



# 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	2024/06/07
编号 File No	24060701
版本 Revision	1.0

客户  
CUSTOMER:

客户料号  
CUSTOMER NO:

MPD-P006

品名  
PART NAME:

WIFI 0 Antenna L=255.0mm MHF

供方料号  
SUPPLIER NO:

YJS01.005.069.301

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



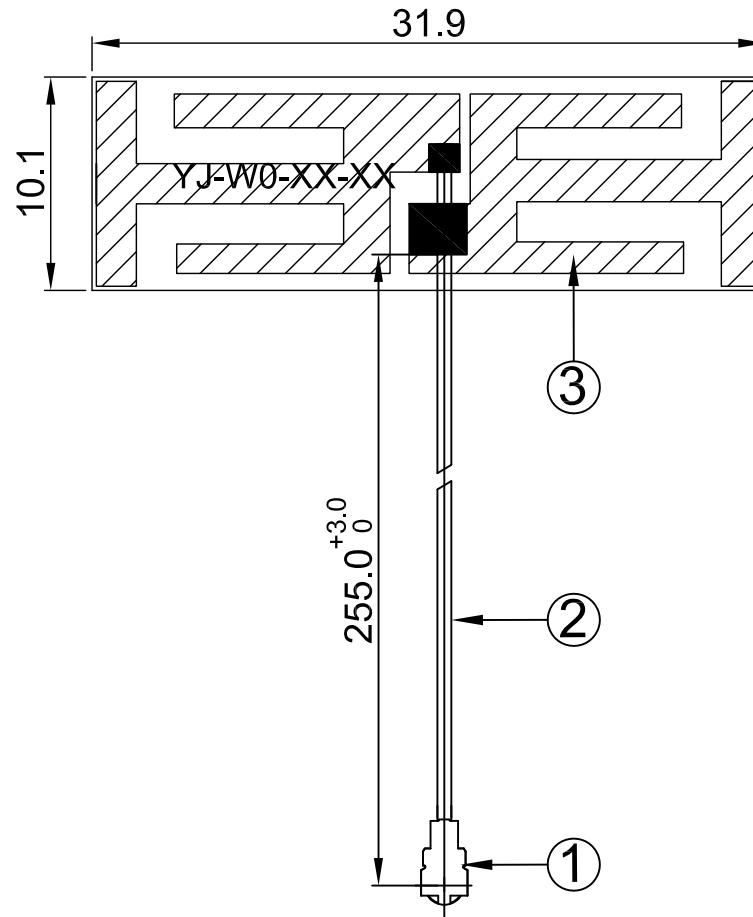
# 承认书项目表

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
**RoHS**  
Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
△	首次发行	2024-01-20
△	修改线长	2024-03-05




**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 0 Antenna L=255.0mm MHF			
PART NO.:YJS01.005.069.301		DATE: 2024-03-05	
APPROVED BY	CHECKED BY	DESIGNED BY	 Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
CiCi	周棋	陈俊	
UNITS: mm SCALE: 1/1 REVISION:B			

3	FPC	31.9*10.1MM	Xiao Ge	FPC	FPC10XXXA.P01	1
2	Coaxial Cable	O.D.1.13 Black Low Loss	Kai Bo	O.D.1.13	COA10XXXA.P01	1
1	Mini Connector	Au Plated 1代	Hang Yuan	Cu	TER10XXXX.P01	1
NO	PART NAME	DESCRIPTION	SUPPLIER	Material	Part Number	Q.TY



