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	24060702
版 本 Revision	1.0

客 户 CUSTOMER: _____

客户料号 CUSTOMER NO: MPD-P006

品 名 PART NAME: WIFI 1 Antenna L=150.0mm MHF

供方料号 SUPPLIER NO: YJS01.005.069.302

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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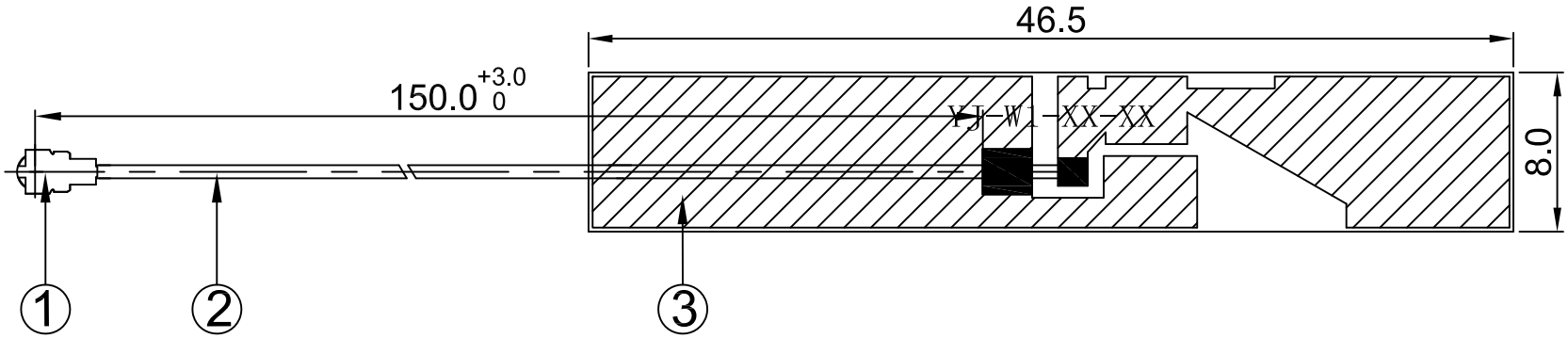
13	-	-	-

RoHS Compatible

CUSTOMER	
PART NO	

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



NO	PART NAME	DESCRIPTION	SUPPLIER	Material	Part Number	Q.TY
3	FPC	46.5*8.0MM	Xiao Ge	FPC	FPC10XXXA.P01	1
2	Coaxial Cable	O.D.1.13 Gray Low Loss	Kai Bo	O.D.1.13	COA10XXXA.P01	1
1	Mini Connector	Au Plated 1代	Hang Yuan	Cu	TER10XXXX.P01	1

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 1 Antenna L=150.0mm MHF

PART NO.:YJS01.005.069.302

DATE: 2024-03-05

APPROVED BY	CHECKED BY	DESIGNED BY
CiCi	周棋	陈俊

UNITS: mm
SCALE: 1/1
REVISION:B

Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

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@2.4-2.5GHz 2.5 Max@5.15-5.85GHz
Gain	3.2 dBi@2.4-2.5GHz 4.5 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1代IPEX
Cable Type	O.D.1.13mm低损耗
Cable Length	150mm
Cable Color	Gray
Operating Temp.	-40 ~ +85 ˚C
Storage Temp / Humidity	25±5˚C / <70%

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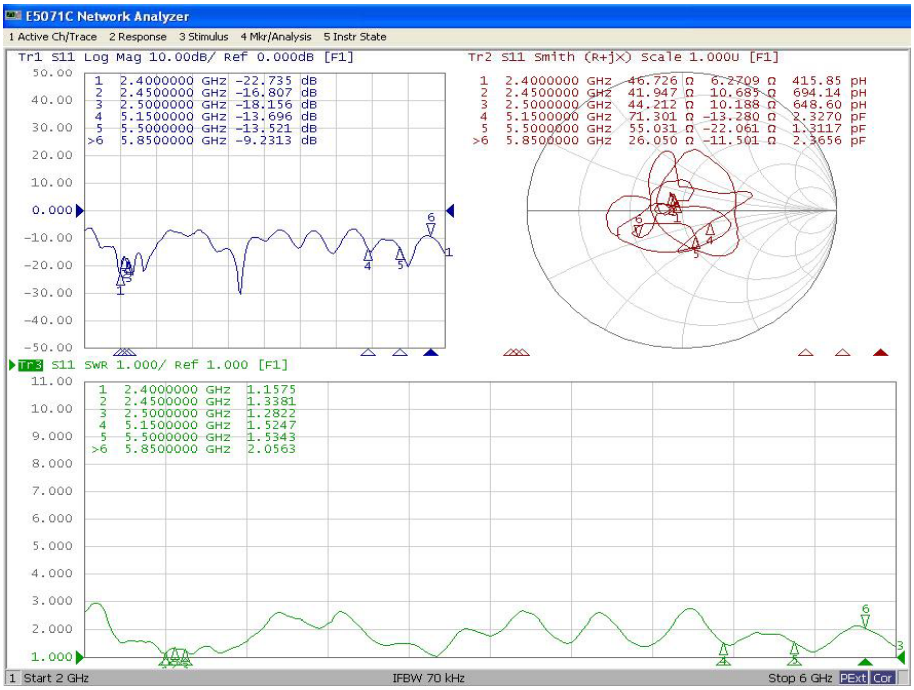
Antenna Performance Test

