



# Dongguan YiJia Electronics Communication Technology Co.,Ltd.

## SPECIFICATION FOR APPROVAL

Date 2022/09/29  
File No 22092903  
Revision 1.0

CUSTOMER: GUIDE

CUSTOMER NO: ZC16A

PART NAME: WIFI Antenna

SUPPLIER NO: YJT01.220.013.303A

Date:

Q “TY:

| CUSTOMER APPROVED BY |       |            |
|----------------------|-------|------------|
| APPROVAL             | CHIEF | SUPERVISOR |
|                      |       |            |

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

YJ-RD-F04-A



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|  | A                    | A                  | A           |
|  |                      |                    |             |
|  |                      |                    |             |

**RoHS**  
Compatible

CUSTOMER  
PART NO

REV.

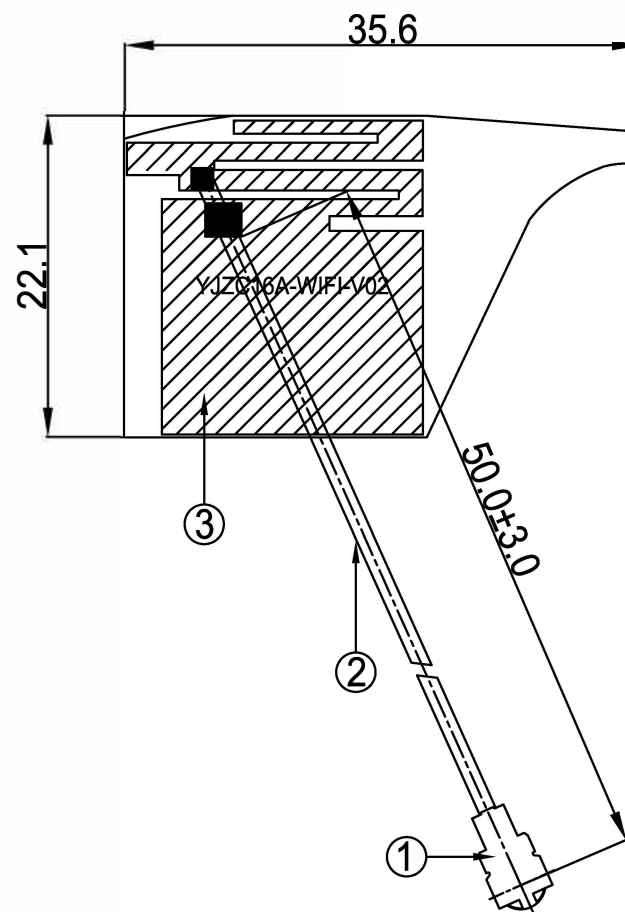


DESCRIPTION

primary offering

DATE

2022-09-29



ongguan Yijia Electronics Communication Technology Co.,Ltd. Tel :0769-82586086 Fax:0769-82586086

PART NAME: WiFi Antenna

PART NO.: YJT01.220.013.303A

DATE: 2022-09-29

APPROVED BY

CHECKED BY

DESIGNED BY



UNITS: mm

SCALE: 1/1

REVISION: A

Tolerance  
X.X ±0.50  
X.XX±0.15  
X° ±3°

|    |                |                |          |               |      |
|----|----------------|----------------|----------|---------------|------|
| 3  | FPCB           | 35.6*22.1MM    | FPCB     | FPC1000XA.P01 | 1    |
| 2  | Coaxial Cable  | O.D.1.13 White | O.D.1.13 | COA1000XA.P01 | 1    |
| 1  | Mini Connector | Au Plated 1代   | Cu       | TER1000XA.P01 | 1    |
| NO | PART NAME      | DESCRIPTION    | Material | Part Number   | Q.TY |



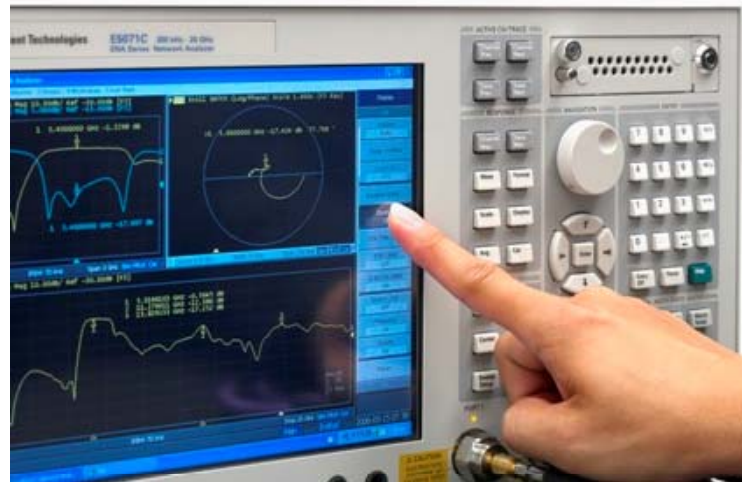
# Antenna Specification

| <b>Electrical Properties</b> |                                          |
|------------------------------|------------------------------------------|
| Frequency                    | 2.4-2.5GHz<br>5.18-5.85GHz               |
| Impedance                    | 50 Ohm Nominal                           |
| V.S.W.R                      | 2.0 Max                                  |
| Gain                         | 0.1 dBi@2.4-2.5GHz<br>1 dBi@5.18-5.85GHz |
| Radiation                    | Omni-directional                         |
| Polarization                 | Linear                                   |
| <b>Physical Properties</b>   |                                          |
| Connector                    | First generation IPEX                    |
| Cable Type                   | O.D.1.13mm                               |
| Cable Length                 | 50mm                                     |
| Cable Color                  | White                                    |
| Operating Temp.              | -40 ~ +85 °C                             |
| Storage Temp / Humidity      | 25±5°C / <70%                            |

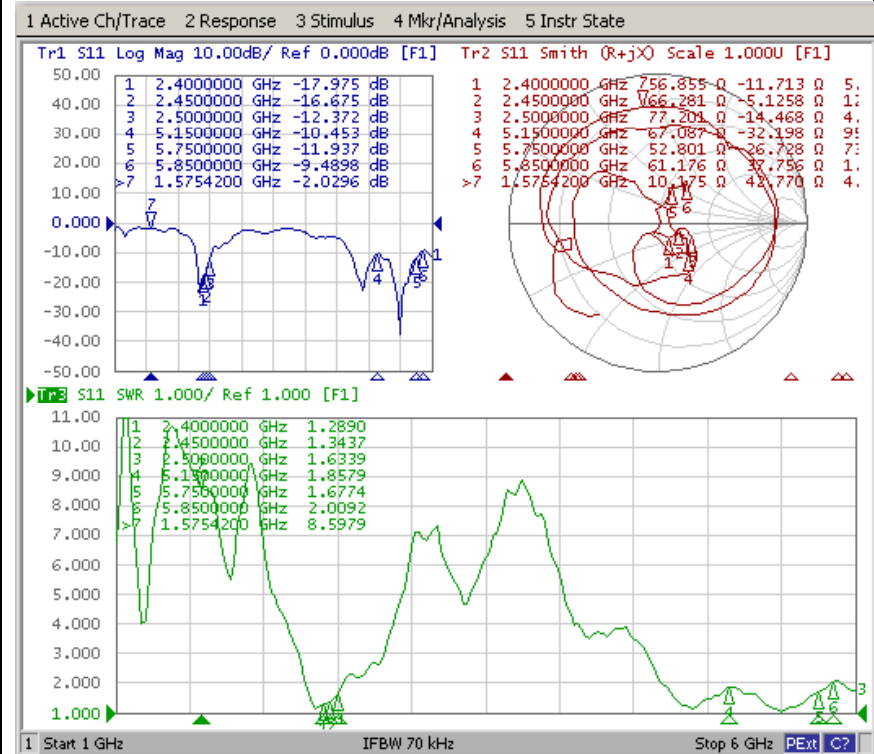
add: YuanfulIndustrialZone,59MuyuRoad,ShatouCommunity,ChanganTown,DongguanCity  
Tel:0769-82586086 Fax:0769-82586086



