编号：SDN-RD-FY-2020071001

承　认　书

APPROVAL SHEET

客户名称 Customer					
客户料号 Customer P/N					
项目名称 Project Name	0dBi Tri-band WiFi Antenna				
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	测试 TE	品质 QA	批准 Approver
	马玉学	钱锐	沈波	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)

目录/Content

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..... 2.4～2.5GHz&5.15～7.125GHz
- 驻波比/VSWR..... ＜3
- 增益/Peak Gain..... 0dBi
- 极化/Polarization..... Vertical
- 特性阻抗/Input Impedance..... 50Ω
- 最大承载功率/Max Input Power..... 5W

Quectel 0dBi Tri-band WiFi Antenna test Report

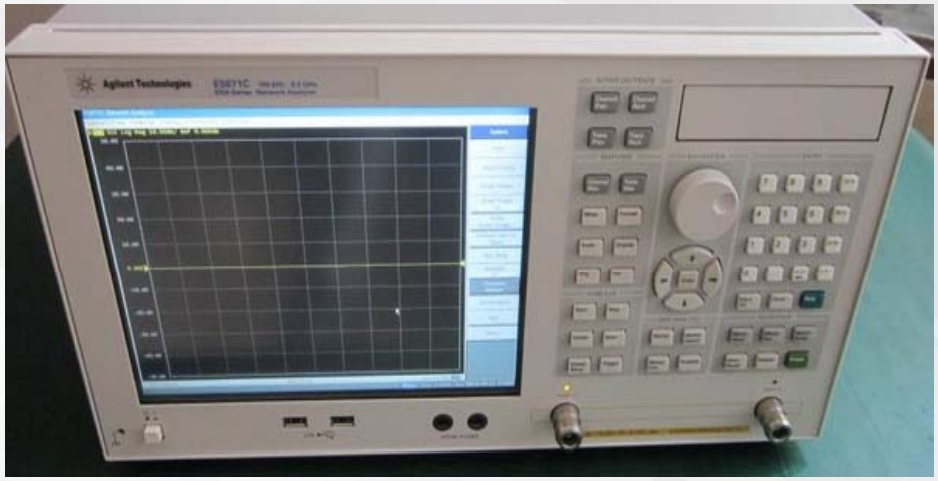
上海圣丹纳无线科技有限公司
Shanghai Saintenna Wireless Technology Co.,LTD.

Project Information

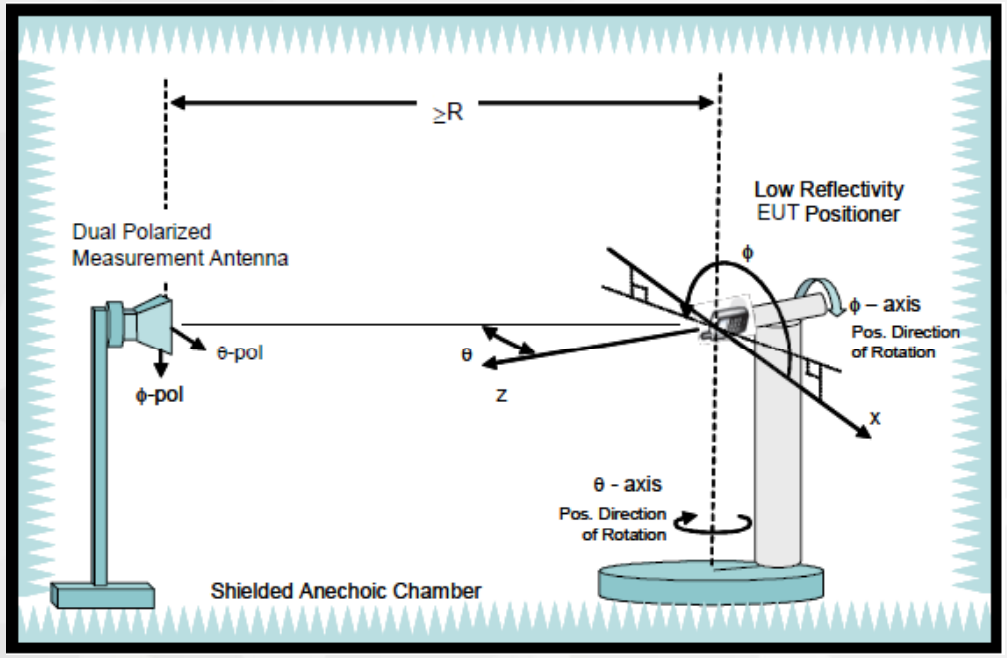
客户名称 Customer Name	Quectel
项目名称 Project Name	0dBi Tri-band WiFi Antenna
工作频段 Working Band	2.4G/5.8GHZ/7GHz
规格/类型 Description/Type	SMA-Male/Dipole Antenna
测试软件 Testsoftware	AnTestPro99
版本 Version	V1.0
日期 Date	2022-12-29

