



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd.

# 规格承认书

## SPECIFICATION FOR APPROVAL

|                |            |
|----------------|------------|
| 日期<br>Date     | 2024/05/09 |
| 编号<br>File No  | 24050902   |
| 版本<br>Revision | 1.0        |

客户  
CUSTOMER:

Autel Robotics Co.,Ltd.

客户料号  
CUSTOMER NO:

501007937

品名  
PART NAME:

WIFI\_L Antenna

供方料号  
SUPPLIER NO:

YJI01.005.098.302A

送样日期Date:

送样数量Q'TY:

| 客户确认CUSTOMER APPROVED BY |       |            |
|--------------------------|-------|------------|
| APPROVAL                 | CHIEF | SUPERVISOR |
|                          |       |            |

| 供方确认 SUPPLIER SIGNATURE                                                                             |       |            |
|-----------------------------------------------------------------------------------------------------|-------|------------|
| APPROVAL                                                                                            | CHECK | DESIGN     |
| <br>ChenGuoqiang | XieLi | ChenXingyi |

YJ-RD-F04-A

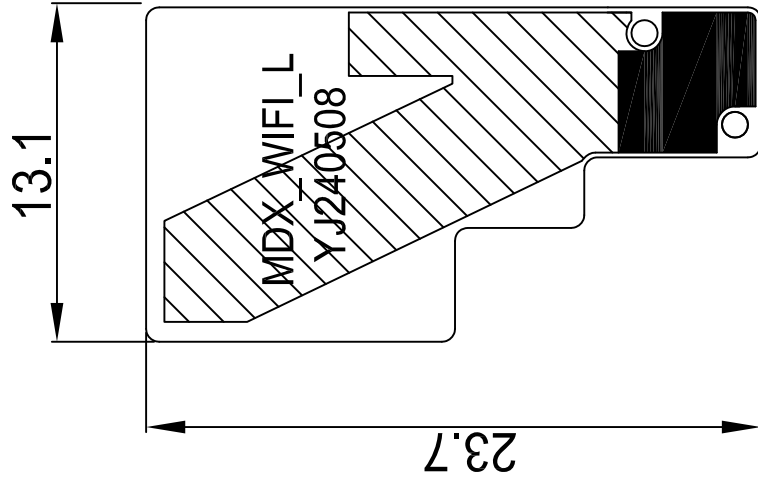
add:Yuanfu Industrial Zone, 59 Muyu Road, Shatou Community, Changan Town, Dongguan City

Tel:0769-82586086 Fax:0769-82586086

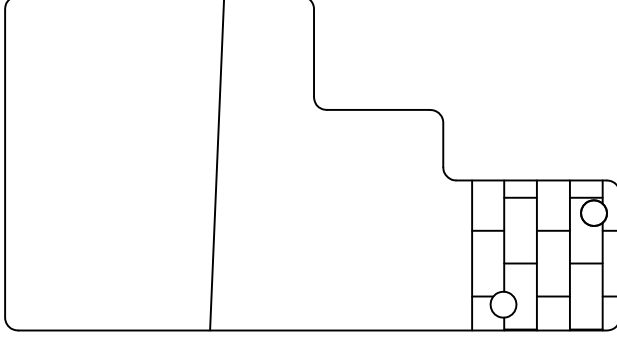


# 承认书项目表

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| 11      | N/A                           | N/A                        | N/A                   |
| 12      | -                             | -                          | -                     |
| 13      | -                             | -                          | -                     |



PI补强含离型纸0.40



 **佳一**  
东莞市一佳电子科技有限公司  
Dongguan Yijia Electronics Communication Technology Co., Ltd.  
Tel: 0769-82586086 Fax: 0769-82586086

|                              |            |                  |                                                                                                                                    |  |
|------------------------------|------------|------------------|------------------------------------------------------------------------------------------------------------------------------------|--|
| PART NAME: WIFI_L Antenna    |            |                  |                                                                                                                                    |  |
| PART NO.: YJ101.005.098.302A |            | DATE: 2024-05-09 |                                                                                                                                    |  |
| APPROVED BY                  | CHECKED BY | DESIGNED BY      |  Tolerance<br>X.X ±0.50<br>X.XX ±0.15<br>X° ±3° |  |
|                              |            |                  | UNITS: mm                                                                                                                          |  |
|                              |            |                  | SCALE: 1/1                                                                                                                         |  |
|                              |            |                  | REVISION: C                                                                                                                        |  |



# 天线规格

## Antenna Specification

### Electrical Properties

|              |                                            |
|--------------|--------------------------------------------|
| Frequency    | 2.4-2.5GHz<br>5.15-5.85GHz                 |
| Impedance    | 50 Ohm Nominal                             |
| V.S.W.R      | 2.0 Max                                    |
| Gain         | 1.9 dBi@2.4-2.5GHz<br>2.8 dBi@5.15-5.85GHz |
| Radiation    | Omni-directional                           |
| Polarization | Linear                                     |

