



Lejin RF

Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: Shenzhen Creality 3D Technology Co.,LTD

Product Name: WIFI/BT Antenna

Product Model: L016

Part Number: LJF02-25030108-ROA

Write By : FUQIANG

Issued Date: 2025-03-01

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	2025/03/01	



Lejin RF

Shenzhen Lejin radio frequency technology Co., LTD

Index

1. Cover	1
2. Index	2
3. Product Specification	3
4. Test Equipment & Conditions	3
5. Test Report	4
6. Reliability Test	5
7. Assemble type	6
8. Product Drawing	7



Lejin RF

Shenzhen Lejin radio frequency technology Co., LTD

3. Product Specification

A. Electrical Characteristics	
Frequency	2400MHz ~2500 MHz
VSWR	<2.0
Efficiency	≥40%
Impedance	50Ohm
Polarization	Linear
Gain(2.4G)	≤3.50dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Black),LJWF2505
Cable Type	Φ1.13mm,L200mm,Black
Connector Type	IPX1
Dimension	33.50mm*9.80mm
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

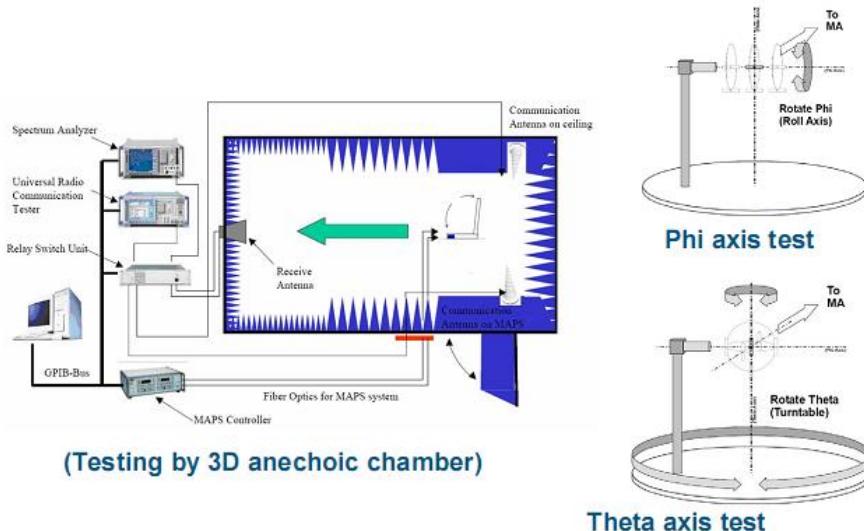


Chart 1 Test topology

5. Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

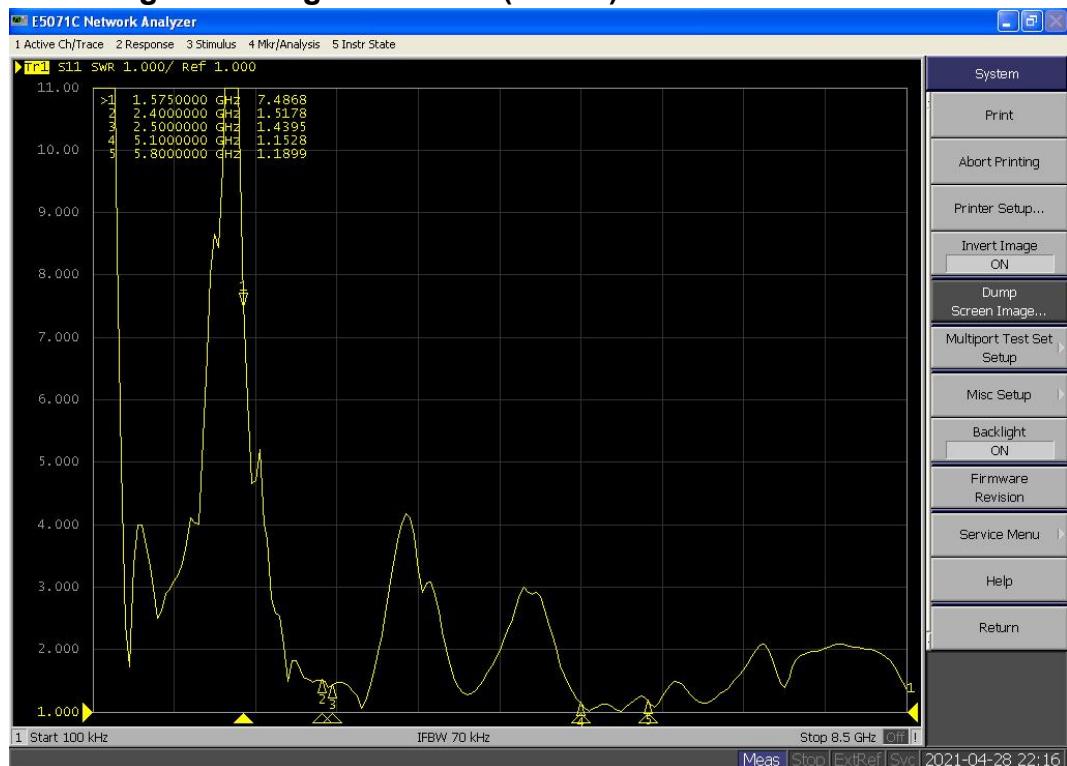
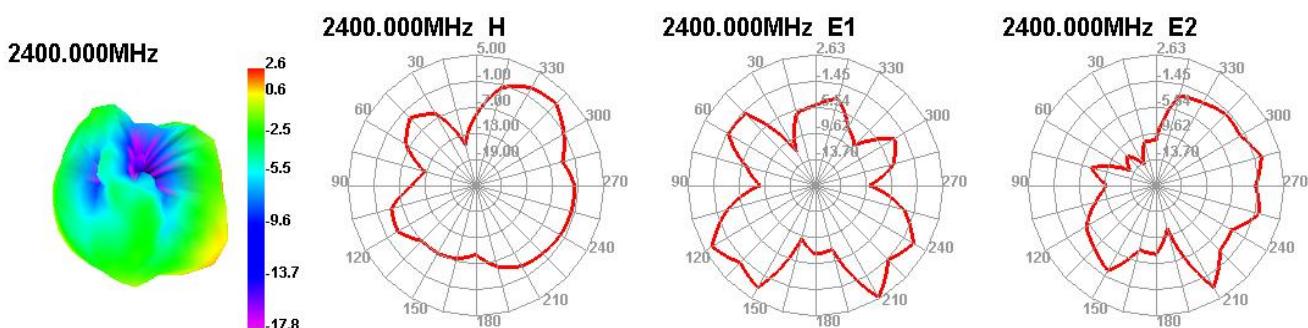


