



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     | 2023/07/03 |
| 编号<br>File No  | 23070302   |
| 版本<br>Revision | 1.0        |

客 户  
CUSTOMER:

客户料号  
CUSTOMER NO:

GH2305

品 名  
PART NAME:

WIFI Antenna L=40mm

供方料号  
SUPPLIER NO:

YJL01.098.020.302A

送样日期Date:

| 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

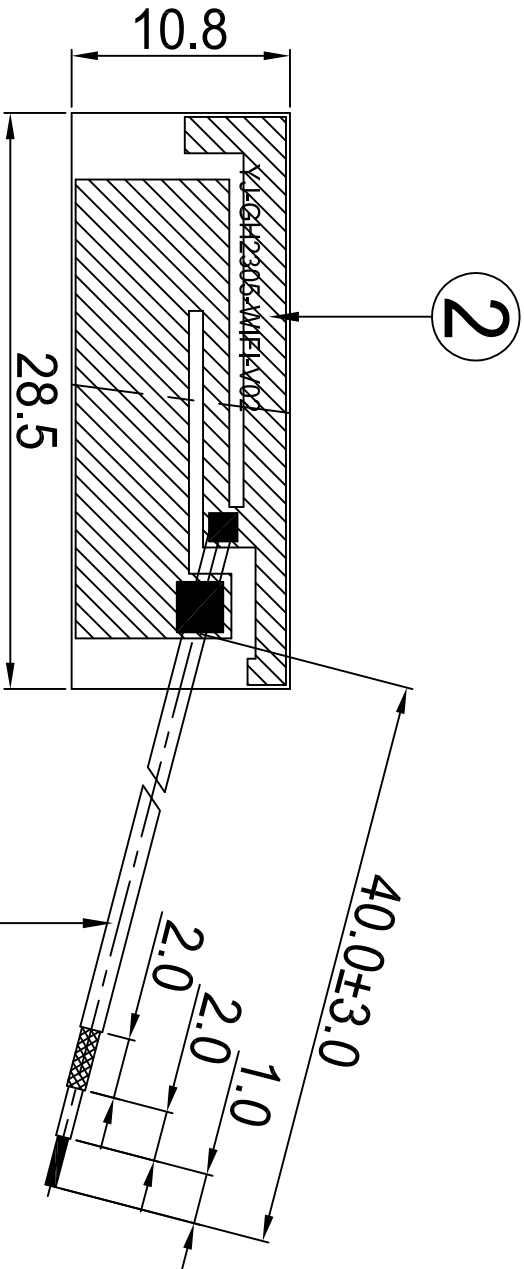


# 天线规格

## 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@2.4-2.5GHz<br>3.0 Max@5.15-5.85GHz |
| Gain                    | 2.7 dBi@2.4-2.5GHz<br>2.9 dBi@5.15-5.85GHz |
| Radiation               | Omni-directional                           |
| Polarization            | Linear                                     |
| Physical Properties     |                                            |
| Connector               | None                                       |
| Cable Type              | O.D.0.81mm                                 |
| Cable Length            | 40mm                                       |
| Cable Color             | Black                                      |
| Operating Temp.         | -40 ~ +85 °C                               |
| Storage Temp / Humidity | 25±5°C / <70%                              |

|            |  |          |  |   |  |   |  |   |  |      |  |             |  |            |  |
|------------|--|----------|--|---|--|---|--|---|--|------|--|-------------|--|------------|--|
| 1          |  | 2        |  | 3 |  | 4 |  | 5 |  | 6    |  | 7           |  | 8          |  |
| RoHS       |  | CUSTOMER |  |   |  |   |  |   |  | REV. |  | DESCRIPTION |  | DATE       |  |
| Compatible |  | PART NO  |  |   |  |   |  |   |  | △    |  | 首次发行        |  | 2023-04-24 |  |



