



# 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  
Date 2023/09/06

编号  
File No 23090601

版本  
Revision 1.0

客户  
CUSTOMER:

方位

客户料号

LEADA100049A0

CUSTOMER NO:

品名

WIFI Antenna L=125mm MHF

PART NAME:

供方料号

YJL01.106.057.301A

SUPPLIER NO:


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: 东莞市长安镇沙头社区木鱼路59号元富工业区 Tel:0769-82586086 Fax:0769-82586086

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



# 承认书项目表

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| 12 | N/A                          | N/A                    | N/A               |
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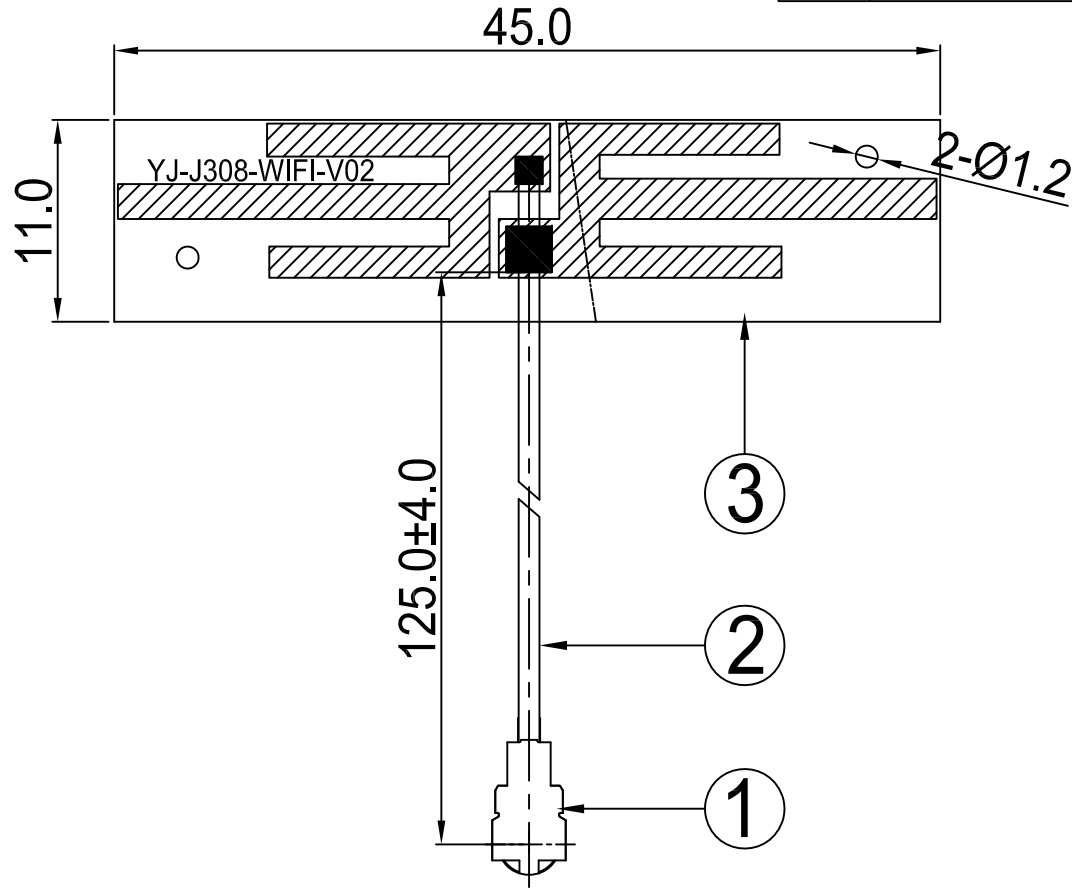
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**RoHS**  
Compatible

|          |  |
|----------|--|
| CUSTOMER |  |
| PART NO  |  |

| REV. | DESCRIPTION | DATE       |
|------|-------------|------------|
| △A   | 首次发行        | 2023-07-13 |
| △B   | 修改线长        | 2023-08-05 |
| △C   | 修改线长        | 2023-08-16 |
| △D   | 修改FPC及线长    | 2023-08-22 |



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|  |            |             |   |
|--|------------|-------------|---|
| PART NAME: WIFI Antenna L=125mm MHF    |            |             |   |
| PART NO.: YJL01.106.057.301A           |            |             | DATE: 2023-08-22                                  |
| APPROVED BY                            | CHECKED BY | DESIGNED BY | <br>Tolerance<br>X.X ±0.50<br>X.XX±0.15<br>X° ±3° |
| 何清军                                    | 周颖杰        | 廖光喜         |   |
| UNITS: mm<br>SCALE: 1/1<br>REVISION: D |            |             |   |

| NO | PART NAME      | DESCRIPTION    | Material | Part Number   | Q.TY |
|----|----------------|----------------|----------|---------------|------|
| 3  | FPC            | 45.0*11.0mm    | FPC      | FPC11XXA.P01  | 1    |
| 2  | Coaxial Cable  | O.D.1.13 Black | O.D.1.13 | COA100XXA.P01 | 1    |
| 1  | Mini Connector | Au Plated 1代   | Cu       | TER100XXA.P01 | 1    |



