承　　認　　書

SPECIFICATION FOR APPROVAL

客　　戶 CUSTOMER	Hansong(NanJing)Technology Ltd
日　　期 DATE	2015-08-19
品　　名 DESCRIPTION	Antenna
客 戶 料 號 CUSTOMER P/N	45-2-000146
成 品 編 號 Model No	RC1WFI0886A

Suzhou point positive electronic technology co.,ltd

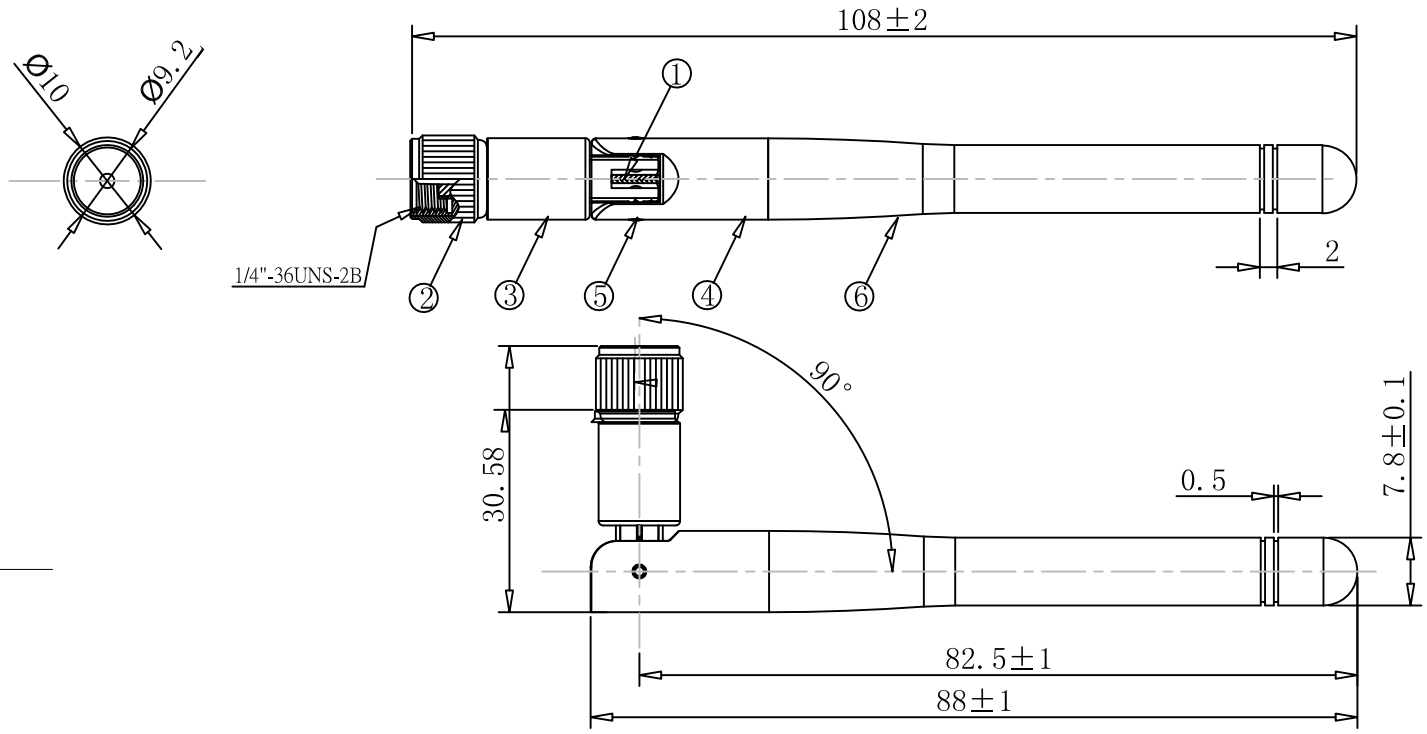
ADD ;No 3 XinLang Road ,Yinghu industrial Park, Wangting Town
Xiangcheng district Suzhou City
E_mail; sales@ppteco.com

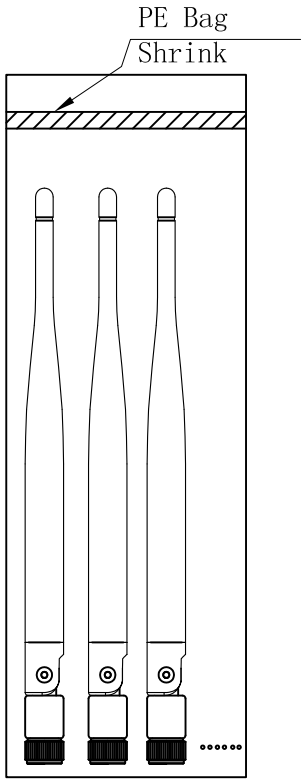
TEL：0512--66706846　FAX ：0512-65088773

SPECIFICATION

1.	Description	: Dipo Antenna
2.	Customer	: Hansong(Nanjing)Technology Ltd
3.	Model No.	: RC1WFI0886A
4.	Part No.	: 45-2-000146
5.	Standard	: Wifi & Bluetooth
6.	Antenna Profile	:
7.	Lead Length	: L:108MM
8.	Electrical Characteristics	
	Operating Frequency	: 2.4~2.5Ghz 5.15~5.85Ghz
	Antenna Type	: Dipo Ant
	Impedance	: 50 Ohm
		: Gain: 1.2382dBi for 2.4 ~ 2.5GHz band Gain: 3.4668dBi for 5.15 ~ 5.85GHz band
9.	Mechanical Characteristics	
	Connector	: RP-SMA
	Core	: N/A
10.	Raw Material	
	Coaxial Cable	: RG178 Coaxilal

REV	DATE	DESCRIPTION
A		New Issue





Packing: 6pcs

SPECIFICATION
1.Frequency Range: 2.4/5Ghz
2.Impendance:50Ω
3.VSWR：≤2.0
4.Polanization:Vertical
5.Radlation:Omni
6.Gain: 2 dBi

NO	PARTNAME	DESCRIPTION	Q'TY	Part P/NO
⑥	Connettor	SM3033 Reverse	1PCS	
⑤	Antenna Cover	L153mm*□13.0mm TPEE Black	1PCS	
④	Rivet	L5.1mm*□2.4mm POM Black	2PCS	
③	Antenna Base	L28.2*□13.0mm PBT Black	1PCS	
②	Antenna Base	L29.4*□13.0mm PC Black	1PCS	
①	Cable	RG-178 Cable 50Ω	1PCS	

XX.	±5
X.	±3.0
.X	±1.0
.XX	±0.5
.XXX	±0.1

CUSTOMER'S SINGATURE

APPROVED: Roy
CHECKED: Tak
DRAWING: Saint

CUSTOMER: Hansong(Nanjing)Technology Ltd
PART NO : 45-2-000146
PARTNAME: 2.4/5Ghz ANT
P/NO : RC1WFI0886A

REV	UNIT	FILE :
A	m/m	SHEET : 1/1

PoinTPositive

Antenna Measurement Report

- Model: Dipo Antenna
- Manufacture：Suzhou point positive electronic technology co.,ltd
- Series Number：QTKOTAPR00321
- Antenna Type:

  WLAN 802.11 a/b/g: Antenna1 & Antenna 2

  Bluetooth: Antenna3
- Data：2023/05/15

Outline Summary

- Test Environment and Equipment
- Test Data of Antenna:

Test Result : Efficiency & Peak Gain

Test Result : 3D Radiation Pattern Test

Taet Laboratory:

Name:**suzhou Laboratory**

Address:No.99 Hongye RD.Suzhou Industrial Park Loufeng Hi-New-Tech Development Area,Suzhou,China

The test results relate only to the samples tested.

