



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: SHENZHEN ELECTRON TECHNOLOGY CO.,LTD

Product Name: WIFI Antenna

Product Model: WH1016T

Part Number: LJF02-20120308B-R0A

Write By : Huxuwen

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(2.4GHz)	≤2.0dB
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Black),LJWF29A
Cable Type	Φ1.13mm,L130mm,Black
Connector Type	IPX1
Dimension	43.0*11.5mm
C. Environmental	
Operation Temperature	- 20 °C ~ + 70 °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 | |

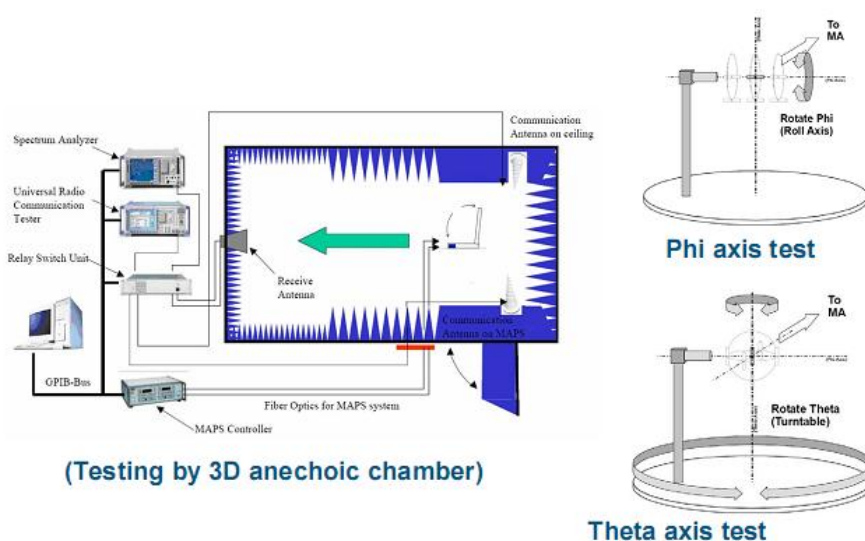


Chart 1 Test topology



5.Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

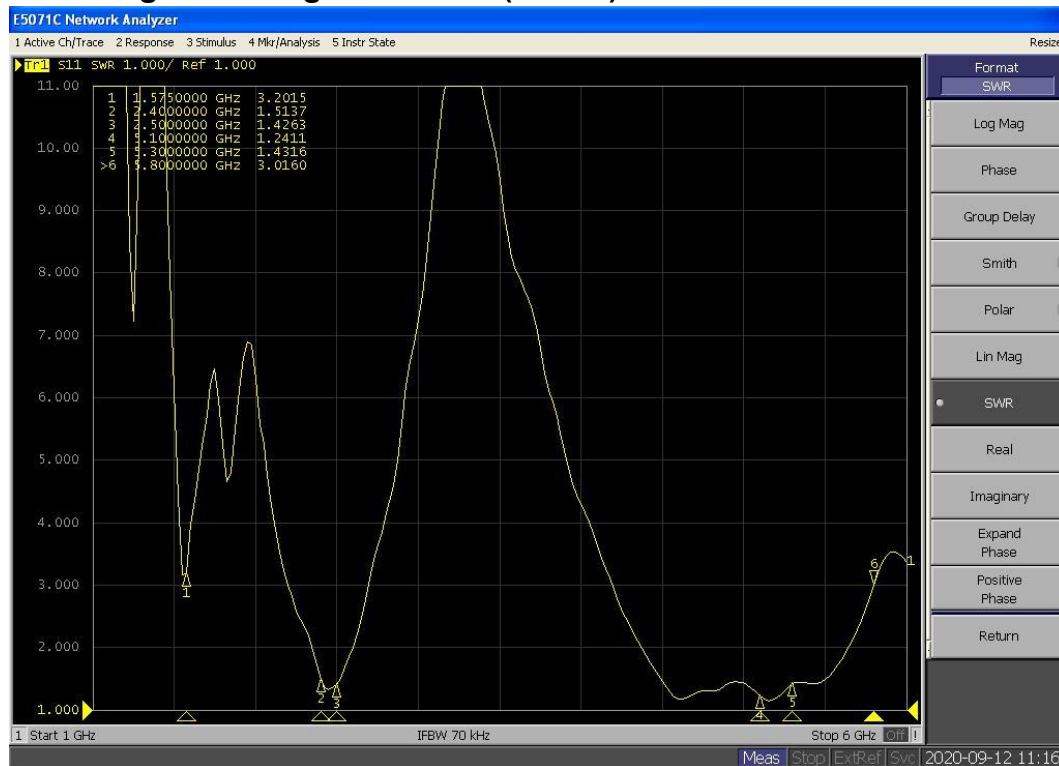
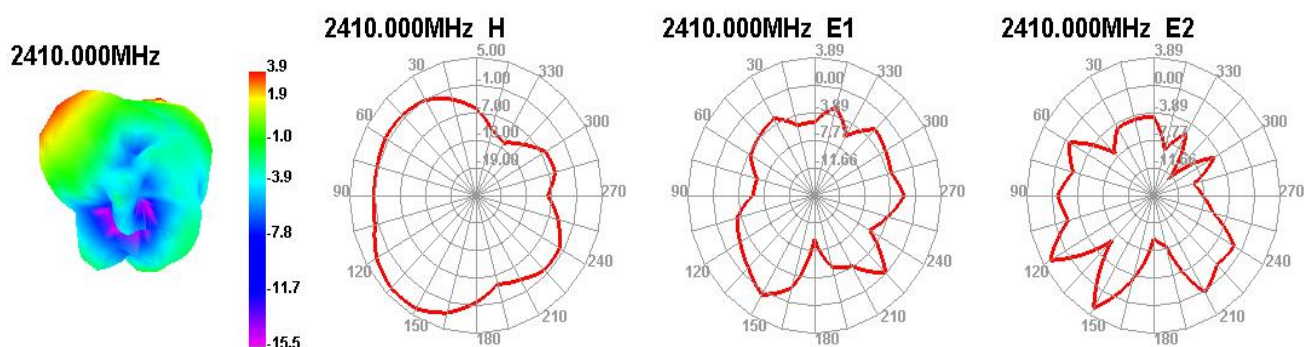