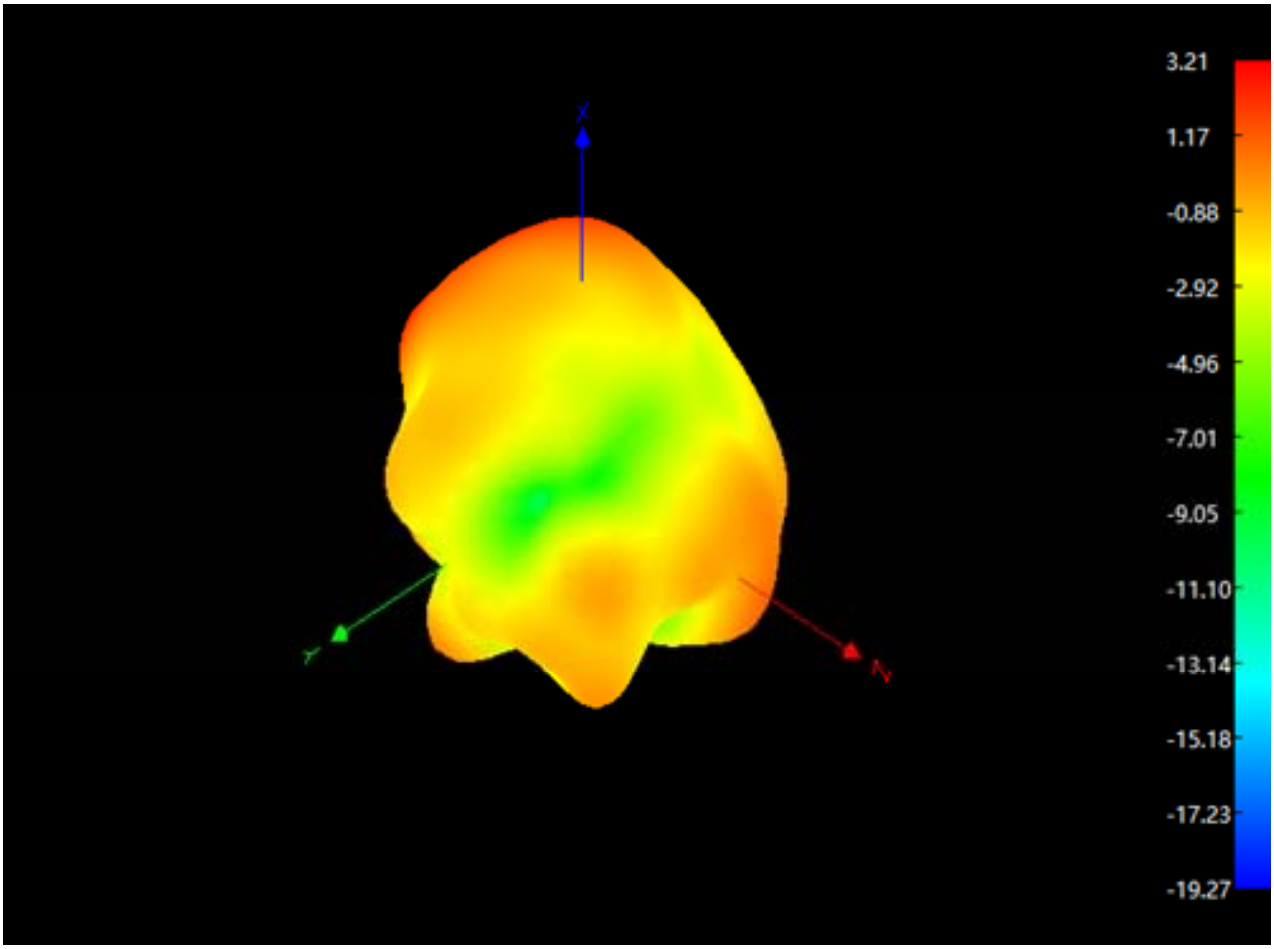
Agilent E5071B S11 Parameter Test // WiFi1 Antenna



Passive Test For WiFi1 Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	50.7	-3.0	3.2
2410	50.7	-3.0	2.8
2420	49.4	-3.1	2.2
2430	47.0	-3.3	1.9
2440	45.5	-3.4	1.3
2450	47.5	-3.2	1.5
2460	45.3	-3.4	1.5
2470	46.6	-3.3	2.3
2480	45.6	-3.4	2.3
2490	47.2	-3.3	3.0
2500	45.4	-3.4	3.0

Passive Test For WiFi1 Antenna(5.8G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	49.3	-3.1	4.3
5200	46.1	-3.4	4.3
5250	42.6	-3.7	4.4
5300	44.8	-3.5	4.5
5350	43.5	-3.6	4.5
5400	49.2	-3.1	4.5
5450	48.4	-3.2	4.5
5500	45.9	-3.4	4.4
5550	52.8	-2.8	4.5
5600	52.1	-2.8	4.5
5650	49.6	-3.1	4.5
5700	49.3	-3.1	4.4
5750	50.6	-3.0	4.5
5800	47.1	-3.3	4.2
5850	47.5	-3.2	4.2

