

Suzhou Point Positive Electronic Technology Co.,ltd

SPECIFICATION FOR APPROVAL

Customer	Hansong (NanJing) Technology Ltd		
Customer P/N		Rev.	A1
Description	ANTENNA		
DRAWING P/N	RC1WFI0886A2		

CUSTOMER APPROVED BY STAMP	Approval	Quality	RD	Sales
	Roy	Hellen	Tak	Frank

ADD : No 3 XinLang Road ,Yinghu industrial Park, Wangting Town
Xiangcheng district Suzhou City

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FAX : 0512-65088773

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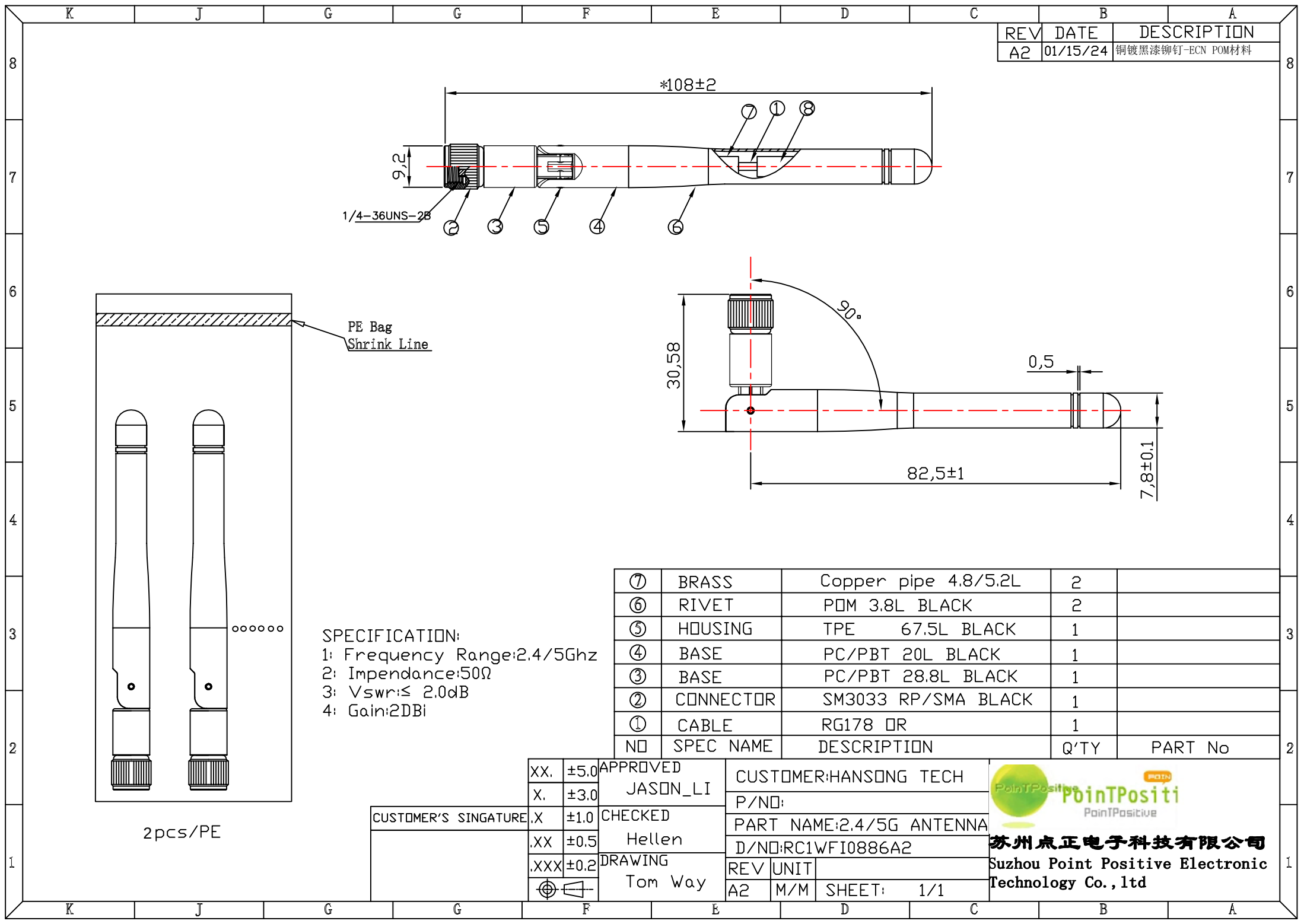


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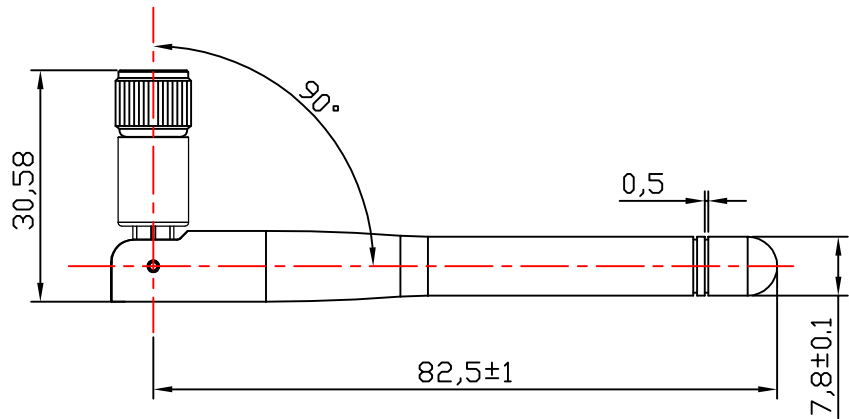
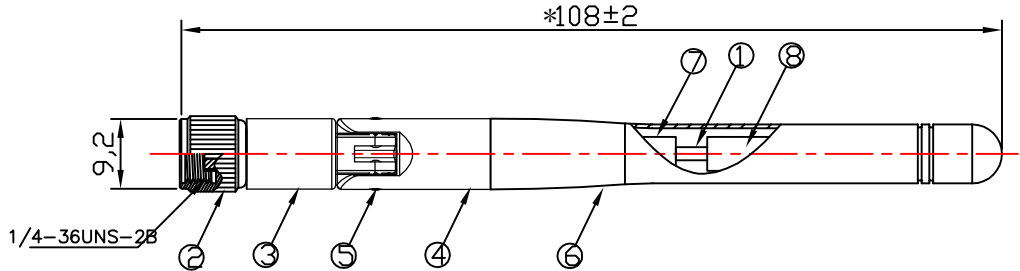
1、 Antenna Drawing	-----	1
2、 Electrical Properties	-----	
Return Loss /VSWR		
Radiation Pattern		
3 ,Packing date	-----	
4. Material Data Sheet		
MHF Connector	-----	
Coaxial Cable	-----	
5. Material SGS.Rohs.MSDS	-----	

