



ShenZhen Huaxinwei communication technology  
Co.,Ltd.

## Antenna test report

Customer Name: Feng Wang

Project Name: D3 pro

Designer: Zhang Yang

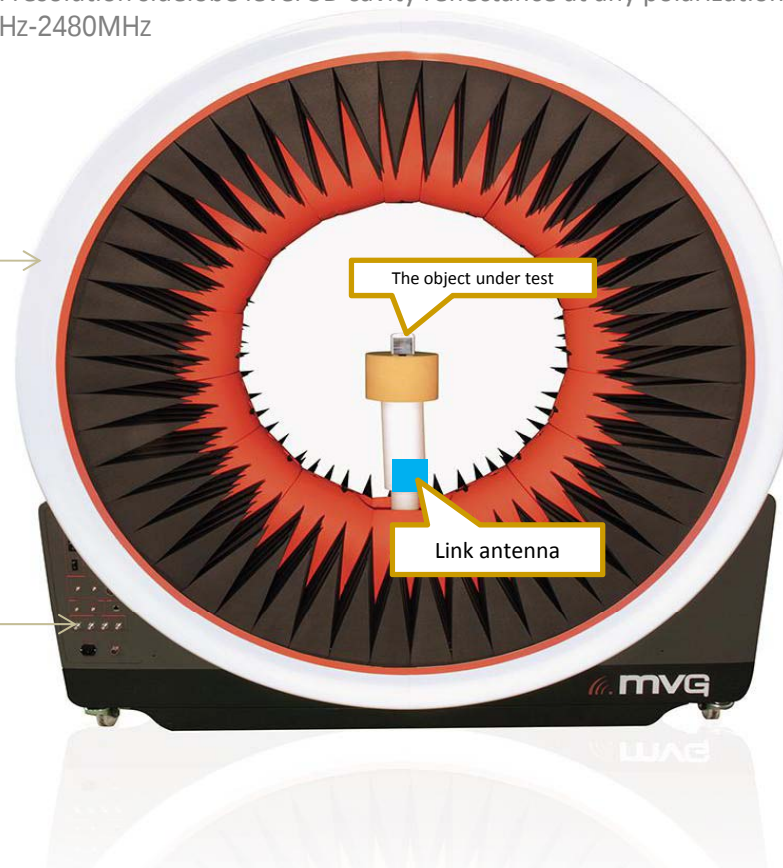
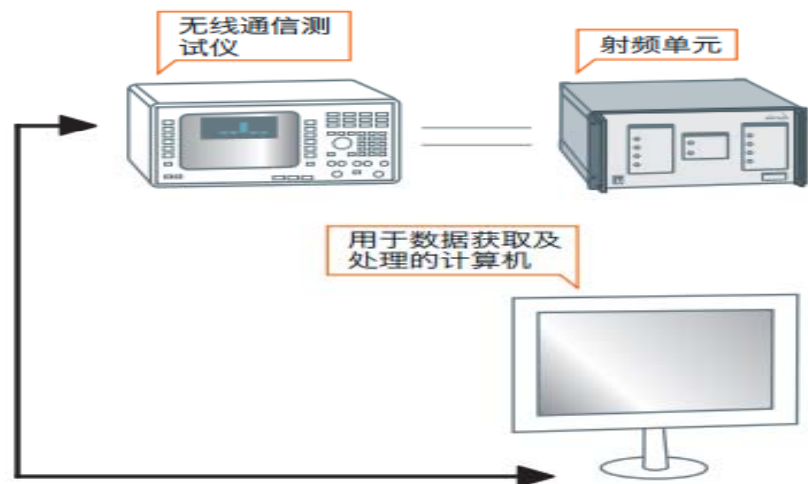
Date: 2023/02/02



|                   |                             |                     |              |                     |
|-------------------|-----------------------------|---------------------|--------------|---------------------|
| The customer name |                             | Feng Wang           | Project Name | <b>D3 pro</b>       |
| NO.               | project                     | Detailed above      |              |                     |
| 1                 | spectrum                    | Lora / WIFI         |              |                     |
| 2                 | Project type                | The controller      |              |                     |
| 3                 | Antenna space area          |                     |              |                     |
| 4                 | Feed point type             |                     |              |                     |
| 5                 | The sensitivity             |                     |              |                     |
| 6                 | Type of antenna             |                     |              |                     |
| 7                 | The length of the PCB board |                     |              |                     |
| 8                 | note                        | Debugging prototype |              |                     |
| RF                |                             | Feng Wang           | 18017141733  | wangf@whalesbot.com |

