



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: 深圳市视美通智能科技有限公司

Product Name: WIFI Antenna

Product Model:

Part Number: LJF01-20063002B-R0A

Write By : LIMINGJIN

Issued Date: 2024-09-09

CUSTOMER

ENGINEER R&D DEPT	BUSSINESS DEPT	APPROVAL

LEJIN

R&D DEPT	ENGINEER DEPT	APPROVAL

REV	MODIFIED DESCRIPTION	DATE	REMARK
V1.0	Initial Draft Release	2024/09/09	



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3.Product Specification

A. Electrical Characteristics	
Frequency	2400MHz ~2500 MHz
VSWR	<2.0
Efficiency	>40%
Impedance	50Ohm
Polarization	Linear
Gain	≤1.76dB
B. Material & Mechanical Characteristics	
Material of Radiator	PCB(Black),WB06A
Cable Type	Φ1.13mm,L210mm,black
Connector Type	IPX1
Dimension	23.5*10.5mm
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 | |

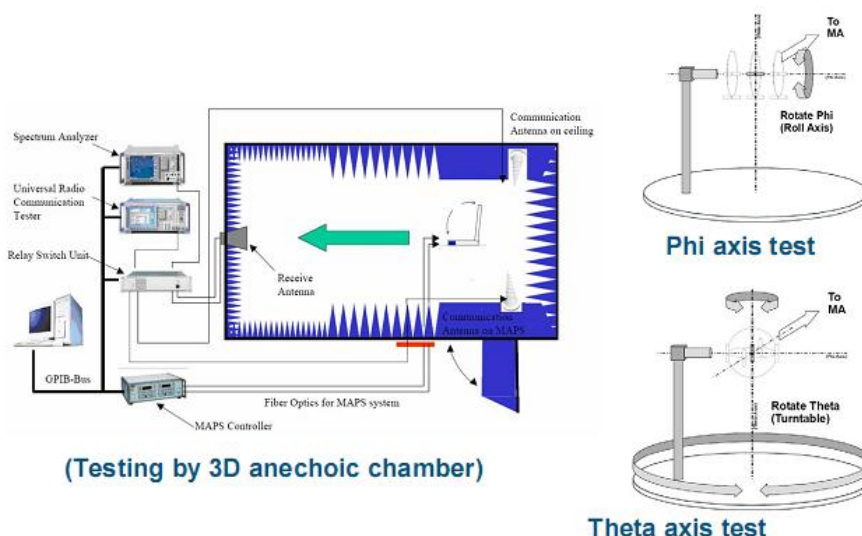


图 1 Test topology

5.Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

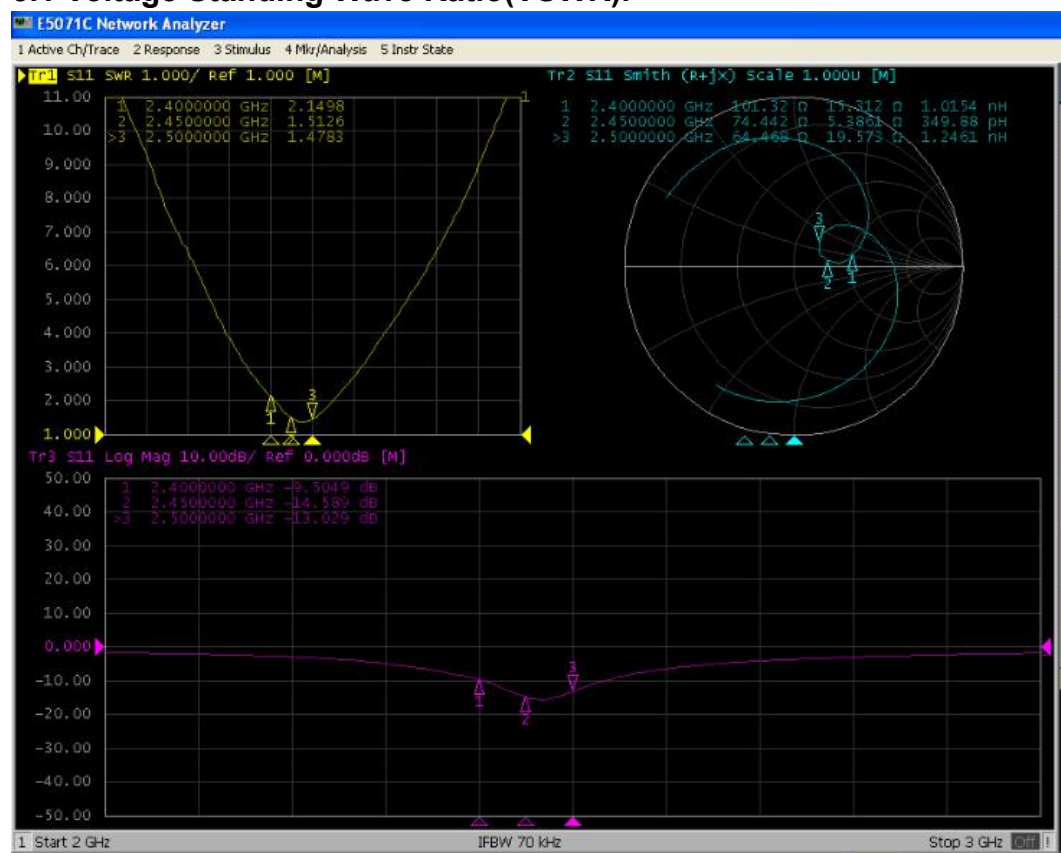
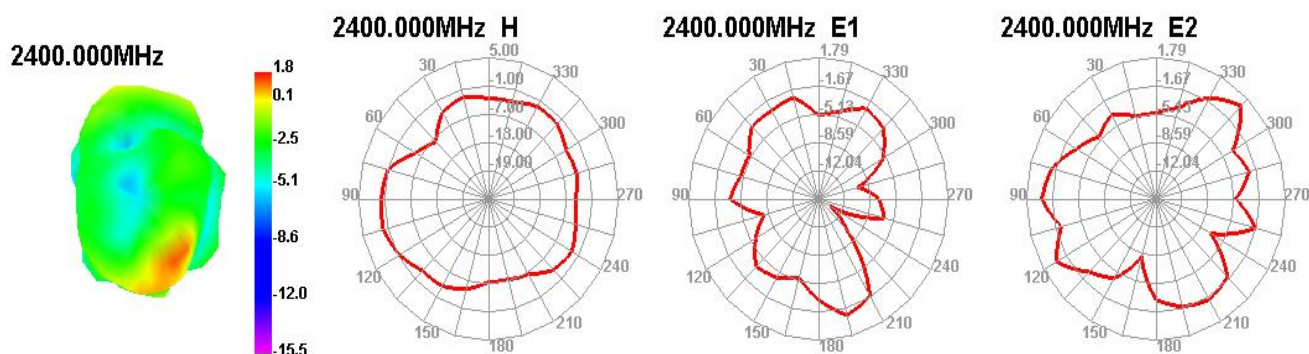


