



## SPECIFICATIONS FOR APPROVAL

**All data in this report only represent the data when the sample antenna is correctly installed in the designated test object. Replacing the test object or changing the installation method and position of the antenna will render the data in the report invalid.**

Antenna manufacturer: Shenzhen Lejin radio frequency technology Co., LTD

Company Address: 3rd Floor, Building A4, No. 176 Chongqing Road, Fuhai Street, Bao'an District, Shenzhen, Guangdong Province. (Phone number: 13603098741)

**Customer Name:** 智纬

**Product Name:** NA156Y

**Product Model:** WIFI MAIN ANT

**Part Number:** LJF02-250525002M-R0A

**Write By :** 李明进

**Issued Date:** 2025/5/25

### CUSTOMER

| ENGINEER R&D DEPT | BUSSINESS DEPT | APPROVED BY | DATE | Edition/Part number |
|-------------------|----------------|-------------|------|---------------------|
|                   |                |             |      |                     |

### LEJIN

| R&D DEPT | ENGINEER R&D DEPT | APPROVAL | DATE | Edition/Part number                                                                                           |
|----------|-------------------|----------|------|---------------------------------------------------------------------------------------------------------------|
|          |                   | 李明进      |      | 数字签名者: 李明进<br>DN : cn=李明进, o=乐进射频, ou=研发, email=13603098741@163.com, cn<无><br>日期: 2025.05.25 15:56:10 +08'00' |

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|---------|--|--|--|
| ECN/ECR |  |  |  |
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## Electrical Characteristics

| Frequency          | VSWR | Efficiency | Impedance | Polarization | Gain  |
|--------------------|------|------------|-----------|--------------|-------|
| 2400 MHz ~2500 MHz | <2   | >30%       | 50 Ohm    | Linear       | ≥1 DB |
| 5100MHZ--5900 MHZ  | <2.5 | >30%       | 50 Ohm    | Linear       | ≥1 DB |
|                    |      |            |           |              |       |

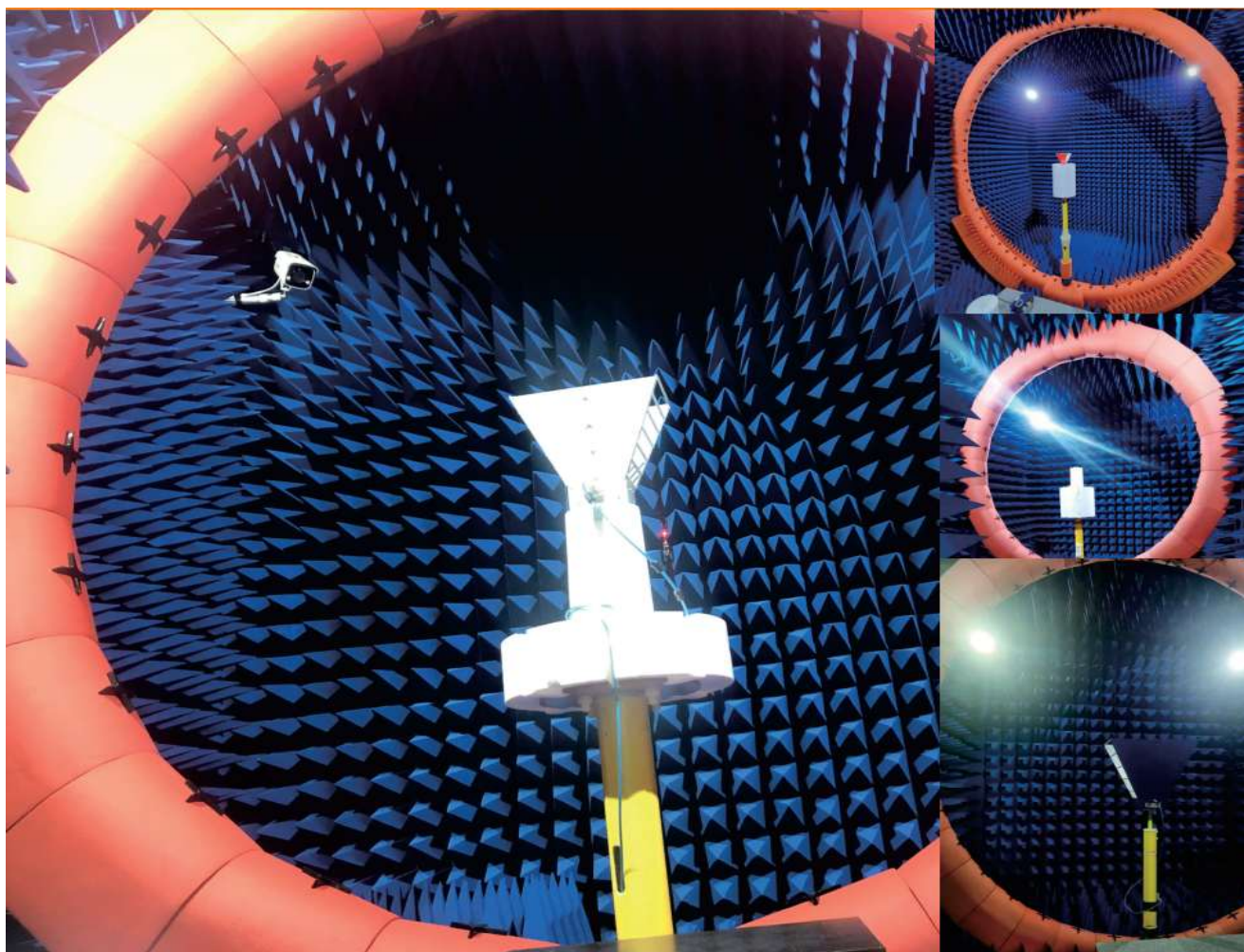
## Material & Mechanical Characteristics