Debug Instrument

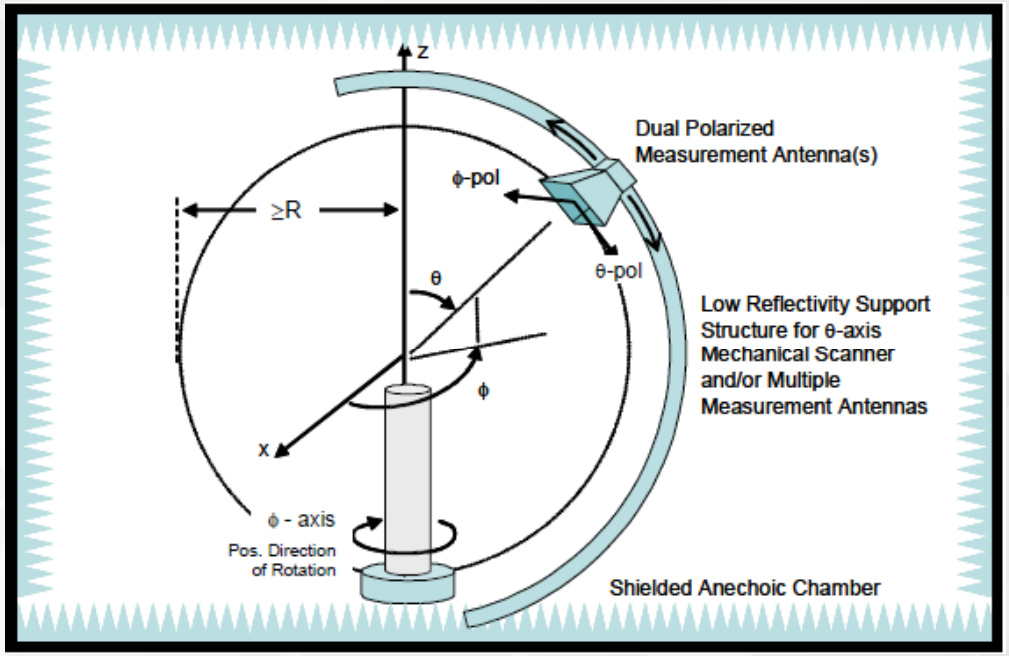
Network Analyzer	Agilent E5071C
Frequency Range	100KHz ~ 8.5GHz
Test Item	Return Loss/VSWR/Smith Chart /Isolation



