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### 3.Product Specification

A. Electrical Characteristics	
Frequency	2400~2500MHz 5150~5850MHz
VSWR	<2.0
Efficiency	>40%
Impedance	50Ohm
Polarization	Linear
Gain	>=1.5dB
B. Material & Mechanical Characteristics	
Material of Radiator	Internal FPC (LJWF27BF)
Cable Type	Φ1.13,Gray,L140mm
Connector Type	IPX1
Dimension	
C. Environmental	
Operation Temperature	- 30 °C ~ + 80 °C
Storage Temperature	- 20 °C ~ + 75 °C
Humidity	40%~95%

### 4.Test Equipment & Conditions

- |                                  |                     |
|----------------------------------|---------------------|
| 1.Network Analyzers              | Agilent 8753D/5071C |
| 2.HSPA and LTE protocol test set | R&S CMW500 -PT      |
| 3.Communications Test Set        | Agilent 8960        |
| 4.3D Chamber Test System         |                     |

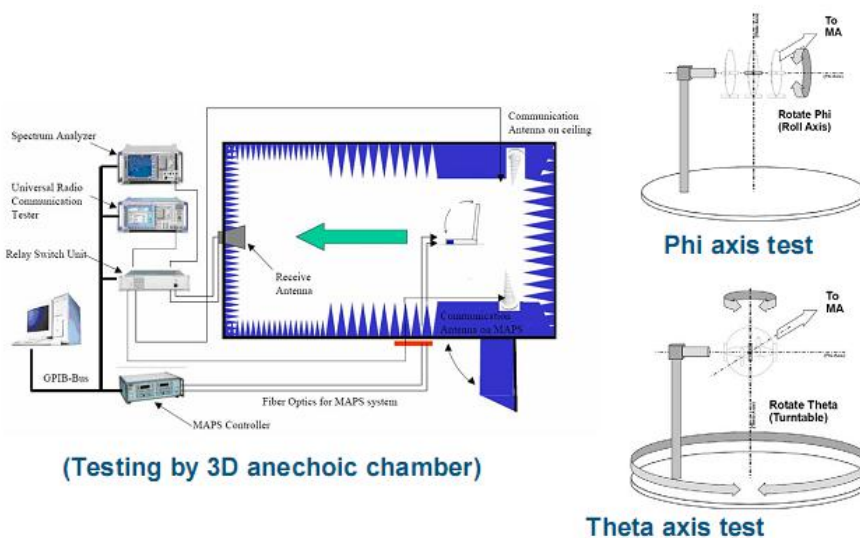


图 1 test topology



## 5. Test Report

### 5.1 Voltage Standing Wave Ratio(VSWR).

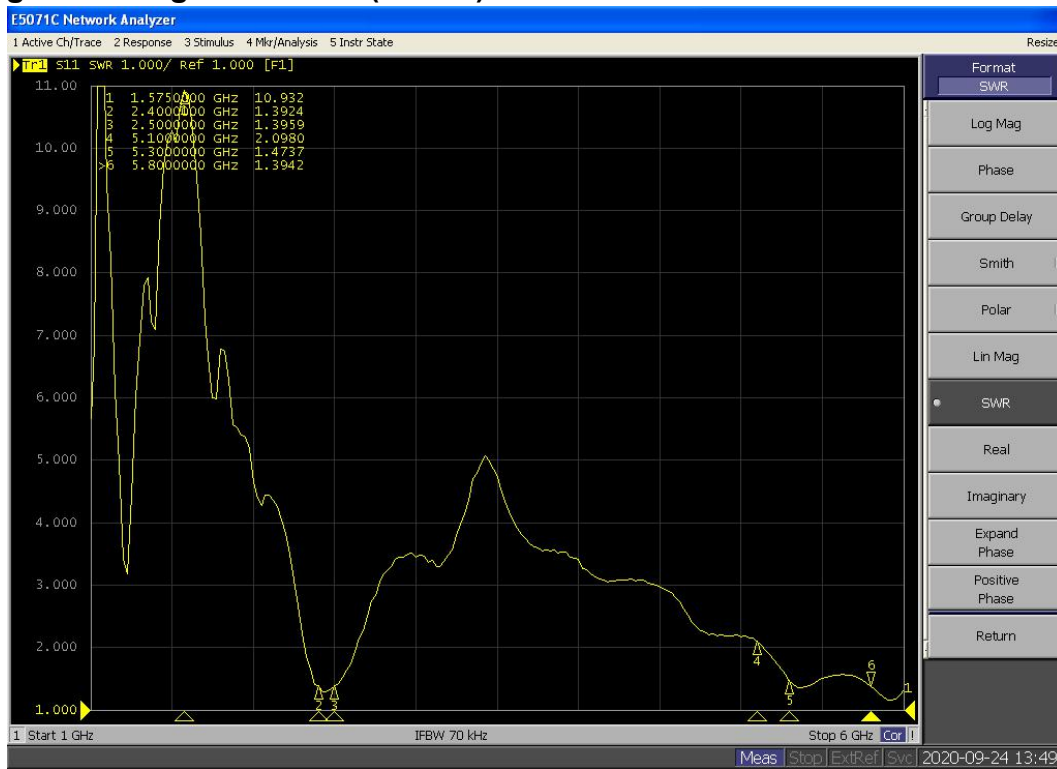


图 2 VSWR

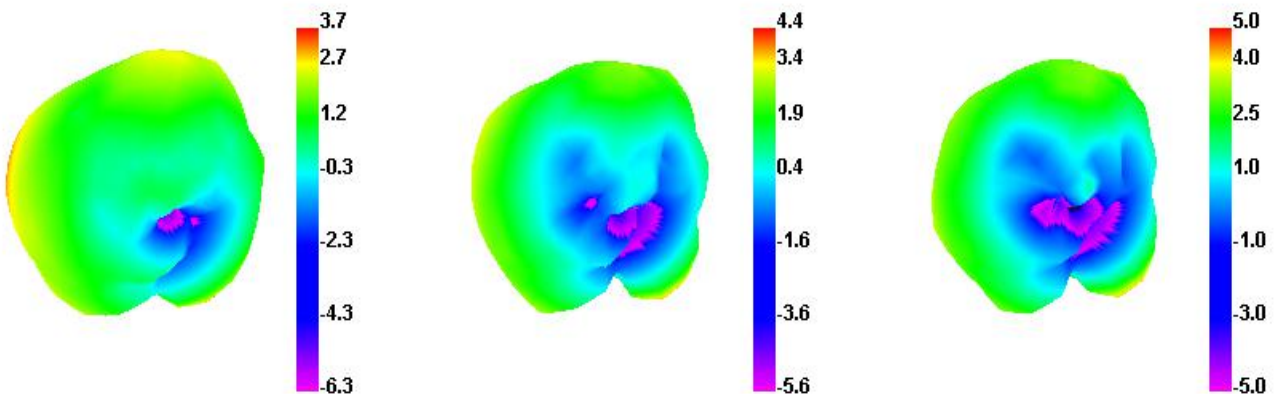
### 5.2 Efficient and gain(All data were tested in the chamber,25°C, 40%RH—65%RH).

Passive Test For BT 2.4G	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	Effi(%)	45.19	44.30	48.69	50.84	51.30	48.65	51.41	52.81	45.45	43.18	38.45
	Gain(dBi)	2.09	2.06	2.12	2.32	2.39	2.12	2.40	2.43	2.10	1.96	1.68

