



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     | 2022/12/30 |
| 编号<br>File No  | 22123008   |
| 版本<br>Revision | 1.0        |

客 户  
CUSTOMER:

Autel Robotics Co.,Ltd.

客户料号  
CUSTOMER NO:

501006482

品 名  
PART NAME:

WIFI\_R Antenna

供方料号  
SUPPLIER NO:

YJI01.005.070.308A

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 | <br>ChenXingyi |

YJ-RD-F04-A

RoHS  
Compatible

CUSTOMER  
PART NO

REV.

DESCRIPTION

DATE

A

2022-10-21

B

2022-11-25

C

2022-12-30

15.1

MDX\_WIFI\_R

24.9

PI Reinforced release paper 0.40



Wiring area



Copper exposed area



Reinforcement area



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd. Tel.:0769-82586086 Fax:0769-82586086

PART NAME: WIFI Antenna

PART NO.: YJI01.005.070.308A

DATE: 2022-10-21

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

UNITS: mm

X.X ±0.50

SCALE: 1/1

X.XX±0.15

REVISION: C

X° ±3°



# 天线规格

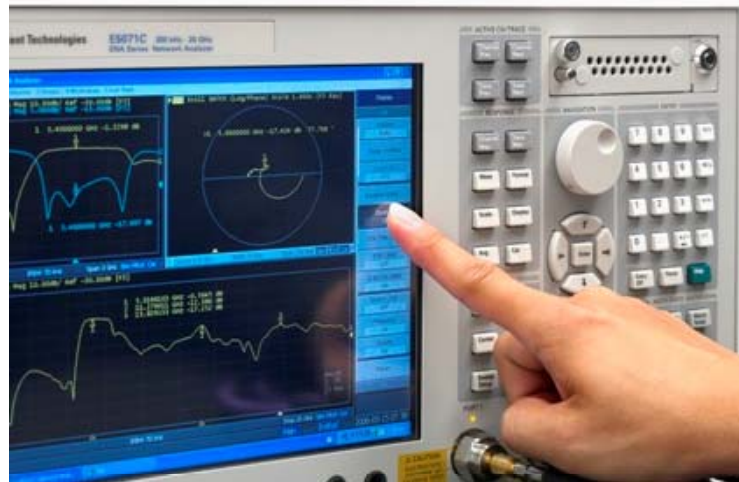
## Antenna Specification

| 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                    | 2.2 dBi@2.4-2.5GHz<br>3.1 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%                              |

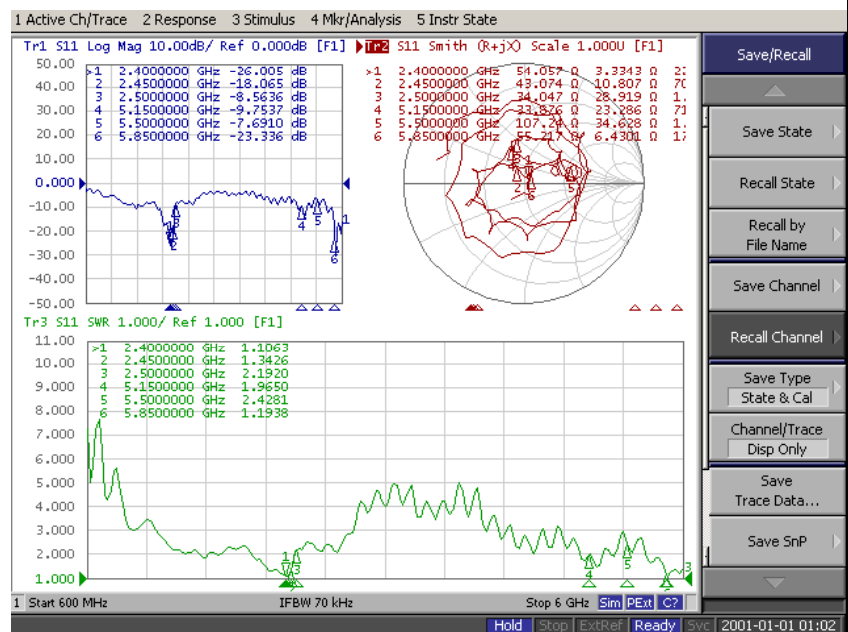


# Antenna Performance Test

**Agilent  
E5071B**



**S  
Parameter  
Test //  
WIFI\_R  
Antenna**





### Passive Test For WIFI Antenna

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 48.7        | -3.1         | 2.1           |
| 2410          | 49.1        | -3.1         | 2.1           |
| 2420          | 46.6        | -3.3         | 2.2           |
| 2430          | 46.6        | -3.3         | 1.9           |
| 2440          | 46.9        | -3.3         | 1.8           |
| 2450          | 47.4        | -3.2         | 1.7           |
| 2460          | 47.6        | -3.2         | 1.3           |
| 2470          | 47.6        | -3.2         | 0.7           |
| 2480          | 45.7        | -3.4         | 0.1           |
| 2490          | 44.8        | -3.5         | -0.7          |
| 2500          | 45.8        | -3.4         | -1.2          |



