



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: SHENZHEN ELECTRON TECHNOLOGY CO.,LTD

Product Name: WIFI Antenna

Product Model: WT1012/1017

Part Number: LJF02-20120308B-R0A

Write By : Limingjin

Issued Date: 2020-12-03



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3.Product Specification

A. Electrical Characteristics	
Frequency	2400MHz ~2500 MHz
VSWR	<2.0
Efficiency	>40%
Impedance	50Ohm
Polarization	Linear
Gain	>=2.0dB
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Black),LJWF29A
Cable Type	Φ1.13mm,L130mm,Black
Connector Type	IPX1
Dimension	
C. Environmental	
Operation Temperature	- 30 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C
Humidity	40%~95%

4.Test Equipment & Conditions

- | | |
|----------------------------------|---------------------|
| 1.Network Analyzers | Agilent 8753D/5071C |
| 2.HSPA and LTE protocol test set | R&S CMW500 -PT |
| 3.Communications Test Set | Agilent 8960 |
| 4.3D Chamber Test System | |

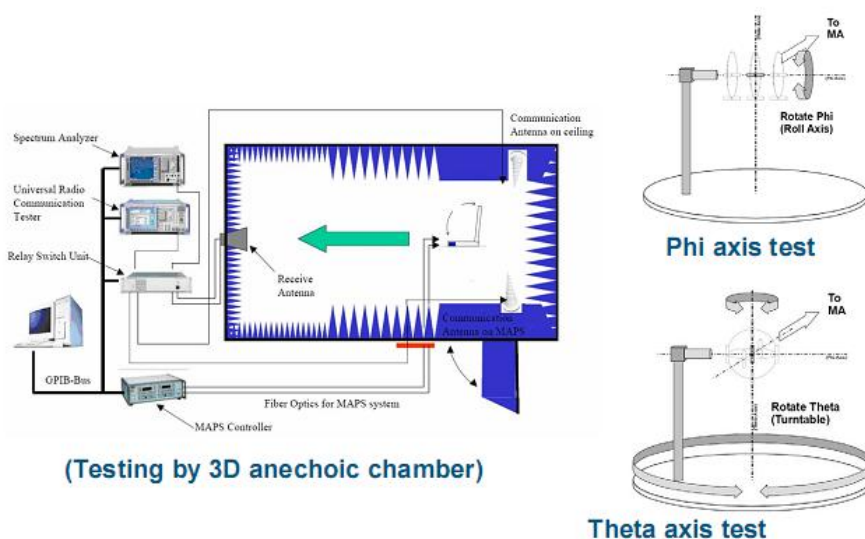


图 1 test topology

5. Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

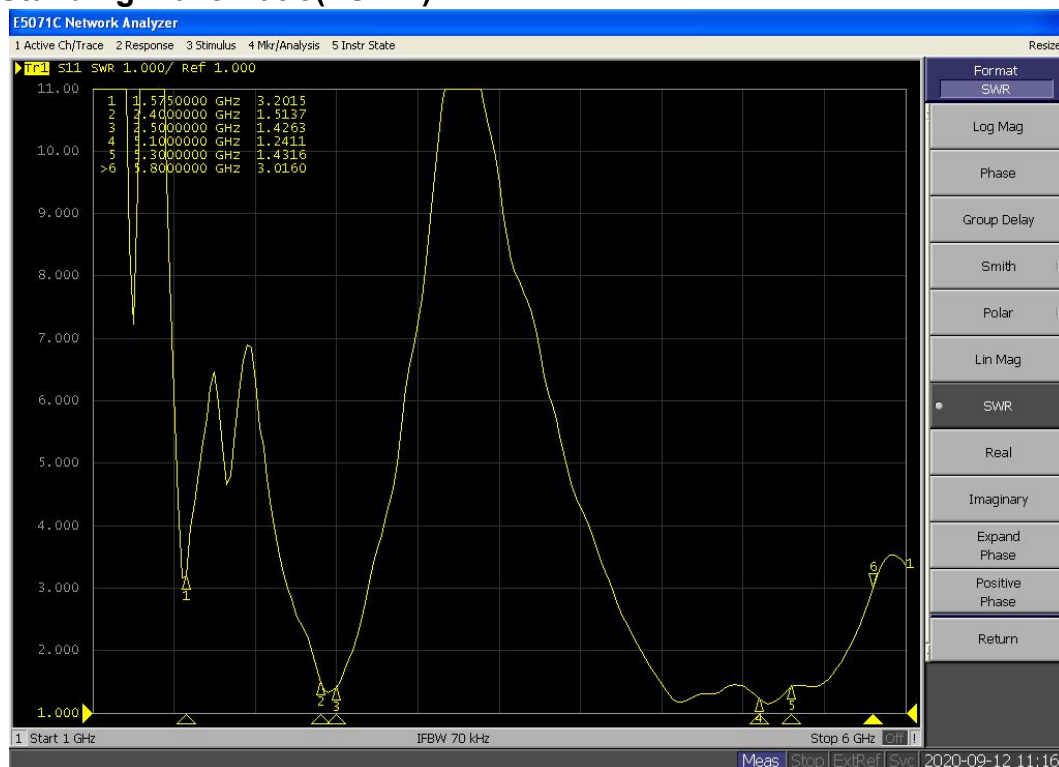


图 2 VSWR

5.2 Efficient and gain.

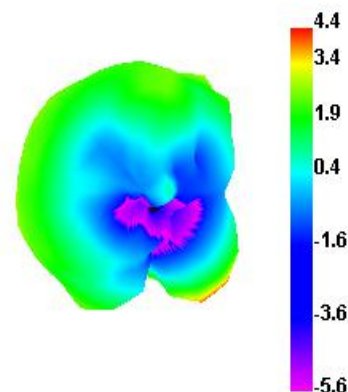
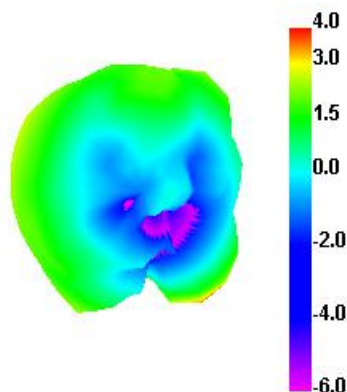
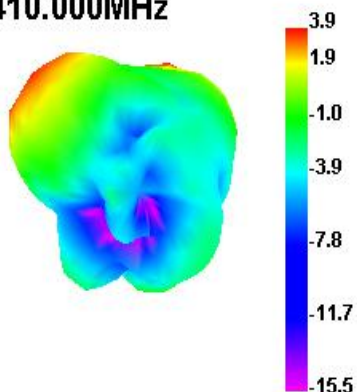
Passive Test For WIFI 2.4G	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	Effi(%)	54.38	58.61	60.82	66.01	61.82	65.13	61.04	60.28	60.26	60.60	55.75
	Gain(dBi)	2.34	2.69	2.66	2.75	2.71	2.77	2.77	2.74	2.71	2.59	2.19



