



SPECIFICATIONS FOR APPROVAL

Customer Name: 吉祥星

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

Product Model: R1529

Part Number: LJF02-230210001A-R0A

Write By : 李明进

Issued Date: 2023/2/10

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

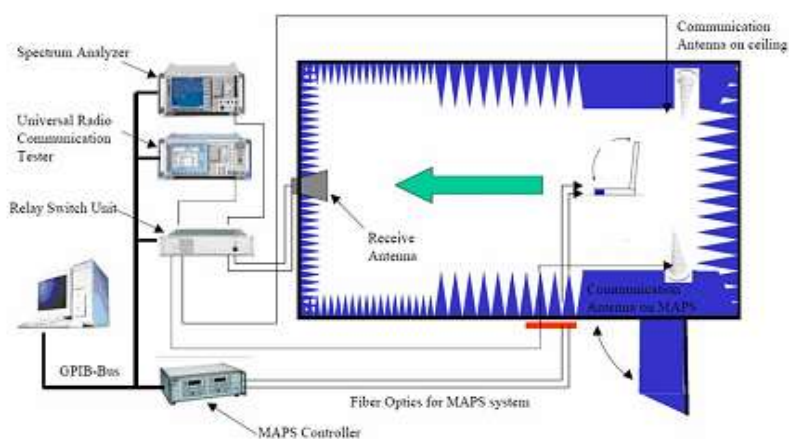
Material & Mechanical Characteristics

Environmental

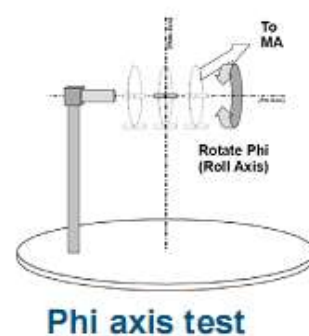
Material of Radiator	Cable Type	Connector Type	Dimension	Operation Temperature	Storage Temperature
FPC black/YELLOW	113	KCC451		- 20 °C ~ + 50 °C	- 30 °C ~ + 80 °C

Test Equipment & Conditions

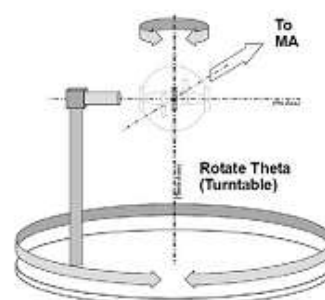
1. Network Analyzers :Agilent 8753SE 5071C
2. Communications Test Set:Agilent E5515C/CMW500
3. 3D Chamber Test System(ETS743)



(Testing by 3D anechoic chamber)

