

承 認 書
SPECIFICATION FOR APPROVAL

客 戶
CUSTOMER

Hansong(NanJing)Technology Ltd

日 期
DATE

2024-06-18

品 名
DESCRIPTION

Antenna

客 戶 料 號
CUSTOMER P/N

45-2-000173

成 品 編 號
Model No

RC12WFI0251A1

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 | : ANTENNA |
| 2. Customer | : Hansong(Nanjing)Technology Ltd |
| 3. Model No. | : RC12WFI0251A1 |
| 4. Part No. | : 45-2-000173 |
| 5. Standard | : WLAN |
| 6. Antenna Profile | : PCB ANTENNA |
| 7. Lead Length | : 700MM |
| 8. Electrical Characteristics | |
| Operating Frequency | : 2.4--5.8Ghz |
| GAIN | : 2dBi~3dBi |
| Impedance | : 50Ω |
| 9. Mechanical Characteristics | |
| Connector | : MHF |
| Core | : 4*10*2MM |
| 10. Raw Material | |
| Coaxial Cable | : MINI1.13 |

PCB /FPC ANTENNA TEST ITEMS			
NO	项目/Items	试验条件/Test Conditions	规格/Specifications
1	冷热冲击试验	将样品放置在冷热冲击试验仪中, -40℃ 30min 70℃ 30min为1循环, 共计试验5个循环, 一个循环条件如下: '-40℃ 30min 70℃ 30min	外观无异常 VSWR满足要求绝缘Return loss满足要求
2	高低温存储测试	样品放置在温度70℃±2℃的高低温试验仪中试验72小时, 结束后回温2小时, 再进行功能、性能、外观检测	外观无异常 VSWR满足要求 Return loss满足要求
3	盐水喷雾	将样品放入试验箱内 温度: 温度 21℃ 相对湿度:50% 盐水浓度: 5±1% NaCl Conc 时间: 48 小时 MIL-STD-202,	外观无明显腐蚀
	成品检验基准	1; 使用材料规格与图纸符合 2: PCB/FPC无冷焊,虚焊,尖刺焊点,方向不符等不良 3: 无端子变形, 无露芯线, 无PIN孔塑胶体损 4; 无断.短路.频率过高过低等不良.	成品檢查基準 MIL-STD-105/ PIQ-1031

[illegible]

Antenna Measurement Report

- Model: **PCB** Antenna(WPB214)
- Manufacture : Suzhou Point Positive
- Electronic Technology Co.,Ltd
- Series Number : QTKOTAPR00316
- Antenna Type: Frequency; 2.4Ghz-5.8Ghz
- -----
- Test Date:2025-04--21

Outline Summary

- Test Environment and Equipment
 - Housing with antenna Photo
 - Test Result : 2D/3D Radiation Pattern Test
 - Test Result : Efficiency & Peak Gain
-
- 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

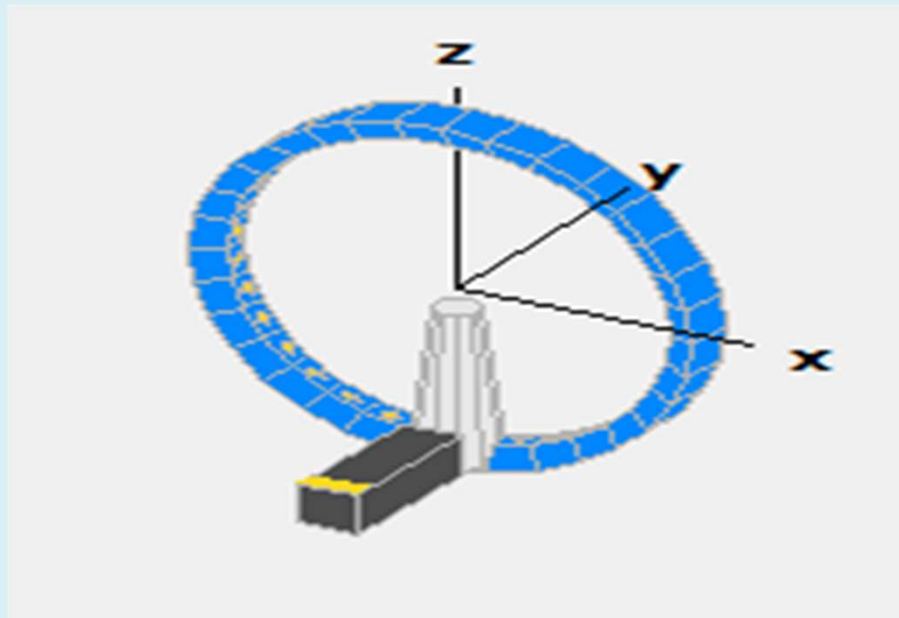
The Gain, Efficiency, Directivity and 2D/3D Pattern

Frequency Range :

Radiation Pattern Test System :

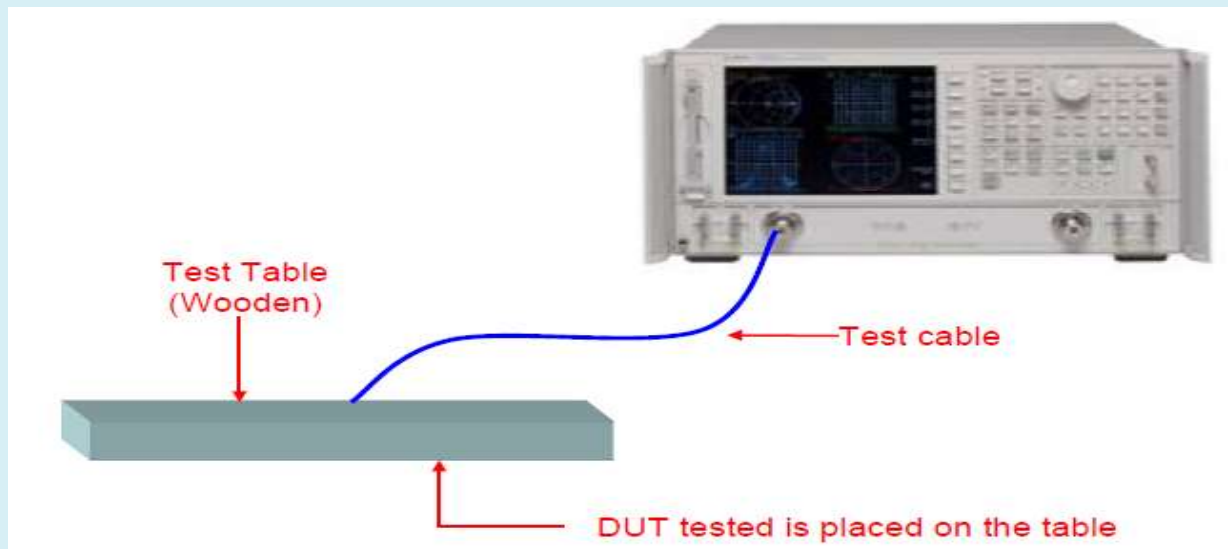
- The Radiation Pattern Test System(EMT24)
- The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 1). when viewed from the door of the chamber.