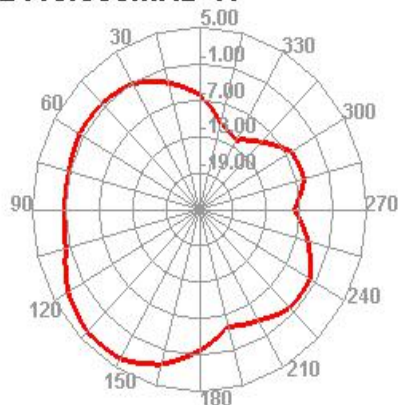
2450.000MHz

2500.000MHz

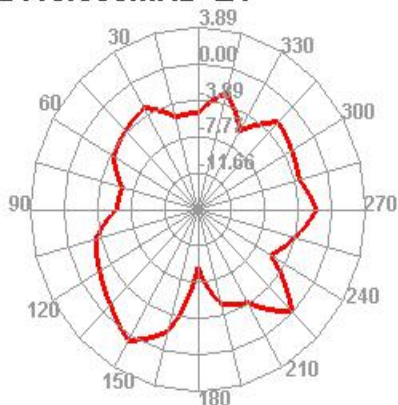
2410.000MHz



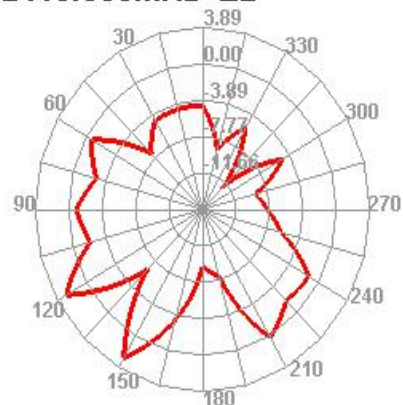
2410.000MHz H



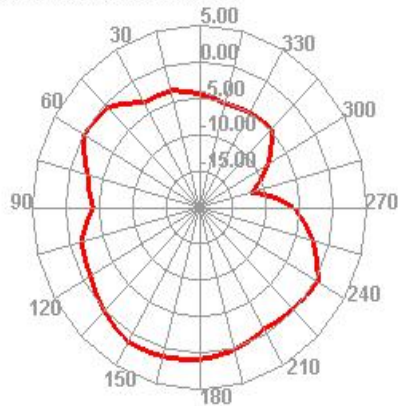
2410.000MHz E1



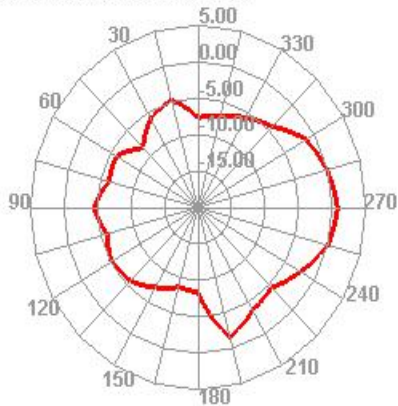
2410.000MHz E2



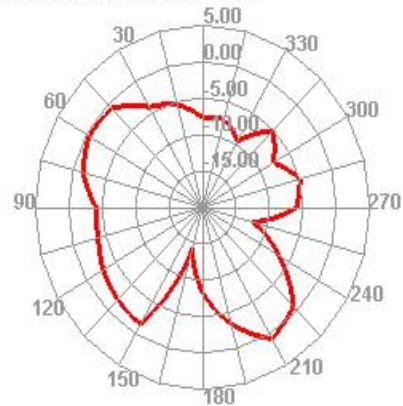
2450.000MHz H



2450.000MHz E1

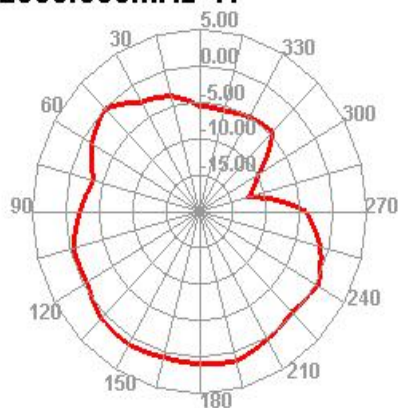


2450.000MHz E2

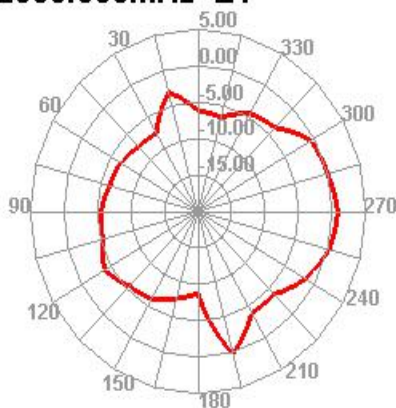




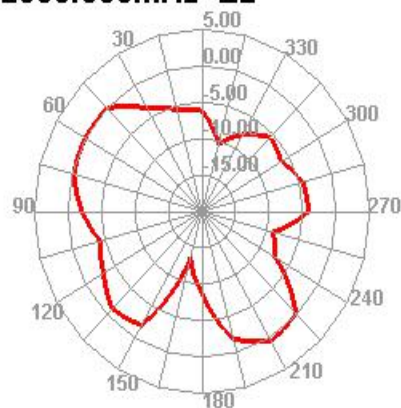
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