# Agilent E5071B



# S Parameter Test // WiFi Antenna





| Passive Test For WiFi Antenna(2.4G) |             |              |               |
|-------------------------------------|-------------|--------------|---------------|
| Freq<br>(MHz)                       | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 2400                                | 35.2        | -4.6         | -1.3          |
| 2410                                | 36.6        | -4.4         | -1.4          |
| 2420                                | 38.3        | -4.2         | -0.9          |
| 2430                                | 38.6        | -4.1         | -0.8          |
| 2440                                | 39.2        | -4.1         | -0.7          |
| 2450                                | 41.8        | -3.8         | -0.4          |
| 2460                                | 40.9        | -3.9         | -0.4          |
| 2470                                | 40.5        | -3.9         | -0.2          |
| 2480                                | 38.9        | -4.1         | -0.1          |
| 2490                                | 36.3        | -4.3         | -0.1          |
| 2500                                | 37.2        | -4.2         | 0.1           |



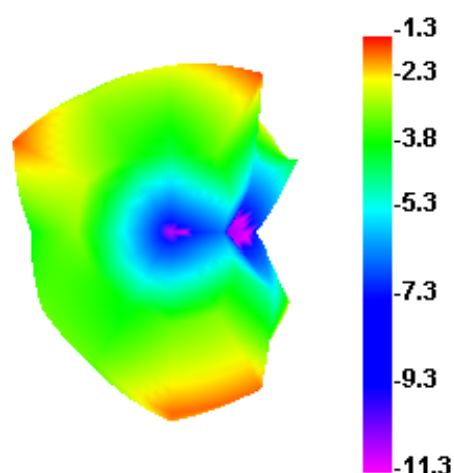
### Passive Test For WiFi Antenna(5.8G)

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 5150          | 32.5        | -4.8         | 0.2           |
| 5200          | 37.8        | -4.2         | 0.8           |
| 5250          | 42.7        | -3.6         | 0.6           |
| 5300          | 48.7        | -3.1         | 0.8           |
| 5350          | 52.0        | -2.8         | 1.0           |
| 5400          | 52.4        | -2.8         | 0.4           |
| 5450          | 52.9        | -2.7         | 0.6           |
| 5500          | 52.2        | -2.8         | 0.7           |
| 5550          | 46.8        | -3.3         | 0.6           |
| 5600          | 44.4        | -3.5         | 0.5           |
| 5650          | 57.8        | -2.3         | 0.7           |
| 5700          | 54.9        | -2.6         | 0.2           |
| 5750          | 48.9        | -3.1         | 0.8           |
| 5800          | 42.7        | -3.6         | 0.4           |
| 5850          | 40.8        | -3.8         | 1.0           |