The axis arrangement is shown in Fig. 3

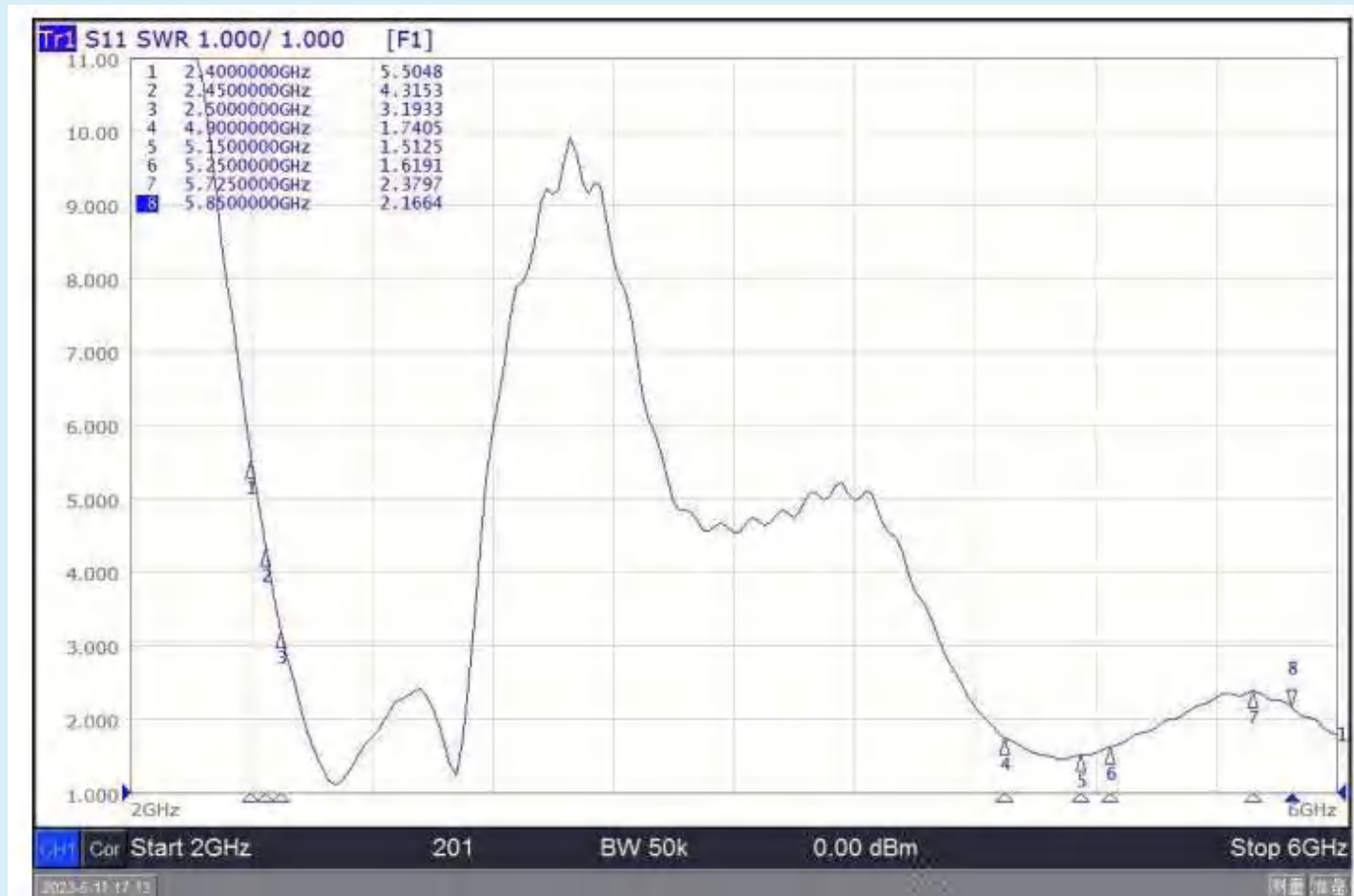


Test Environment and Equipments

- S-Parameter test
 - Network Analyzer
 - Testing range from 30KHz to 8.5GHz

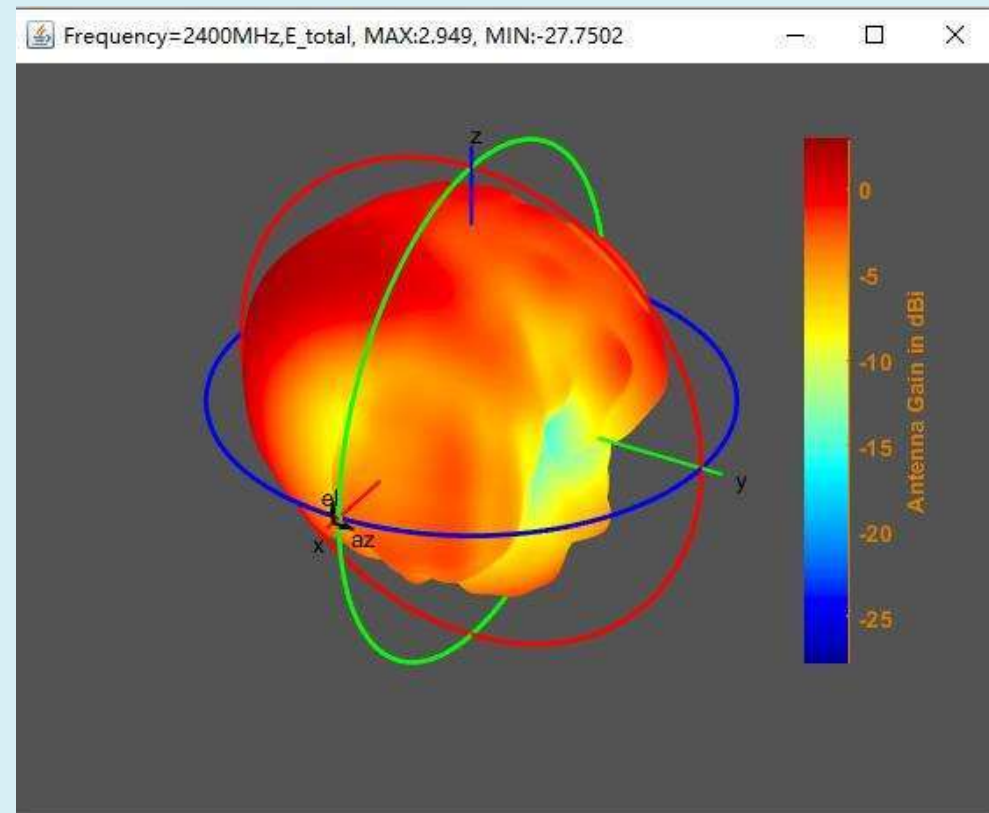
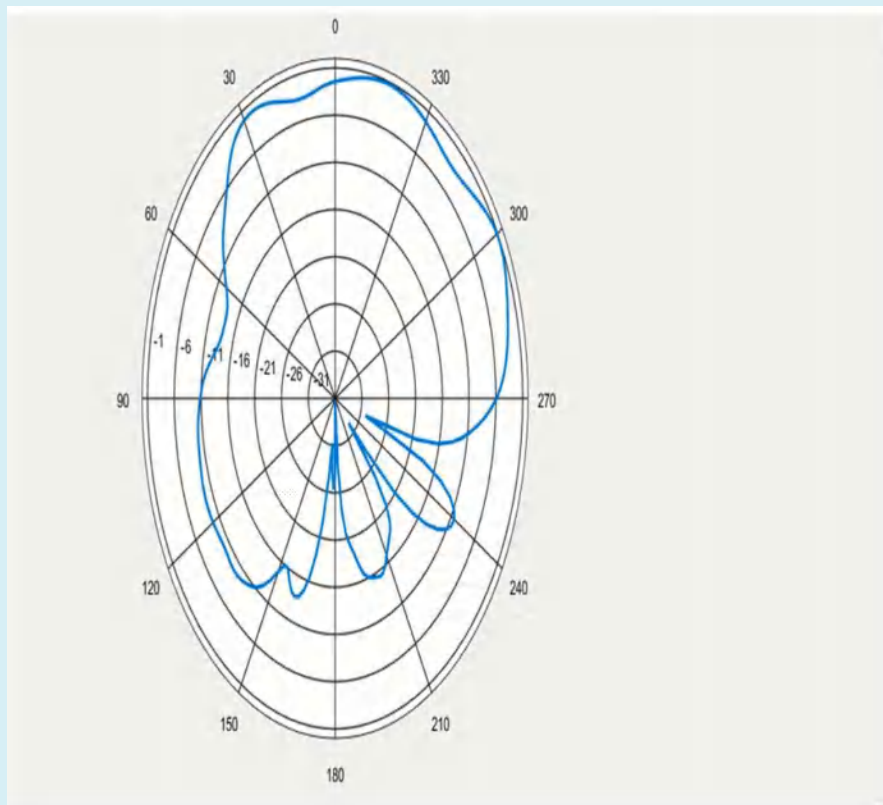