Typical Setup for Test System



Combined-Axes System



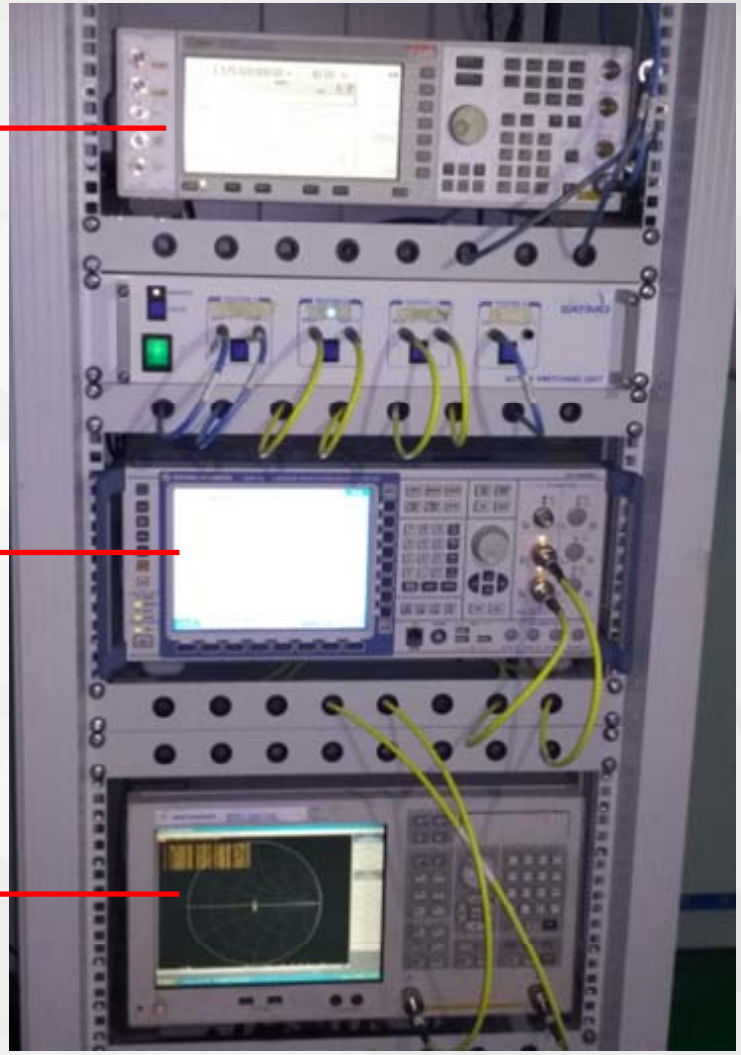
Distributed-Axes System

Test Instrument

Generator	Agilent E4438C	Calibration Date
Test Item	GPS	2022.3.3

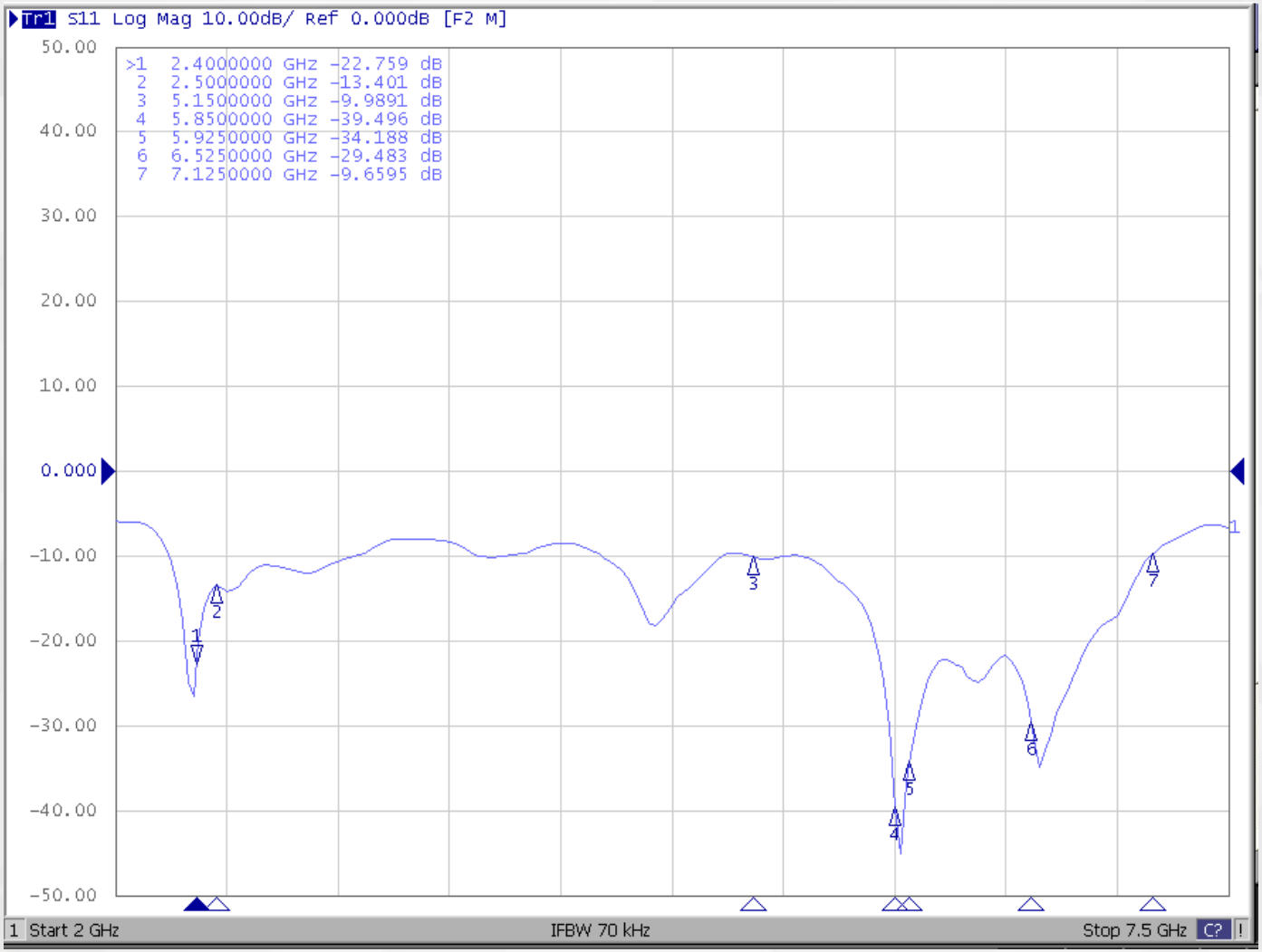
Radio Communication Tester	R&S CMW500	Calibration Date
st Item	Active Test	2022.3.3

