Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name:	智纬
Product Name:	WIFI (2G+5G)_M_ANT
Product Model:	MP14J(7265NGW)
Part Number:	LJF02-220424001M-R0A
Write By :	李明进
Issued Date:	2022/4/24

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

ECN/ECR			

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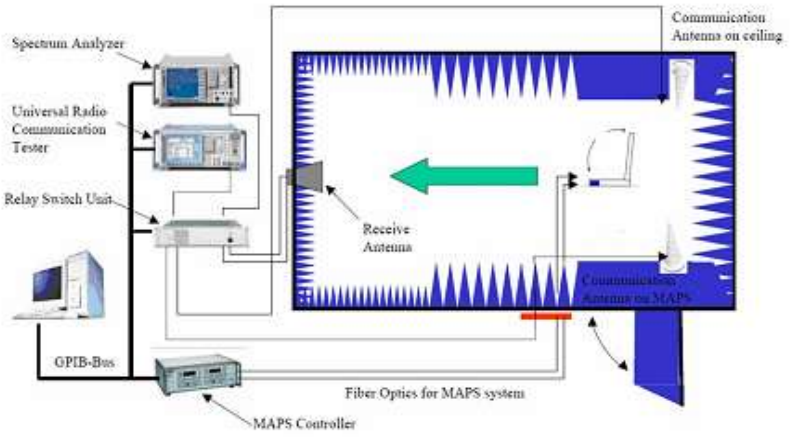
Electrical Characteristics

Frequency	VSWR	Efficiency	Impedance	Polarization	Gain
2400 MHz ~2500 MHz	<2	>30%	50 Ohm	Linear	⩾1 DB
5100MHZ--5900 MHZ	<2.5	>35%	50 Ohm	Linear	⩾1 DB

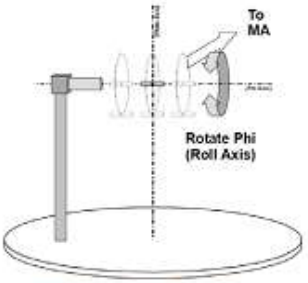
Material & Mechanical Characteristics				Environmental	
Material of Radiator	Cable Type	Connector Type	Dimension	Operation Temperature	Storage Temperature
FPC black/YELLOW	081b	KCC421		- 20 ˚C ~ + 50 ˚C	- 30 ˚C ~ + 80 ˚C

Test Equipment & Conditions

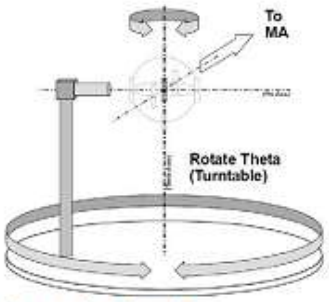
1. **Network Analyzers :Agilent 8753SE 5071C**
2. **Communications Test Set:Agilent E5515C/CMW500**
3. **3D Chamber Test System(ETS743)**



(Testing by 3D anechoic chamber)



