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

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

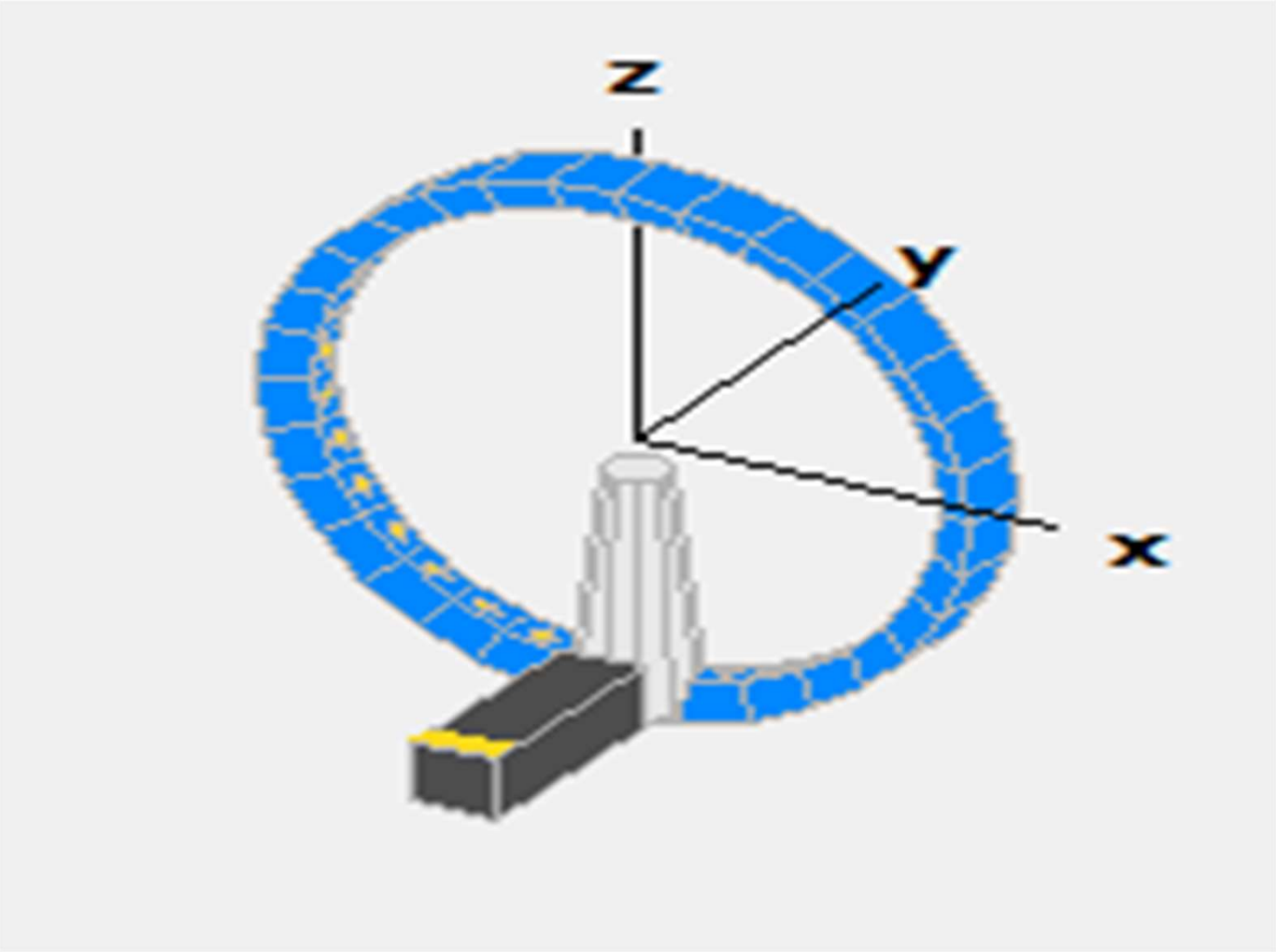
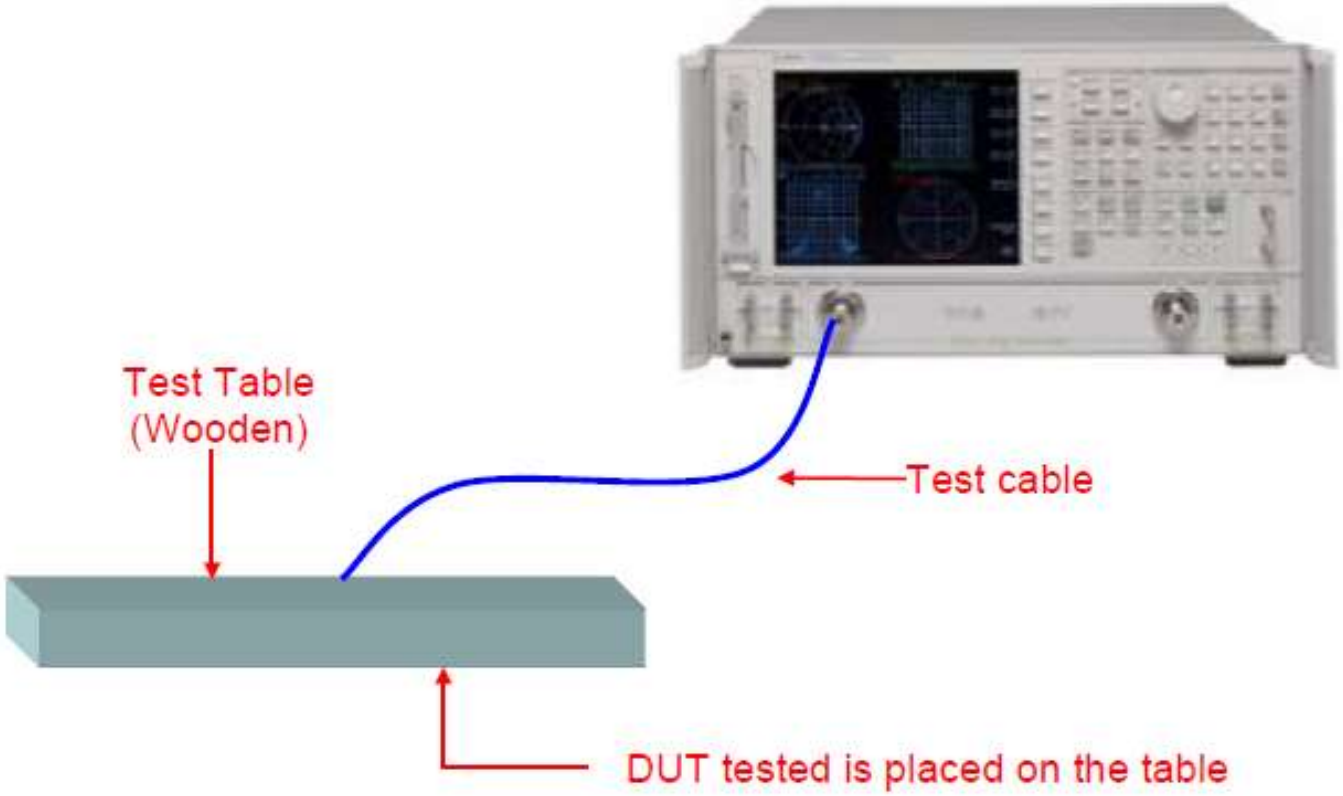