# 天线规格

## Antenna Specification

| <b>Electrical Properties</b> |  |
|------------------------------|--|
| Frequency                    | 2.4-2.5GHz<br>5.15-5.85GHz                 |
| Impedance                    | 50 Ohm Nominal                             |
| V.S.W.R                      | 2.0 Max                                    |
| Gain                         | 6.1 dBi@2.4-2.5GHz<br>5.1 dBi@5.15-5.85GHz |
| Radiation                    | Omni-directional                           |
| Polarization                 | Linear                                     |
| <b>Physical Properties</b>   |  |
| Connector                    | 1代IPEX                                     |
| Cable Type                   | O.D.1.13mm                                 |
| Cable Length                 | 125mm                                      |
| Cable Color                  | Black                                      |
| Operating Temp.              | -40 ~ +85 °C                               |
| Storage Temp / Humidity      | 25±5°C / <70%                              |

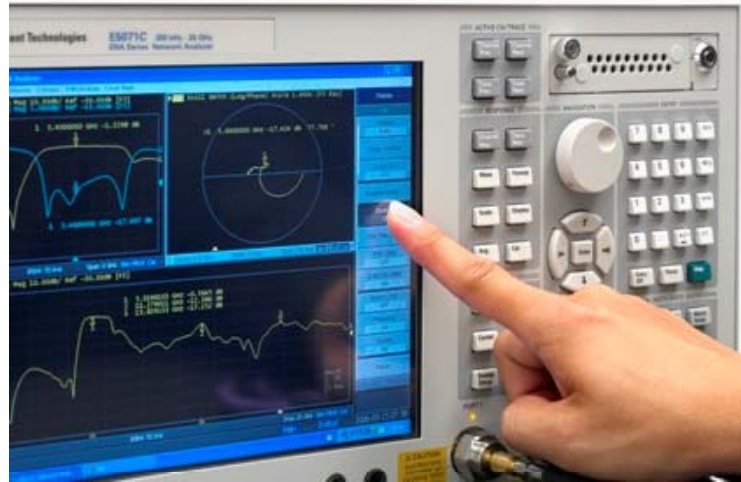
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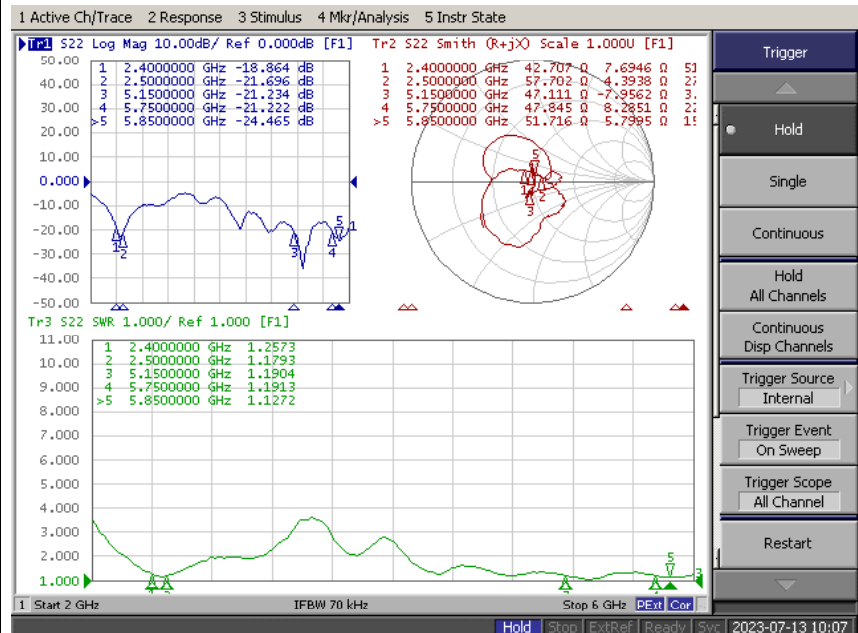