## Environmental

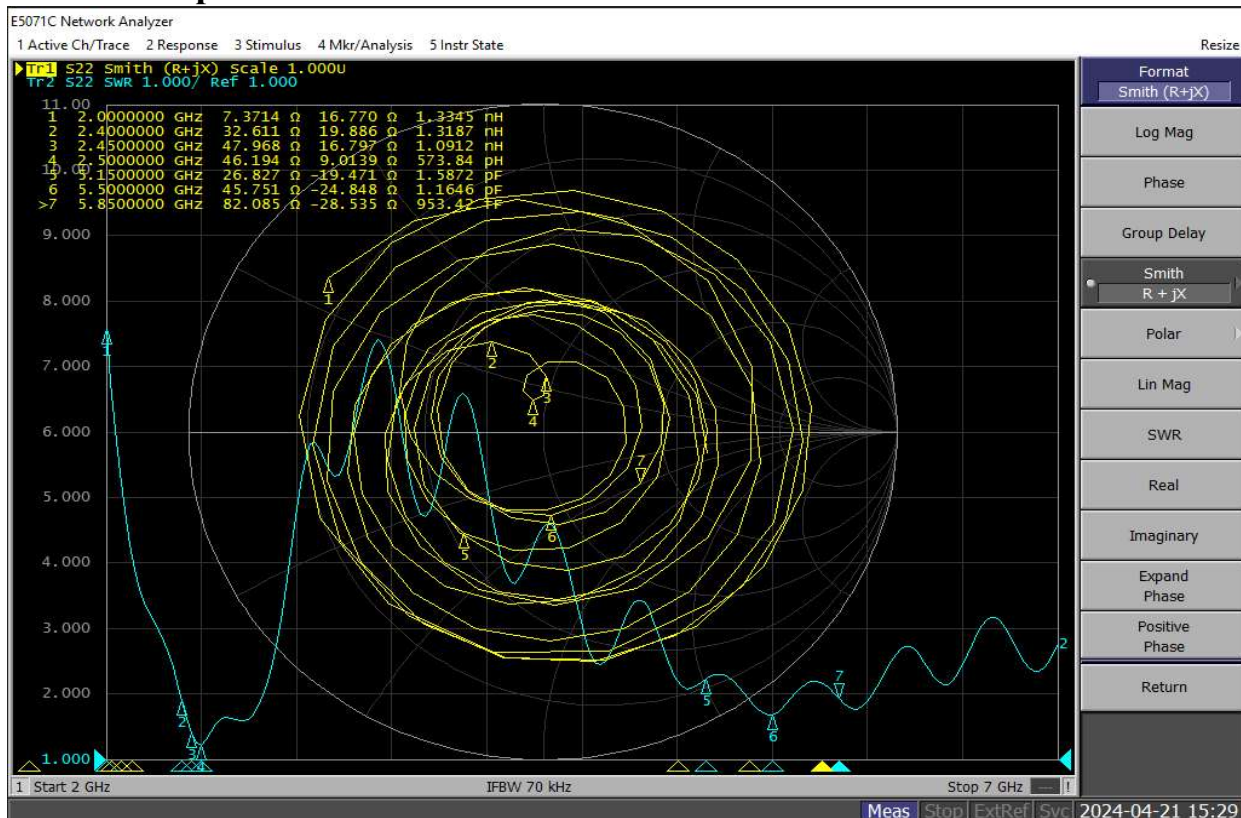
| Material of Radiator | Cable Type | Connector Type | Dimension | Operation Temperature | Storage Temperature |
|----------------------|------------|----------------|-----------|-----------------------|---------------------|
| FPC black/YELLOW     | 0.81<br>黑色 | KCC421-260     |           | - 20 °C ~ + 50 °C     | - 30 °C ~ + 80 °C   |

