



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 2022/12/12
Date

编号 22121201
File No

版本 1.0
Revision

客户 国光

CUSTOMER:

客户料号 MK2

CUSTOMER NO:

品名 WIFI Antenna L=155MM MHF

PART NAME:

供方料号 YJY02.002.015.302A

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 |
|---|-------|------------|
|  ChenGuoqiang | XieLi | ChenXingyi |

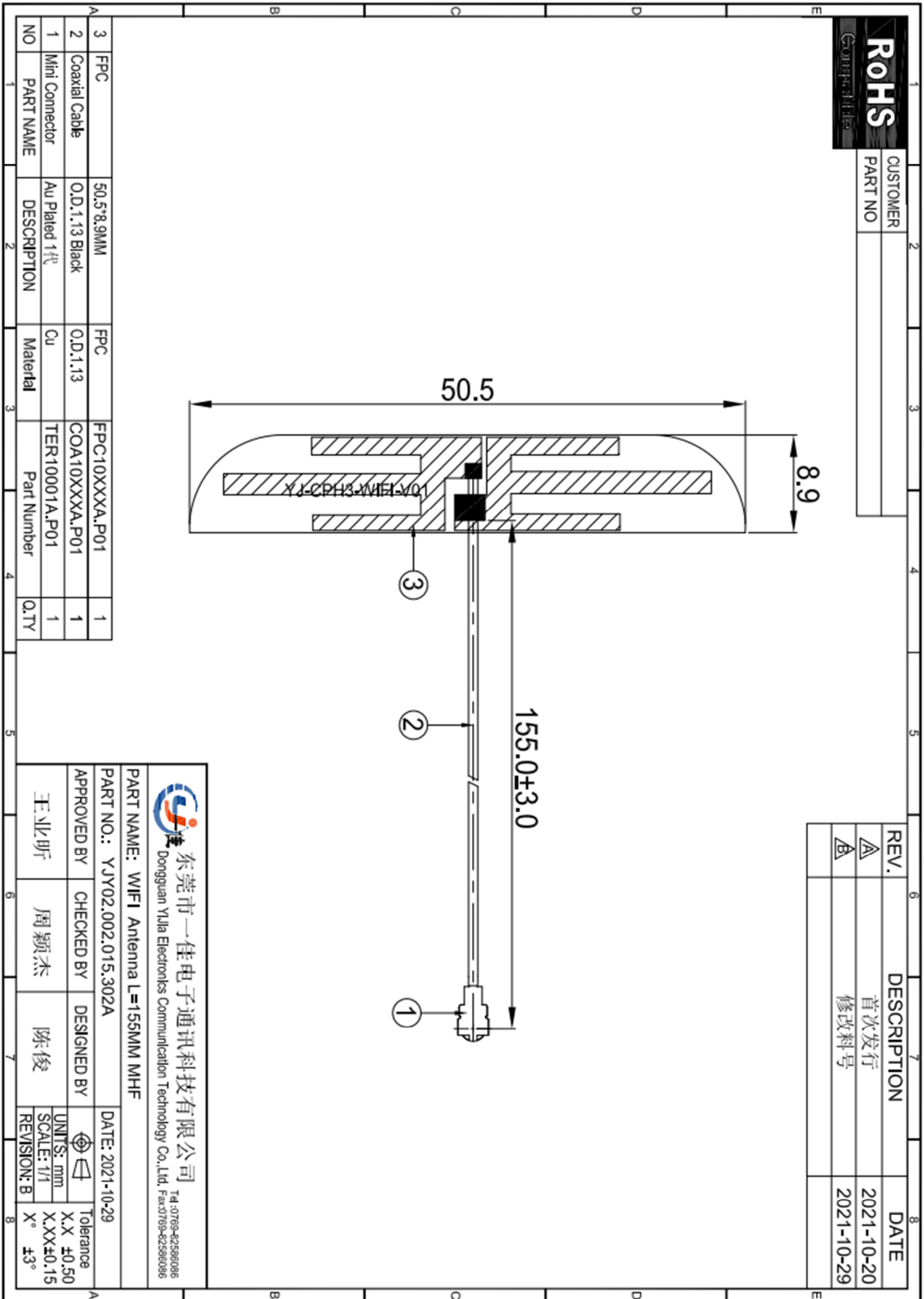
YJ-RD-F04-A



天线规格

Antenna Specification

| Electrical Properties | |
|------------------------------|--|
| Frequency | 2.4-2.5GHz 5.15-5.85GHz |
| Impedance | 50 Ohm Nominal |
| V.S.W.R | 2.0 Max |
| Gain | 4.3dBi@2.4-2.5GHz 4.6dBi@5.15-5.85GHz |
| Radiation | Omni-directional |
| Polarization | Linear |
| Physical Properties | |
| Connector | 1代IPEX |
| Cable Type | O.D.1.13mm |
| Cable Length | 155mm |
| Cable Color | Black |
| Operating Temp. | -40 ~ +85 °C |