Fig. 3

Test Environment and Equipments

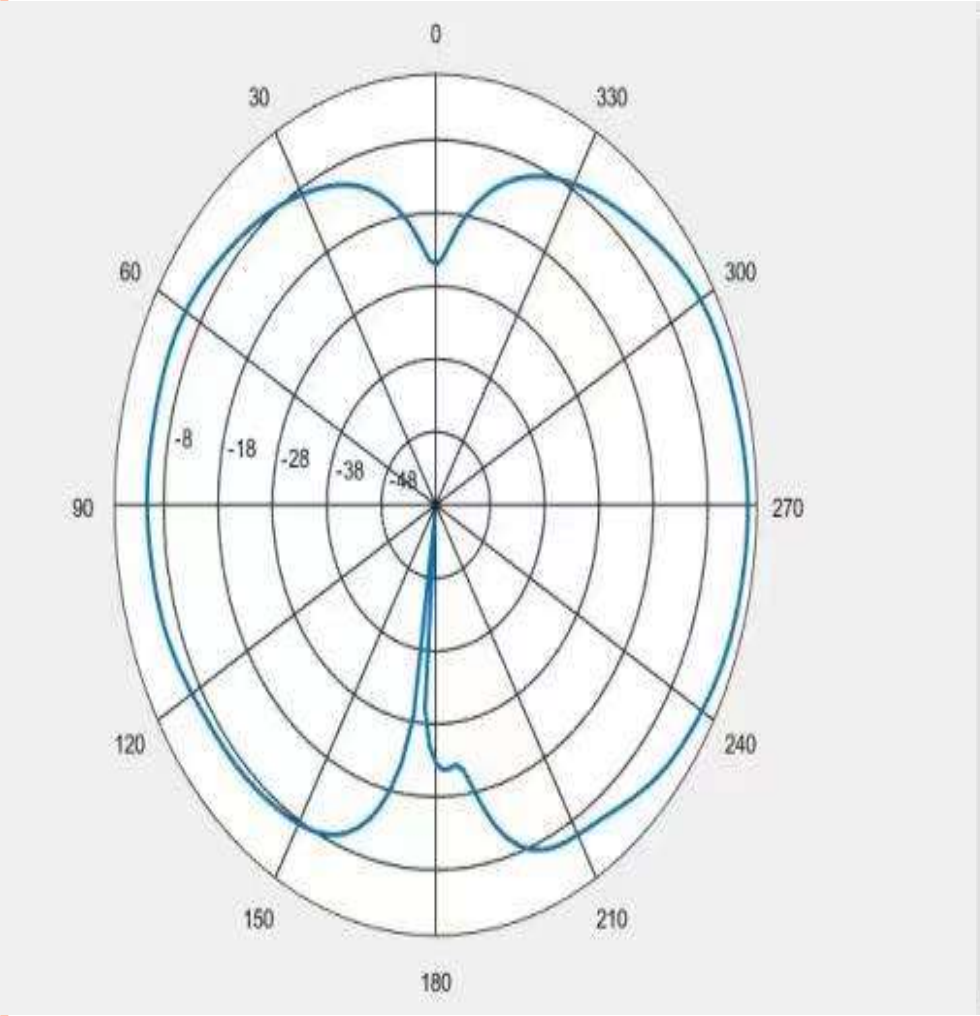
S-Parameter test

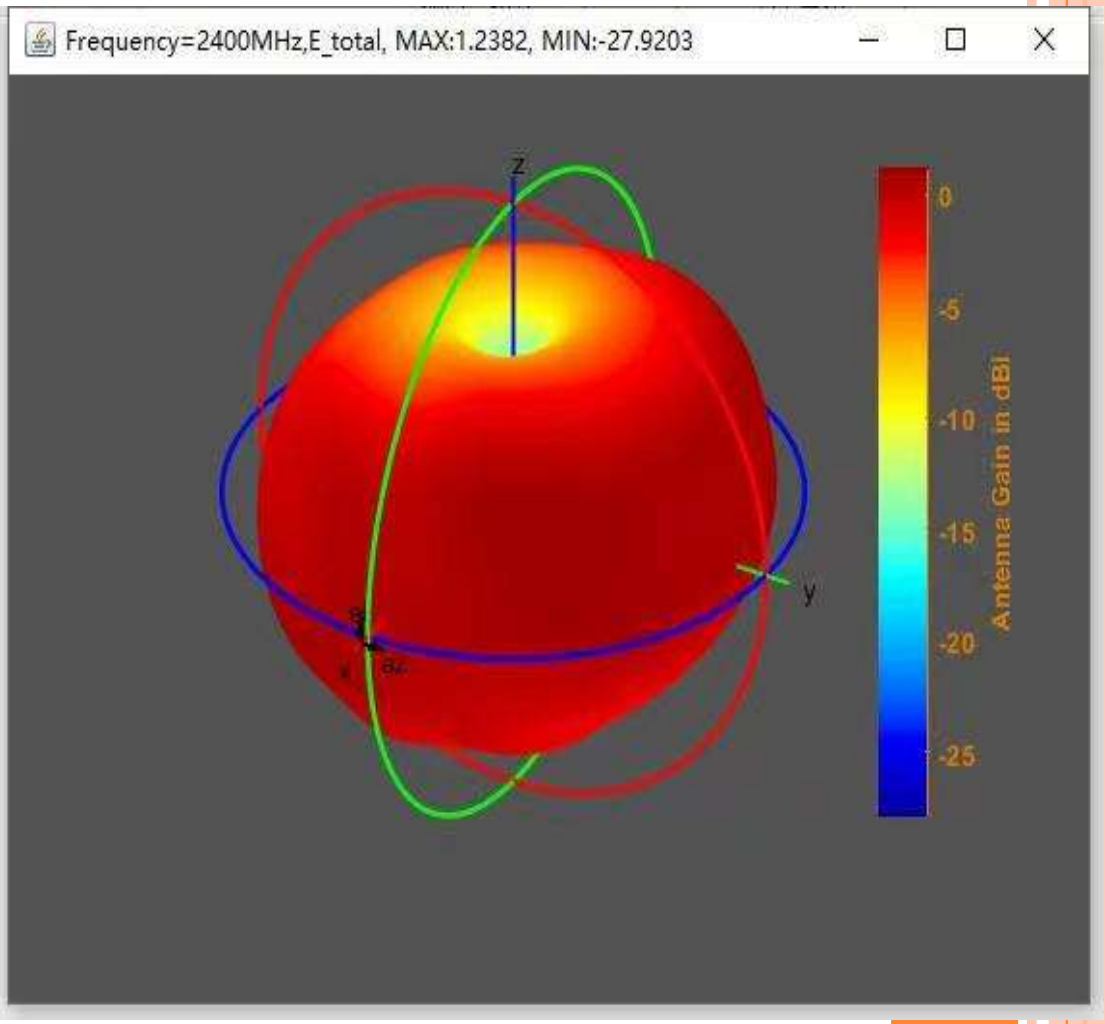
- Network Analyzer
- Testing range from 30KHz to 8.5GHz



