



Shenzhen Xunyton Technology Co.,Ltd

Specification

Customer: LM Technology

Product Name: 2.4G 5DB RP SMA male antenna

Product Part NO.: XYTR-2.4 -200-RPSMA

Date: 2023-08-17

Engineer confirmed:

核准	工程	制作	签章
Approval	Quality	Engineer	

Customer confirmed:

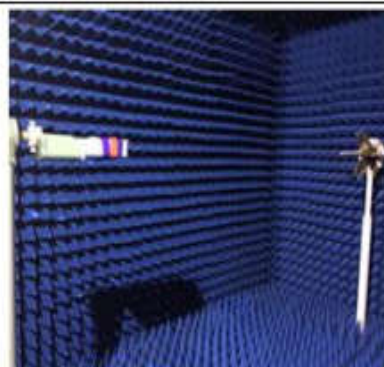
Approval	Engineer	Quality	Signature
Result: ☐ Yes ☐ NG ☐ Others			



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1.测试项目与设备 /Test Item and Equipment

	测试项目 Test Item	设备 Equipment
1. S11 参数 (S-parameter)	1. 回波损耗 (Return Loss) 2. 电压驻波比 (VSWR)	网络分析仪: Agilent E5071B HP 8753D
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 综合测试仪: Agilent 8960 E5515B x2 StarPoint SP6011
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 网络分析仪: Agilent E5071B HP 8753D





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Specification:

Electrical Specifications:	
Frequency Range	2400-2500MHZ
Gain	5.18dBi
VSWR	≤ 2
Polarization	Vertical
Impedance	50ohm
Maximum Input Power	10W
Connector	RP SMA Male
Operating Temperature	-40℃ to+80℃
Mechanical Specifications:	
Antenna Dimension	200mm
Weight	25g



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Project	Test condition	Test results
Storage environment	Test temperature, humidity, pressure without stated condition as follwings:1.Temperature: $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$;2.Relative humidity: 45%-85%;3,Pressure: 86kpa-106kpa	Electrical and mechanical performance normal
High and low temperature test	Having 5 times cycle between -40°C to 70°C ,Then in common condition 1-2 hours test exterior quality.	Measurement satisfied with electrical and mechanical performance normal.
Resistance constant hot and humid test	Relative humidity: $95 \pm 3\%$,Test temperature: 40°C ,last 2 hours ,put it after 5 min test the electrical function .Test products during common condition 1-2 hours ,Then test exterior quality.	Measurement satisfied with electrical and mechanical performance normal.
Vibration test	Vibrate Frequency:10-55HZ; Distance :0.35mm;Acceleration :50.0m/s;Sweep frequency cycle:30 times	Electrical and mechanical performance normal
Fall test	From 1m height fall down 3 times freely (vertical direction)	Electrical and mechanical performance normal

Picture:





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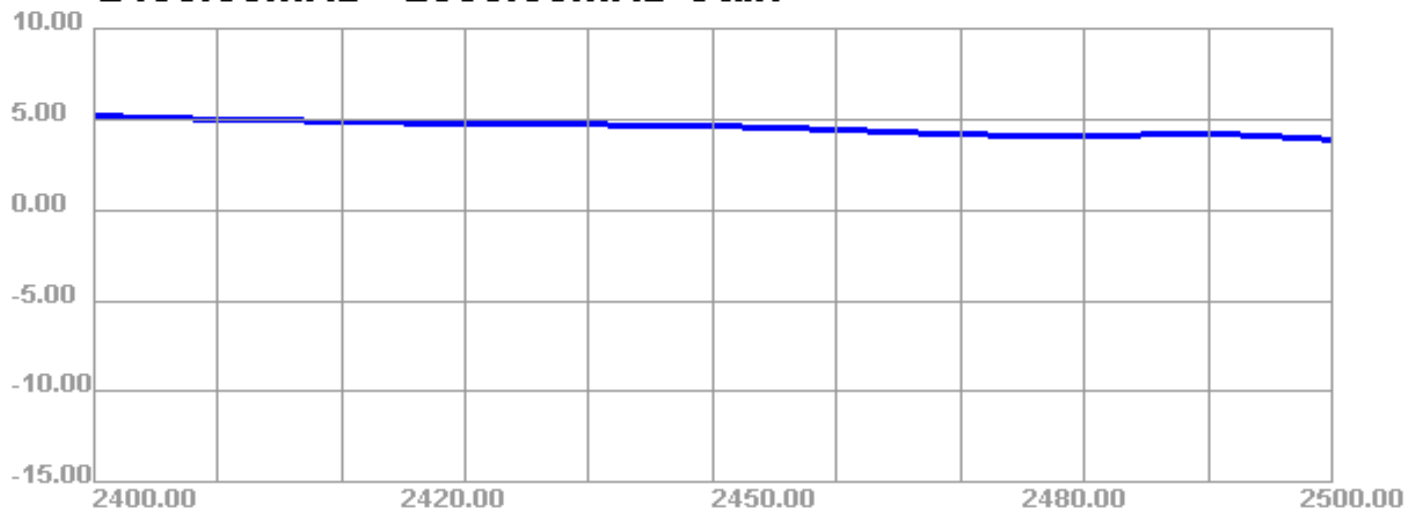
Test:

Passive Test For WIFI										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	93.69	-0.28	5.18	3.03	47.992	45.698	5.18	-12.73	48.42	48.27
2410	90.92	-0.41	4.99	2.84	46.492	44.427	4.99	-12.25	48.62	48.42
2420	89.48	-0.48	4.88	2.73	45.68	43.802	4.88	-11.82	48.87	48.69
2430	86.8	-0.61	4.73	2.58	44.246	42.555	4.73	-11.68	48.84	48.66
2440	86.23	-0.64	4.7	2.55	44.011	42.219	4.7	-11.23	48.95	48.73
2450	85.34	-0.69	4.63	2.48	43.472	41.866	4.63	-10.55	49.07	48.77
2460	82.51	-0.83	4.42	2.27	41.625	40.887	4.42	-10.14	49.11	48.76
2470	78.66	-1.04	4.16	2.01	38.905	39.759	4.16	-9.88	49.11	48.73
2480	77.22	-1.12	4.06	1.91	37.246	39.976	4.06	-9.56	49.41	48.96
2490	79.27	-1.01	4.23	2.08	37.315	41.957	4.23	-9.79	49.76	49.29
2500	72.6	-1.39	3.88	1.73	33.071	39.532	3.88	-10.94	49.65	49.12

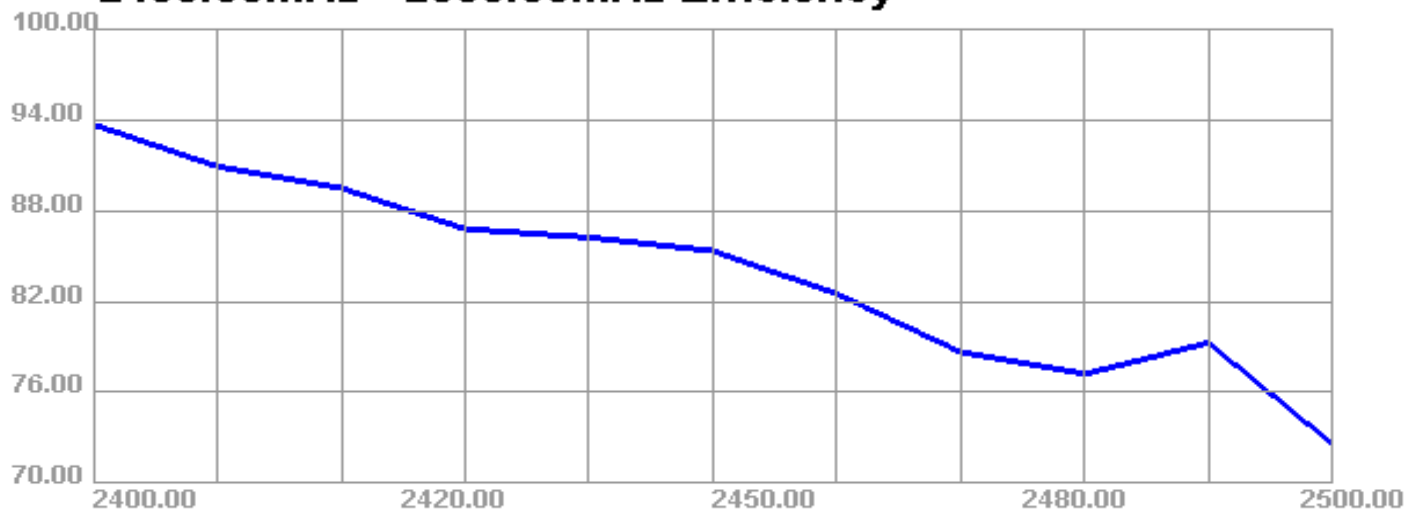


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2400.00MHz - 2500.00MHz Gain



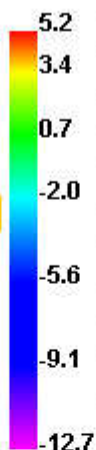
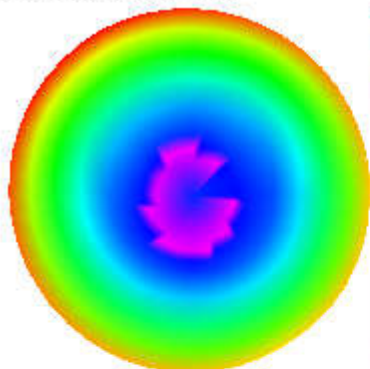
2400.00MHz - 2500.00MHz Efficiency



