DONGGUAN YIJIA ELECTRONICS COMMUNICATION TECHNOLOGY CO., LTD

SPECIFICATION FOR APPROVAL

Date	2025/06/19
File No	25061905
Revision	1.0

CUSTOMER: FJ Dynamics Technology Co., Ltd.

CUSTOMER NO: YTX-TX-003070-1A

PART NAME: WIFI 2 Antenna L=46mm MHF

SUPPLIER NO: YJF01.085.029.305A

Date: Q'TY:

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A

Spec Item

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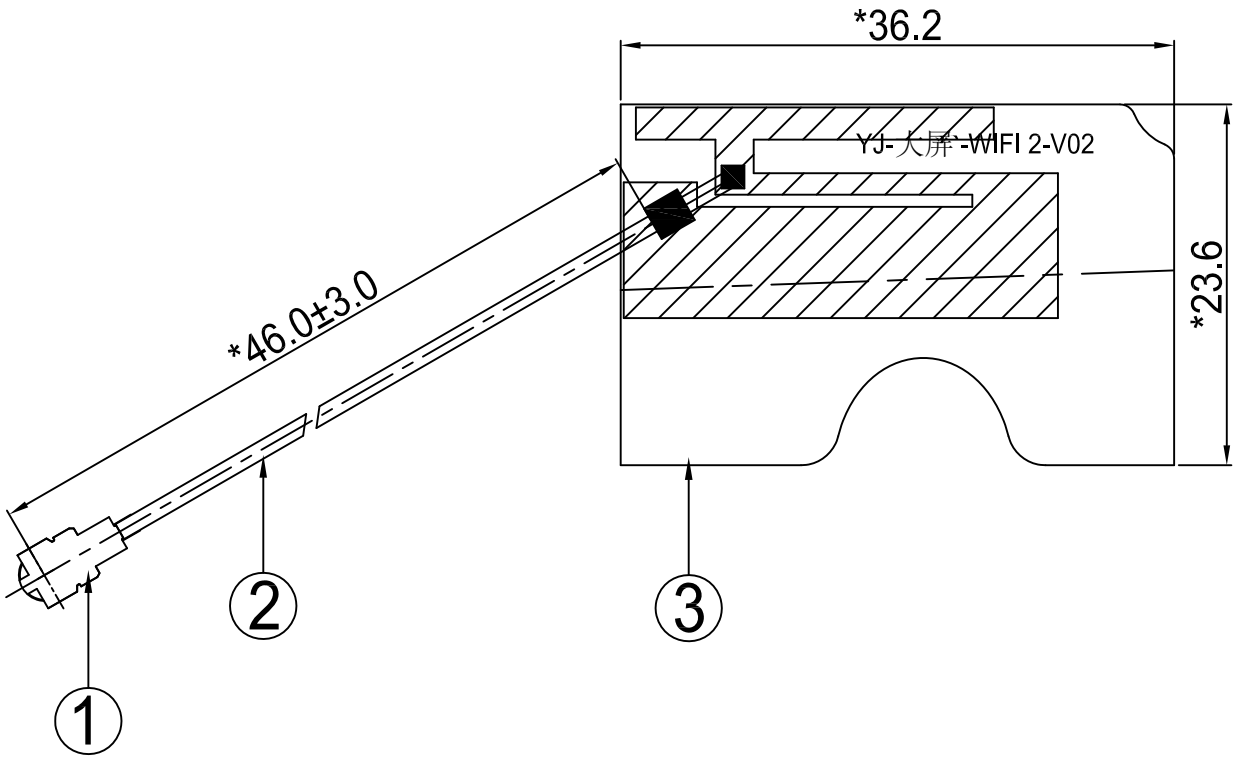
12	-	-	-
13	-	-	-

RoHS Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
A	Initial release	2024-08-24
B	ModifyFPC	2024-10-30



Belt * is the key size

Frequency：2400-2500MHz,5150-5850MHz

NO	PART NAME	DESCRIPTION	Material	Q.TY
3	FPC	36.2*23.6mm	FPC	1
2	Coaxial Cable	O.D.1.13 Black Low loss	O.D.1.13	1
1	Mini Connector	Au Plated 1 Generation	Cu	1

DONGGUAN YIJIA ELECTRONICS COMMUNICATION TECHNOLOGY CO., LTD

PART NAME: WIFI 2 Antenna L=46mm MHF

PART NO.: YJF01.085.029.305A

DATE: 2024-10-30

APPROVED BY	CHECKED BY	DESIGNED BY	
Zhou Sheng	Zhou Yingjie	Liao Guangxi	UNITS: mm SCALE: 1/1 REVISION: B

Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

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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	6.3 dBi@2.4-2.5GHz 5.7 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1 Generation IPEX
Cable Type	O.D.1.13mm Low loss
Cable Length	46mm
Cable Color	Black
Operating Temp.	-40 ~ +85 ˚C
Storage Temp / Humidity	25±5˚C / <70%