Radiation Pattern For WiFi1 Antenna（2400MHz）



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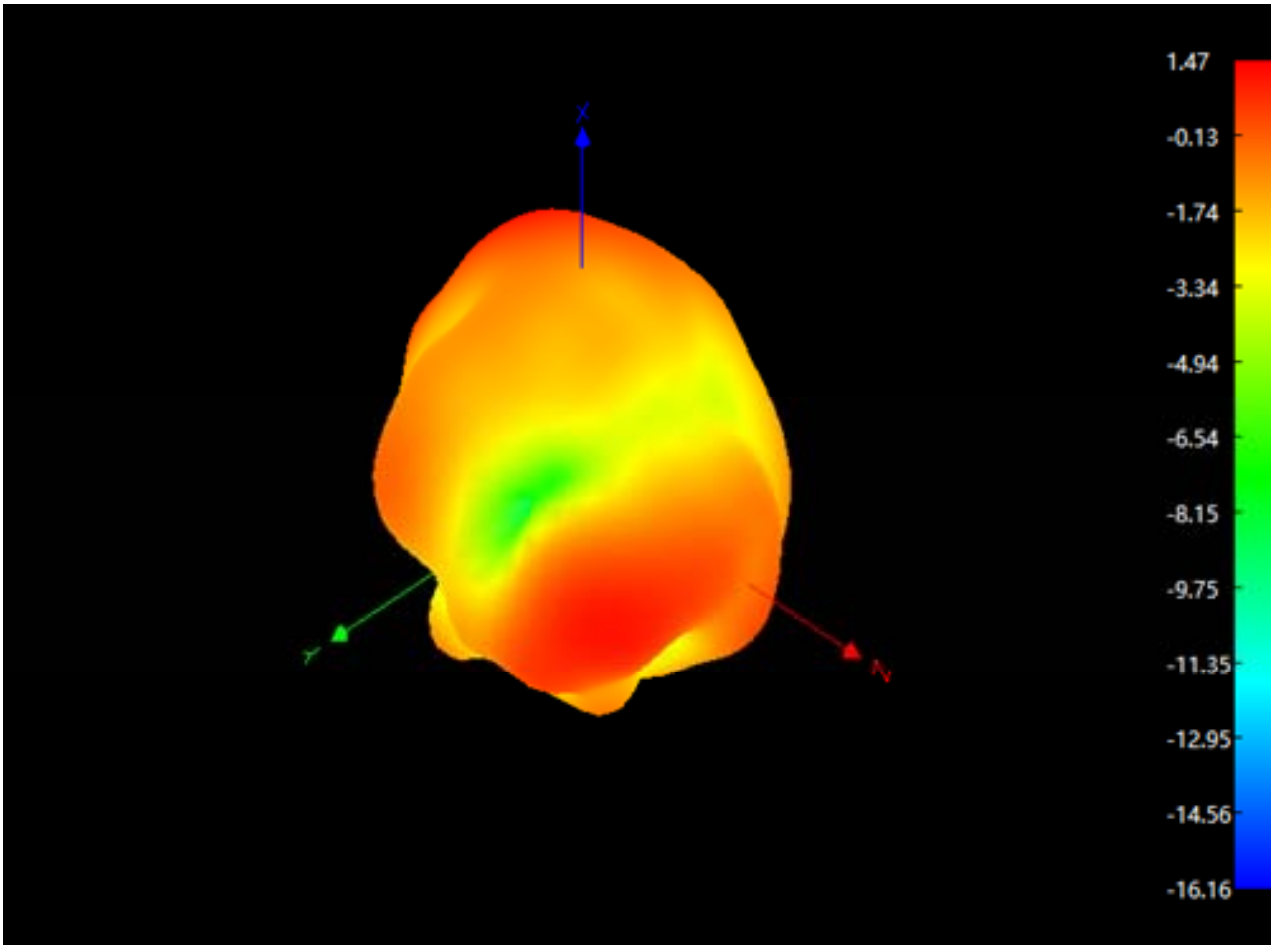
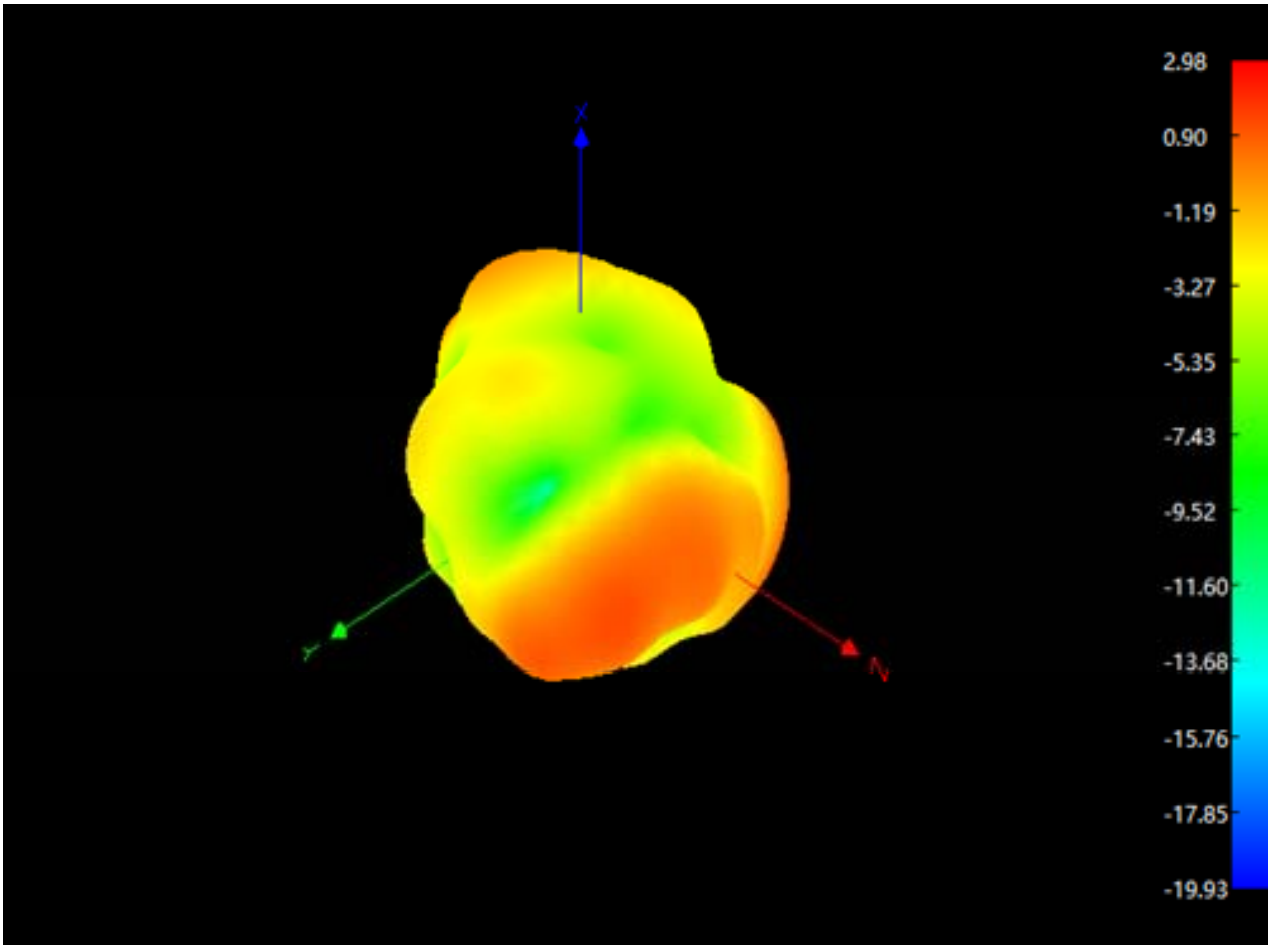
Radiation Pattern For WiFi1 Antenna（2450MHz）



