



Dongguan YiJia Electronics Communication Technology Co.,Ltd.

SPECIFICATION FOR APPROVAL

Date 2024/02/01
File No 24020101
Revision 1.0

CUSTOMER: Guide Sensmart

CUSTOMER NO: ZG32


PART NAME: WIFI Antenna L=80mm MHF

SUPPLIER NO: YJT01.220.029.301A

Date:

Q “TY:

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A



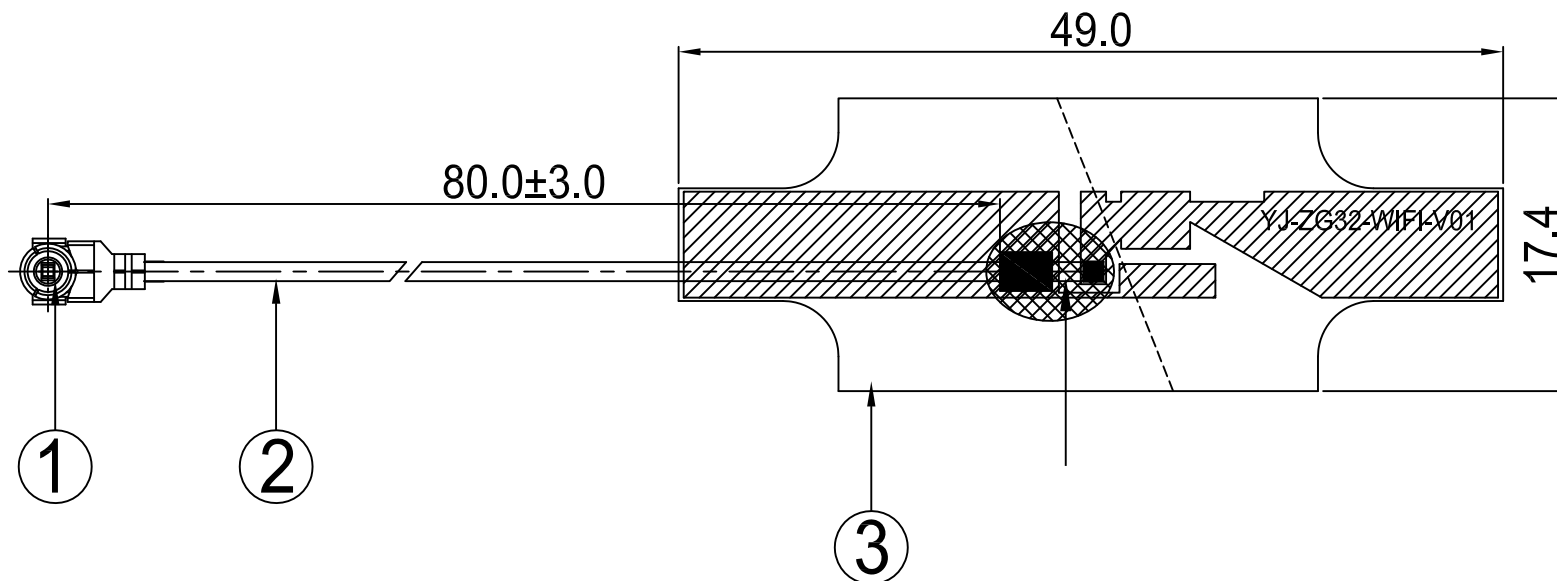
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RoHS
Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
△		2023-12-19



3	FPC	49.0*17.4mm	FPC	FPC11XXXA.P01	1
2	Coaxial Cable	O.D.1.13 Black Low loss	O.D.1.13	COA10001A.P02	1
1	Mini Connector	Au Plated 1	Cu	TER100XXA.P01	1
NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY



Dongguan YiJia Electronics Communication Technology Co.,Ltd. Tel :0769-82586086 Fax:0769-82586086

PART NAME: WIFI Antenna L=80mm MHF			
PART NO.: YJT01.220.029.301A		DATE: 2023-12-19	
APPROVED BY	CHECKED BY	DESIGNED BY	 Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
			UNITS: mm SCALE: 1/1 REVISION: A



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 3.0 Max@5.15-5.85GHz
Gain	3.3 dBi@2.4-2.5GHz 5.2 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear

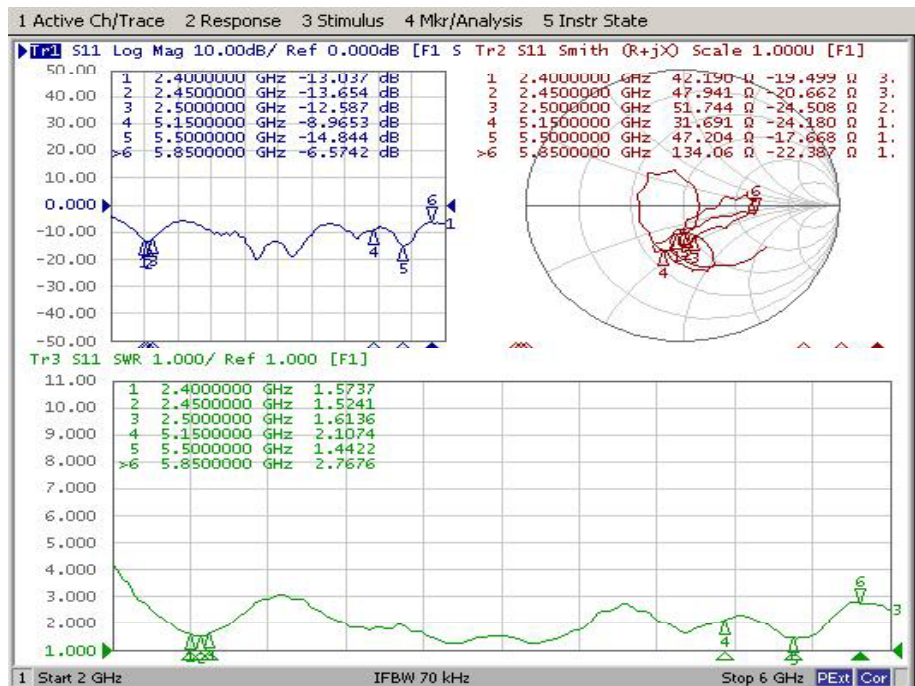
Physical Properties

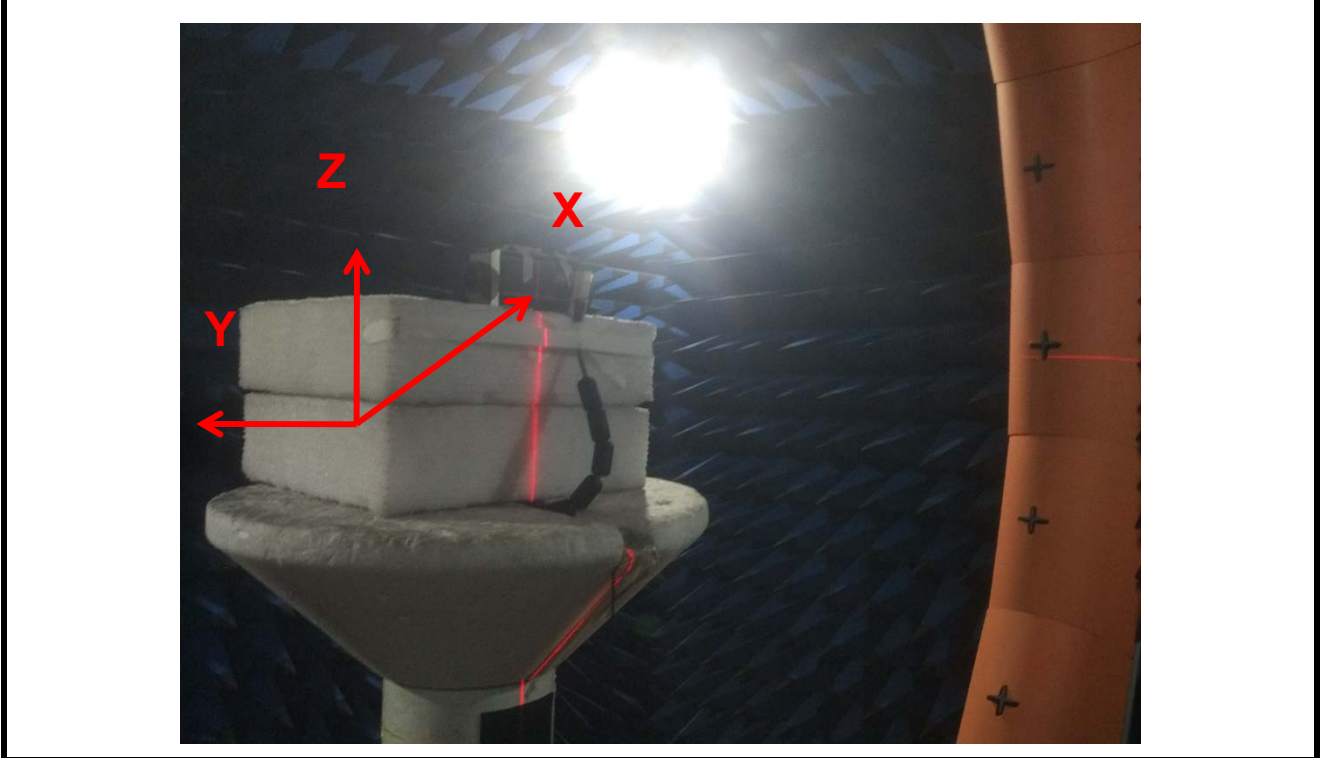
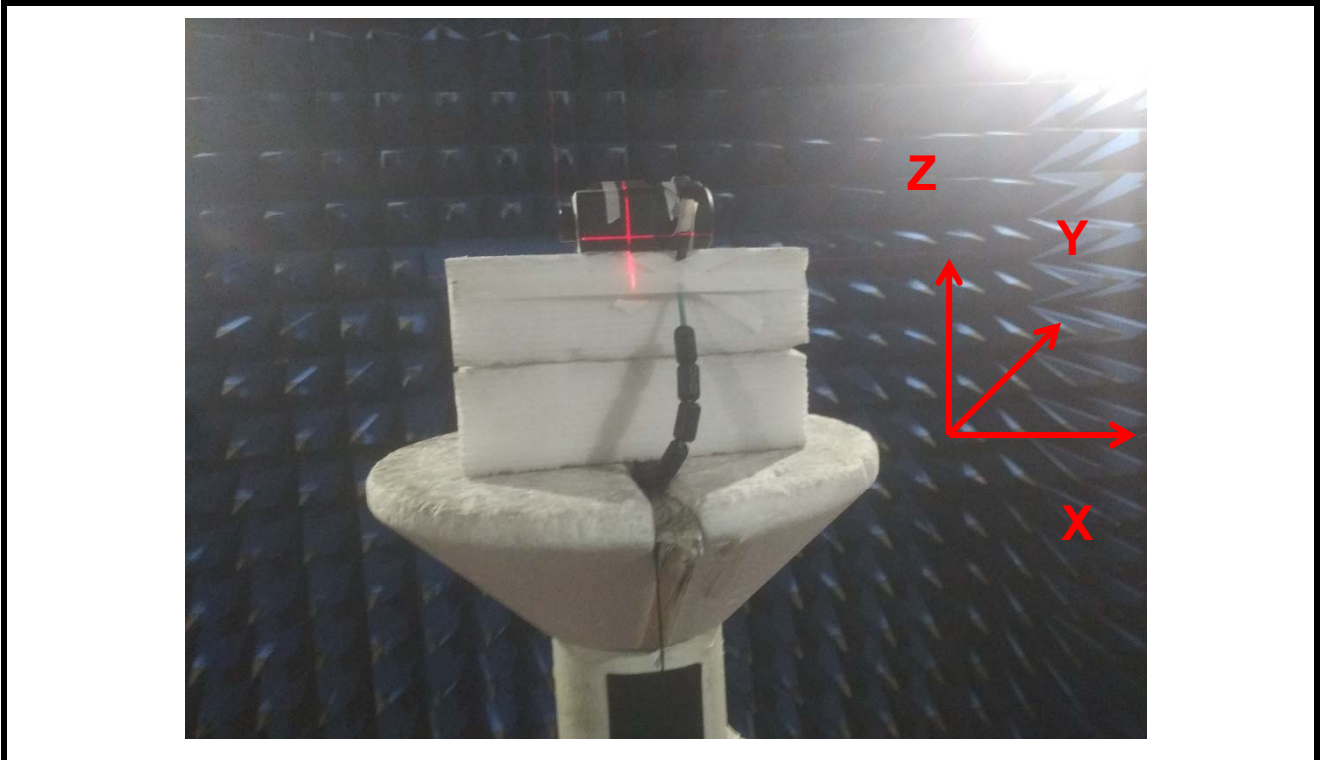
Connector	Generation 1IPEX
Cable Type	O.D.1.13mm
Cable Length	80mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%