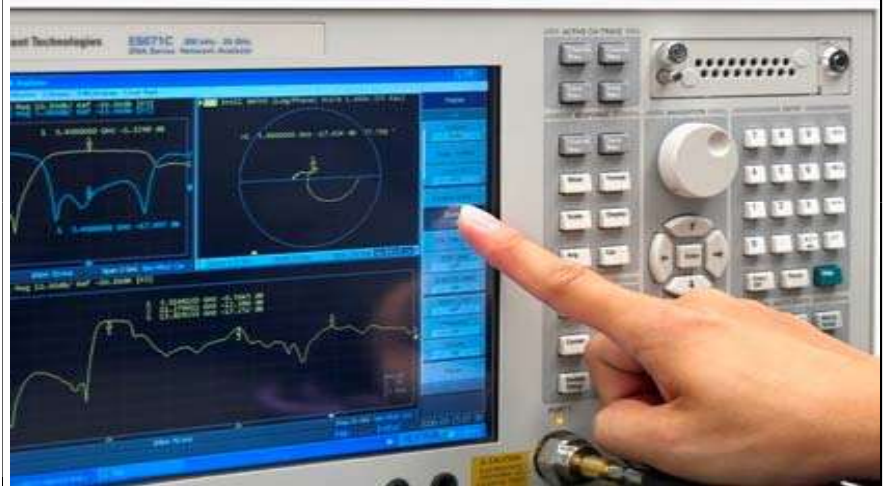
### Physical Properties

|                         |               |
|-------------------------|---------------|
| Connector               | None          |
| Cable Type              | None          |
| Cable Length            | None          |
| Cable Color             | None          |
| Operating Temp.         | -40 ~ +85 °C  |
| Storage Temp / Humidity | 25±5°C / <70% |