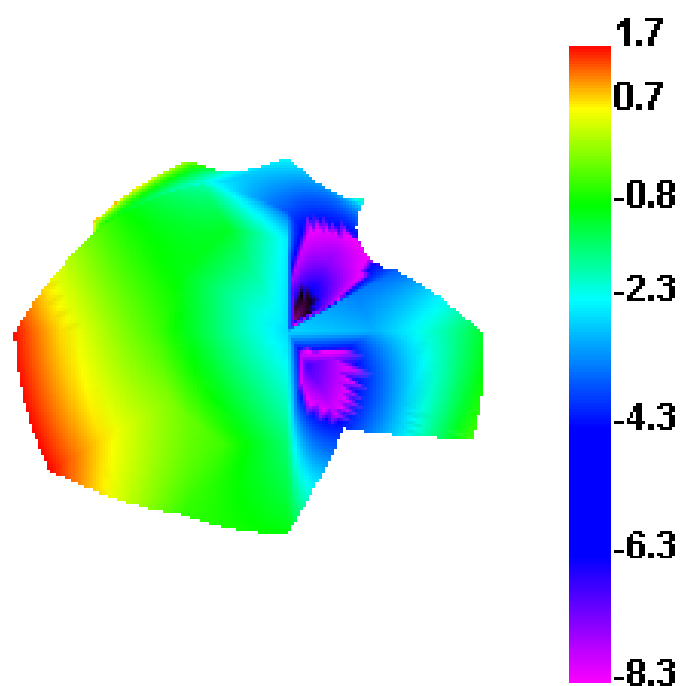
### Passive Test For WiFi Antenna

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 5150          | 27.9        | -5.5         | -0.4          |
| 5200          | 27.7        | -5.6         | -0.5          |
| 5250          | 29.4        | -5.3         | -0.4          |
| 5300          | 33.8        | -4.7         | 0.2           |
| 5350          | 34.5        | -4.6         | 0.5           |
| 5400          | 32.6        | -4.9         | 0.2           |
| 5450          | 31.4        | -5.0         | -0.4          |
| 5500          | 35.5        | -4.5         | -0.3          |
| 5550          | 39.4        | -4.0         | 0.5           |
| 5600          | 46.2        | -3.4         | 1.4           |
| 5650          | 66.2        | -1.8         | 3.1           |
| 5700          | 63.0        | -2.0         | 3.1           |
| 5750          | 60.3        | -2.2         | 2.9           |
| 5800          | 52.1        | -2.8         | 2.0           |
| 5850          | 49.1        | -3.1         | 1.9           |



## Radiation Patten For 2450MHz

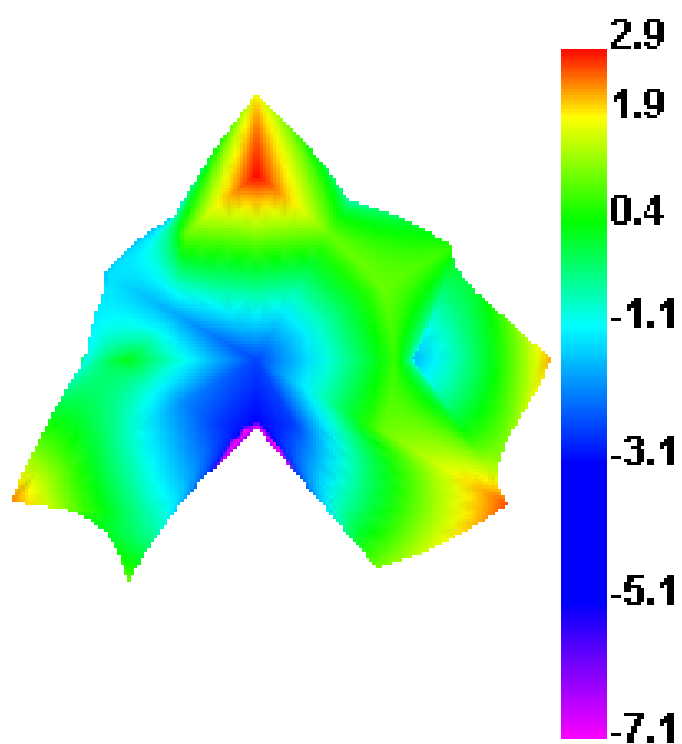
**2450.000MHz**





## Radiation Patten For 5750MHz

**5750.000MHz**







## WIFI\_R *Antenna*