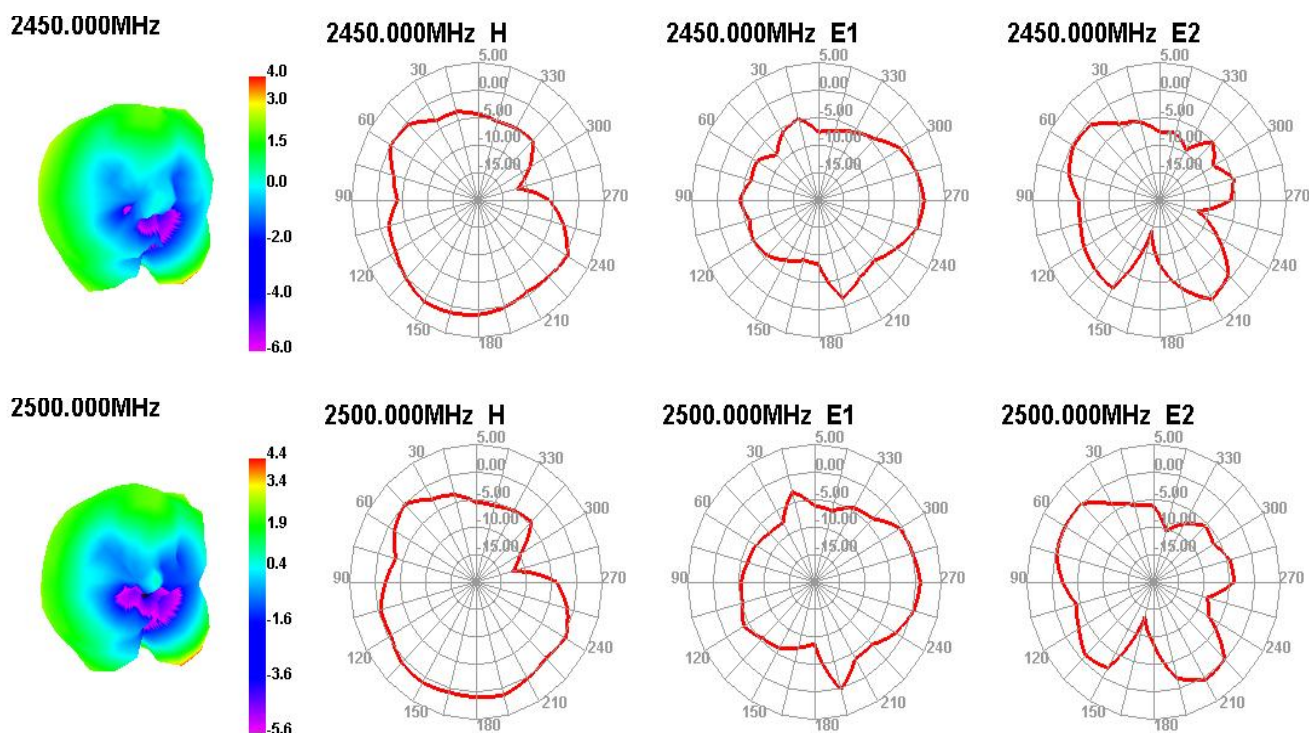
Chart 2 VSWR

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)	1.74	1.96	1.86	1.79	1.91	1.97	1.87	1.90	1.83	1.79	1.72

5.3 Radiation pattern.





6. Reliability Test

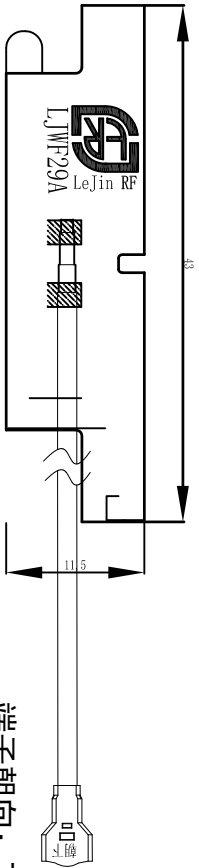
Test Item	Test condition	Equipment	Specification	Result
1 Low Temp. Storage Test	Temperature: -30℃, Time: 48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for 44 hours; step-up temp to 25℃, test antenna after 2 hours.	Temp. & Humidity 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. & Humidity Tester	No material deformation is allowed. Electronic Performance is ok.	PASS
3 Salt-Spray 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 Test time: 24 hours	Salt-Spray Tester	No color change No appear rusting	PASS

7. Assemble type

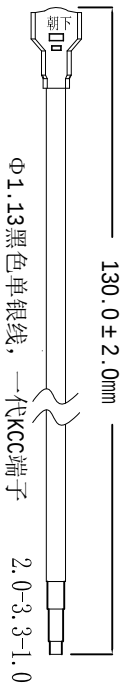


WH1016T assemble type

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		Description		Date	
3		Date		Remark	
6		Location		Unit	
7		mm		Scale	
8		FIT		Rev	
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