# Antenna Performance Test

**Agilent  
E5071B**



**S  
Parameter  
Test //  
WIFI  
Antenna**

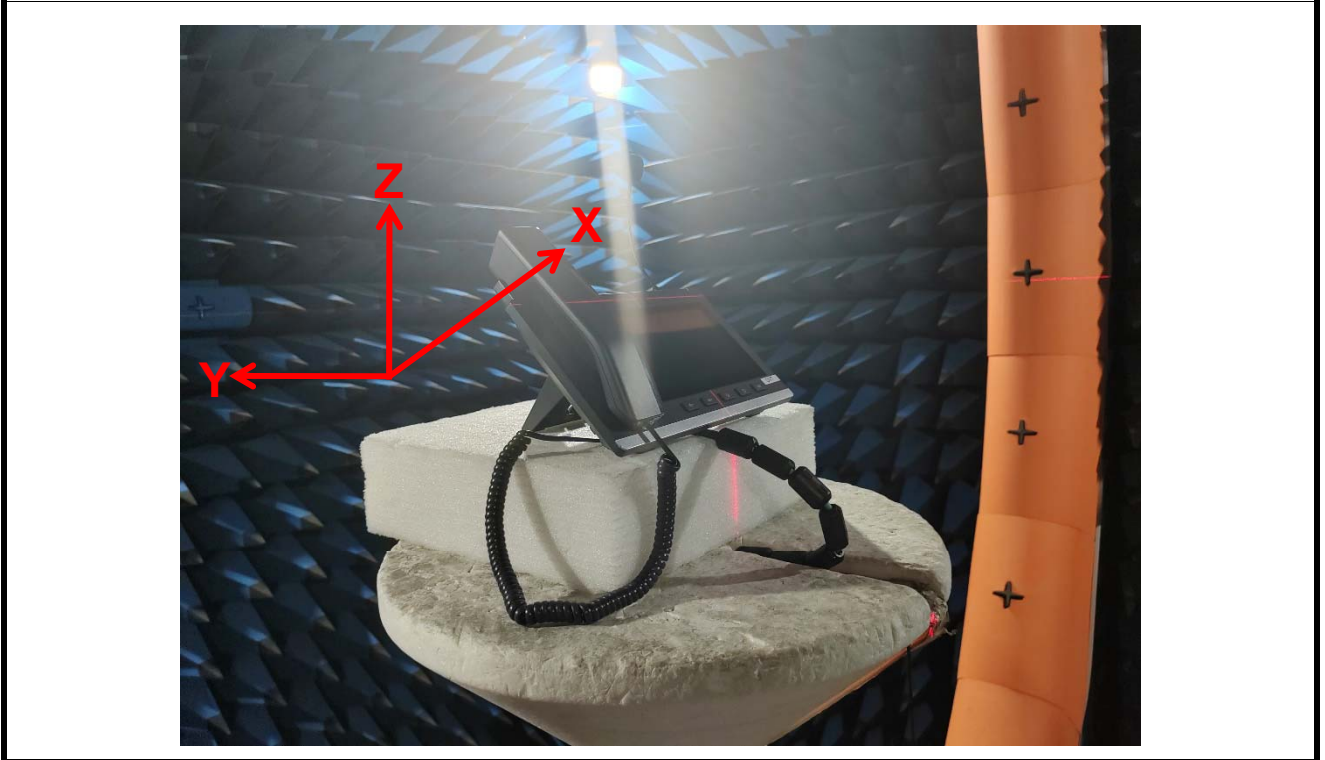
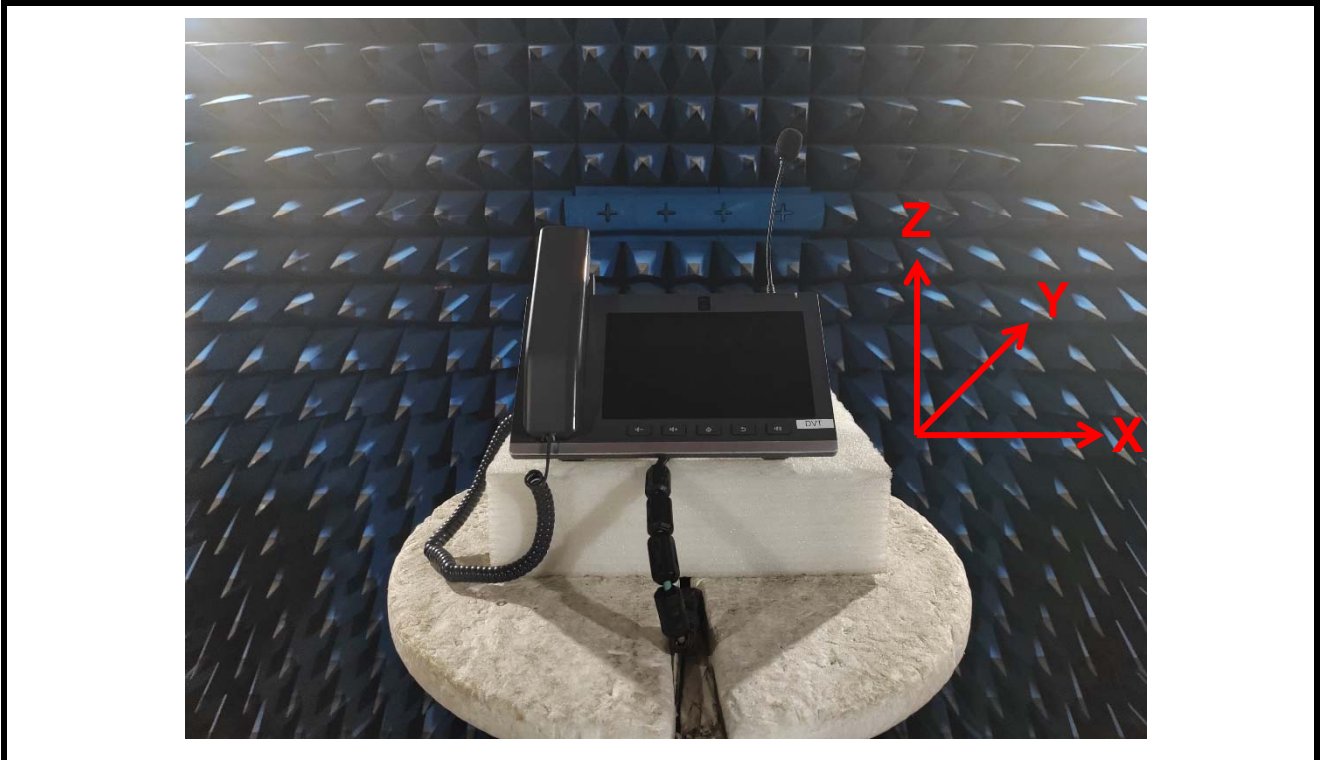