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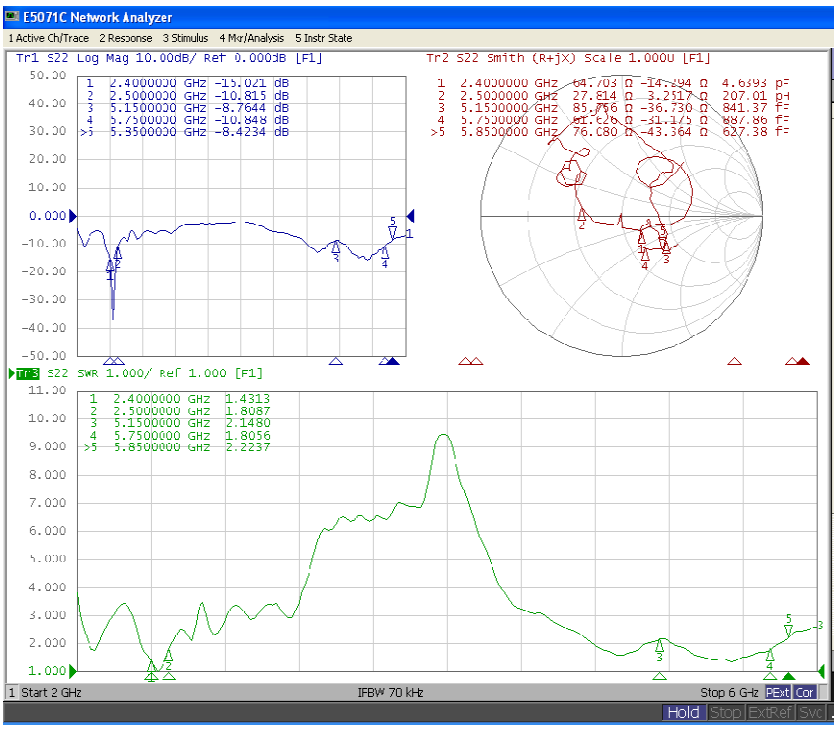
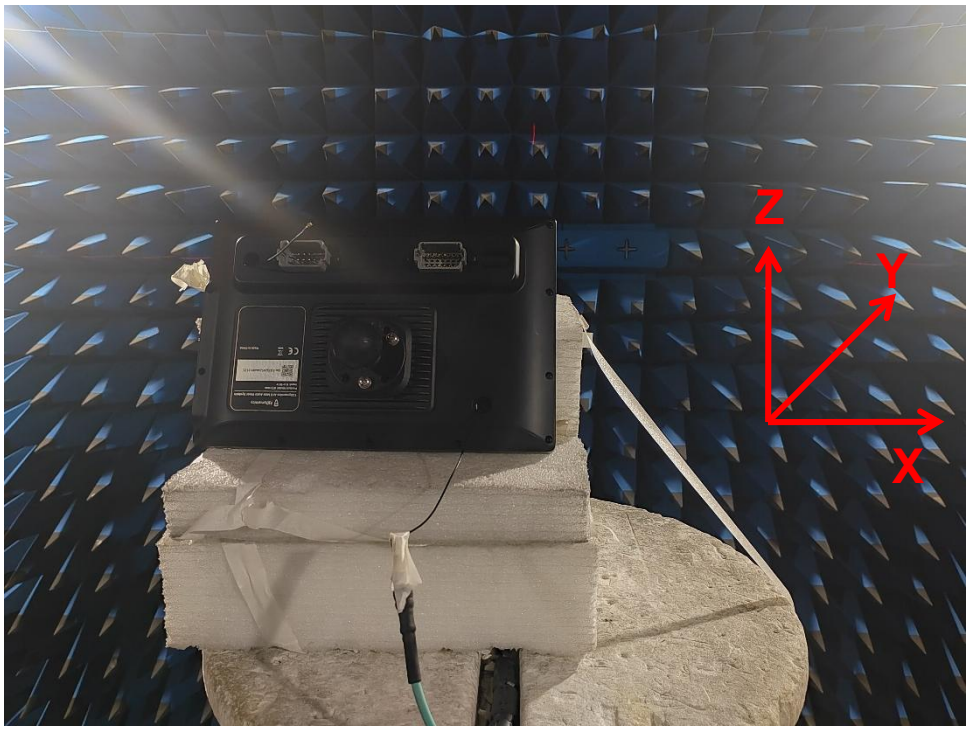
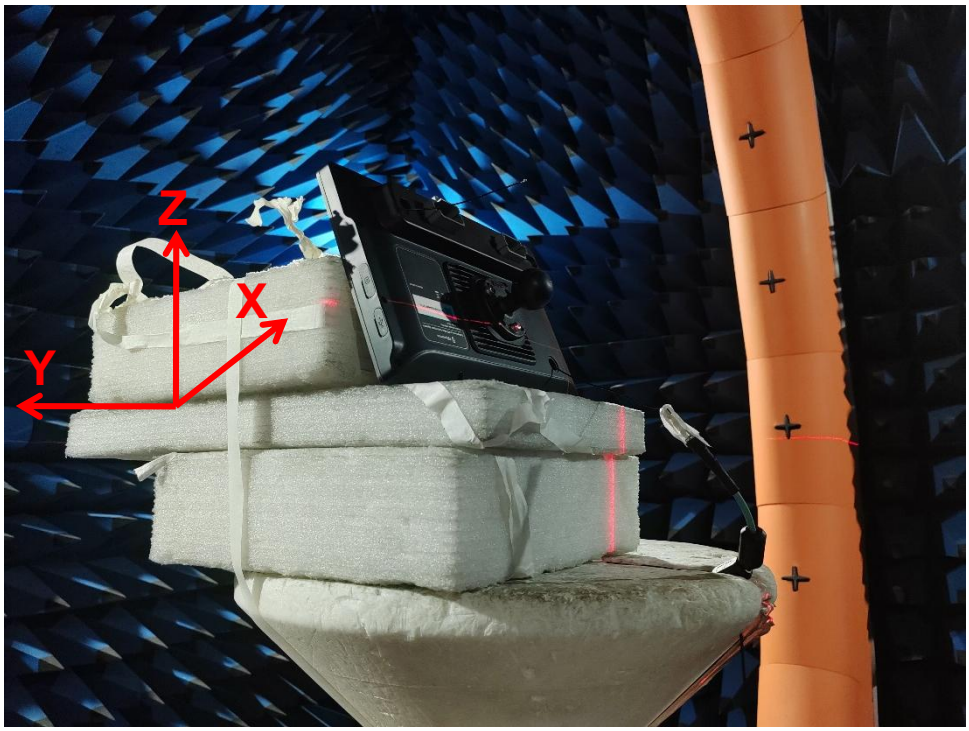
Agilent E5071C S Parameter Test // WiFi2 Antenna



