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

Shenzhen Lejin radio frequency technology Co., LTD

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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

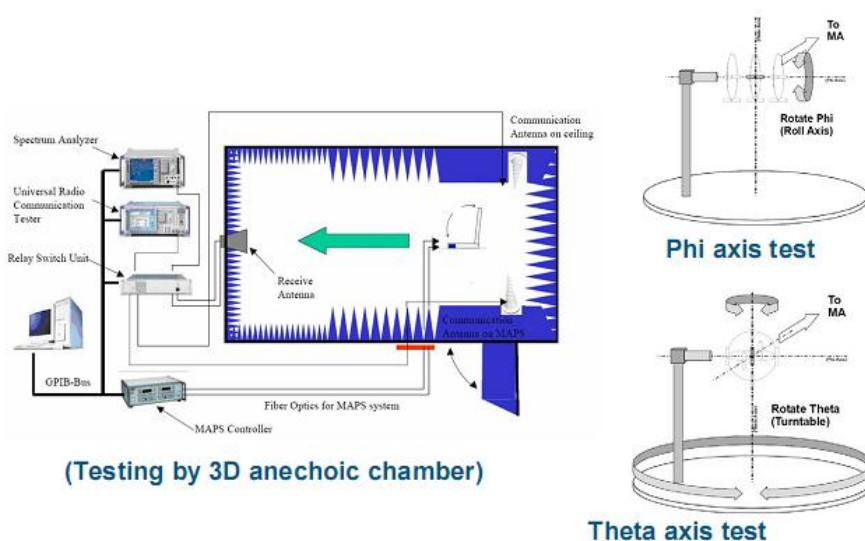3.Communications Test Set   Agilent 8960

4.3D Chamber Test System

Chart 1 Test topology

5.Test Report

5.1 Voltage Standing Wave Ratio(VSWR).
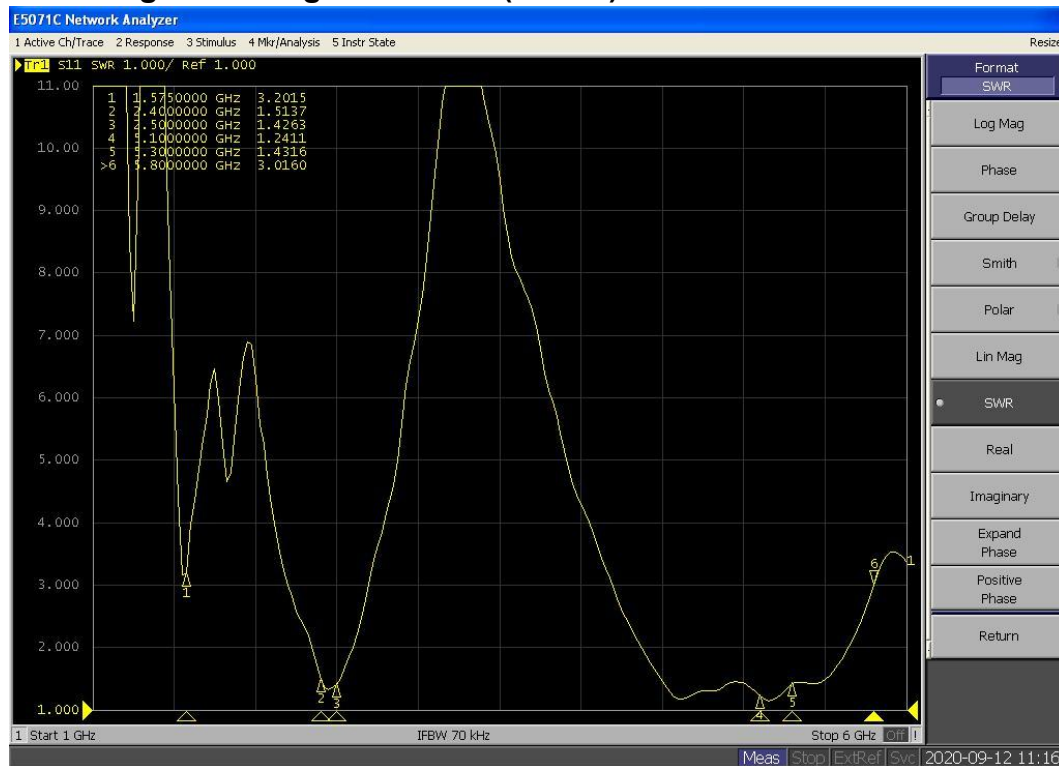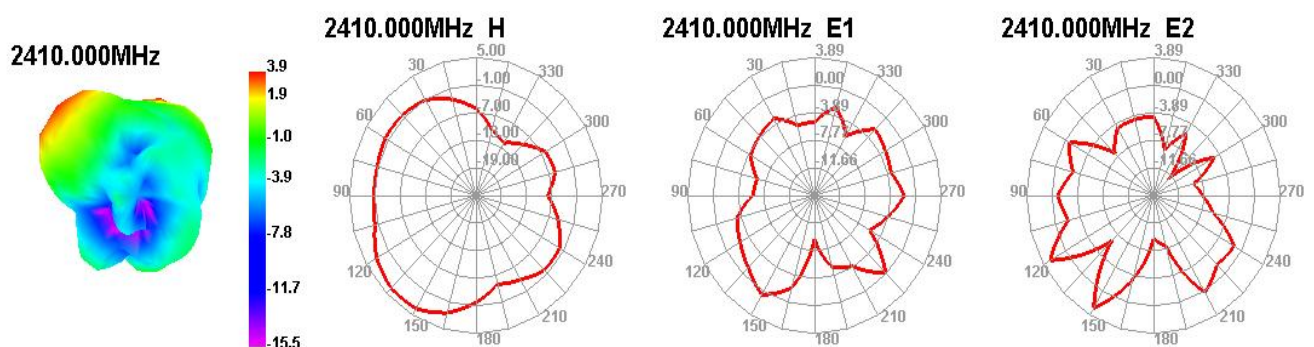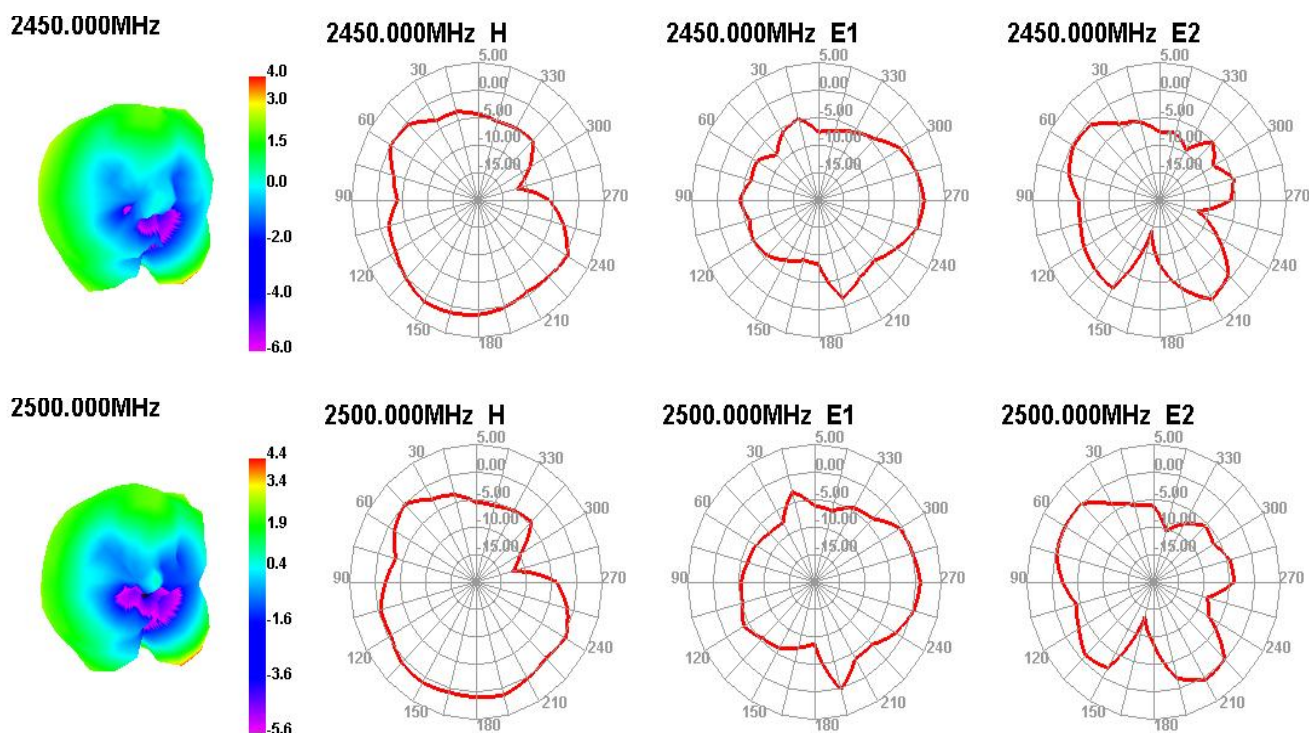