Test Result : 2D & 3D Radiation Pattern

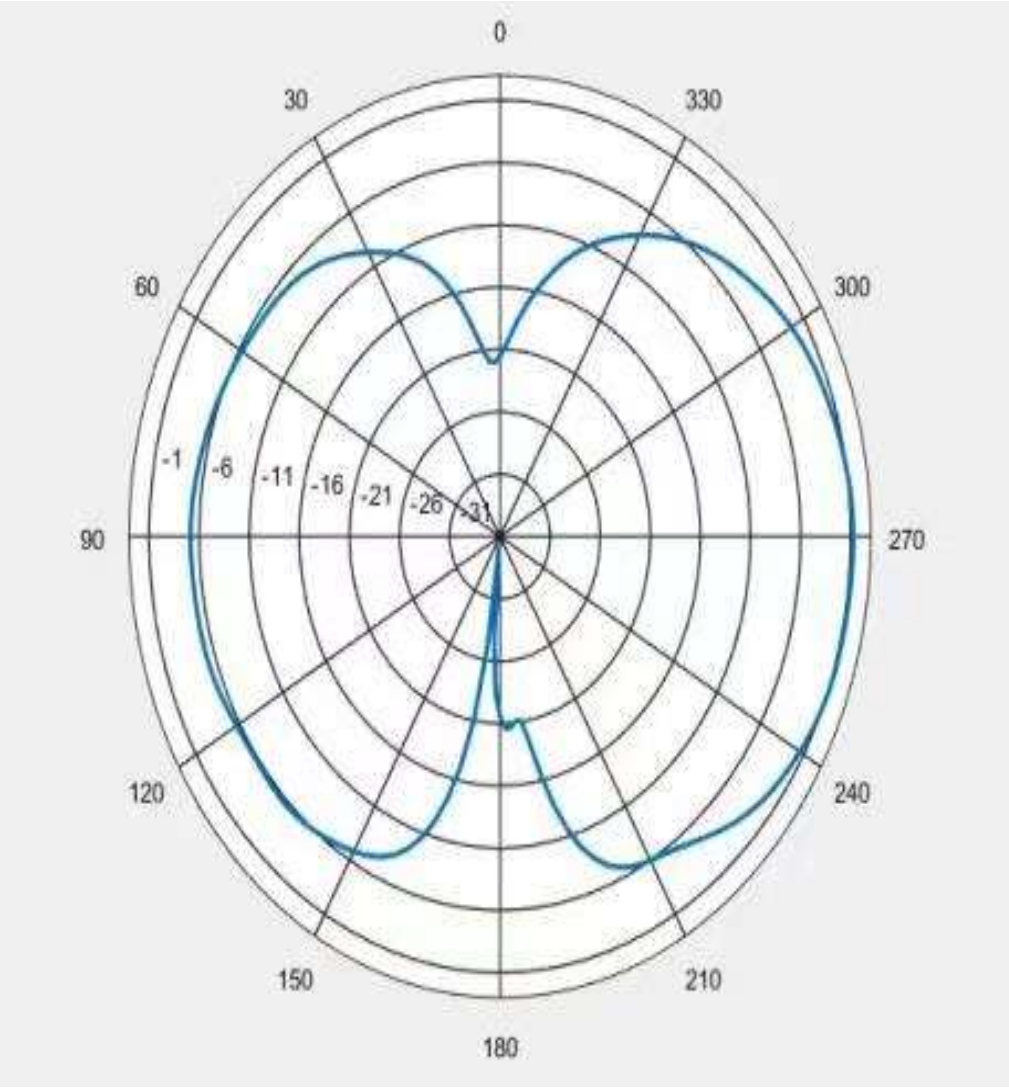
Antenna 1 2.4GHz

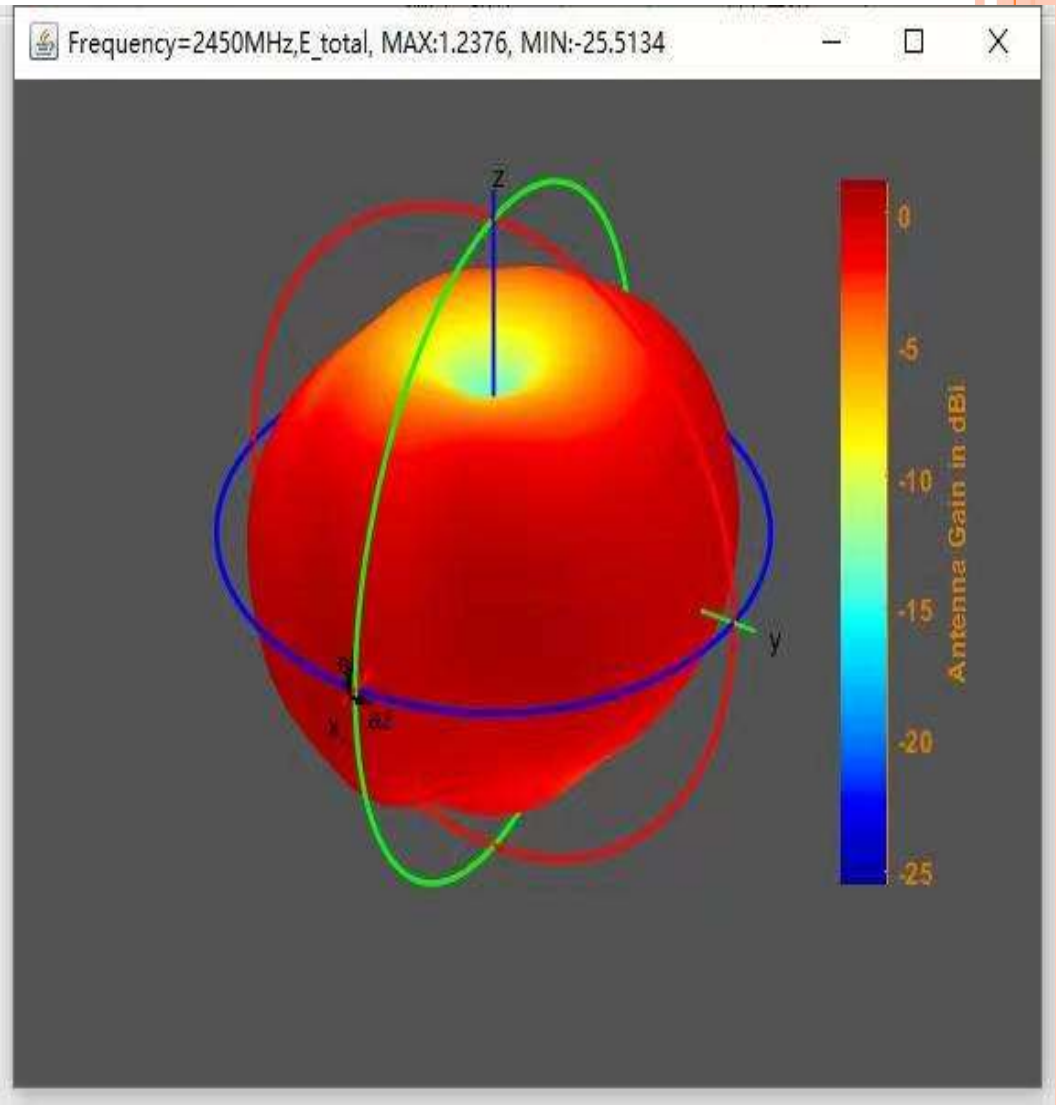




Test Result : 2D & 3D Radiation Pattern

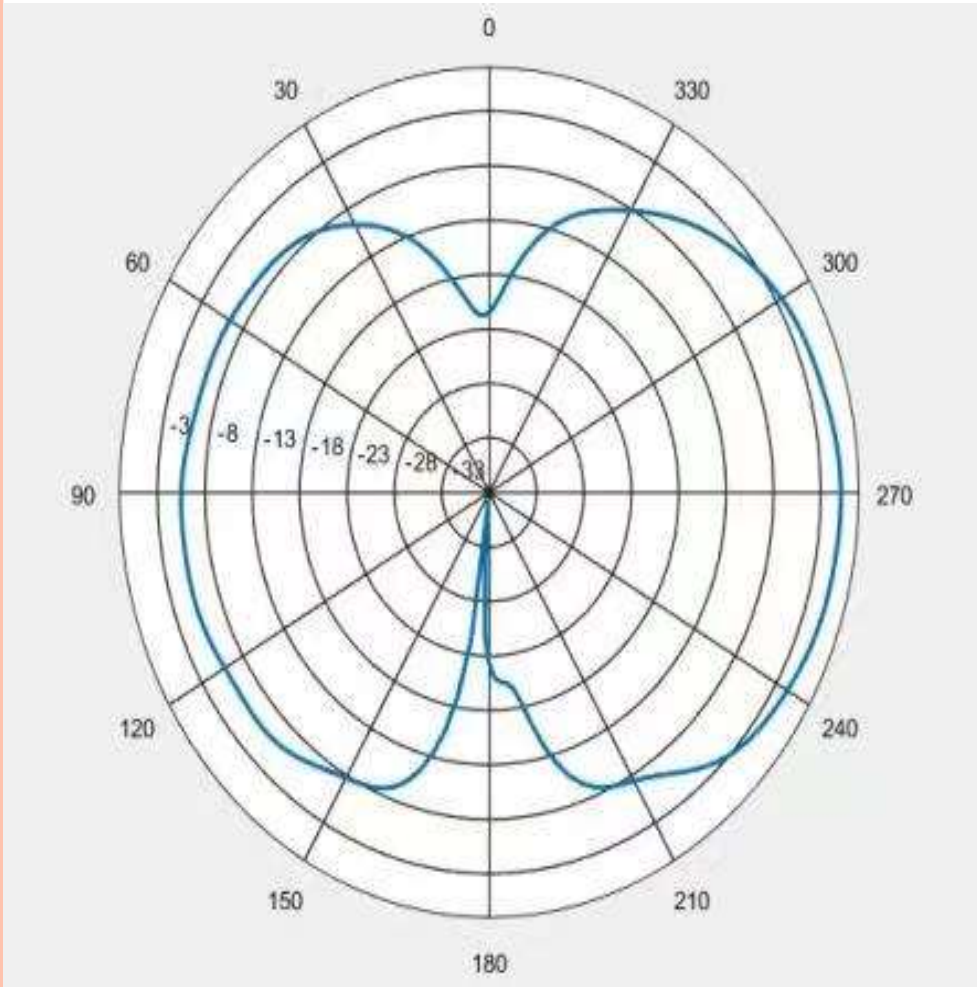
Antenna 1 2.45GHz

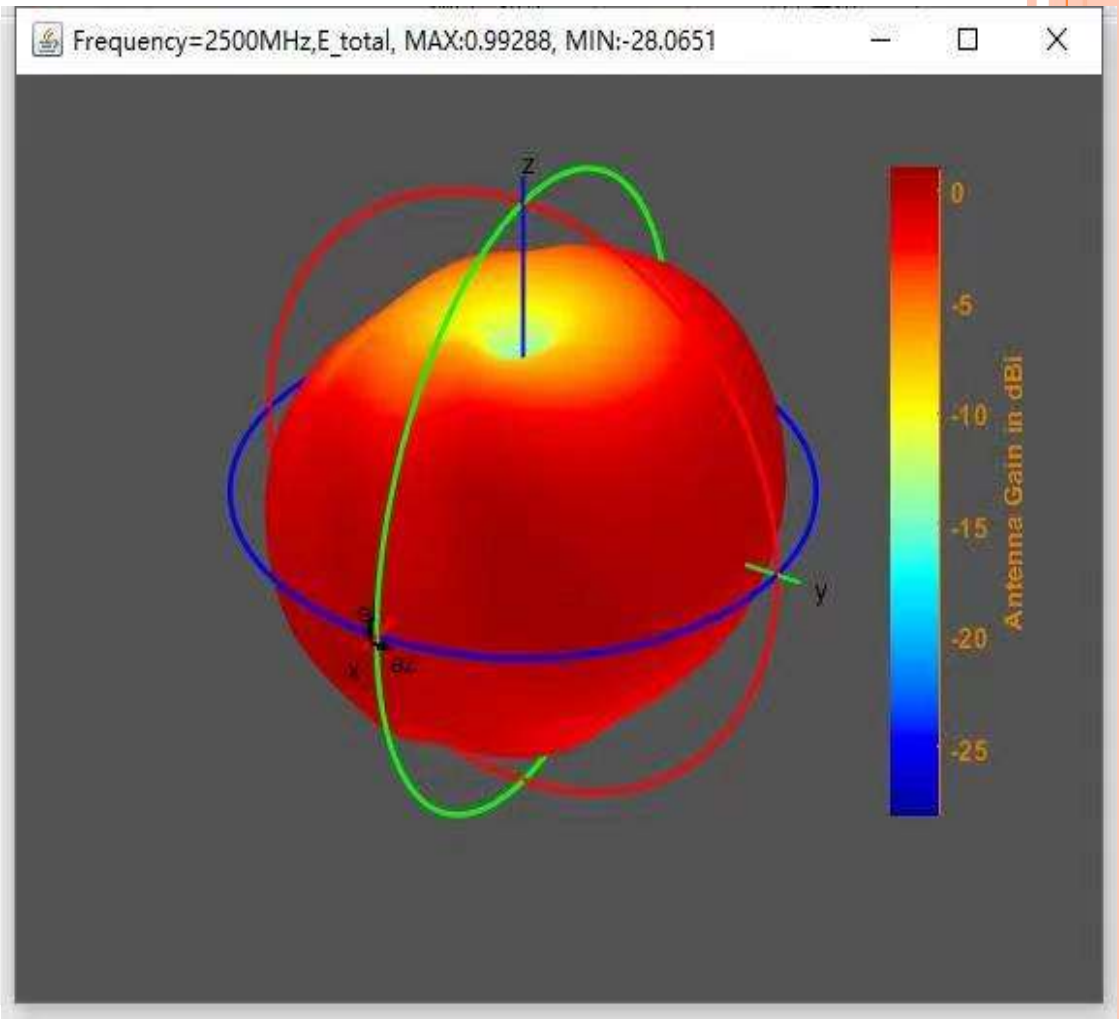




Test Result : 2D & 3D Radiation Pattern

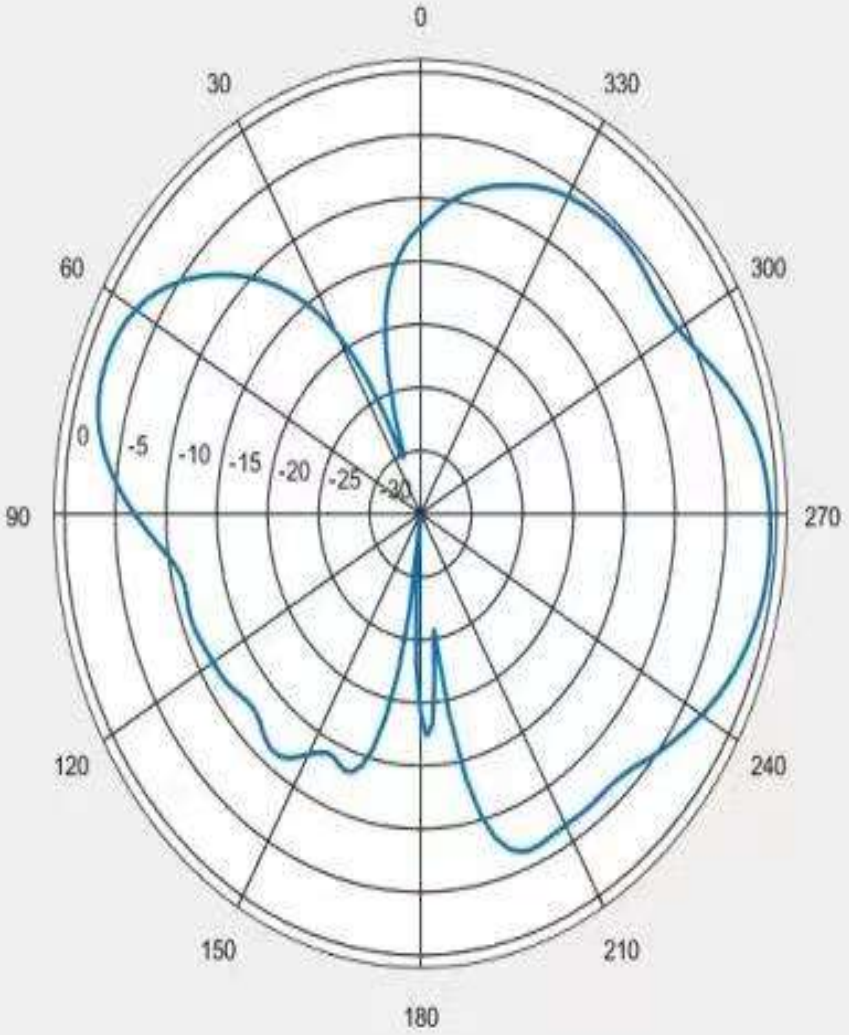
Antenna 1 2.5GHz

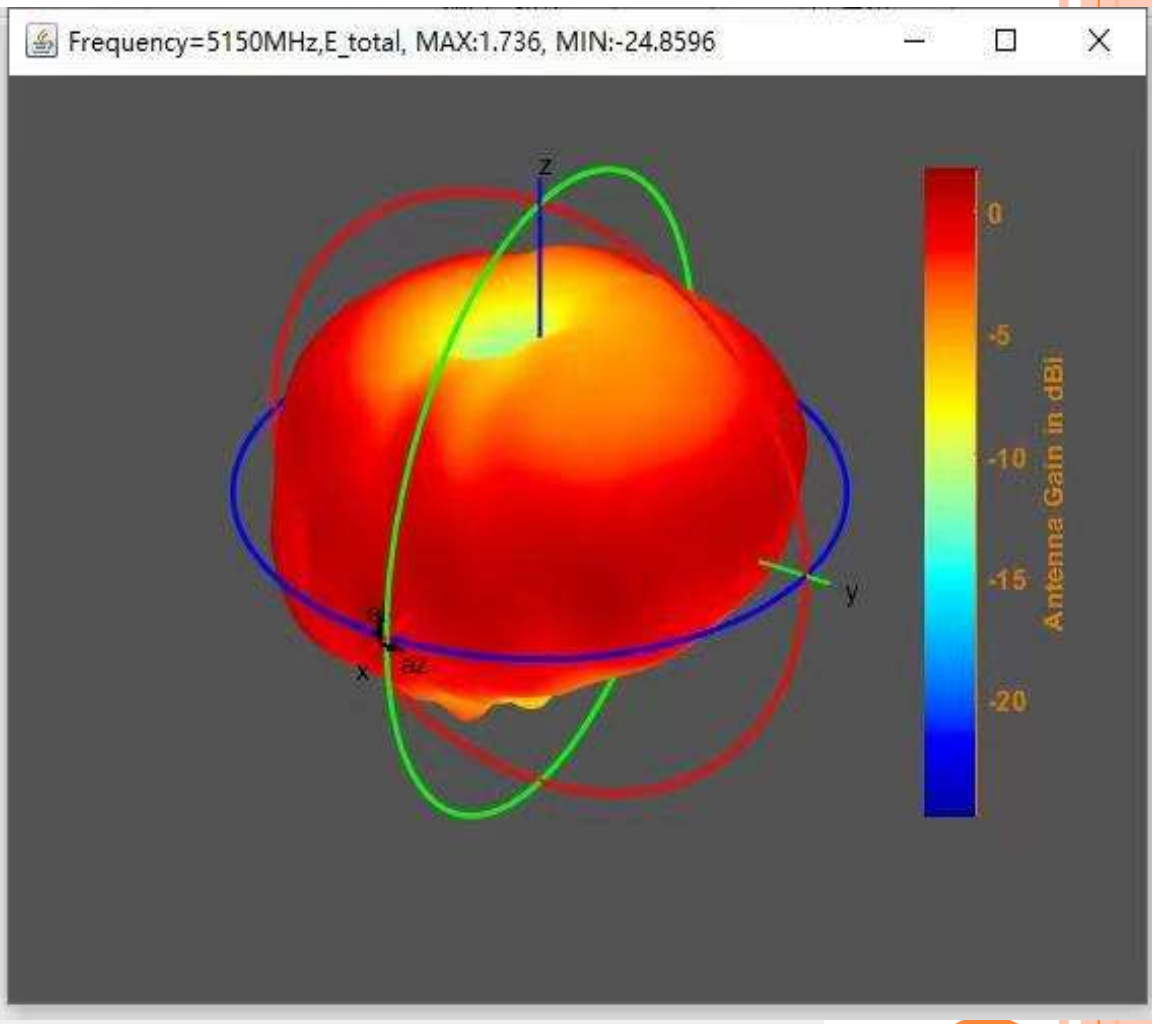




Test Result : 2D & 3D Radiation Pattern

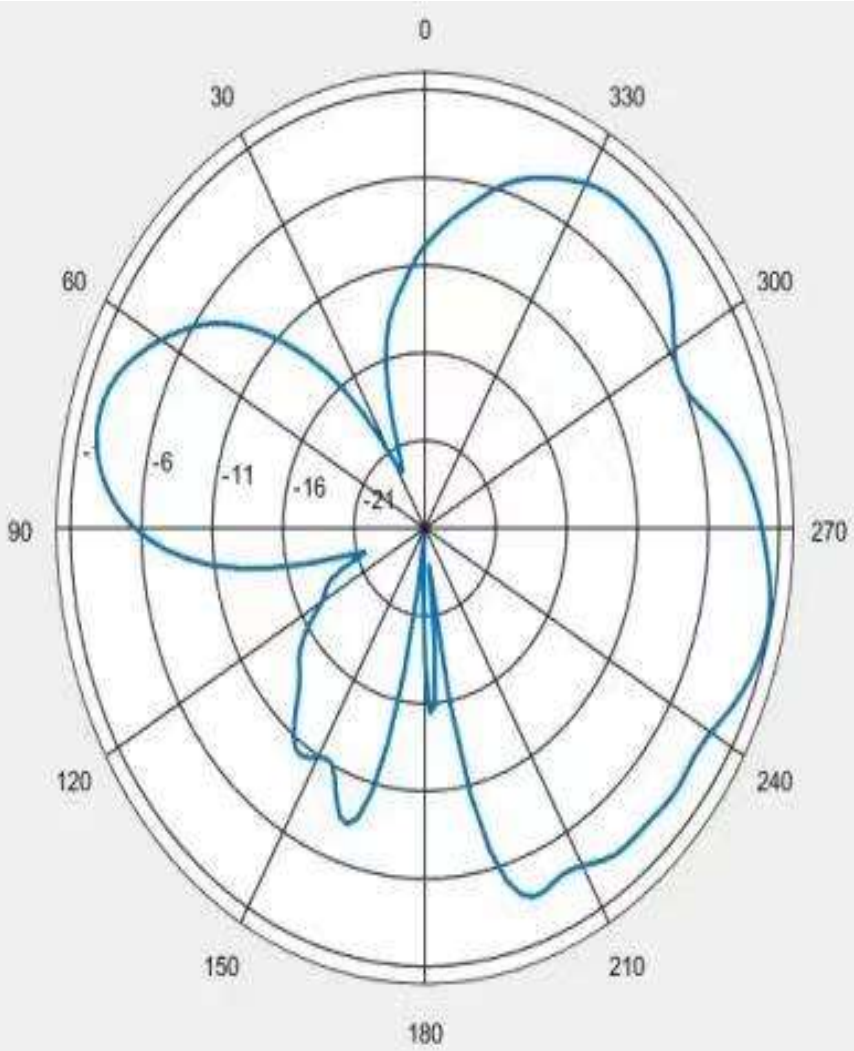