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

Antenna Passive Test





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Passive Test For WiFi2 Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	45.8	-3.4	5.5
2410	46.9	-3.3	5.8
2420	46.6	-3.3	5.9
2430	46.2	-3.4	6.3
2440	44.9	-3.5	6.2
2450	44.4	-3.5	6.0
2460	40.9	-3.9	5.2
2470	41.1	-3.9	5.0
2480	40.2	-4.0	4.9
2490	41.8	-3.8	5.0
2500	40.6	-3.9	4.8

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Passive Test For WiFi2 Antenna(5.8G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	42.8	-3.7	3.6
5170	43.5	-3.6	4.0
5190	41.6	-3.8	4.1
5210	38.3	-4.2	3.6
5230	37.1	-4.3	3.5
5250	35.8	-4.5	3.3
5270	35.9	-4.5	3.2
5290	35.3	-4.5	3.0
5310	33.7	-4.7	2.8
5330	31.9	-5.0	2.4
5350	31.6	-5.0	2.3
5370	34.3	-4.7	2.6
5390	36.7	-4.4	3.0
5410	40.4	-3.9	3.3
5430	41.1	-3.9	3.6
5450	43.6	-3.6	4.0
5470	42.3	-3.7	3.9
5490	43.5	-3.6	4.1

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Passive Test For WiFi2 Antenna(5.8G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5510	42.6	-3.7	4.1
5530	47.5	-3.2	4.7
5550	51.4	-2.9	5.1
5570	55.3	-2.6	5.6
5590	55.3	-2.6	5.7
5610	52.0	-2.8	5.6
5630	50.0	-3.0	5.6
5650	43.0	-3.7	5.1
5670	43.0	-3.7	5.0
5690	39.2	-4.1	4.5
5710	40.4	-3.9	4.5
5730	36.7	-4.4	3.9
5750	36.5	-4.4	3.7
5770	32.8	-4.8	3.3
5790	33.6	-4.7	3.5
5810	32.1	-4.9	3.5
5830	37.0	-4.3	4.3
5850	37.3	-4.3	4.2

