



SPECIFICATIONS FOR APPROVAL

Customer Name: 智纬

Product Name: WIFI (2G+5G)_A_ANT

Product Model: MP14A(AC9560)

Part Number: LJF02-220424001A-R0A

Write By : 李明进

Issued Date: 2024/8/28

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	≥ 0 DB

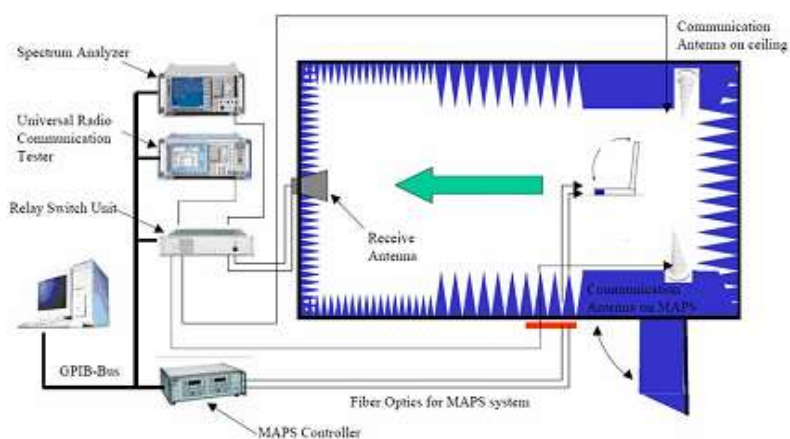
Material & Mechanical Characteristics

Environmental

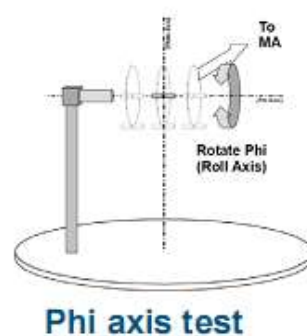
Material of Radiator	Cable Type	Connector Type	Dimension	Operation Temperature	Storage Temperature
FPC black/YELLOW	081b	KCC421		- 20 °C ~ + 50 °C	- 30 °C ~ + 80 °C

Test Equipment & Conditions

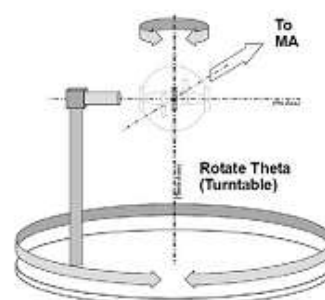
1. Network Analyzers :Agilent 8753SE 5071C
2. Communications Test Set:Agilent E5515C/CMW500
3. 3D Chamber Test System(ETS743)



(Testing by 3D anechoic chamber)

