



深圳市英佳创电子科技有限公司

<http://www.szsyjc.com>

APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2.4G/5.8G 绿色 PCB 内置天线, 1.13黑 L=160MM	
P/ N	YJC-6N160-B30	
APPROVAL REV.	A0	
DELIVERY DATE	2023 年 03 月 25 日	
PREPARED BY	殷飞杰	
CHECKED BY	方文锋	
APPROVED BY	肖 汉	
Customer Approved		
Prepared By	Checked By	Approved By

总部地址：深圳市光明区马田街道油麻岗路 11 号宏域光明谷 C 栋

东莞分厂：东莞市桥头镇石水口银河三路 2 号英佳创产业园

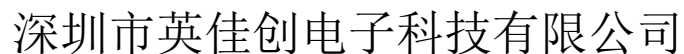
杭州办事处：杭州市滨江区物联网街 369 号大华江虹国际创新园 B 栋 212

绵阳办事处：四川省绵阳市高新区绵兴东路 35 号万向高新国际 4F-34 号

电话：0755-27810060

传真：0755-27810057

网址：<http://www.szsyjc.com>



<http://www.szsyjc.com>

目录

1、	Cover	1
2、	Directory	2
3、	Resume	3
4、	Antenna Plan	4
5、	Antenna technical parameters	5
6、	Physical image of antenna	6
7、	Antenna performance testing	6
8、	2D、3D(2.4G/5G)test data	7-8
9、	Wire specification parameters	9
10、	ROHS	10

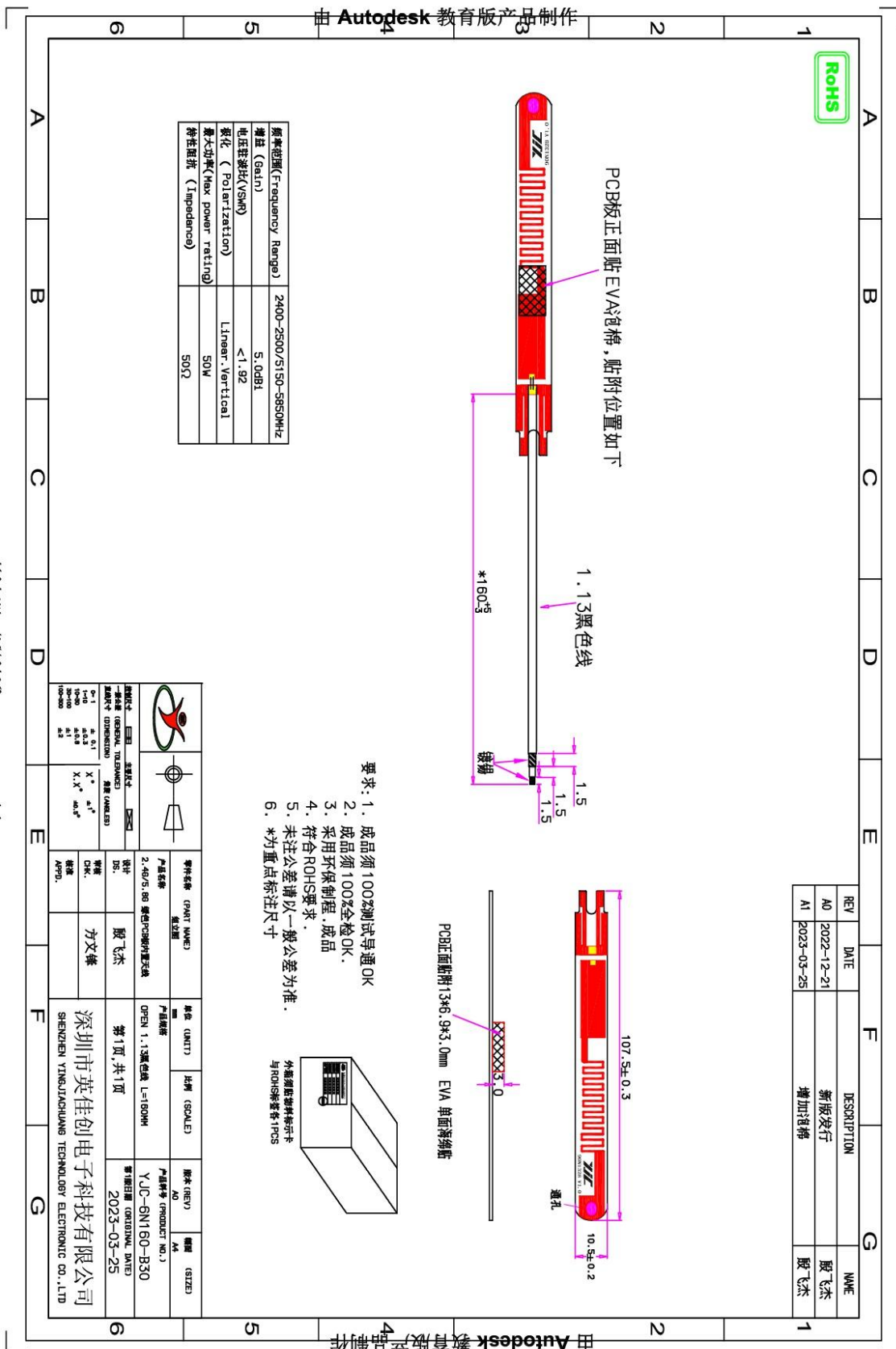


Resume:

version	reason for change	date	issue
A0	Initial release	December 21, 2022	



Antenna Plan:





Antenna technical parameters and environmental testing:

Electrical technical parameters			
电 性 能 指 标		Electrical Specifications	
频率范围	2400-2500/5150-5850MHz	Frequency Range	2400-2500/5150-5850MHz
电压驻波比	<1.92	VSWR	<1.92
输入阻抗	50 Ω	Input Impedance	50 Ω
方向	全向	Direction	All
增益	5.0dBi	Gain	5.0dBi
机 械 指 标		Mechanical Specifications	
线材颜色	黑色	Wire Color	Black
接口形式	OPEN	Input connector	OPEN
线材长度	160MM	Wire Length	160MM
工作温度	-20℃~+70℃	Working Temperature	-20℃~+70℃
工作湿度	20%~80%	Working Humidity	20%~80%

Physical image of antenna:





Antenna performance testing:

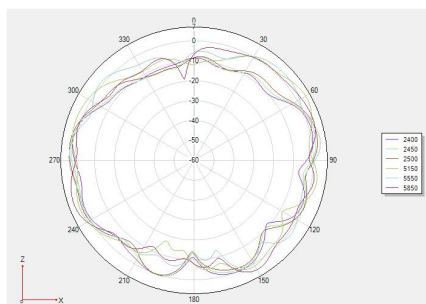




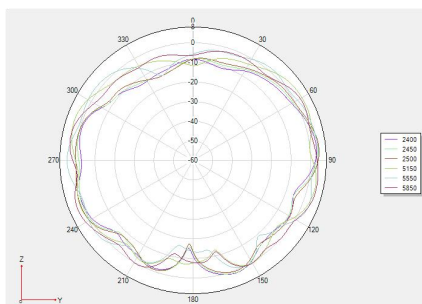
2D、3D(2.4G/5G)test data:

Frequency (MHz)	Efficiency (%)	Gain. (dBi)
2400MHz	60.35	3.17
2410MHz	61.83	3.73
2420MHz	61.35	3.67
2430MHz	63.8	4.86
2440MHz	60.59	4.61
2450MHz	62.53	4.18
2460MHz	62.62	3.97
2470MHz	64.19	4.64
2480MHz	63.18	4.21
2490MHz	64.62	4.54
2500MHz	65.17	4.42
5150MHz	53.5	4.65
5250MHz	55.77	5.12
5350MHz	54.96	4.68
5450MHz	53.34	4.3
5550MHz	52.11	4.75
5650MHz	54.65	4.9
5750MHz	58.16	5.71
5850MHz	55.58	5.12

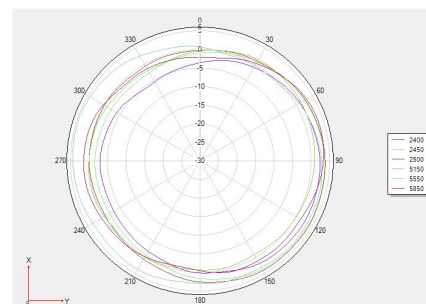
Phi 0 2D:



Phi 90 2D

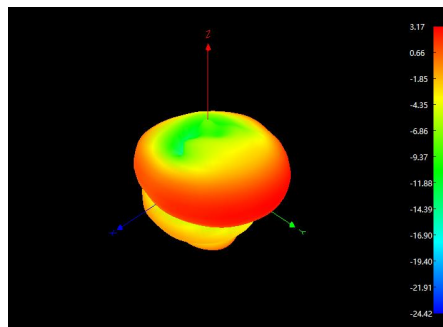


Theta 90 2D

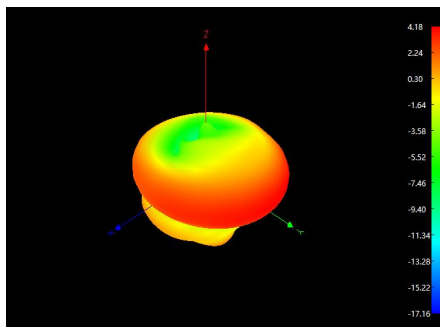




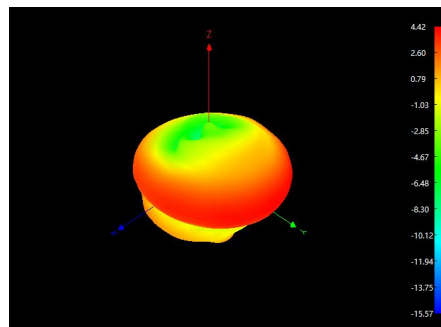
3D 2400:



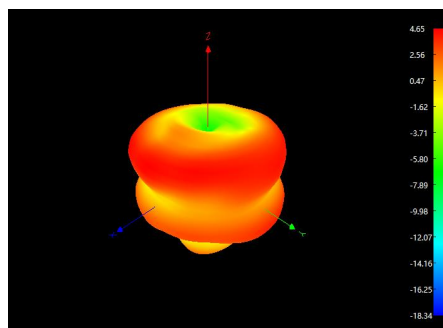
3D 2450:



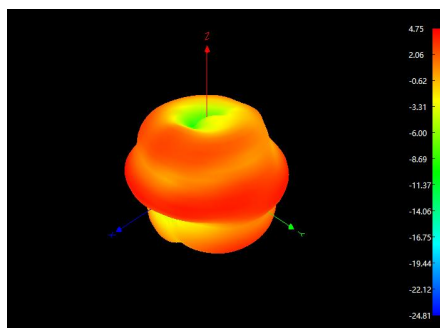
3D 2500:



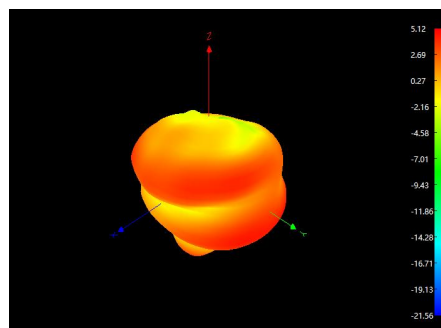
3D 5150:



3D 5550:



3D5850:





产品规格 Product Type		1.13 线			
结构图 Structure Drawing					
结构特性 Structure Characteristics					
结构 Structure		项目 Item		标准值 Standard Value	
内导体 Inner Conductor		材质 Material		镀银铜线 Silver plated copper wire	
		构成(根/mm/Composition(No./mm)		7/0.08±0.005	
		标称外径 Nom.Dia(mm)		Φ0.24±0.01	
绝缘层 Insulation		材质 Material		聚全氟乙丙烯/FEP	
		标称外径 Nom.Dia(mm)		Φ0.7±0.03	
外导体 Outer Conductor		材质 Material		镀锡铜线 Tinned copper	
		形式 From		编织/Weaving	
		遮蔽率/ Shielding rate		≥90%	
		标称外径 Nom.Dia(mm)		Φ0.92±0.03	
护套 Jacket		材质 Material		聚全氟乙丙烯/FEP	
		标称外径 Nom.Dia(mm)		Φ1.13±0.05	
电气性能 Electrical Characteristics					
项目 Item		标准值 Standard Value	项目 Item	频率 Frequency	标准值 Standard Value
阻抗 Impedance (Ω)		50±3	衰减 Attenuation@20 ℃ (dB/100m)	1GHz	≤2.23
电容 Capacitance(pF/m)		98		2GHz	≤3.15
抗拉强度 Tensile strengthkgf/mm²		1.76		3GHz	≤3.96
驻波比 VSWR		≤1.40@0-6GHz		4GHz	≤4.6
耐压强度 Dielectric Strength (A.C V/1min)		1000		5GHz	≤5.15
最大工作频率 (MHz) Max.oper. frequency		6000		6GHz	≤5.7
可靠性 Dependability					
最小弯曲半径(单次)Min.Bending Radius/Single			mm	4	
最小弯曲半径 (重复) Min.Bending Radius/Repeated			mm	8	
工作温度范围 Operating Temperature			℃	-20~+80	
包装 Packing					
包装方式 Packing Mode		1000 (m/盘) 成卷 Reel			
使用提示 Trips for Use					
存储环境 Storage Environment		Temperature: below 30 ℃, humidity: 20-65%			
铁氟龙收缩 Teflon Shrink		Insulation layer shrinkage ≤ 0.2mm; Shrinkage of sheath layer ≤ 0.3mm			
加工温度 Processing temperature		Can withstand for a short period of time at 250 ℃~260 ℃; Thermal decomposition occurs above 300 ℃			



深圳市英佳创电子科技有限公司

<http://www.szsyjc.com>

最佳保存周期
The best save cycle

After 2 months, the tin effect deteriorates, but the electrical performance is not affected. After peeling in high temperature and high humidity environments in summer, it needs to be circulated as soon as possible



深圳市英佳创电子科技有限公司

<http://www.szsyjc.com>

ROHS											
We hereby certify that the components, auxiliary materials, raw materials, and additives used in the production process delivered to your company comply with the environmental requirements of the RoHS Directive on the Restriction of Hazardous Substances (RoHS 2011/65/EC)											
The composition report of raw materials, packaging materials, and additives used in the production process for components and auxiliary materials is as follows:											
Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances(ppm)						PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB	PBDE	PASS
wire rod	Teflon coaxial cable	SZXEC2202766604	SGS	22/08/18	ND	ND	ND	ND	ND	ND	PASS
PCB	PCB	CANEC2221844502	SGS	22/10/20	ND	12	ND	ND	ND	ND	PASS
EVA	EVA foam adhesive	CANEC2227574118	SGS	23/01/03	ND	8	ND	ND	ND	ND	PASS
Environmenta lly friendly tin wire	Environment ally friendly tin wire	SHAEC2206174502	SGS	22/06/13	ND	181	ND	ND	ND	ND	PASS