Radiation Pattern For WiFi1 Antenna（2500MHz）



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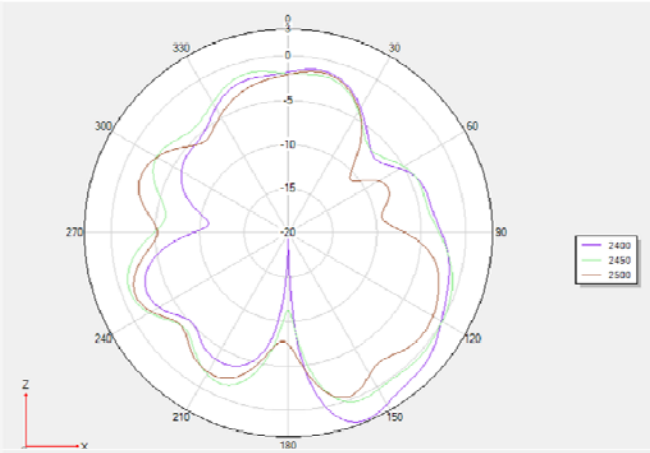
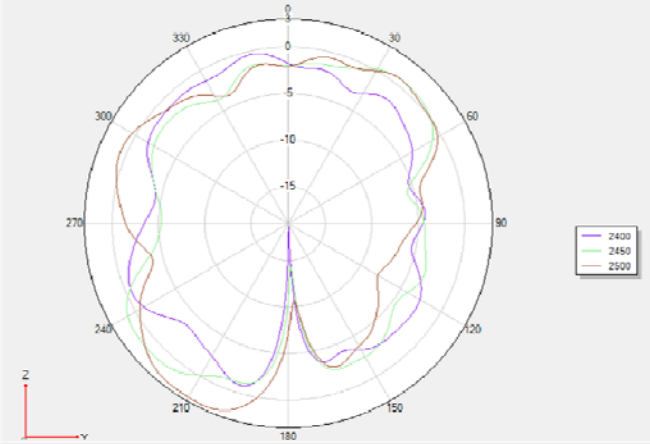
Radiation Pattern For WiFi1 Antenna