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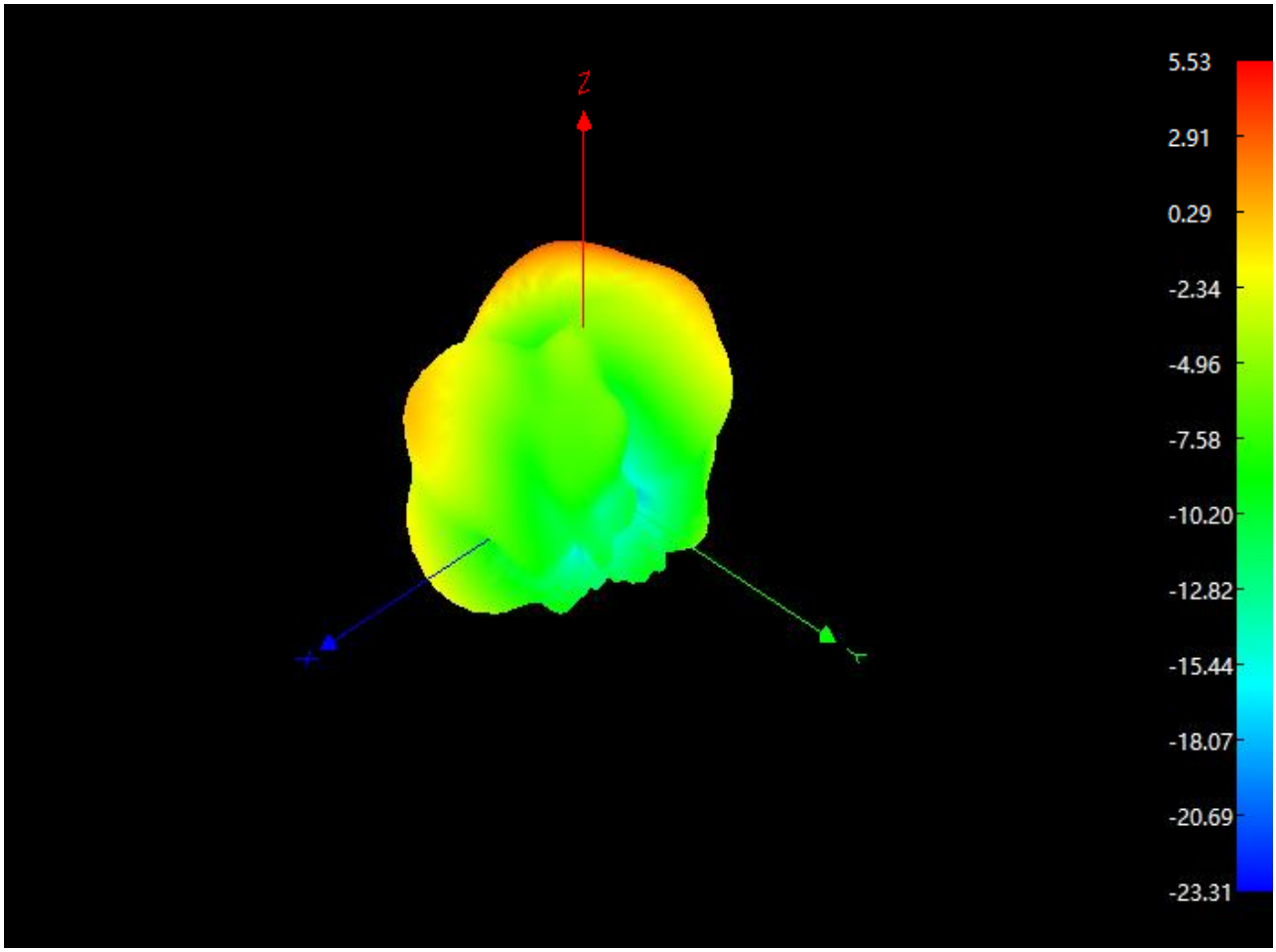
Radiation Pattern For WiFi2 Antenna（2400MHz）



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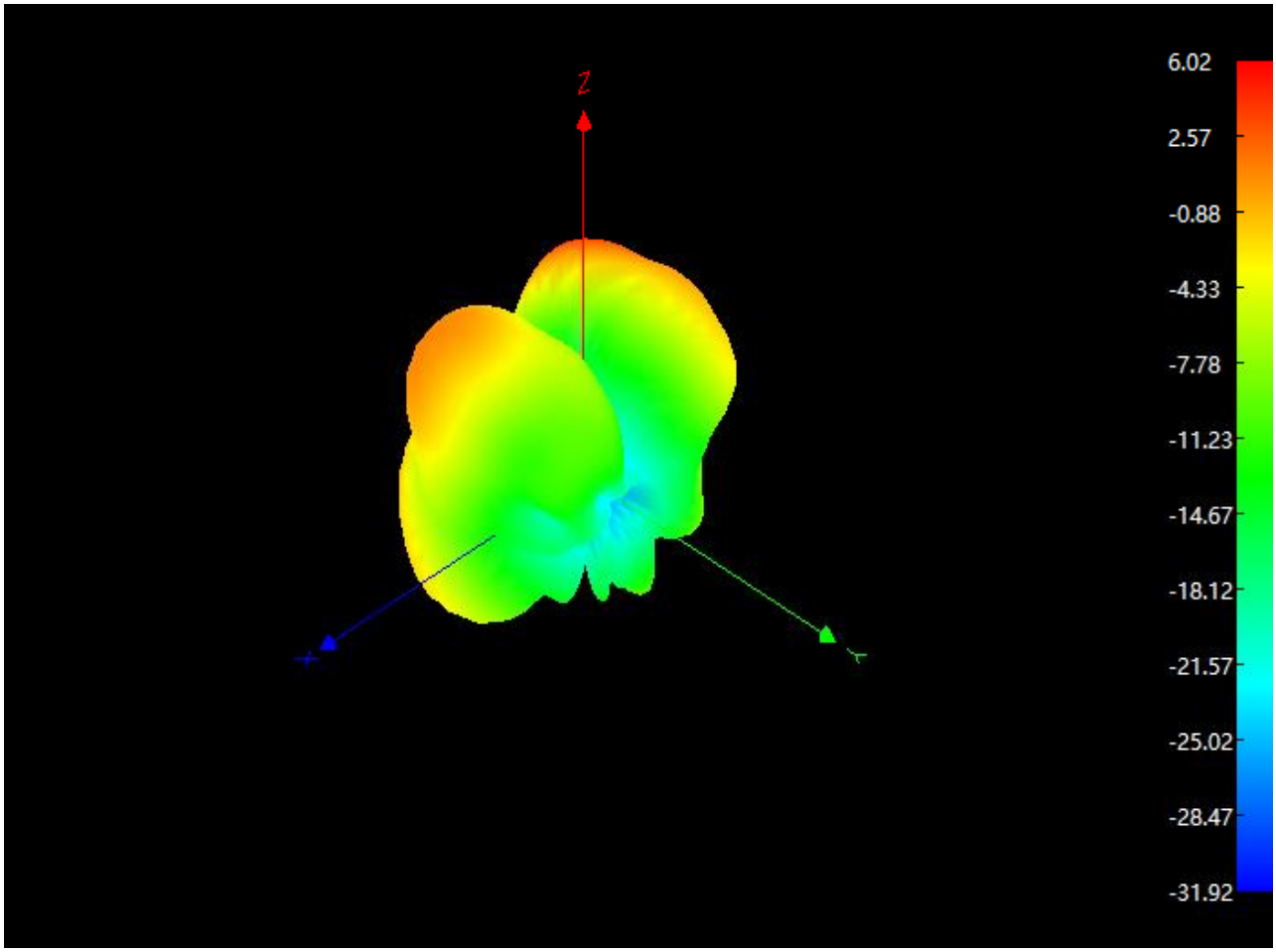
Radiation Pattern For WiFi2 Antenna（2450MHz）