# 天线规格

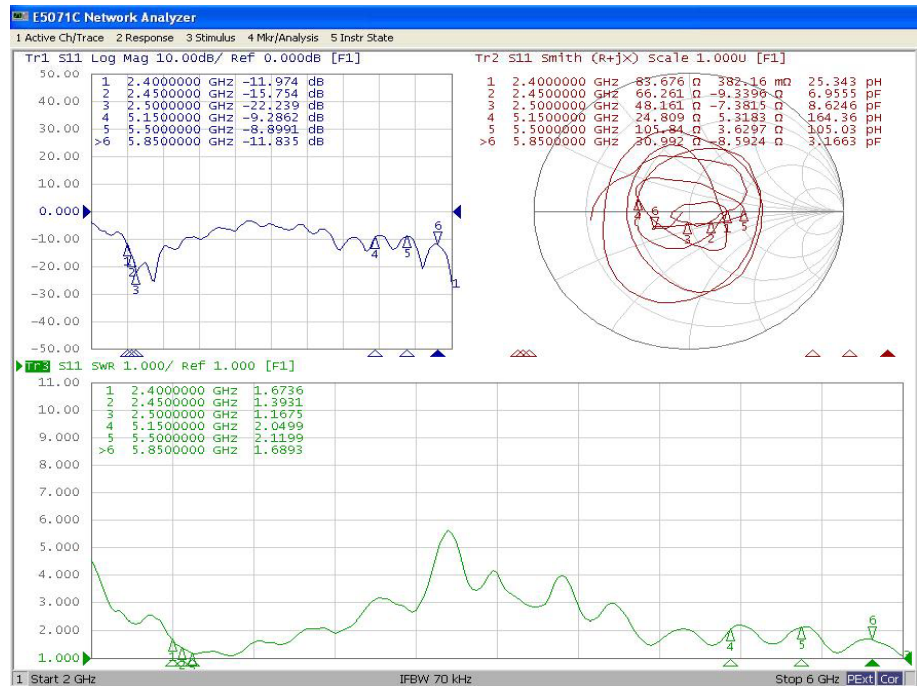
## Antenna Specification

<b>Electrical Properties</b>	
Frequency	2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max@2.4-2.5GHz 2.5 Max@5.15-5.85GHz
Gain	3.8 dBi@2.4-2.5GHz 4.6 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
<b>Physical Properties</b>	
Connector	1代IPEX
Cable Type	O.D.1.13mm低损耗
Cable Length	255mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%



# Antenna Performance Test

**Agilent  
E5071B  
S11  
Parameter  
Test //  
WiFi0  
Antenna**





### Passive Test For WiFi0 Antenna(2.4G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	52.7	-2.8	2.7
2410	53.7	-2.7	3.0
2420	53.5	-2.7	3.2
2430	54.7	-2.6	3.5
2440	55.7	-2.5	3.6
2450	57.5	-2.4	3.8
2460	55.2	-2.6	3.3
2470	56.8	-2.5	3.5
2480	54.2	-2.7	2.8
2490	53.7	-2.7	2.7
2500	50.6	-3.0	2.1