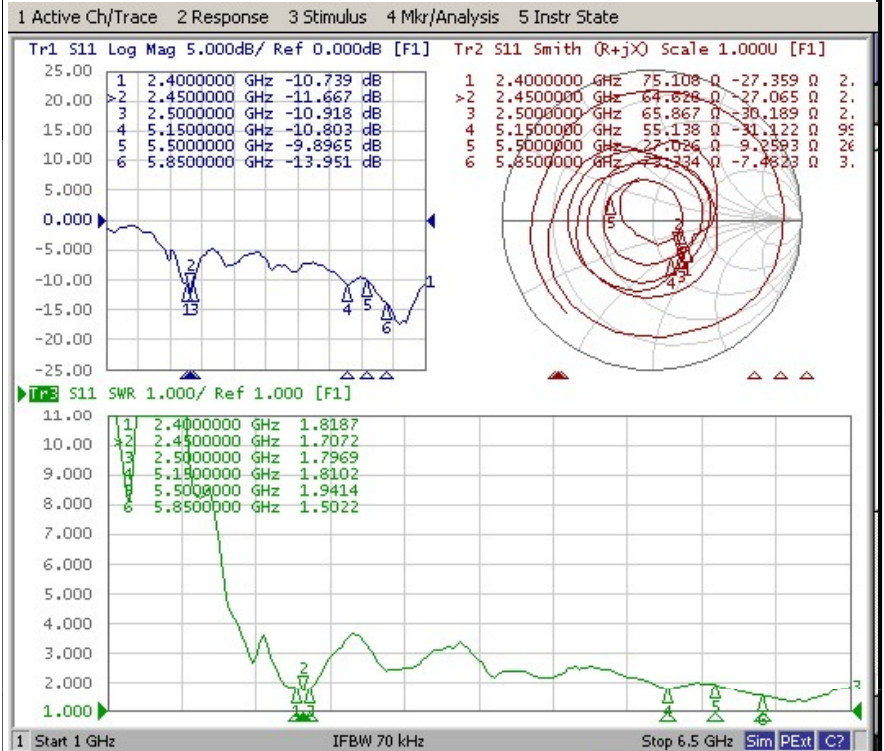


## Antenna Performance Test

**Agilent  
E5071B**

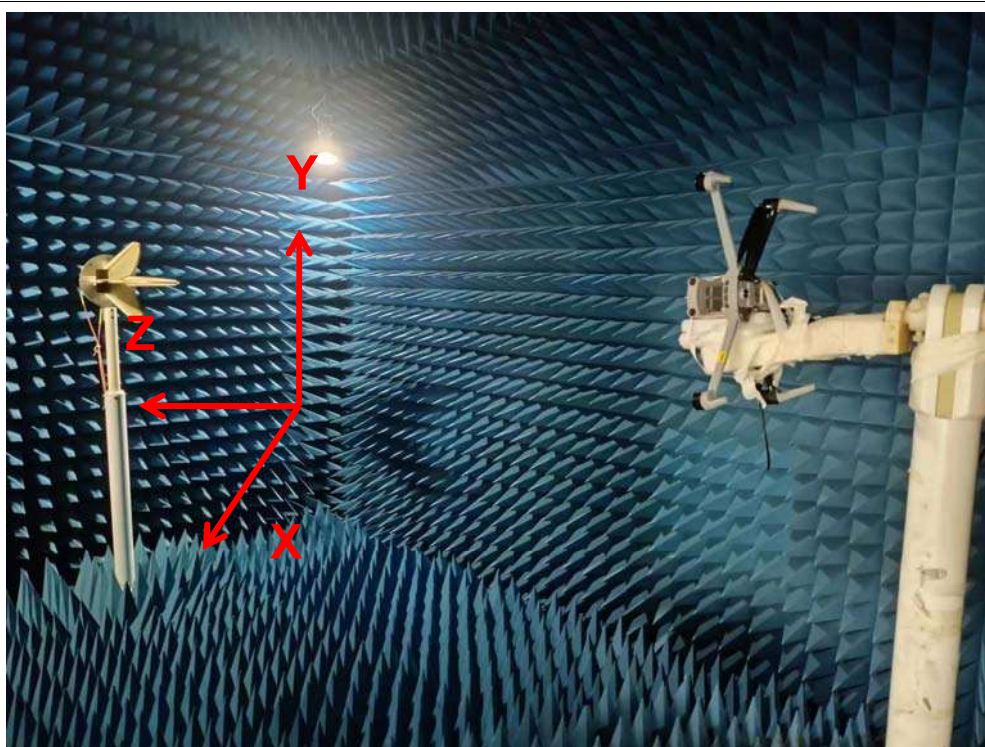
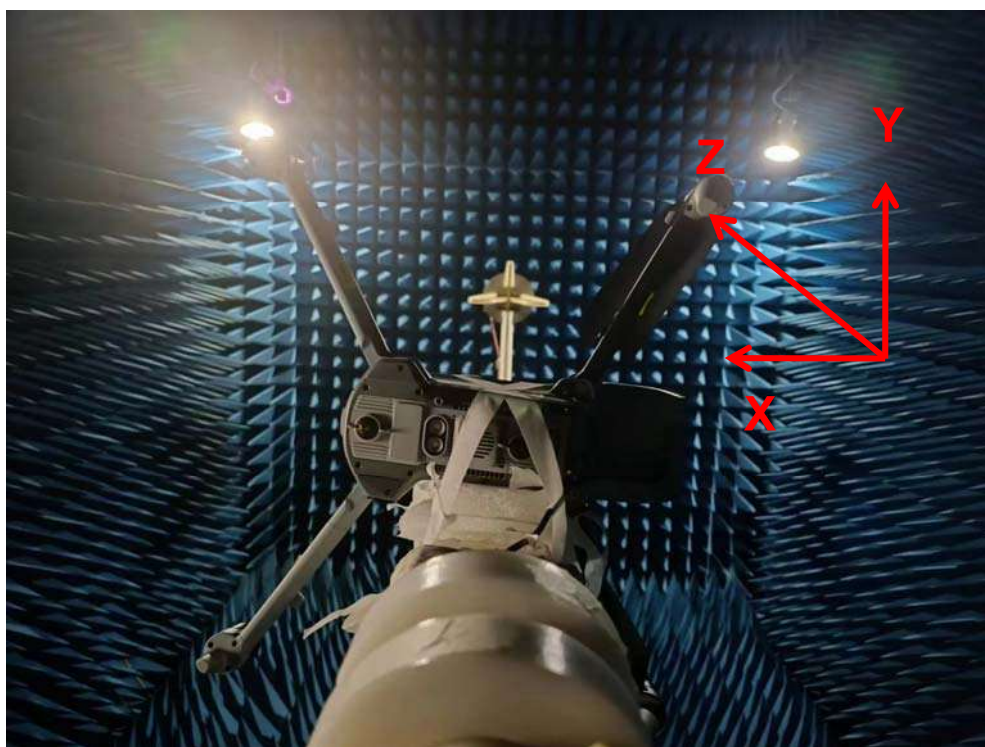