Test • Network Analyzer



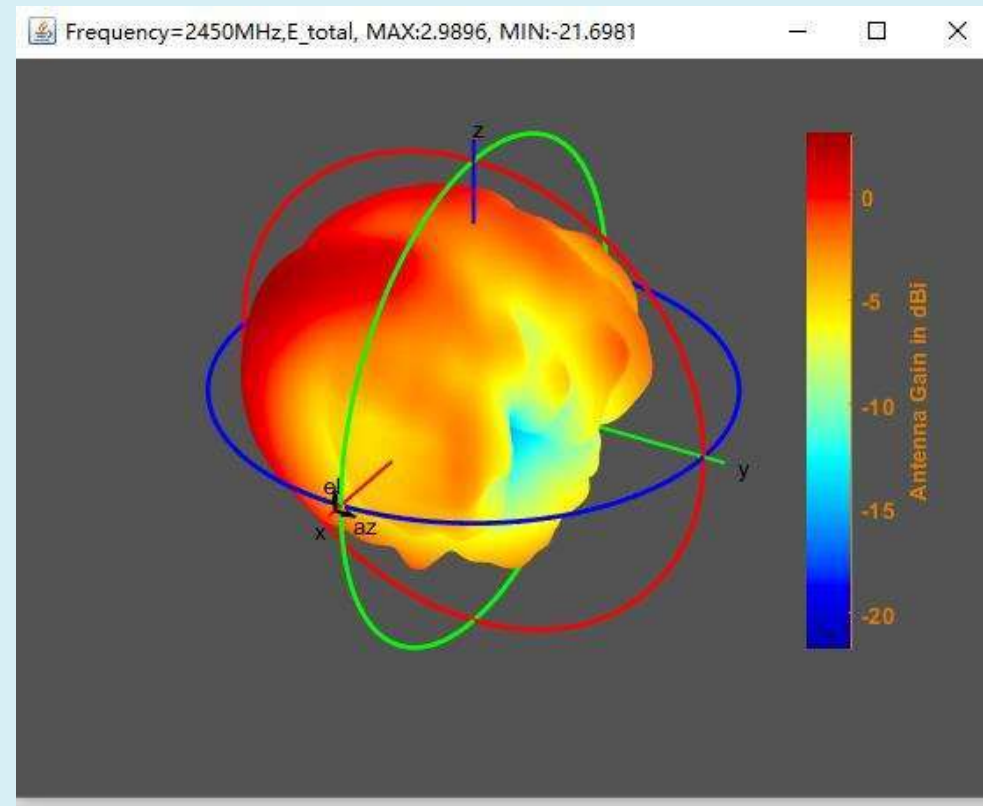
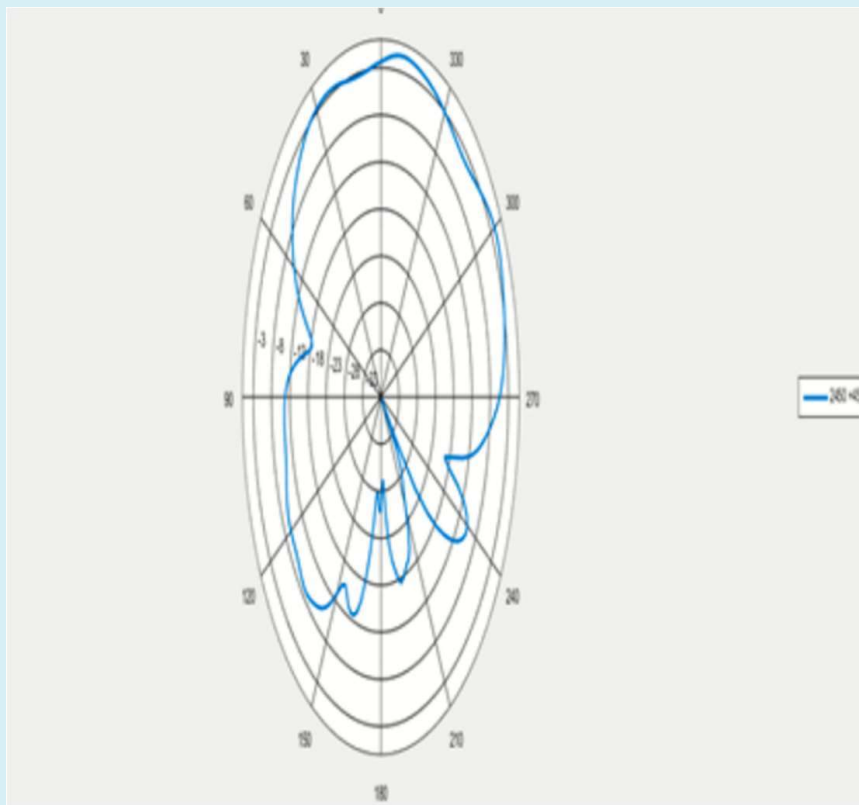
Test Result : 2D & 3D Radiation Pattern

