



承 认 书

APPROVAL SHEET

客户名称 Customer				
客户料号 Customer P/N				
项目名称 Project Name	WiFi Tri-band SMA Male(Black)			
供应商名称 Supplier	上海圣丹纳无线科技有限公司 Shanghai Saintenna Wireless Technology Co.,LTD.			
圣丹纳物料型号 Saintenna P/N	SAA31578A			
是否符合 RoHS IF ROHS	yes			
送样日期 Providing Date	2022.12.29			
供应商 Supplier	制定 Prepared by	设计 Designer	品质 QA	批准 Approver
	马玉学	钱锐	李光辉	余剑平
地址: 上海市宝山区宝祁路611号8号楼 Address: Building 8, No.611 Bao Qi Road, Bao Shan District, Shanghai, China				
电话/Tel: 086-021-36307272; 传真/Fax: 086-021-36307757				
客户 Customer	编制 Prepared by	审核 Checked by	批准 Approver	

注: 必须手工签字确认 (Note: Signature must be confirmed by hand)

CONFIDENTIAL

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目录/Content

一 封面/Cover.....	<input checked="" type="checkbox"/>
二 目录/Content.....	<input checked="" type="checkbox"/>
三 规格/Specification.....	<input checked="" type="checkbox"/>
四 图纸/Drawing.....	<input checked="" type="checkbox"/>
五 电性能报告/Electric Report.....	<input checked="" type="checkbox"/>

规格/Specification

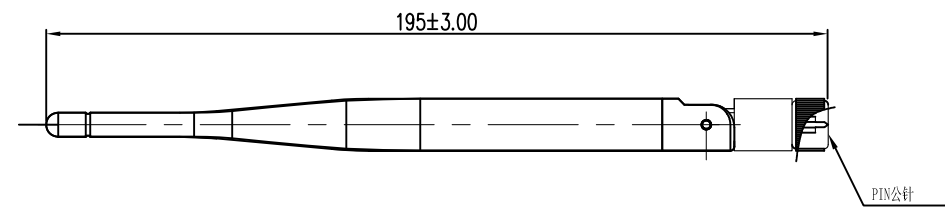
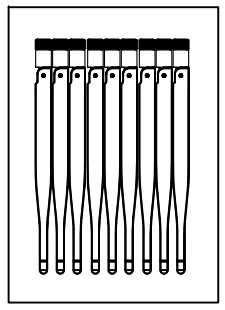
1. 机械规格/Mechanical Specification

- 连接方式/Connect Type..... SMA-J
- 工作温度/Work Temperature..... -40~85℃
- 存储温度/Storage Temperature..... -40~85℃

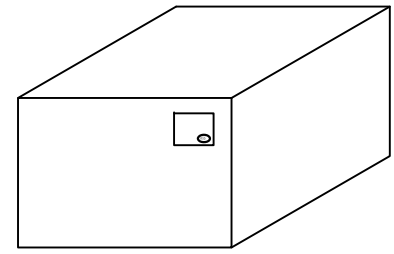
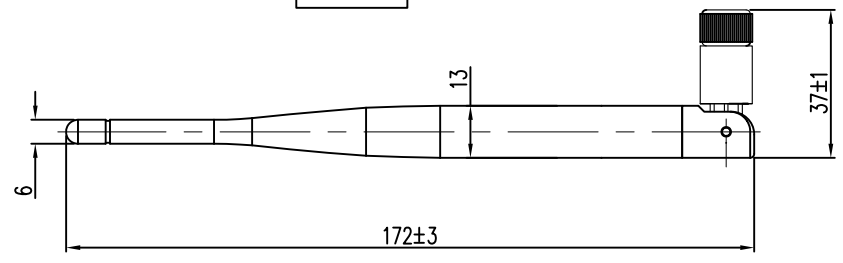
2. 电性能参数/Electrical Specification

- 频段/Frequency Range..... 2.4~2.5&5.15~5.85GHz
- 驻波比/VSWR..... <3
- 增益/Peak Gain..... 0dBi
- 极化/Polarization..... Vertical
- 特性阻抗/Input Impedance..... 50 Ω
- 最大承载功率/Max Input Power..... 5W

标记	签名	修改内容	日期



ROHS



上海圣丹纳无线科技有限公司

第三视角	公差	符号	公差
0~3	±0.05	⊕	0.05
3~30	±0.10	○	0.03
30~50	±0.15	◎	0.02
50~80	±0.20	⊥	0.02
角度	±1°	∠	0.05