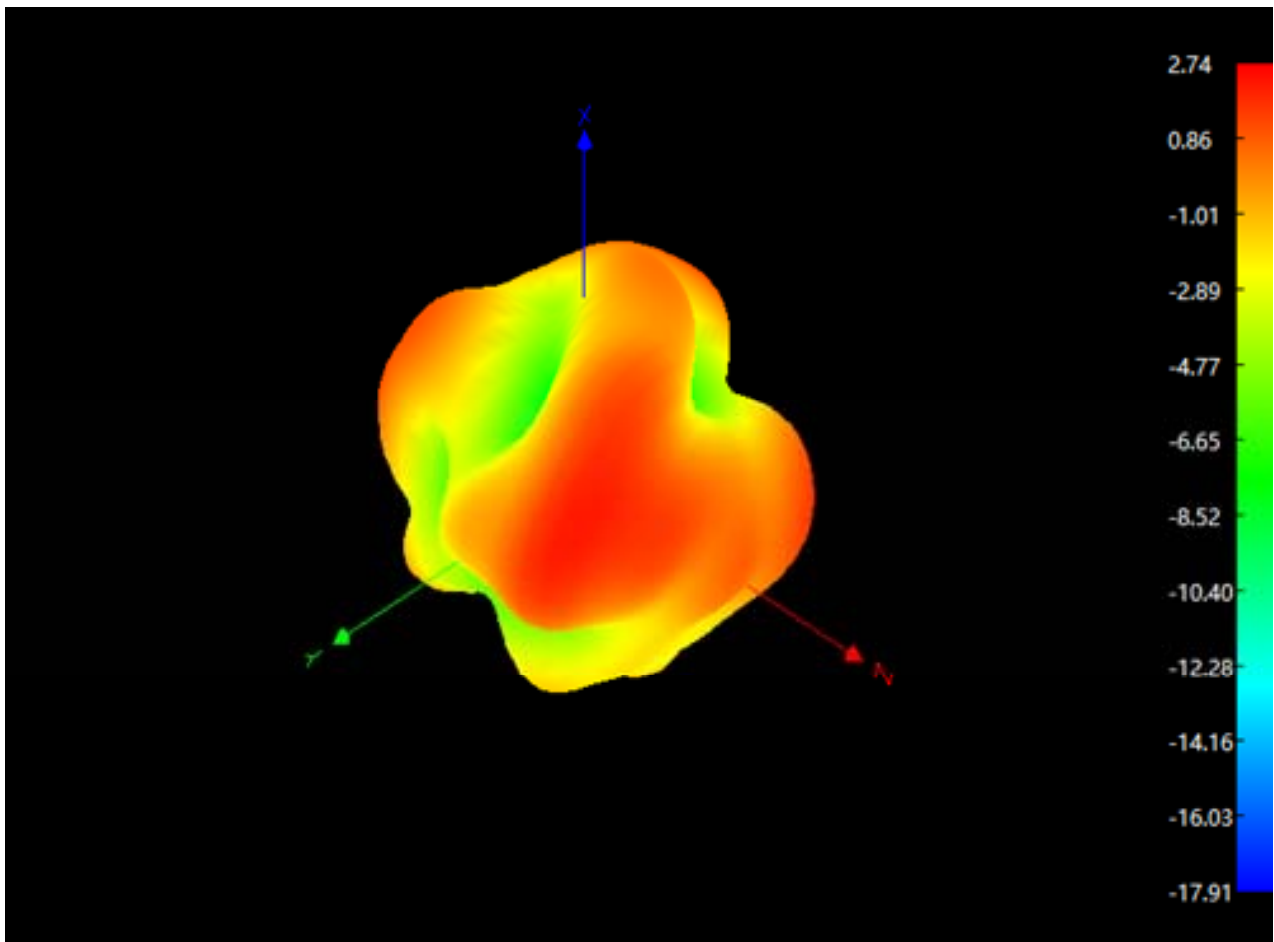


### Passive Test For WiFi0 Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	36.6	-4.4	3.8
5200	37.0	-4.3	4.2
5250	38.0	-4.2	4.3
5300	36.7	-4.4	4.1
5350	35.0	-4.6	3.5
5400	35.2	-4.5	3.4
5450	34.9	-4.6	2.6
5500	32.6	-4.9	2.8
5550	37.2	-4.3	3.7
5600	39.9	-4.0	4.2
5650	35.1	-4.6	4.1
5700	37.8	-4.2	4.6
5750	34.9	-4.6	3.9
5800	32.6	-4.9	3.5
5850	34.9	-4.6	4.5



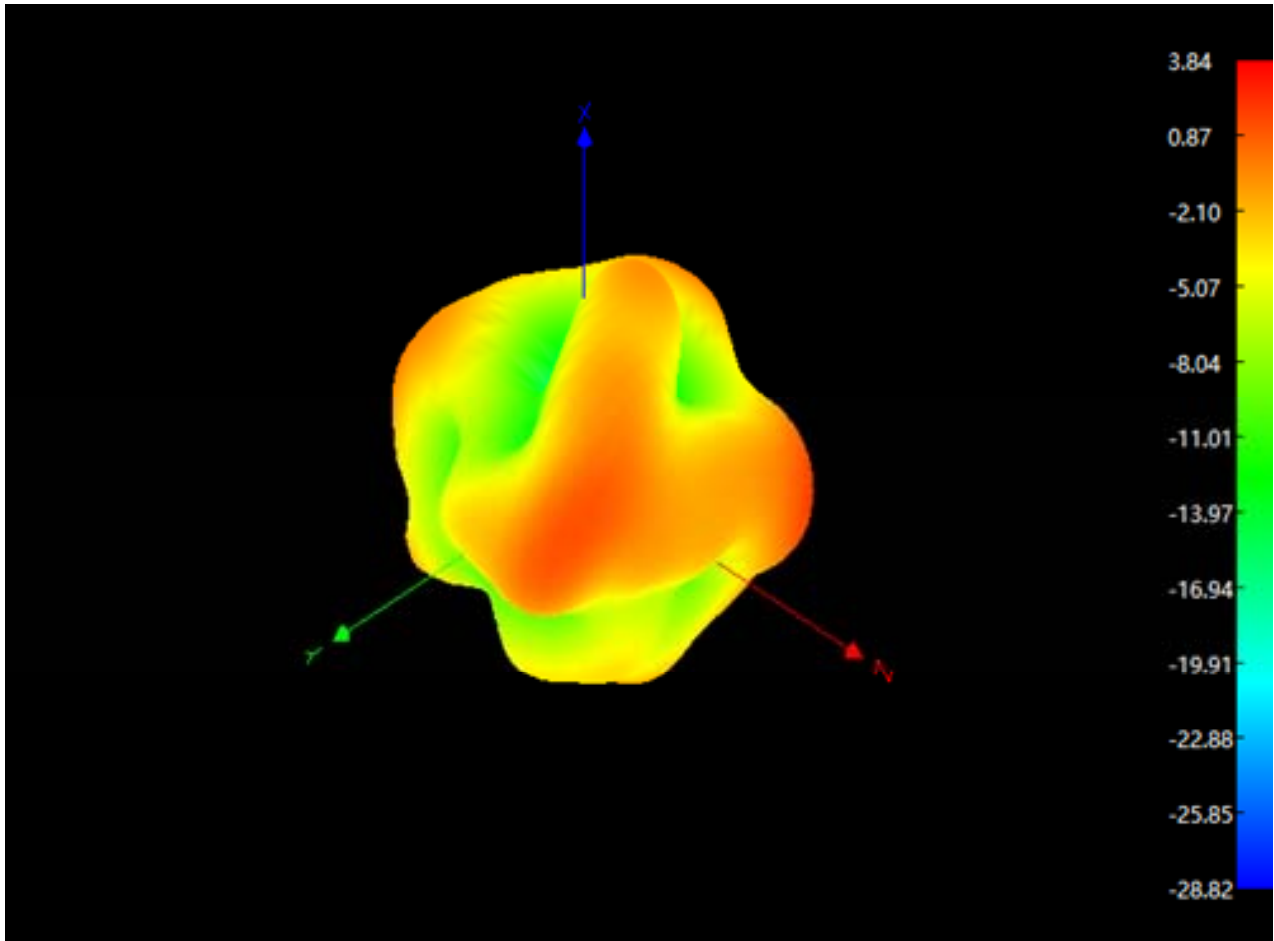
## Radiation Pattern For WiFi0 Antenna (2400MHz)