Test Environment and Equipments

The Gain, Efficiency, Directivity and 3D Pattern

Shanghai EM-Testing Co., Ltd.
https://www.em-testing.com/

Frequency Range :

WLAN 802.11 a/b/g: 2.40~2.50 & 5.125~5.85 GHz

Radiation Pattern Test System :

The Radiation Pattern Test System(EMT24)
The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 1 &2). when viewed from the door of the chamber.

The axis arrangement is shown in Fig. 3

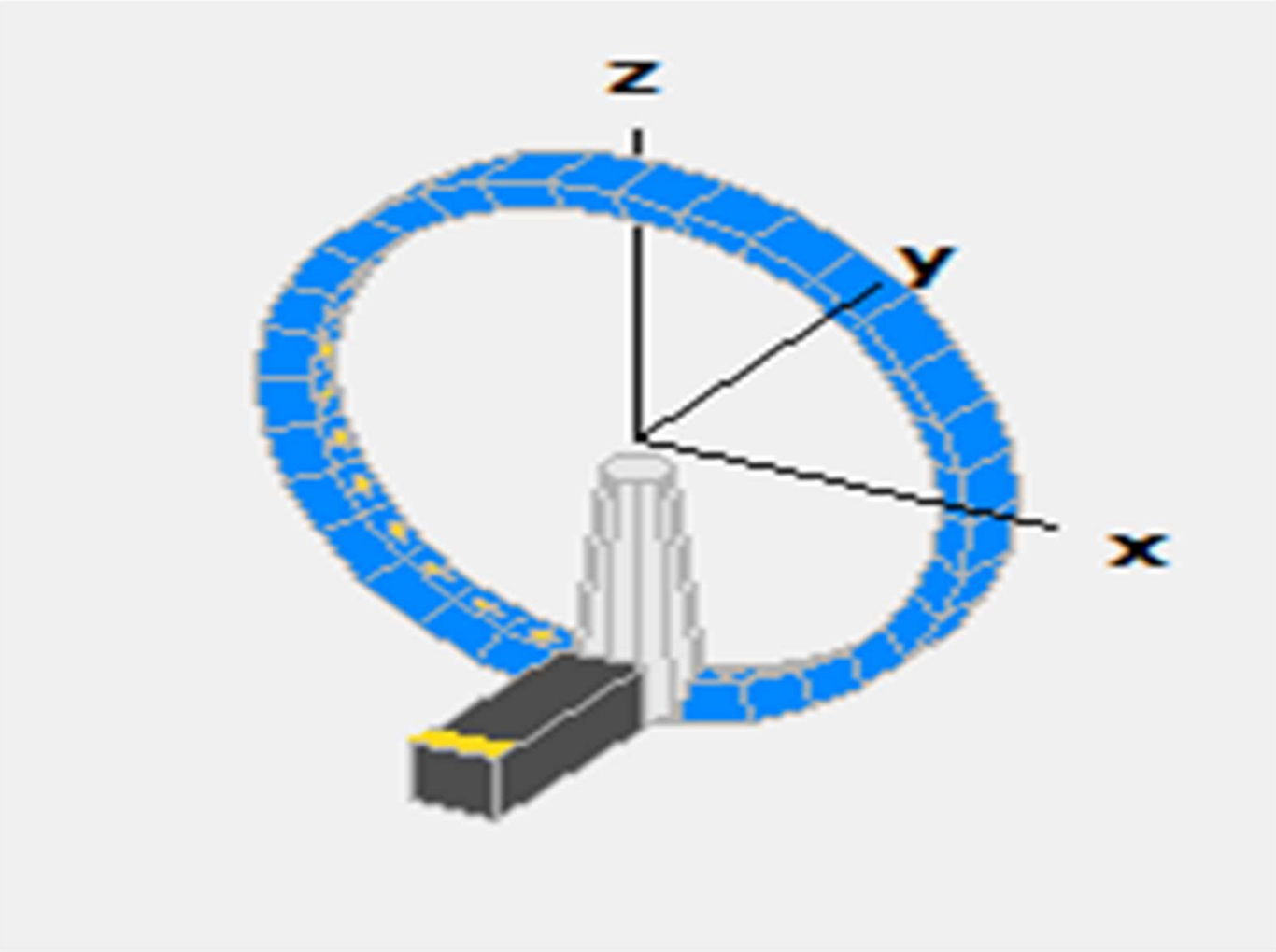
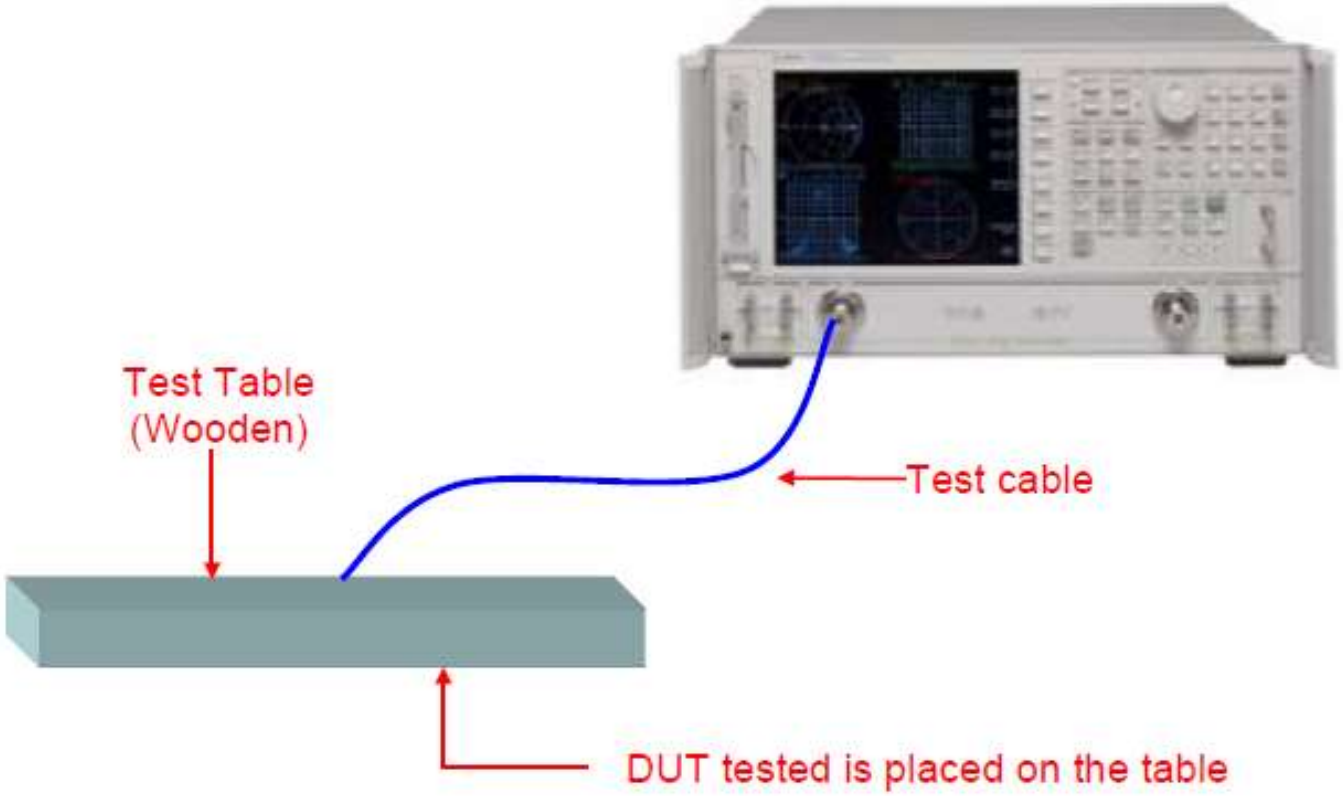