Frequency: 2.4Ghz

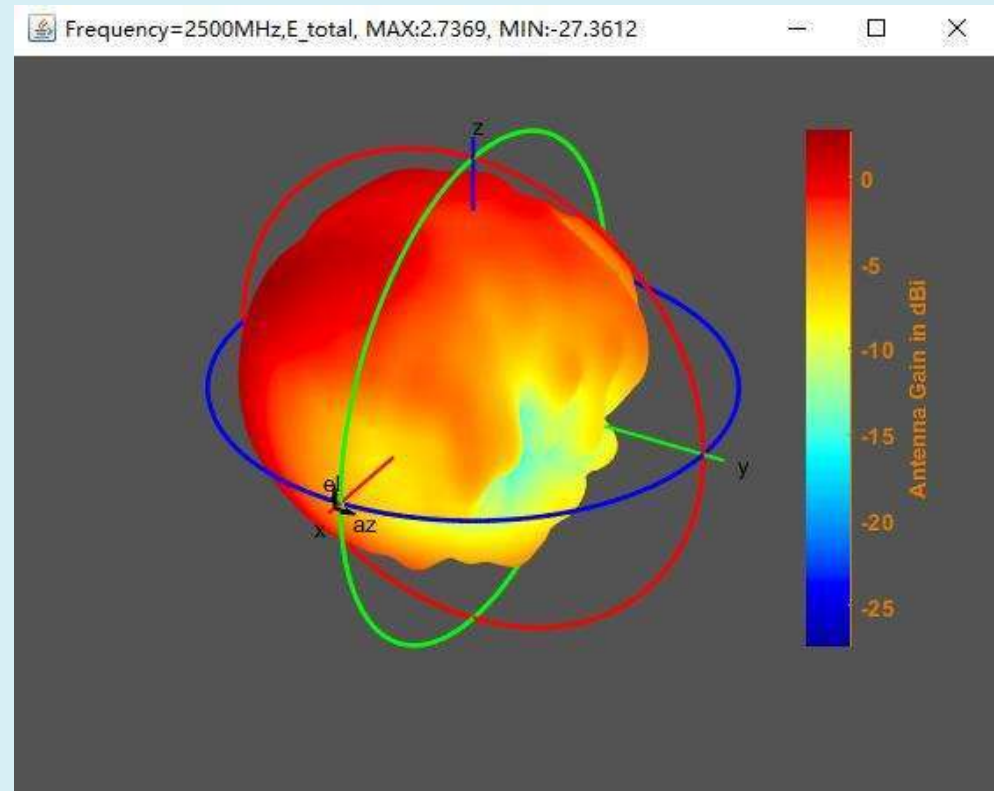
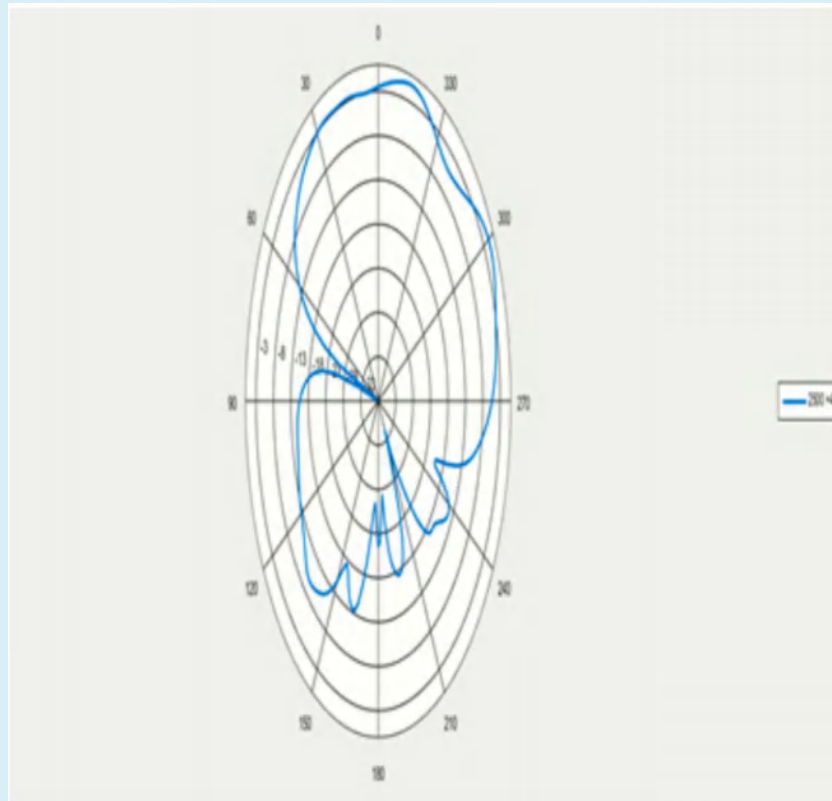


