

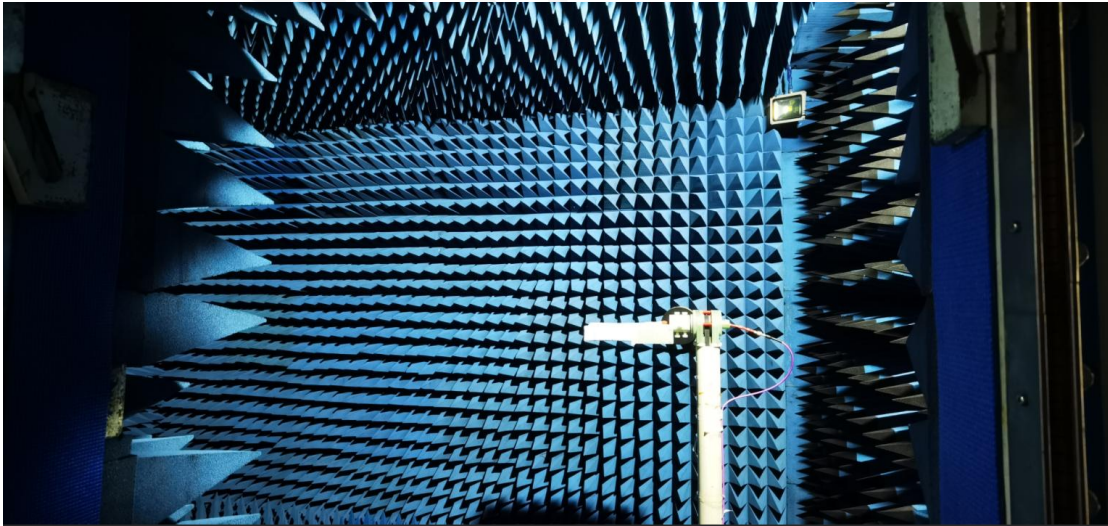
# ANTENNA TEST REPORT

|      |       |
|------|-------|
| 产品名称 | FT503 |
|------|-------|

## Summary

| ITEM         | SPEC.       |
|--------------|-------------|
| Model Name   | BT 2.4 GHz  |
| MAX. GAIN    | -0.04dBi    |
| Polarization | Horizontal  |
| Impedance    | 50 $\Omega$ |
| Antenna Type | PCB 天线      |
| Manufacturer |             |

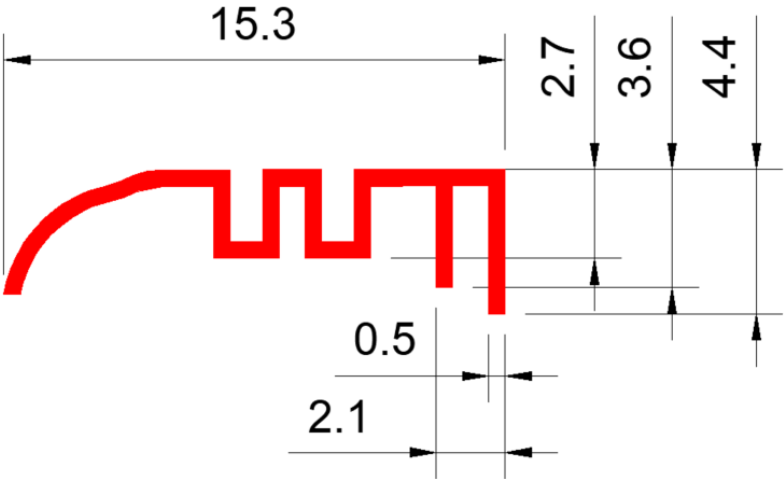
## Laboratory Testing Environment and Equipment





| 测试项目                                    | 测试设备                                                    |
|-----------------------------------------|---------------------------------------------------------|
| S11、S12、VSWR、LOSS                       | 网络分析仪E5071B、E5062A                                      |
| Efficiency、Gain<br>3D Radiation Pattern | Satimo SG16暗室、GP7*4*3暗室、E5071B                          |
| TRP、TIS                                 | Satimo SG16暗室、GP7*4*3暗室、8960、<br>CMW500、MT8820C、E4438C、 |