Antenna Performance Test

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







Passive Test For WiFi Antenna(2.4G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	34.8	-4.6	1.9
2410	36.4	-4.4	2.3
2420	37.2	-4.3	2.5
2430	38.1	-4.2	2.7
2440	40.4	-3.9	3.0
2450	43.4	-3.6	3.3
2460	42.3	-3.7	3.1
2470	40.2	-4.0	2.6
2480	38.3	-4.2	2.1
2490	36.3	-4.4	1.8
2500	34.3	-4.7	1.5

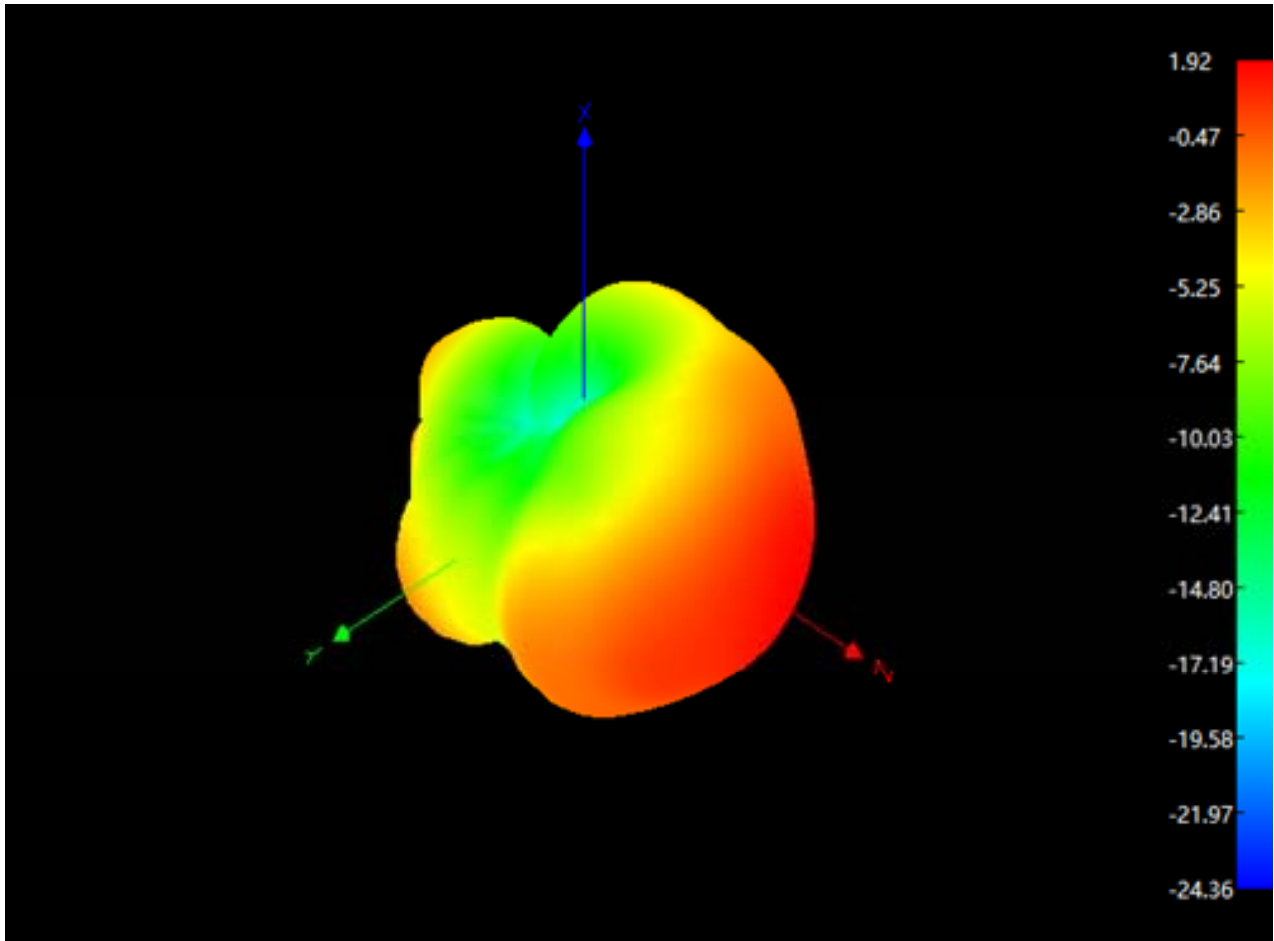


