



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: ZW

Product Name: WIFI 2G+5G

Product Model: G109D(YD_pcb)

Part Number: LJF02-20121104-R0A

Write By : Star Li

Issued Date: 2020/12/11

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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Manufacturer: Shenzhen Lejin radio frequency technology Co., LTD
Add: Floor 3, Building A4, Junfeng Industrial Park, No. 176, Chongqing
Road, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
518103

Electrical Characteristics

Frequency	VSWR	Efficiency	Impedance	Polarization	Gain
2400 MHz ~2500 MHz	<2	>20%	50 Ohm	Linear	≥ 1 DB
5100MHZ--5900 MHZ	<2.5	>25%	50 Ohm	Linear	≥ 1 DB

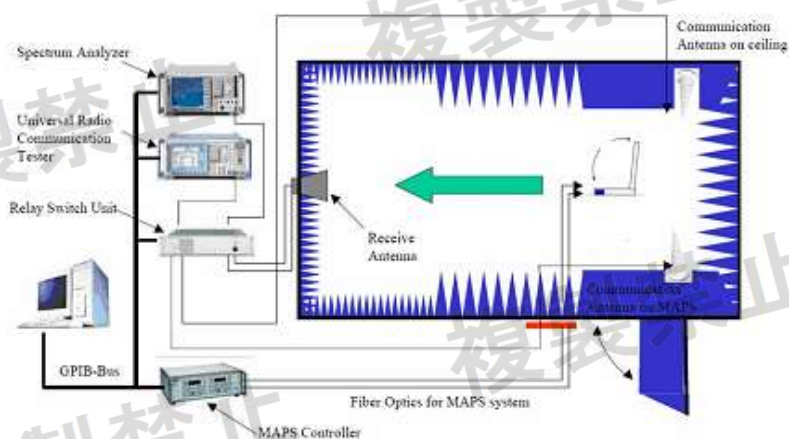
Material & Mechanical Characteristics

Environmental

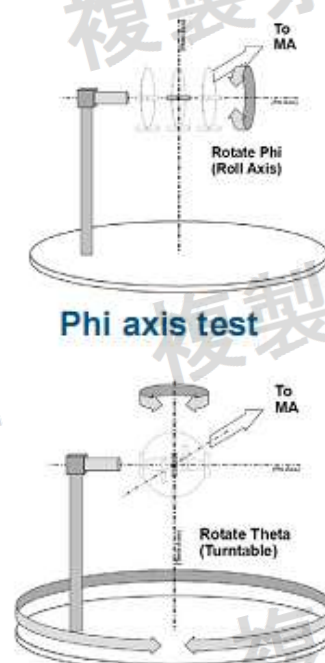
Material of Radiator	Cable Type	Connector Type	Dimension	Operation Temperature	Storage Temperature
FPC black/YELLOW	113B	kcc451		- 20 °C ~ + 50 °C	- 30 °C ~ + 80 °C