**S  
Parameter  
Test //  
WIFI-L  
Antenna**





## *Antenna Passive Test*





### Passive Test For WIFI2.4 Antenna

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 49.5        | -3.1         | 1.7           |
| 2410          | 49.1        | -3.1         | 1.9           |
| 2420          | 48.0        | -3.2         | 1.9           |
| 2430          | 45.8        | -3.4         | 1.6           |
| 2440          | 44.0        | -3.6         | 1.4           |
| 2450          | 45.6        | -3.4         | 1.6           |
| 2460          | 44.5        | -3.5         | 1.6           |
| 2470          | 44.4        | -3.5         | 1.7           |
| 2480          | 41.7        | -3.8         | 1.5           |
| 2490          | 40.5        | -3.9         | 1.3           |
| 2500          | 41.0        | -3.9         | 1.4           |



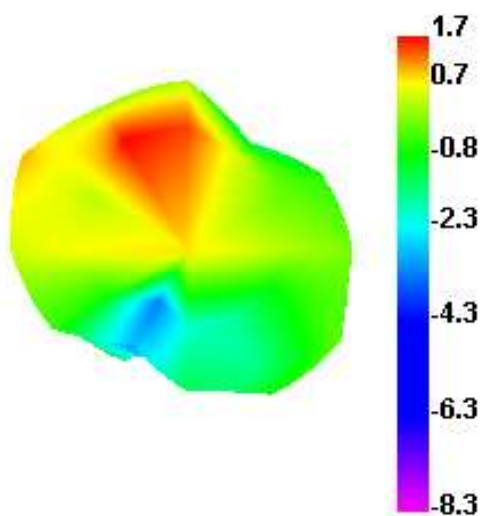
### Passive Test For WiFi5.8 Antenna

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 5150          | 24.4        | -6.1         | 1.1           |
| 5200          | 22.0        | -6.6         | 0.5           |
| 5250          | 21.4        | -6.7         | 0.0           |
| 5300          | 24.3        | -6.1         | -0.5          |
| 5350          | 26.6        | -5.7         | -0.6          |
| 5400          | 27.6        | -5.6         | -0.4          |
| 5450          | 28.1        | -5.5         | -0.8          |
| 5500          | 31.4        | -5.0         | -0.9          |
| 5550          | 33.0        | -4.8         | -1.0          |
| 5600          | 35.3        | -4.5         | 0.1           |
| 5650          | 49.2        | -3.1         | 2.2           |
| 5700          | 45.3        | -3.4         | 2.2           |
| 5750          | 44.4        | -3.5         | 2.8           |
| 5800          | 39.9        | -4.0         | 2.8           |
| 5850          | 38.0        | -4.2         | 2.5           |

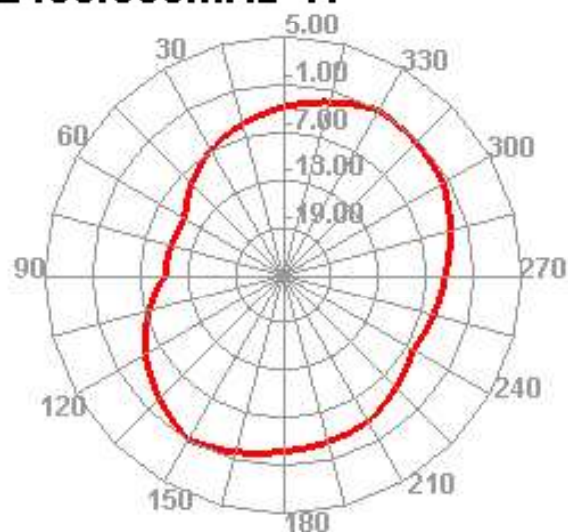


## Radiation Pattern For WIFI2.4 Antenna

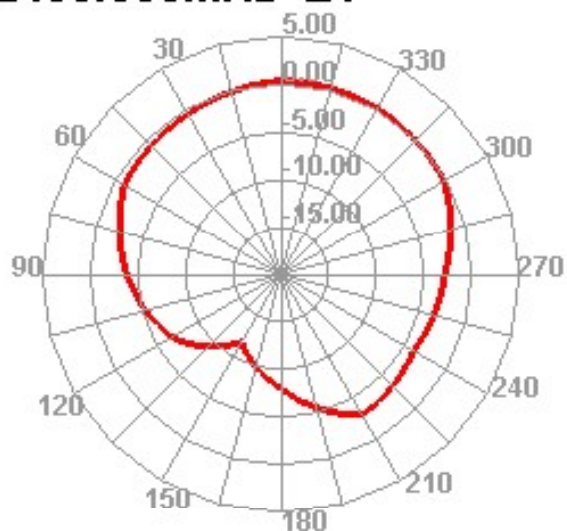
2400.000MHz



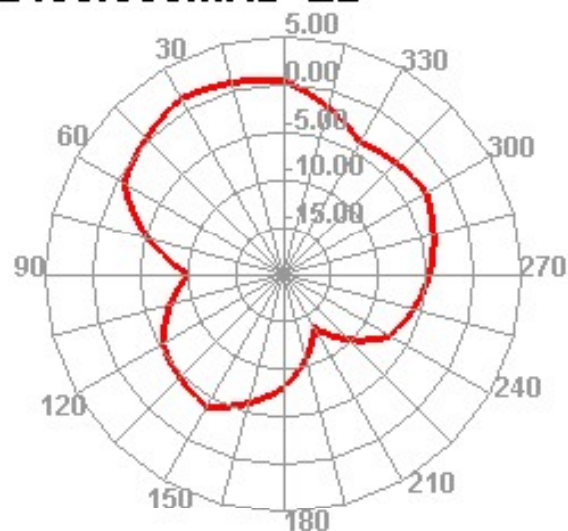
2400.000MHz H



2400.000MHz E1



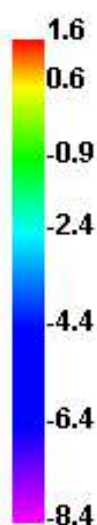
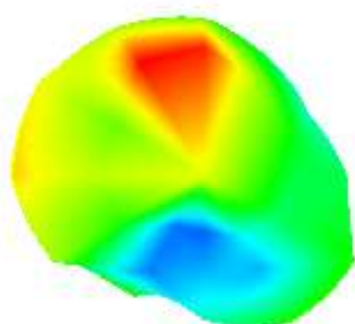
2400.000MHz E2



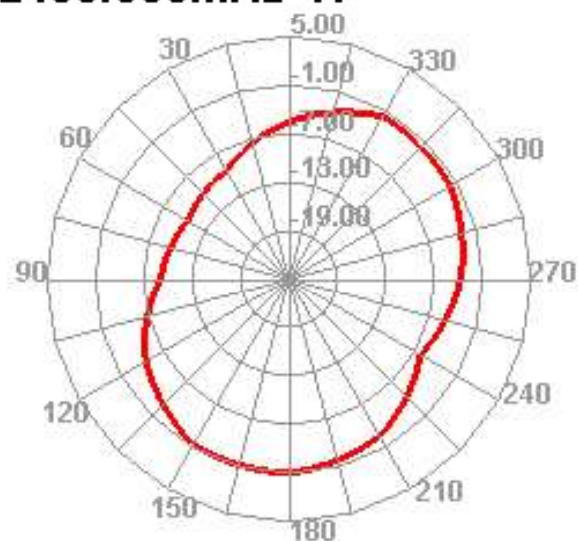


## Radiation Pattern For WIFI2.4 Antenna

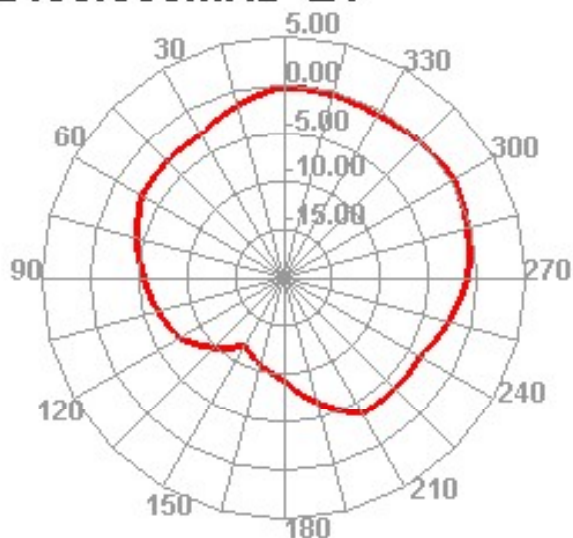
2450.000MHz



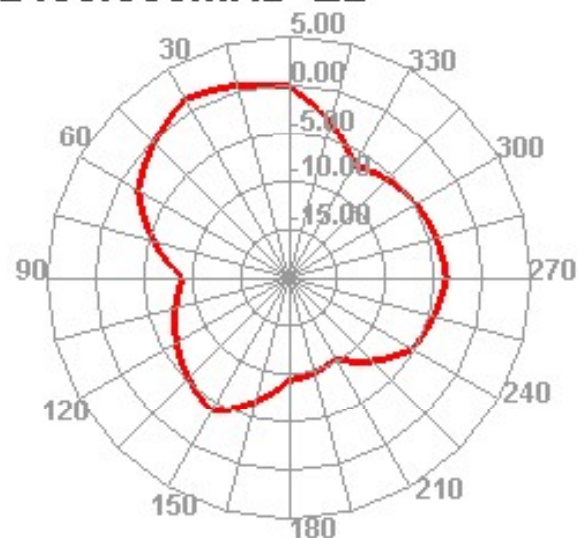
2450.000MHz H



2450.000MHz E1



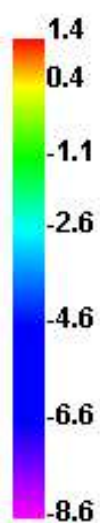
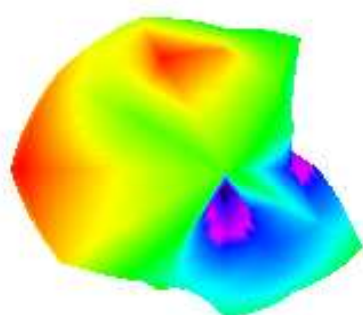
2450.000MHz E2