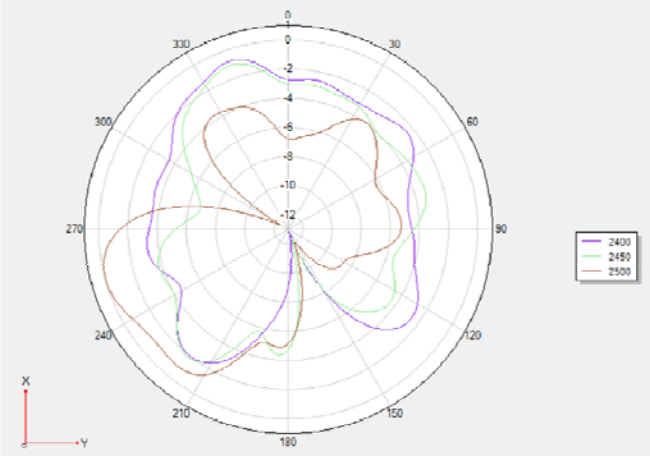
Phi 0°



Phi 90°



Theta 90°



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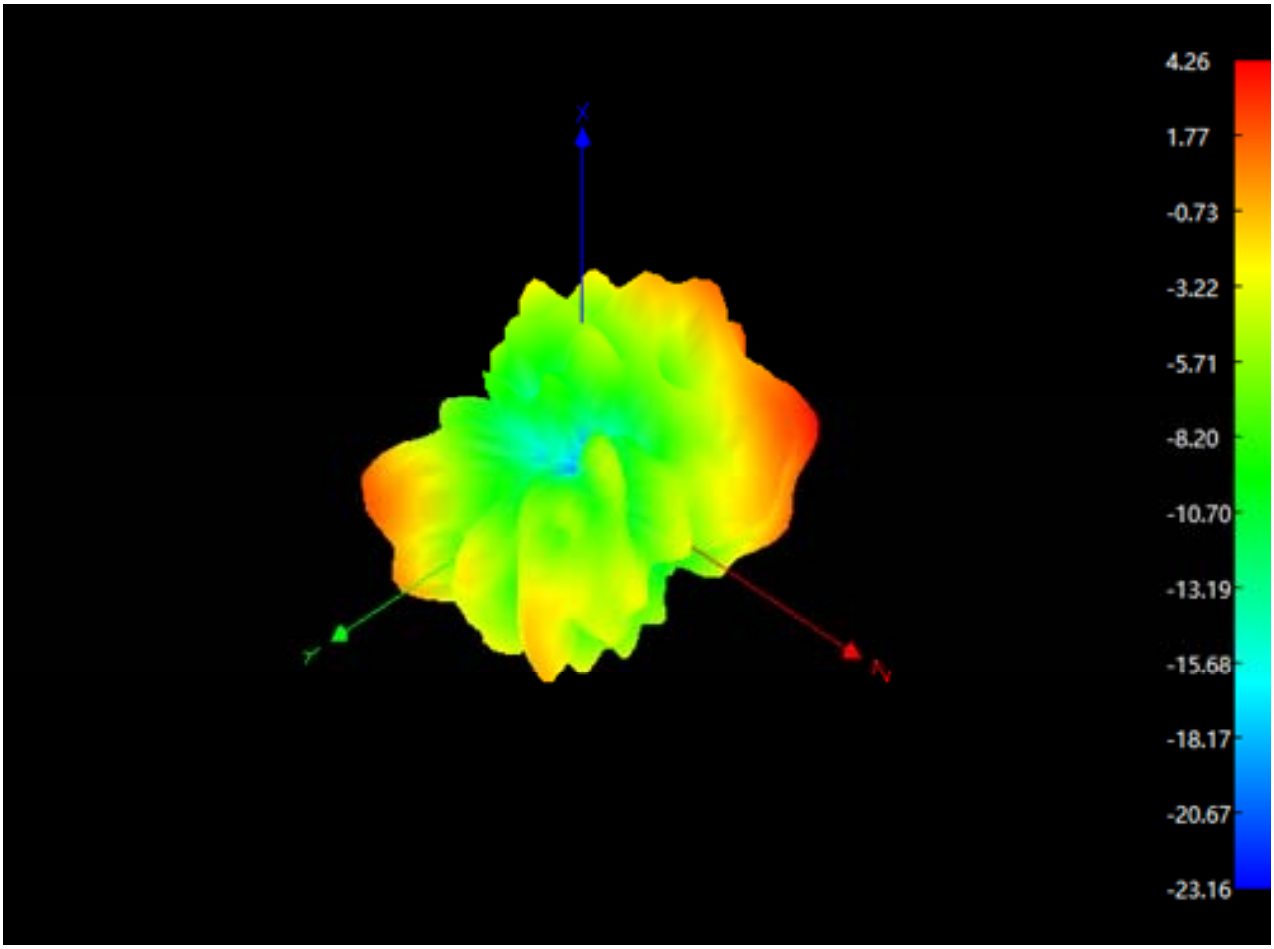
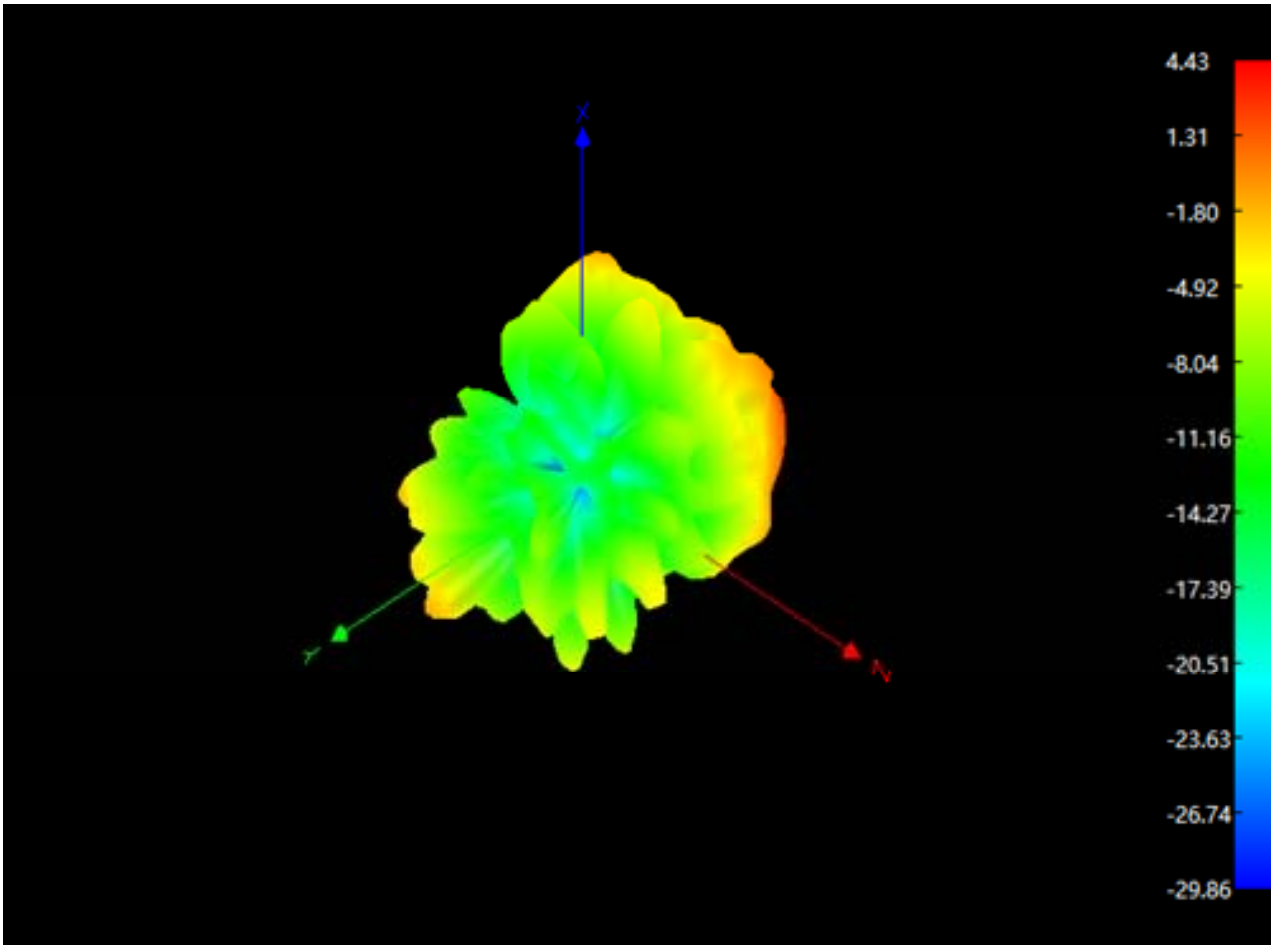
Radiation Pattern For WiFi1 Antenna（5150MHz）



