



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: SHENZHEN ELECTRON TECHNOLOGY CO.,LTD

Product Name: WIFI Antenna

Product Model: WL1012T/WL1016T

Part Number: LJF01-19041901-R0A

Write By : Huxuwen

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CUSTOMER

REV	MODIFIED DESCRIPTION	DATE	REMARK
V1.0	Initial Draft Release	2019/04/19	
V1.1	Support new model WL1016T	2022/10/20	



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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)	≤1.99dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Black),LJWF28C
Cable Type	Φ1.13mm,L100mm,Black
Connector Type	IPX1
Dimension	25.0*13.0mm
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

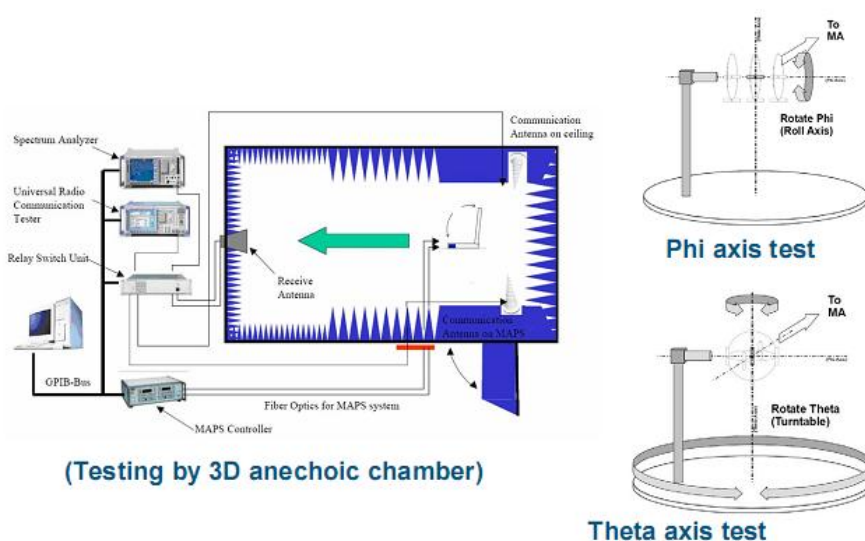


Chart 1 Test topology

5.Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

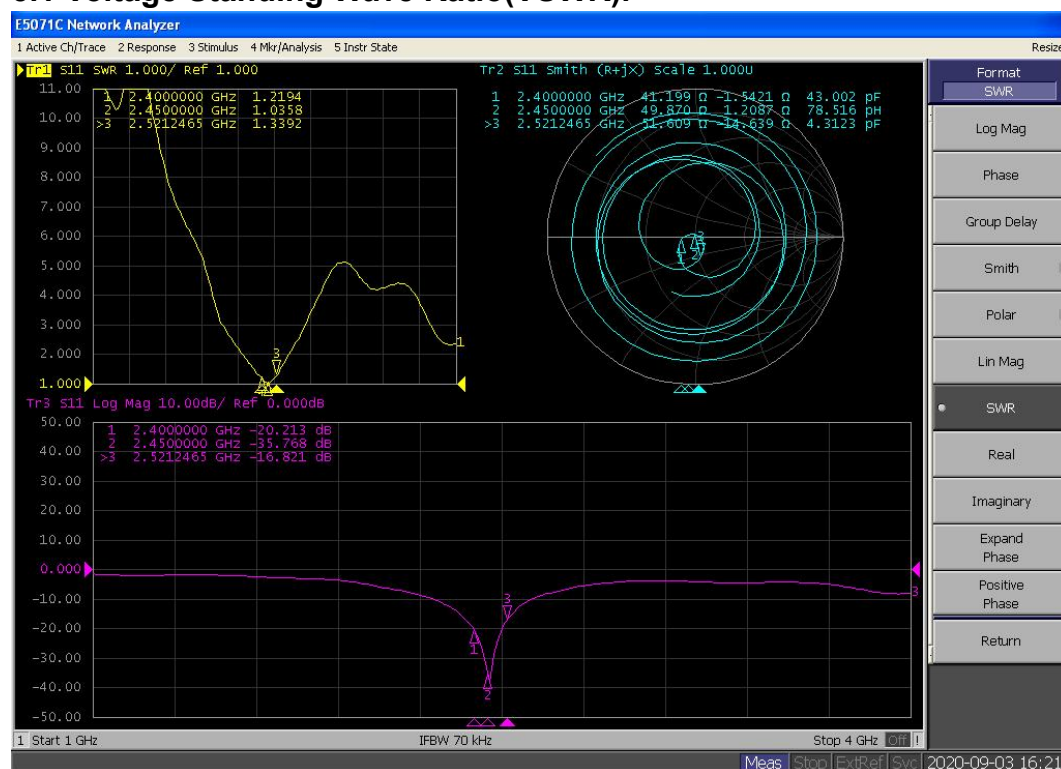
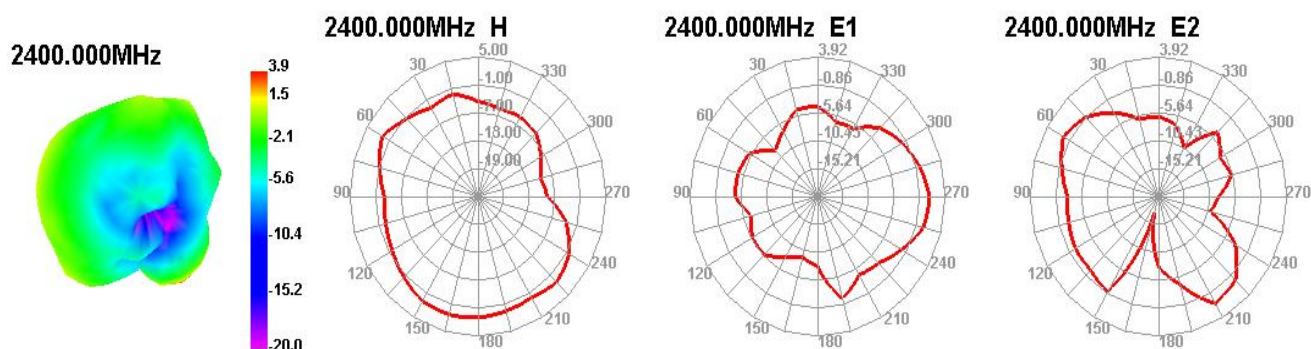