Phi axis test



Theta axis test

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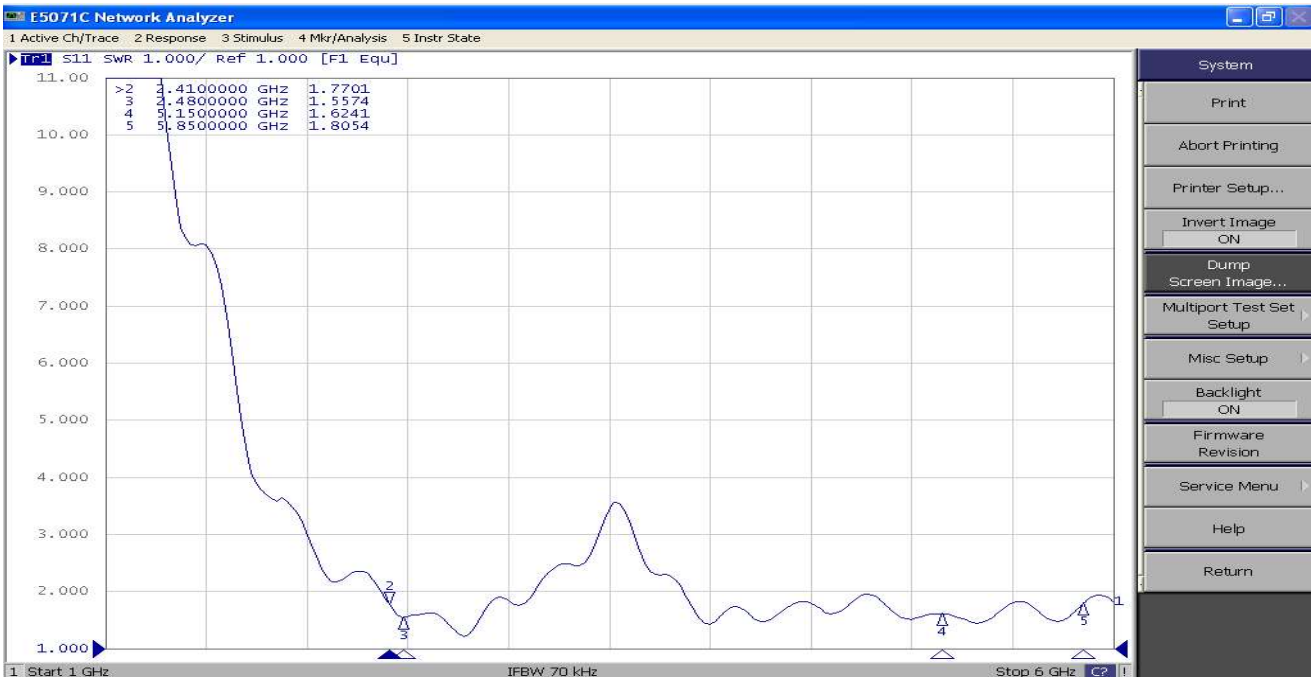
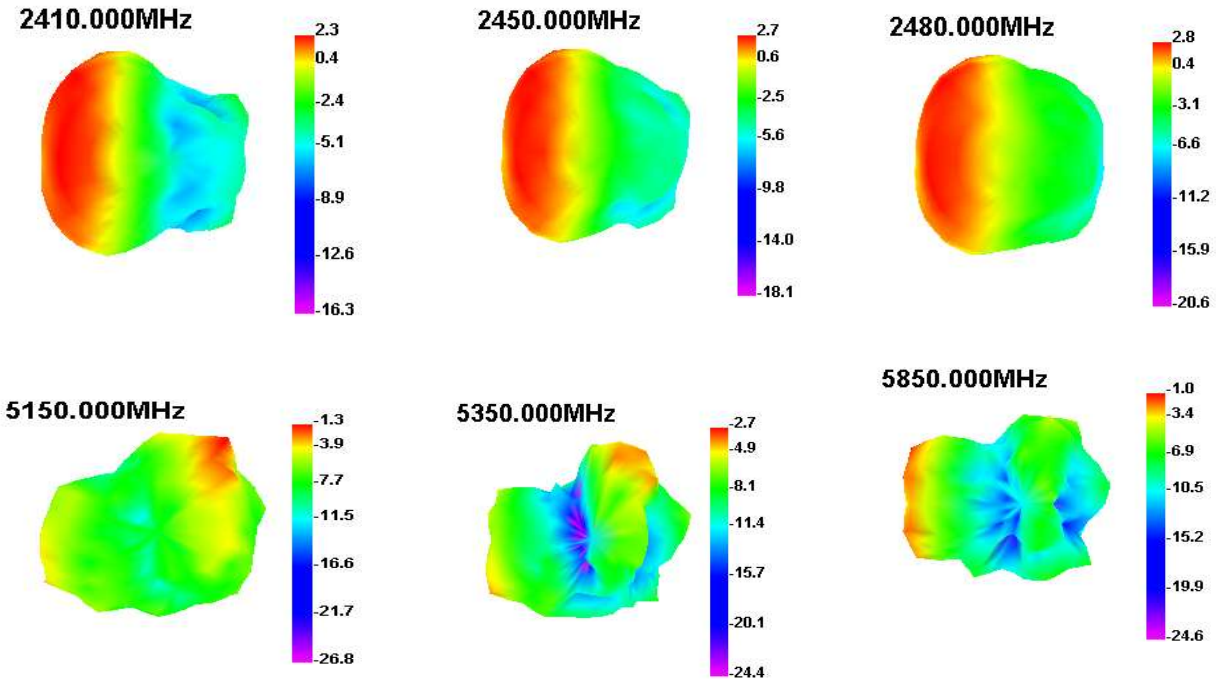
Antenna Impedance: WIFI ANT M:



2.4G (Wifi)	Freq	(MHz)	2400	2410	2420	2430	2450	2460	2470	2480	2490	2500
	Effi	(%)	38.11	39.32	40.05	44.21	42.45	35.21	37.36	32.04	34.34	28.61
	Gain	(dBi)	2.36	2.25	1.99	2.75	2.21	2.25	2.99	2.89	3.25	3.12
5G WIFI and BT	Freq	(MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5950	6000
	Effi	(%)	45.25	46.37	50.21	53.45	49.85	45.22	43.45	47.54	48.13	49.34
	Gain	(dBi)	-1.03	-0.8	-0.2	-0.15	-0.12	-0.05	-0.02	0.98	0.2	0.07



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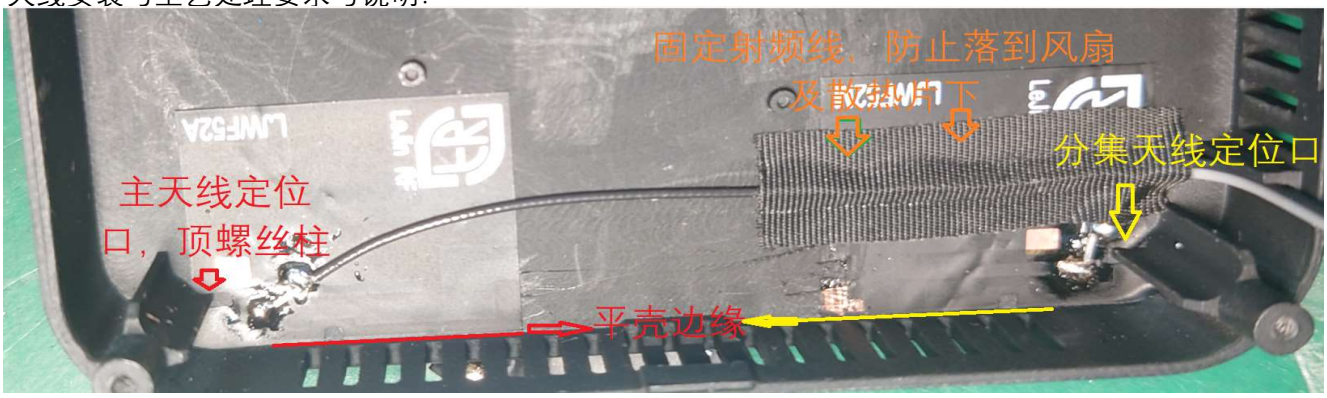
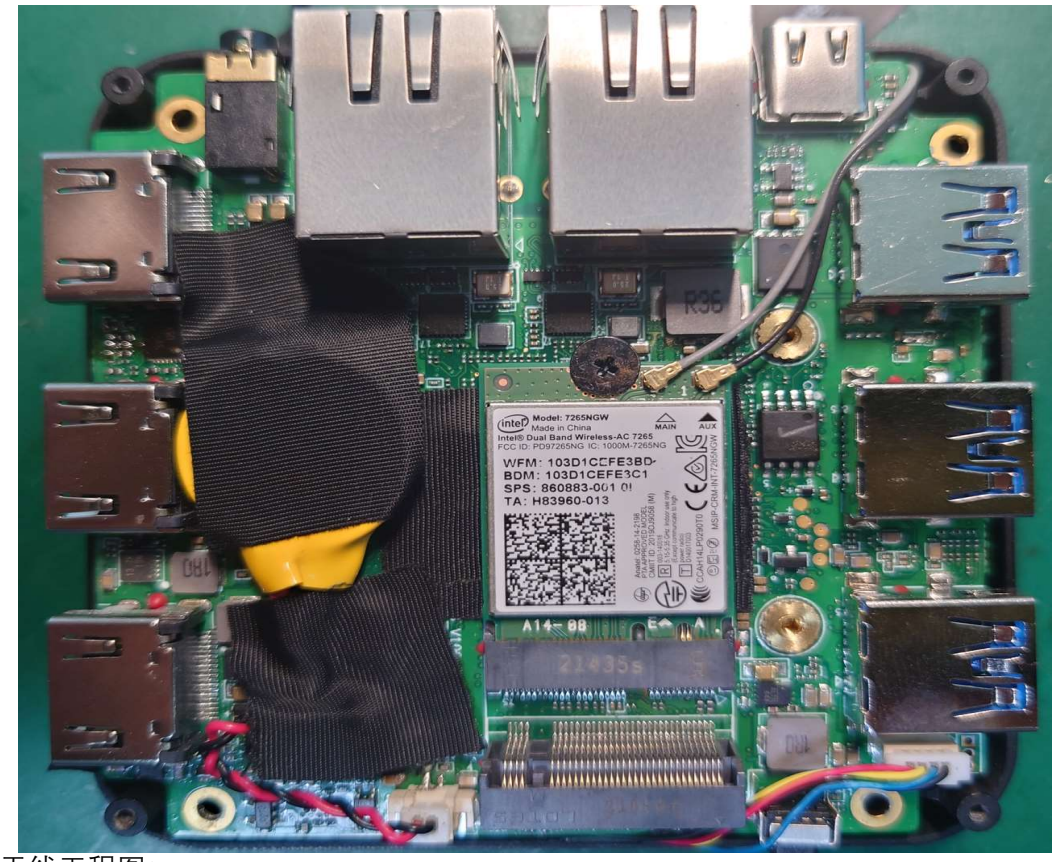
OTD_DATA:(以下OTD_DATA是在本规格书中的天线所测试得来,更换天线或更改天线的安装方式,以下OTD_DATA将会失效)