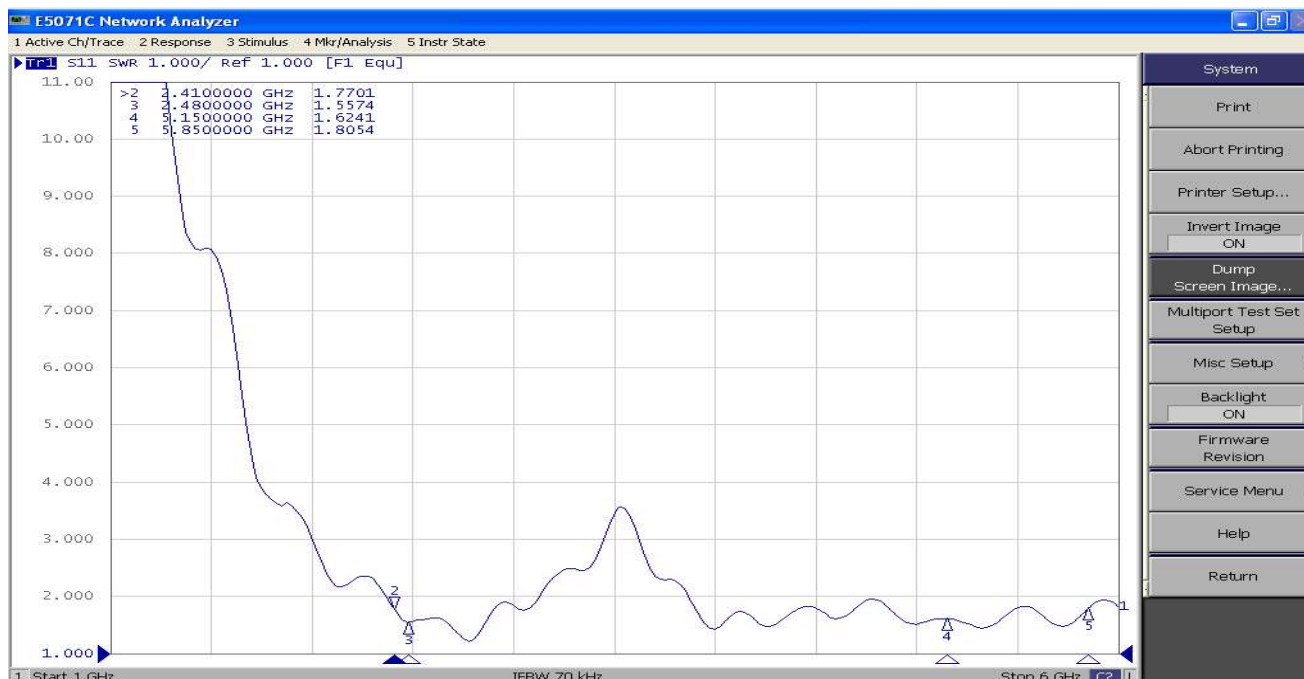


Phi axis test



Theta axis test

Antenna Impedance: WIFI ANT M:



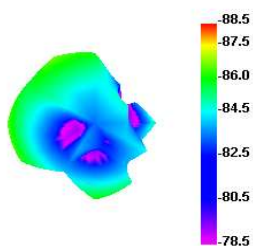
2.4GWIFI/BT	Freq (MHz)	2400	2410	2420	2430	2450	2460	2470	2480	2490	2500	ANTA
	Effi (%)	32.77	30.35	31.22	33.54	33.21	34.5	30.58	30.65	33.78	32.98	
	Gain (dBi)	2.07	1.82	2.08	2.27	2.21	2.21	1.88	1.87	2.08	1.99	
5G WIFI	Freq (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5950	6000	
	Effi (%)	40.35	40.57	41.24	39.98	40.58	41.33	38.37	39.56	41.25	42.56	
	Gain (dBi)	2.49	2.27	2.33	2.04	2.17	2.23	2.01	2.05	2.74	2.81	

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 M ANT一起测得。

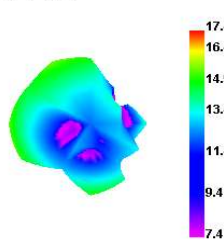
2.4G 802.11.B @11Mbit		
Frequency	TRP (dBm)	TIS (dBm)
1 (2412MHz)	13.11	-84.61
6 (2437MHz)	13.57	-83.5
13 (2472MHz)	13.61	-84.55

5G 802.11 A @MC54		
Frequency	TRP (dBm)	TIS (dBm)
36 (5180MHz)	14.5	-72.35
60 (5300MHz)	14.72	-71.89
161 (5805MHz)	13.88	-71.47