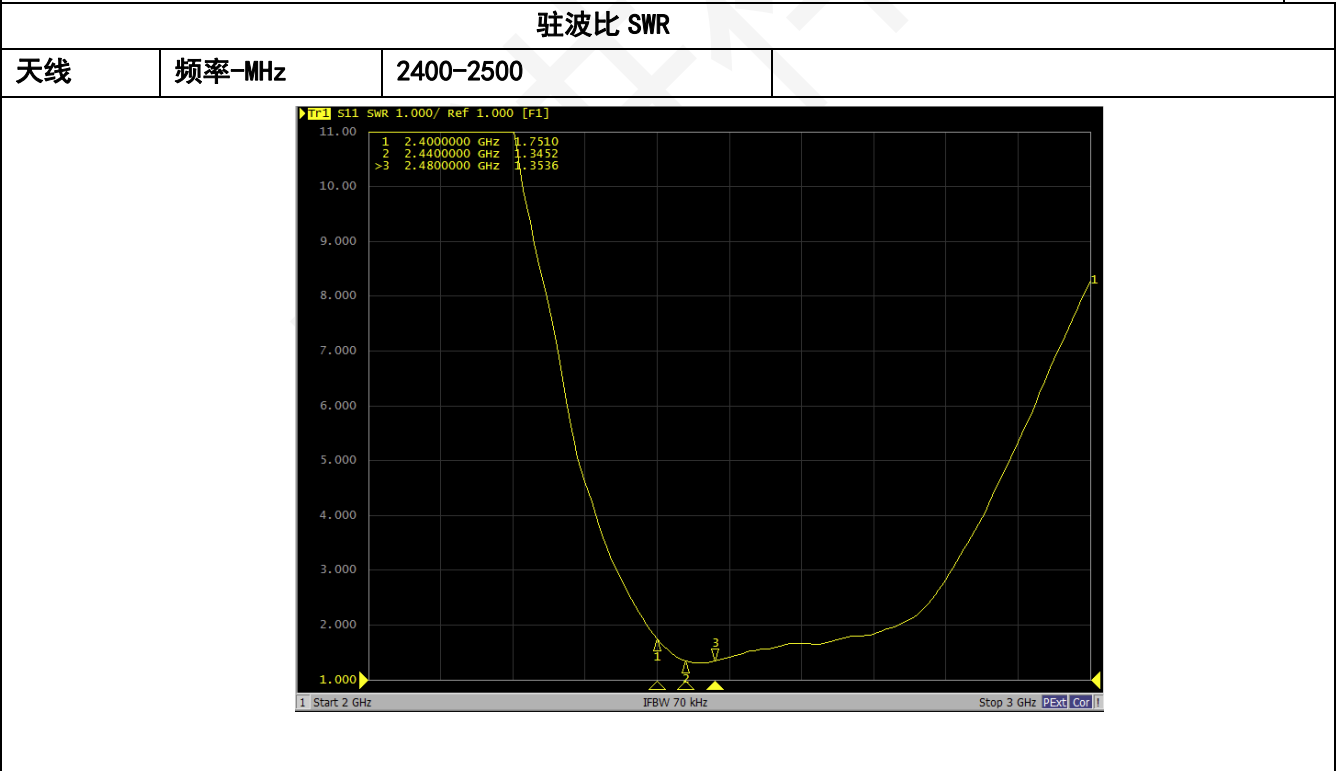
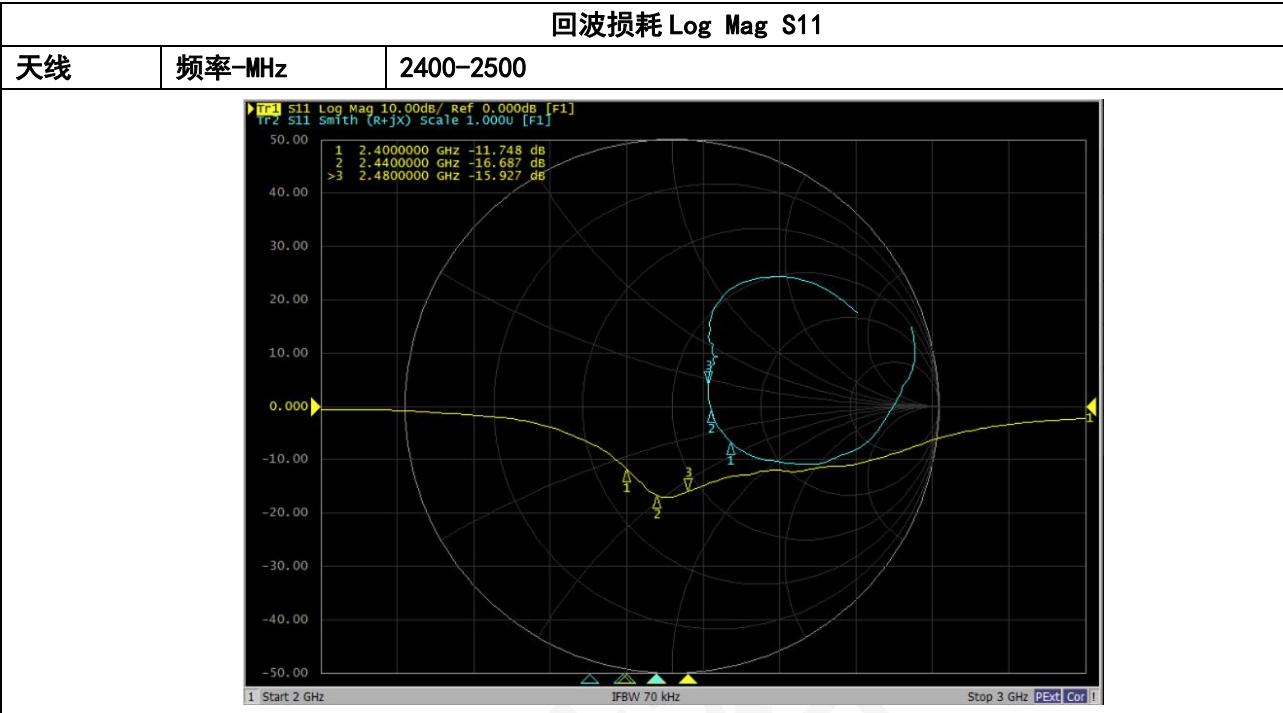
Antenna Photo & Length (mm)