SPECIFICATION

1. Description	ANTENNA
2. Customer	Hansong (NanJing) Technology Ltd
3. Model No	RC1WFI0886A2
4. Part No	
5. Standard	
6. Antenna Profile	See Drawing
7. Color	BK
8. Electrical Characteristics	
Operating Frequency	2.4~5.8Ghz
Antenna Type	External Rod Antenna
Polarization Type	vertical or horizontal
Peak Gain	2.4G~1.3 DBi/5G~ 3.5DBi Typica
Impedance	50Ω
V.S.W.R	2:1 Max.
9. Mechanical Characteristics	
Swivel	
Lead Length	L:108MM
Connector	RP-SMA
10. Raw Material	
Coaxial Cable	RG178
Housing/Hinge	TPEE



REV	DATE	DESCRIPTION
A2	01/15/24	铜镀黑漆铆钉-ECN POM材料



SPECIFICATION:
1: Frequency Range:2.4/5Ghz
2: Impedance:50Ω
3: Vswr:≤ 2.0dB
4: Gain:2DBi

⑦	BRASS	Copper pipe 4.8/5.2L	2	
⑥	RIVET	POM 3.8L BLACK	2	
⑤	HOUSING	TPE 67.5L BLACK	1	
④	BASE	PC/PBT 20L BLACK	1	
③	BASE	PC/PBT 28.8L BLACK	1	
②	CONNECTOR	SM3033 RP/SMA BLACK	1	
①	CABLE	RG178 OR	1	
NO	SPEC NAME	DESCRIPTION	Q'TY	PART No

XX.	±5.0	APPROVED
X.	±3.0	JASON_LI
.X	±1.0	CHECKED
.XX	±0.5	Hellen
.XXX	±0.2	DRAWING
⊕		Tom Way

CUSTOMER: HANSONG TECH		
P/NO:		
PART NAME: 2.4/5G ANTENNA		
D/NO: RC1WFI0886A2		
REV	UNIT	
A2	M/M	SHEET: 1/1

PointPositive
PointPositive
苏州点正电子科技有限公司
Suzhou Point Positive Electronic
Technology Co., Ltd