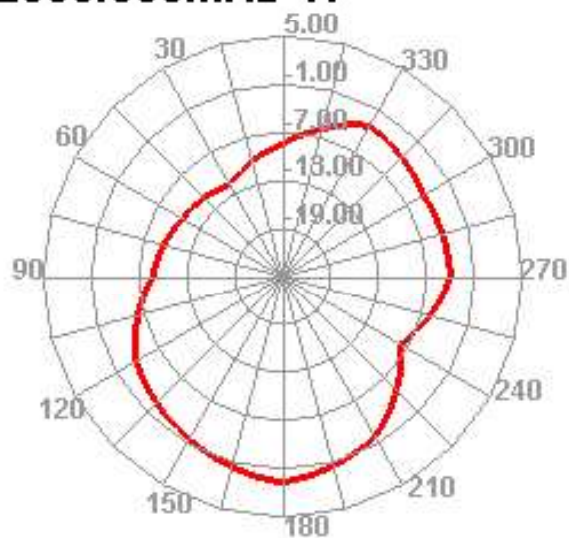


## Radiation Pattern For WIFI2.4 Antenna

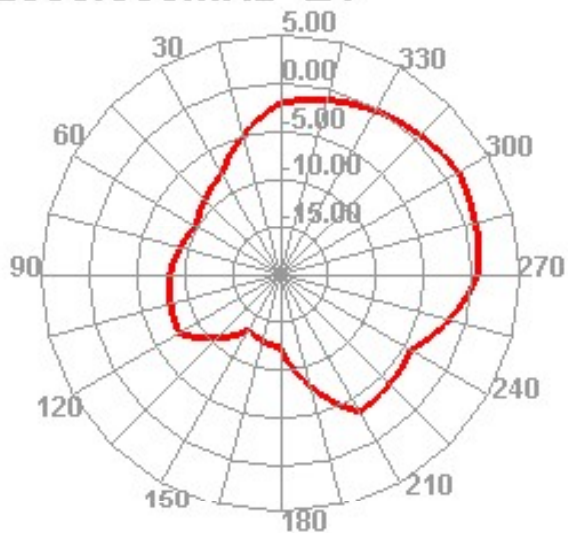
2500.000MHz



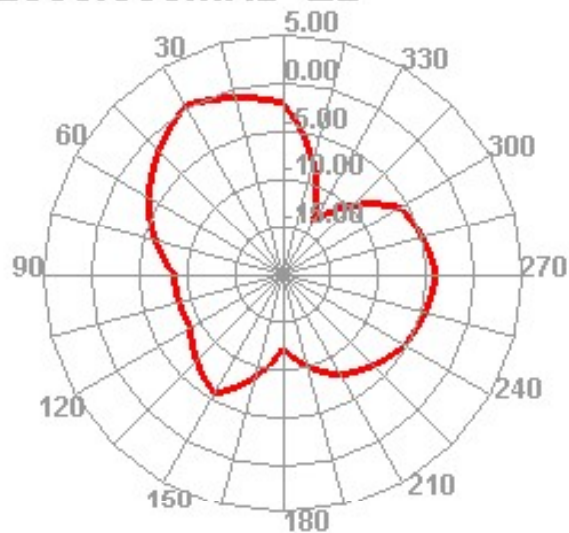
2500.000MHz H



2500.000MHz E1



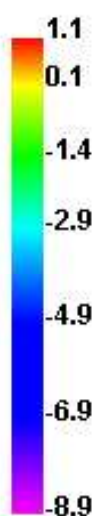
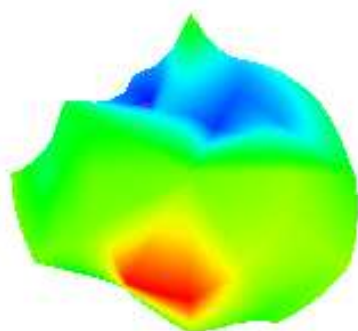
2500.000MHz E2