Chart 2 VSWR

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.

2450.000MHz   2450.000MHz H   2450.000MHz E1   2450.000MHz E2

2500.000MHz   2500.000MHz H   2500.000MHz E1   2500.000MHz E2

6.Reliability Test

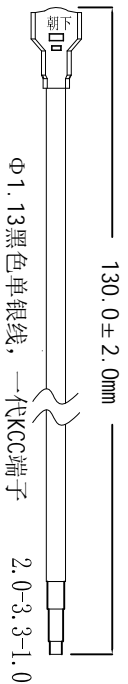|	Test Item	Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30℃, Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for44 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 tempto 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

WH1016T assemble type

8.Product Drawing

Φ1.13黑色单银线，一代KCC端子

130.0±2.0mm

2.0-3.3-1.0

LJWF29A
LeJin RF

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11.5

端子朝向：下

RoHS
Compliant
G P

Rev	Description	Date	Remark	Location
A	New drawing			
1	2	3		

变更	1	修正		
记录	2			
	3			

	0~10	±0.05	○	0.02
	10~18	±0.10	◎	Ø0.03
	18~30	±0.12	⊥	0.02
	30~40	±0.15	⟋	0.04
	40~	±0.20	Angle	±0.5°
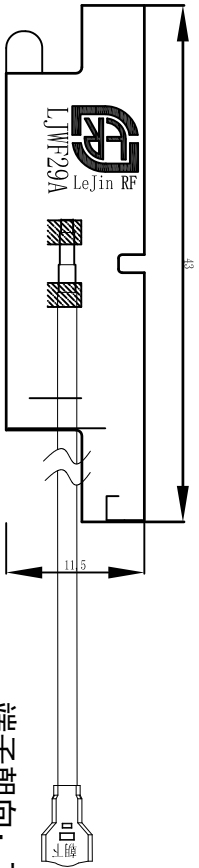
Third Angle

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

Project	亿莱顿科技	Date	Designed by	MD
Part Name	WIFI天线		Checked by	RF
Part No.			Approved by	
Material		Unit	mm	Scale	FIT	Rev	A
Treatment	LJF02-2012030 8B-R0A		2024-05-28	