## 1、Test system and test equipment

System Brand: MVG(SATIMO) measurement features: gain • pattern beamwidth cross polarization resolution sidelobe level 3D cavity reflectance at any polarization cavity reflectance (line or arc) antenna efficiency TRP, TIS, EIRP and EIS. Frequency band: StarLab 2402MHz-2480MHz



**TIS预计测量时间** (一个信道每隔30° 取样)

| 灵敏度算法 \ 标准       | GSM<br>GPRS<br>EDGE | CDMA<br>1 x RTT<br>1 x EvDO | WCDMA<br>HSDPA<br>LTE FDD/TDD | Wi-Fi<br>802.11<br>a/b/g/n | CTIA<br>批准方法   |
|------------------|---------------------|-----------------------------|-------------------------------|----------------------------|----------------|
| RSSI模式+线性化+TIS补偿 | 8 min               |                             | 10 min                        |                            | 是              |
| EIS模式+TIS补偿      |                     | 5 min                       |                               | 5 min                      | 是 <sup>2</sup> |
| 快速CDMA           |                     | 8 min                       |                               |                            | No             |
| EIRP模式+TIS补偿     |                     |                             |                               | 10 min                     | No             |

1、根据RTC  
2、根据协议

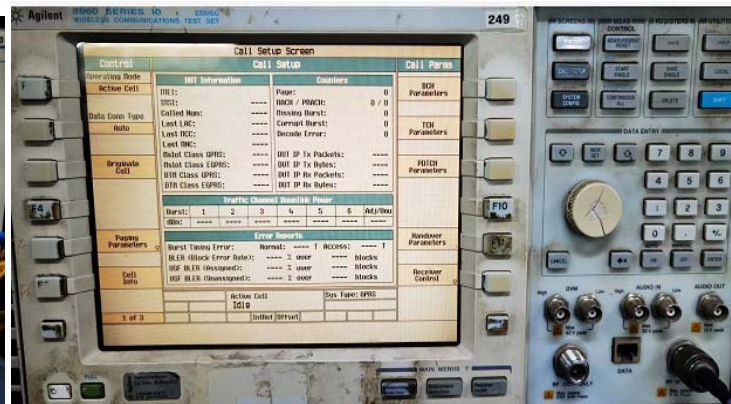


TIS 3D方位切割强度图



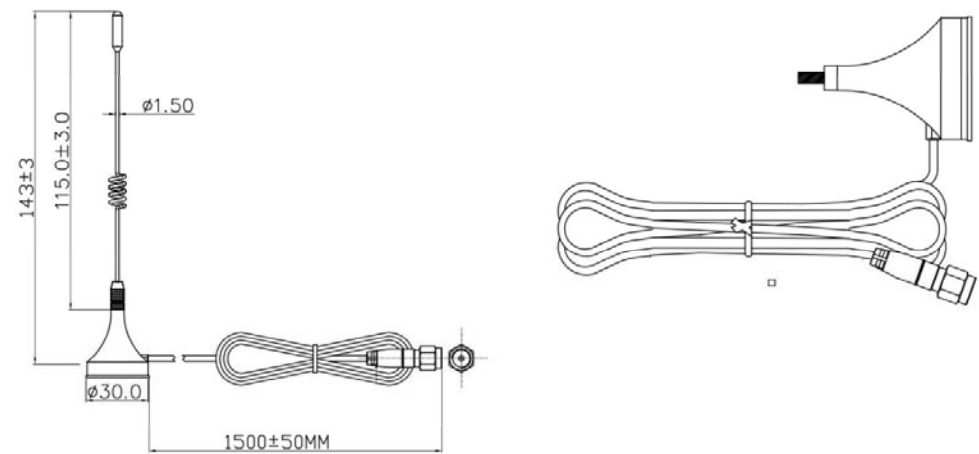
TRP 3D方位切割强度图

# Test Equipment

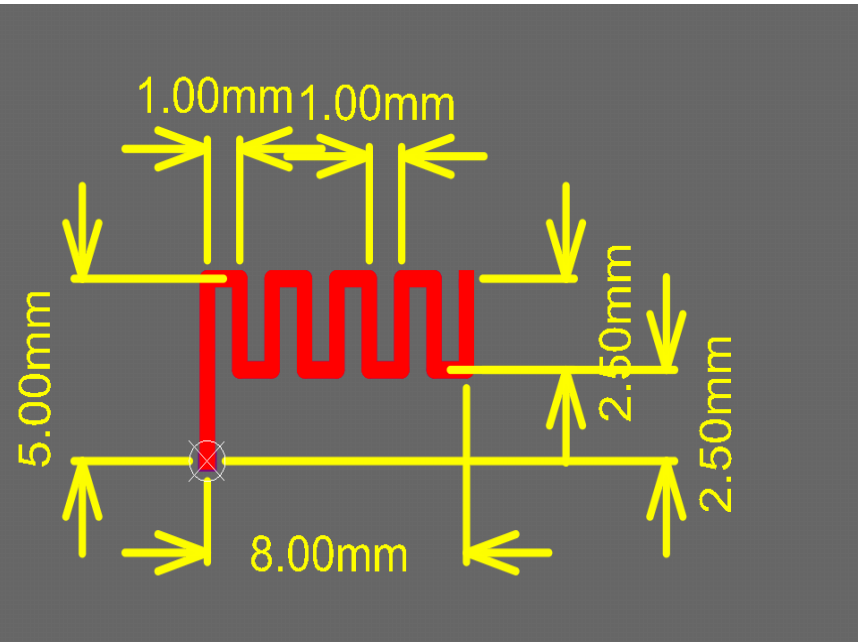


Antenna position

Lora antenna



WIFI antenna

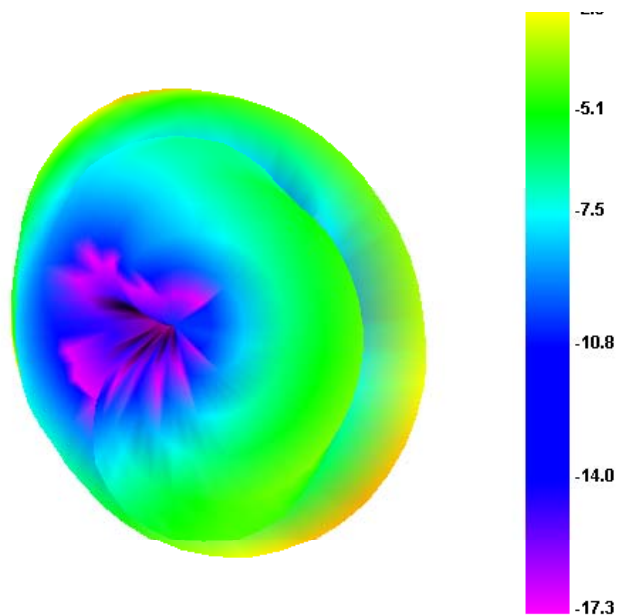


## Efficient ( Lora+WiFi )

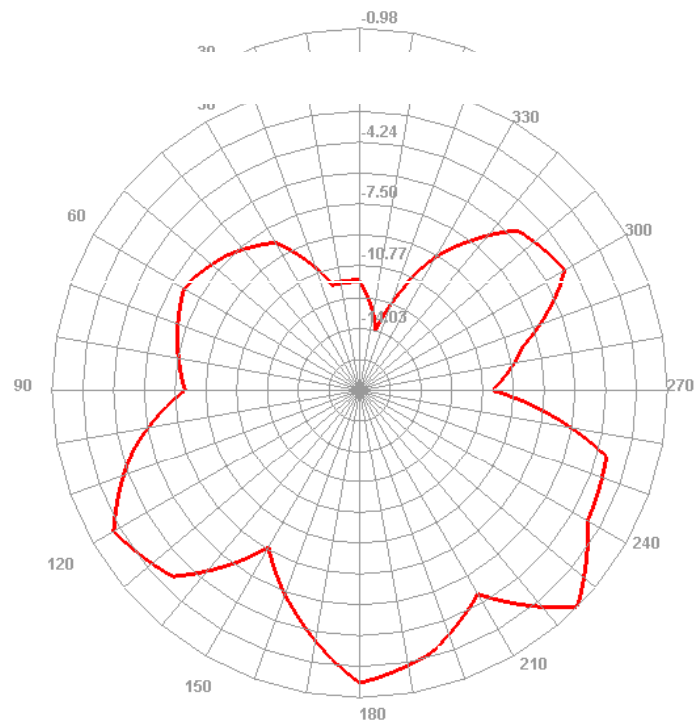
[illegible]