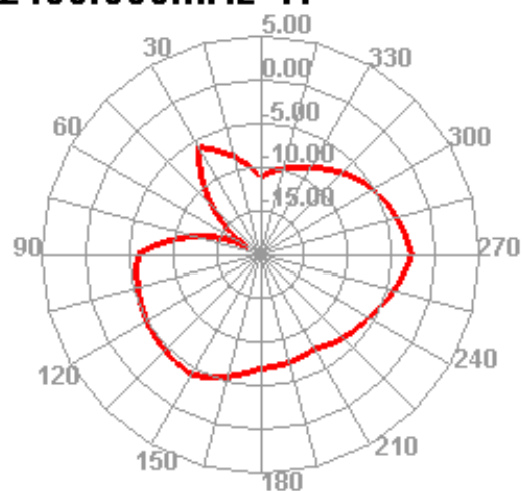


## Radiation Pattern For WiFi Antenna

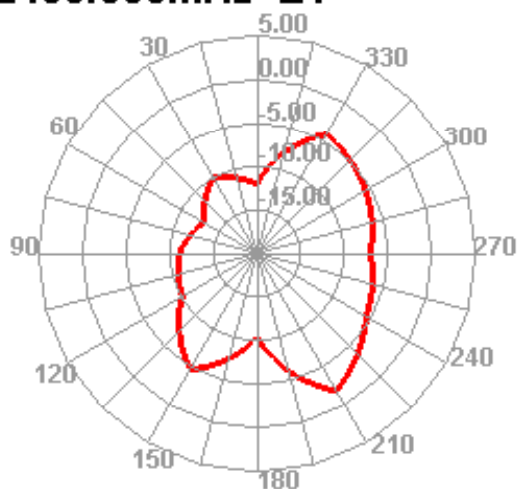
**2400.000MHz**



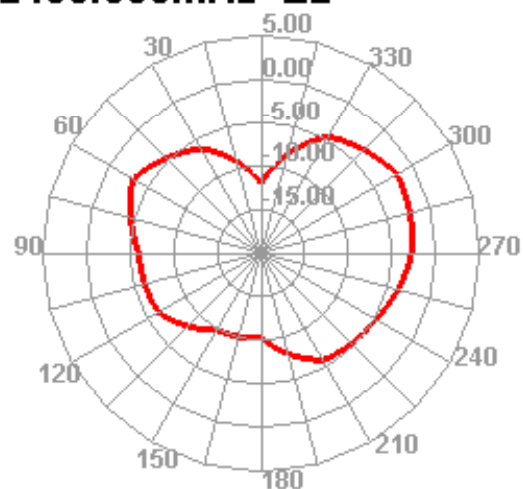
**2400.000MHz H**



**2400.000MHz E1**



**2400.000MHz E2**

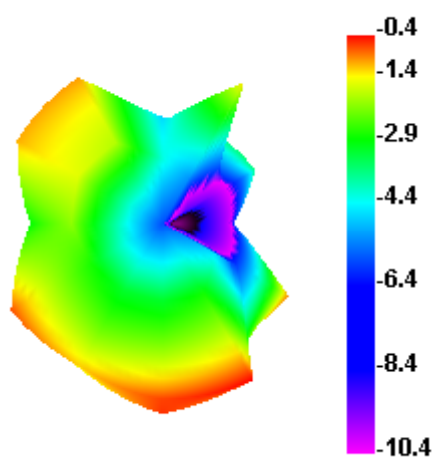




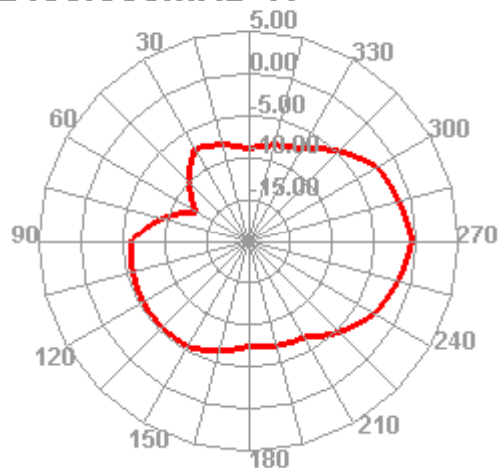


## Radiation Pattern For WiFi Antenna

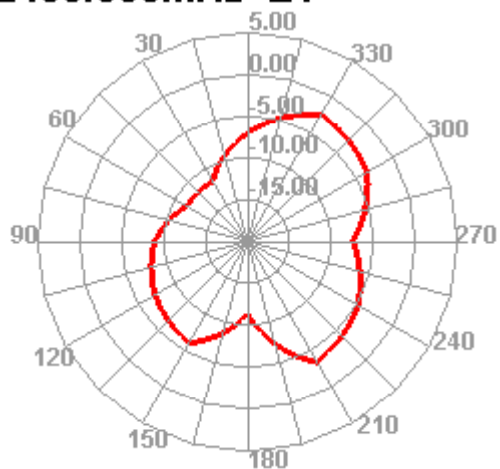