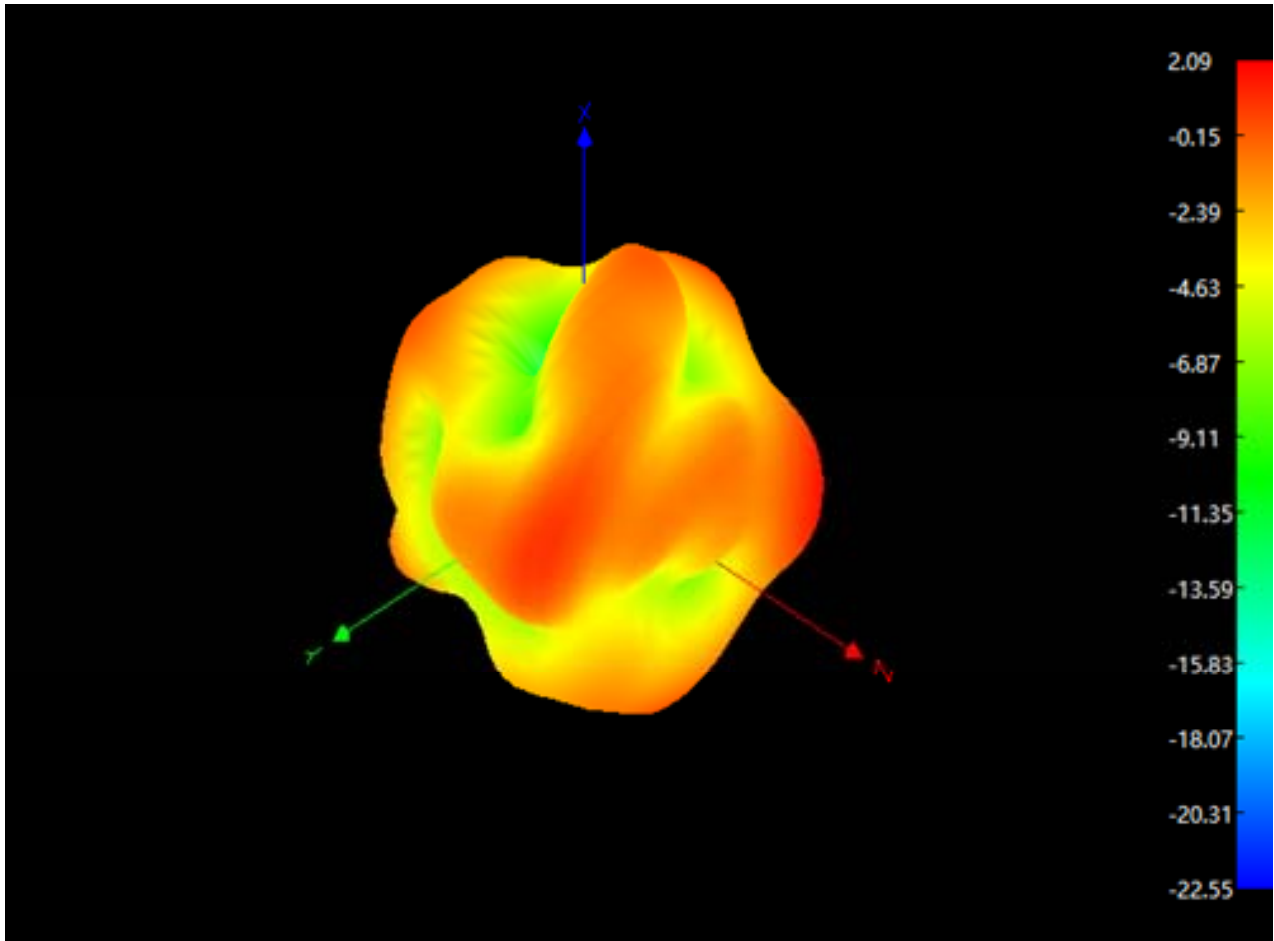


## Radiation Pattern For WiFi0 Antenna (2450MHz)





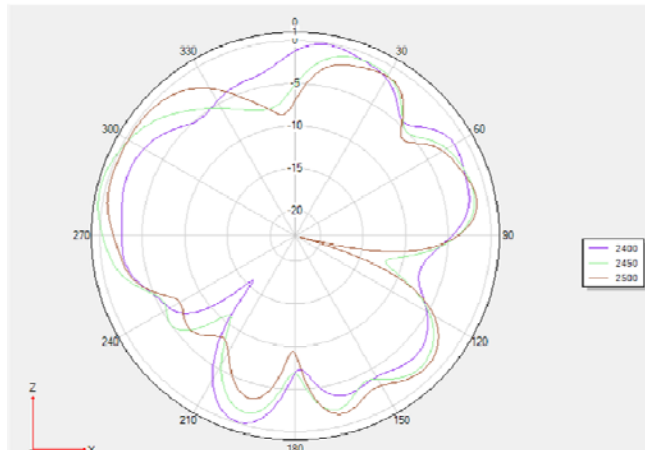
## Radiation Pattern For WiFi0 Antenna (2500MHz)