| Storage Temp / Humidity | 25 ± 5 °C / <70% |



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



1. Antenna Profile

Device



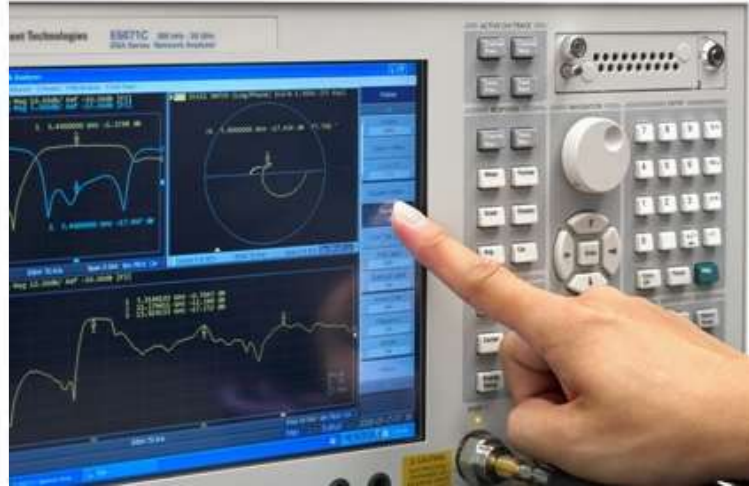
*WIFI
Antenna*



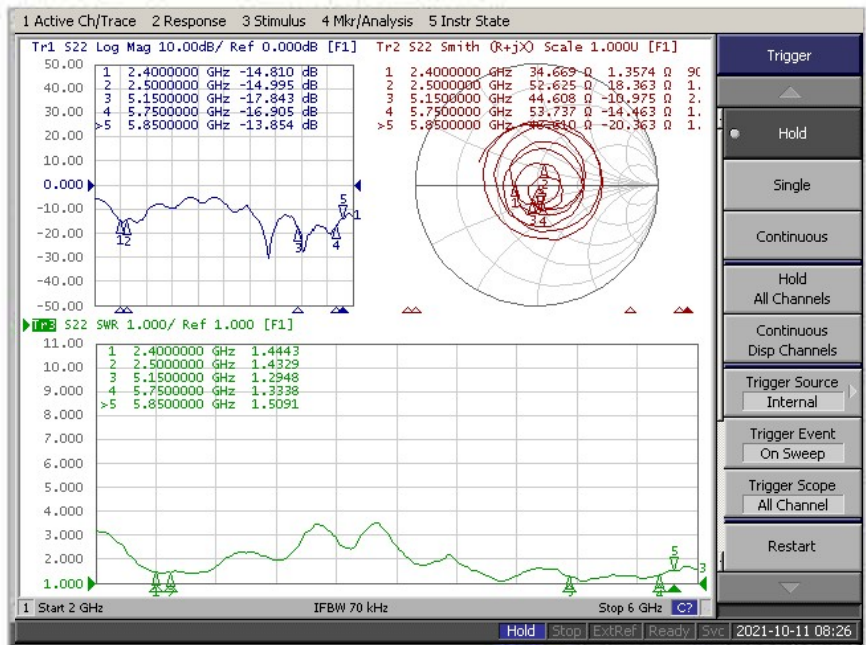


2. Antenna Performance Test

**Agilent
E5071B**



**S11
Parameter
Test //
WIFI
Antenna**





3. Antenna Passive Test





| Passive Test For WiFi Antenna(2.4G) | | | |
|-------------------------------------|----------|-----------|------------|
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
| 2400 | 64.3 | -1.9 | 3.7 |
| 2410 | 65.2 | -1.9 | 3.9 |
| 2420 | 64.3 | -1.9 | 3.8 |
| 2430 | 64.9 | -1.9 | 4.1 |
| 2440 | 64.7 | -1.9 | 4.3 |
| 2450 | 64.1 | -1.9 | 3.8 |
| 2460 | 64.9 | -1.9 | 3.7 |
| 2470 | 64.8 | -1.9 | 4.2 |
| 2480 | 64.9 | -1.9 | 4.0 |
| 2490 | 65.2 | -1.9 | 4.2 |
| 2500 | 63.0 | -2.0 | 3.9 |