Passive Test For WiFi Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	47.6	-3.2	3.4
5200	45.2	-3.4	3.3
5250	44.1	-3.6	3.2
5300	42.4	-3.7	3.0
5350	41.7	-3.8	2.5
5400	43.3	-3.6	2.4
5450	39.5	-4.0	2.1
5500	37.1	-4.3	2.2
5550	44.1	-3.6	3.4
5600	44.6	-3.5	3.6
5650	39.3	-4.1	3.6
5700	42.9	-3.7	4.2
5750	47.7	-3.2	5.2
5800	46.5	-3.3	4.8
5850	45.9	-3.4	4.6

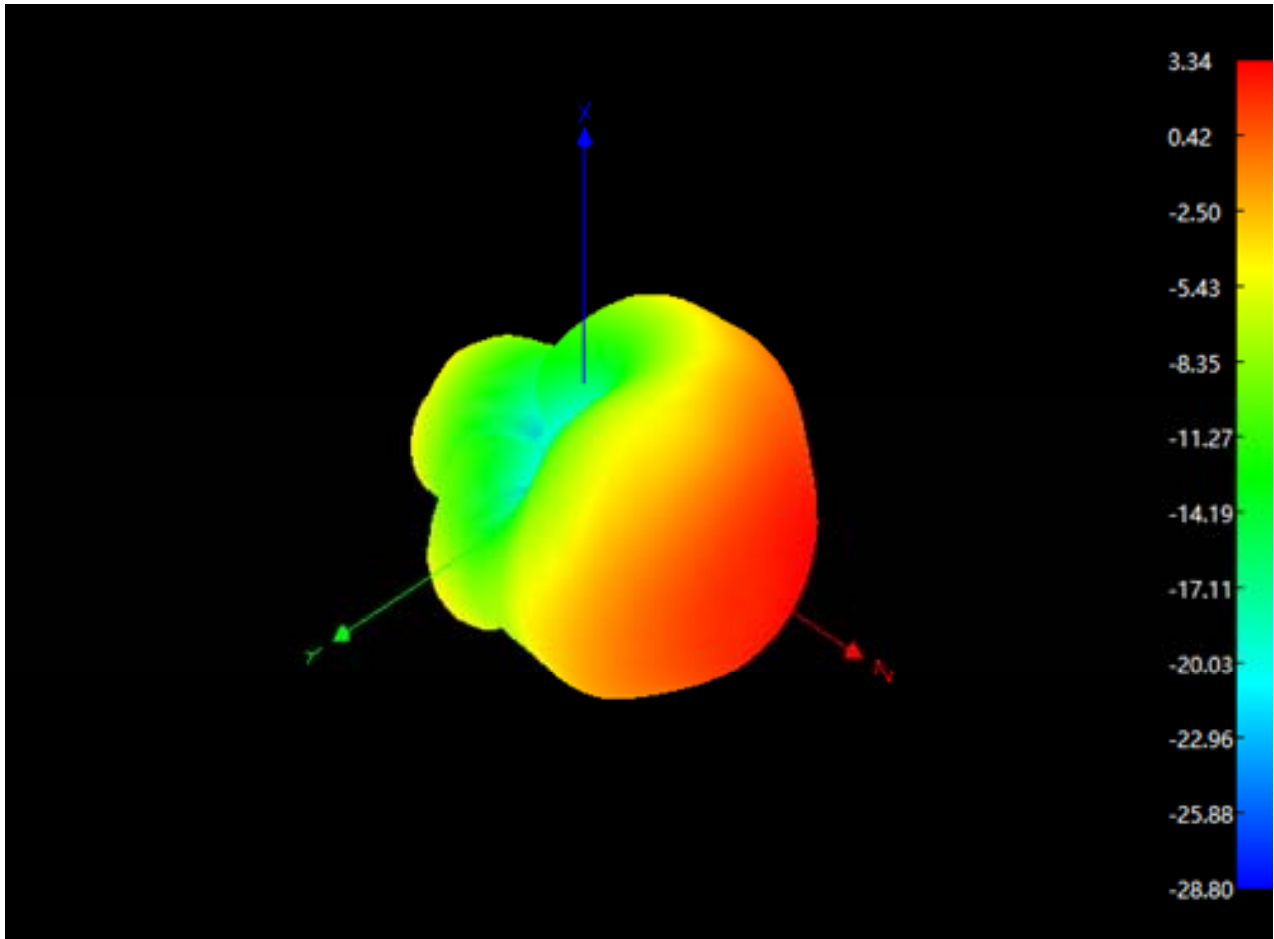


Radiation Pattern For WiFi Antenna (2400MHz)