## Test Equipment & Conditions

1. Network Analyzers :Agilent 8753SE 5071C
2. Communications Test Set:Agilent E5515C/CMW500
3. 3D Chamber Test System(ETS743)

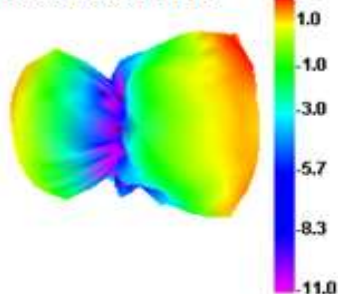


## Antenna Impedance: WIFI ANT M:

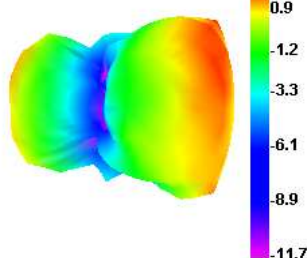


|                    |            |       |       |       |       |       |       |       |       |       |       |       |
|--------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2.4G (Wifi and BT) | Freq (MHz) | 2400  | 2410  | 2420  | 2430  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  | ANT M |
|                    | Effi (%)   | 35.33 | 35.74 | 38.89 | 37.66 | 40.71 | 38.35 | 37.18 | 37.65 | 37.21 | 35.89 |       |
|                    | Gain (dBi) | 2.12  | 2.34  | 2.46  | 2.88  | 2.99  | 1.98  | 2.45  | 2.27  | 2.25  | 2.12  |       |
| 5G WIFI            | Freq (MHz) | 5150  | 5250  | 5350  | 5450  | 5550  | 5650  | 5750  | 5850  | 5950  | 6000  |       |
|                    | Effi (%)   | 38.89 | 36.74 | 37.82 | 33.65 | 40.56 | 42.77 | 44.69 | 41.38 | 42.73 | 40.65 |       |
|                    | Gain (dBi) | 2.57  | 2.88  | 2.02  | 2.15  | 2.08  | 2.15  | 1.88  | 2.27  | 2.15  | 2.02  |       |