Radiation Pattern For WiFi1 Antenna（5500MHz）



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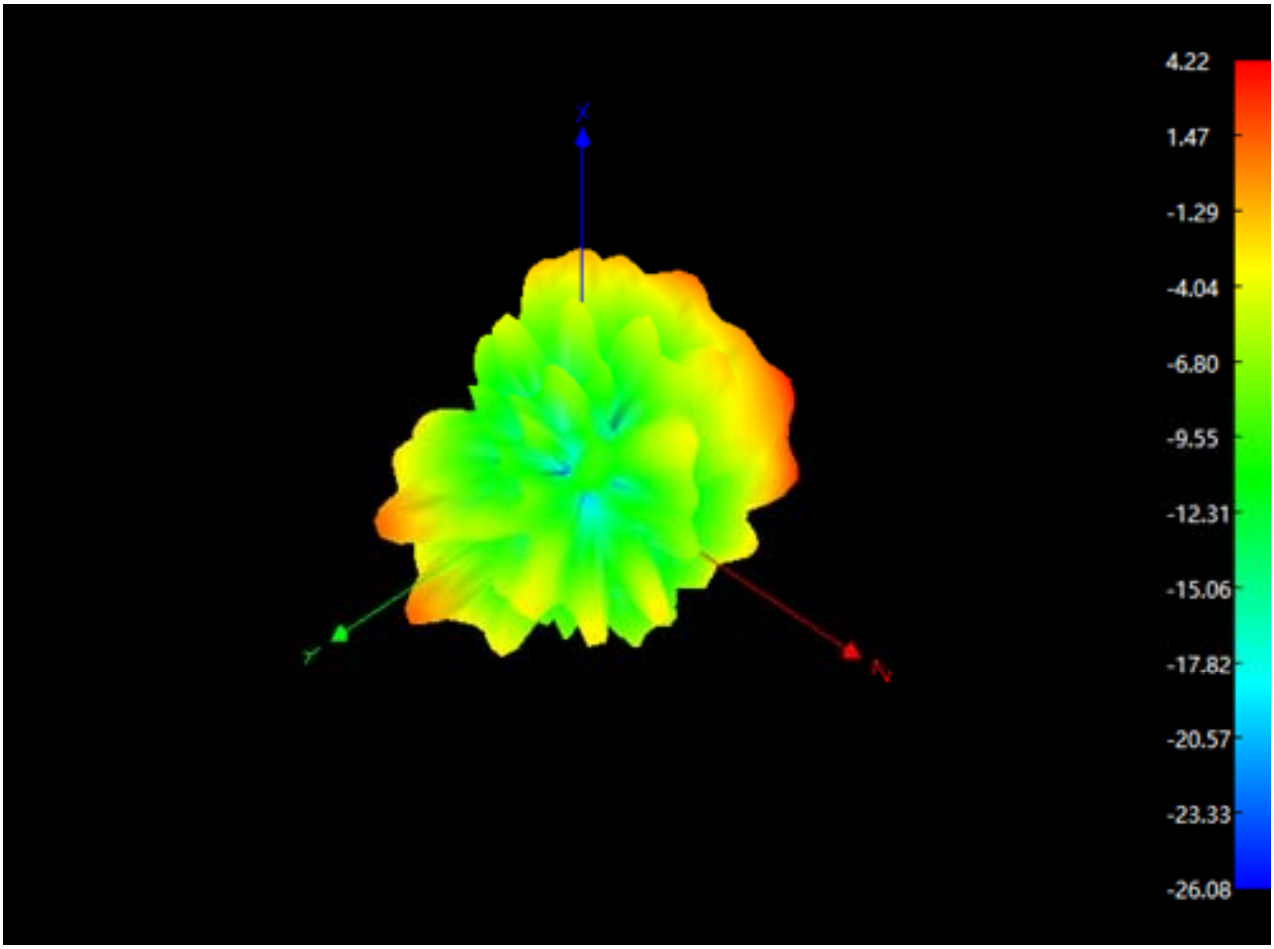
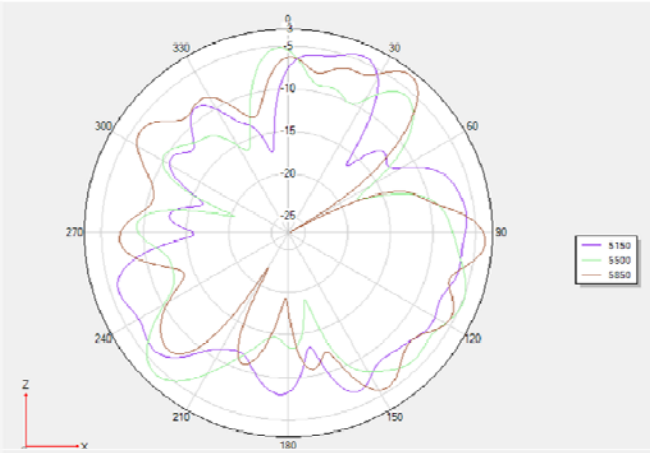
Radiation Pattern For WiFi1 Antenna（5850MHz）