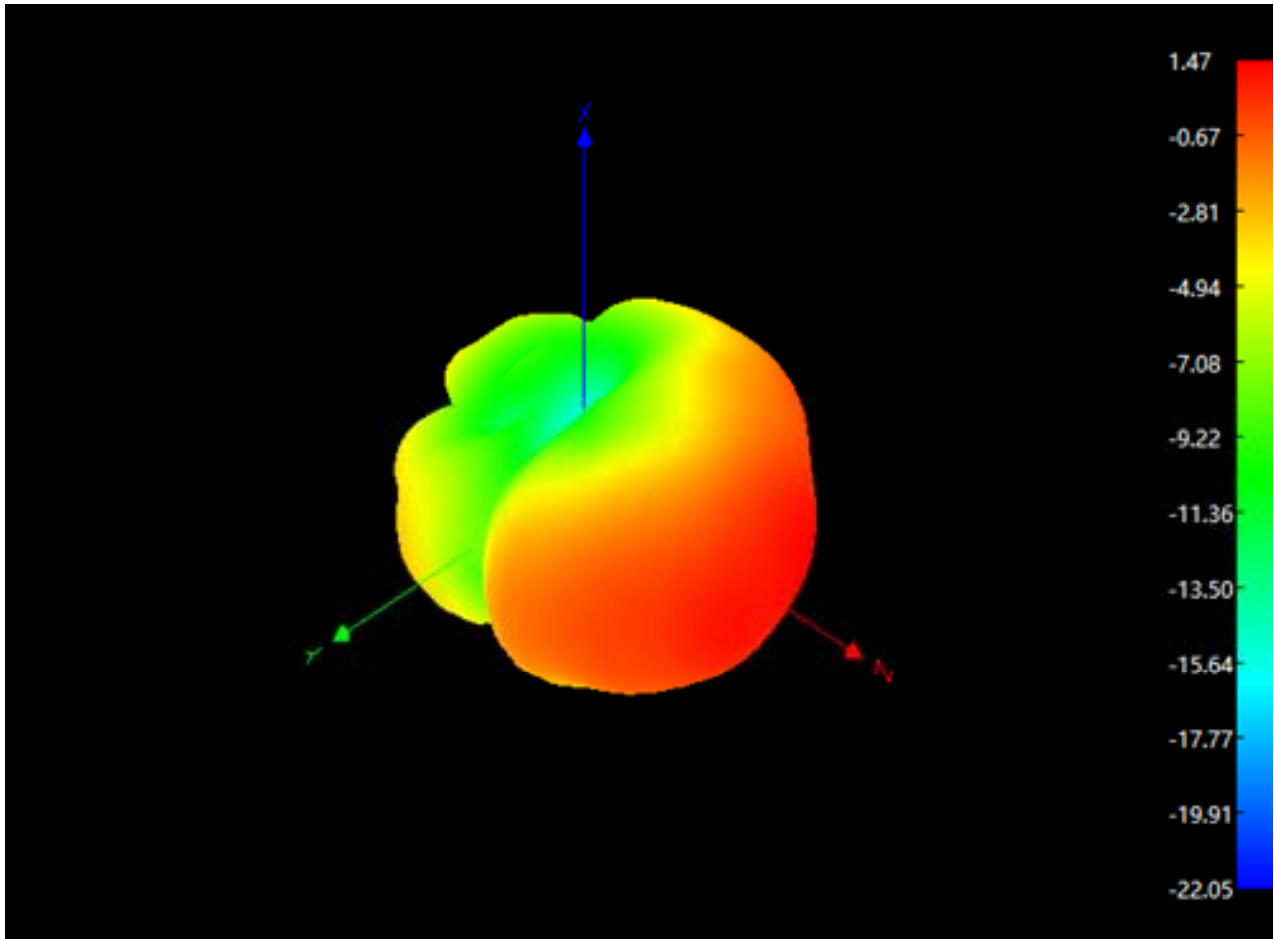


Radiation Pattern For WiFi Antenna (2450MHz)





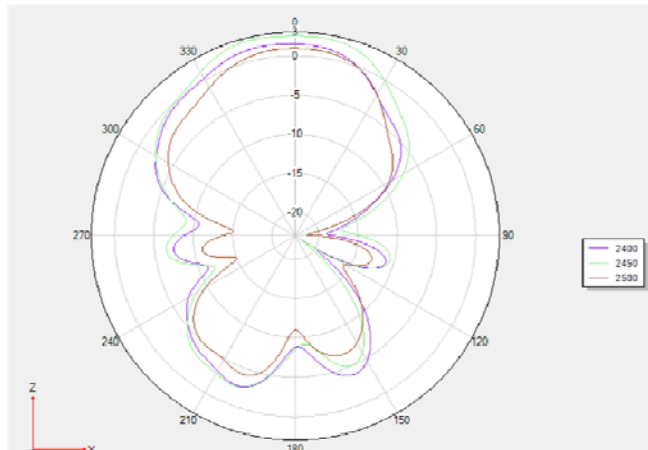
Radiation Pattern For WiFi Antenna (2500MHz)