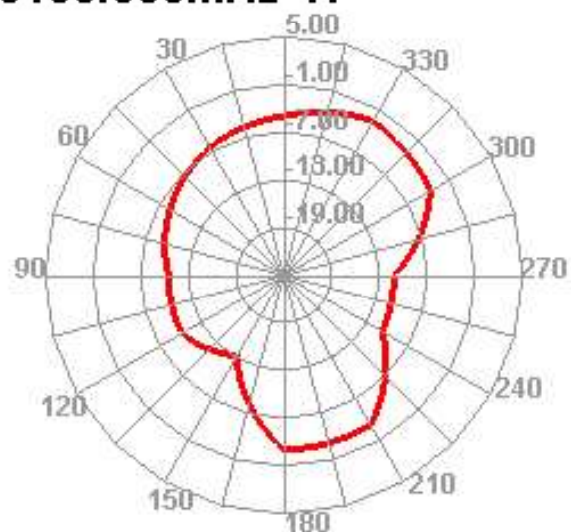


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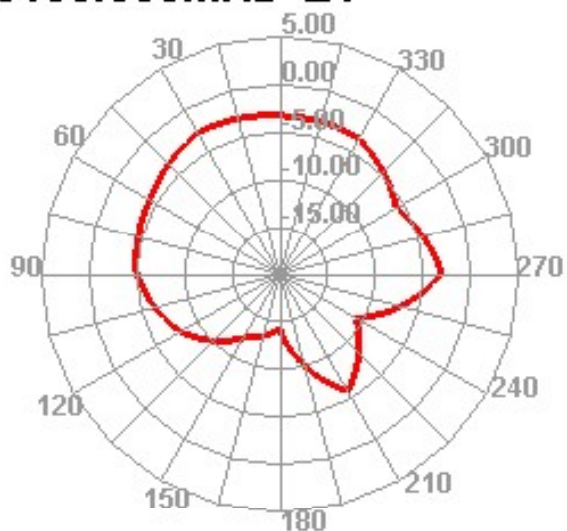
5150.000MHz



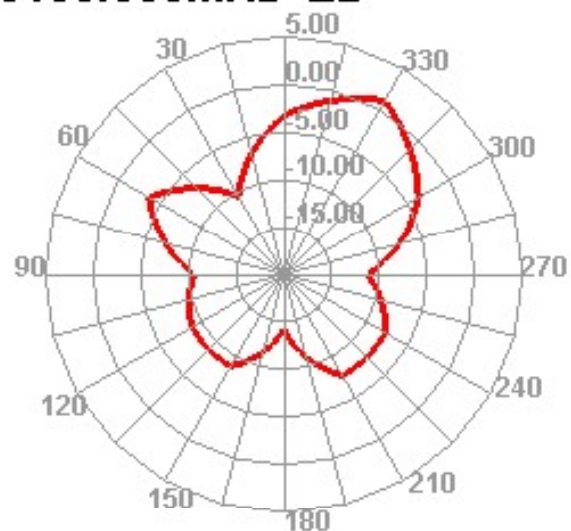
5150.000MHz H



5150.000MHz E1



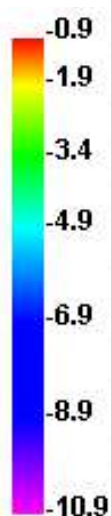
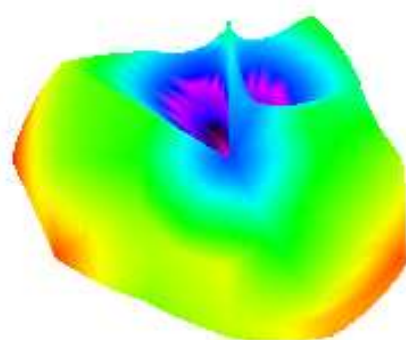
5150.000MHz E2