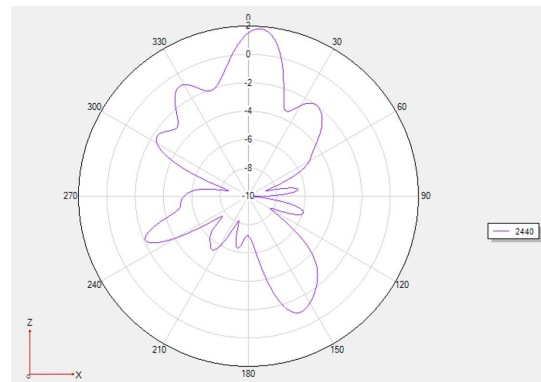


| Passive Test For WiFi Antenna(5.8G) | | | |
|-------------------------------------|----------|-----------|------------|
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
| 5150 | 57.2 | -2.4 | 3.7 |
| 5200 | 60.8 | -2.2 | 4.1 |
| 5250 | 57.5 | -2.4 | 3.8 |
| 5300 | 54.7 | -2.6 | 3.4 |
| 5350 | 55.6 | -2.6 | 3.5 |
| 5400 | 60.8 | -2.2 | 4.4 |
| 5450 | 53.6 | -2.7 | 3.4 |
| 5500 | 52.3 | -2.8 | 3.3 |
| 5550 | 56.6 | -2.5 | 4.4 |
| 5600 | 57.3 | -2.4 | 4.6 |
| 5650 | 50.6 | -3.0 | 4.1 |
| 5700 | 53.6 | -2.7 | 4.4 |
| 5750 | 60.0 | -2.2 | 4.1 |
| 5800 | 63.0 | -2.0 | 4.2 |
| 5850 | 58.5 | -2.3 | 4.4 |

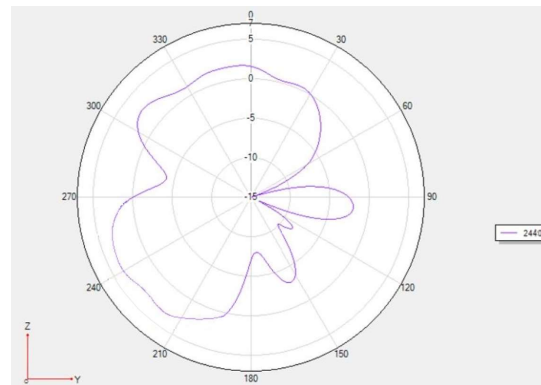


Radiation Pattern For WIFI Antenna(2440MHz)

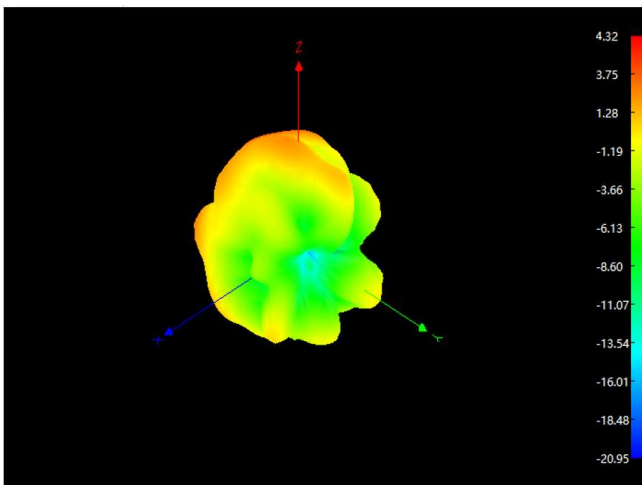
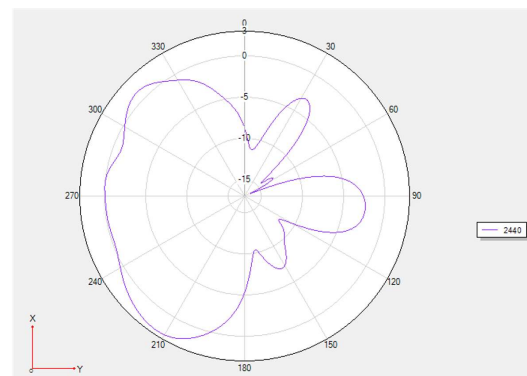
Phi 0



Phi 90



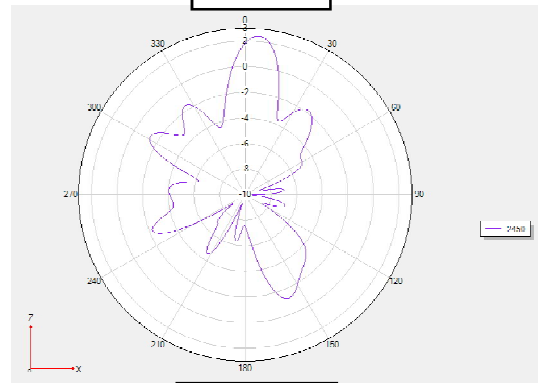
Theta 90



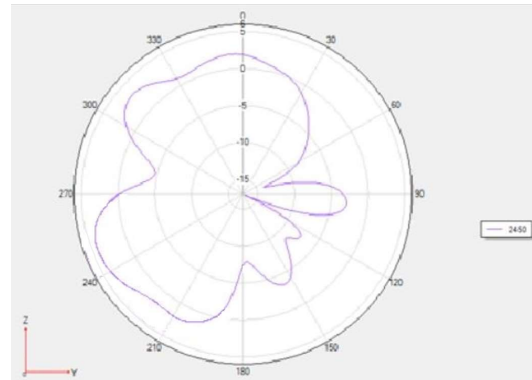


Radiation Pattern For WIFI Antenna(2450MHz)

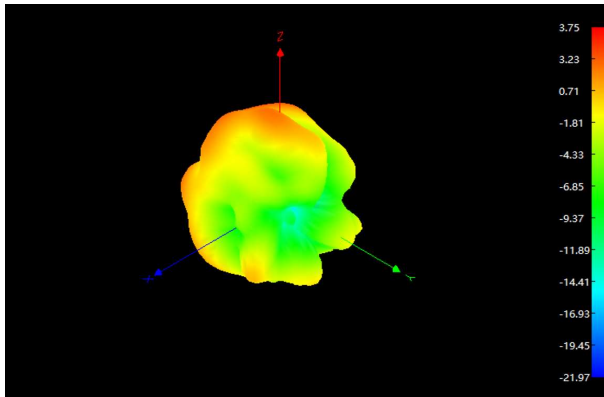
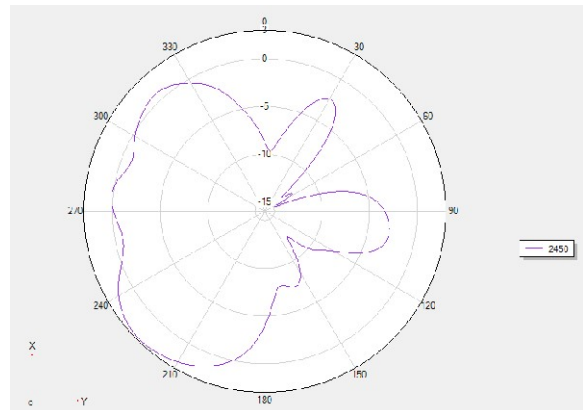
Phi 0



Phi 90



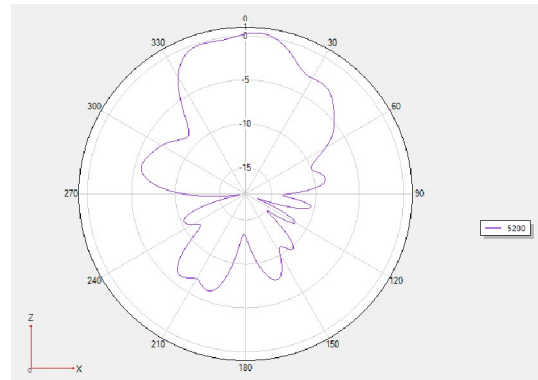
Theta 90



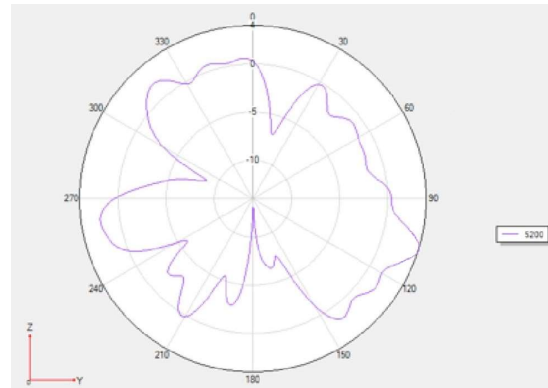


Radiation Pattern For WIFI Antenna(5200MHz)

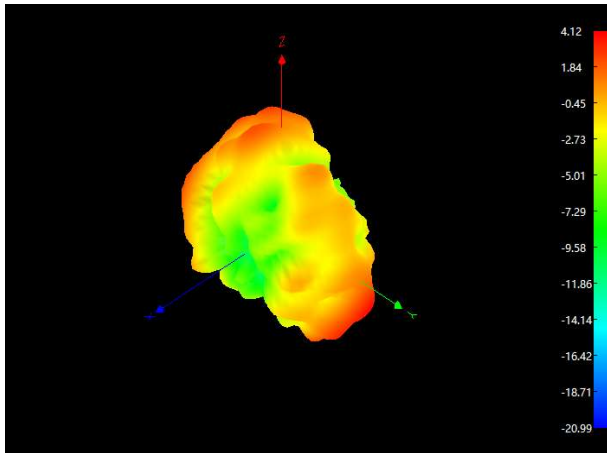
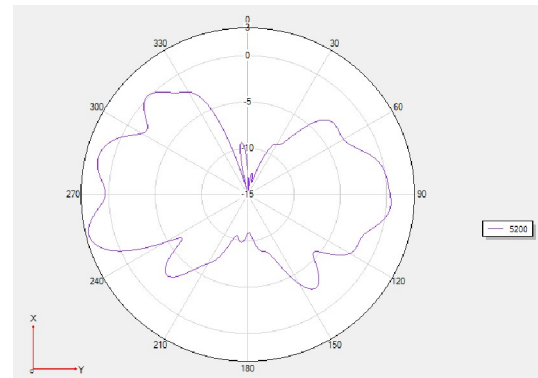
Phi 0



Phi 90



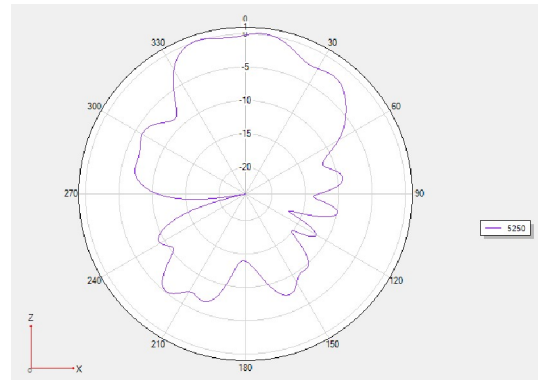
Theta 90



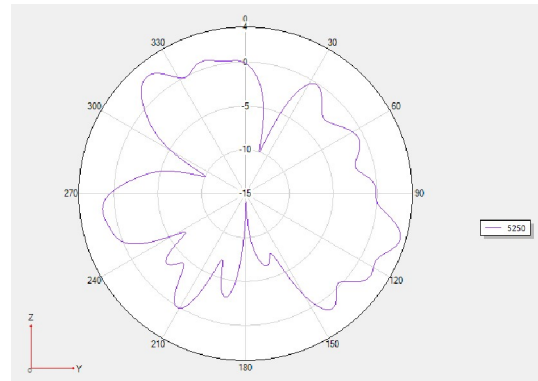


Radiation Pattern For WIFI Antenna(5250MHz)

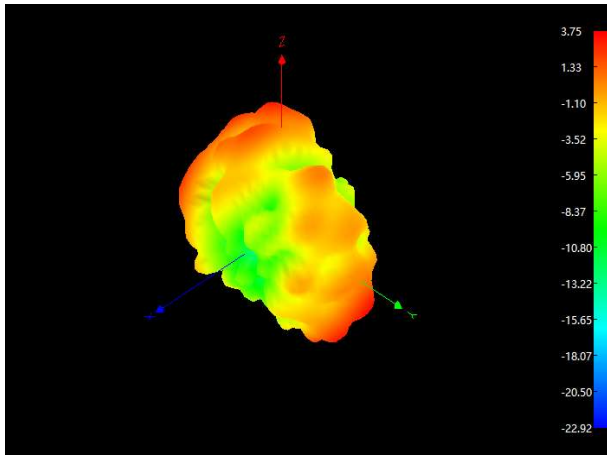
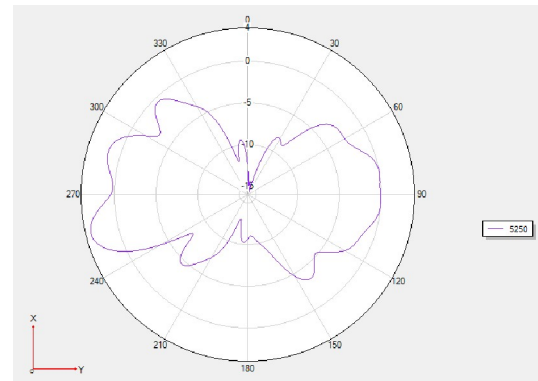
Phi 0



Phi 90



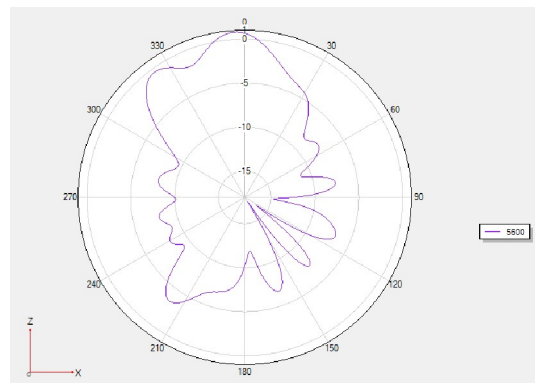
Theta 90



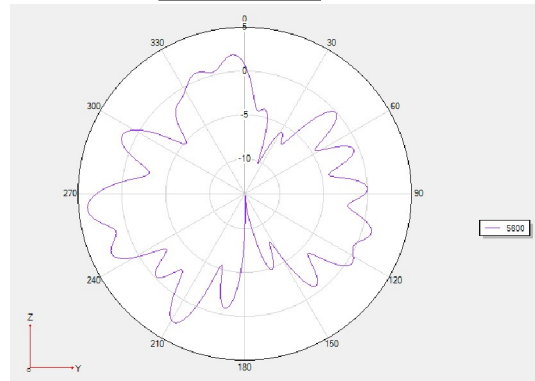


Radiation Pattern For WIFI Antenna(5600MHz)

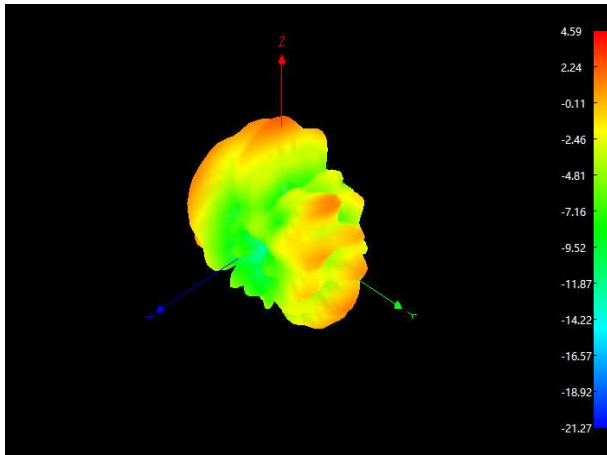
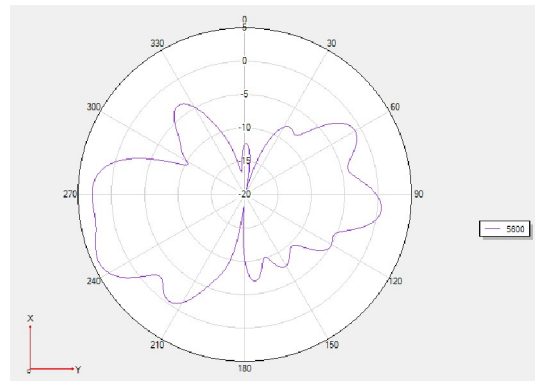
Phi 0



Phi 90



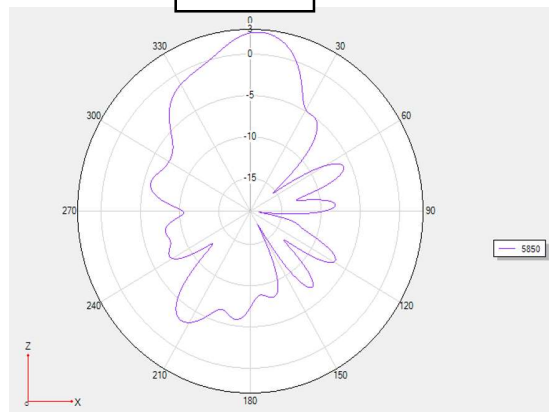
Theta 90



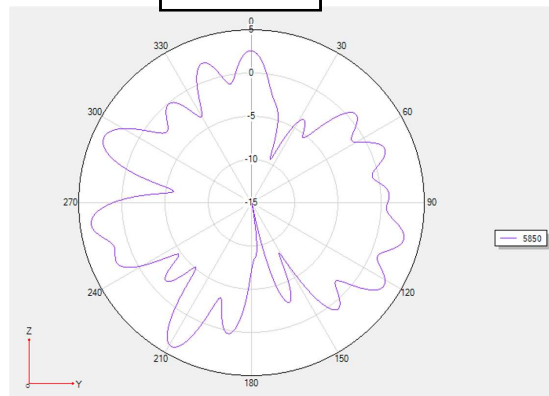


Radiation Pattern For WIFI Antenna(5850MHz)

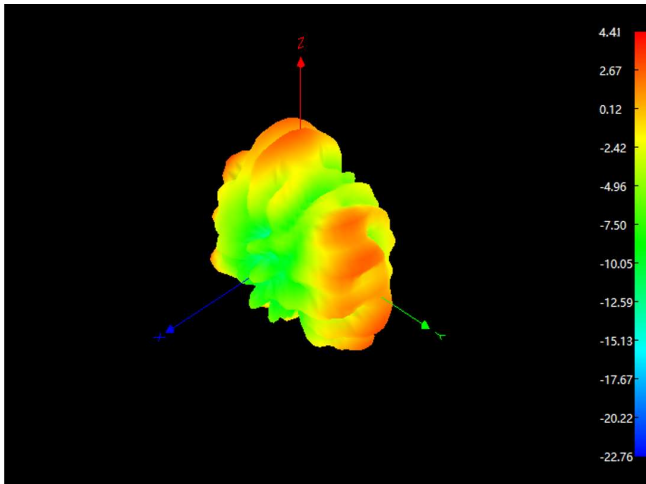
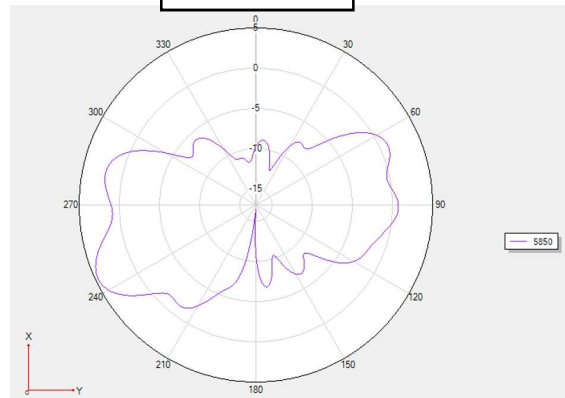
Phi 0