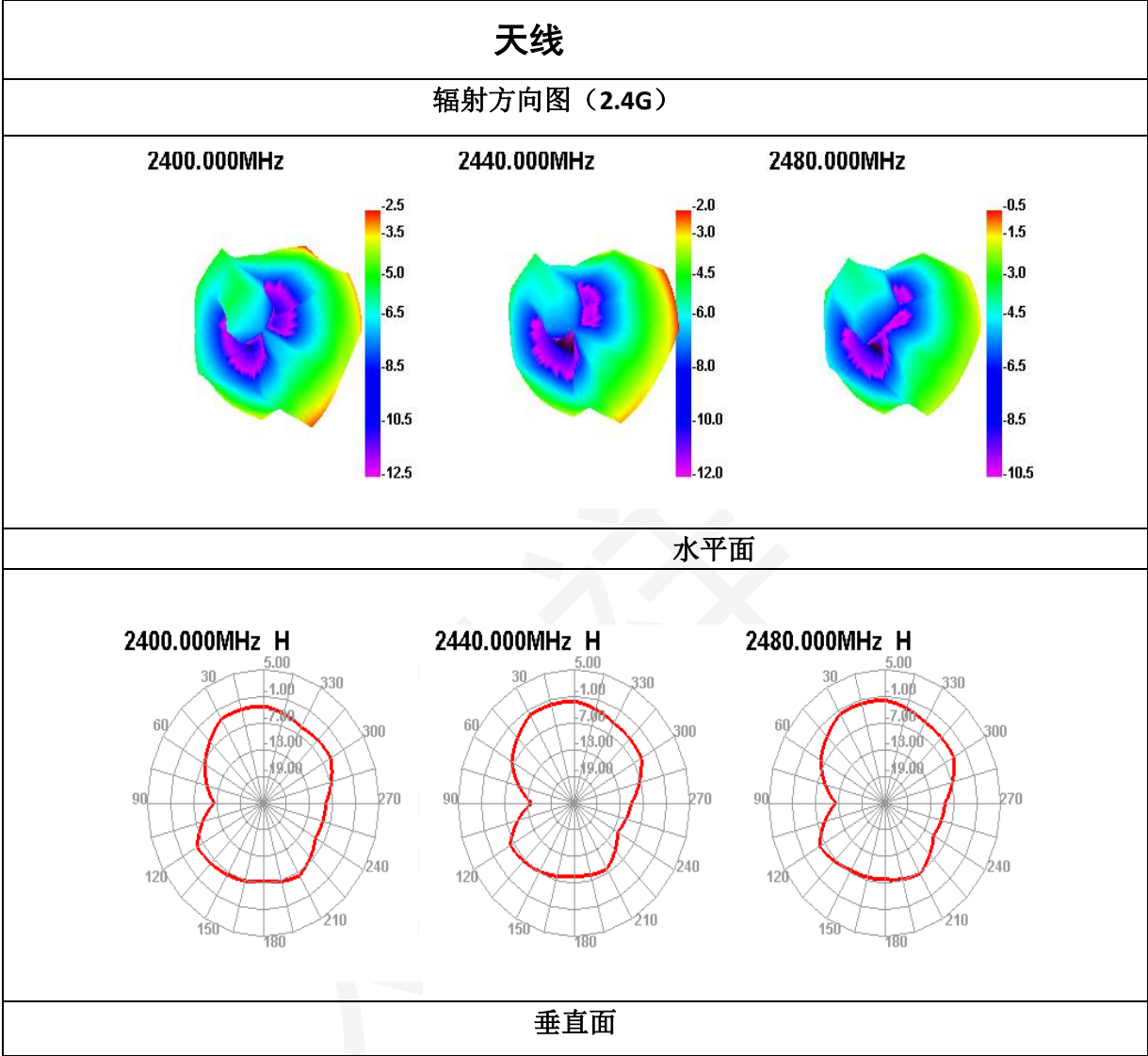
Manufacturer:Ugreen Group Limited  
Address:Ugreen Building, Longcheng Industrial Park, Longguanxi  
Road, Longhua, ShenZhen, China