2400.000MHz

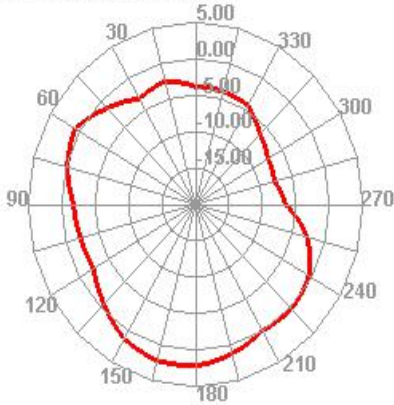
2450.000MHz

2500.000MHz

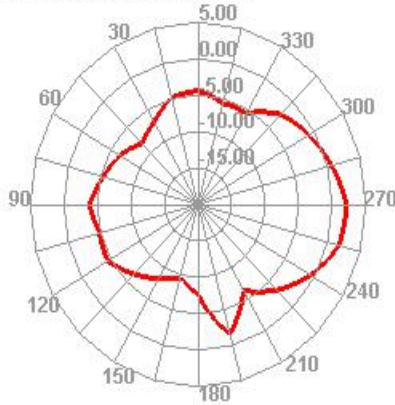




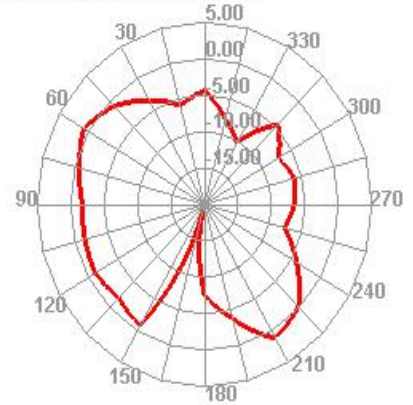
2400.000MHz H



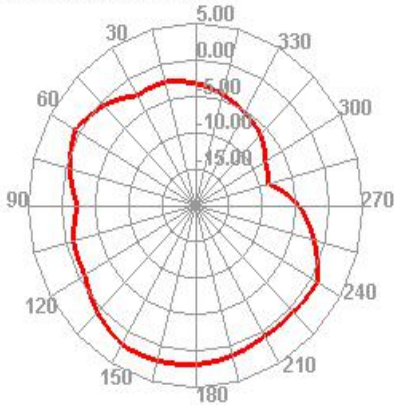
2400.000MHz E1



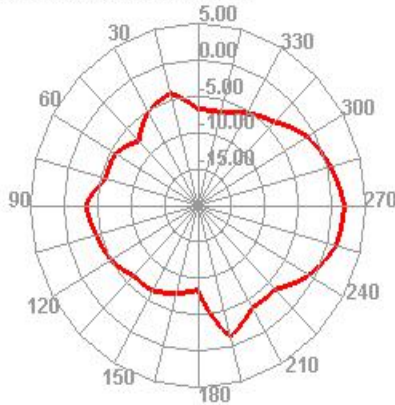
2400.000MHz E2



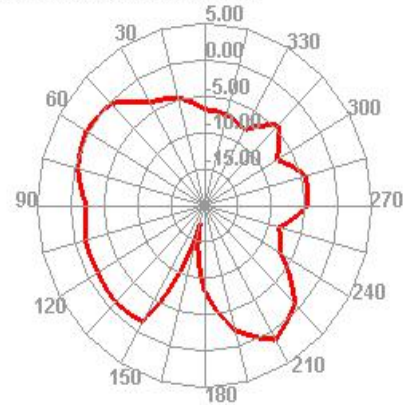
2450.000MHz H



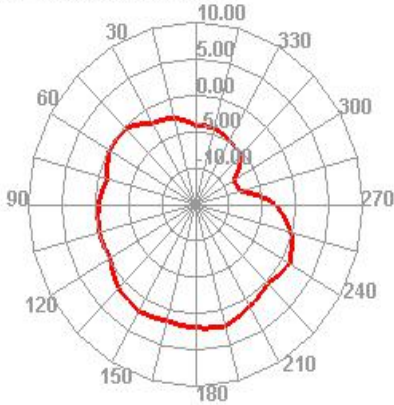
2450.000MHz E1



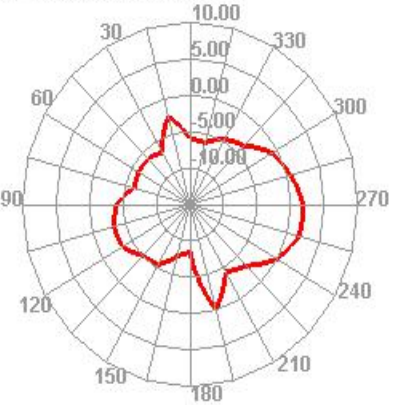
2450.000MHz E2