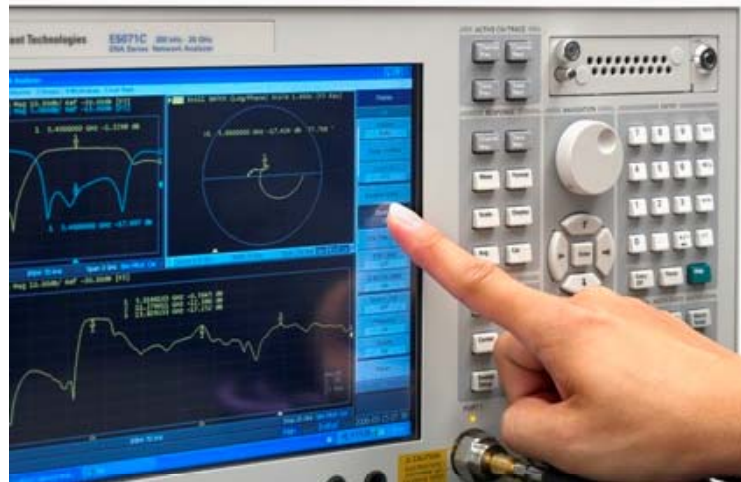
|    |               |                |          |                |      |
|----|---------------|----------------|----------|----------------|------|
| 2  | FPC           | 28.5*10.8mm    | FPC      | FPC11XXXXA.P01 | 1    |
| 1  | Coaxial Cable | O.D.0.81 Black | O.D.0.81 | COA100XXA.P01  | 1    |
| NO | PART NAME     | DESCRIPTION    | Material | Part Number    | Q.TY |
| 1  |               |                |          |                |      |

|                                                                                                                                                                                                             |            |             |             |           |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-------------|-----------|--|
| <br>东莞市一佳电子通讯科技有限公司<br>Dongguan Yulia Electronics Communication Technology Co.,Ltd. Tel.:0769-82586086 Fax:0769-82586086 |            |             |             |           |  |
| PART NAME: WIFI Antenna L=40mm                                                                                                                                                                              |            |             |             |           |  |
| PART NO.: YJL01.098.020.302A                                                                                                                                                                                |            |             |             |           |  |
| DATE: 2023-04-24                                                                                                                                                                                            |            |             |             |           |  |
| APPROVED BY                                                                                                                                                                                                 | CHECKED BY | DESIGNED BY | Tolerance   |           |  |
| 何清军                                                                                                                                                                                                         | 周颖杰        | 廖光喜         | X.X ±0.50   |           |  |
|                                                                                                                                                                                                             |            |             | UNITS: mm   | X.XX±0.15 |  |
|                                                                                                                                                                                                             |            |             | SCALE: 1/1  | X° ±3°    |  |
|                                                                                                                                                                                                             |            |             | REVISION: A |           |  |

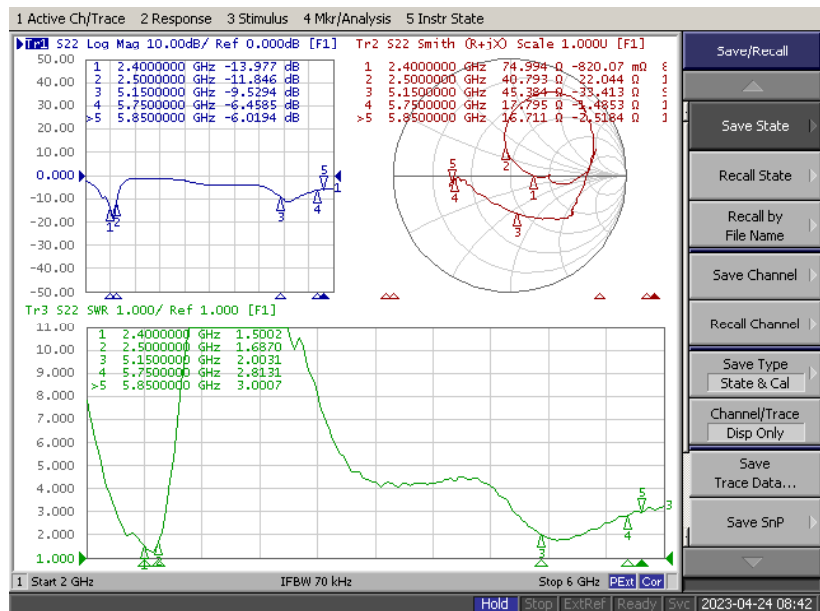


# Antenna Performance Test

**Agilent  
E5071B**



**S  
Parameter  
Test //  
WIFI  
Antenna**





## *Antenna Passive Test*





### Passive Test For WiFi Antenna(2.4G)

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 43.7        | -3.6         | 2.7           |
| 2410          | 44.3        | -3.5         | 2.6           |
| 2420          | 43.9        | -3.6         | 2.4           |
| 2430          | 44.6        | -3.5         | 2.4           |
| 2440          | 45.8        | -3.4         | 2.2           |
| 2450          | 48.9        | -3.1         | 2.5           |
| 2460          | 48.8        | -3.1         | 2.1           |
| 2470          | 51.2        | -2.9         | 2.4           |
| 2480          | 49.8        | -3.0         | 2.6           |
| 2490          | 49.9        | -3.0         | 2.7           |
| 2500          | 46.6        | -3.3         | 2.7           |

