



Shenzhen Lejin radio frequency technology Co., LTD

SPECIFICATIONS FOR APPROVAL

Customer Name: 兴未来

Product Name: 2.4GHz 天线

Product Model:

Part Number: LJF01-17091602-R0A

Write By : 胡雪文

Issued Date: 2019-11-15

CUSTOMER

ENGINEER R&D DEPT	BUSSINESS DEPT	APPROVAL

LEJIN

R&D DEPT	ENGINEER DEPT	APPROVAL

REV	MODIFIED DESCRIPTION	DATE	REMARK
V1.0	Initial Draft Release	2019/11/15	



目 录/Index

一、 封面 (Cover)	1
二、 目录 (Index)	2
三、 规格 (Product Specification)	3
四、 测试设备 (Test Equipment & Conditions)	3
五、 性能测试报告 (Test Report)	4
六、 可靠性测试 (Reliability Test)	5
七、 包装 (Package)	6
八、 工程图纸 (Product Drawing)	6



三、规格 (Product Specification)

A. Electrical Characteristics	
Frequency	2400~2500MHz
VSWR	<2.0
Efficiency	>30%
Impedance	50 Ohm
Polarization	Linear
Gain	1.38dBi
B. Material & Mechanical Characteristics	
Material of Radiator	N/A
Cable Type	N/A
Connector Type	N/A
Dimension	
C. Environmental	
Operation Temperature	- 30 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C
Humidity	40%~95%

四、测试设备 (Test Equipment & Conditions)

- 1.Network Analyzers Agilent 8753D/5071C
- 2.HSPA+和LTE协议测试仪 R&S CMW500 -PT
- 3.Communications Test Set Agilent 8960
- 4.3D Chamber Test System