Test Result : 2D & 3D Radiation Pattern

Frequency: 2.45GHz

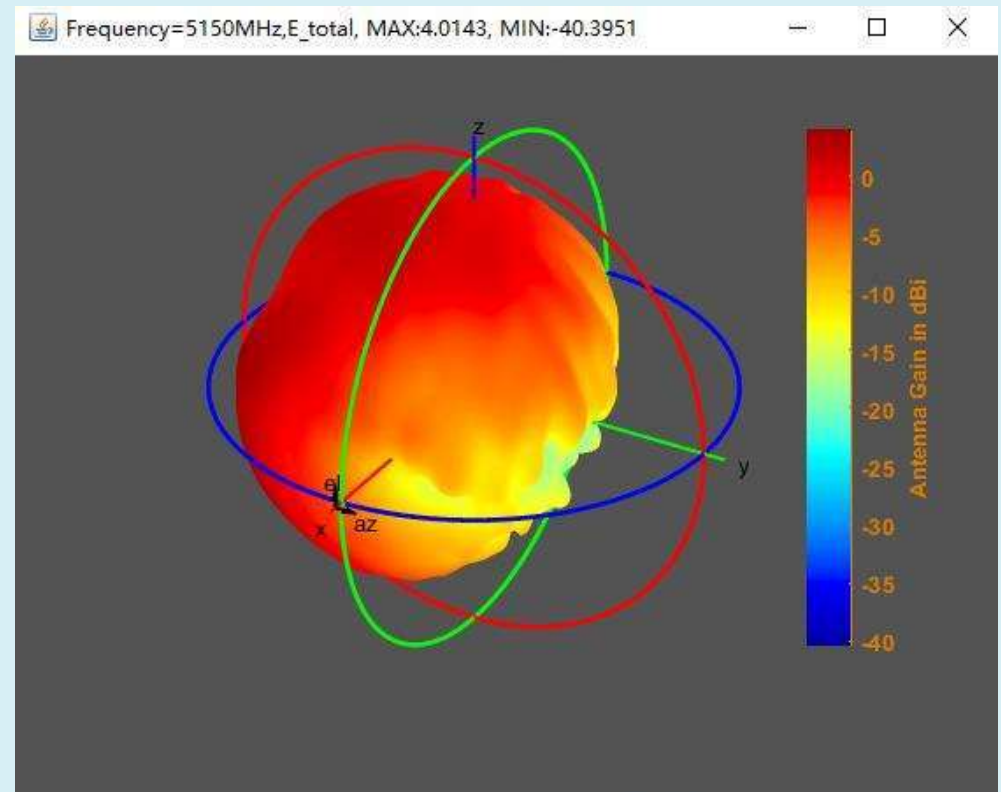
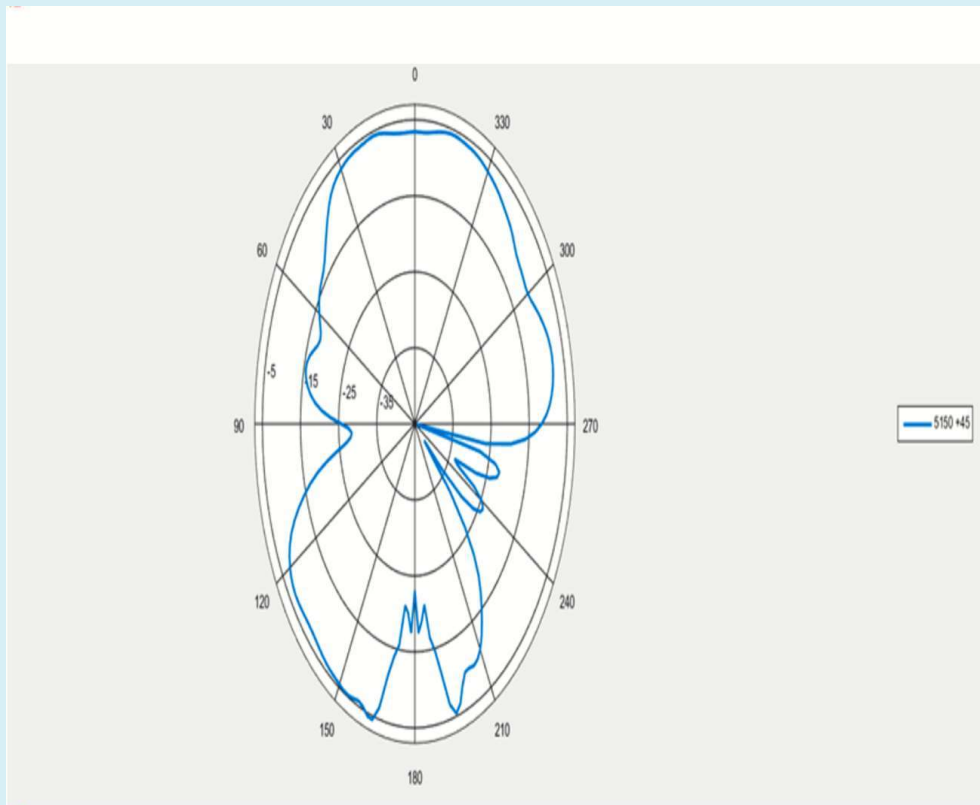


Test Result : 2D & 3D Radiation Pattern Frequency:2.5Ghz



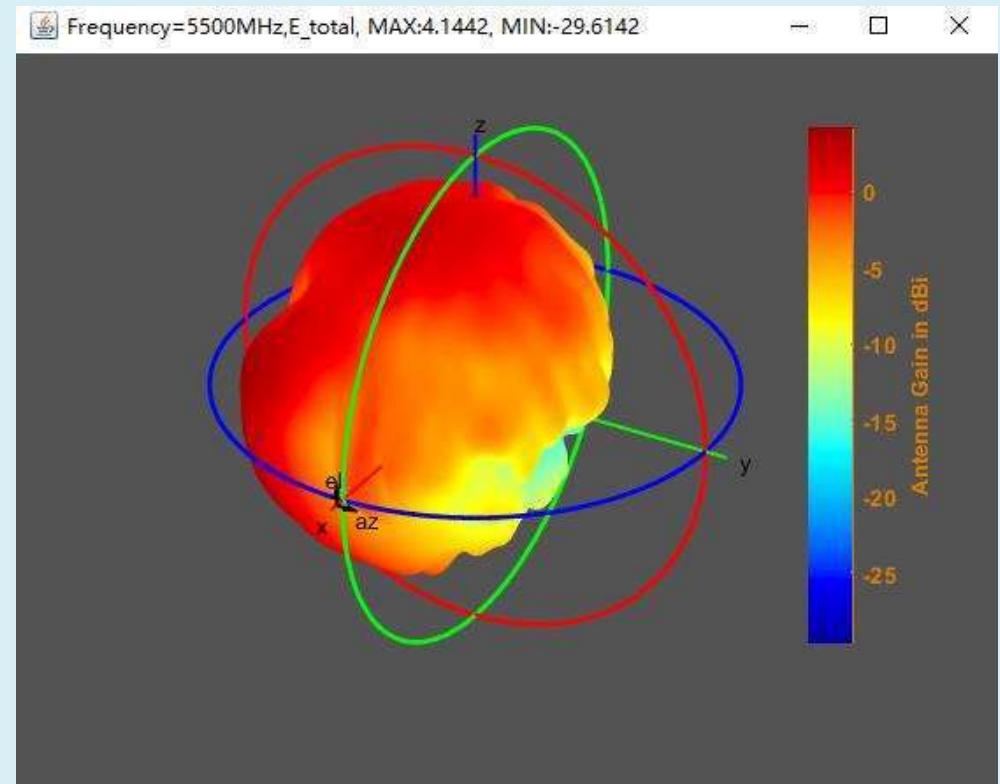
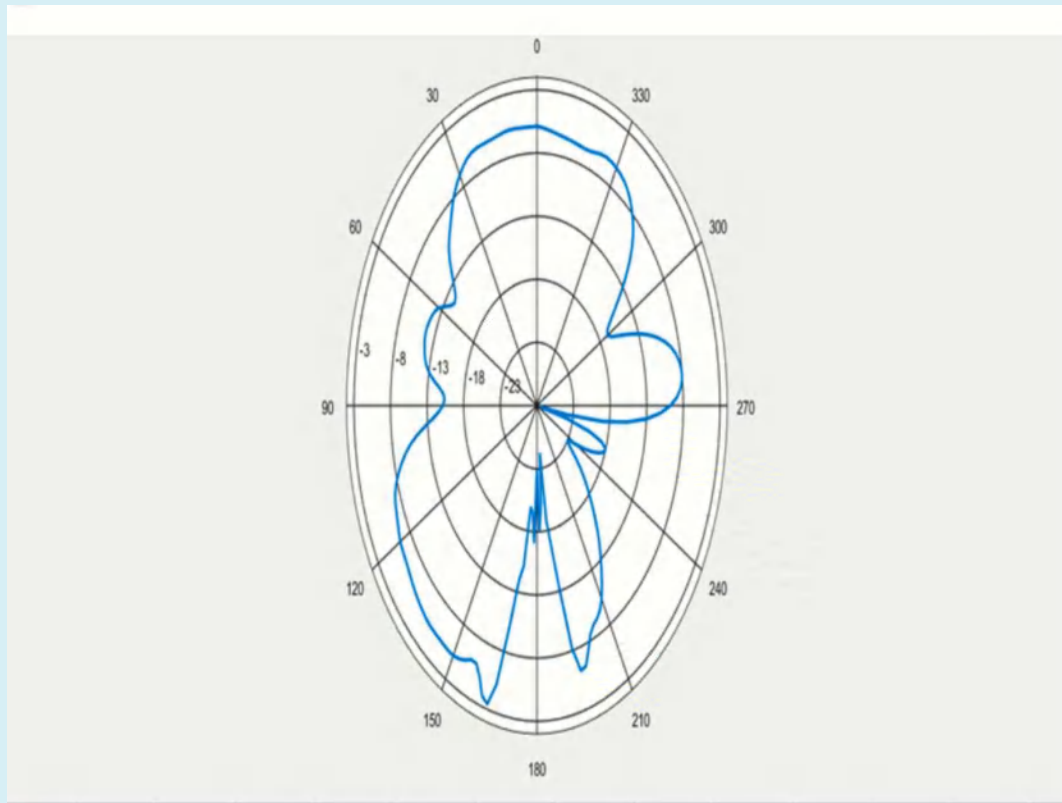
Test Result : 2D & 3D Radiation Pattern