6. Reliability Test

Test Item		Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30℃ , Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 ℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for 44 hours; step-up temp to 25℃, test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
2	High Temp./High Humid Storage Test	Temperature: 85℃ Humidity: 85% RH Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 ℃ and humidity is 65% for one hour, then step-up the temp. to 80℃ and the humidity up to 85% in one hour, store antenna for 44 hours; step-down temp to 25 ℃ , test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
3	Salt-Spray 6 pray Test	Placing antenna in the Salt-Spray Tester ,set the test condition , Temp: 35±2℃ Humidity: 85% NaCl salt spray :5±1%.PH value :6.5~7.2 Testtime:24hours	Salt-Spray Tester	No color change No appear rusting	PASS

7. Assemble type

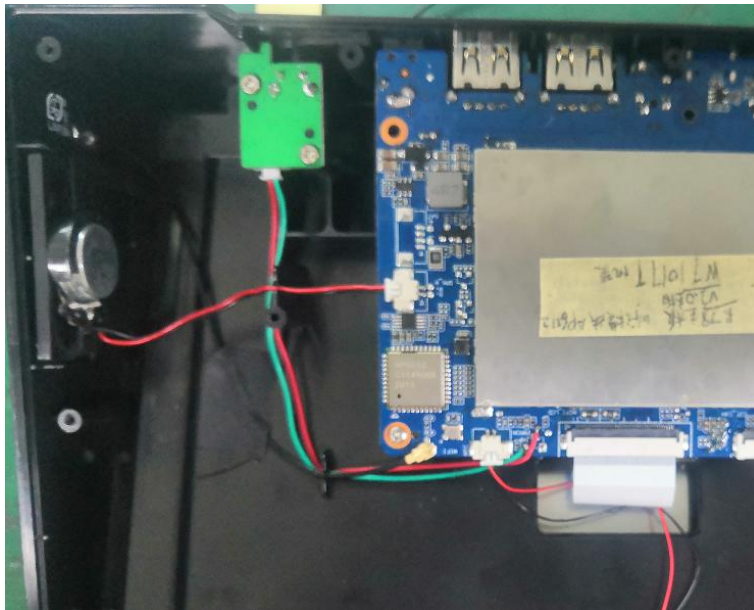
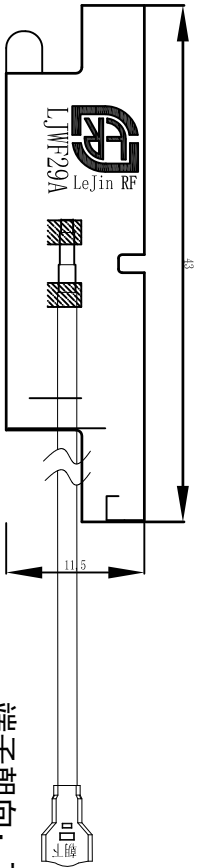


图 3 overall assemble type

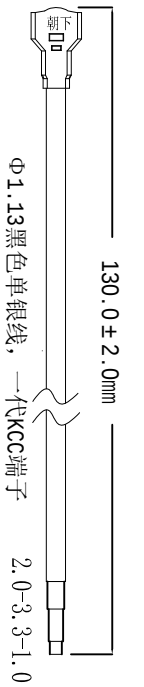


图 4 Antenna position

8.Product Drawing



端子朝向：下



深 圳 乐 进 射 频 科 技 有 限 公 司									
SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD									

		Third Angle	Project	亿莱顿科技	Date
0~10	+0.05	○	0.02	Part Name	WiFi 天线
				Part Name	Designed by
					20220510828

变更记录	1	修正							
	2								
	3								

D		由 Autodesk 教育版产品制作		A	
Rev		Description		Date	
1		New drawing		Remark	
2		Location		Unit	
3		mm		Scale	
6		FIT		Rev	
7		A			
8					