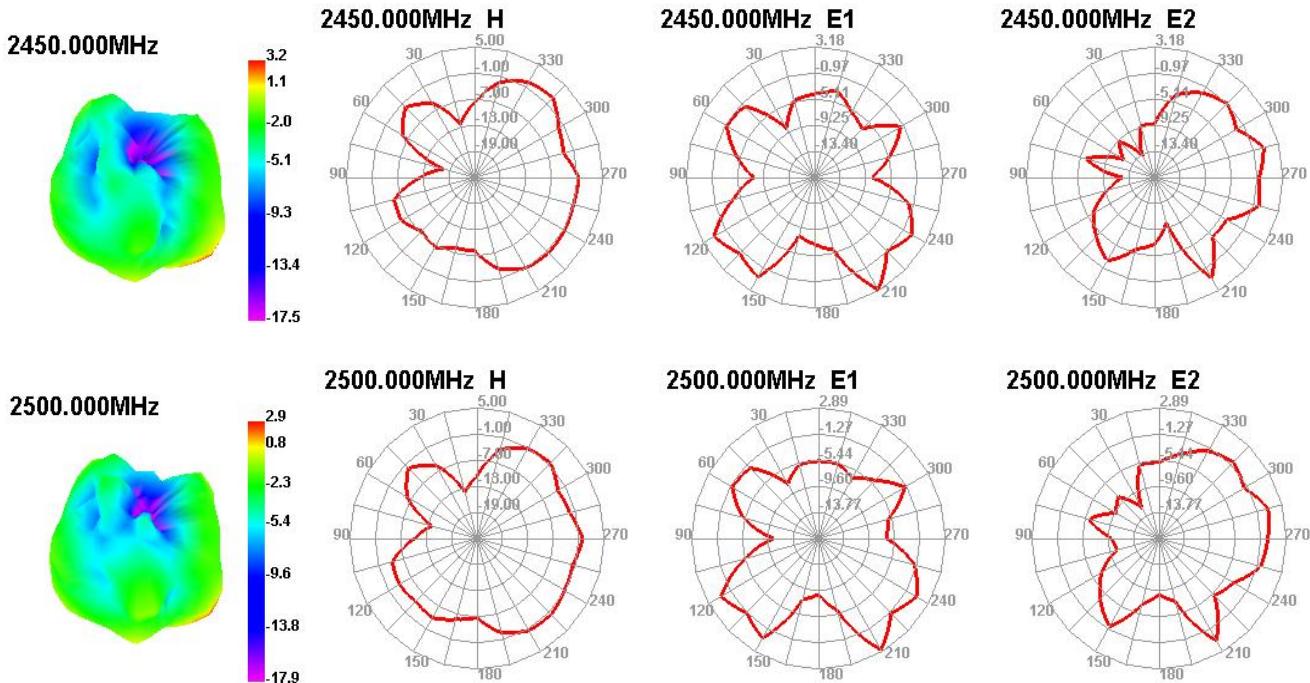
Chart 2 VSWR

5.2 Efficient and gain.

Passive	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Test	Effi(%)	57.00	58.65	60.41	61.53	58.99	62.19	62.03	65.84	55.44	62.97	58.75
2.4GHz	Gain(dBi)	2.63	2.82	2.94	3.09	2.85	3.18	3.20	3.50	2.63	3.27	2.89