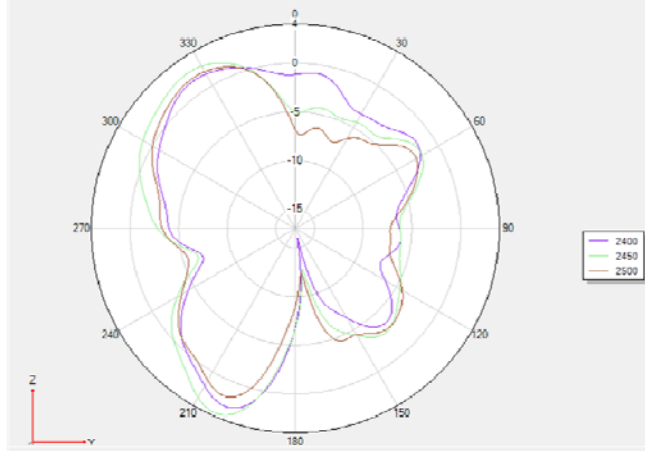


## Radiation Pattern For WiFi0 Antenna

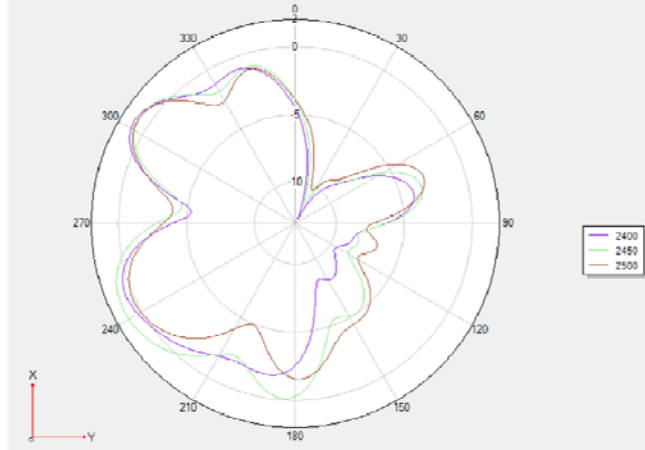
**Phi 0°**



**Phi 90°**

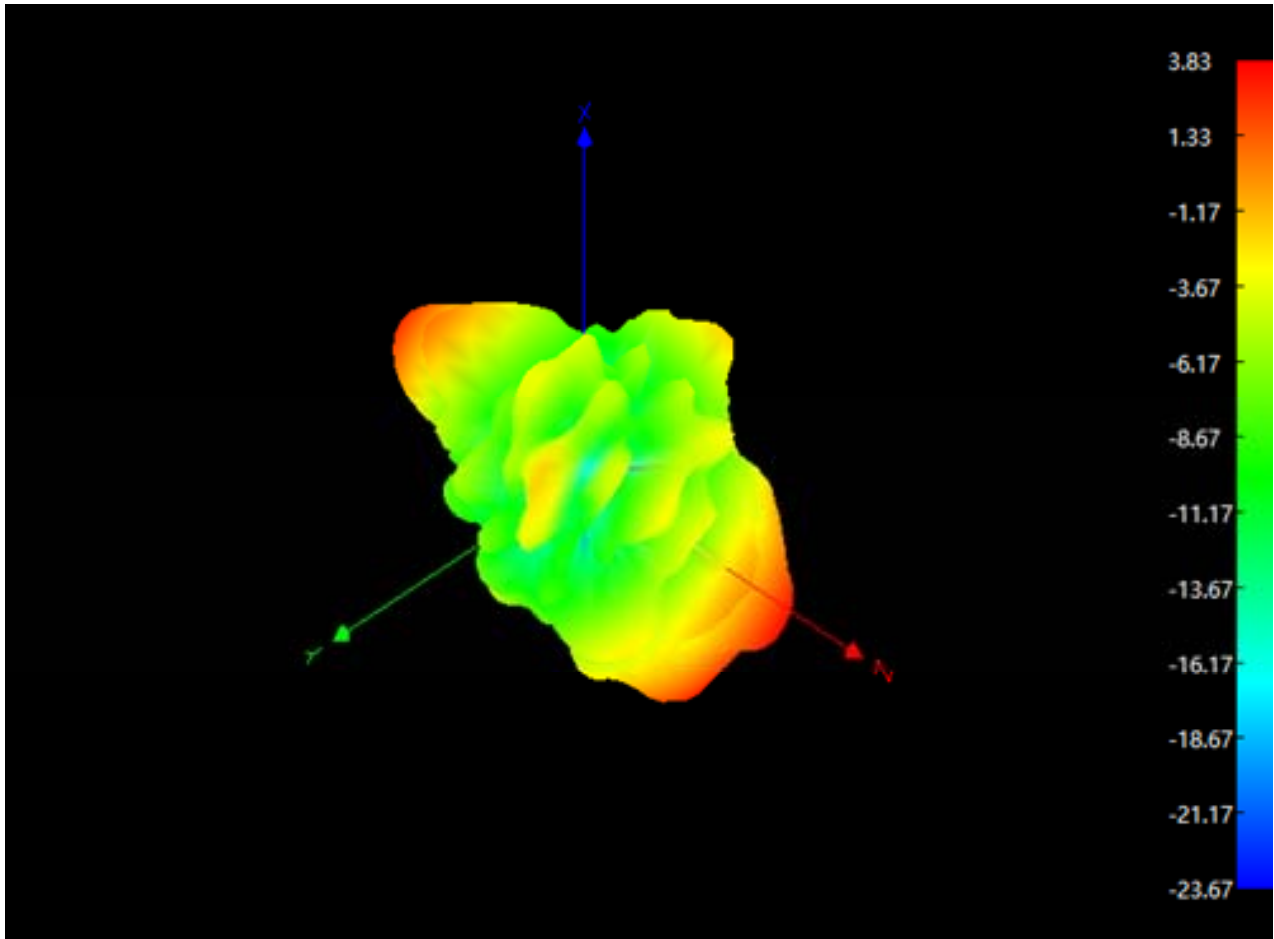


**Theta 90°**



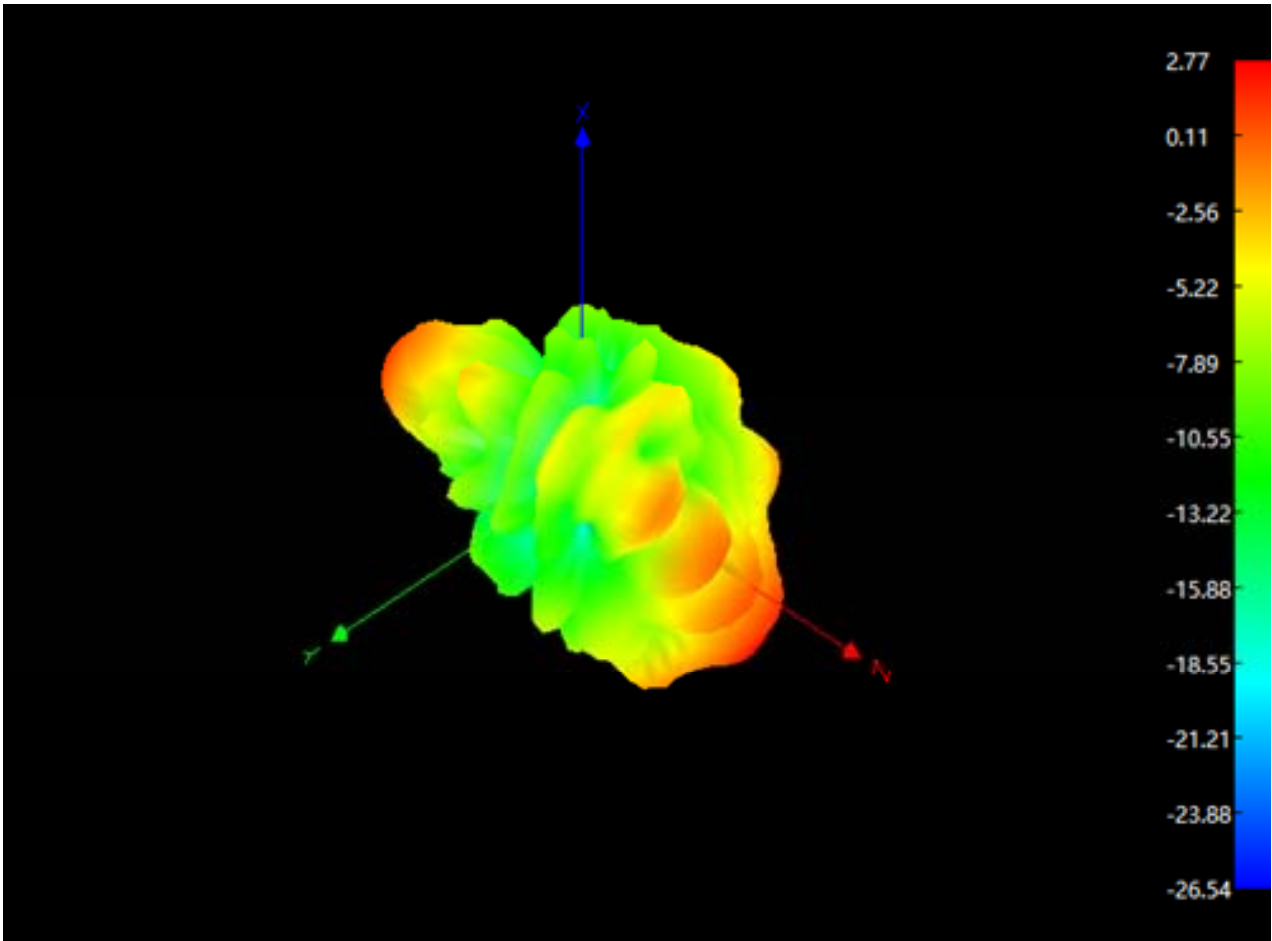


## Radiation Pattern For WiFi0 Antenna (5150MHz)