Frequency: 5.15GHz



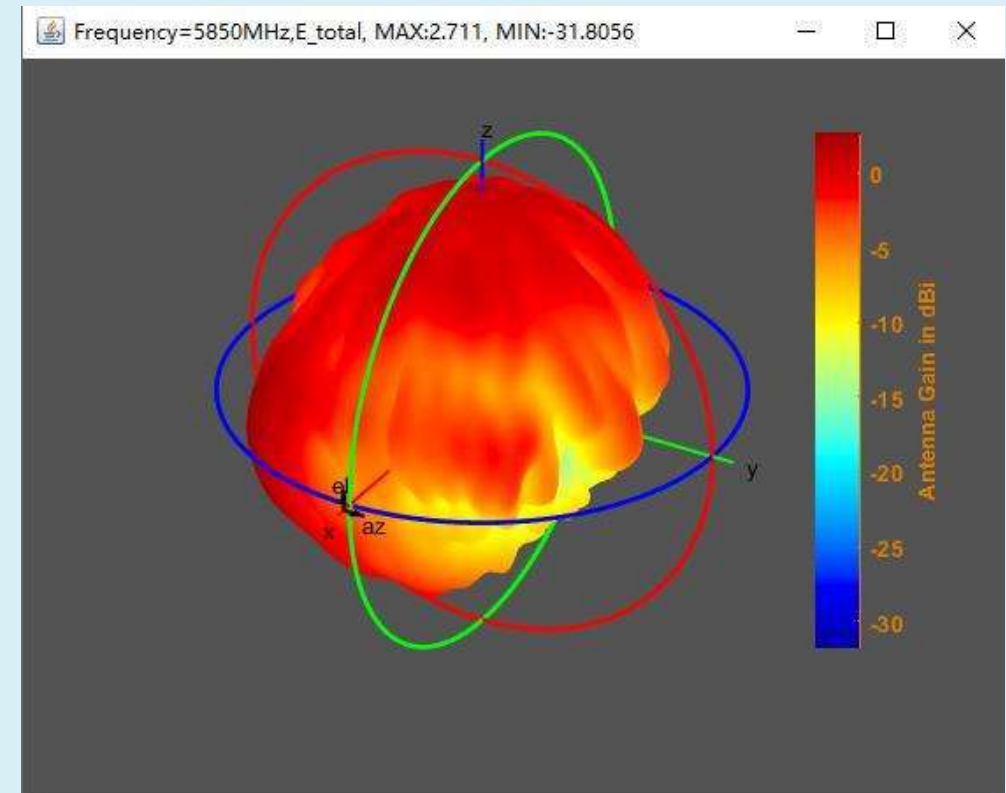
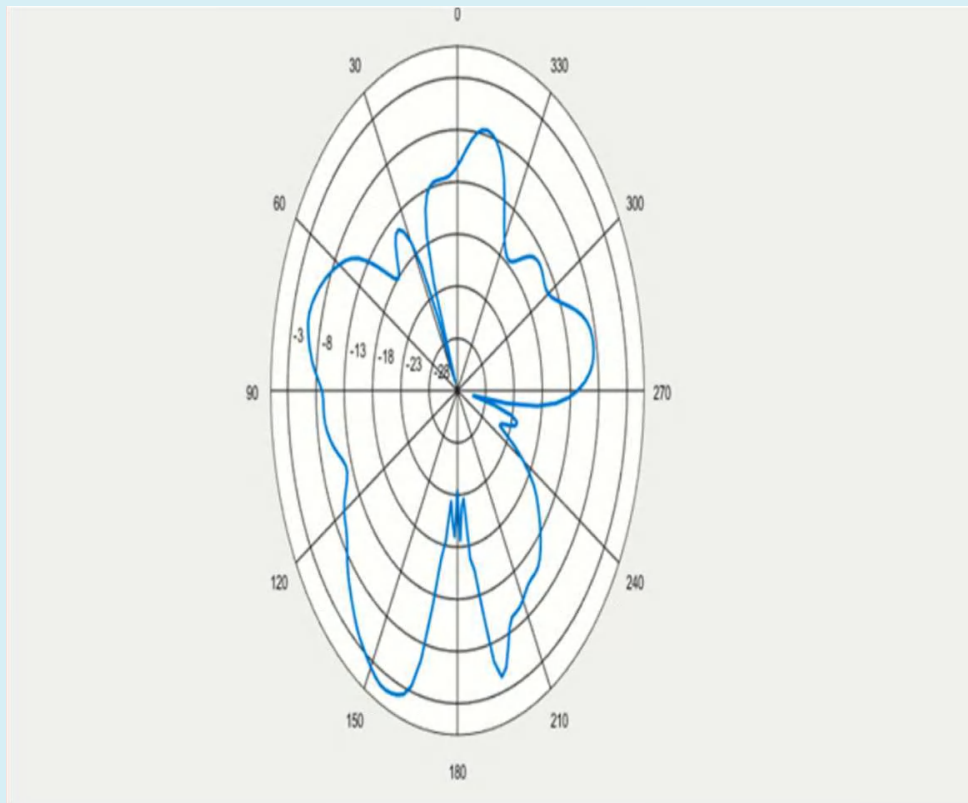
Test Result : 2D & 3D Radiation Pattern