Fig. 3

Test Environment and Equipments

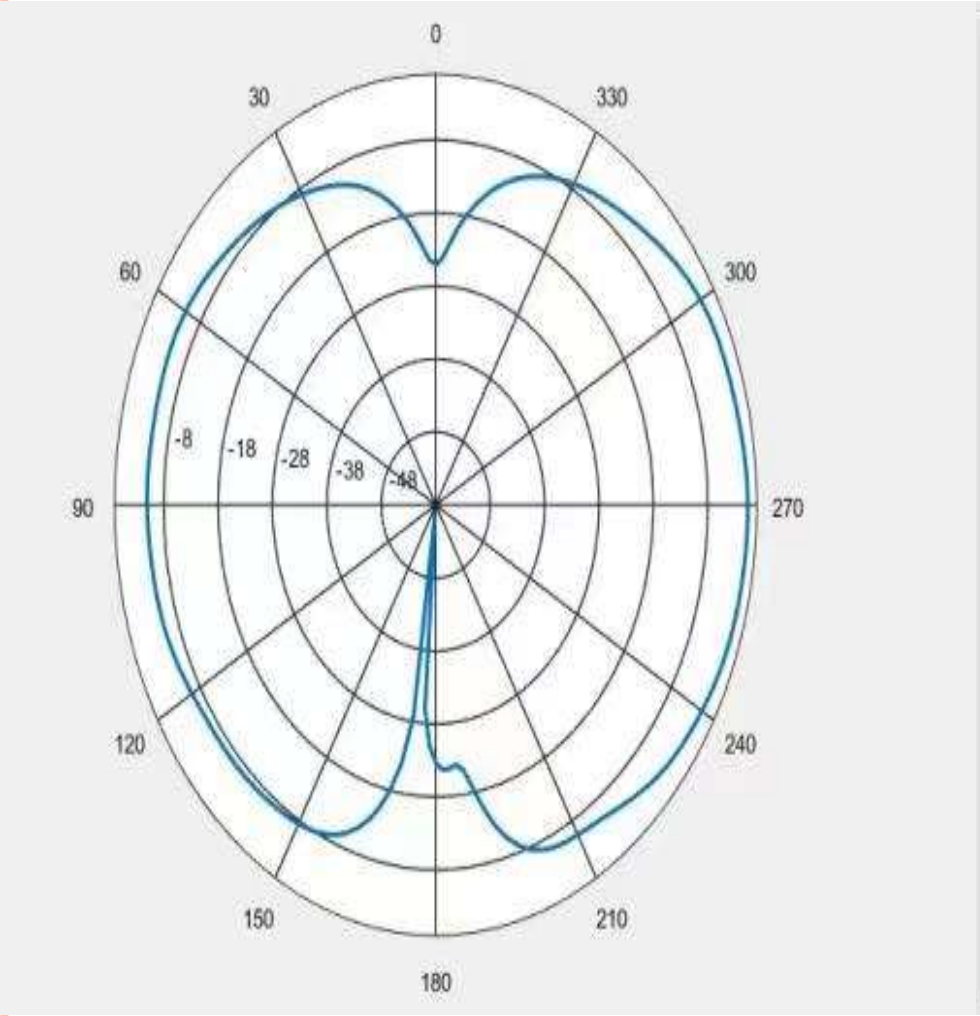
S-Parameter test

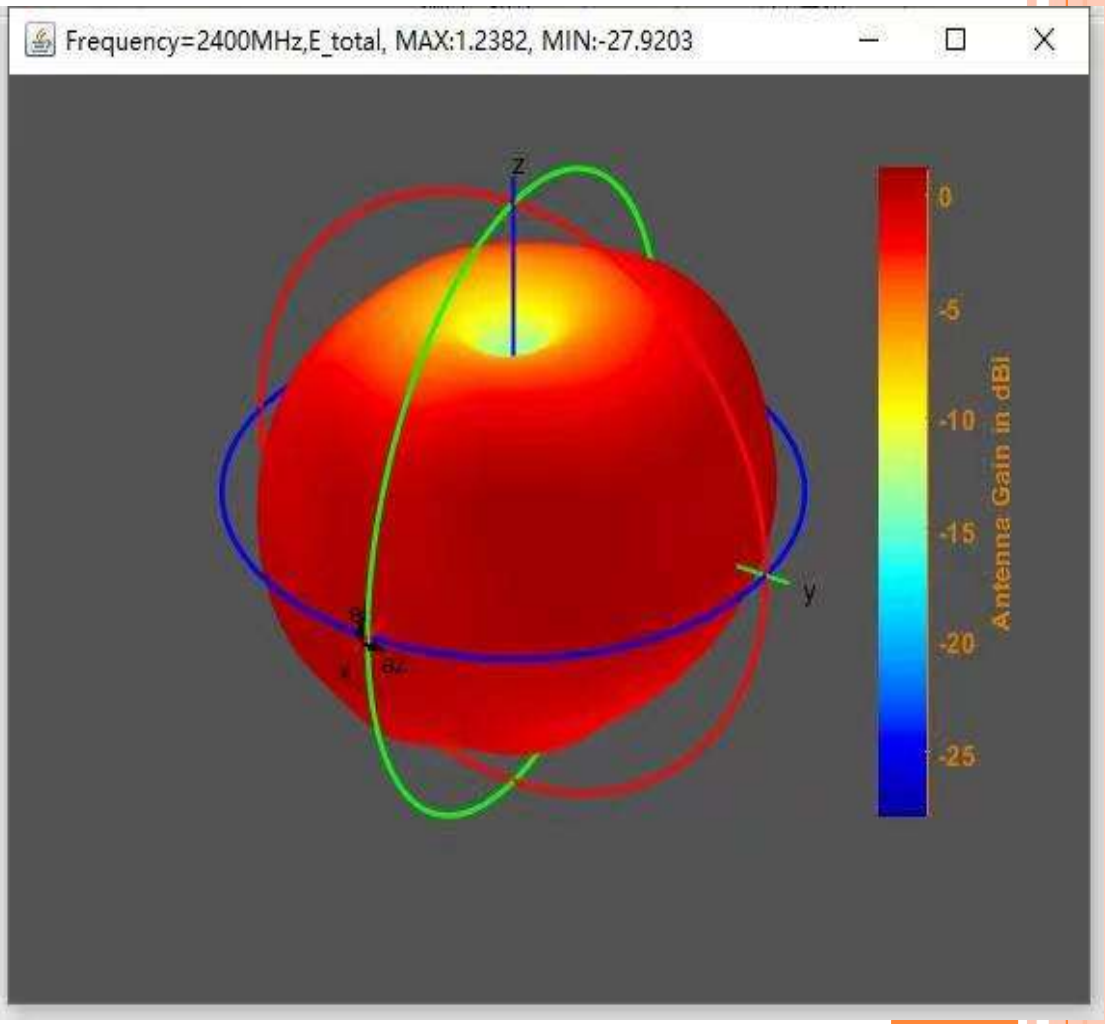
- Network Analyzer
- Testing range from 30KHz to 8.5GHz