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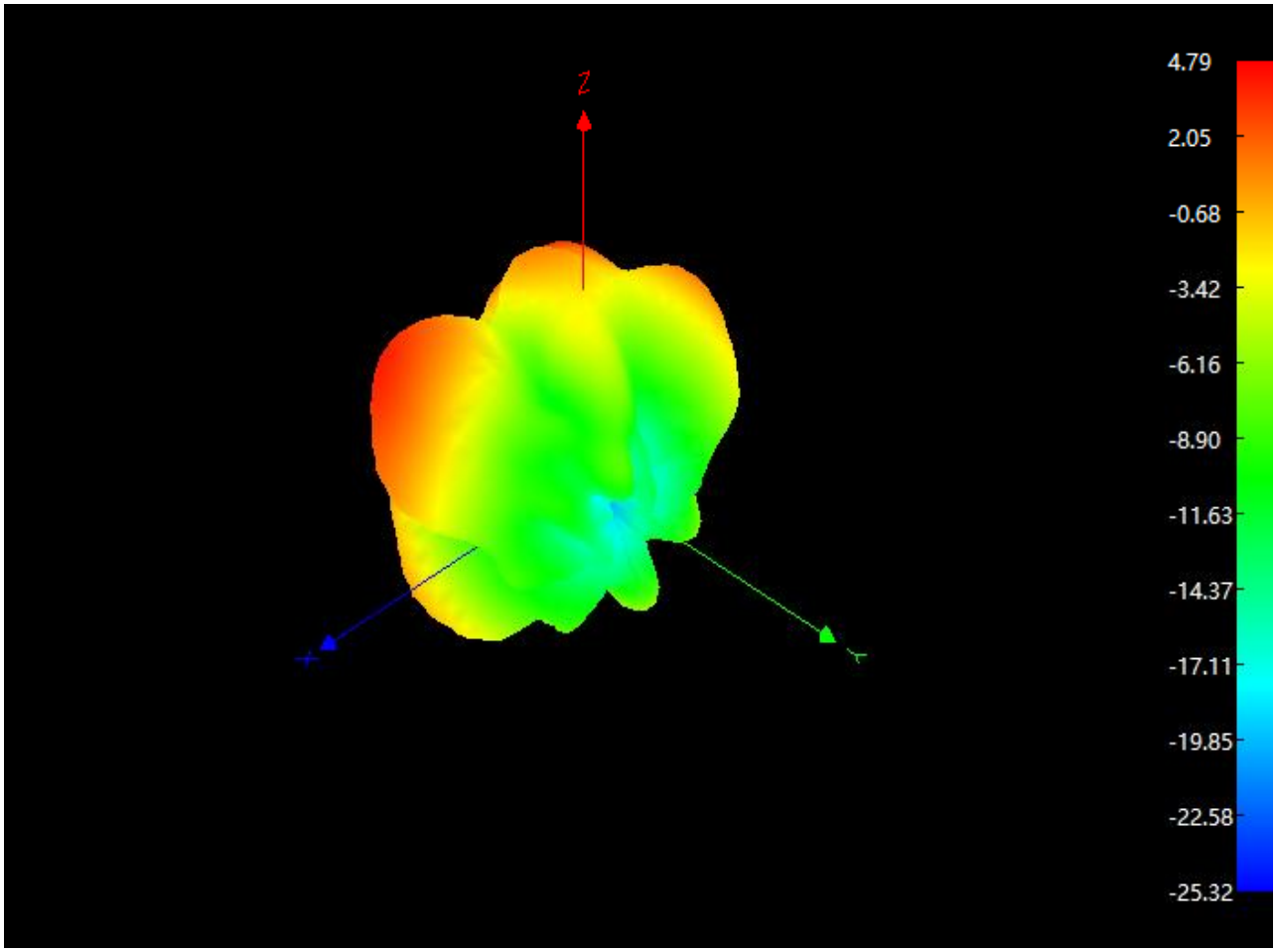
Radiation Pattern For WiFi2 Antenna（2500MHz）