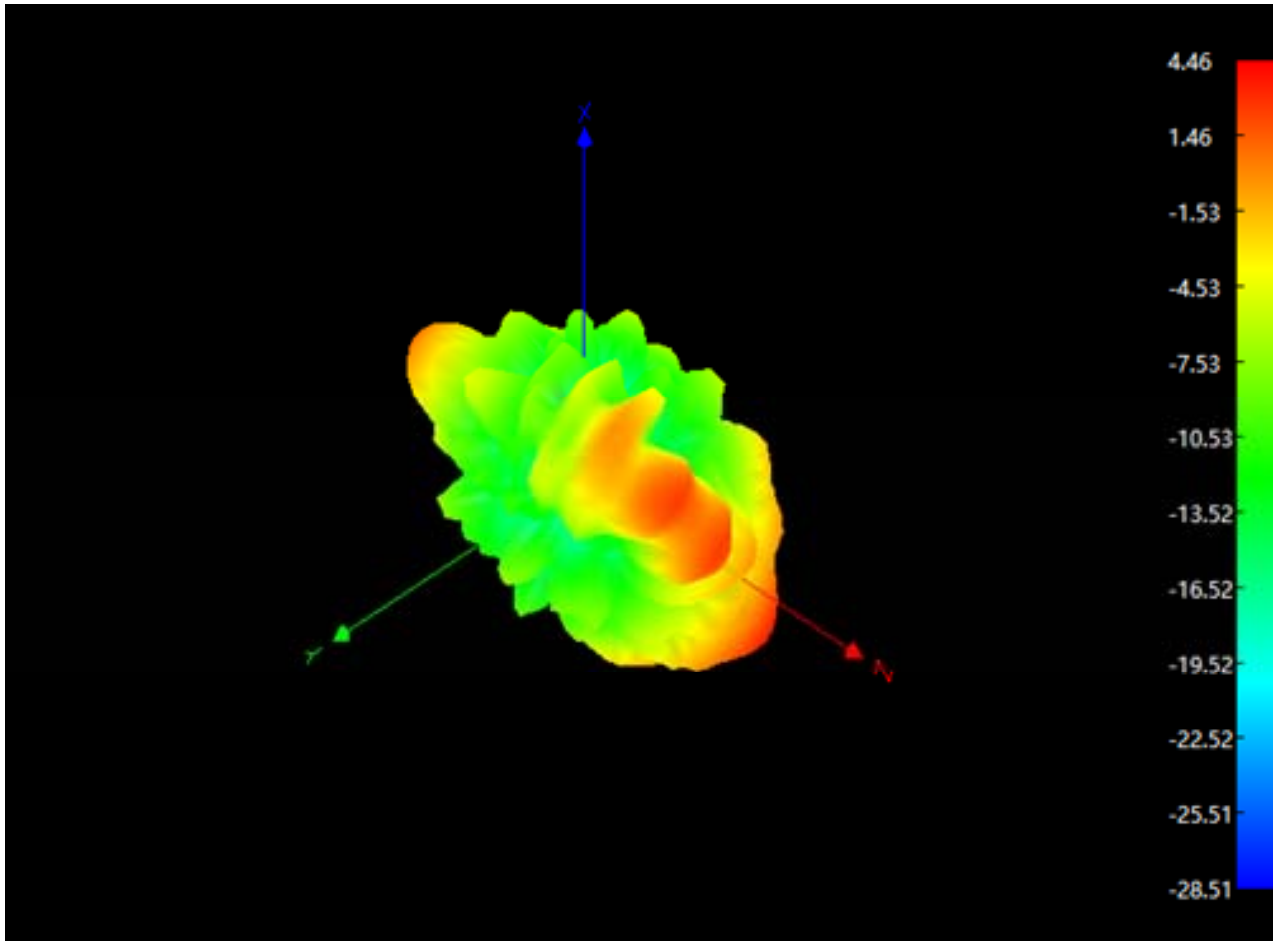


## Radiation Pattern For WiFi0 Antenna (5500MHz)





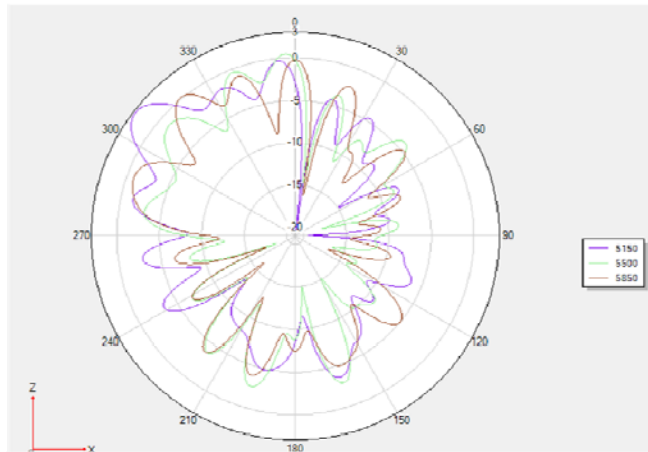
## Radiation Pattern For WiFi0 Antenna (5850MHz)



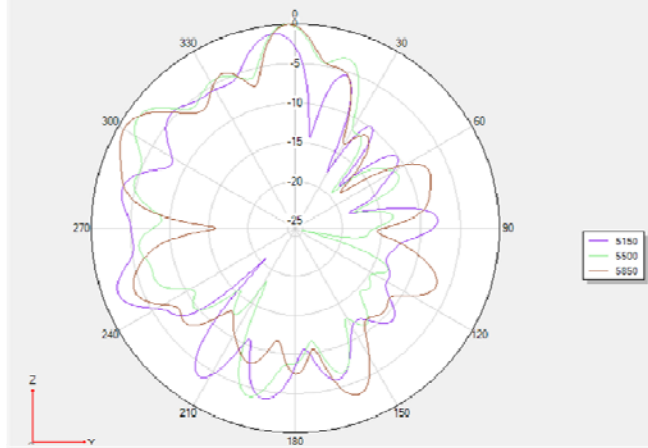


## Radiation Pattern For WiFi0 Antenna

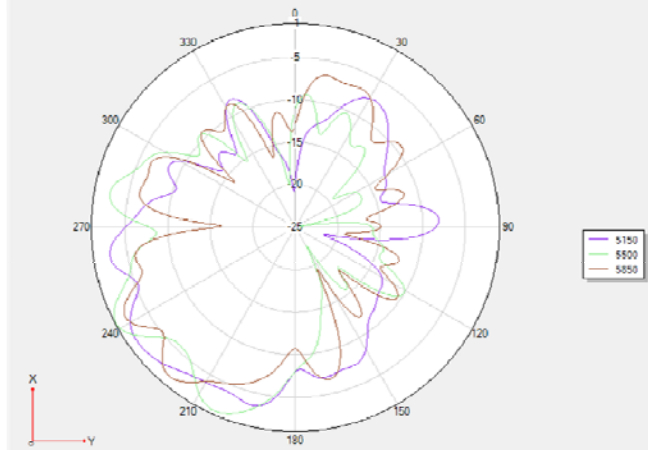
**Phi 0°**



**Phi 90°**



**Theta 90°**





### Active Test For WIFI0

Band	Channel	Data Rate	TRP	EIRP	Data Rate	TIS	EIS
WIFI 802.11a	36	6Mbps	14.8	18.8	54Mbps	-78.1	-82.1
	149		15.3	19.6		-77.2	-81.3
	165		15.1	19.3		-76.5	-80.5
WIFI 802.11b	1	11Mbps	15.5	19.4	11Mbps	-84.0	-87.9
	6		16.0	20.4		-85.5	-90.1
	11		16.3	21.0		-87.9	-92.5
WIFI 802.11g	1	6Mbps	14.8	19.0	54Mbps	-71.9	-76.5
	6		15.2	20.1		-74.0	-78.8
	11		15.8	20.8		-74.7	-79.9

add: Yuanfu Industrial Park, No.59, Muyu Road, Shatou Community, Chang'an Town, Dongguan, Guangdong





*Device*





*WiFi0  
Antenna*