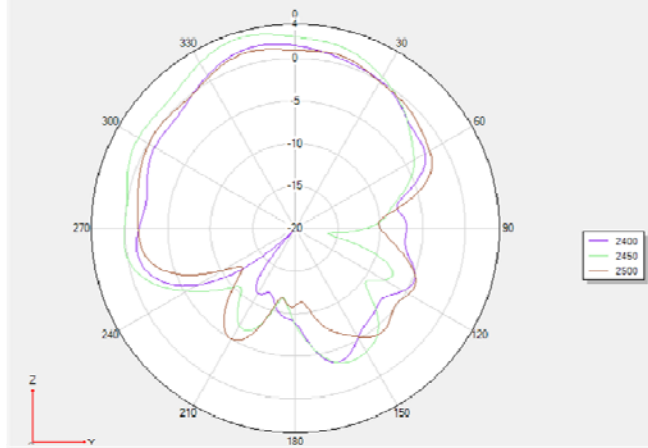


Radiation Pattern For WiFi Antenna

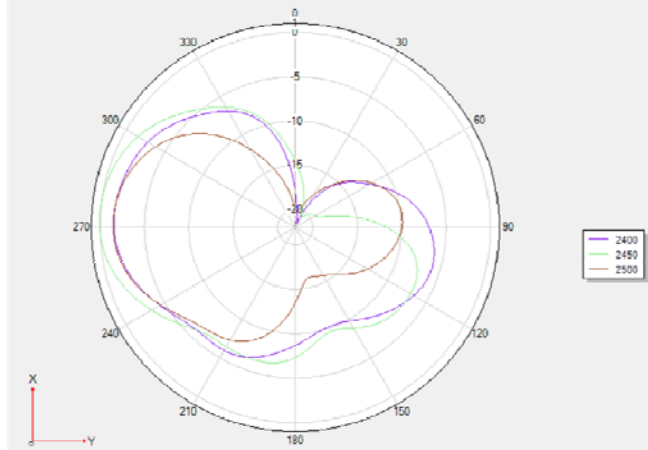
Phi 0°



Phi 90°