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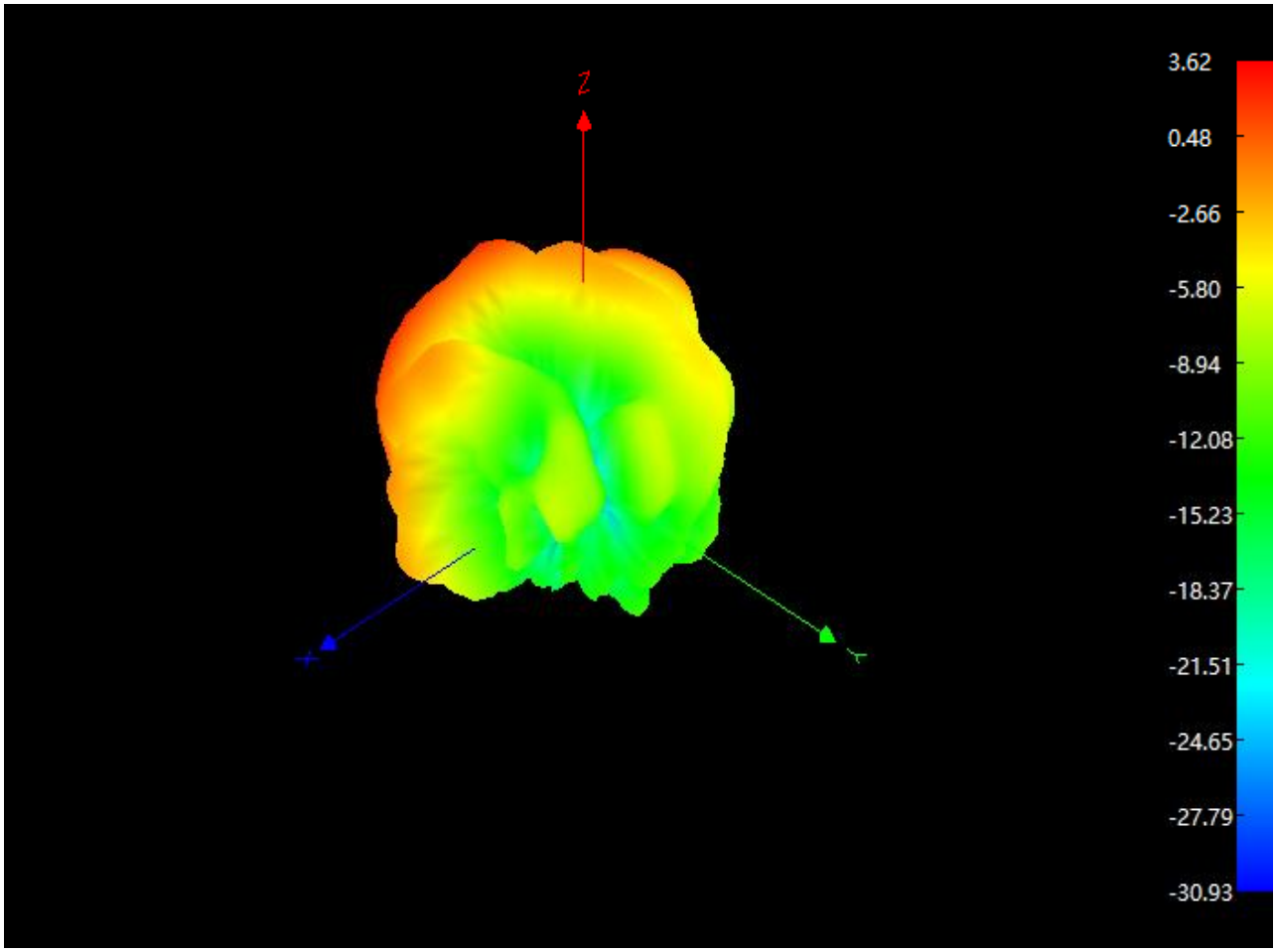
Radiation Pattern For WiFi2 Antenna（5150MHz）