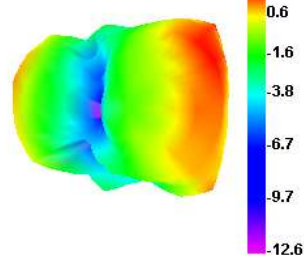
2400.000MHz



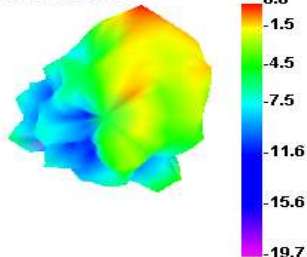
2450.000MHz



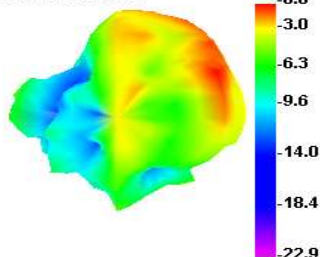
2480.000MHz



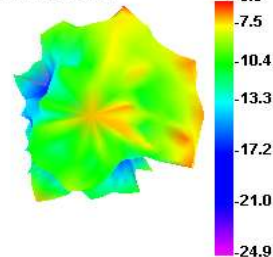
5150.000MHz



5350.000MHz



5850.000MHz



OTD\_DATA:(以下OTD\_DATA是在本规格书中的天线所测试得来,更换天线或更改天线的安装方式,以下OTD\_DATA将会失效)以下数据配合WIFI AUX天线一起测得。

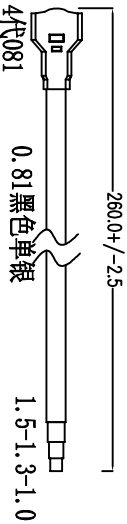
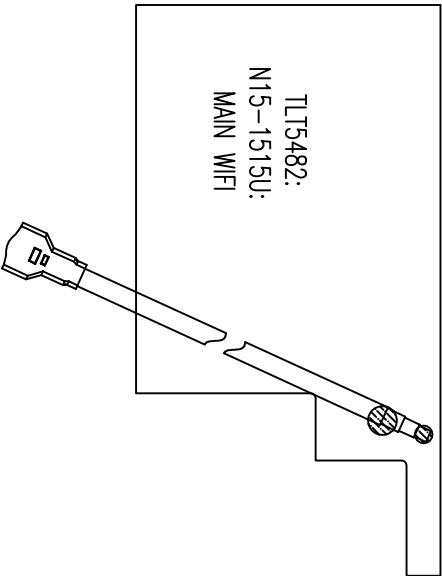
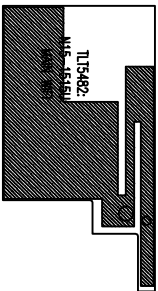
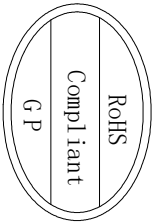
| Antenna Performance Table |             |           |           | Antenna Performance Table |             |           |           |
|---------------------------|-------------|-----------|-----------|---------------------------|-------------|-----------|-----------|
| TRP /TIS(dBm)             |             | 12.46     | -81.71    | TRP /TIS(dBm)             |             | 11.58     | -70.32    |
| 802.11B                   | Channel No. | TRP (dBm) | TIS (dBm) | 802.11A                   | Channel No. | TRP (dBm) | TIS (dBm) |
| Tx_11M / Rx_11M           | 1           | 12.81     | -80.81    | Tx_6M / Rx_54M            | 36          | 11.98     | -69.56    |
|                           | 6           | 12.59     | -82.75    |                           | 149         | 11.57     | -70.19    |
|                           | 11          | 11.99     | -81.56    |                           | 161         | 11.18     | -71.22    |
| 2.4G WIFI                 |             |           |           | 5.8G wifi                 |             |           |           |

天线安装：图片上"AUX"文字为样品资料出错，大货修正为"MAIN"字样。



其它未有提及到的EMI/EMC等环境处理，请按送调时的环境处理状态处理。

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 深圳乐进频率科技有限公司  
SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD

|                                                                                     |             |                                                                                     |          |           |            |
|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|----------|-----------|------------|
|  | Third Angle | Project                                                                             | LJWF2523 | Date      | 2025-05-24 |
| 0~10                                                                                | ±0.05       |  | 0.02     | Part Name | 双频WIFI     |

|     |             |  |      |        |          |           |  |      |    |       |     |     |   |
|-----|-------------|--|------|--------|----------|-----------|--|------|----|-------|-----|-----|---|
| Rev | Description |  | Date | Remark | Location | Treatment |  | Unit | mm | Scale | FTT | Rev | A |
| A   | New drawing |  |      |        |          |           |  |      |    |       |     |     |   |
| 1   |             |  |      |        |          |           |  |      |    |       |     |     |   |

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