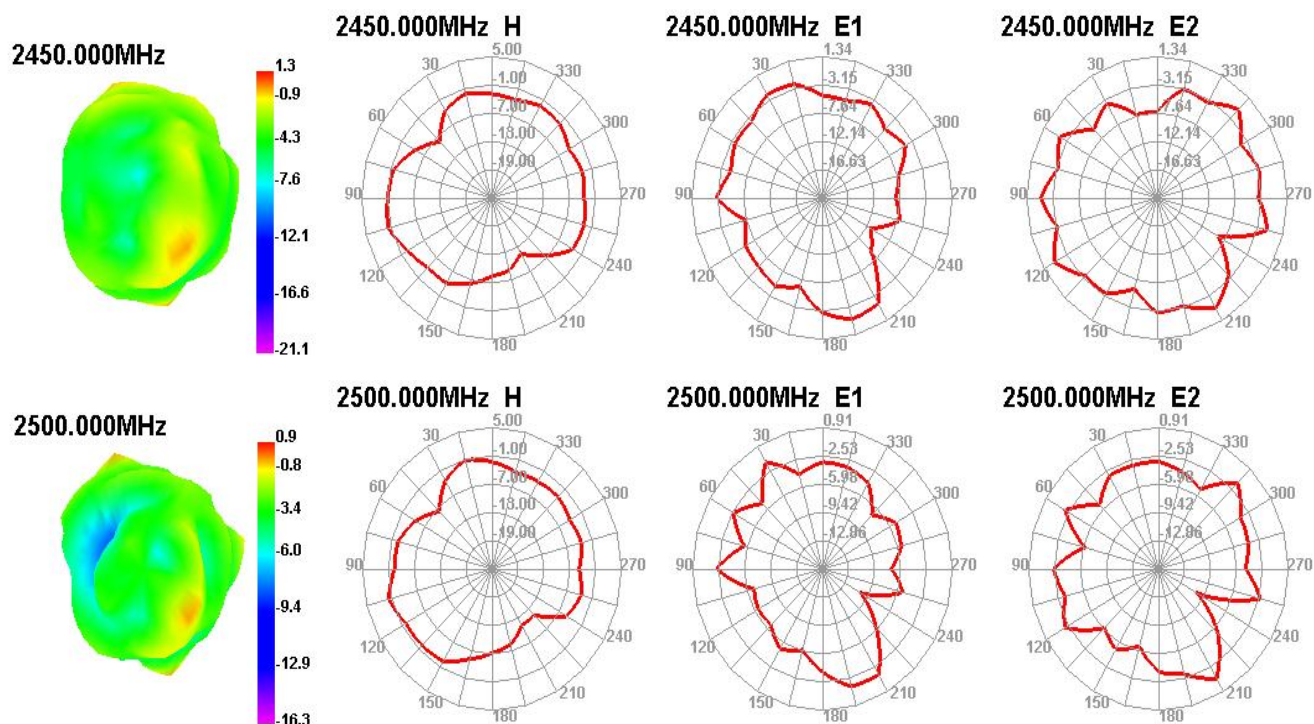
图 2 VSWR

5.2 Efficient and gain(estimating conducted by Lejin in Jan,2021,using 3D drawing document that provided by Crealty.)

Passive	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Test For	Effi(%)	58.62	51.84	56.47	55.07	54.54	53.06	51.80	52.38	53.21	52.77	50.64
WIFI 2.4G	Gain(dBi)	1.76	1.75	1.74	1.57	1.44	1.33	1.22	1.36	1.10	1.07	0.86

5.3 Radiation pattern.



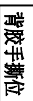


6. Reliability Test

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.&Hum. 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.&Hum. 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(omitted)

8. Product Drawing



210.0 $\pm$ 3.0 mm

1.0 1.8 1.8

Φ1.3 coaxial cable black KCC-1 connector

Φ1.1.3 coaxial cable, black, KCC-1 connector

Revise record	1 2
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1. PCB material: RF4.
2. Backing in behind: 3M300LSE.
3. Tolerance: Cutting die: $\pm 0.1\text{mm}$; Circuit on FPC: $\pm 0.05\text{mm}$
4. ROHS: (Pb, Hg, Cr+6, PBBs, PBDEs), $<1000\text{ppm}$; Cd, $<100\text{ppm}$.



Third Angle

Project	视美通
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Date	2024-09-09
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$0 \sim 10$	± 0.05
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○	0.02
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Part NameWIFI ANTDesigned by

10~18	± 0.10
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◎	Ø0.03
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Part No

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MD	
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18~30	± 0.12
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T	0.02
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[illegible]

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Checked by	
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PF	

30~40	± 0.15
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$\angle$	0.04
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0 -	
	0 -

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	33	
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40 ~	±0.20
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2.0.1

Treatment

LJF01-20063

002B-R0A	Approved by	
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5			
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Location[illegible]

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[illegible]

Unit	mm
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Scale	Flt
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