2.4G 802.11.B @11Mbit		
Frequency	TRP（dBm）	TIS（dBm）
1（2412MHz）	11.75	-79.98
6（2437MHz）	13.22	-81.26
13（2472MHz）	12.21	-80.58

5G 802.11 A @54M BIT		
Frequency	TRP（dBm）	TIS（dBm）
60（5300MHz）	13.3	-74.32
161（5805MHz）	14.12	-76.48

天线安装与工艺处理要求与说明:





天线在主板上的出线方式（具唯一性）

天线工程图:

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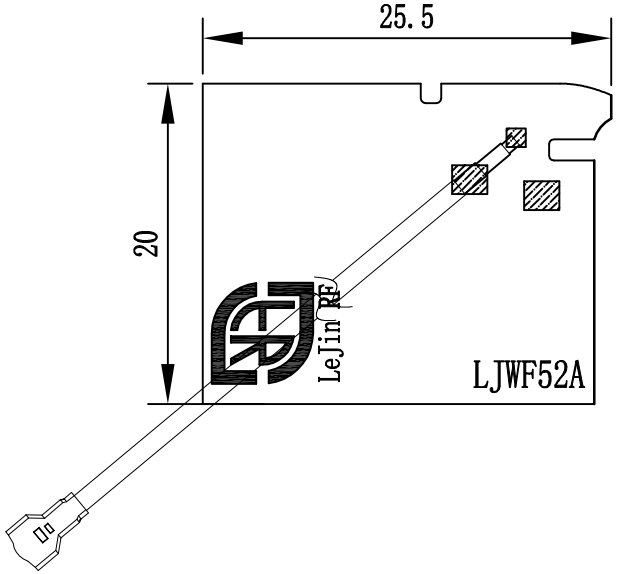
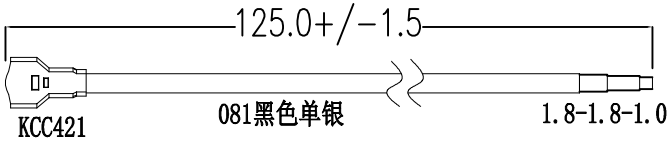
RoHS
Compliant
G P





Rev	Description	Date	Remark
A	New drawing		

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SHEN ZHEN LEJIN RADIO FREQUENCY CO.,LTD

Third Angle				Project	MP14J	Date	2022-04-23
0～10	±0.05	○	0.02	Part Name	WIFI 主天线	Designed by	
10～18	±0.10	◎	∅0.03	Part No.		Checked by	MD
18～30	±0.12	⊥	0.02				RF
30～40	±0.15	▱	0.04	Material	LJWF52A		
40～	±0.20	Angle	±0.5°	Treatment	LJF02-220424001M-R0A	Approved by	
Location						Unit mm	Scale FIT Rev A

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