项目名称	WiFi Dual-band -Antenna	日期	2020.07.10				
产品名称	WiFi-组件	设计	MD	mayuxue			
			RF	qianrui			
产品料号	SAA31578A	批准					
		单位	mm	比例	FIT	版本	P1



移远0dBi三频WiFi天线调试报告

Quectel 0dBi Tri Band WiFi Antenna Debugging Report

上海圣丹纳无线科技有限公司

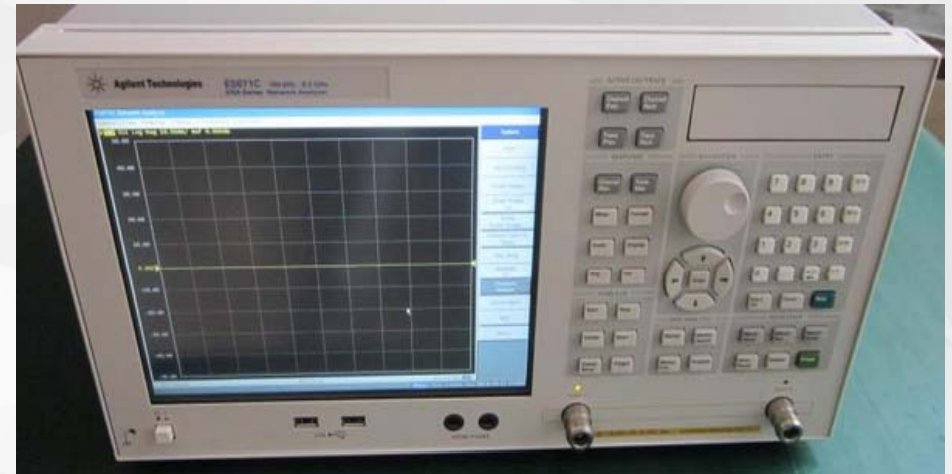
Shanghai Saintenna Wireless Technology Co.,LTD.

Project Information

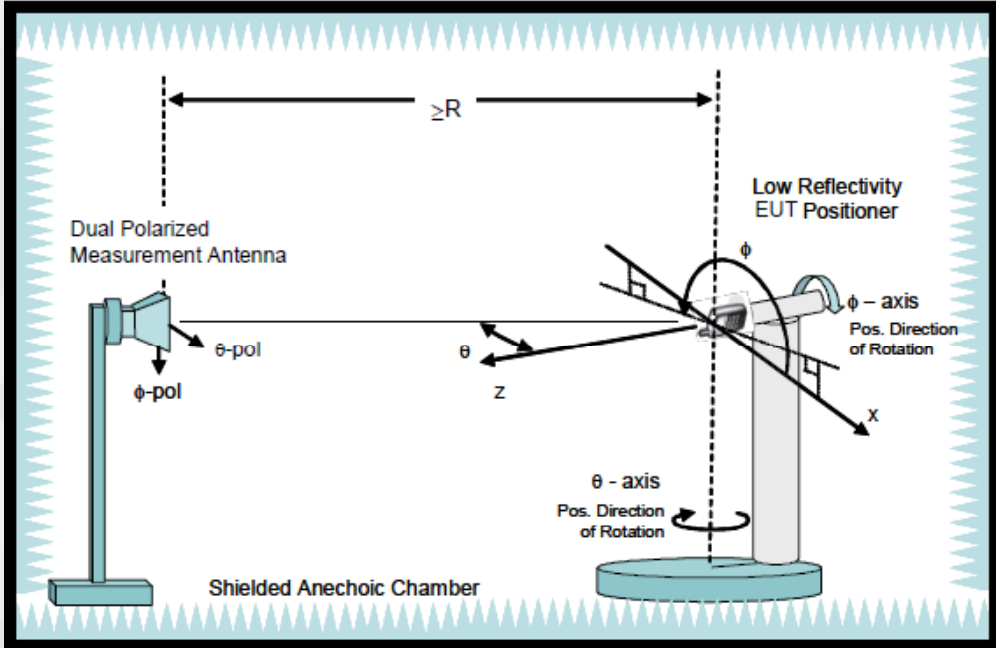
客户名称 Customer Name	移远 <small>Quectel</small>
项目名称 Project Name	0dBi三频WiFi天线 <small>0dBi Tri Band WiFi Antenna</small>
工作频段 Working Band	2.4G/5.8GHZ/7GHz
规格 Description	SMA-Male
版本 Version	V1.0
日期 Date	2022-12-29