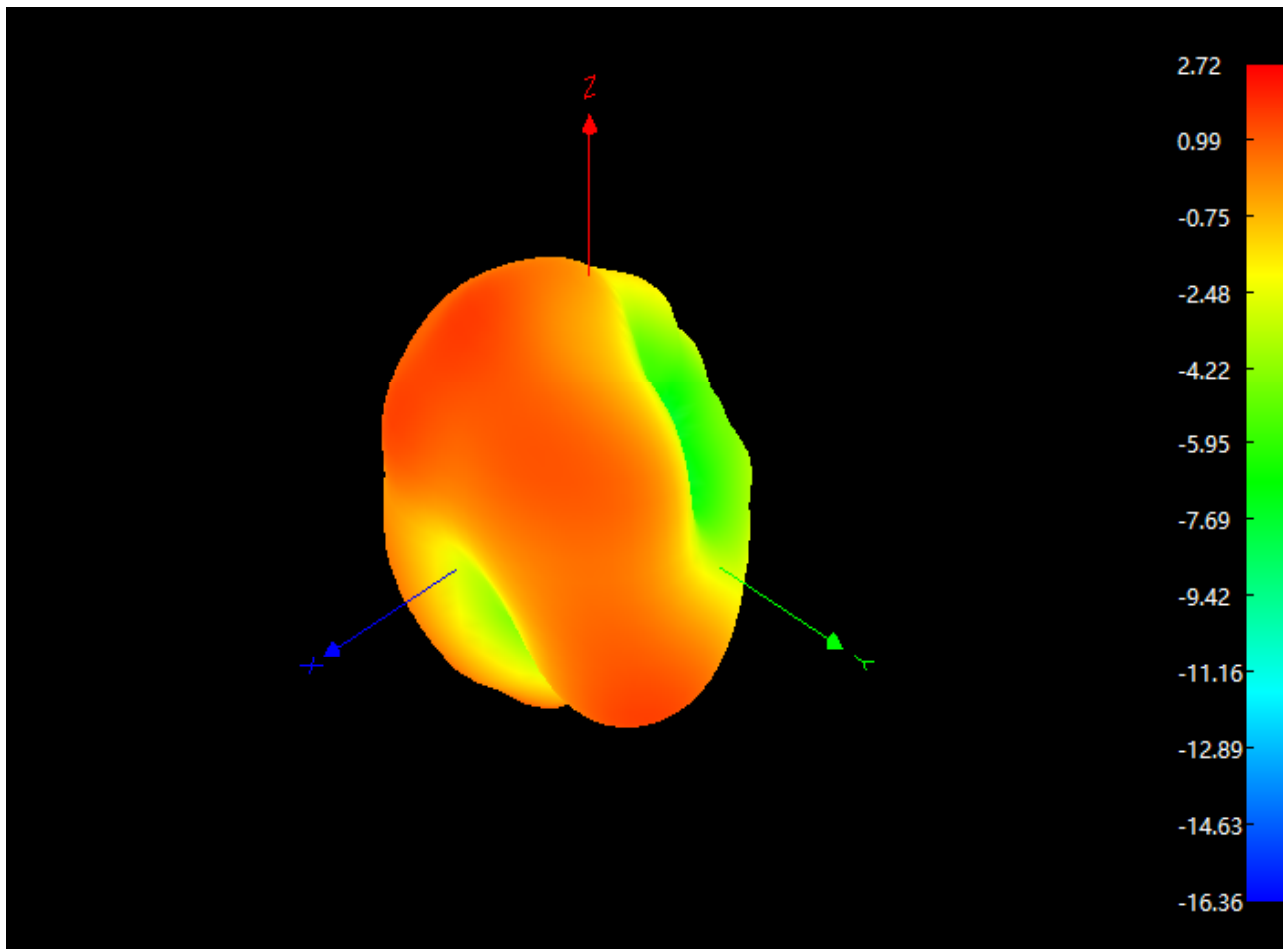


### Passive Test For WiFi Antenna(5.8G)

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 5150          | 55.2        | -2.6         | 1.7           |
| 5200          | 57.0        | -2.4         | 2.2           |
| 5250          | 58.8        | -2.3         | 2.4           |
| 5300          | 59.8        | -2.2         | 2.5           |
| 5350          | 59.4        | -2.3         | 2.4           |
| 5400          | 66.7        | -1.8         | 2.9           |
| 5450          | 65.6        | -1.8         | 2.6           |
| 5500          | 57.9        | -2.4         | 2.1           |
| 5550          | 66.1        | -1.8         | 2.7           |
| 5600          | 66.2        | -1.8         | 2.5           |
| 5650          | 56.5        | -2.5         | 2.0           |
| 5700          | 57.9        | -2.4         | 2.1           |
| 5750          | 63.4        | -2.0         | 2.2           |
| 5800          | 53.8        | -2.7         | 1.6           |
| 5850          | 53.5        | -2.7         | 1.6           |