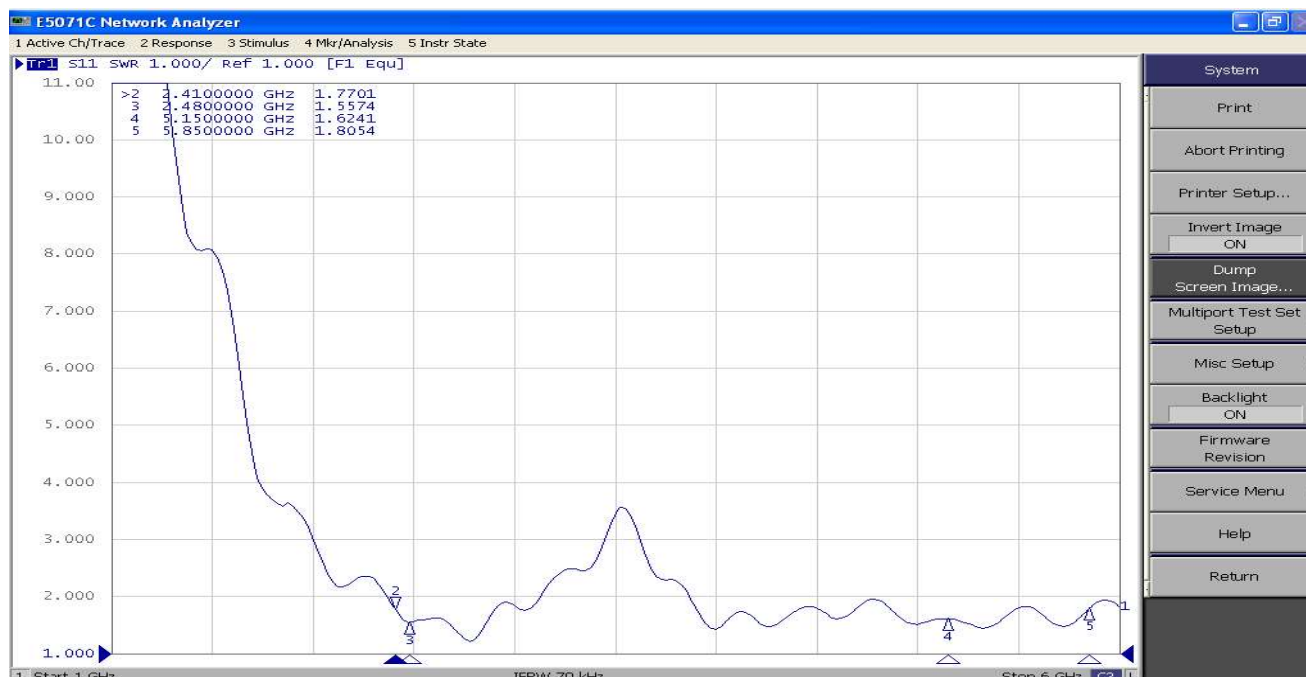


Phi axis test



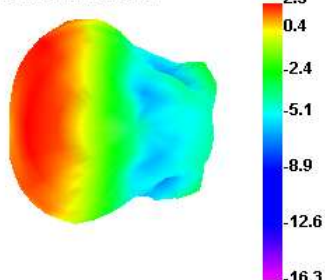
Theta axis test

Antenna Impedance: WIFI ANT M:

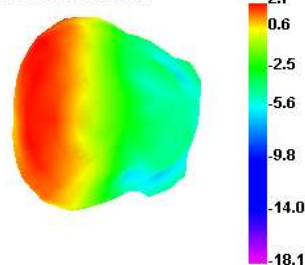


2.4G (Wifi and BT)	Freq (MHz)	2400	2410	2420	2430	2450	2460	2470	2480	2490	2500	
	Effi (%)	38.11	39.32	40.05	44.21	42.45	35.21	37.36	32.04	34.34	28.61	
	Gain (dBi)	2.36	2.25	1.99	2.75	2.21	2.25	2.99	2.89	3.25	3.12	
5G WIFI	Freq (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5950	6000	
	Effi (%)	45.25	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	