Debug Instrument

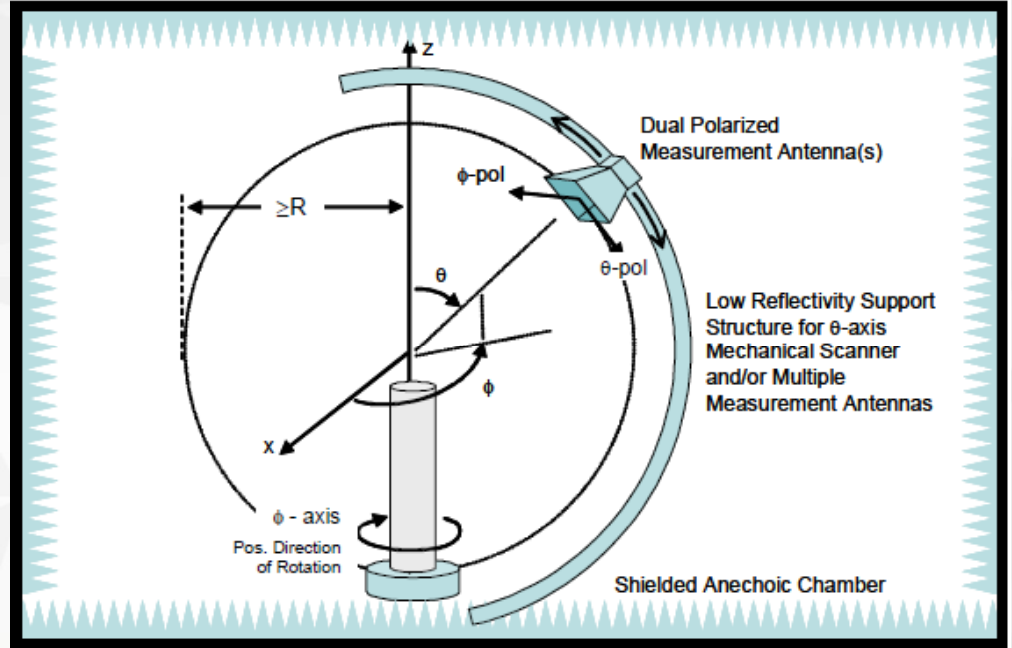
Network Analyzer	Agilent E5071C
Frequency Range	100KHz ~ 8.5GHz
Test Item	Return Loss/VSWR/Smith Chart /Isolation



Typical Setup for Test System

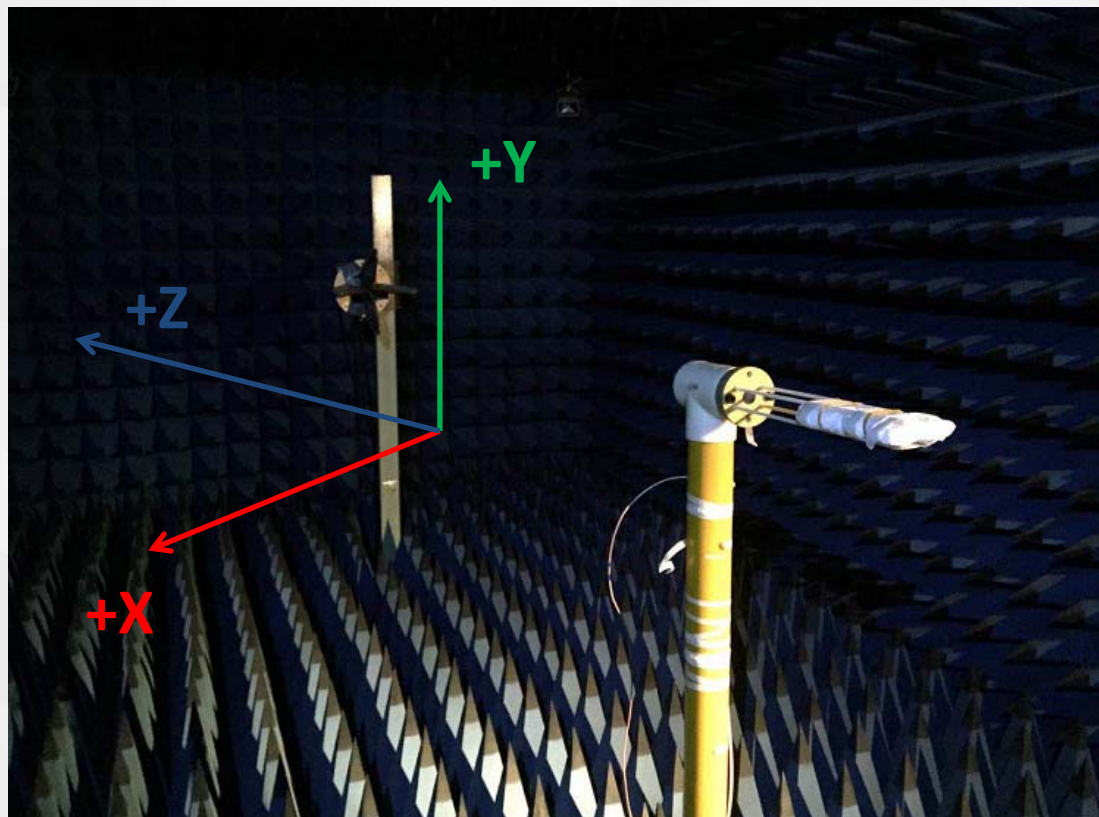


Combined-Axes System



Distributed-Axes System

Anechoic Chamber



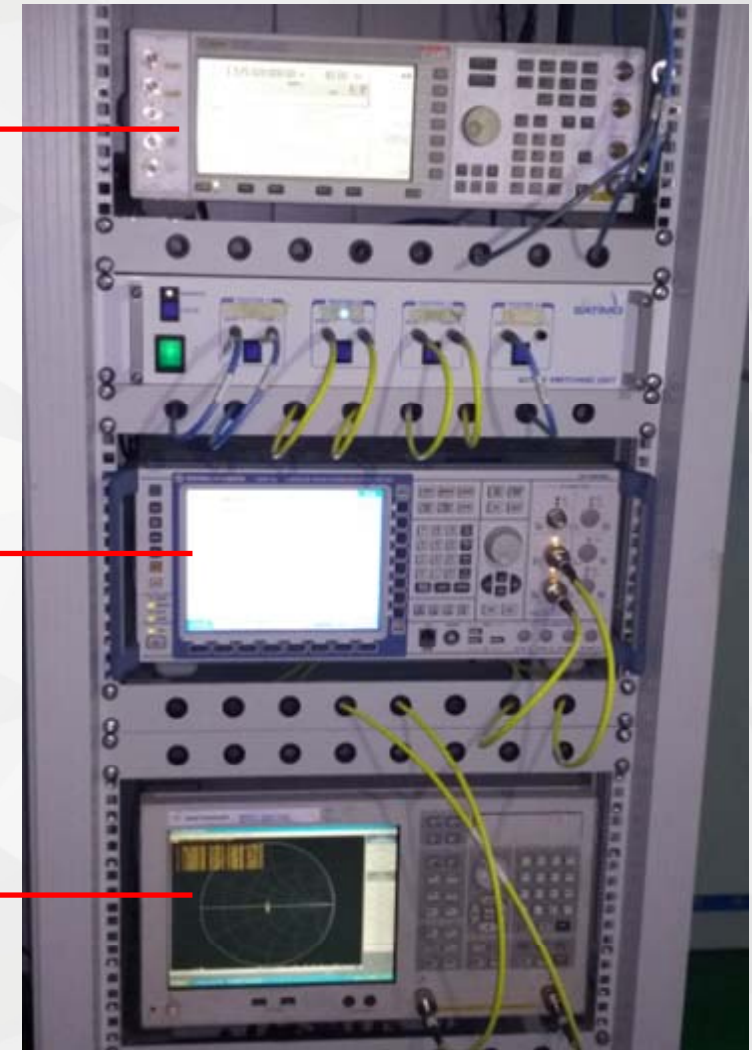
Combined-Axes System