Frequency: 5.5GHz



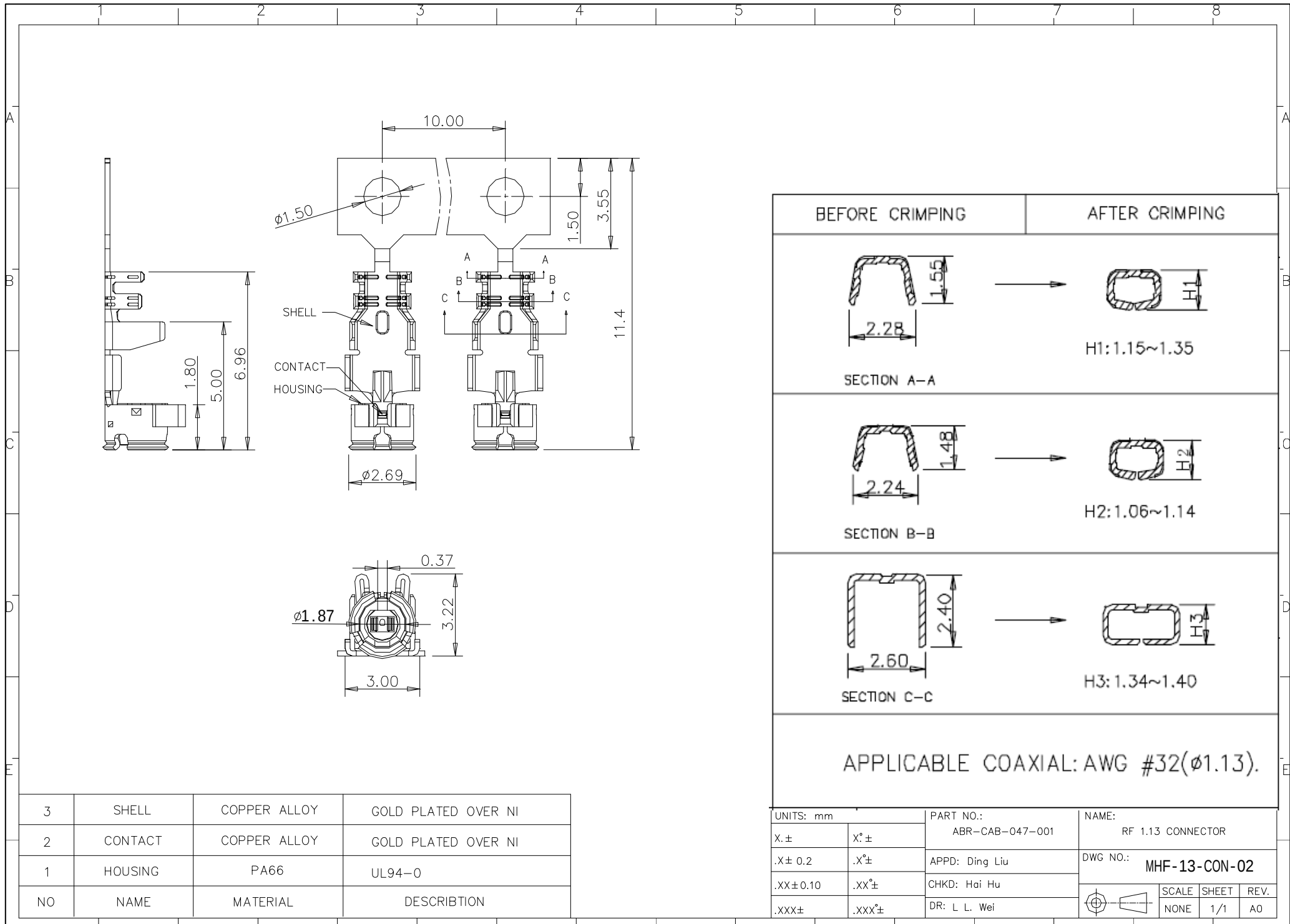
Test Result : 2D & 3D Radiation Pattern

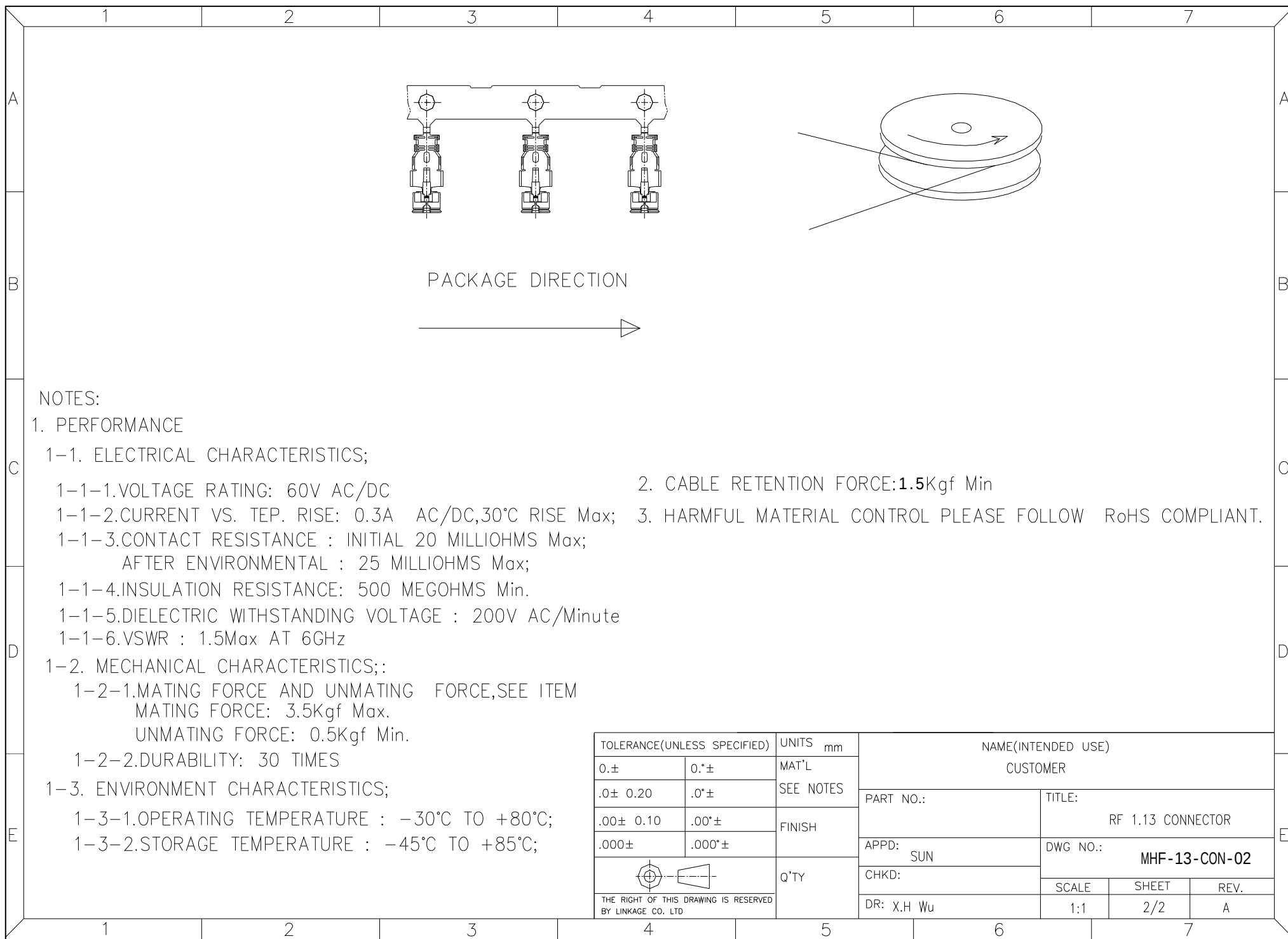
Frequency: 5.85Ghz



Test Result : Efficiency & Peak Gain For Reference

Frequency (MHz)	Peak Gain(dBi)	Average Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	2.09381	-2.5171	-2.2762	48.5279
2450	2.14324	-2.822	-2.6001	52.9134
2500	2.34422	-2.9571	-2.8089	54.5729
5150	2.54406	-2.5832	-2.6512	36.4306
5250	2.59018	-2.3622	-2.5175	39.4784
5350	2.55269	-2.5389	-2.8515	32.6201
5725	2.53948	-2.4486	-3.0094	34.941
5850	2.78974	-3.0598	-3.6296	30.902





客户/Customer: 点正电子

客户料号/ Customer P/N:

规格书

Specification

50 Ω (FEP) 绝缘射频电缆

50 Ω FEP Insulated Coaxial Cable

YD113 系列

YD113 SERIES

编制/Signed by: lai cool

编制日期/ Date: 25th November

1. 适用范围:

Scope

本规格书制定了 50Ω FEP 绝缘射频电缆 YD113 系列的结构和电气特性.

This specification covers the construction and the electrical properties of YD113 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	镀锡铜线/Tinned Copper Wire
	构成(根/mm) Composition(No. /mm)	7/0.083
	标称直径/NOM. O. D	0.24±0.03
绝缘层 /Insulation	材料/Material	聚全氟乙丙烯(自然色) /FEP(Natural)
	标称绝缘厚度/Nom. Thick. (mm)	0.23
	标称外径/NOM. O. D	0.695±0.03
屏蔽层/Shield	材料/Material	镀锡铜线/Tinned annealed copper wire
	构成/Composition	0.05单线编织/Single Braid of 0.05
护套/Jacket	材料/Material	聚全氟乙丙烯/FEP
	标称护套厚度/ Nom. Thick (mm)	0.10
	标称外径/Nom. O. D (mm)	1.13±0.05
	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℃)