2pcs/PE

CUSTOMER'S SINGATURE

Antenna Measurement Report

- Model: Dipole 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

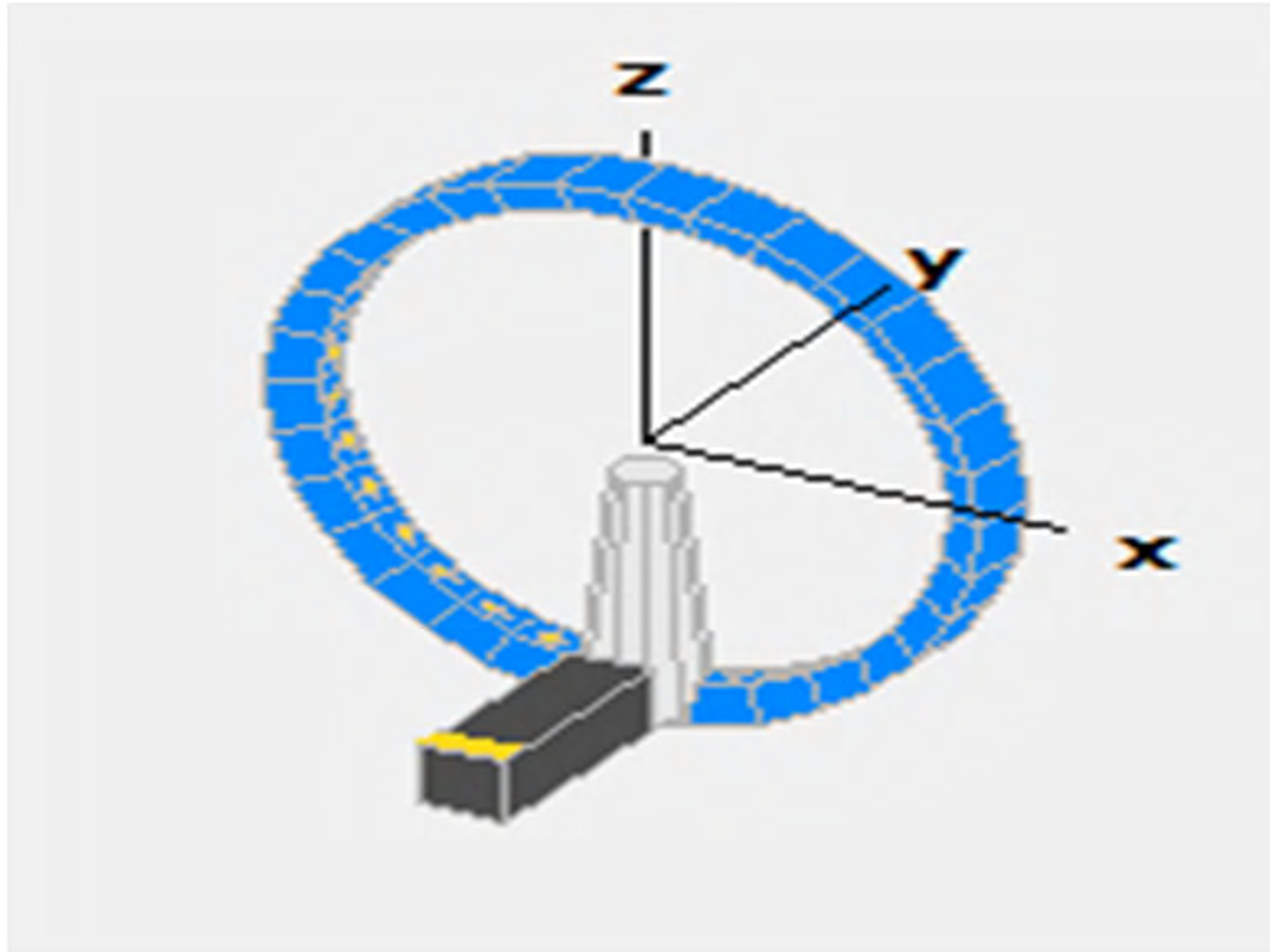


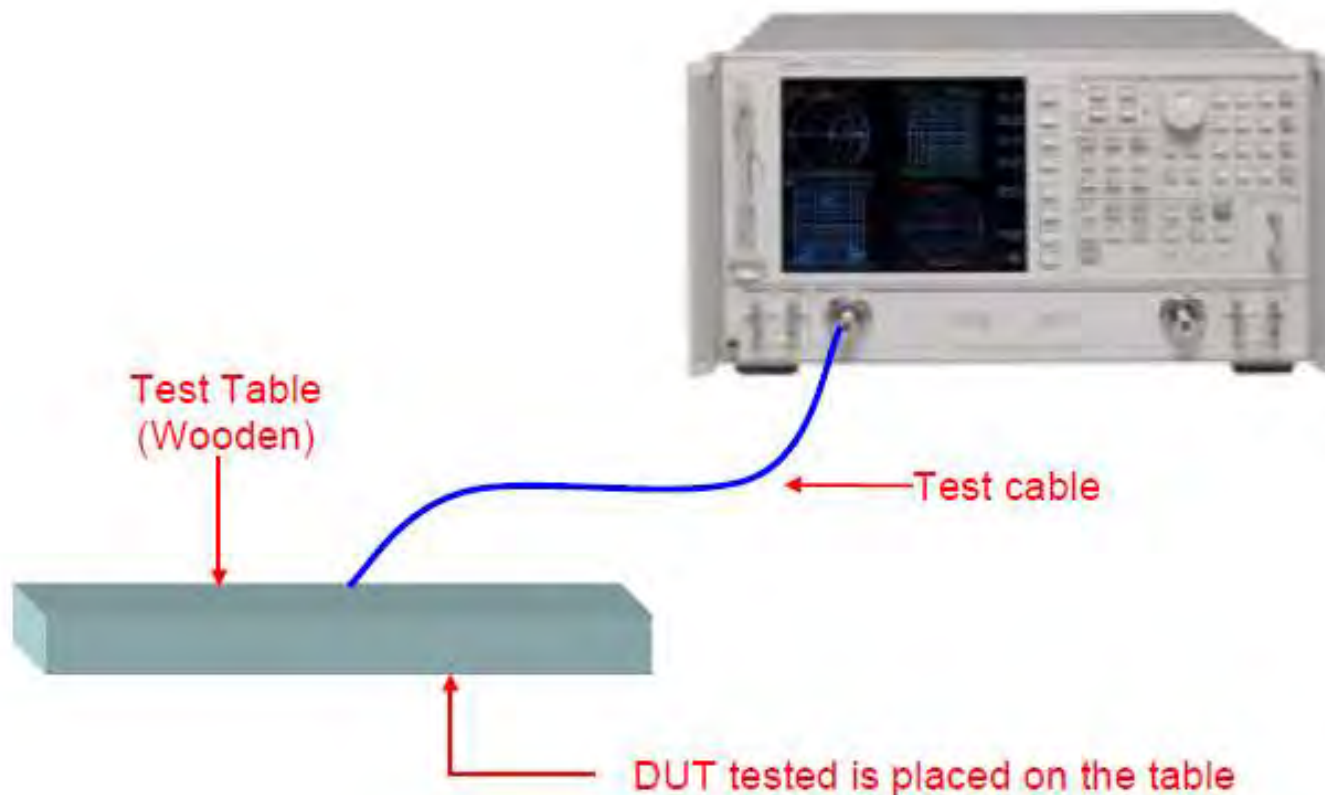
Fig. 3



TEST ENVIRONMENT AND EQUIPMENTS

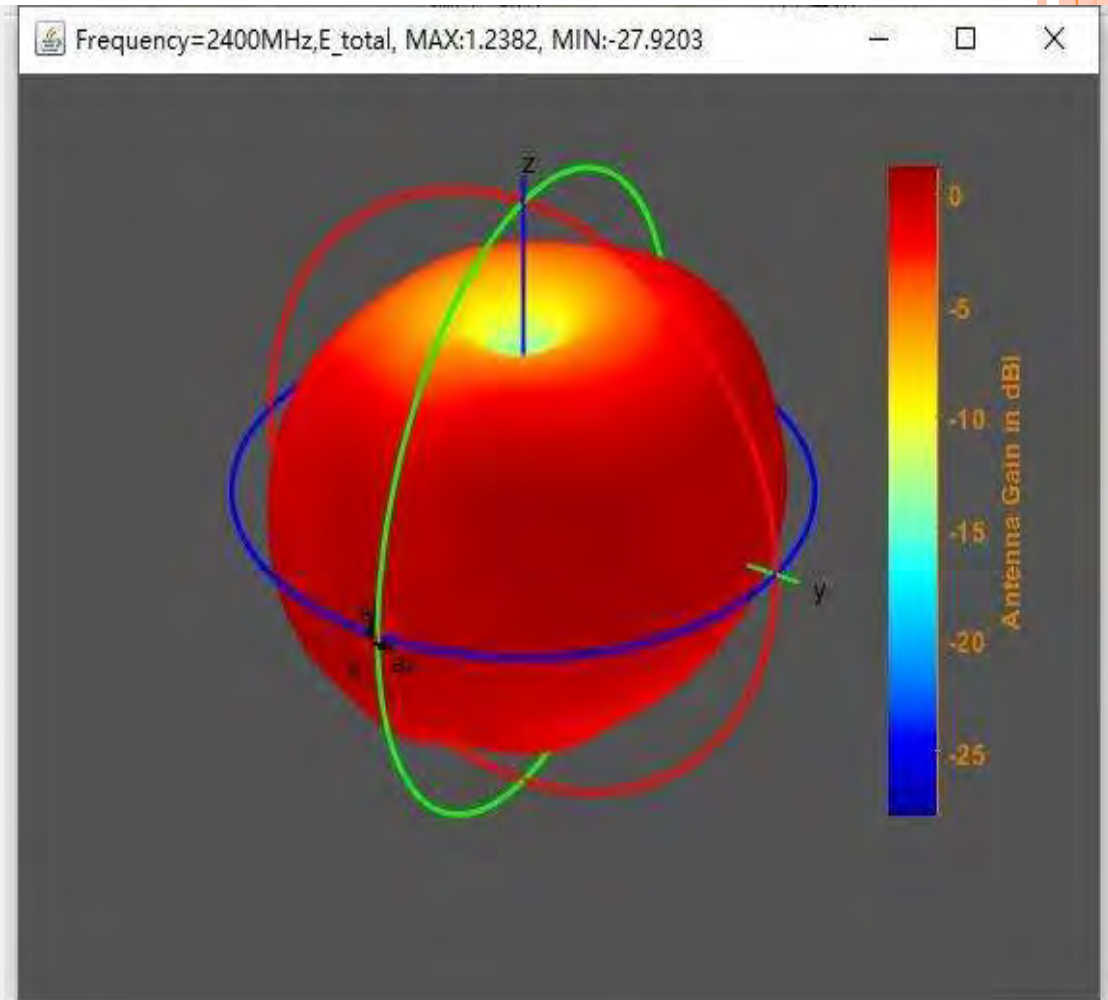
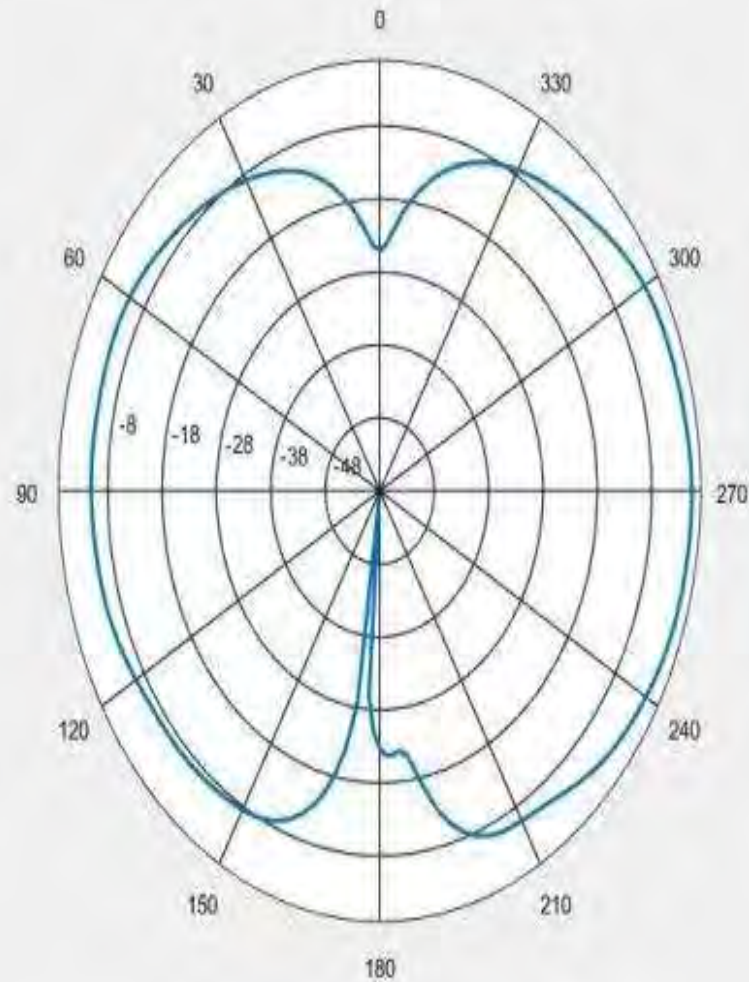
S-Parameter test