Test Instrument

Generator	Agilent E4438C
Test Item	GPS

Radio Communication Tester	R&S CMW500
Test Item	Active Test

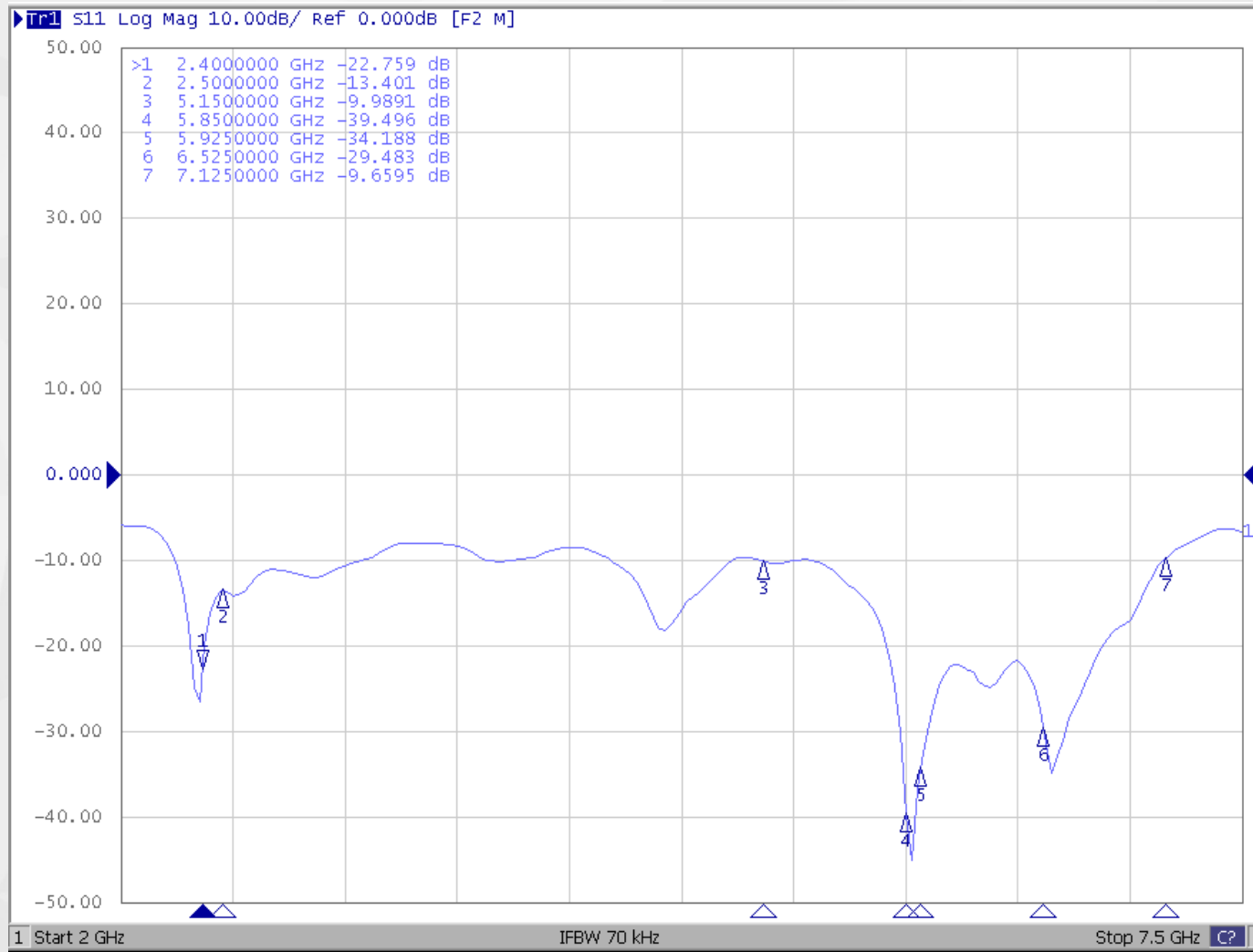
Network Analyzer	Agilent E5071C
Test Item	Passive Test