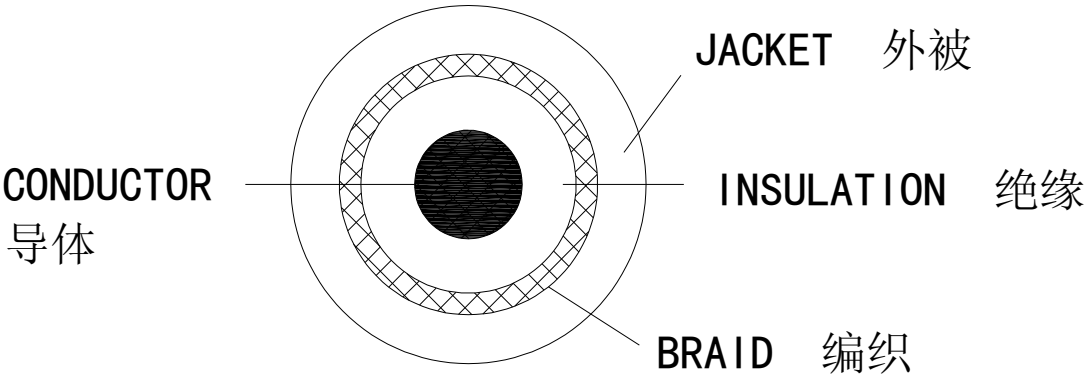
项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω/km	Max. 560
绝缘电阻/Insulation Resistance	MΩ. km	Min. 200
耐压强度/Dielectric Strength	V(AC)/min	1000
静电容/Capacitance	pF/m	98
特性阻抗/Characteristic Impedance	Ω	50±2.0

衰减/Attenuation	dB/m	1GHz	2.20
		2GHz	3.15
		3GHz	3.90
		4GHz	4.60
		5GHz	5.20
		6GHz	5.70
驻波比/Standing wave (0-6GHz)	/	≤1.35	

4. 包装 Packing

标准单位包装长度为 1000 米/盘, 每盘最多允许 5 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 1000m on reel, frequency of joint max.5/reel, the mini length is 20m. The finished cable shall be packed not be damaged during transportation



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.

规格书完
End of specification

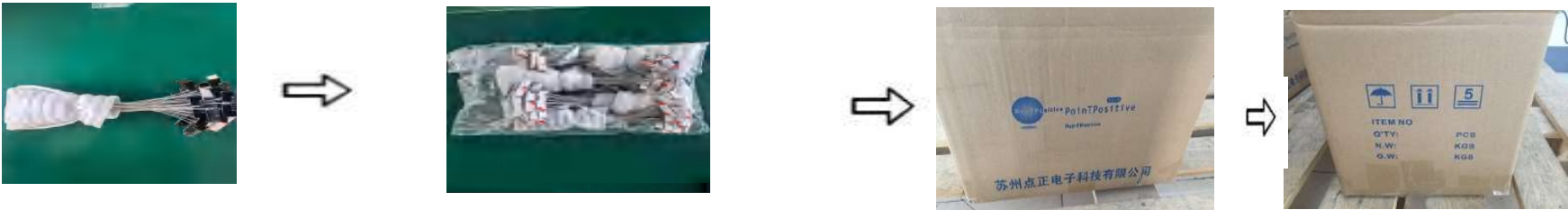
苏州点正电子科技有限公司

Suzhou Point Positive Electronic Technology Co.,Ltd

产品包装规范

Product packaging specification

日期/Date 2025.11 2025.11.28

产品名称/型号(PART/Name)		PCB ANTENNA PACKING LIST				
產品料號(P/NO):		PCB 天线通用包装		專案號	P25-250015	Customer HANGSON
序号	产品名称(Name)	厂家代号(Vendor)	包装箱长×宽×高 /Box(L*W*H)	包装袋 长×宽×高;PE bag(L*W*H)	每箱 数量(Box/Amount)	包装要求 (Package Requiement)
1	PE袋			L355*W280MM	10pcs	200pcs/PE袋
2	外箱(Box)		L350*W250*H270mm	无	2000pcs	
正唛 (Front Mark) ; 侧唛 (Side MARK):  50PCS 一扎/泡棉包裹住端子 200pcs/Big PE Bag/LABLE 装箱 2000pcs/Box						
备注	环保物質控制等級:RoHS					

核准 (App) Roy 审核 (Ex) Hellen 承办(By);Sanit

保存期限(Shelf life): three Years PP-RD-021(A0)