# Efficient ( 2402MHz-2480MHz )

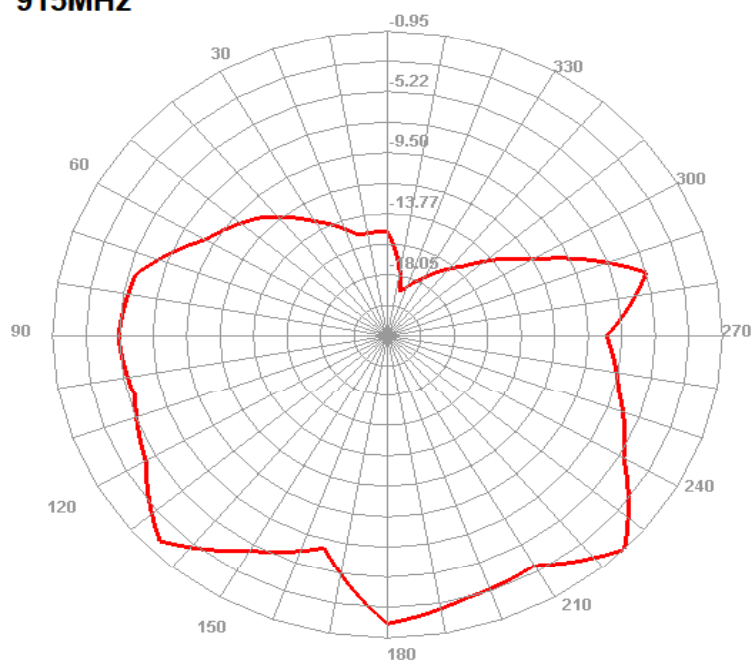
2402MHz



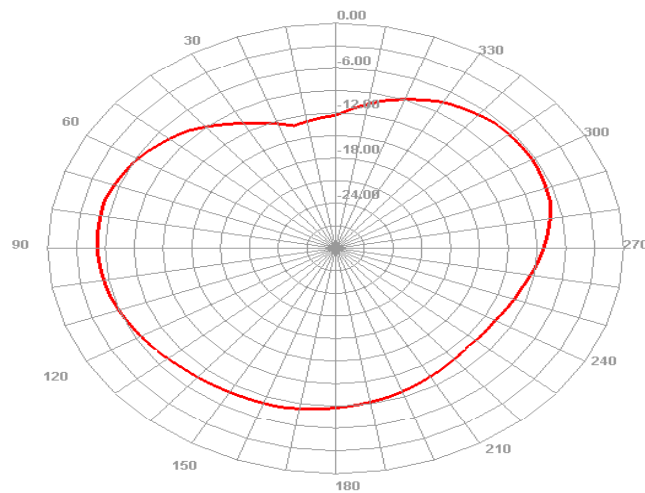
920.000MHz E2



915MHz

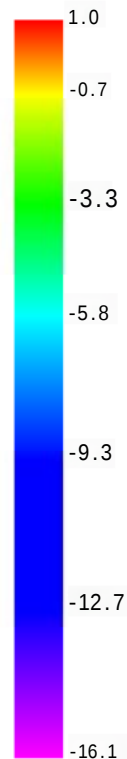
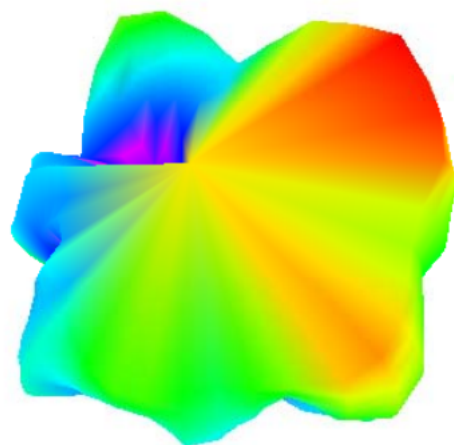