Antenna 1 5.15GHz

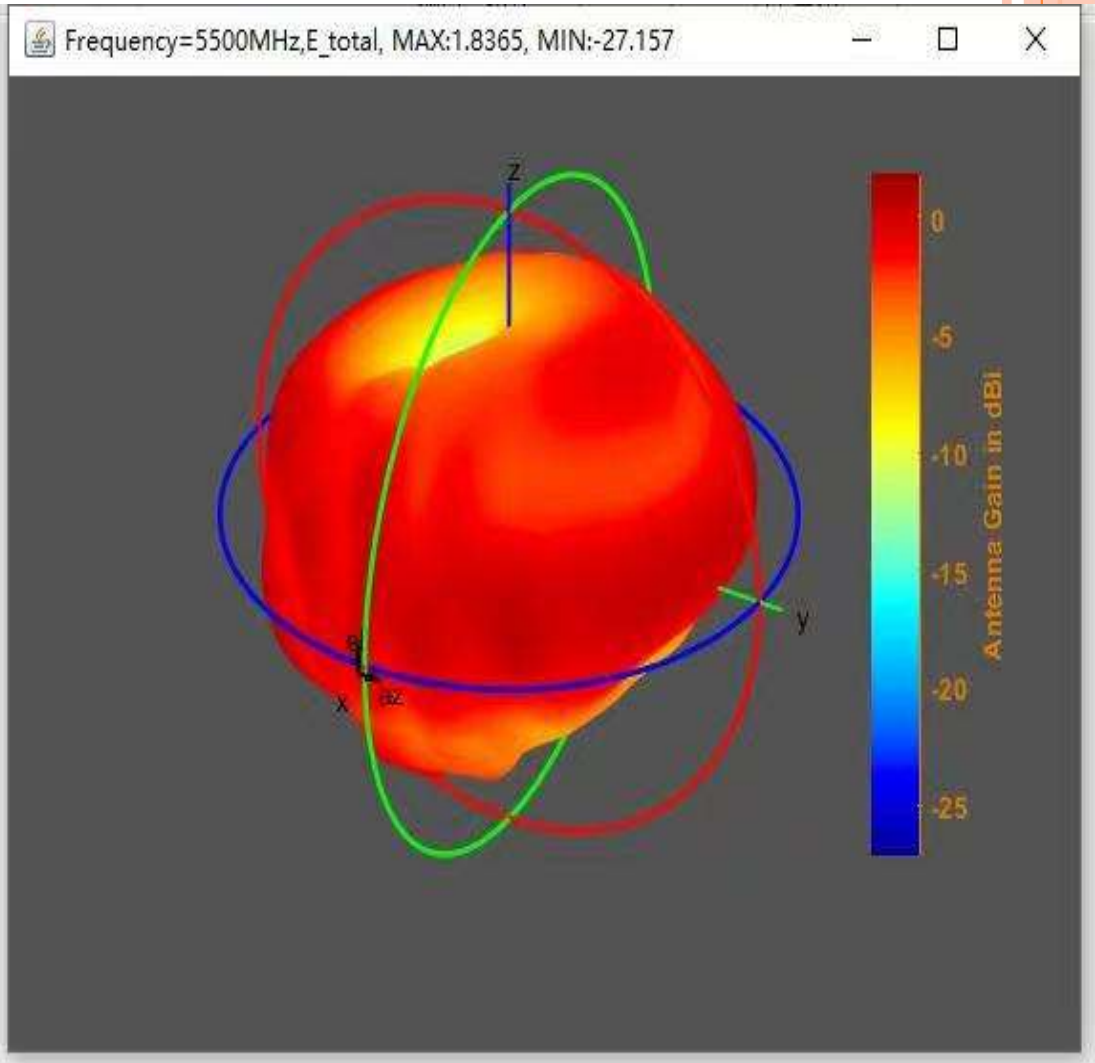




Test Result : 2D & 3D Radiation Pattern

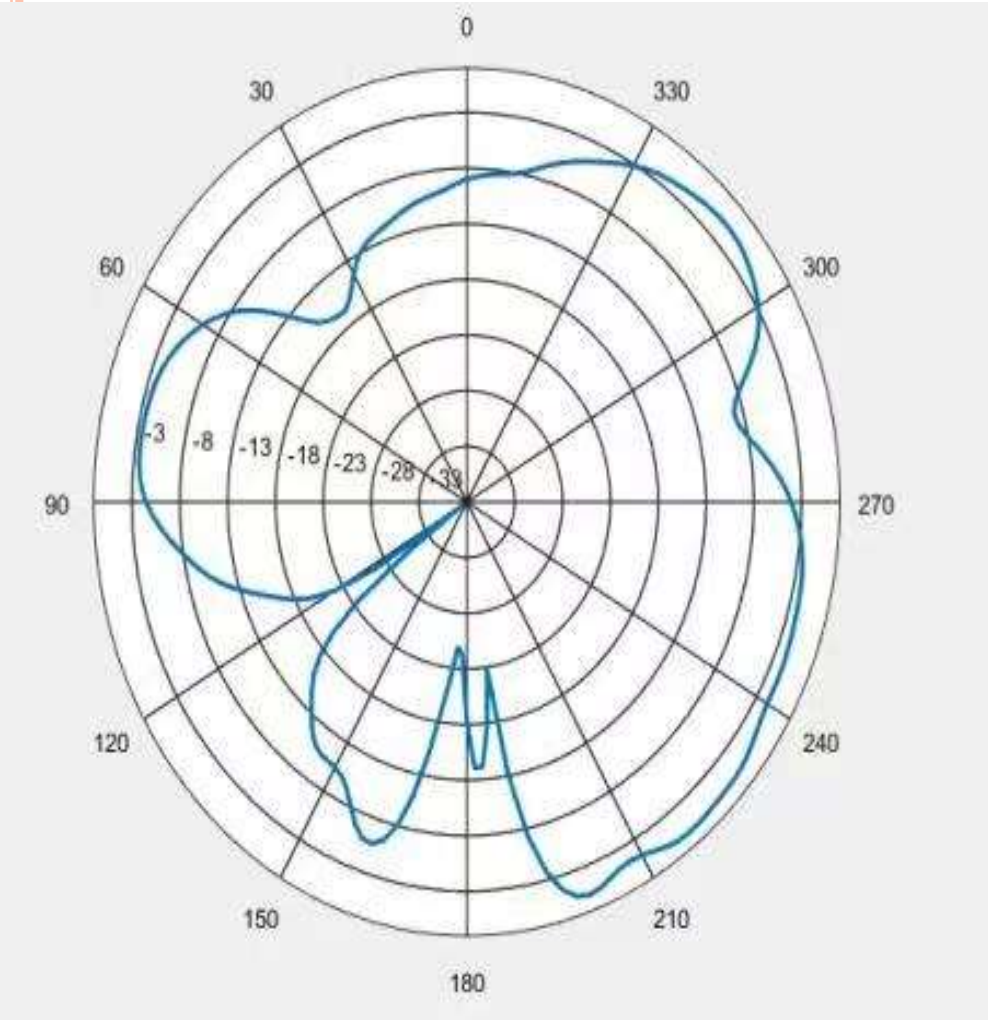
Antenna 1 5. 5GHz

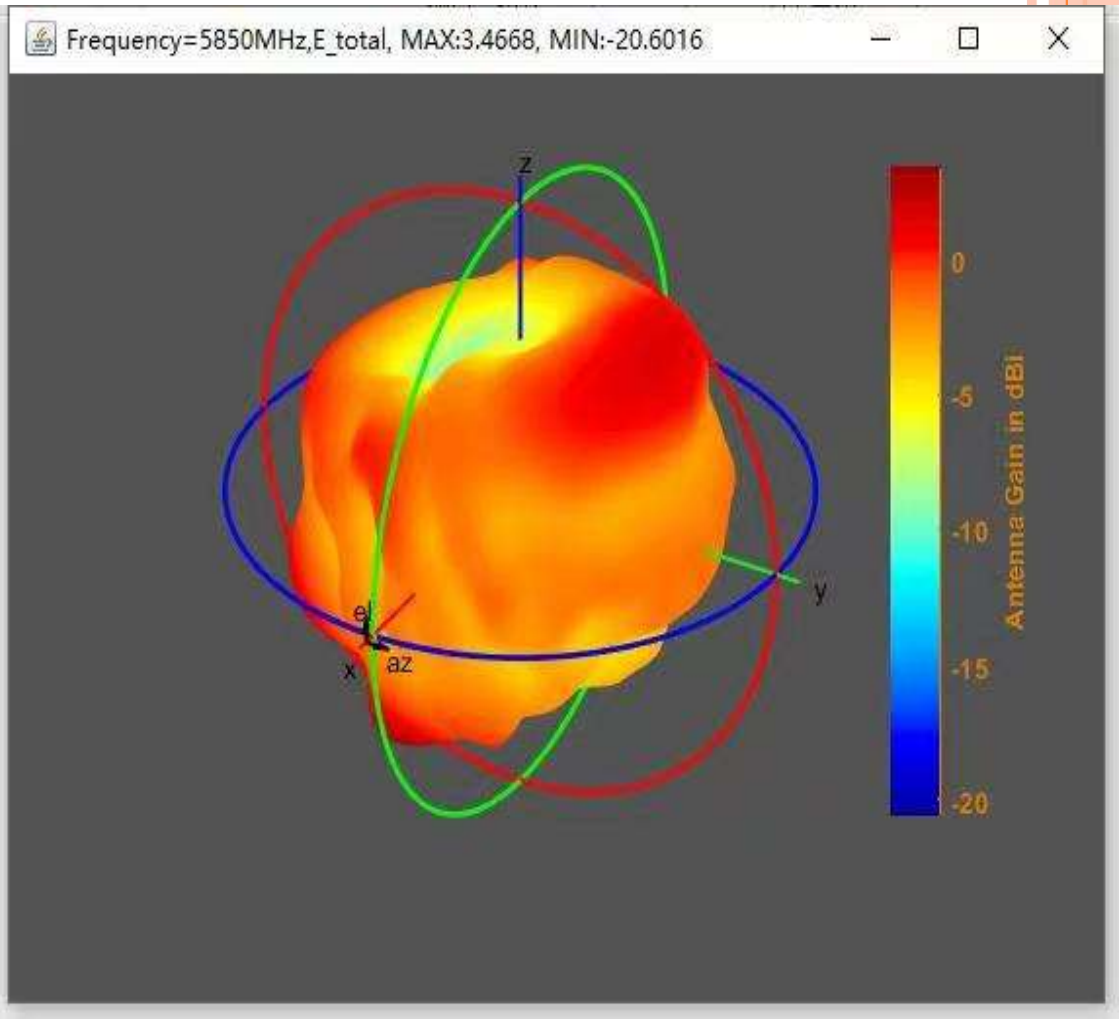




Test Result : 2D & 3D Radiation Pattern

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

无锡源达电工材料有限公司

WUXI YUANDA ELECTRICAL MATERIAL CO.,LTD.

中国江苏省江阴市青阳镇南陈村 邮编 214401
Nachen,Qingyang Town, Jiangyin City 214400,Jiangsu, China

客户/Customer: 苏州点正电子科技有限公司_____

客户料号/ Customer P/N:_ YD178_____

规 格 书

Specification