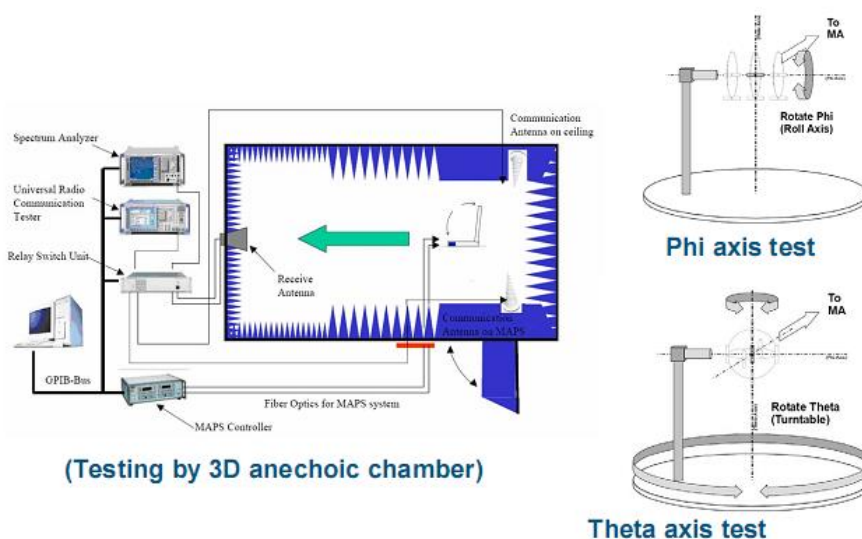


图 1 Test topology



五、性能测试报告（Test Report）

1 天线驻波图

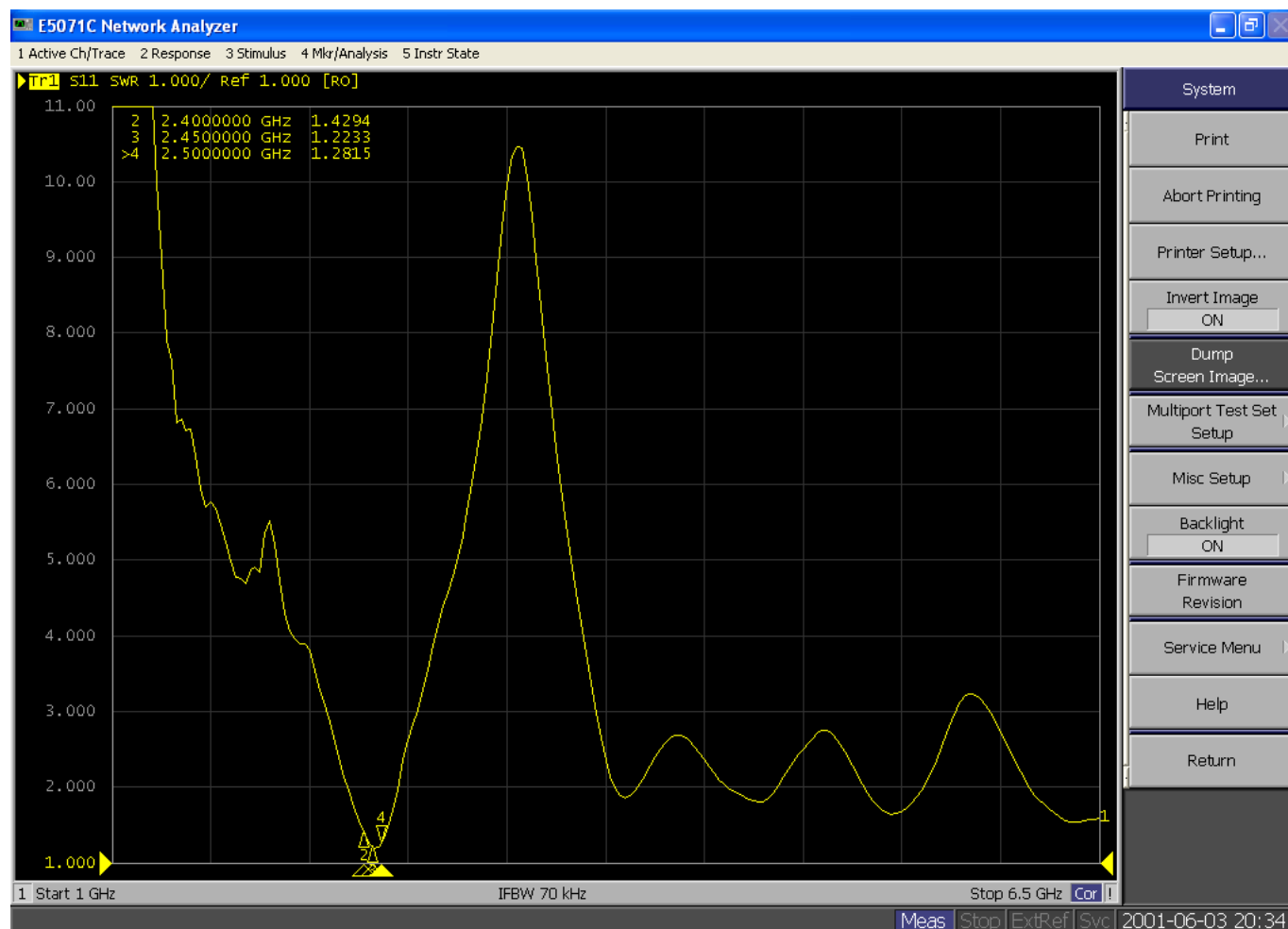


图 2 天线驻波图



2. Antenna Efficient & Gain(天线效率&增益)

Passive Test For 2G		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	39.88	1.23
2410	39.00	1.37
2420	38.97	1.09
2430	40.23	1.23
2440	40.40	1.27
2450	41.23	1.22
2460	42.51	1.37
2470	43.67	1.38
2480	41.85	1.36
2490	42.01	1.04
2500	41.67	1.26



六、可靠性测试 (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.&Humi. 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.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
3	Salt-Spray 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 Test time:24hours	Salt-Spray Tester	No color change No appear rusting	PASS

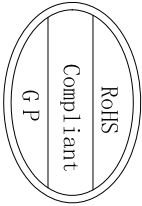
七、包装(Package)

(1) 天线实物图

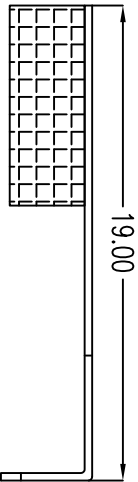


(2) 产品包装(略)

八、工程图纸(Product Drawing)

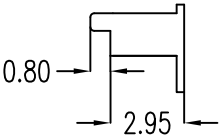


折弯后



EVA8*3*3

带背胶



1	2	3	4	5	6	7	8
A				A			
B				B			
C				C			
D				D			
Rev				Rev			
A				A			
New drawing				New drawing			
Description				Description			
Date				Date			
Remark				Remark			
1				1			
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			

深 圳 乐 进 射 频 科 技 有 限 公 司											
SHEN ZHEN LEJIN RADIO FREQUENCY CO., LTD											
			Third Angle			Project			LJM01-17091602-80A		
0~10			±0.05			○			0.02		
10~18			±0.10			◎			Ø0.03		
18~30			±0.12			⊥			0.02		
30~40			±0.15			∠			0.04		
40~			±0.20			Angle			±0.5°		
Location			Treatment			LJM01-17091602-80A			Approved by		
Unit			mm			Scale			FIT		
Rev			A			Rev			A		