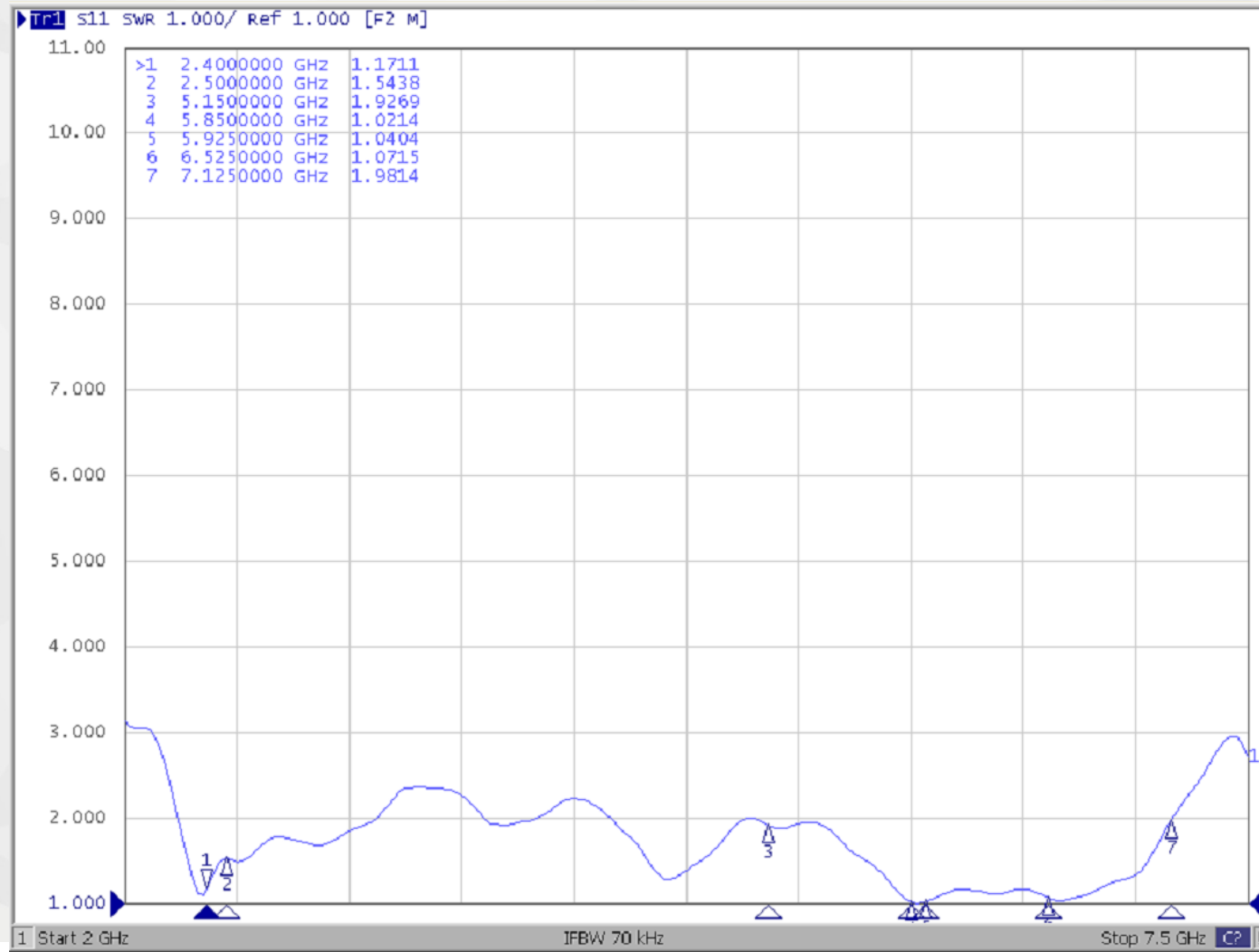
Test Fixture



S11 Return Loss



S11 VSWR



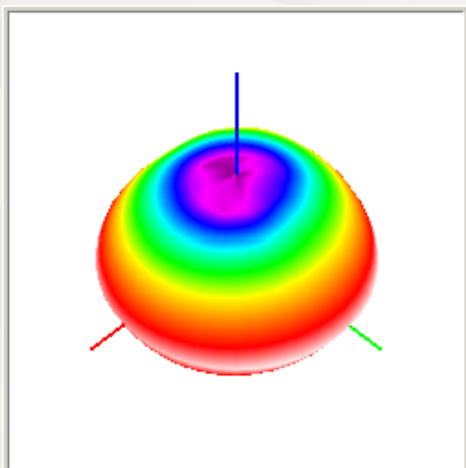
Gain/Efficiency

Freq.(MHz)	Gain(dBi)	Efficiency	Freq.(MHz)	Gain(dBi)	Efficiency
2400	0.25	51.60%	5150	-0.91	30.80%
2410	0.47	51.80%	5200	-0.69	40.60%
2420	-0.02	49.00%	5250	-0.67	41.30%
2430	-0.12	46.60%	5300	-0.19	44.20%
2440	-0.04	46.50%	5350	-0.92	36.70%
2450	-0.55	45.60%	5400	-0.02	43.40%
2460	-0.34	45.00%	5450	0.49	43.50%
2470	-0.11	44.70%	5500	0.65	41.00%
2480	-0.02	43.80%	5550	0.39	35.80%
2490	-0.11	43.40%	5600	1.09	42.70%
2500	-0.24	43.50%	5650	1.28	45.70%
			5700	0.48	37.10%
			5750	0.16	32.10%
			5800	1	36.40%
			5850	1.1	38.80%