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



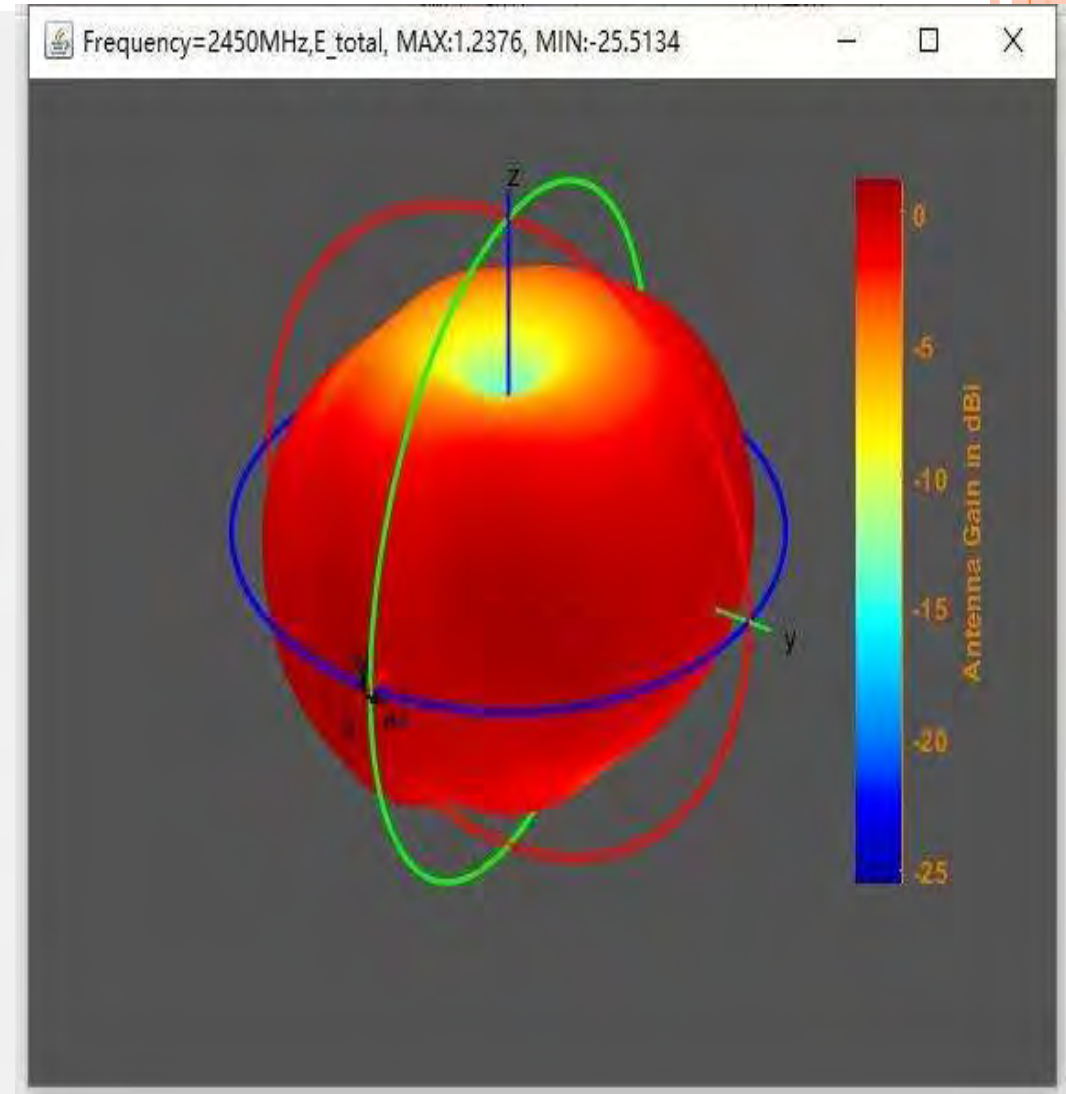
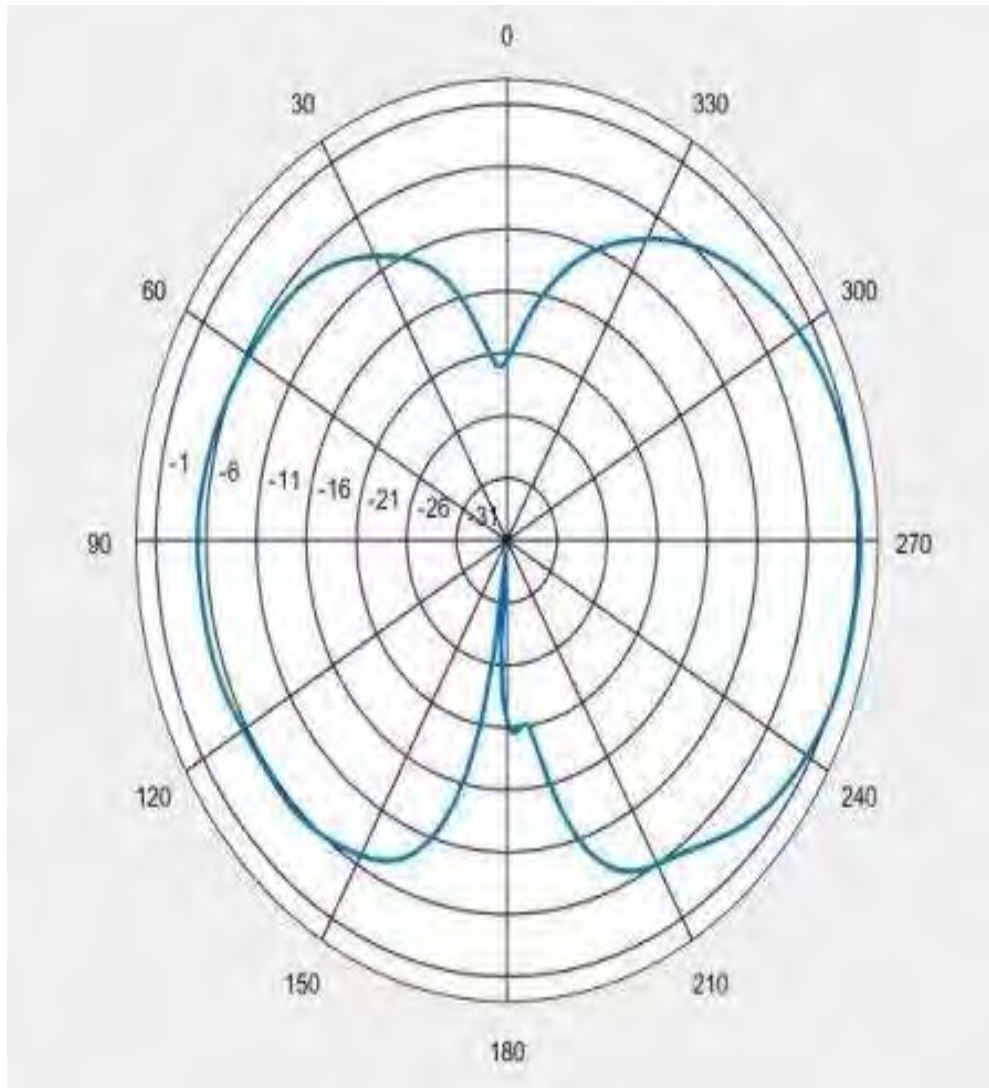
TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 2.4GHz