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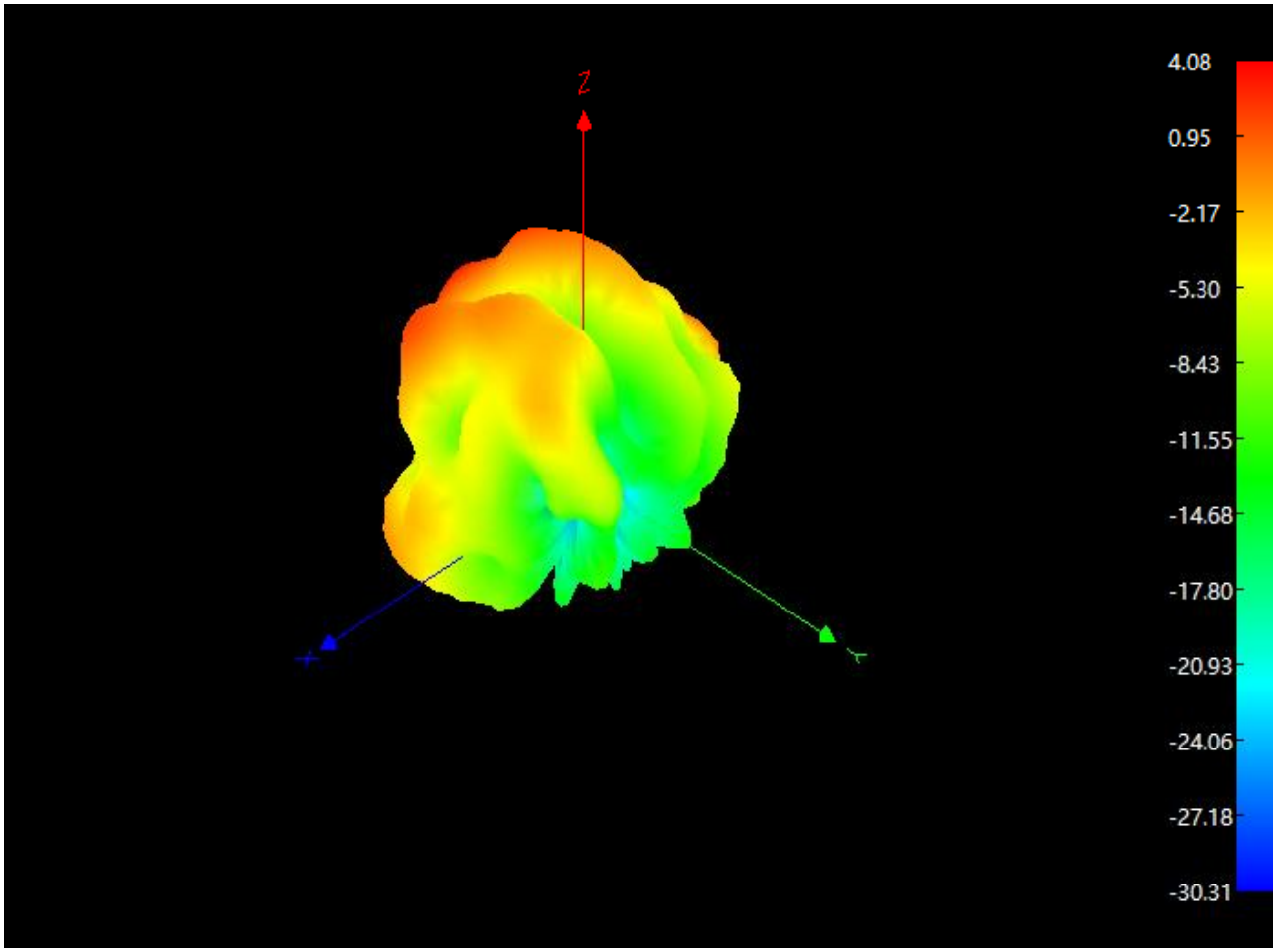
Radiation Pattern For WiFi2 Antenna（5510MHz）