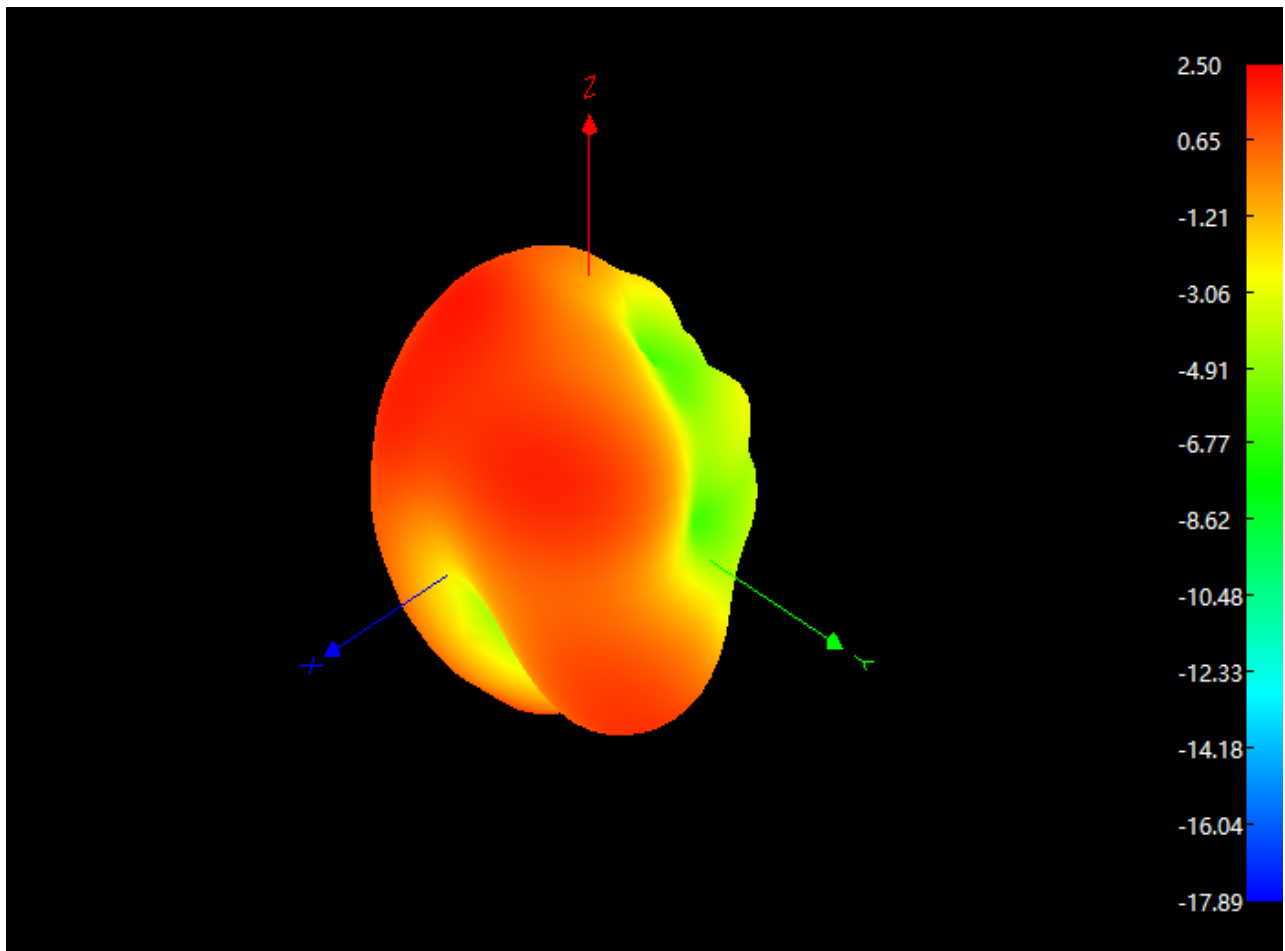


## Radiation Pattern For WiFi Antenna(2400MHz)



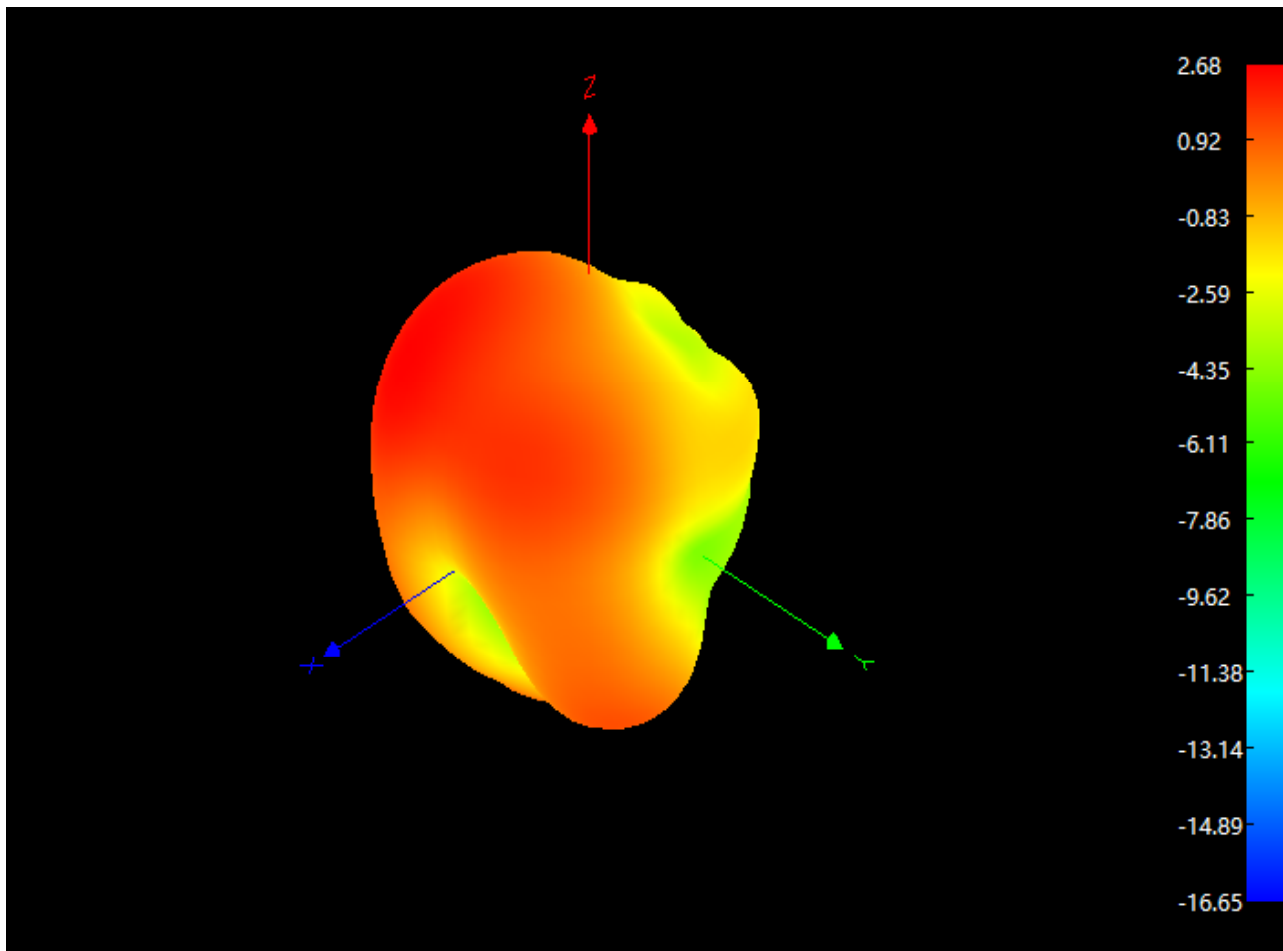


## Radiation Pattern For WiFi Antenna(2450MHz)



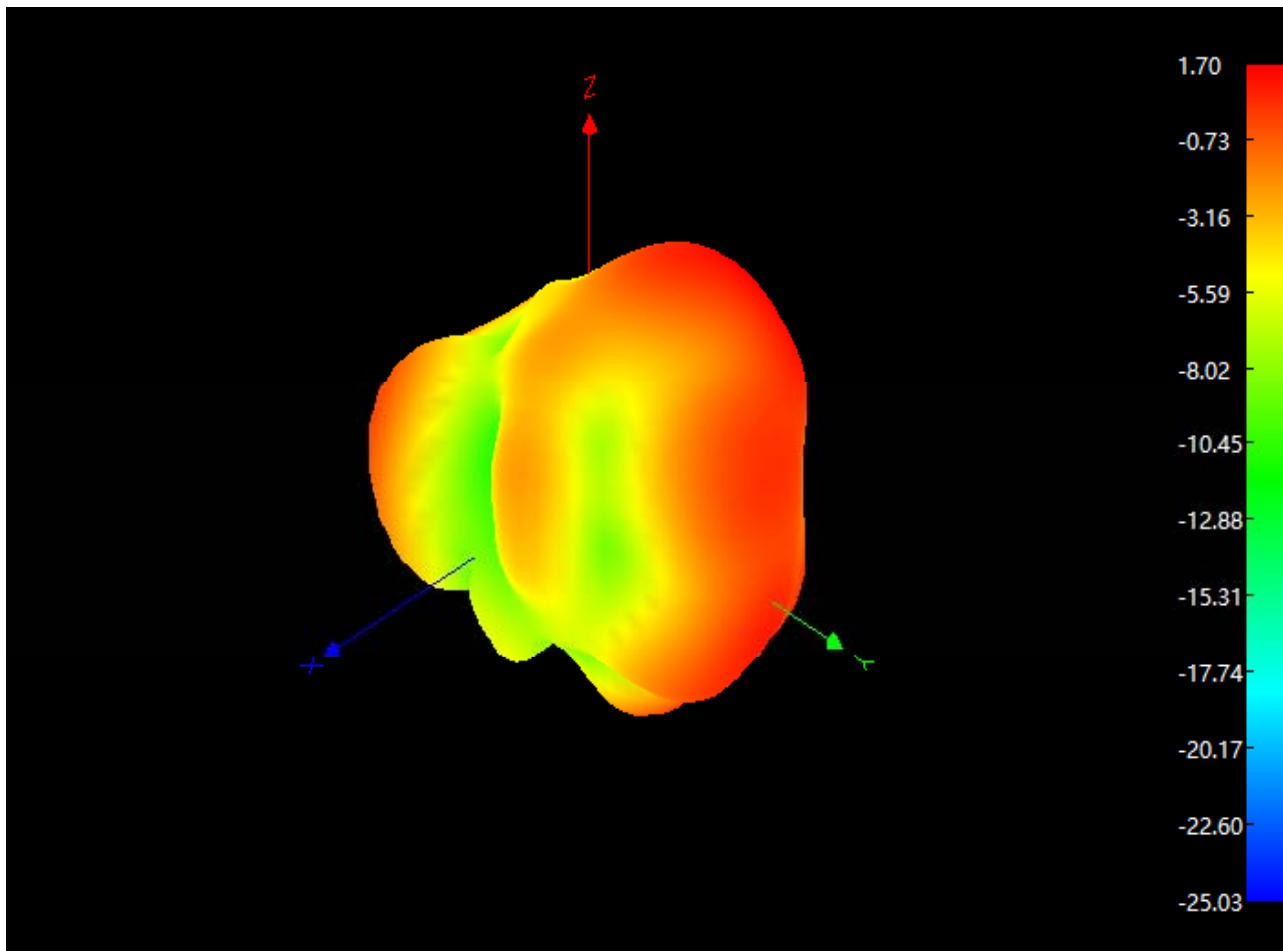