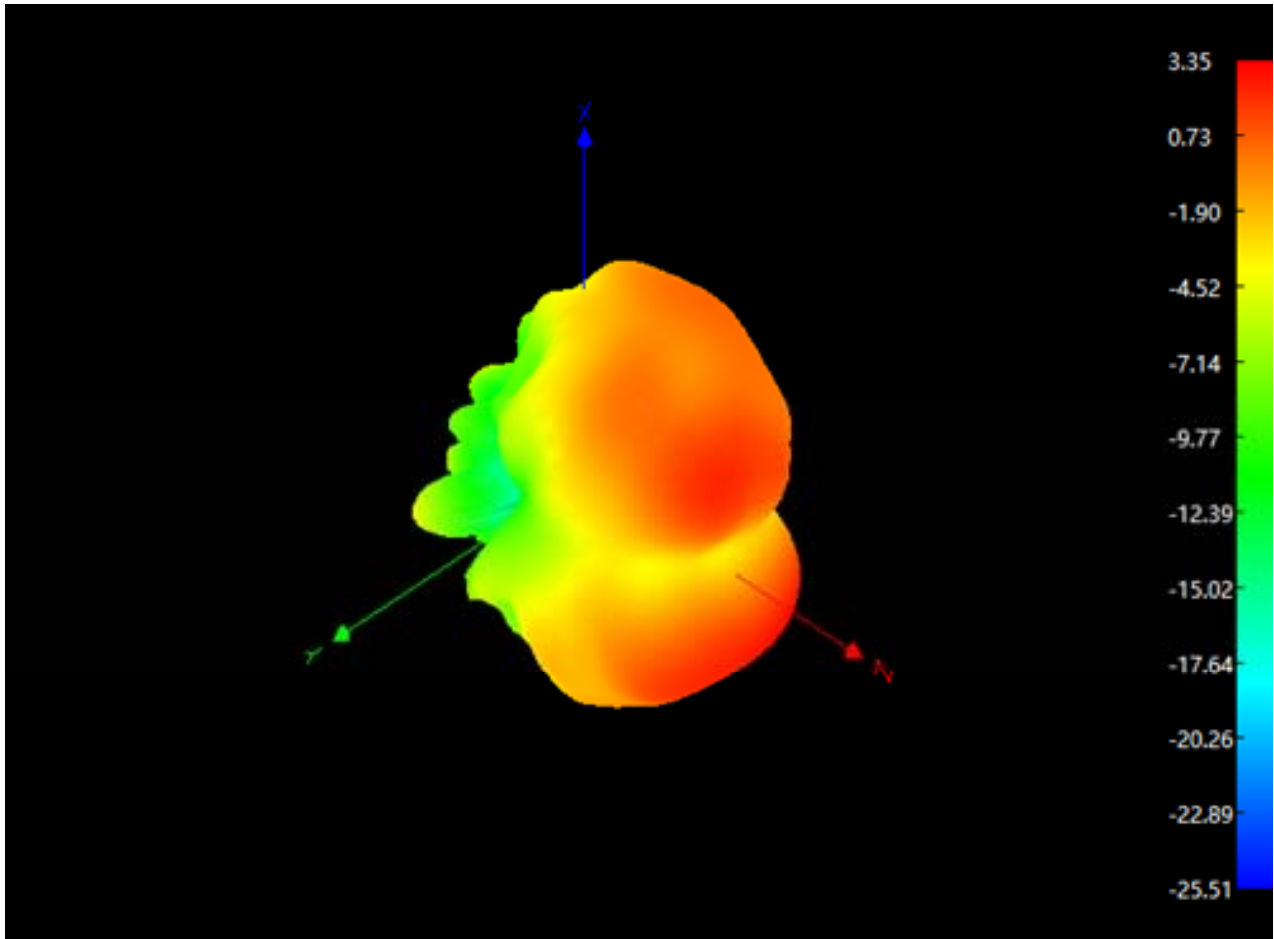


Theta 90°



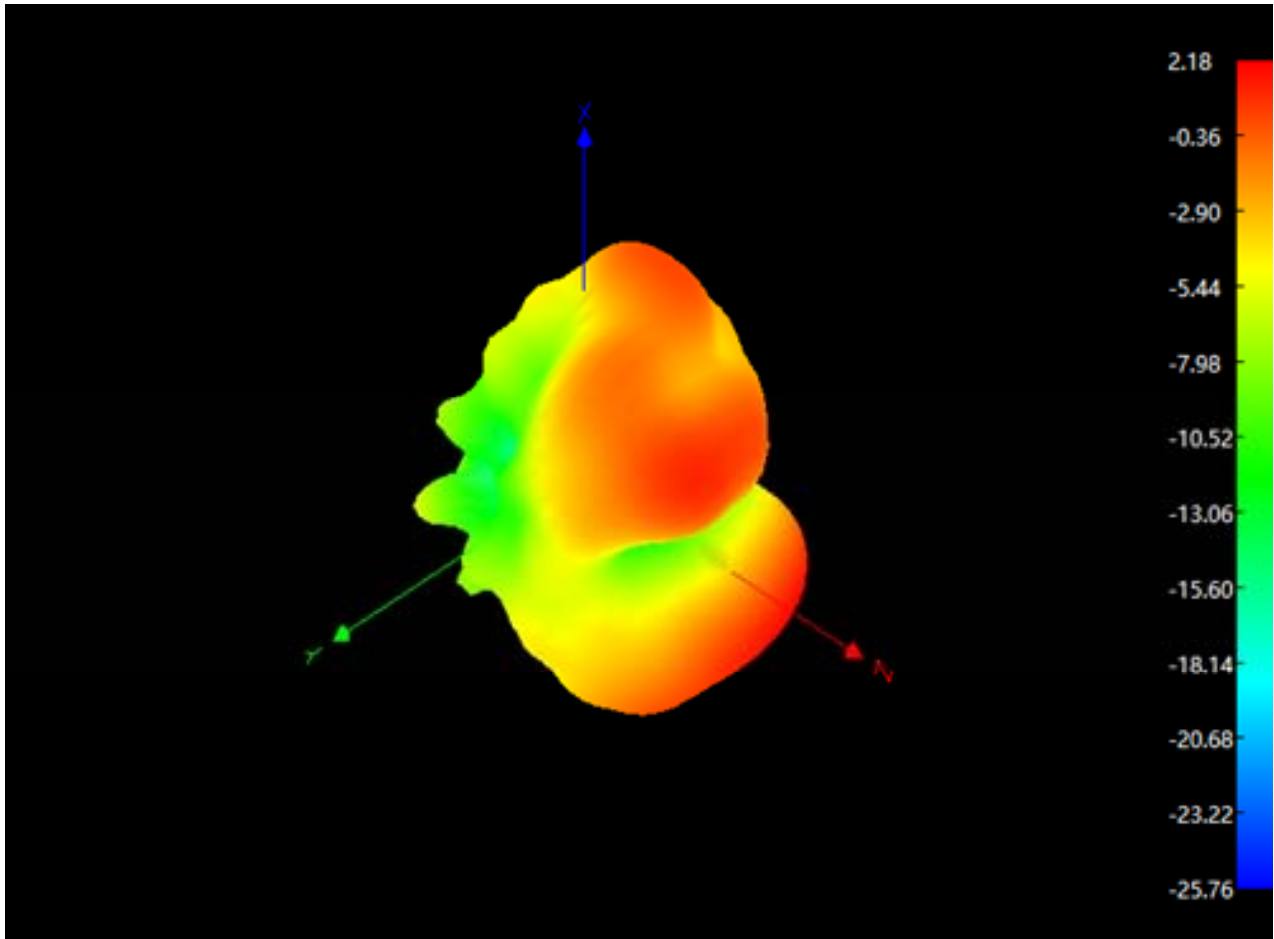


Radiation Pattern For WiFi Antenna (5150MHz)



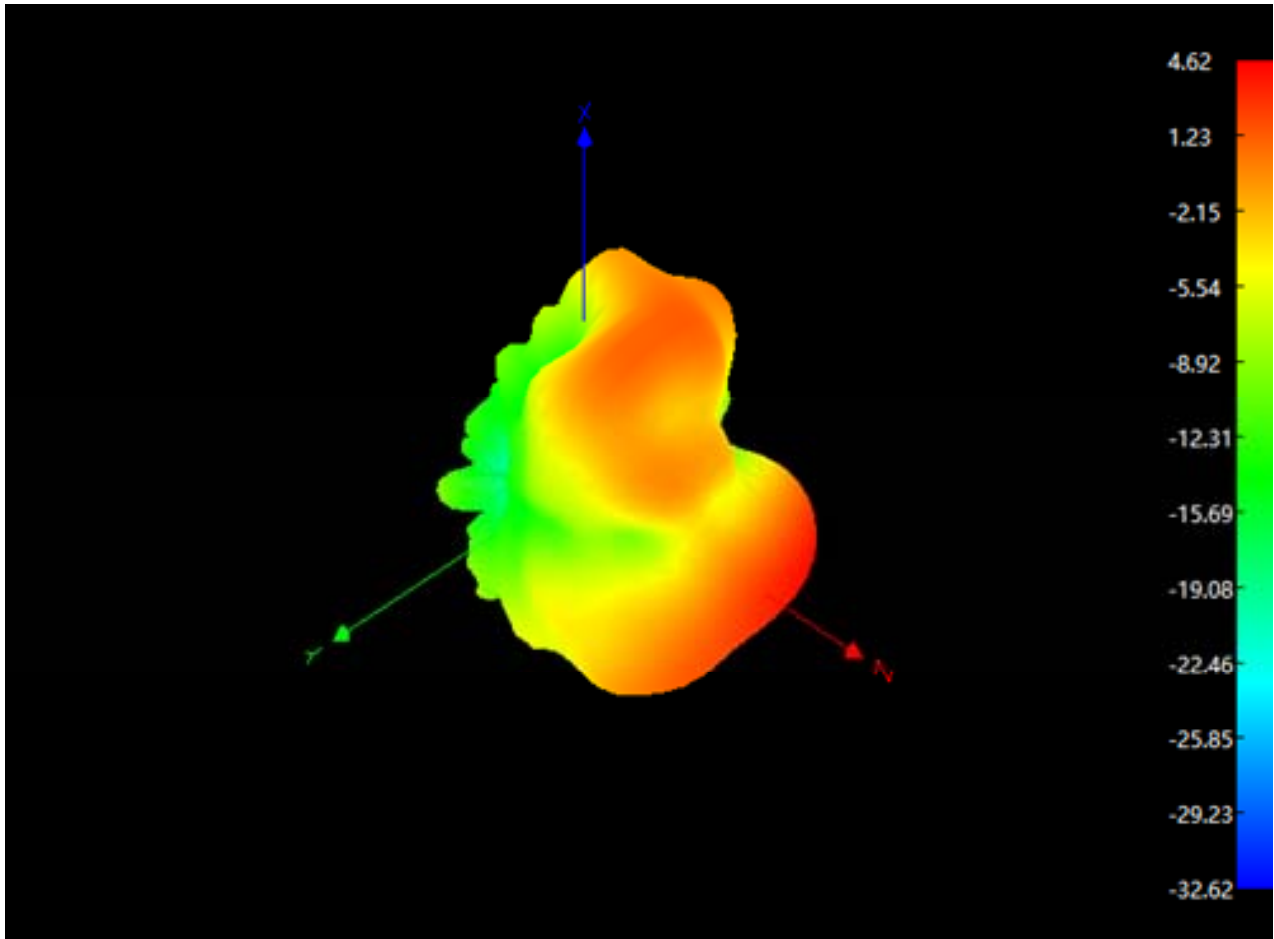


Radiation Pattern For WiFi Antenna (5500MHz)





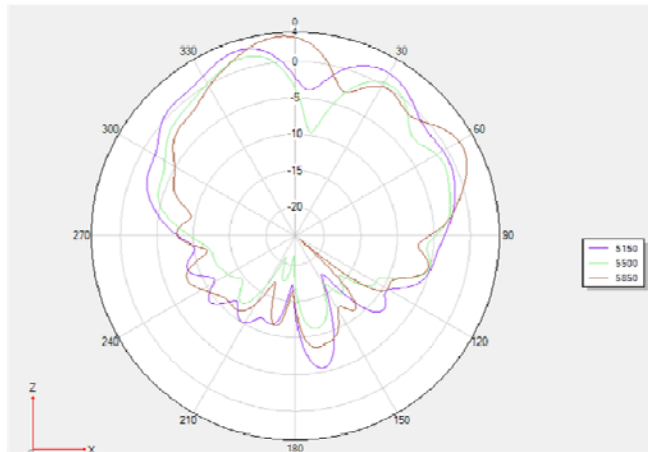
Radiation Pattern For WiFi Antenna (5850MHz)



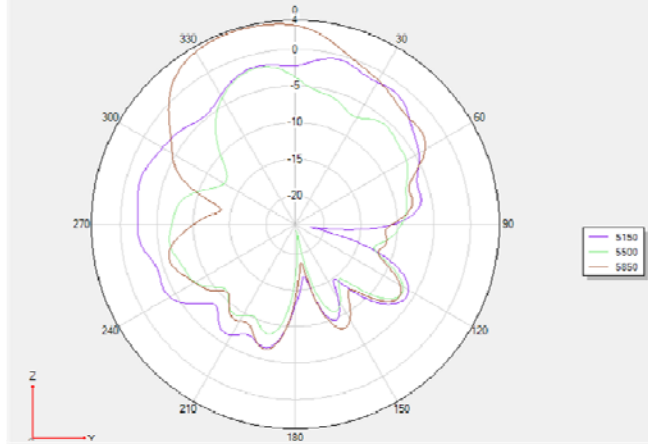


Radiation Pattern For WiFi Antenna

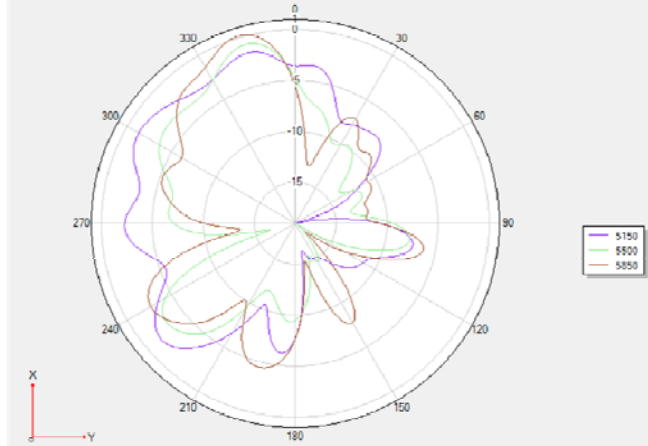
Phi 0°



Phi 90°



Theta 90°





Device





***WiFi
Antenna***