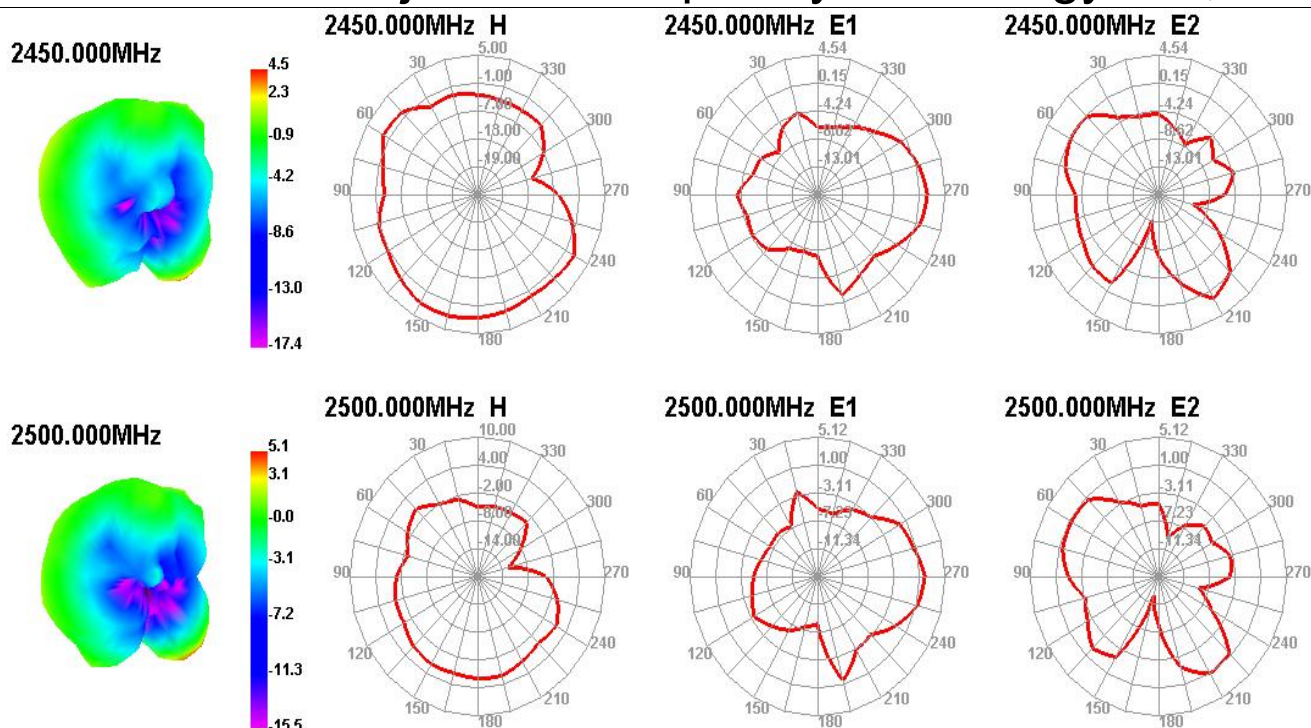
Chart 2 VSWR

5.2 Efficient and gain.

Passive Test For 2.4G	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	Effi(%)	49.63	47.27	45.06	48.89	47.57	50.64	49.99	52.53	50.40	52.25	46.44
	Gain(dBi)	1.78	1.81	1.99	1.76	1.93	1.95	1.89	1.91	1.85	1.85	1.40

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 Testtime:24hours	Salt-Spray Tester	No color change No appear rusting	PASS

7. Assemble type

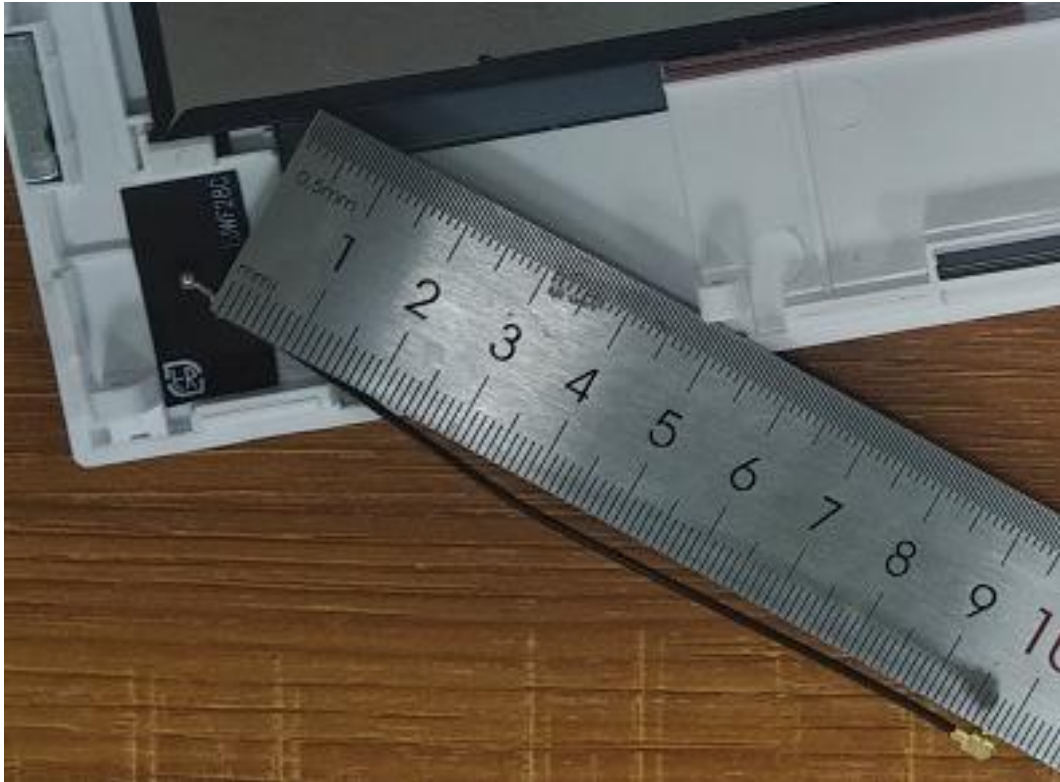


Chart 3 WL1012T/WL1016T assemble type

8.Product Drawing

