



1.1 Product Specification

A. Electrical Characteristics	
Frequency	2400MHz ~2500 MHz 5150MHz ~5850 MHz
VSWR	<2.0
Efficiency	>40%
Impedance	50Ohm
Polarization	Linear
Gain	≤2.39dB
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Black),LJWF29A
Cable Type	Φ1.13mm,L300mm,gray
Connector Type	IPX1
Dimension	43.0*11.5mm
C. Environmental	
Operation Temperature	- 30 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C
Humidity	40%~95%

1.2 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 | |

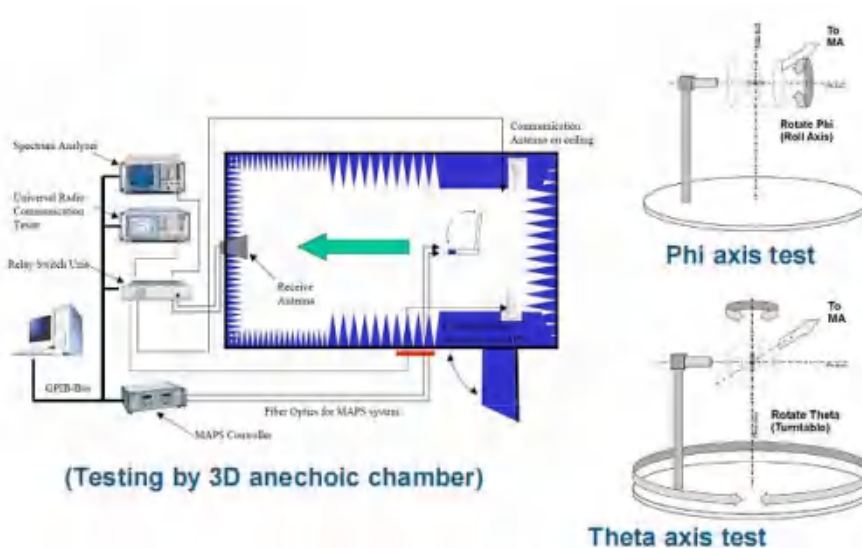


图 1 Test topology



5. Test Report

5.1 Voltage Standing Wave Ratio(VSWR).

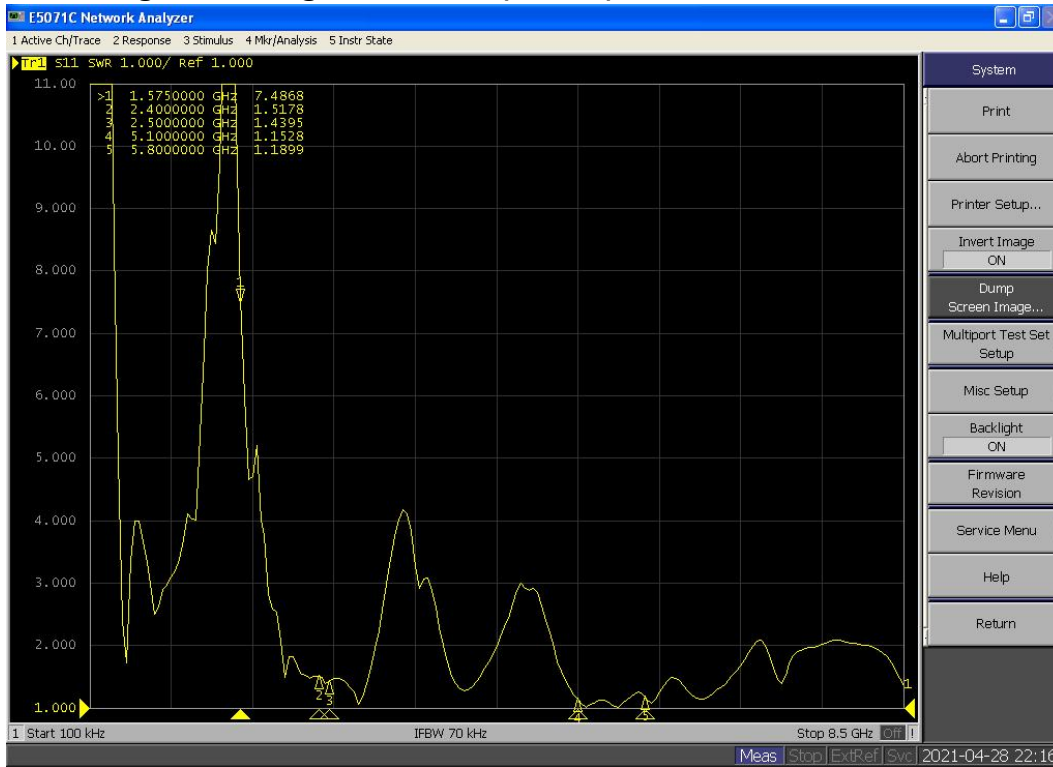


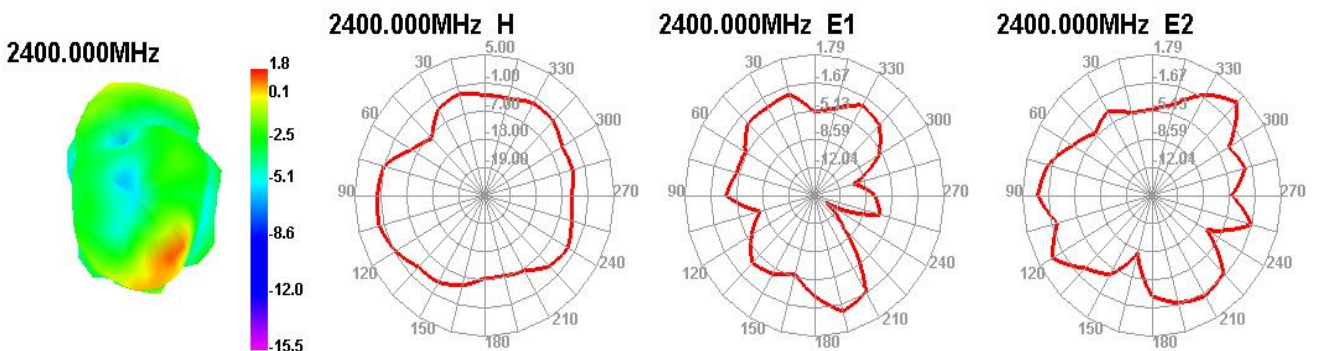
图 2 VSWR

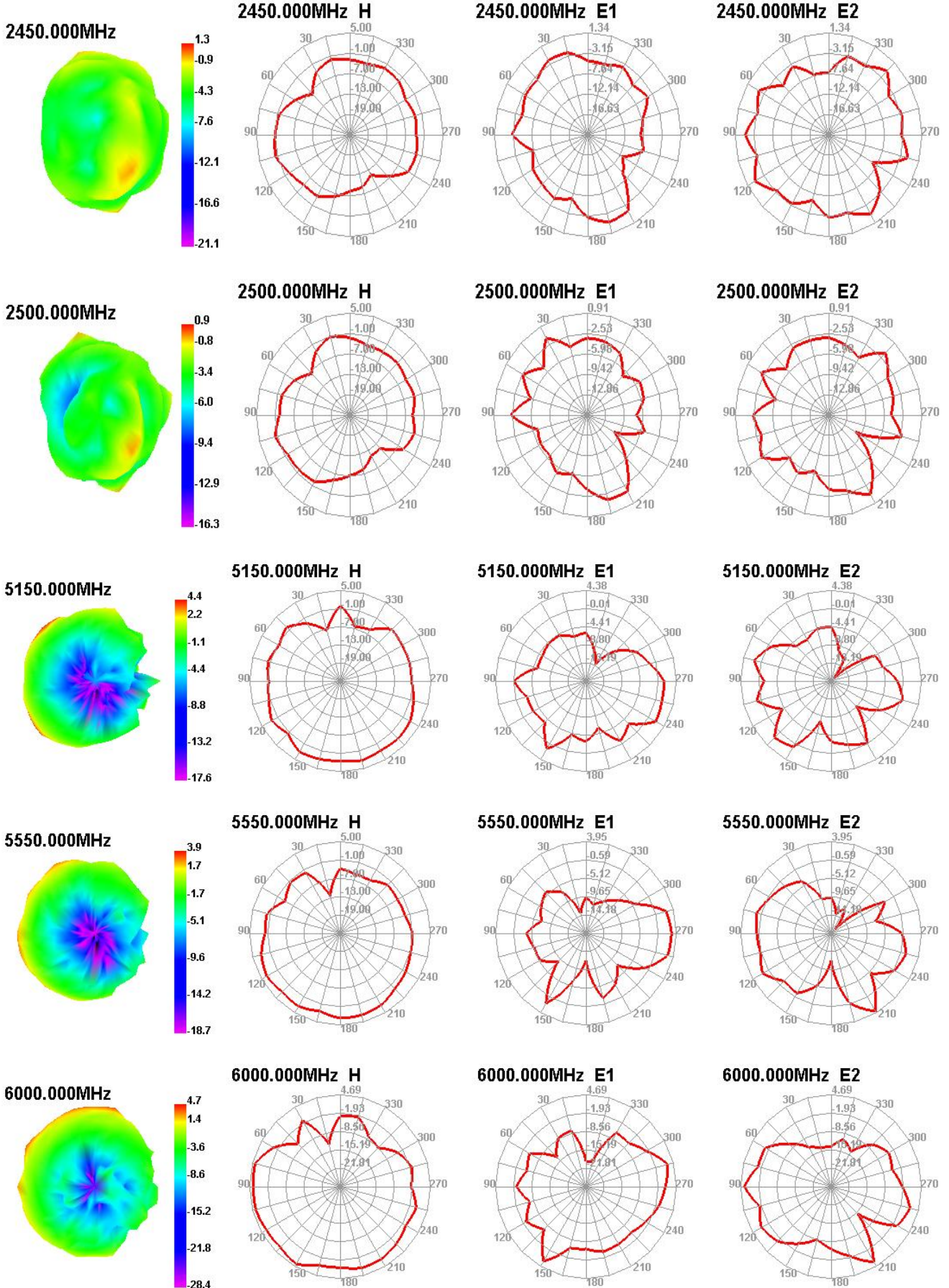
5.2 Efficient and gain(estimating conducted by Lejin in Jan,2021,using 3D drawing document that provided by Creality.)