Test Result : 2D & 3D Radiation Pattern

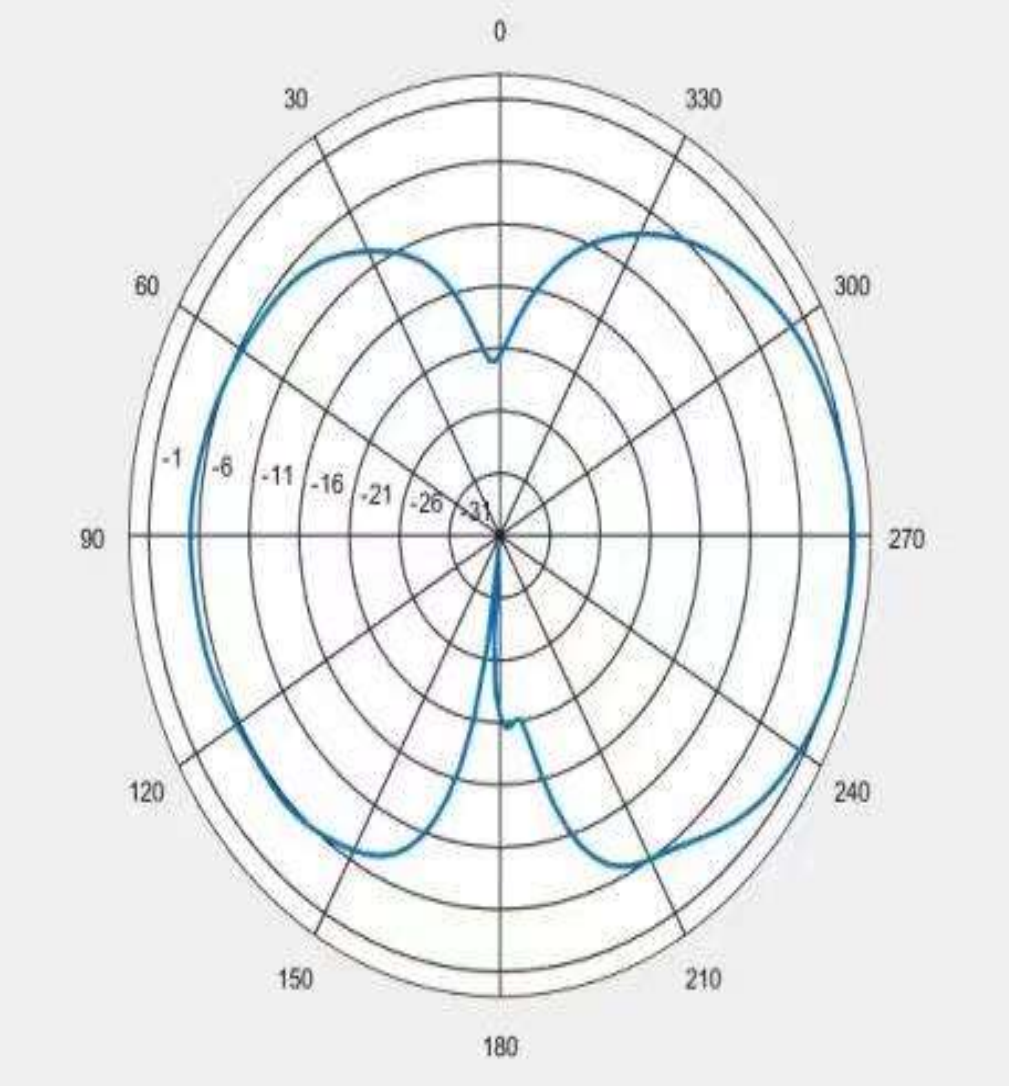
Antenna 1 2.4GHz

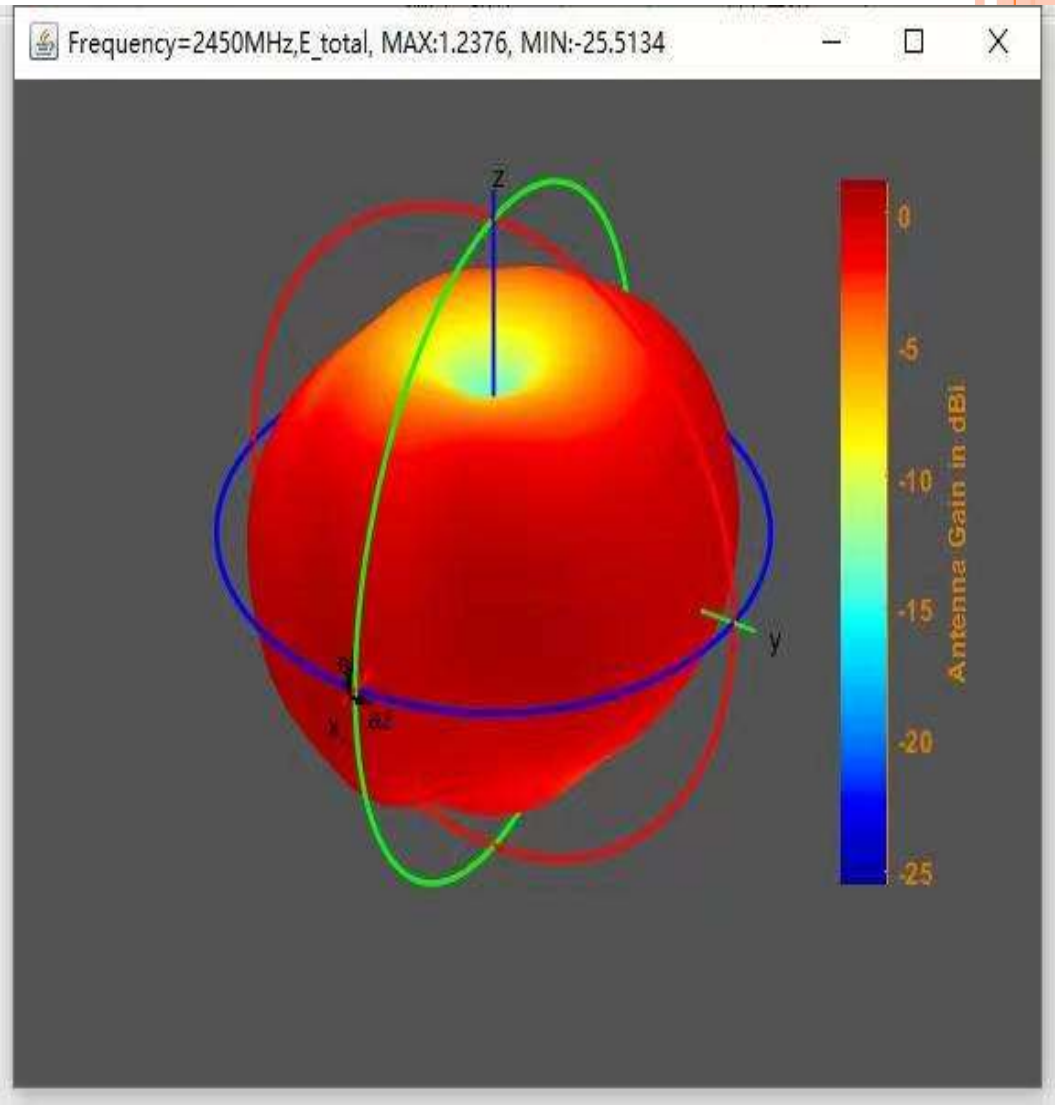




Test Result : 2D & 3D Radiation Pattern

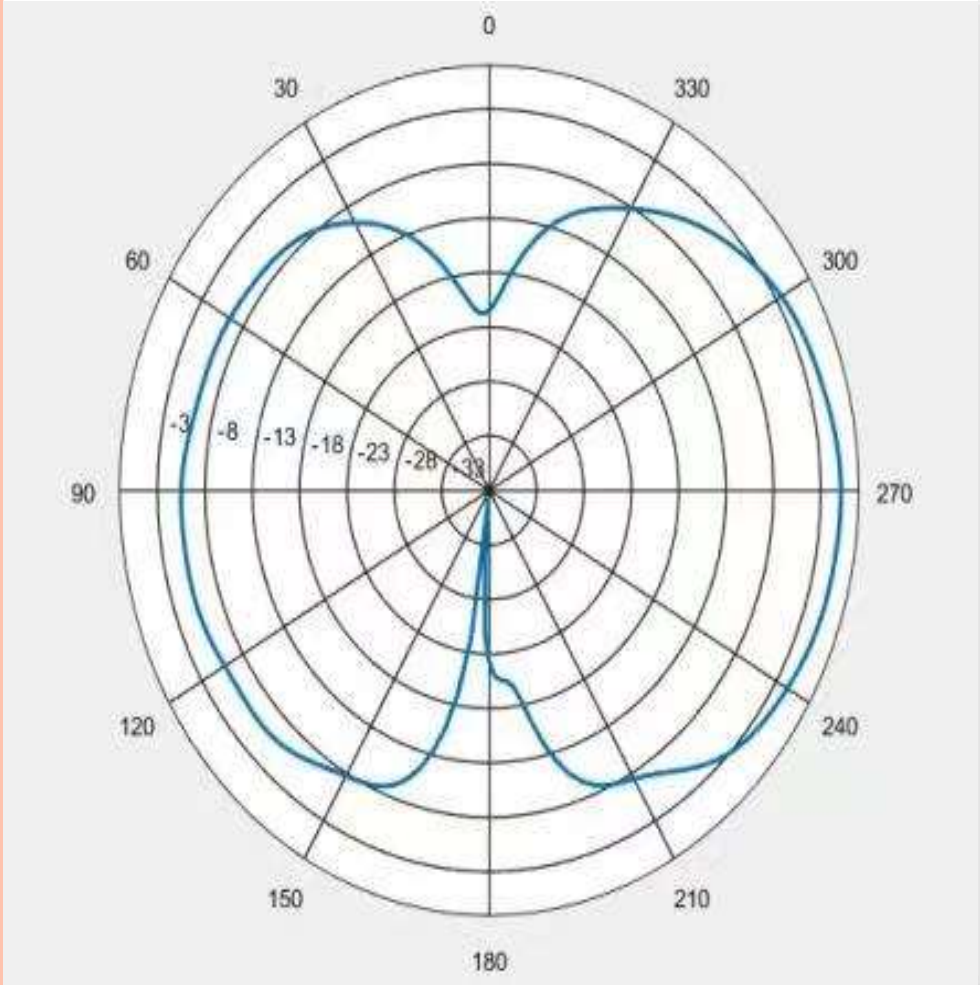
Antenna 1 2.45GHz

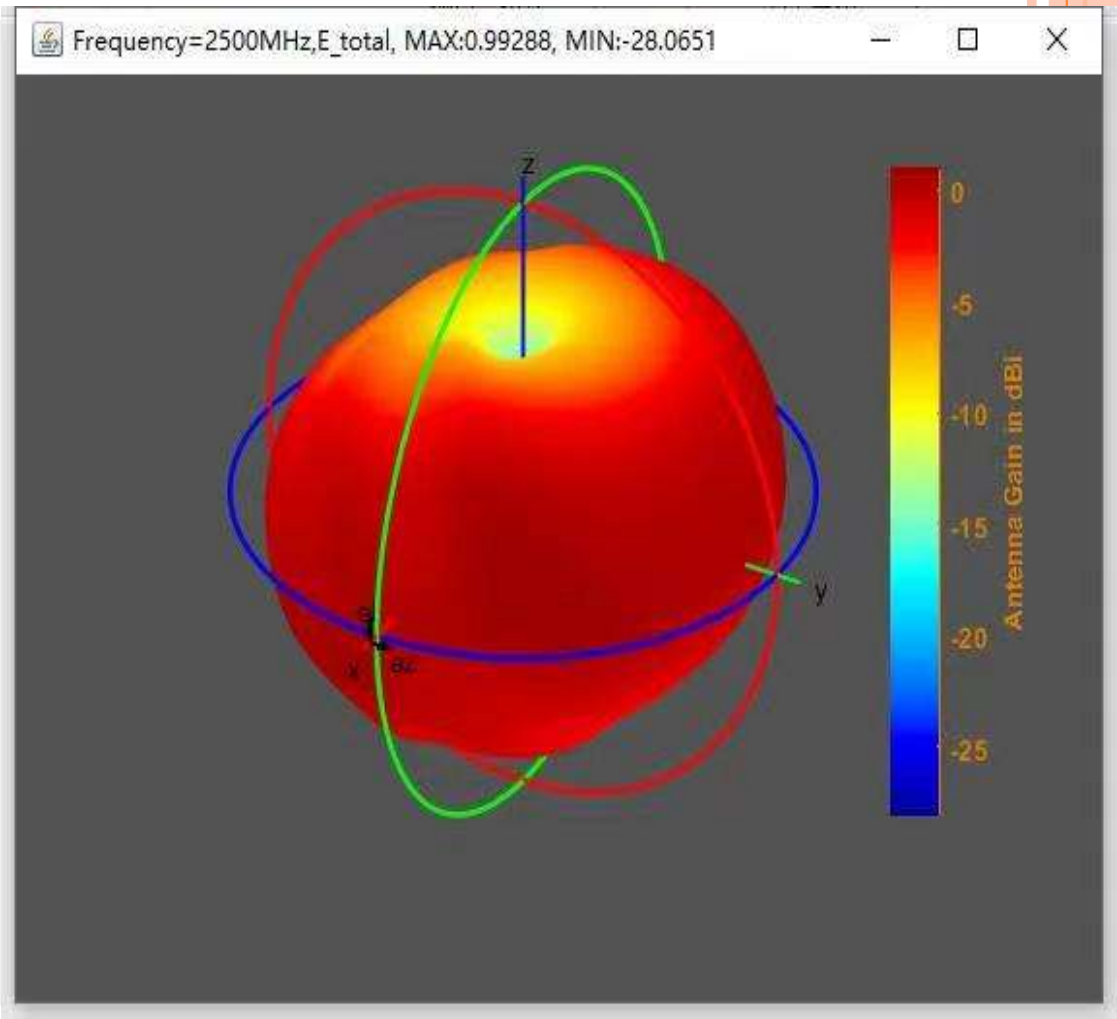




Test Result : 2D & 3D Radiation Pattern