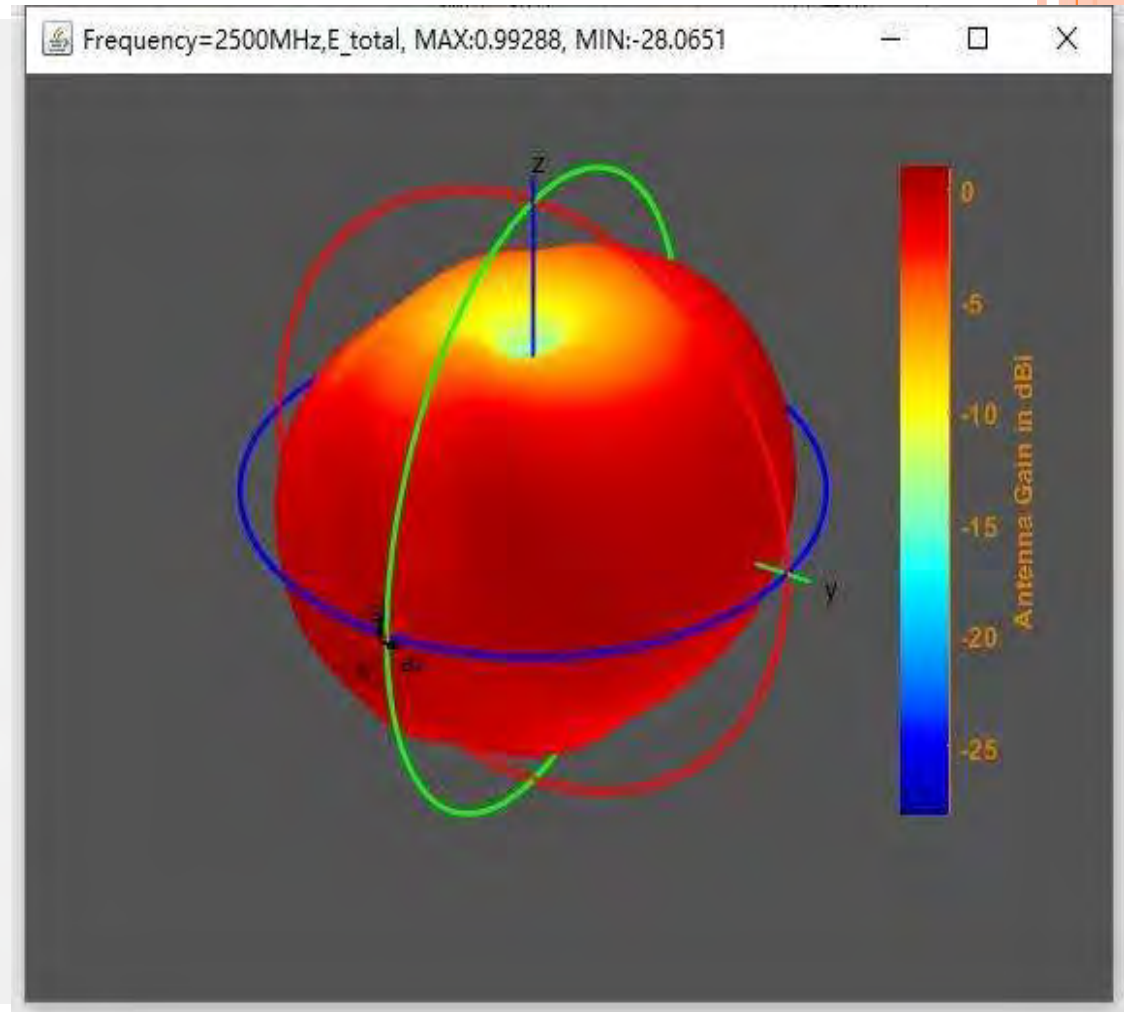
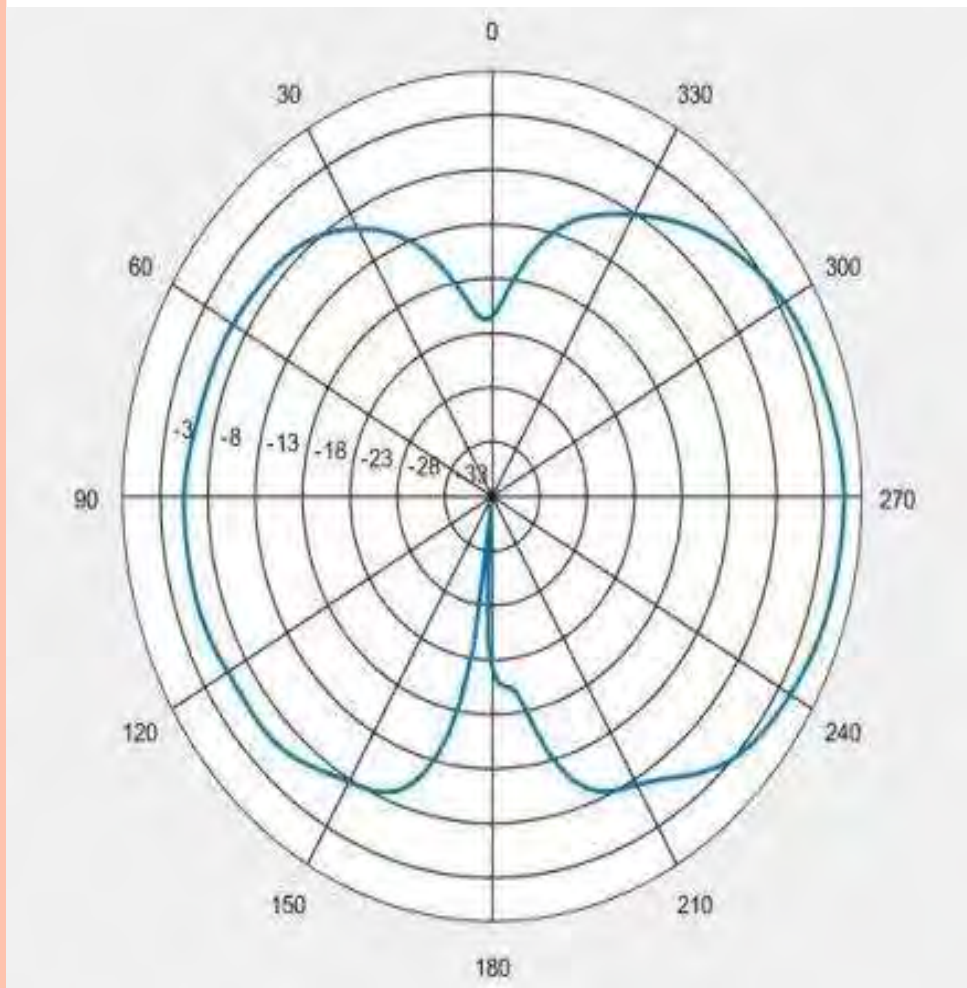
TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 2.45GHz