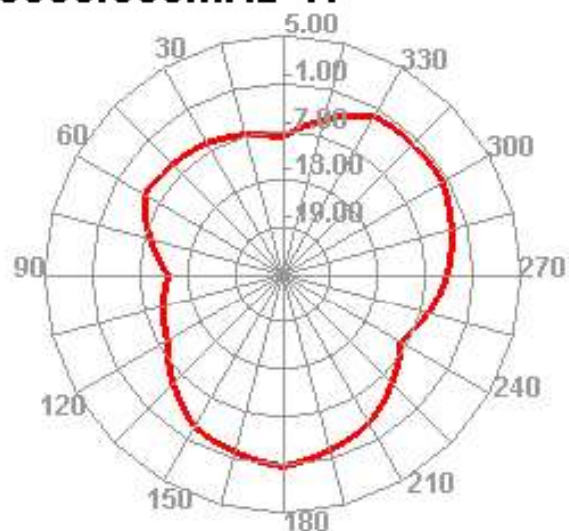


## Radiation Pattern For WIFI5.8 Antenna

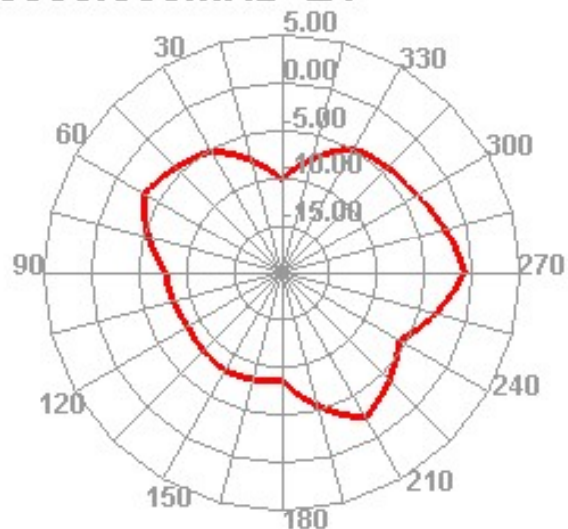
5500.000MHz



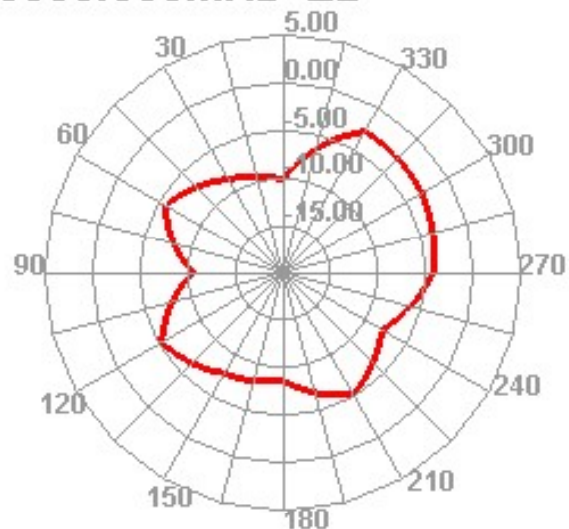
5500.000MHz H



5500.000MHz E1



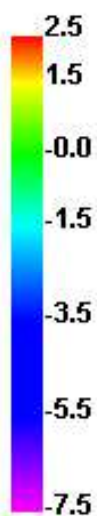
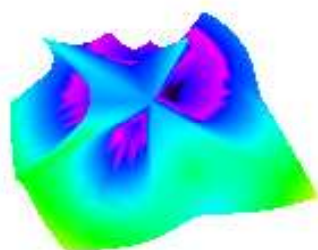
5500.000MHz E2



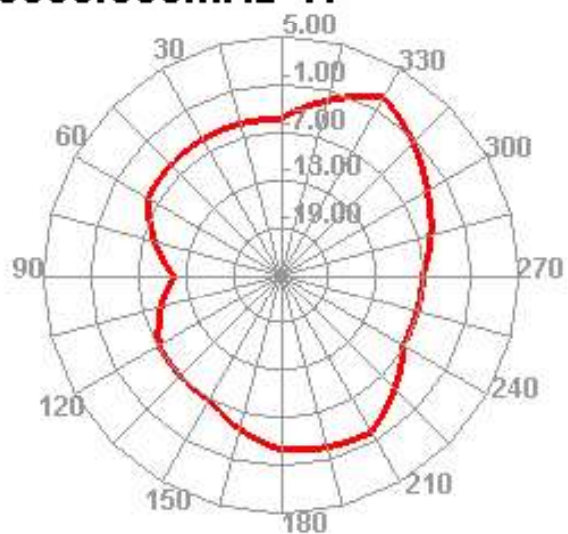


## Radiation Pattern For WIFI5.8 Antenna

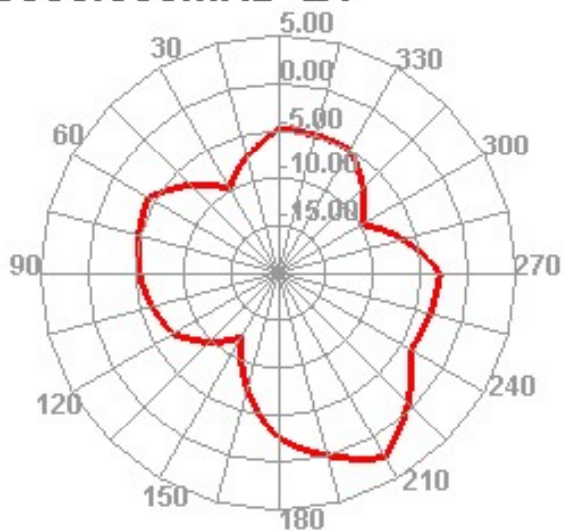
5850.000MHz



5850.000MHz H



5850.000MHz E1



5850.000MHz E2