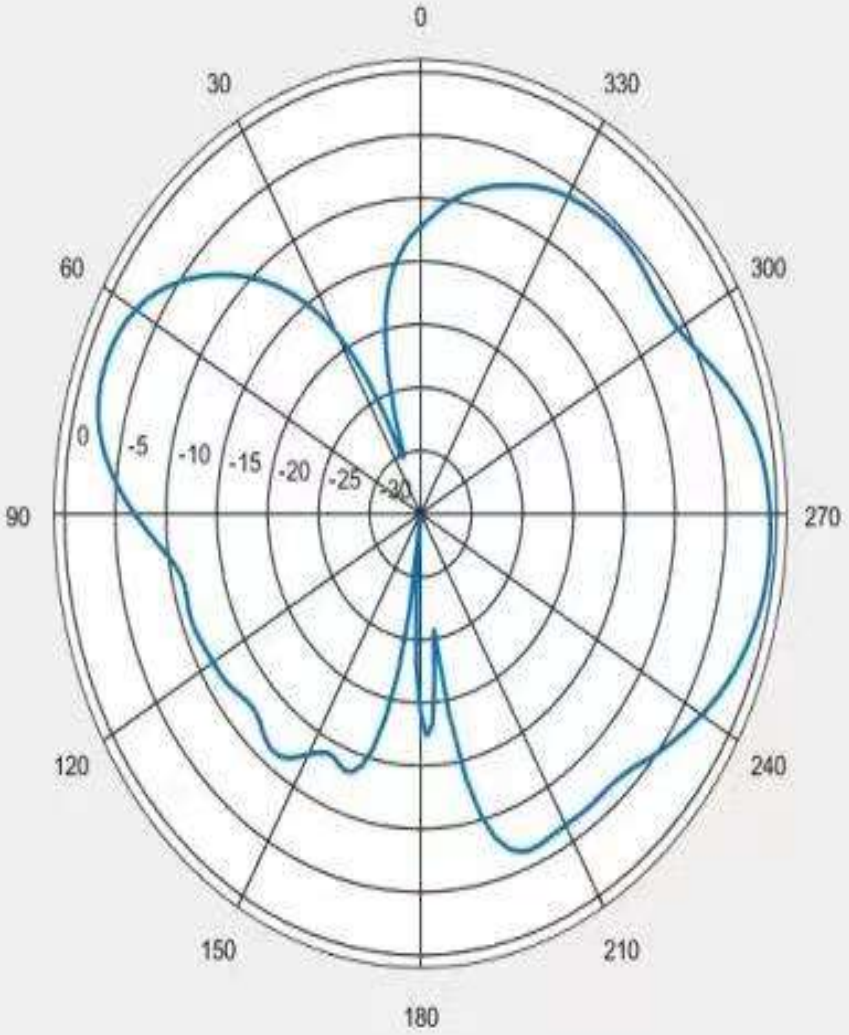
Antenna 1 2.5GHz

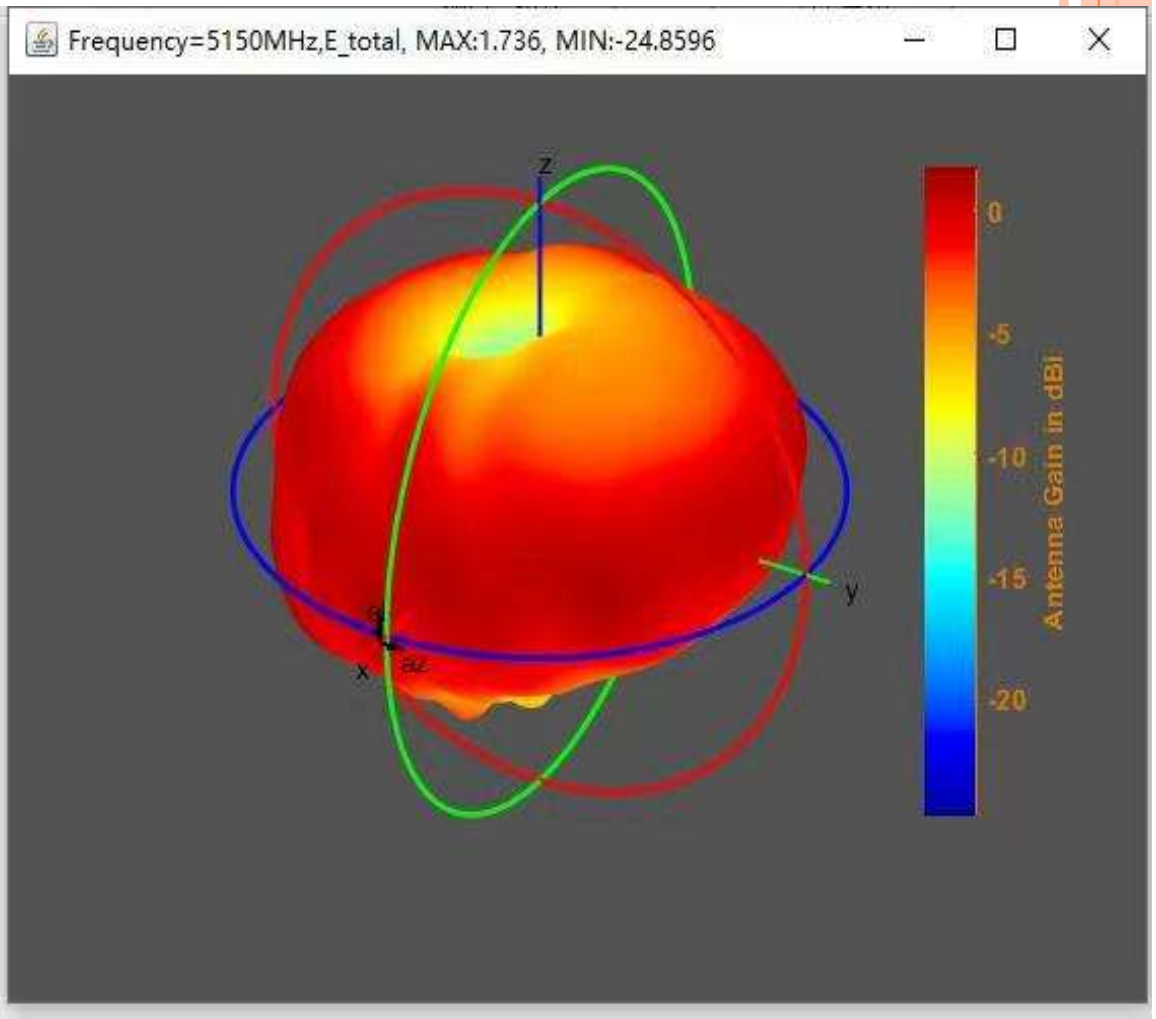




Test Result : 2D & 3D Radiation Pattern

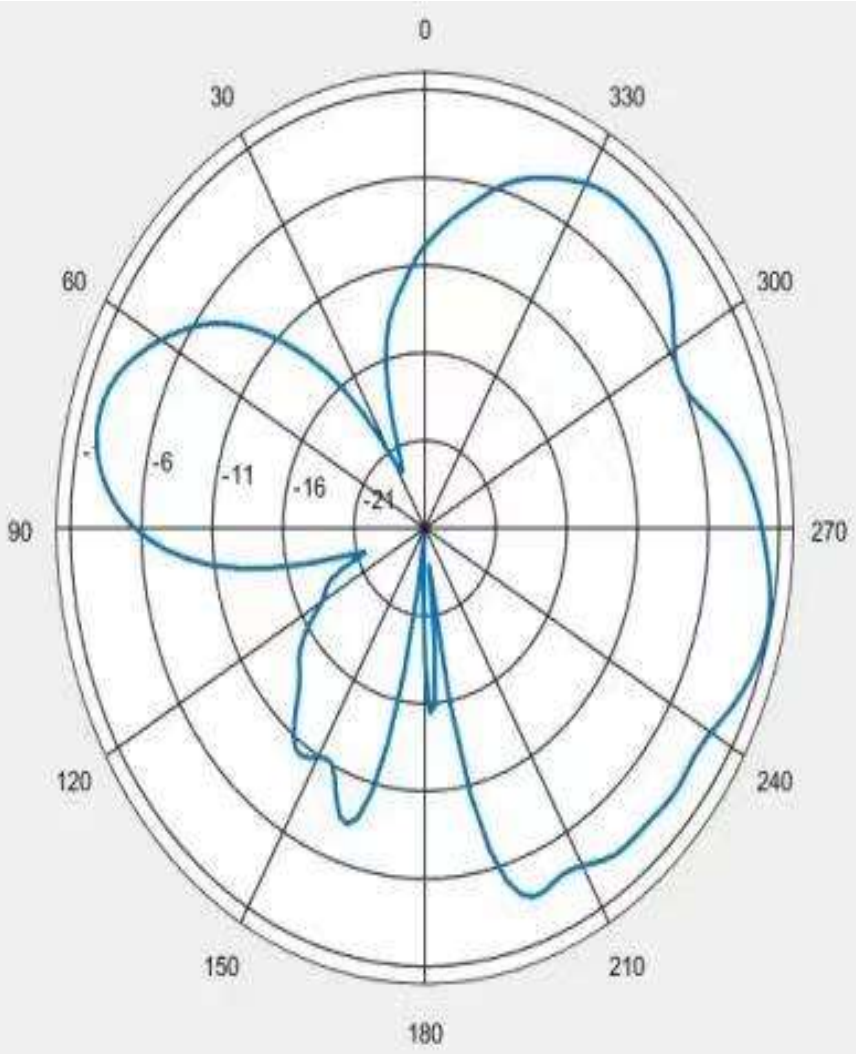
Antenna 1 5.15GHz

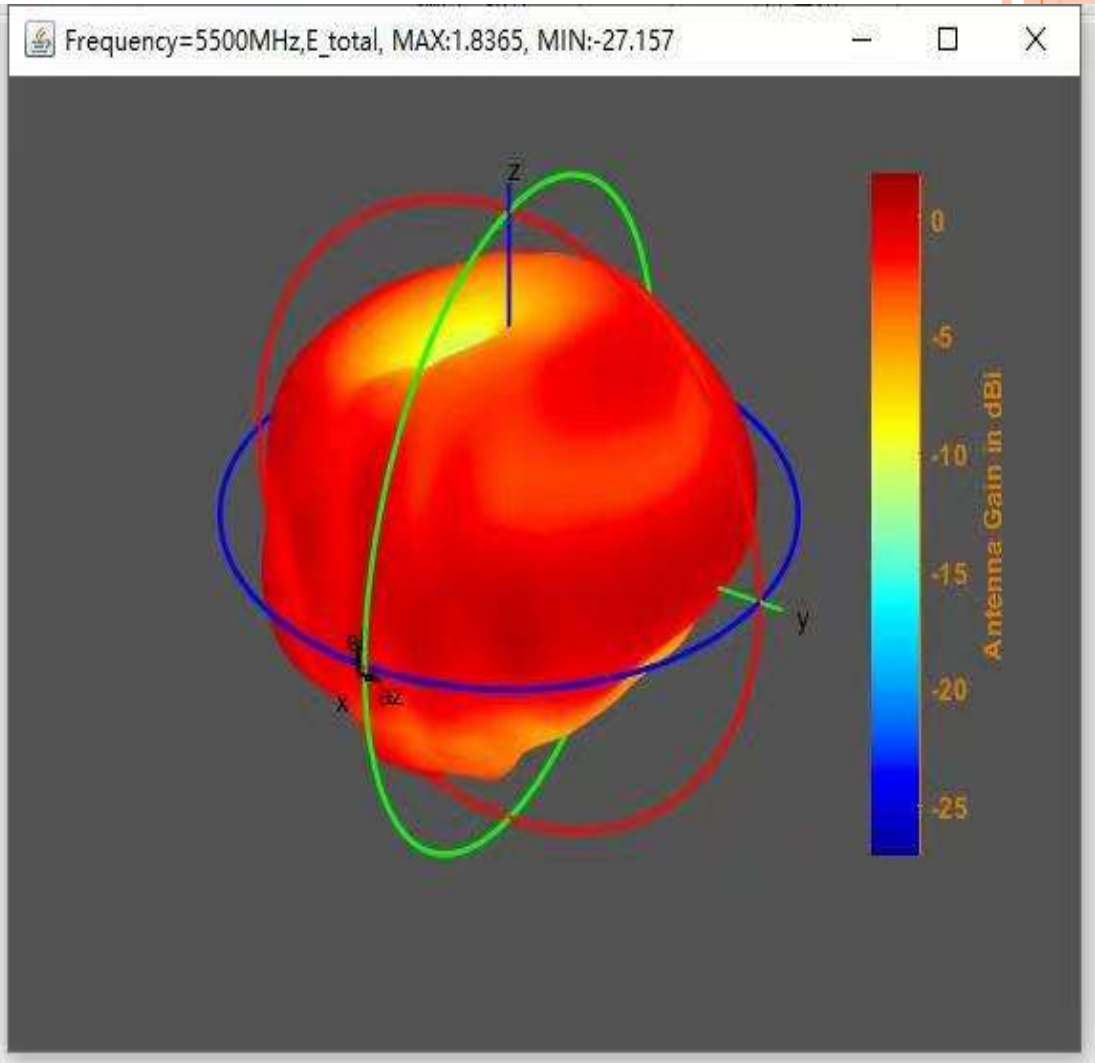




Test Result : 2D & 3D Radiation Pattern