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## *Antenna Passive Test*



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

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|------------|----------|-----------|------------|
| 2400       | 57.6     | -2.4      | 5.2        |
| 2410       | 58.9     | -2.3      | 5.5        |
| 2420       | 59.5     | -2.3      | 5.6        |
| 2430       | 58.9     | -2.3      | 5.6        |
| 2440       | 58.7     | -2.3      | 5.4        |
| 2450       | 61.1     | -2.1      | 5.6        |
| 2460       | 58.1     | -2.4      | 5.3        |
| 2470       | 59.7     | -2.2      | 5.8        |
| 2480       | 58.1     | -2.4      | 5.7        |
| 2490       | 60.2     | -2.2      | 6.1        |
| 2500       | 57.6     | -2.4      | 5.9        |



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

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|------------|----------|-----------|------------|
| 5150       | 61.6     | -2.1      | 4.0        |
| 5200       | 61.8     | -2.1      | 4.2        |
| 5250       | 60.6     | -2.2      | 4.1        |
| 5300       | 59.3     | -2.3      | 3.9        |
| 5350       | 58.9     | -2.3      | 3.9        |
| 5400       | 63.6     | -2.0      | 4.6        |
| 5450       | 60.6     | -2.2      | 4.4        |
| 5500       | 54.6     | -2.6      | 4.5        |
| 5550       | 60.3     | -2.2      | 5.1        |
| 5600       | 58.7     | -2.3      | 4.8        |
| 5650       | 55.3     | -2.6      | 4.8        |
| 5700       | 57.5     | -2.4      | 4.6        |
| 5750       | 58.7     | -2.3      | 4.5        |
| 5800       | 56.7     | -2.5      | 4.4        |
| 5850       | 59.7     | -2.2      | 4.4        |

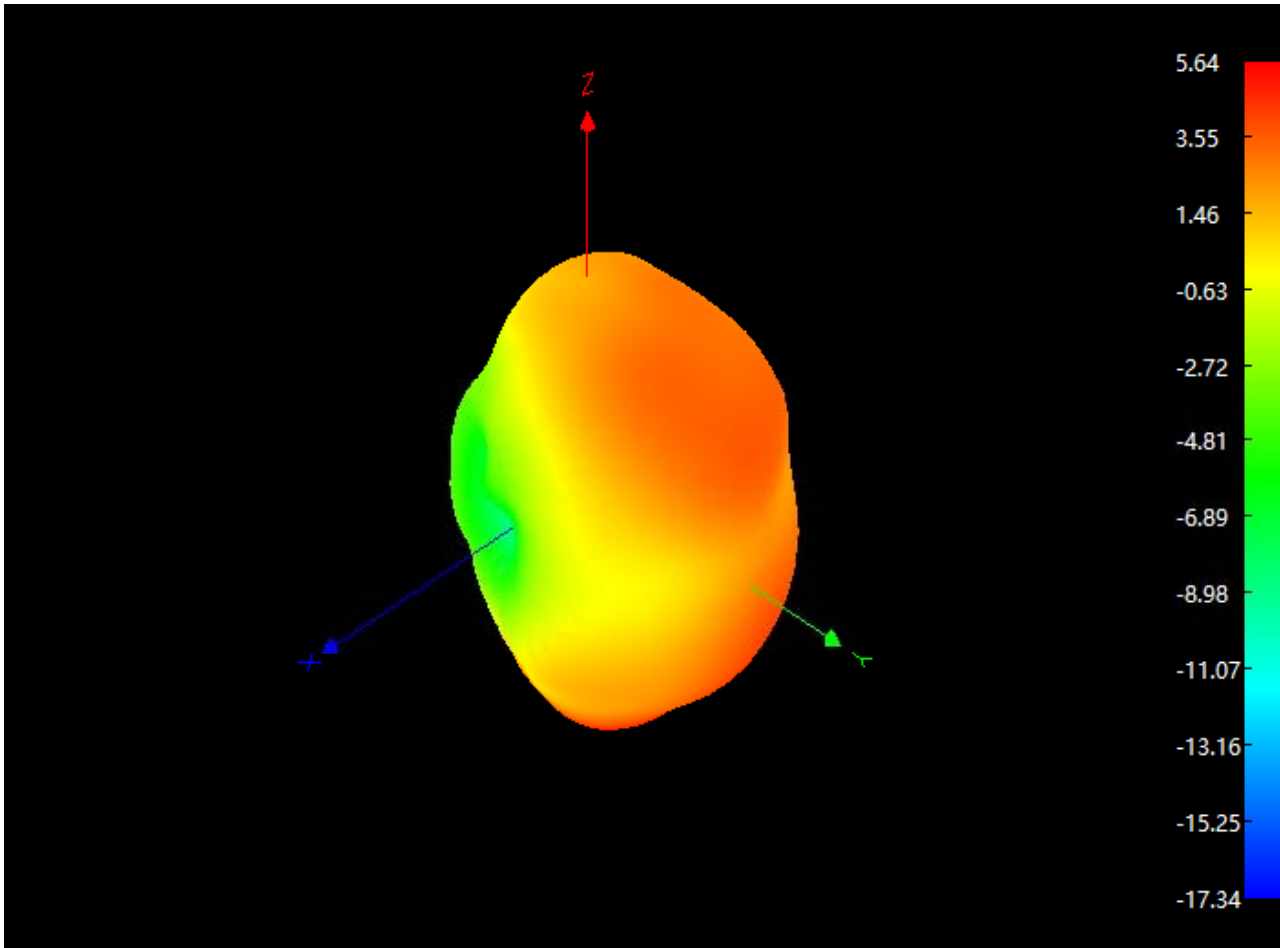
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## Radiation Pattern For WiFi Antenna(2450MHz)

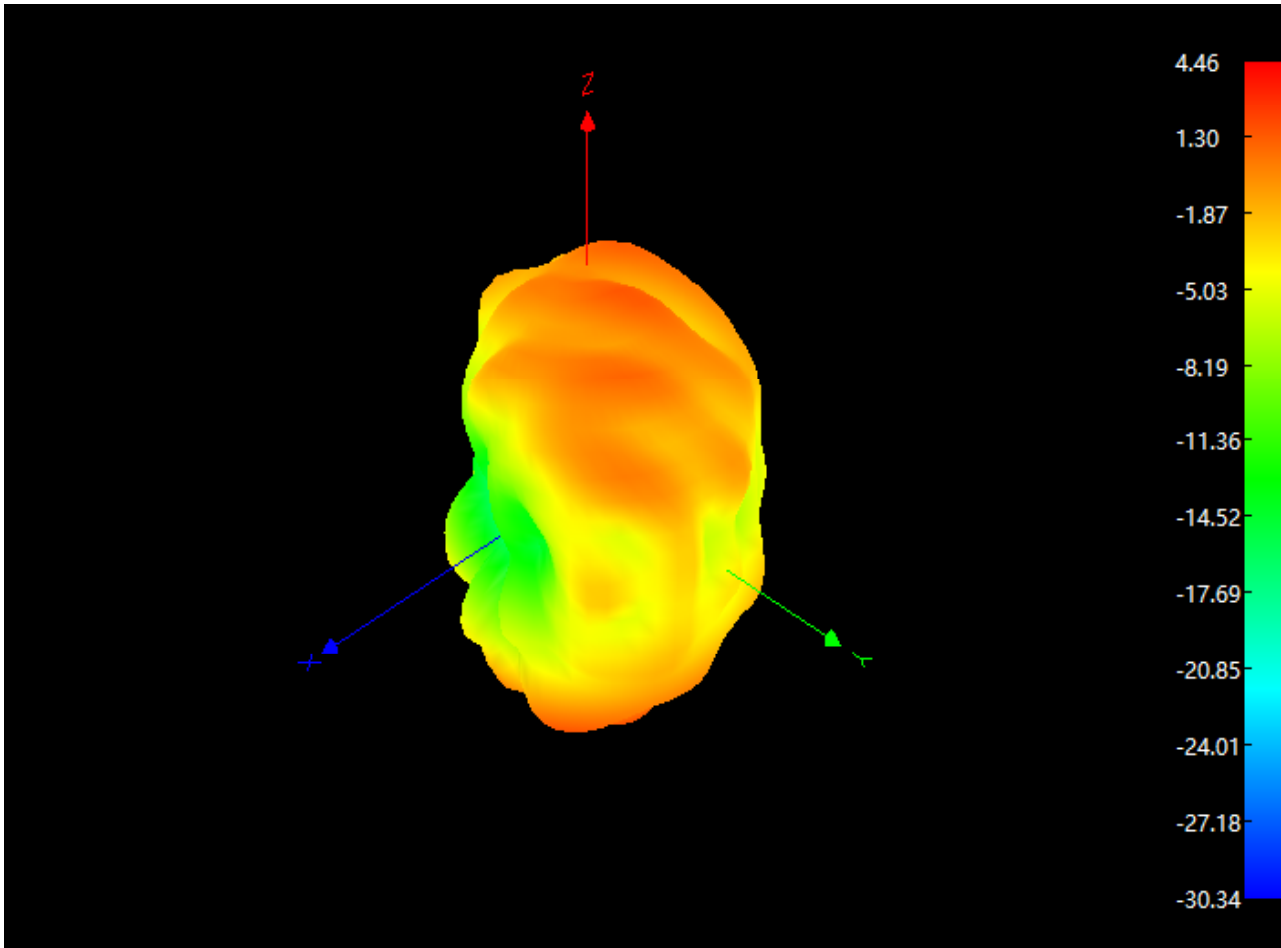


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