2450.000MHz



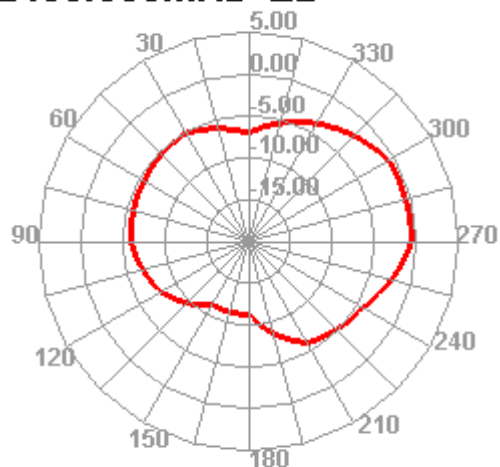
2450.000MHz H



2450.000MHz E1



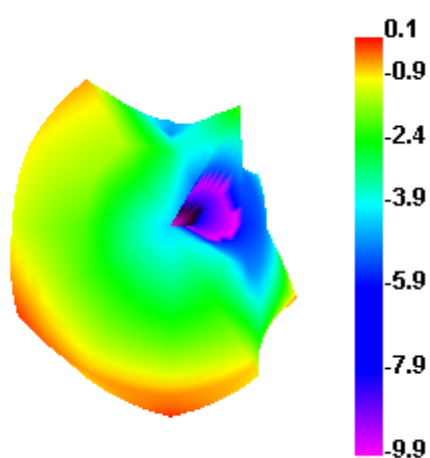
2450.000MHz E2



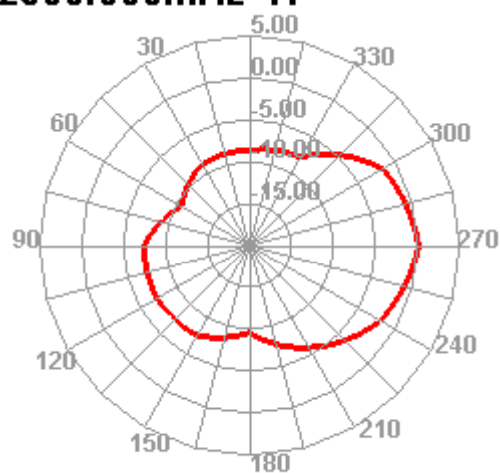


## Radiation Pattern For WiFi Antenna

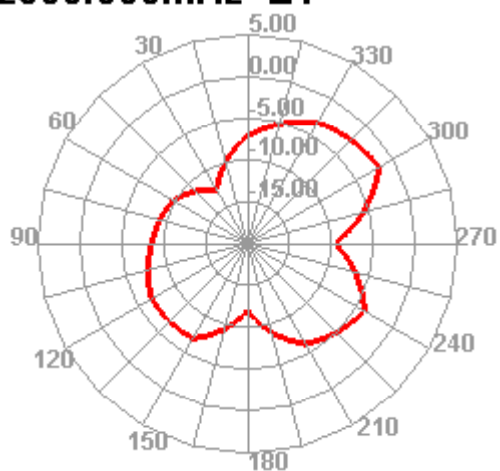
2500.000MHz



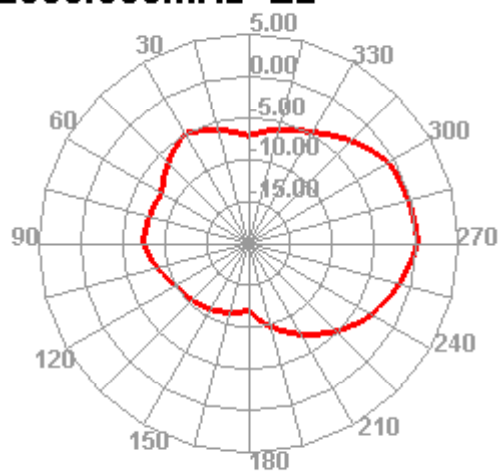