Test Equipment & Conditions

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

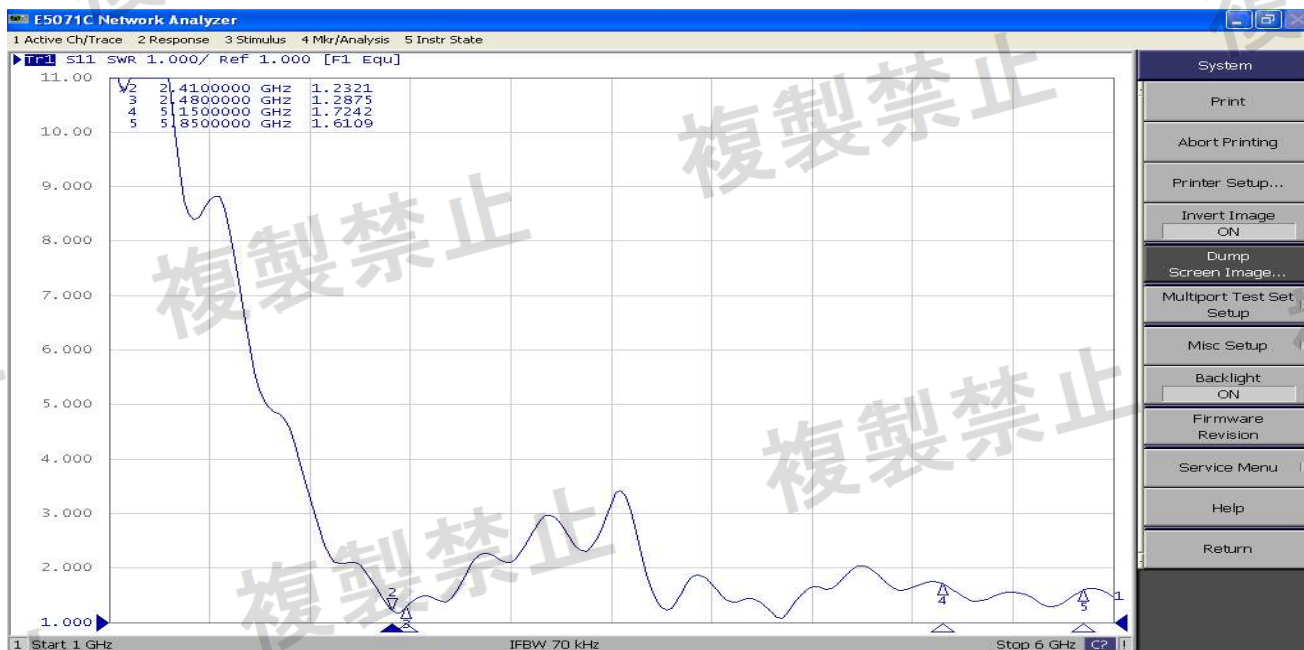


(Testing by 3D anechoic chamber)



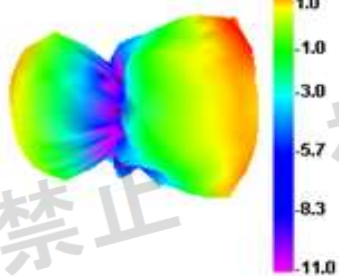
Theta axis test

Antenna Impedance: WIFI ANT A:

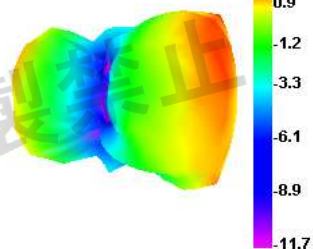


2.4G (Wifi and BT)	Freq (MHz)	2400	2410	2420	2430	2450	2460	2470	2480	2490	2500	ANT A
	Effi (%)	22.1	24.3	20.75	28.5	26.55	27.3	22.7	24.56	25.5	29.98	
	Gain (dBi)	2.25	2.35	2.48	3.07	3.35	2.78	3.85	2.44	2.56	2.98	
5G WIFI	Freq (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5950	6000	
	Effi (%)	27.5	31.58	33.75	29.95	38.8	33.78	36.9	33.8	38.85	39.97	
	Gain (dBi)	0.75	1.78	3.35	1.03	1.2	1.41	2.1	1.02	1.01	1.2	

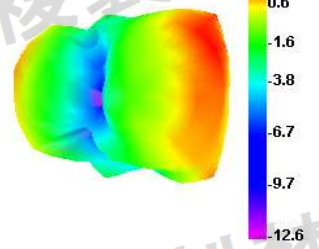
2400.000MHz



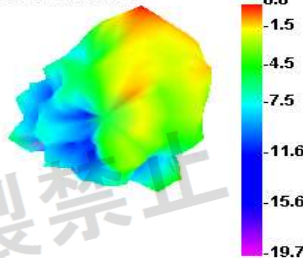
2450.000MHz



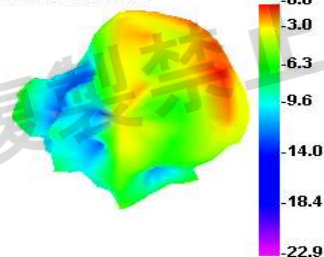
2480.000MHz



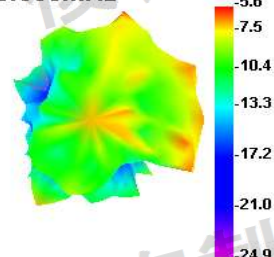
5150.000MHz



5350.000MHz



5850.000MHz





OTD_DATA:

2.4G 802.11.B @11Mbit		
Frequency	TRP (dBm)	TIS (dBm)
1 (2412MHz)	7.88	-78.25
6 (2437MHz)	8.15	-75.37
13 (2472MHz)	8.07	-76.25

2.4G 802.11.G(ODF) @48Mbit		
Frequency	TRP (dBm)	TIS (dBm)
1 (2412MHz)	7.94	-70.68
6 (2437MHz)	8.08	-71.25
13 (2472MHz)	8.28	-69.99

5G 802.11 A @54Mbit		
Frequency	TRP (dBm)	TIS (dBm)
36 (5180MHz)	8.28	-69.25
60 (5300MHz)	9.35	-70.37
161 (5805MHz)	8.78	-70.4

5G 802.11 N @MCS4		
Frequency	TRP (dBm)	TIS (dBm)
36 (5180MHz)	8.33	-73.68
60 (5300MHz)	8.47	-75.85
161 (5805MHz)	8.18	-72.99

Product Drawing:

