1.64      | 12.548  | 21.16    | 0.51     | -16.21   | 47.99       | 48.32       |
| 2440                     | 36.59    | -4.37     | 0.78       | -1.37      | 13.342  | 23.247   | 0.78     | -16.5    | 48.18       | 48.34       |
| 2450                     | 42.81    | -3.68     | 1.43       | -0.72      | 15.348  | 27.462   | 1.43     | -16.12   | 48.44       | 48.53       |
| 2460                     | 44.66    | -3.5      | 1.51       | -0.64      | 15.929  | 28.729   | 1.51     | -16.16   | 48.39       | 48.66       |
| 2470                     | 41.69    | -3.8      | 1.35       | -0.8       | 14.558  | 27.132   | 1.35     | -16.29   | 48.46       | 48.64       |
| 2480                     | 37.36    | -4.28     | 0.88       | -1.27      | 12.966  | 24.393   | 0.88     | -16.56   | 48.45       | 48.45       |
| 2490                     | 36.95    | -4.32     | 0.92       | -1.23      | 12.75   | 24.197   | 0.92     | -16.14   | 48.47       | 48.36       |
| 2500                     | 37.07    | -4.31     | 0.84       | -1.31      | 12.796  | 24.272   | 0.84     | -15.78   | 48.29       | 48.19       |



Note: If there are any unclear or questionable locations regarding this project, please contact me promptly