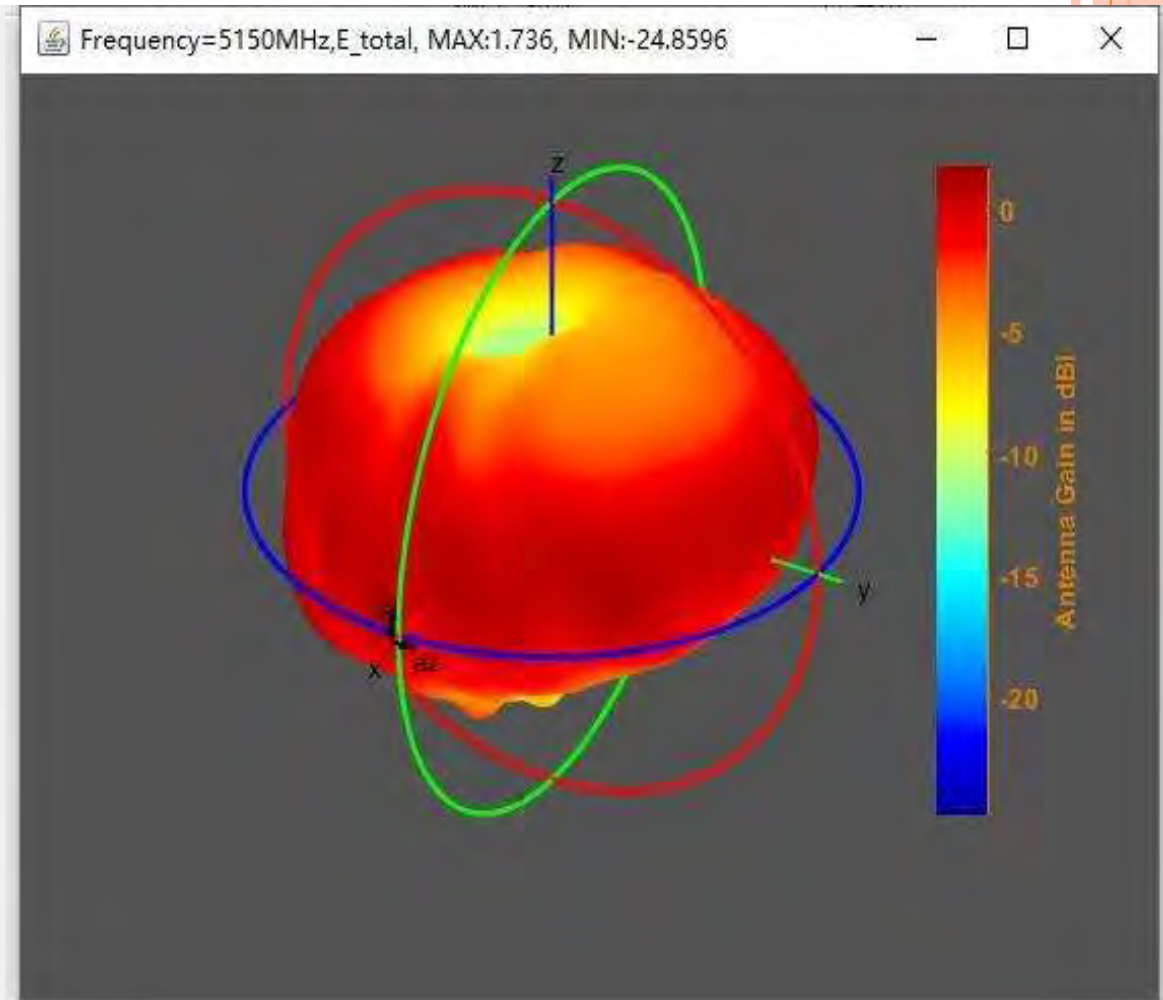
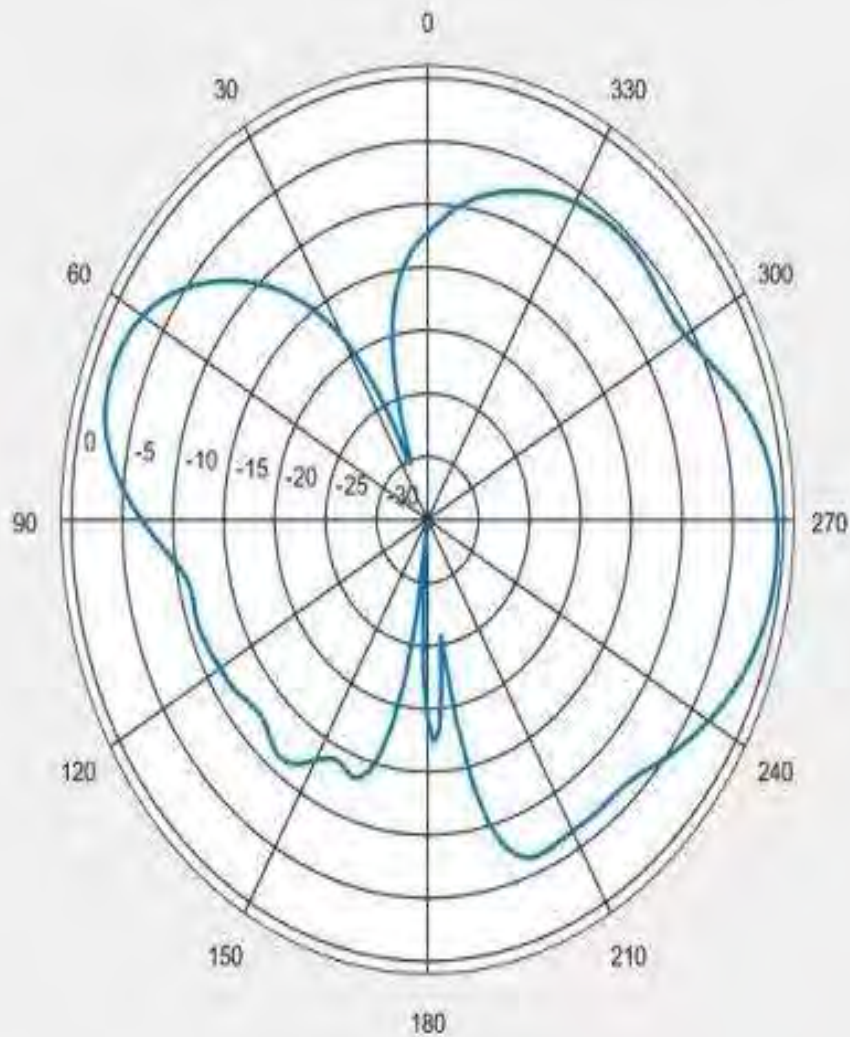
TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 2.5GHZ