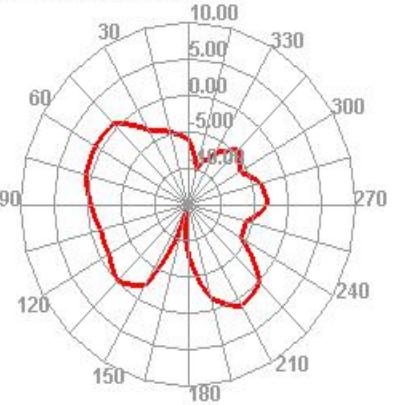
2500.000MHz H



2500.000MHz E1



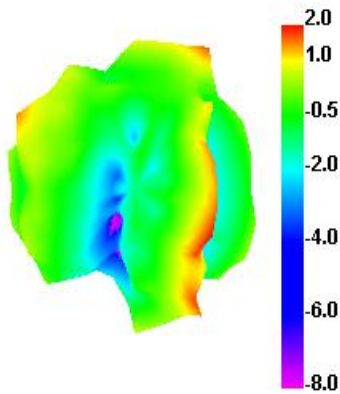
2500.000MHz E2



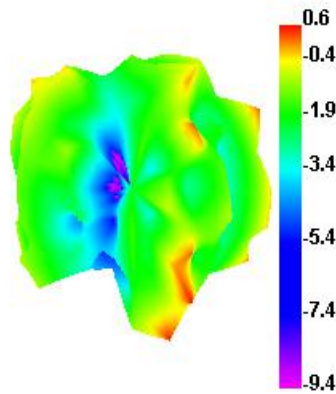
Passive Test For WIFI 5G															
Freq (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Effi (%)	46.69	48.21	45.67	48.27	47.69	48.87	42.65	41.64	36.57	38.36	35.99	35.86	34.79	34.11	32.87
Gain (dBi)	1.95	2.28	2.17	2.29	2.53	2.87	1.88	1.84	1.57	1.45	1.54	1.42	1.42	1.38	1.35