50Ω(FEP)绝缘射频电缆

50Ω FEP Insulated Coaxial Cable

YD178 系列

YD178 SERIES

编制/Signed by:___cool lai_____

编制日期/ Date: 22th April 2009

无锡源达电工材料有限公司

WUXI YUANDA ELECTRICAL MATERIAL CO.,LTD.

中国江苏省江阴市青阳镇南陈村 邮编 214401
Nachen,Qingyang Town, Jiangyin City 214400,Jiangsu, China

1. 适用范围:

Scope

本规格书制定了 50Ω FEP 绝缘射频电缆 YD178 系列的结构和电气特性.

This specification covers the construction and the electrical properties of YD178 series of 50Ω FEP Insulation Coaxial Cable.

2. 结构/Construction: 单位/Unit:mm

项目/Item		详细资料/Details
导体/Conductor	材料/Material	镀银铜线/Silver-coated Copper Wire
	构成(根/mm) Composition(No./mm)	7/0.102
	标称直径/Nom.O.D (mm)	0. 306±0.03
绝缘层 /Insulation	材料/Material	/聚四氟乙烯/PTFE
	标称绝缘厚度/Nom.Thick(mm)	0.275
	标称外径/Nom.O.D (mm)	0.86±0.03
屏蔽层/Shield	材料/Material	镀银铜线/ Silver-coated annealed copper wire
	构成/Composition	0.10单线编织/Single Braid of 0.10
护套/Jacket	材料/Material	聚全氟乙丙烯(*颜色)/FEP(*color)
	标称护套厚度/Nom.Thick(mm)	0.25
	标称外径/Nom.O.D(mm)	1.80±0.08
	颜色/Color	按与客户确认的颜色/According to corresponding have approved by the suppliers and customers