927.5MHz

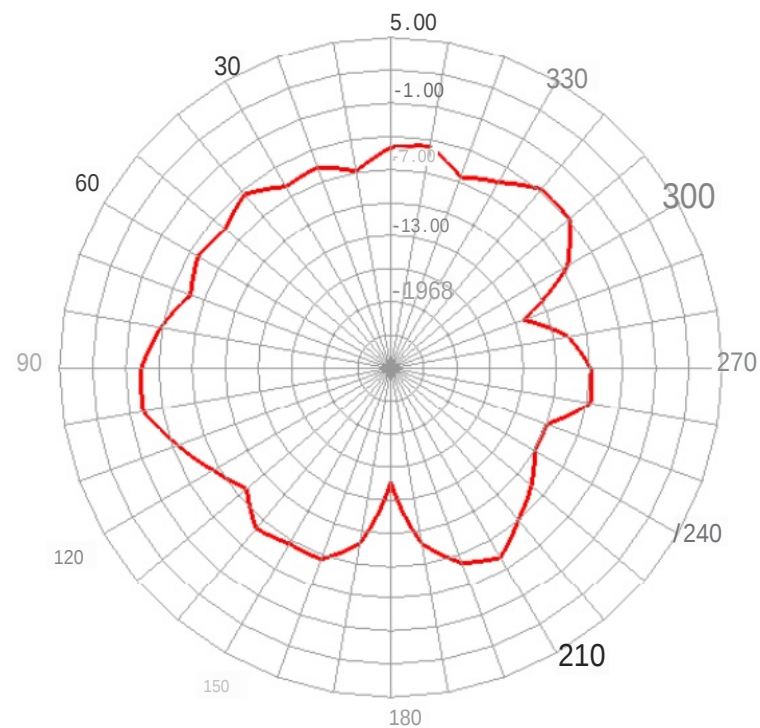


# Efficient(2.4GWIFI)

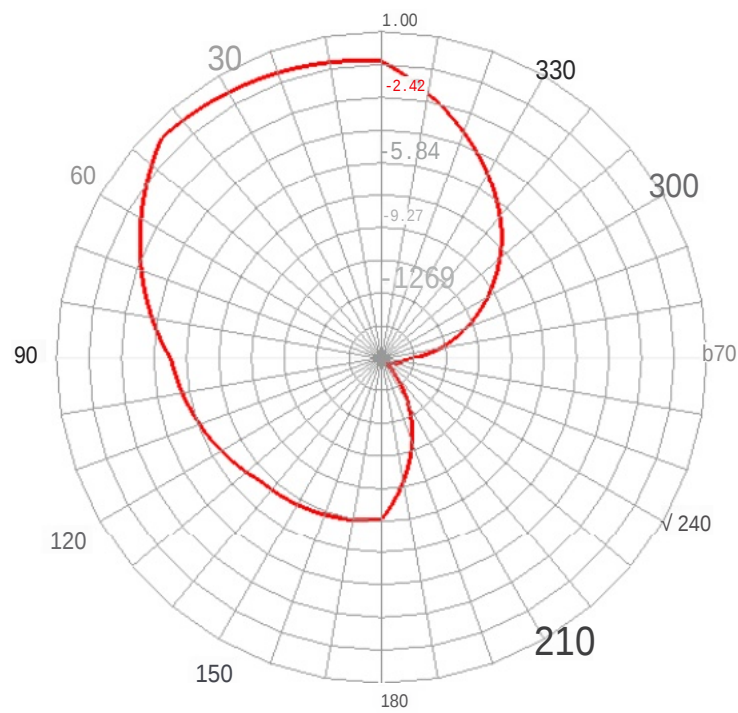
2402MHz-2480MHz



2450.000MHz H



2450.000MHz E1



2450.000MHz E2