2500.000MHz H



2500.000MHz E1



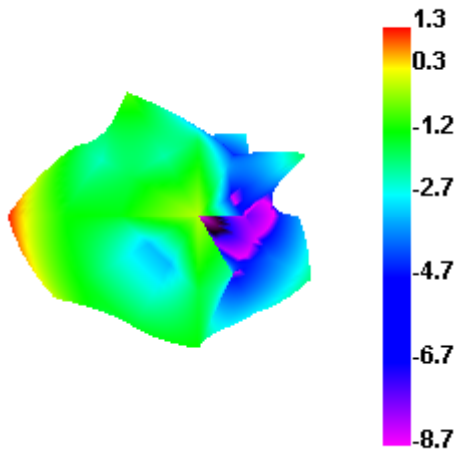
2500.000MHz E2



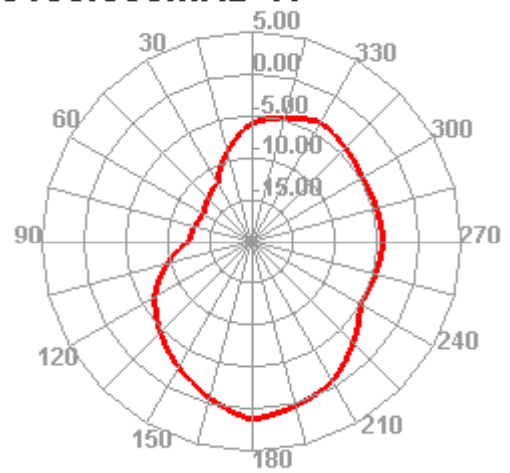


## Radiation Pattern For WiFi Antenna

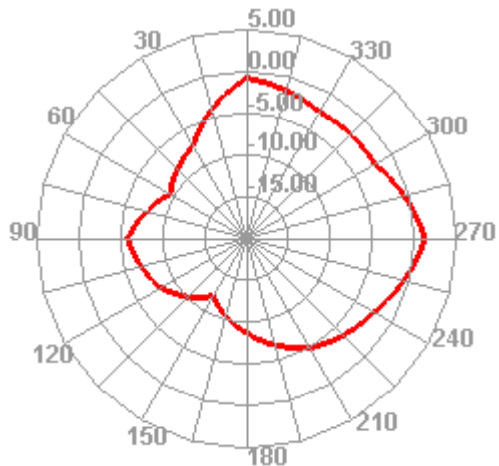
5150.000MHz



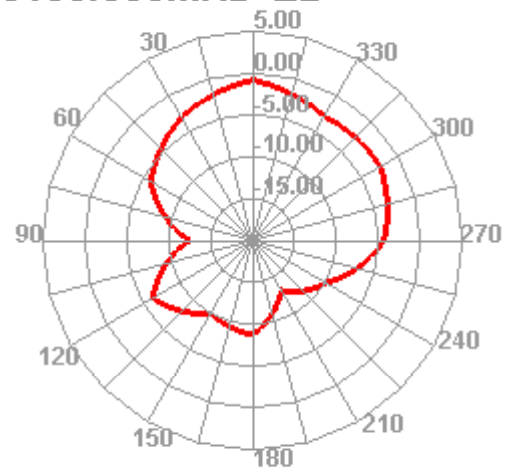
5150.000MHz H



5150.000MHz E1



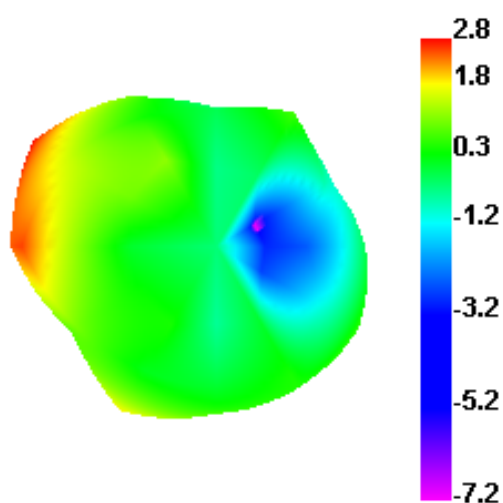
5150.000MHz E2



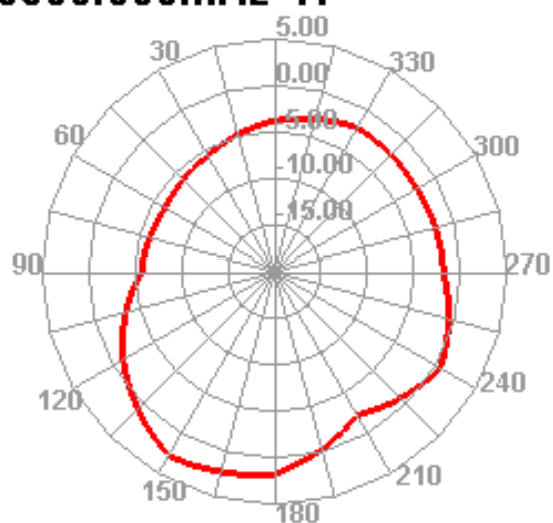


## Radiation Pattern For WiFi Antenna

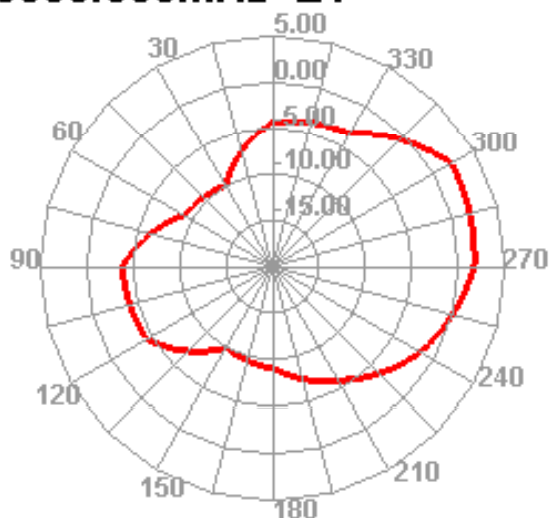
**5500.000MHz**



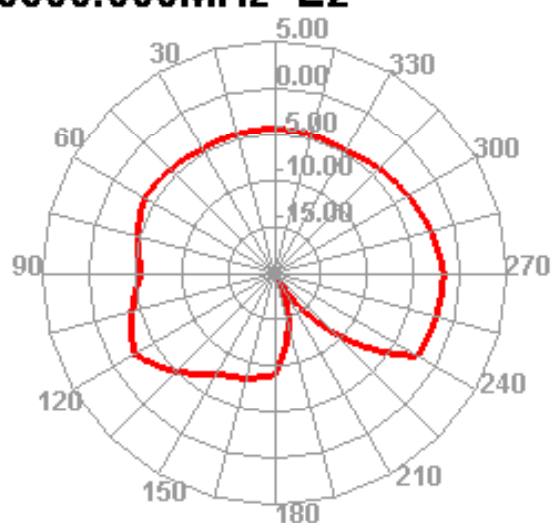
**5500.000MHz H**



**5500.000MHz E1**



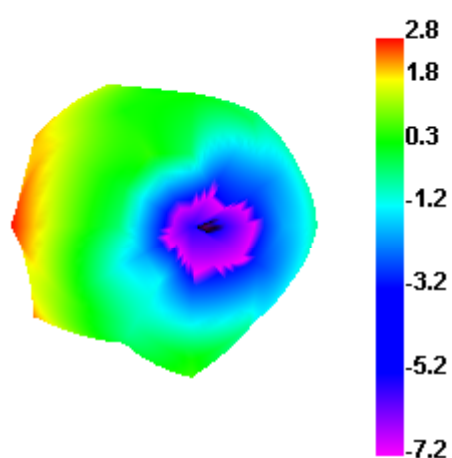
**5500.000MHz E2**



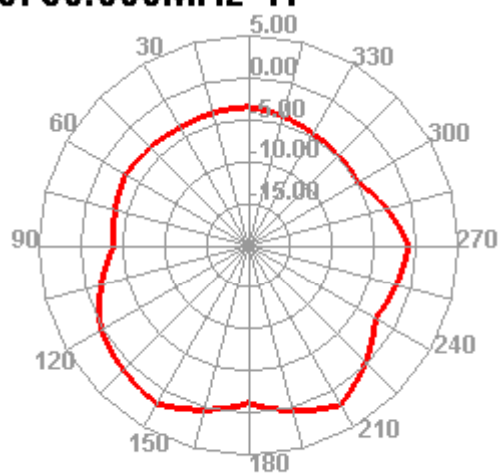


## Radiation Pattern For WiFi Antenna

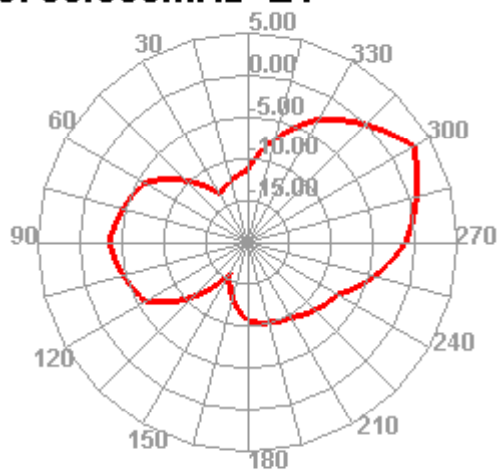