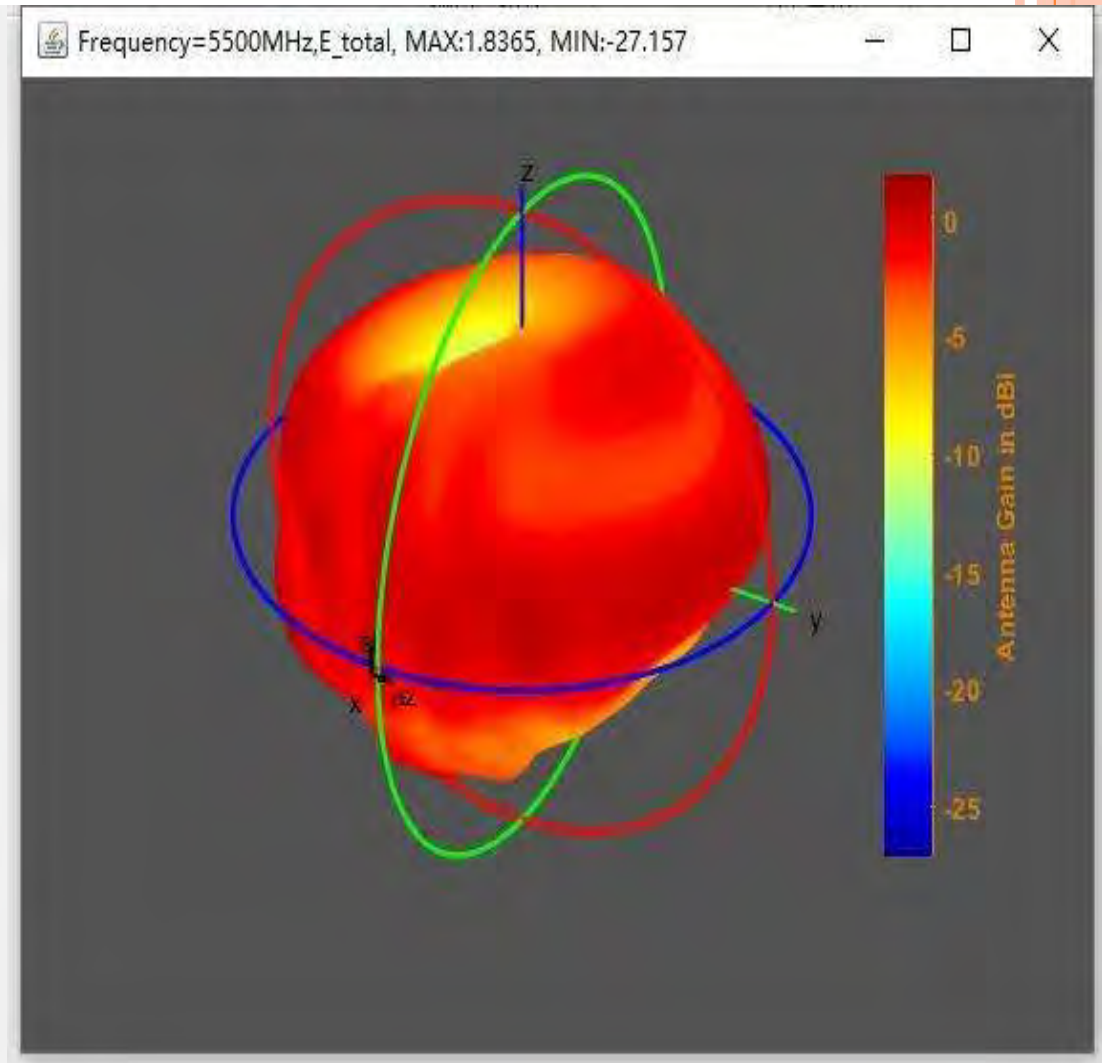
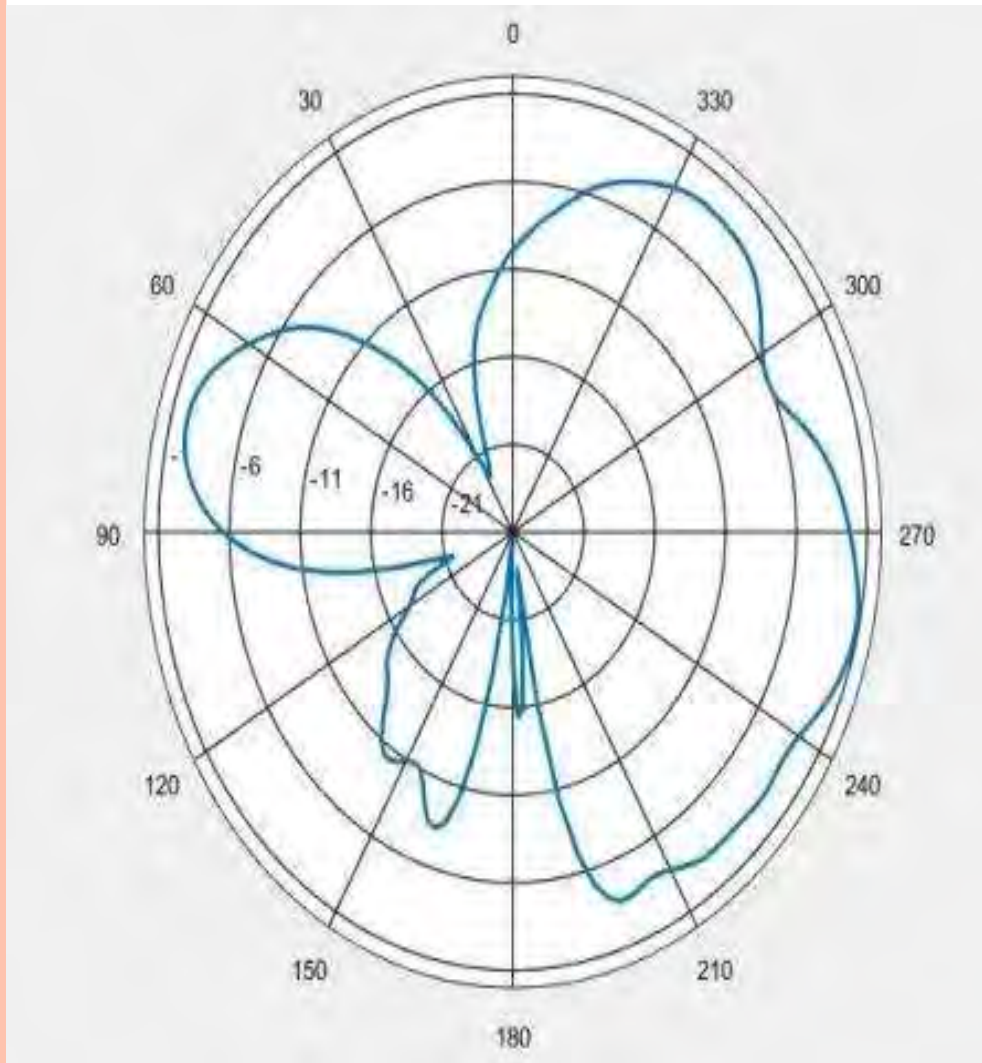
TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 5.15GHz