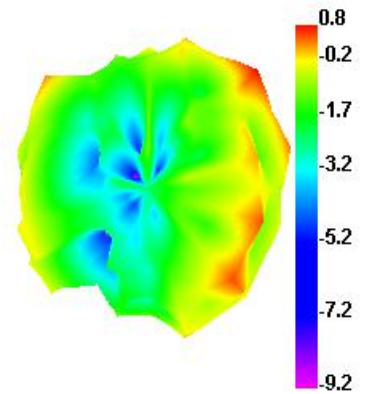
5150.000MHz



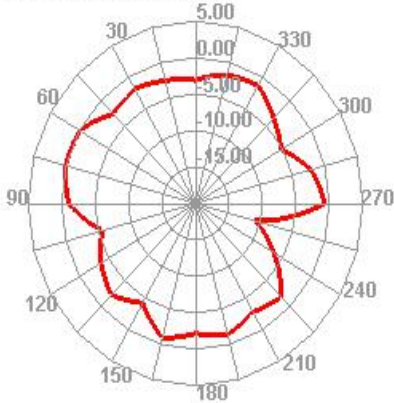
5550.000MHz



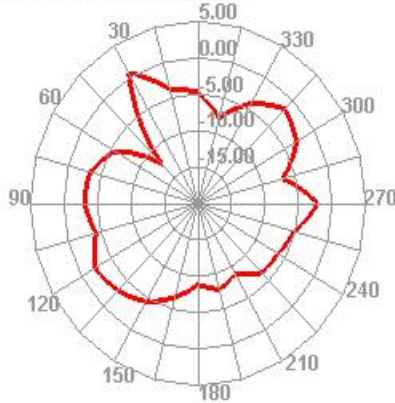
6000.000MHz



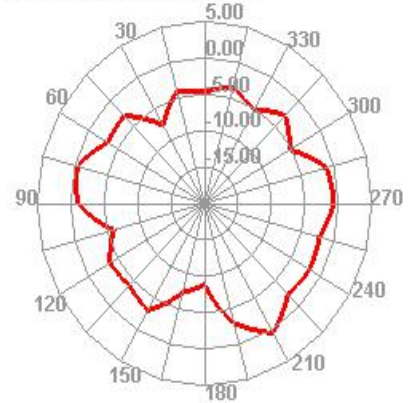
5150.000MHz H



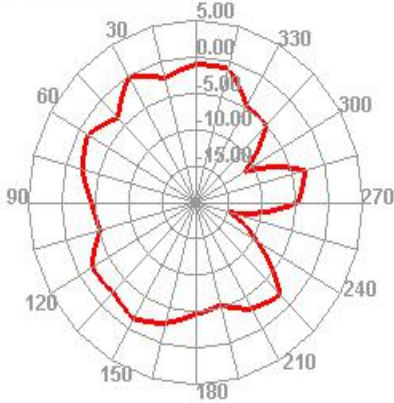
5150.000MHz E1



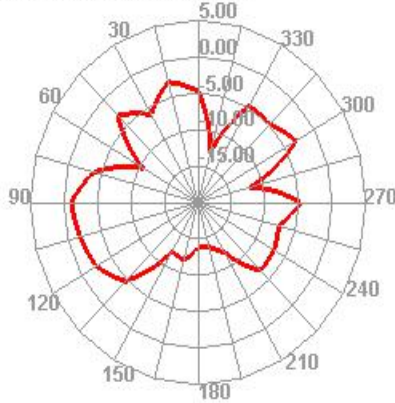
5150.000MHz E2



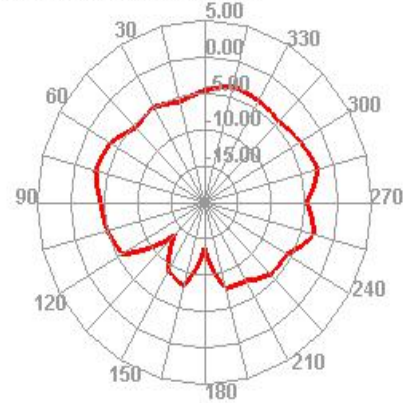
5550.000MHz H



5550.000MHz E1

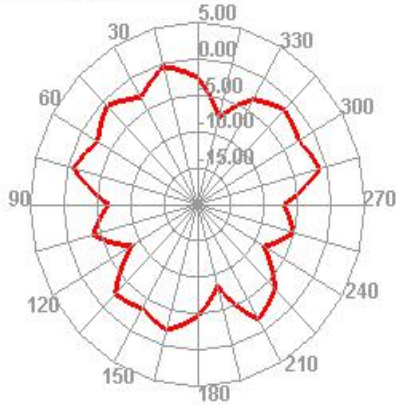


5550.000MHz E2

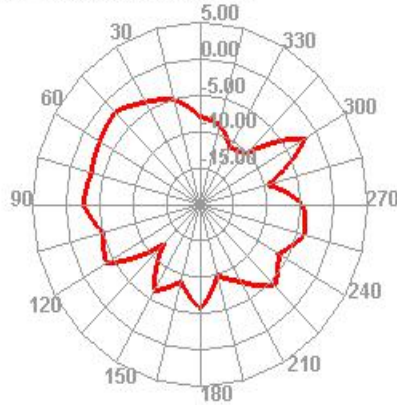




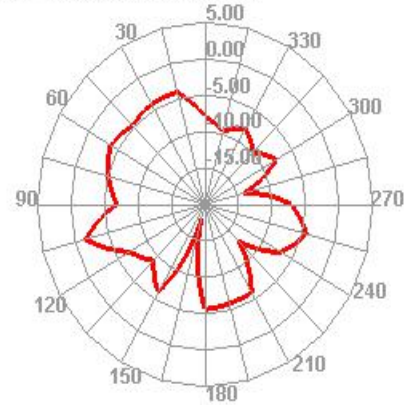
6000.000MHz H



6000.000MHz E1



6000.000MHz E2



### 6. Reliability Test

Test Item	Test condition	Equipment	Specification	Result
1 Low Temp. Storage Test	Temperature: -30℃, Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for 44 hours; step-up temp to 25℃, test antenna after 2 hours.	Temp.&Hum. Tester	No material deformation is allowed. Electronic Performance is ok.	PASS
2 High Temp./High Humid Storage Test	Temperature: 85℃ Humidity: 85% RH Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-up the temp. to 80℃ and the humidity up to 85% in one hour, store antenna for 44 hours; step-down temp to 25℃, test antenna after 2 hours.	Temp.&Hum. Tester	No material deformation is allowed. Electronic Performance is ok.	PASS
3 Salt-Spray 6 pray Test	Placing antenna in the Salt-Spray Tester, set the test condition, Temp: 35±2℃ Humidity: 85% NaCl salt spray :5±1%.PH value :6.5~7.2 Testtime:24hours	Salt-Spray Tester	No color change No appear rusting	PASS

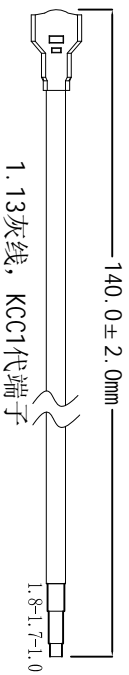
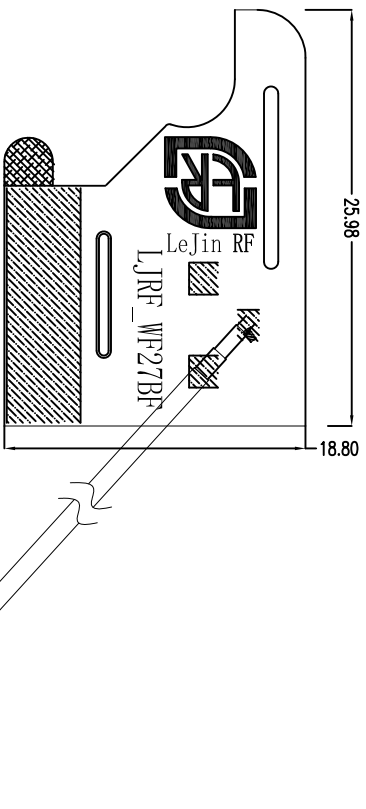
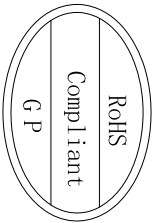
### 7. Real picture



图 3 Real picture

## 8.Product Drawing





Rev	Description	Date	Remark
1			
2			
3			
A	New drawing		

		深圳乐进射频频科技有限公司 SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD	
0~10 10~18 18~30 30~40 40~	±0.05 ±0.10 ±0.12 ±0.15 ±0.20	Third Angle 0.02 ∅0.03 0.02 0.04 ±0.5°	Project Part Name Part No. Material Treatment
随晨科技P07S WIFI 5G+BT LJWF27BF		Date Designed by Checked by RF	2021-03-06 MD RF
Location ±0.20		Angle ±0.5°	LjF02-21040108A-RTA Unit mm
由 Autodesk 教育版产品制作		由 Autodesk 教育版产品制作	