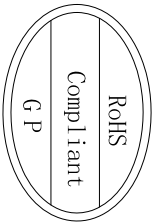
Passive	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Test For	Effi(%)	58.62	51.84	56.47	55.07	54.54	53.06	51.80	52.38	53.21	52.77	50.64
WIFI 2.4G	Gain(dBi)	1.96	1.87	1.74	1.67	1.94	1.40	1.72	1.89	1.90	1.37	0.96

Passive	Freq(MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Test WIFI	Effi(%)	53.64	53.19	50.30	52.06	54.00	51.62	51.36	53.09	52.82	51.62	51.30	51.70	52.90	52.86	50.46
5G	Gain(dBi)	4.09	3.75	3.52	3.85	3.95	3.18	3.75	3.82	3.83	3.62	3.55	3.90	4.09	4.55	4.46

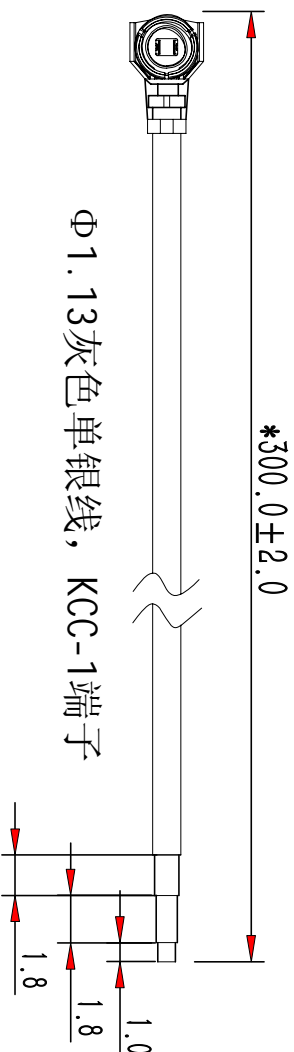
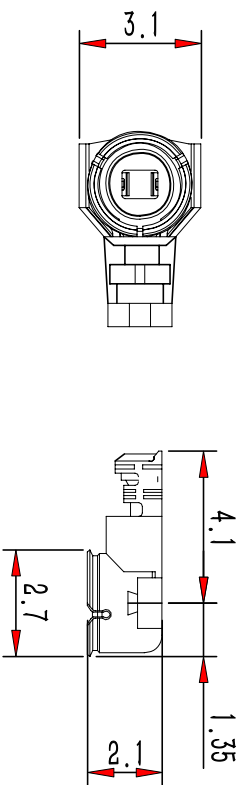
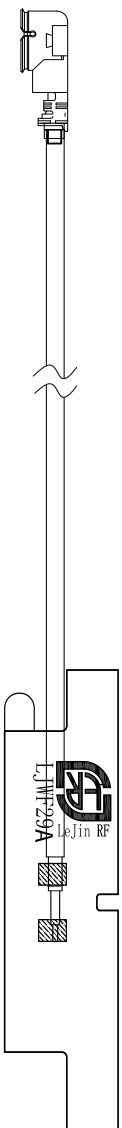
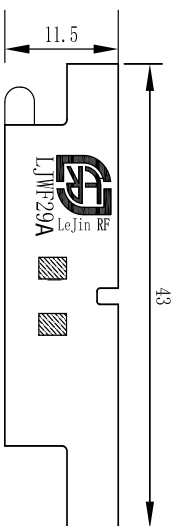
5.3 Radiation pattern.







背放手撕位



- Remark:
- 1.FPC material:Electrolytic copper.
 - 2.Backing in behind:3M300LSE.
 - 3.Tolerance: Cutting die:±0.1mm;Circuit on FPC:±0.05mm; others are ±0.05mm.
 - 4.ROHS:(Pb,Hg,Cr+6,PBBS,PBDEs),<1000ppm; Cd,<100ppm.

SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD

0~10	±0.05	Third Angle	○	0.02	Project	Creativity 3D	Date	2018-08-09
10~18	±0.10		◎	∅0.03	Part Name	2.4G ANT	Designed by	
18~30	±0.12		⊥	0.02	Part No.		Checked by	MD
30~40	±0.15	Angl	∇	0.04	Material		RF	
40~	±0.20	Angl		±0.5°	Treatment	LJF02-24021808-R0A	Approved by	

Rev	1	2	3	4	5	6	7	8
Description	New drawing			Date	Remark	Location	Unit	Scale
1	2	3	4	5	6	7	8	9