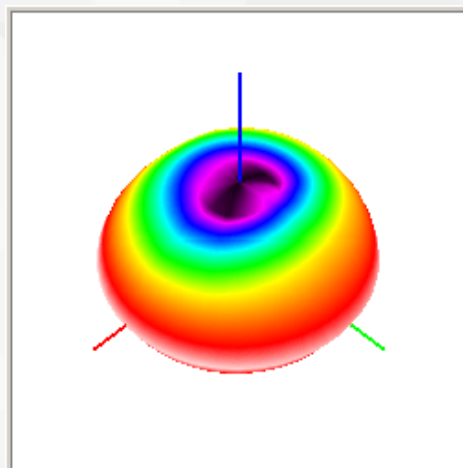
Gain/Efficiency

Freq. (MHz)	Gain(dBi)	Efficiency	Freq. (MHz)	Gain(dBi)	Efficiency
5925.0	3.48	54.5%	6525.0	3.62	57.5%
5975.0	2.04	39.8%	6575.0	1.34	44.4%
6025.0	1.72	39.9%	6625.0	0.83	41.7%
6075.0	0.34	33.1%	6675.0	2.62	49.0%
6125.0	0.99	40.2%	6725.0	2.27	44.6%
6175.0	1.96	55.6%	6775.0	2.66	47.3%
6225.0	1.75	51.5%	6825.0	1.50	37.2%
6275.0	2.04	60.6%	6875.0	2.03	43.9%
6325.0	3.76	67.9%	6925.0	2.20	48.0%
6375.0	3.46	67.4%	6975.0	0.87	36.3%
6425.0	3.59	77.0%	7025.0	1.33	39.1%
6475.0	3.38	53.3%	7075.0	0.77	37.3%
			7125.0	-0.94	28.7%