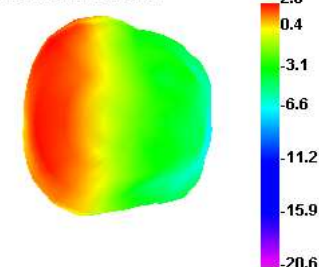
2410.000MHz



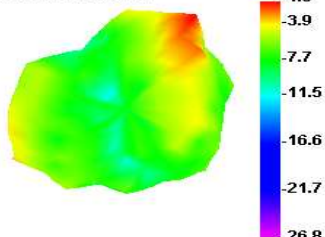
2450.000MHz



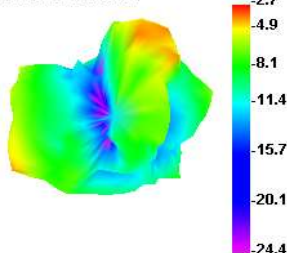
2480.000MHz



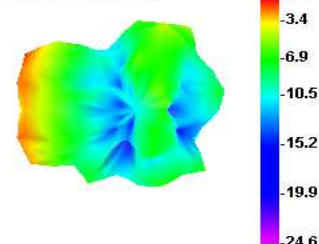
5150.000MHz



5350.000MHz



5850.000MHz

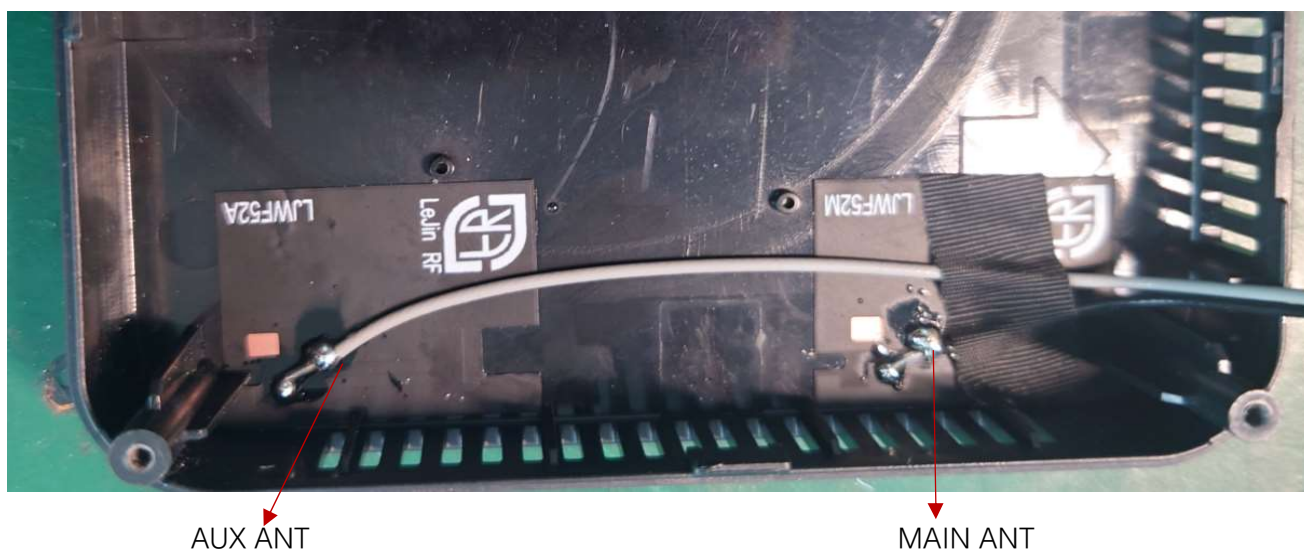


OTD_DATA:(以下OTD_DATA是在本规格书中的天线所测试得来,更换天线或更改天线的安装方式,以下OTD_DATA将会失效,测试WIFI OTA时产品BT处于关闭状态, 测为成品裸机测试)

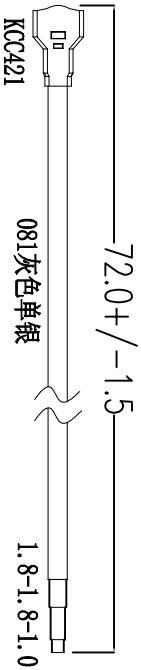
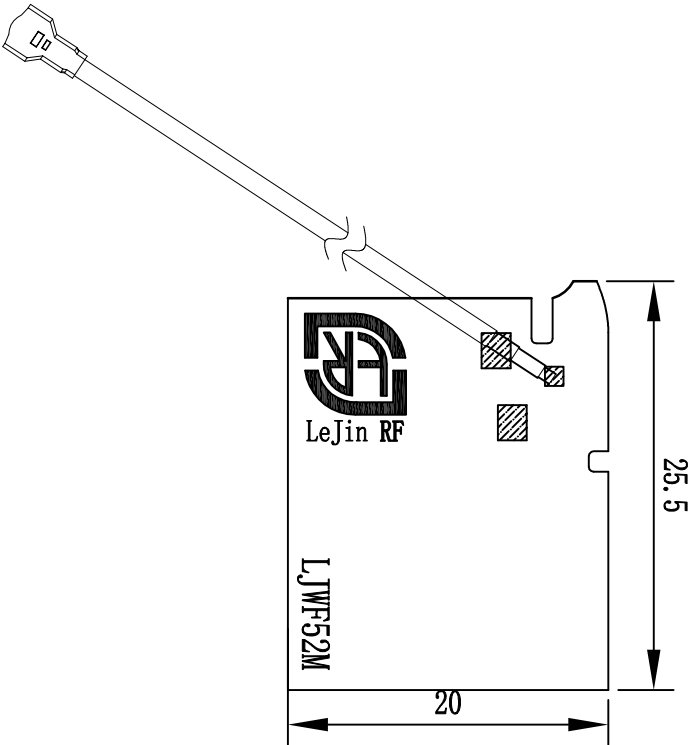
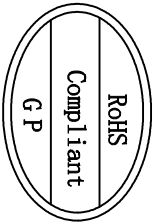
2.4G 802.11.B @11Mbit		
Frequency	TRP (dBm)	TIS (dBm)
1 (2412MHz)	11.75	-79.18
6 (2437MHz)	13.22	-80.56
13 (2472MHz)	12.21	-79.55
BT (BER MODEL)/BT测试时WIFI设置为关闭状态		
Frequency	TRP (dBm)	TIS (dBm)
0 (2402MHz)	4.75	-83.58
78 (2480MHz)	5.25	-83.45

5G 802.11 A @54M BIT		
Frequency	TRP (dBm)	TIS (dBm)
60 (5300MHz)	13.7	-75.1
161 (5805MHz)	14.2	-72.98

天线安装与工艺处理要求与说明:



天线工程图:



SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD

Project				Date			
MP14J				2022-04-23			
Part Name				Designed by			
WIFI 分集天线							
Material				Checked by			
LJWTF52M				RF			
Treatment				Approved by			
LJF02-220424001A-R0A							
Unit				Scale			
mm				FIT			
Rev				Rev			
A				A			