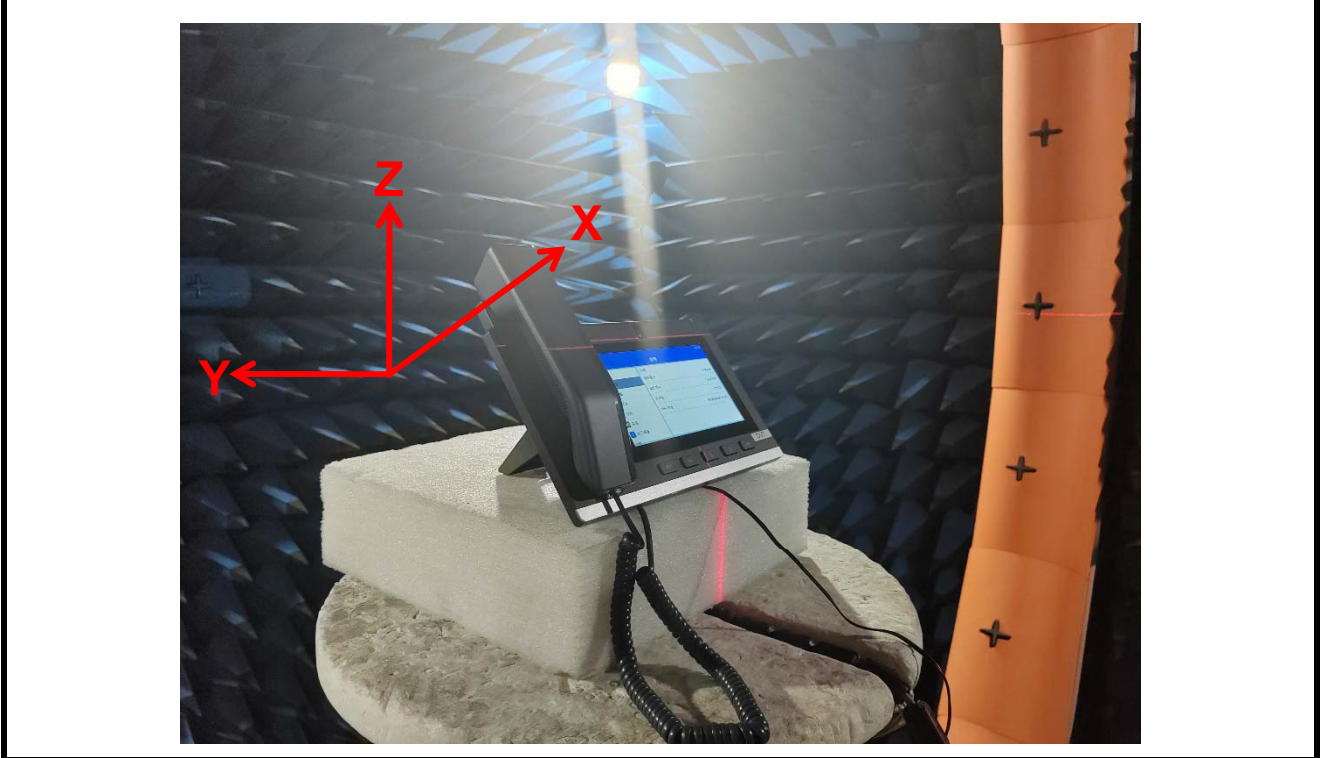
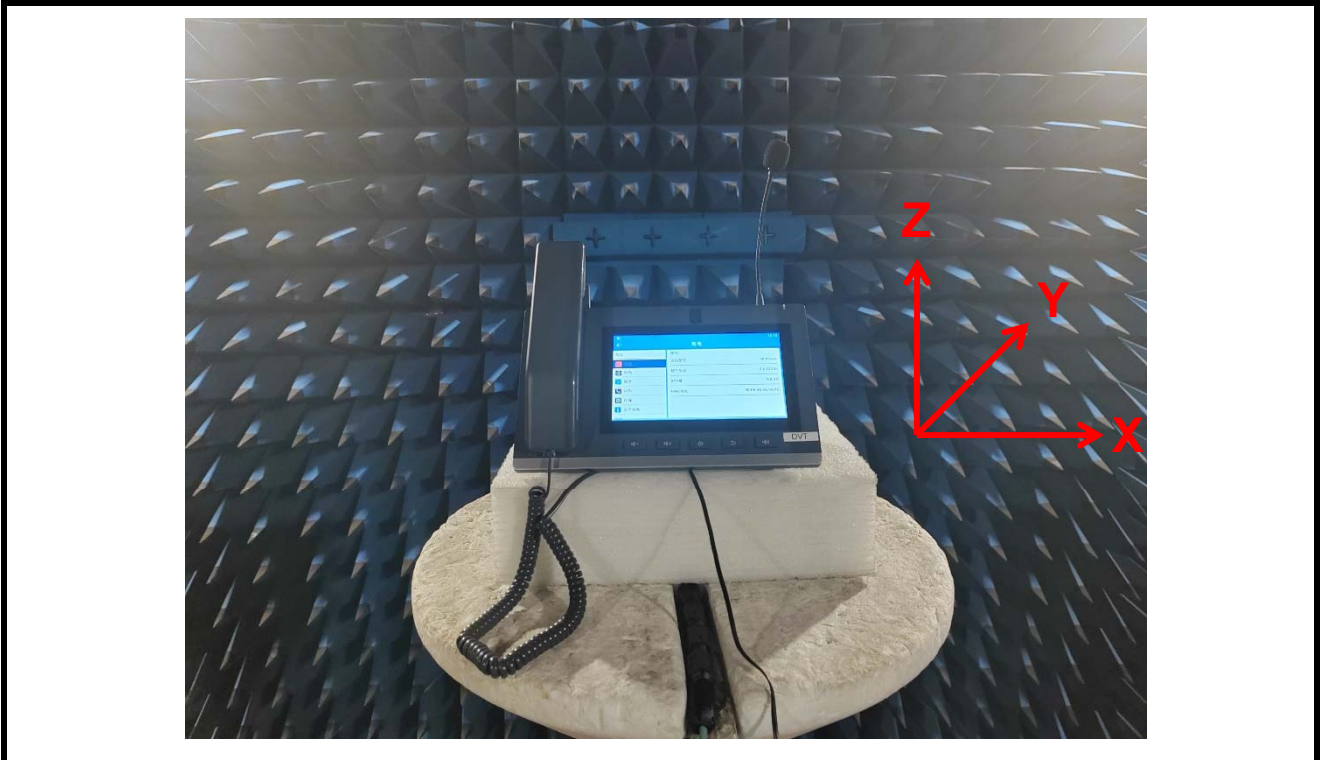