## Radiation Pattern For WiFi Antenna(2500MHz)



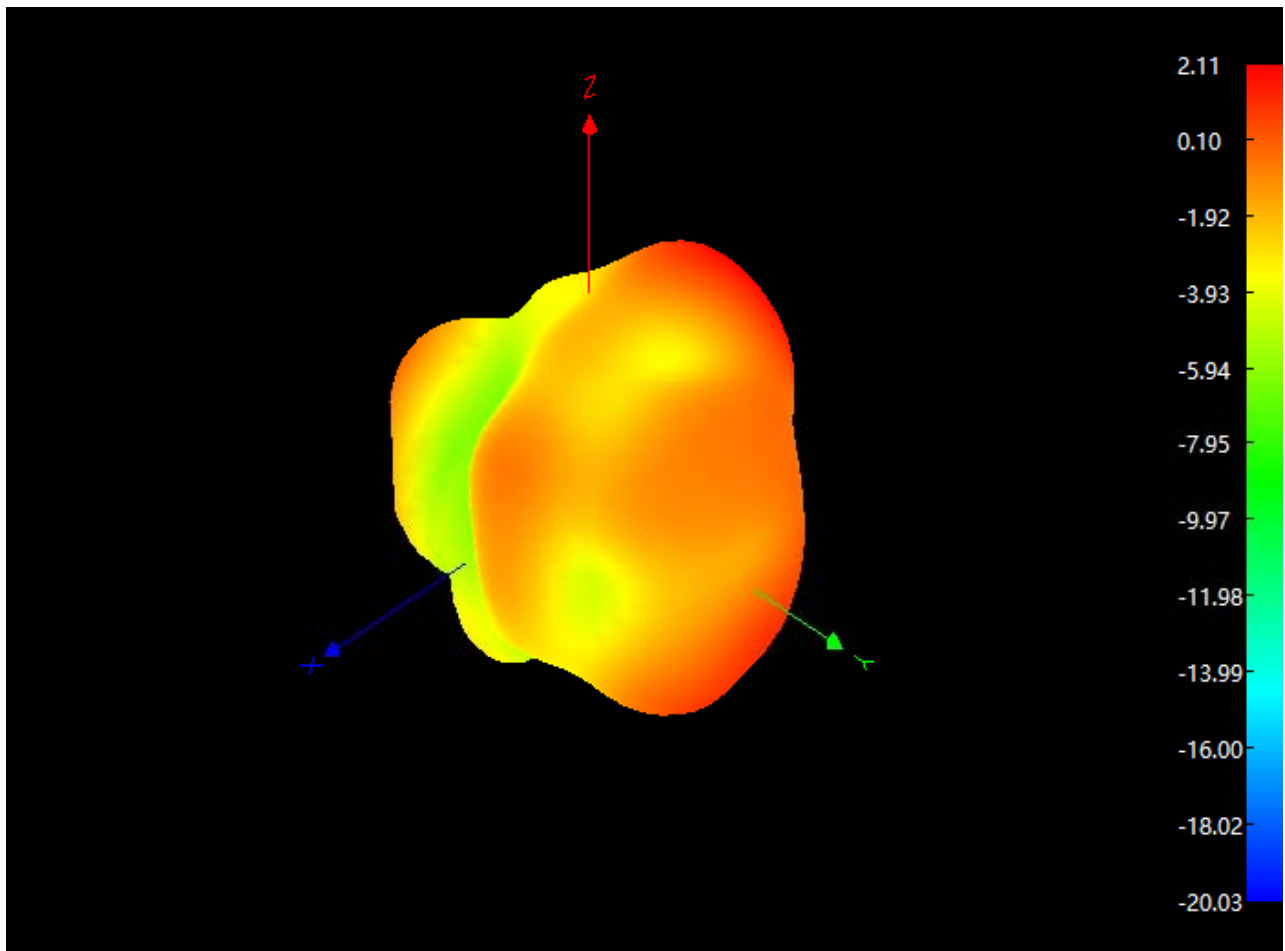


## Radiation Pattern For WiFi Antenna(5150MHz)





## Radiation Pattern For WiFi Antenna(5500MHz)





## Radiation Pattern For WiFi Antenna(5850MHz)