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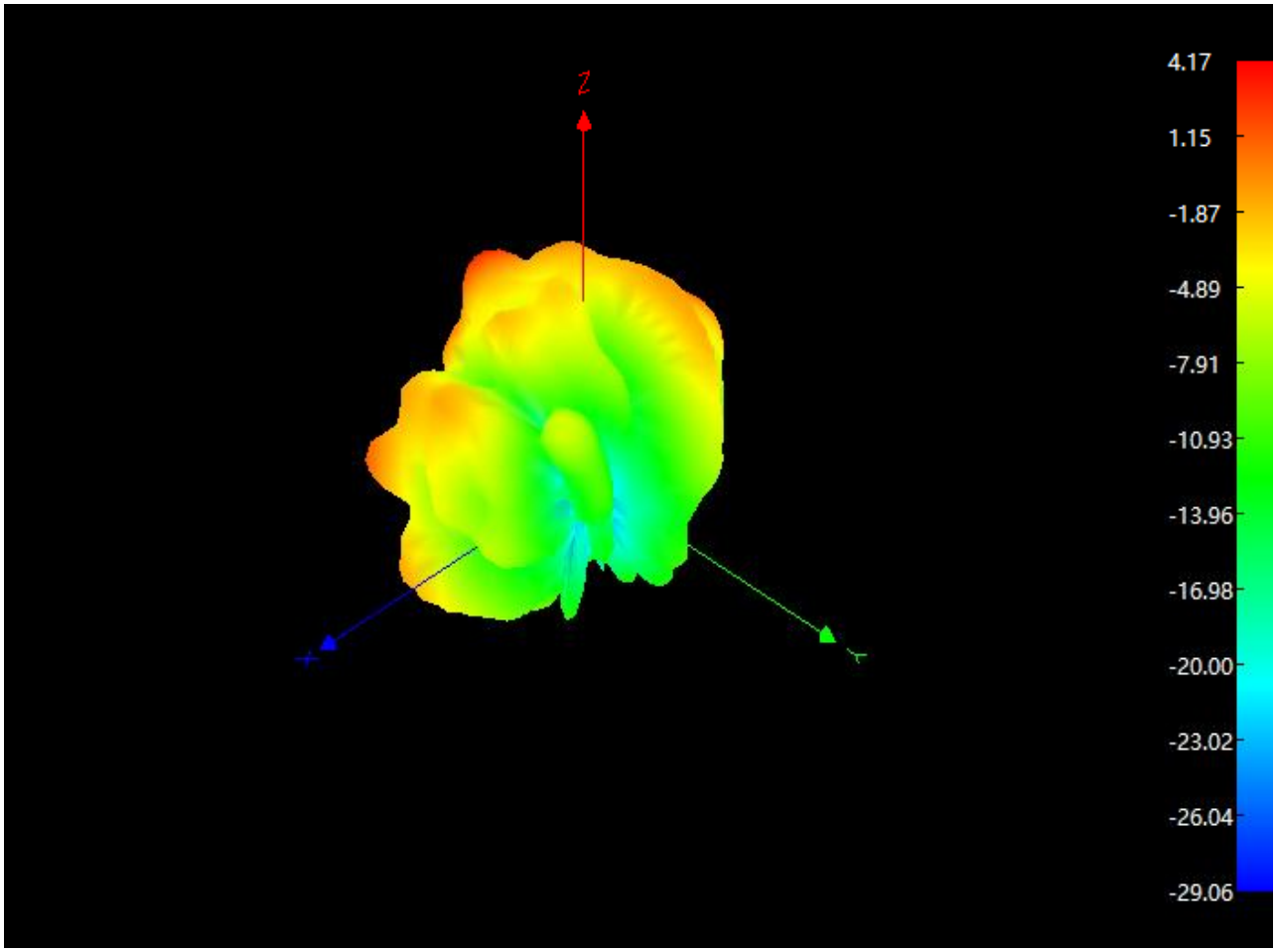
Radiation Pattern For WiFi2 Antenna（5850MHz）



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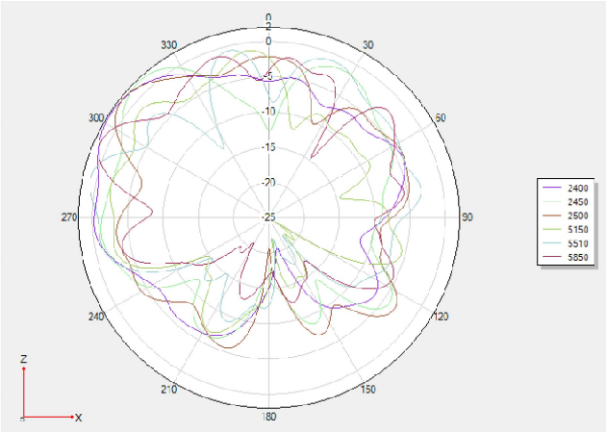
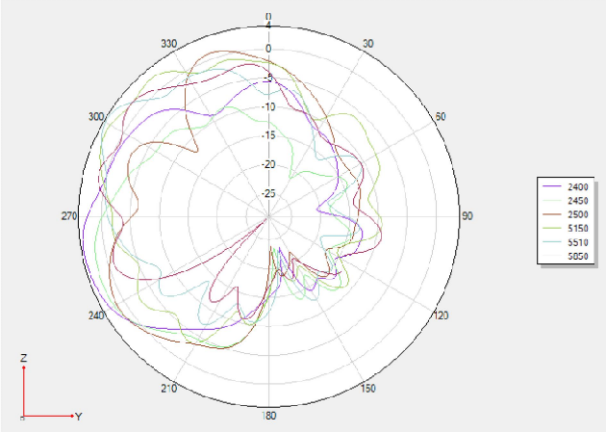
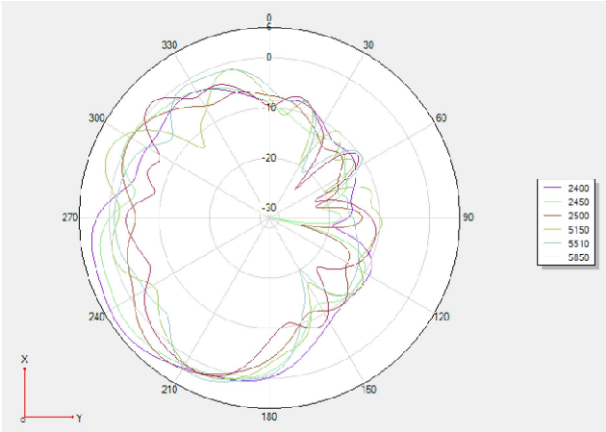
Radiation Pattern For WiFi2 Antenna

Phi 0°



Phi 90°



Theta 90°