Phi 90

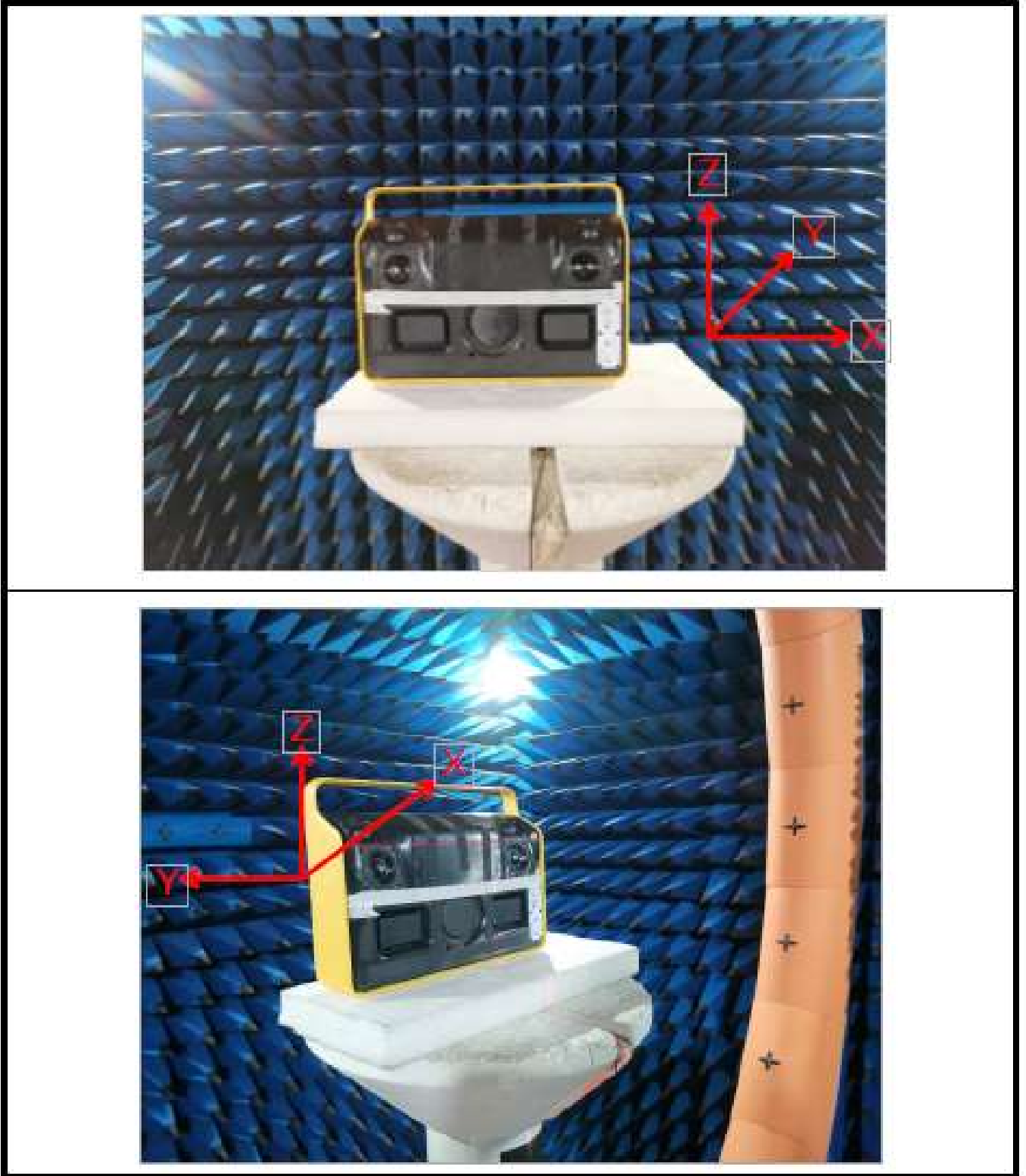


Theta 90





4. Antenna Active Test





| Active Test For WIFI Antenna | | | | | |
|------------------------------|---------|-----------|------|-----------|-------|
| Band | Channel | Data Rate | TRP | Data Rate | TIS |
| WIFI 2.4G 802.11b | 1 | 11Mbps | 14.3 | 11Mbps | -76.5 |
| | 6 | | 15.1 | | -78.0 |
| | 11 | | 15.2 | | -78.6 |
| WIFI 2.4G 802.11g | 1 | 54Mbps | 12.7 | 54Mbps | -66.0 |
| | 6 | | 13.6 | | -65.4 |
| | 11 | | 14.2 | | -65.9 |
| WIFI 5G 802.11a | 36 | 54Mbps | 11.7 | 54Mbps | -69.4 |
| | 100 | | 12.2 | | -70.1 |
| | 165 | | 13.0 | | -68.9 |



实测：室外180度直线拉距，手机放口袋



测试结果：测试过程中50米内无卡顿、杂音、断音，无音等现象，加减音量、开始暂停播放都能流畅实现，超过50米出现杂音卡顿等现象，播放不流畅。