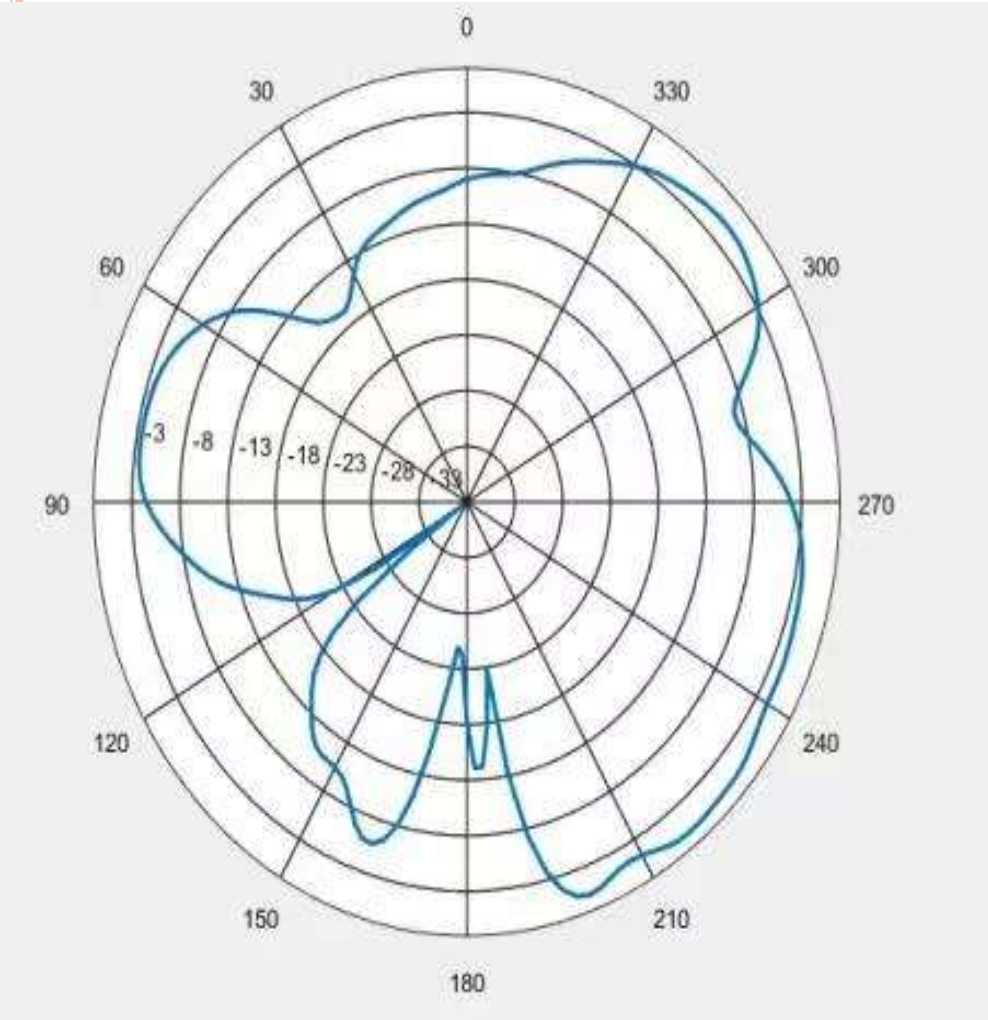
Antenna 1 5. 5GHz

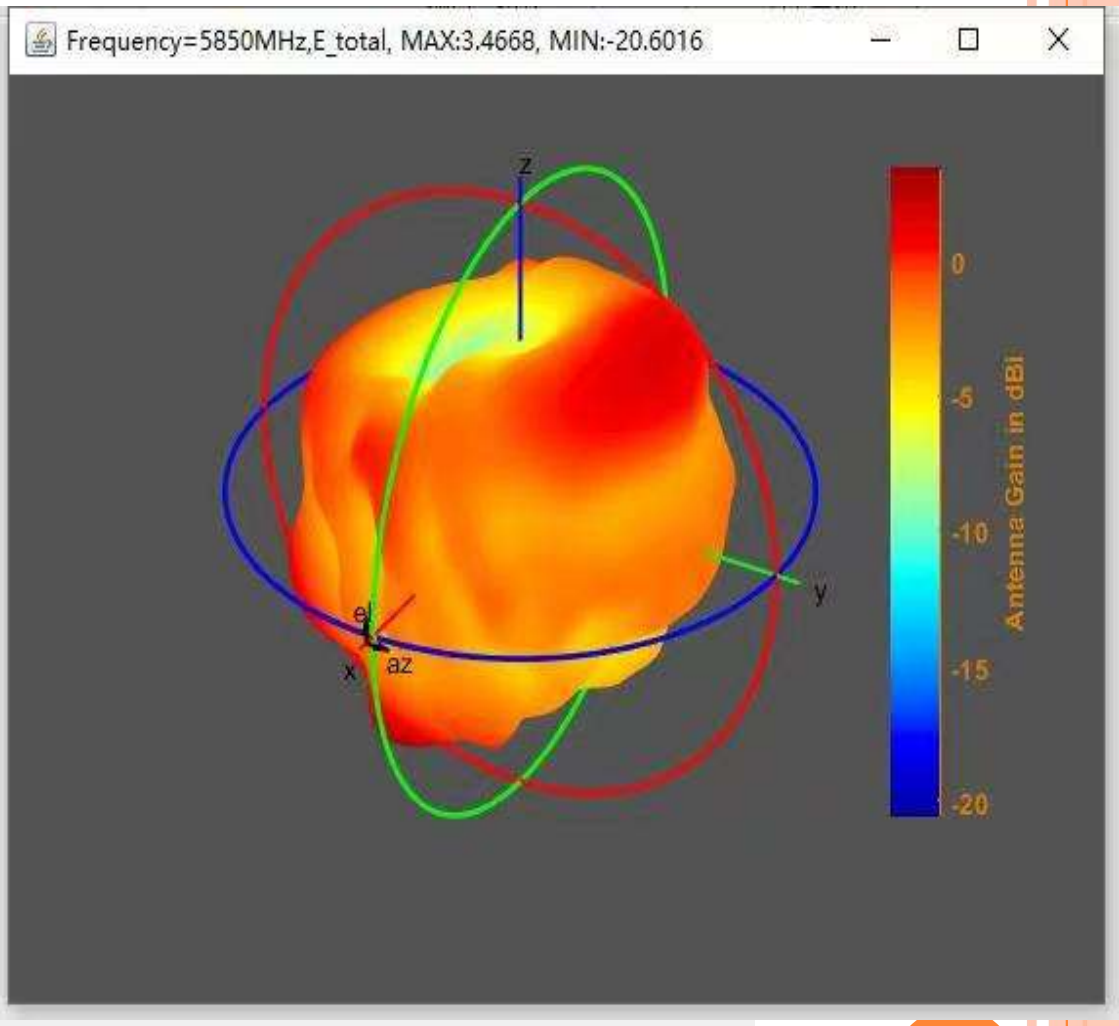




Test Result : 2D & 3D Radiation Pattern

Antenna 1 5.85GHz





TEST RESULT : EFFICIENCY & PEAK GAIN

Frequency (MHz	Directivity(dB)	Peak Gain(dBi)	Average Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	2.2596	1.2382	-2.2683	-1.0214	79.0418
2450	2.4342	1.2376	-2.4718	-1.1965	75.9181
2475	2.5203	1.1678	-2.6398	-1.3525	73.2402
2500	2.471	0.9929	-2.7526	-1.4781	71.1517
5150	3.4513	1.736	-2.8959	-1.7152	67.3714
5175	3.2087	1.2482	-3.1069	-1.9605	63.6722
5350	3.2736	1.499	-2.8116	-1.7746	66.4563
5375	3.2676	1.4915	-2.806	-1.7761	66.4339
5400	3.9964	2.3024	-2.6858	-1.694	67.702
5425	3.4521	1.583	-2.8203	-1.8691	65.027
5450	3.3415	1.7092	-2.5721	-1.6323	68.6709
5475	3.7417	2.2569	-2.3905	-1.4849	71.0419
5500	3.5249	1.8365	-2.5758	-1.6884	67.7898
5800	4.3962	2.9879	-2.023	-1.4084	72.3041
5850	5.0296	3.4668	-2.1298	-1.5628	69.7783