**5750.000MHz**



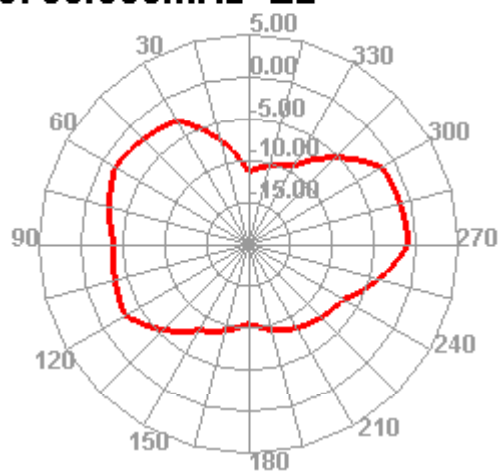
**5750.000MHz H**



**5750.000MHz E1**



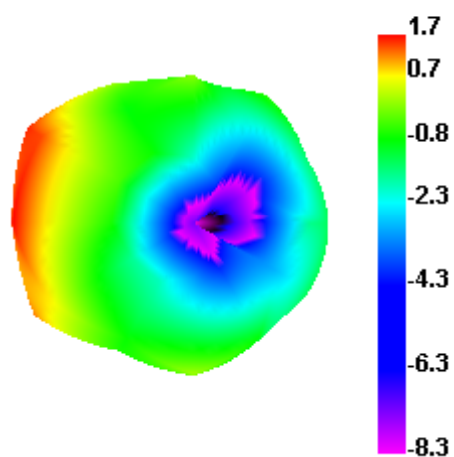
**5750.000MHz E2**



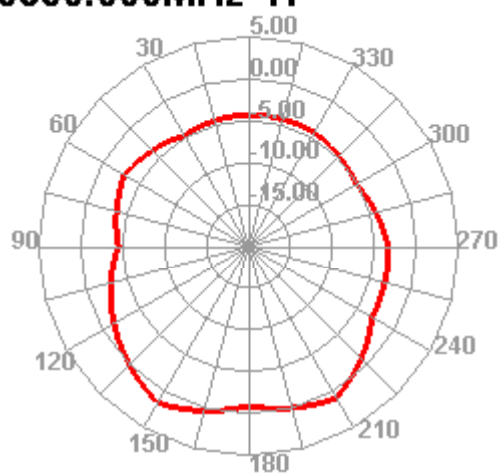


## Radiation Pattern For WiFi Antenna

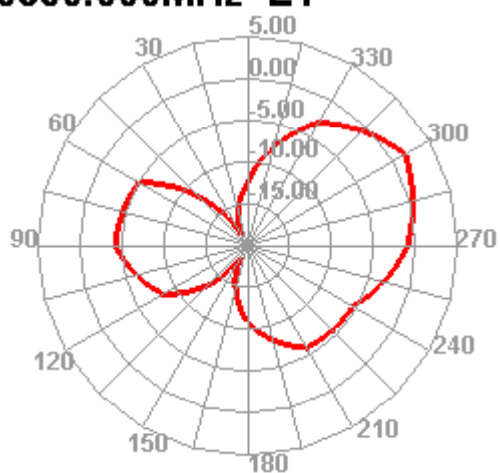
5850.000MHz



5850.000MHz H



5850.000MHz E1



5850.000MHz E2