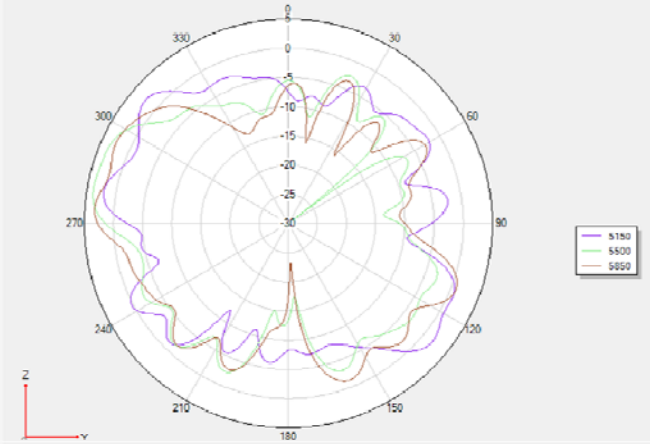


Radiation Pattern For WiFi1 Antenna

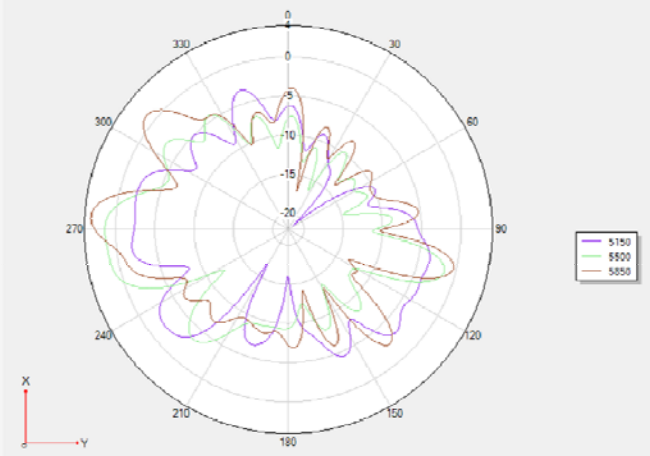
Phi 0°



Phi 90°



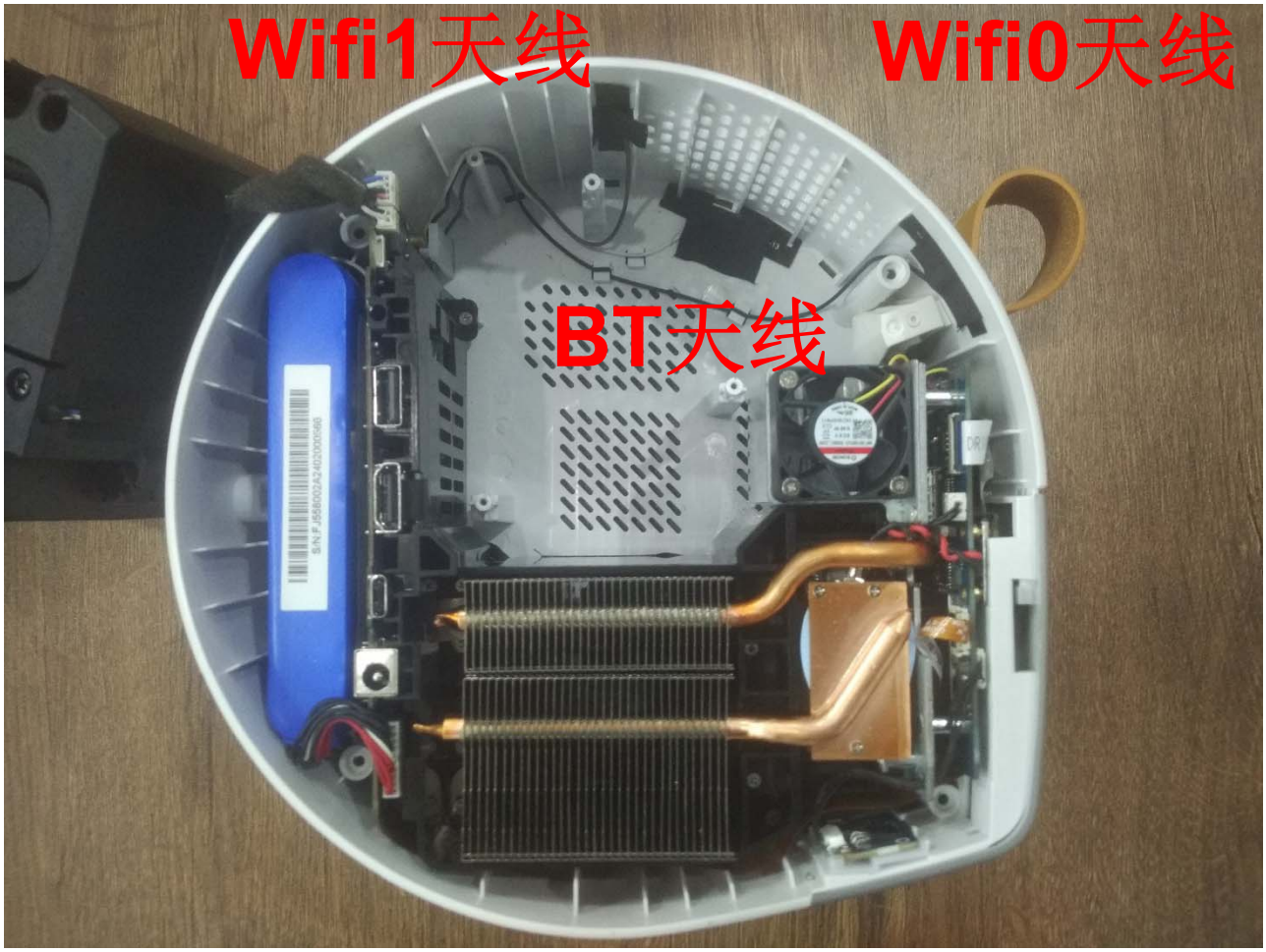
Theta 90°



Active Test For WIFI1							
Band	**Channel**	**Data Rate**	**TRP**	**EIRP**	**Data Rate**	**TIS**	**EIS**
WIFI 802.11a	36	6Mbps	15.4	19.5	54Mbps	-78.9	-83.1
	149		16.1	21.9		-78.0	-83.5
	165		16.2	22.4		-77.3	-82.8
WIFI 802.11b	1	11Mbps	15.7	20.7	11Mbps	-85.7	-90.5
	6		16.2	21.9		-85.5	-91.3
	11		16.6	22.3		-87.9	-93.8
WIFI 802.11g	1	6Mbps	15.4	20.4	54Mbps	-72.1	-77.2
	6		15.7	21.6		-71.4	-77.0
	11		16.1	22.0		-74.3	-79.6

Device	

WiFi1 Antenna	


Wifi1天线
Wifi0天线
BT天线