5.3 Radiation pattern.





6. Reliability Test

Test Item		Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30°C , Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 °C and humidity is 65% for one hour, then step-down the temp. to -30 °C in one hour, store antenna for44 hours; step-up temp to 25 °C,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°C Humidity: 85% RH Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 °C and humidity is 65% for one hour, then step-up the temp. to 80 °C and the humidity up to 85% in one hour, store antenna for 44 hours; step-down temp to 25 °C ,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°C 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



Lejin RF

Shenzhen Lejin radio frequency technology Co., LTD

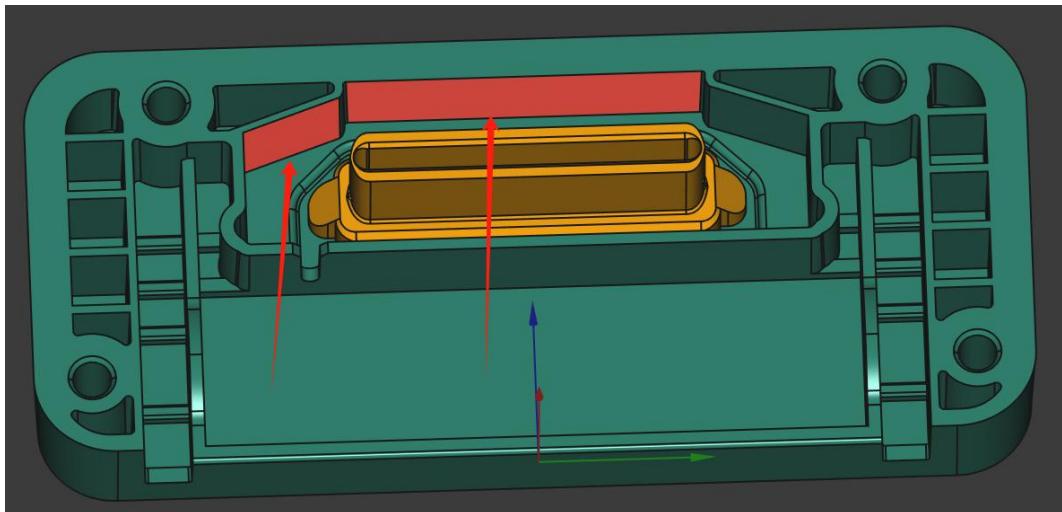
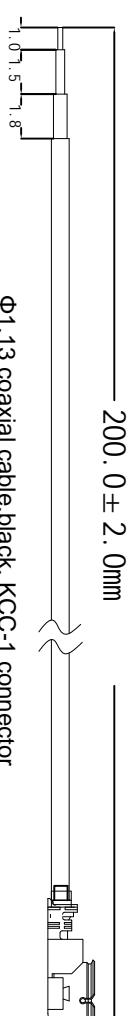
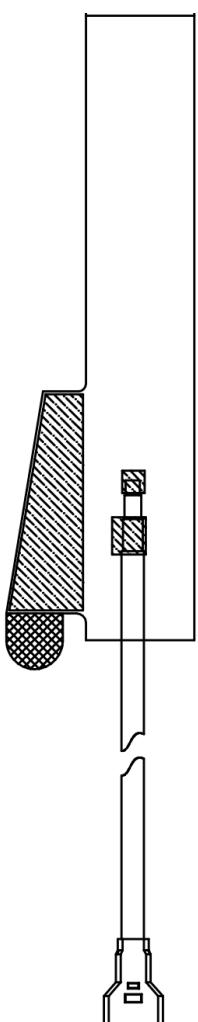
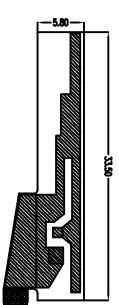
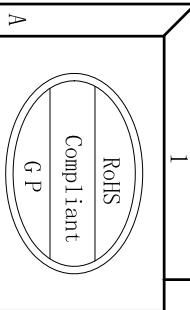


Chart 3 Assemble type

8. Product Drawing

1 2 3 4 5 6 7 8



C

B

A

C

B

A

Remark:

1.FPC material:Electrolytic copper.

2.Backing in behind 3M300LSE.

3.Tolerance: Cutting die: ± 0.1 mm; Circuit on FPC: ± 0.05 mm; others are ± 0.05 mm.

SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD

D

Third Angle Project

Date

2025-03-01

D

Part Name

Designed by

MD

A

Part No.

Checked by

Rev

Material

RF

1

Treatment

LJF02-25030108-R0A

2

Approved by

Unit

3

Scale

mm

4

FIT

Rev

5

Approved by

A

6

Scale

mm

7

FIT

Rev

8

Approved by

A