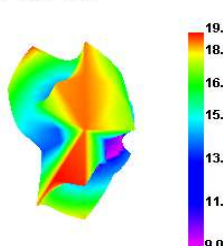
Wifi 1 TIS



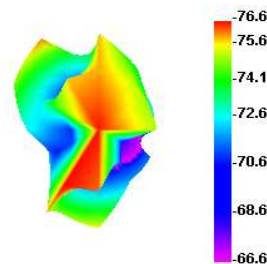
Wifi 1 TRP



Wifi 161 TRP



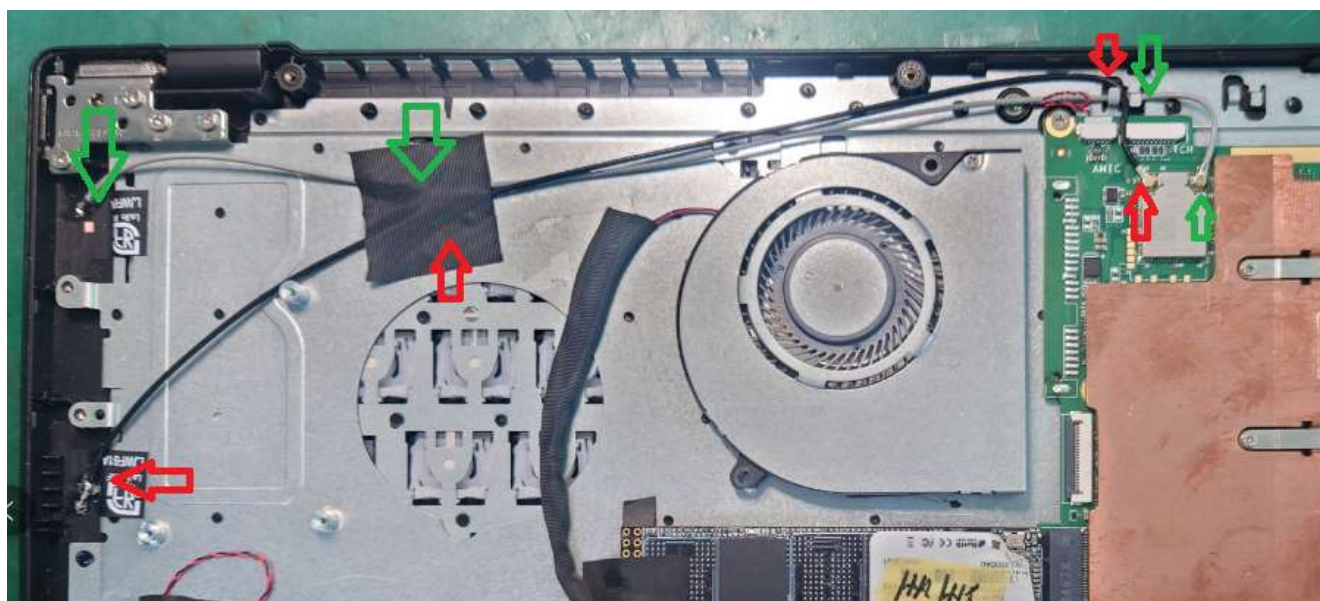
Wifi 161 TIS



天线安装工艺说明图片:



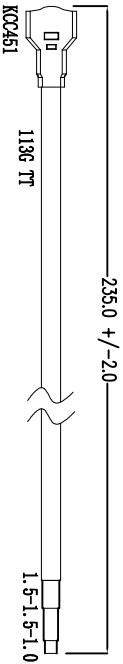
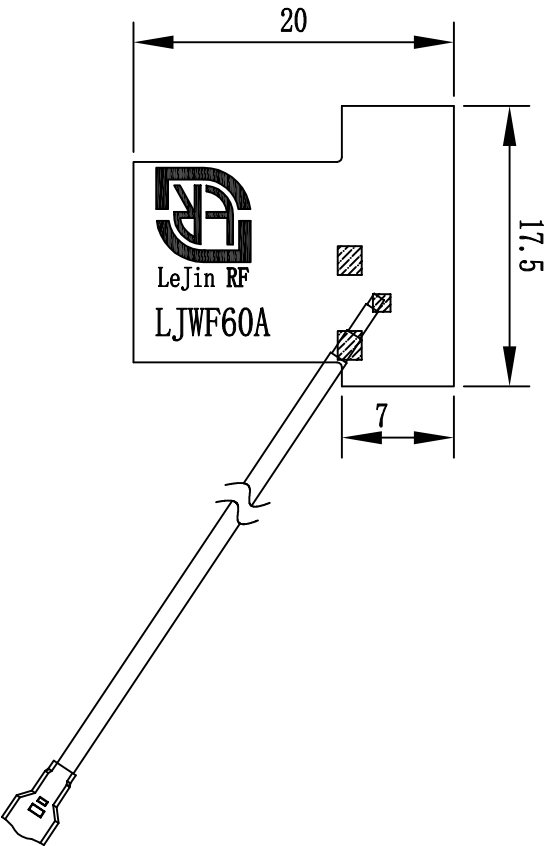
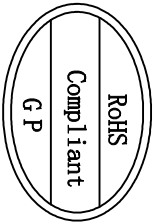
射频线固定及天线对应模块的端口



布线与整体环境处理:



天线工程图



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

						Third angle		Project		RI529 ant		Date		2023-02-10			
				0~10		±0.05		○		0.02		Part Name		WIFI A ANT			
				10~18		±0.10		◎		Ø0.03		Part No.					
				18~30		±0.12		┴		0.02		Material		LJWFO1-230210001-RIA			
				30~40		±0.15				0.04		Treatment		LJWFO2-230210001A-ROA			
				40~		±0.20		Angle		±0.5°		Approved by					
				Location								Unit		mm		Scale	
				6								7				8	
				1		2		3				Date		Remark			
				A		New drawing											
				Rev		Description											
				1		2		3									