Electrical performance test results

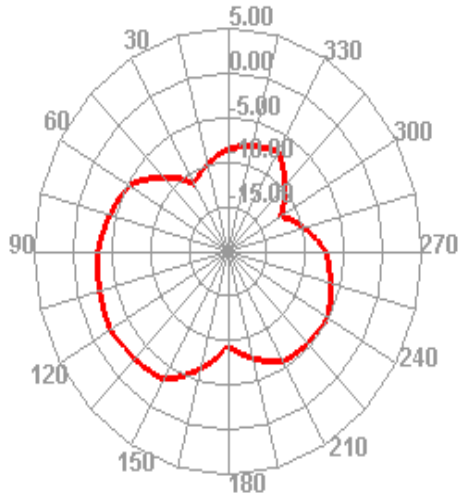
| Antenna performance indicators |                     |      |                                     |           |        |    |
|--------------------------------|---------------------|------|-------------------------------------|-----------|--------|----|
| NO                             | Test items          | unit | Performance indicators requirements | Result    |        |    |
| 1                              | frequency domain    | MHz  | 2412-2483                           | 2400-2483 |        | OK |
| 2                              | Gain                | dBi  | /                                   | 2400      | -1.95  |    |
|                                |                     |      |                                     | 2440      | -1.55  |    |
|                                |                     |      |                                     | 2480      | -0.04  |    |
| 4                              | RL<br>(return loss) | dB   | $\leq -10$                          | 2400      | -11.7  |    |
|                                |                     |      |                                     | 2440      | -16.68 |    |
|                                |                     |      |                                     | 2480      | -15.9  |    |
| 4                              | SWR                 | dB   | /                                   | 2400      | 1.75   |    |
|                                |                     |      |                                     | 2440      | 1.34   |    |
|                                |                     |      |                                     | 2480      | 1.35   |    |