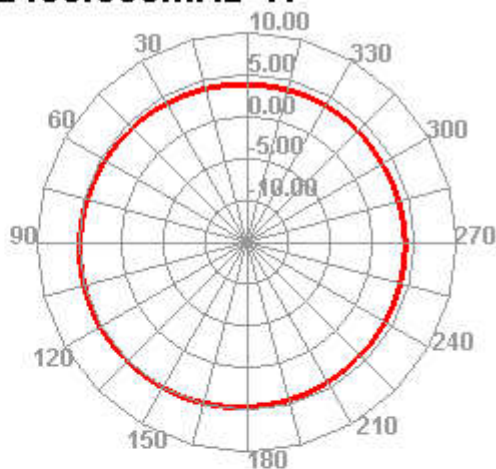


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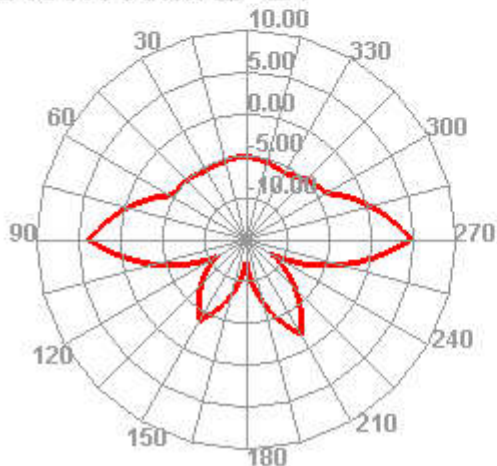
2400.000MHz



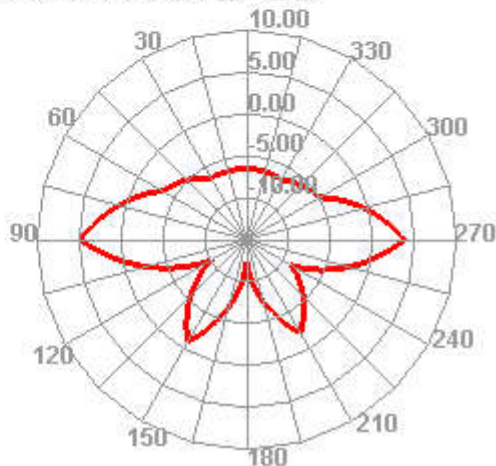
2400.000MHz H



2400.000MHz E1



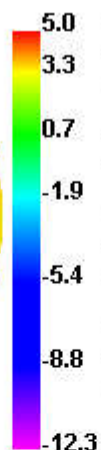
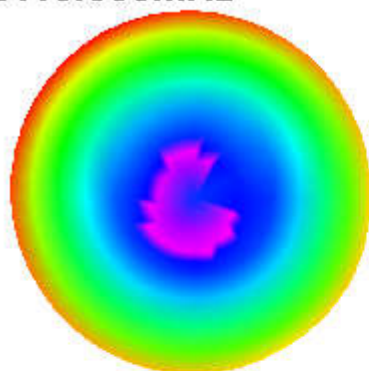
2400.000MHz E2



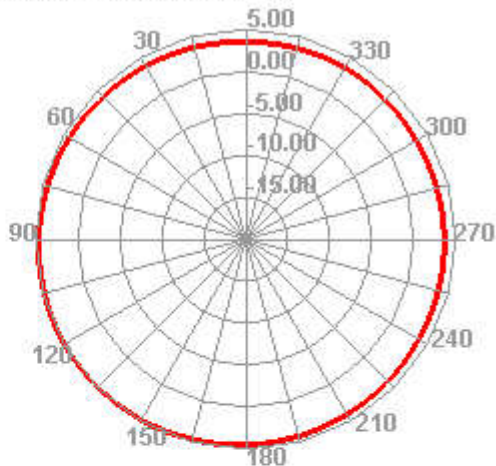


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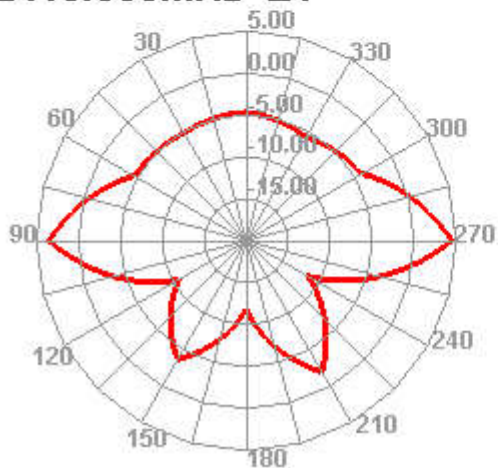
2410.000MHz



2410.000MHz H



2410.000MHz E1



2410.000MHz E2