## Radiation Pattern For WiFi Antenna(5500MHz)





## *Antenna Active Test*





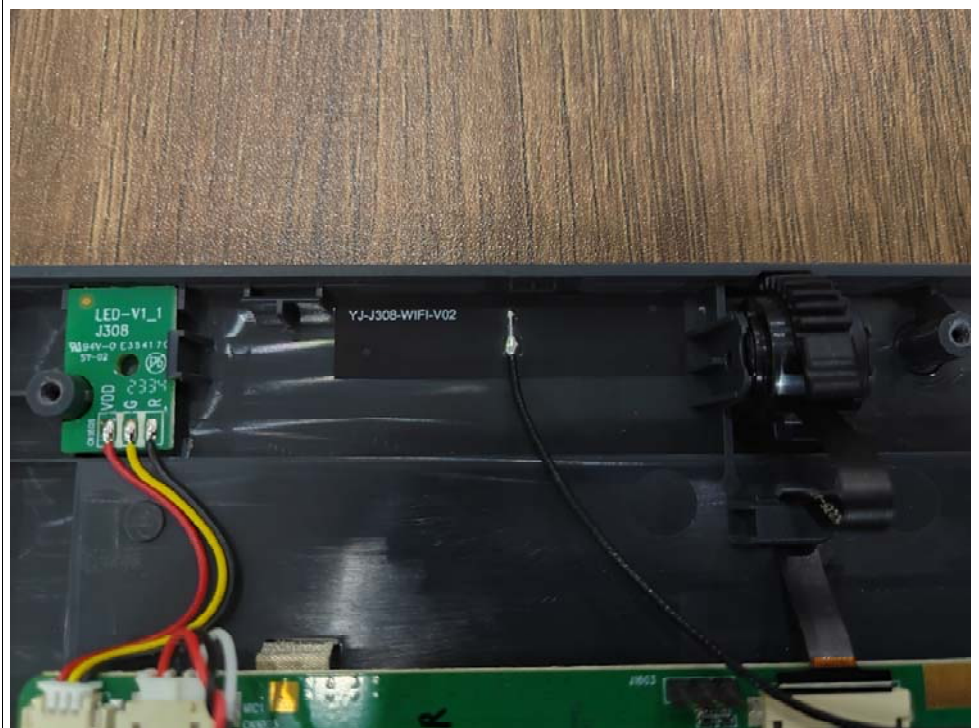
| Active Test For WIFI Antenna |         |           |      |           |       |
|------------------------------|---------|-----------|------|-----------|-------|
| Band                         | Channel | Data Rate | TRP  | Data Rate | TIS   |
| WIFI 2.4G<br>802.11b         | 1       | 11Mbps    | 17.6 | 11Mbps    | -81.8 |
|                              | 6       |           | 17.9 |           | -82.9 |
|                              | 11      |           | 17.3 |           | -82.1 |
| WIFI 5G<br>802.11a           | 149     | 54Mbps    | 14.4 | 54Mbps    | -70.3 |
|                              | 157     |           | 15.9 |           | -71.1 |
|                              | 165     |           | 15.6 |           | -70.5 |

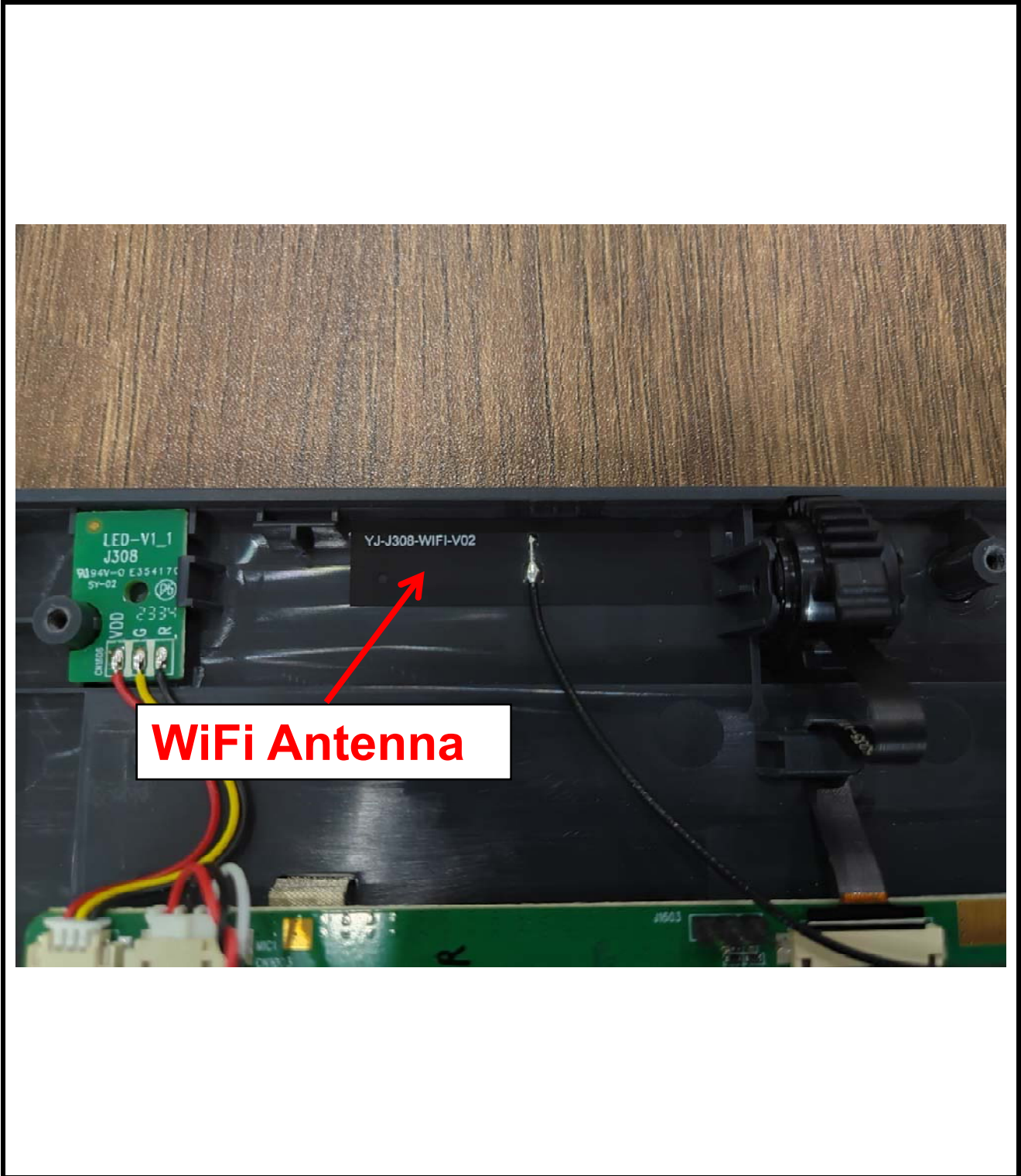


*Device*



*WIFI  
Antenna*





**WiFi Antenna**