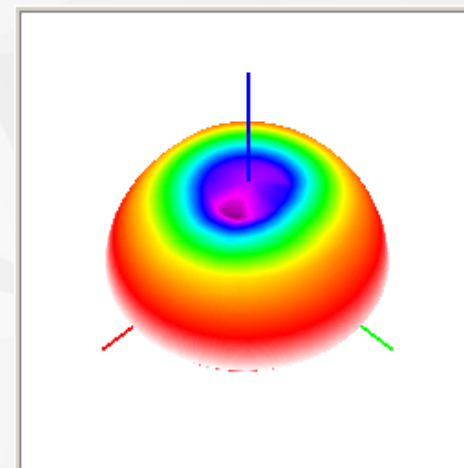
Test Result



2.4GHz

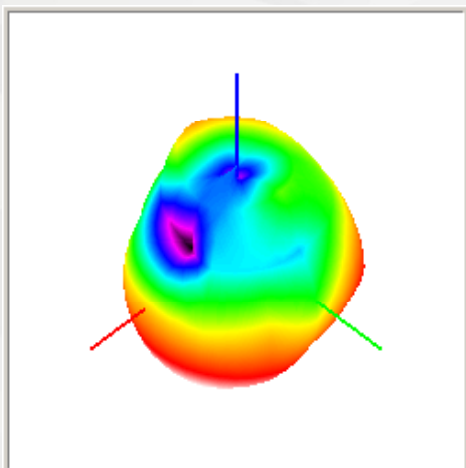


2.45GHz

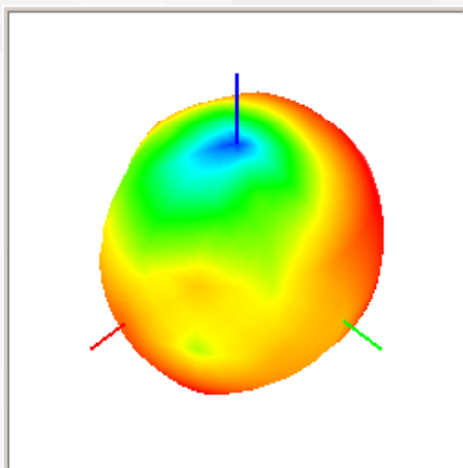


2.5GHz

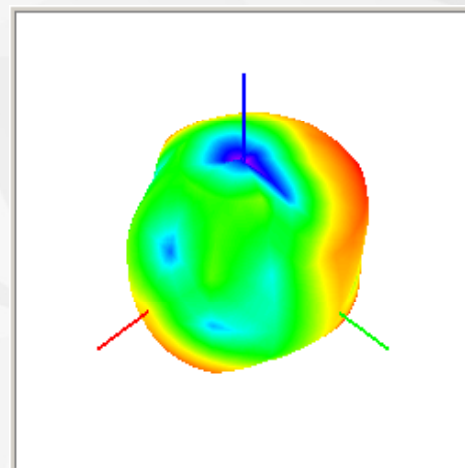
Test Result



5.15GHz

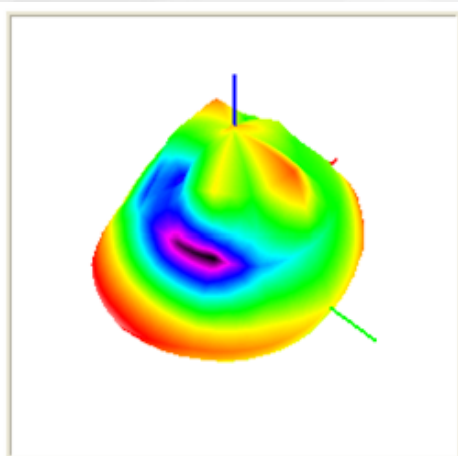


5.5GHz

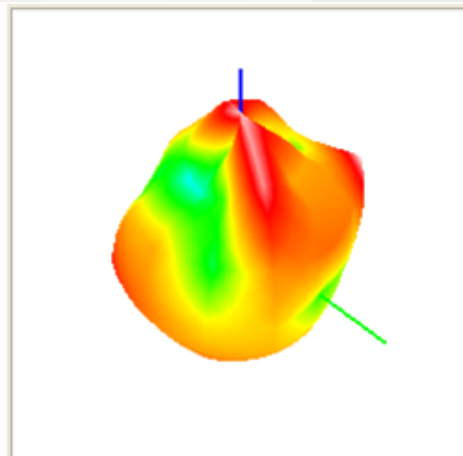


5.85GHz

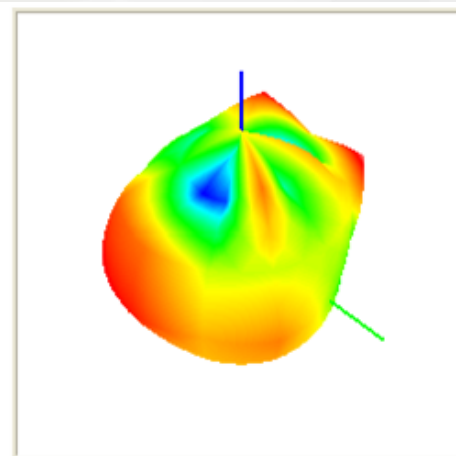
Test Result



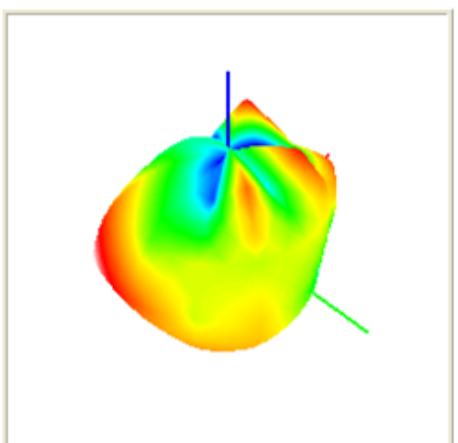
5925MHz



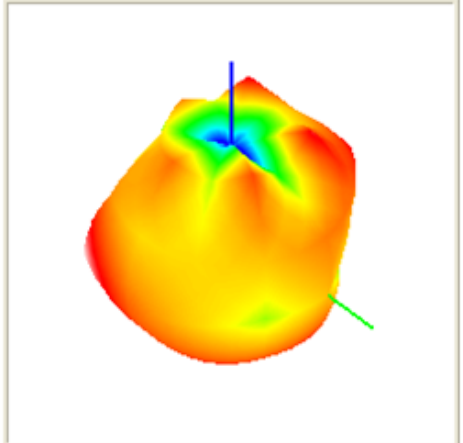
6225MHz



6525MHz



6825MHz



7125MHz