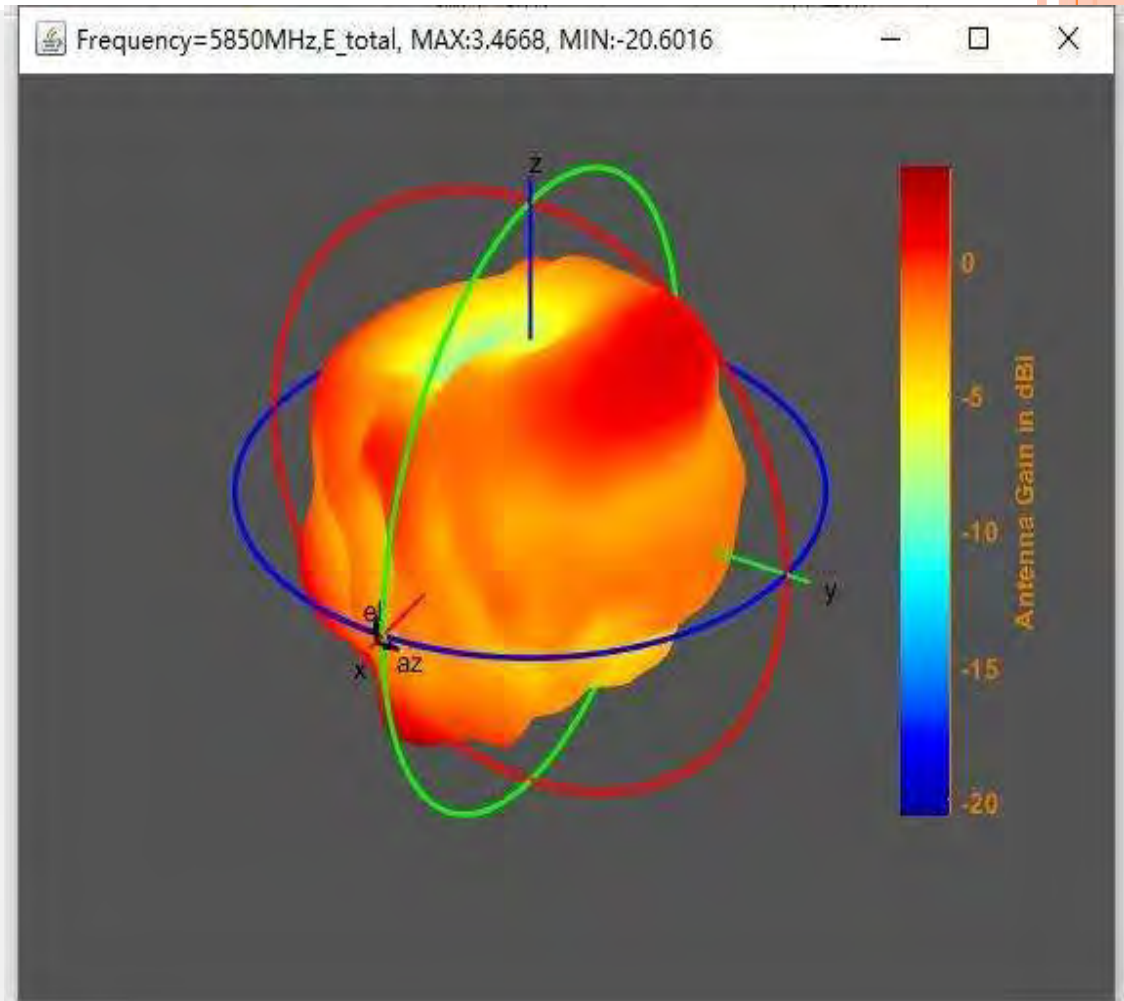
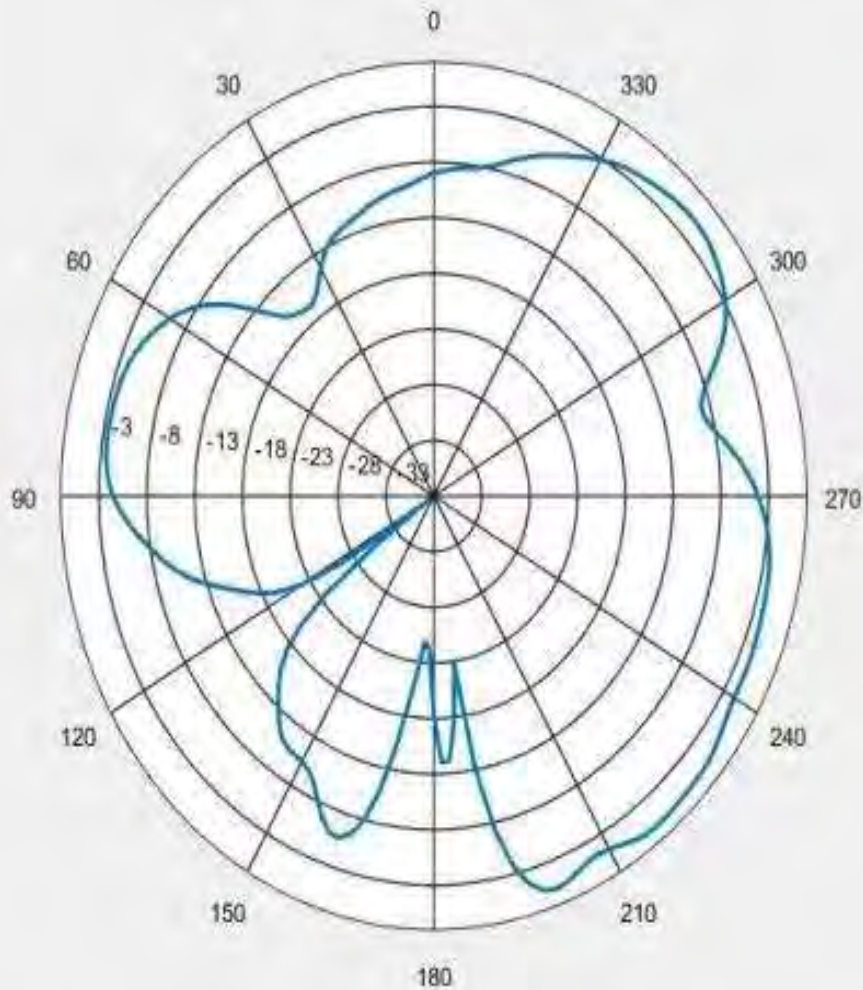
TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 5.5GHz



TEST RESULT : 2D & 3D RADIATION PATTERN

ANTENNA 1 5.85GHz



TEST RESULT : EFFICIENCY & PEAK GAIN

Frequency (MHz)	Directivity(dB)	Gain(dB)	Average Gain(dB)	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