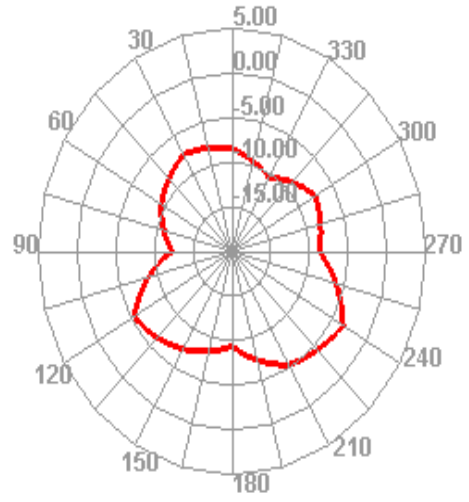
辐射参数测试



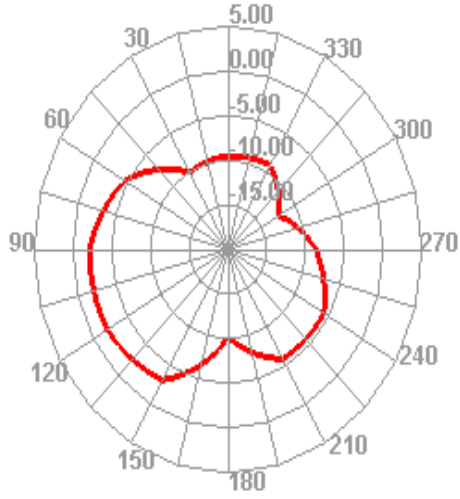
**2400.000MHz E1**



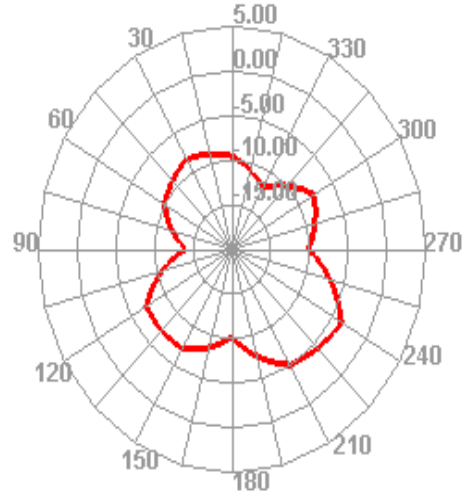
**2400.000MHz E2**

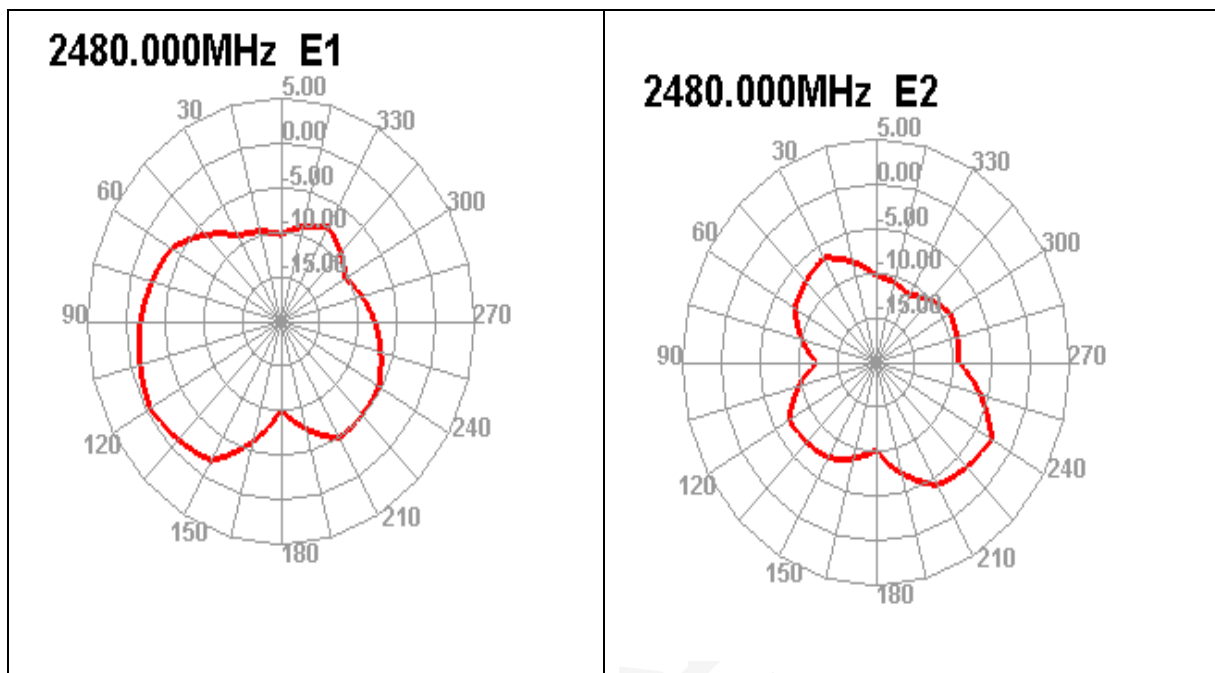


**2440.000MHz E1**



**2440.000MHz E2**





| 天线无源效率    |                  |               |
|-----------|------------------|---------------|
| Frequency | E Total. dB(dBi) | Efficiency(%) |
| 2400MHz   | -1.95            | 33.29         |
| 2410MHz   | -1.83            | 33.9          |
| 2420MHz   | -1.71            | 33.9          |
| 2430MHz   | -2               | 31.33         |
| 2440MHz   | -1.55            | 32.83         |
| 2450MHz   | -1.27            | 33.35         |
| 2460MHz   | -0.69            | 35.63         |
| 2470MHz   | -0.54            | 35.25         |
| 2480MHz   | -0.04            | 37.68         |
| 2490MHz   | 0.37             | 40.41         |
| 2500MHz   | 0.46             | 40.79         |