3.电气特性(20℃时)/Electrical Properties(at 20℃)

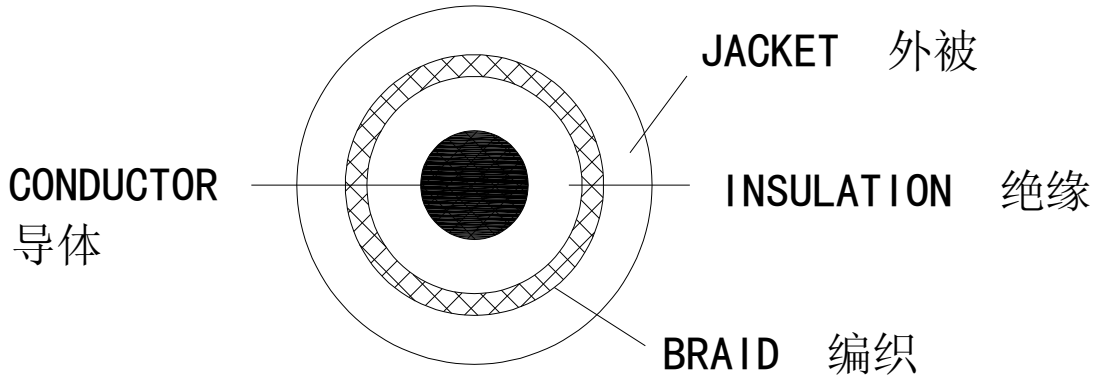
项目/Item	单位/Unit	详细资料/Details	
导体电阻/Conductor Resistance	Ω/km	Max.800	
绝缘电阻/Insulation Resistance	MΩ.km	Min.500	
耐压强度/Dielectric Strength	V(AC)/min	1000	
静电容/Capacitance	pF/m	105(1kHz)	
特性阻抗/Characteristic Impedance	Ω	50±2.0	
衰减/Attenuation	dB/m	1GHz	1.70
		2GHz	2.42
		3GHz	3.08

		4GHz	3.63
		5GHz	4.15
		6GHz	4.80
耐温 Temperature range	℃	-55-150(FEP), -55-200(PTFE)	
驻波比/Standing wave(0-6GHz)	/	≤1.35	

4.包装 Packing

标准单位包装长度为 400 米/盘,每盘最多允许 3 个接头,接头最短长度 20 米,在搬运过程中不能损坏包装.

Standard unit length of finished cable shall be 400m on reel, frequency of joint max.3/reel, the mini length is 20m. The finished cable shall be packed not be damaged during transportation



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本产品有时不适合车载用途的情况也有,所以使用前请先和本公司业务部门进行商谈.

This product is not suitable for automobile application in some cases.Please contact with our sales department before you use this product.

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规格书完

End of specification