Network Analyzer	Agilent E5071C	Calibration Date
Test Item	Passive Tes	2022.3.3

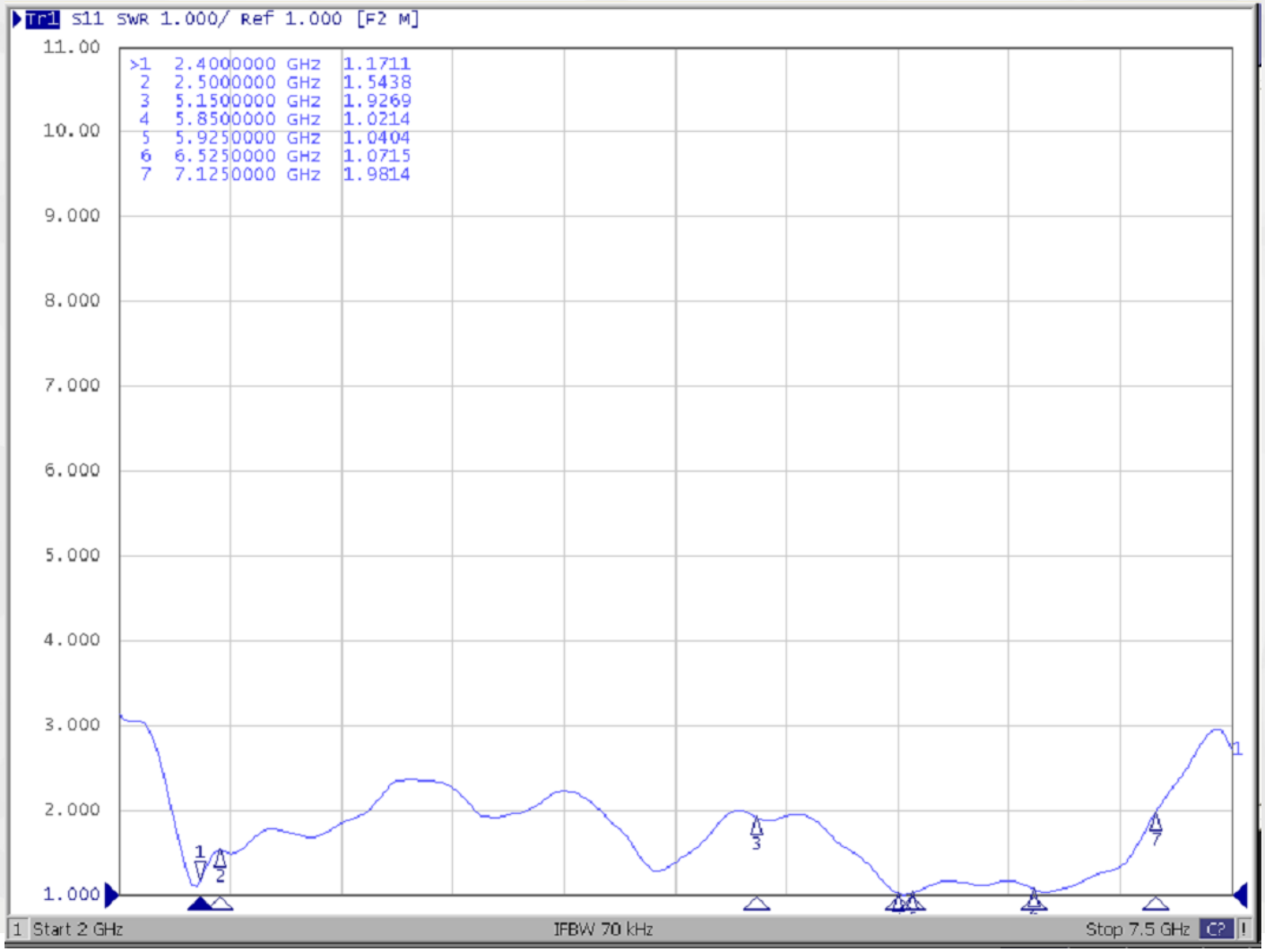


Test Fixture

S11 Return Loss



S11 VSWR


Tr1 S11 SWR 1.000/ Ref 1.000 [F2 M]
>1 2.4000000 GHz 1.1711
2 2.5000000 GHz 1.5438
3 5.1500000 GHz 1.9269
4 5.8500000 GHz 1.0214
5 5.9250000 GHz 1.0404
6 6.5250000 GHz 1.0715
7 7.1250000 GHz 1.9814
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Start 2 GHz
IFBW 70 kHz
Stop 7.5 GHz

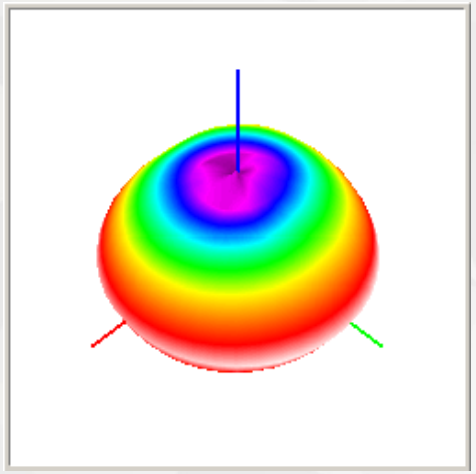
Gain/Efficiency

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%
			5865	1.16	42.50%
			5895	0.25	36.50%

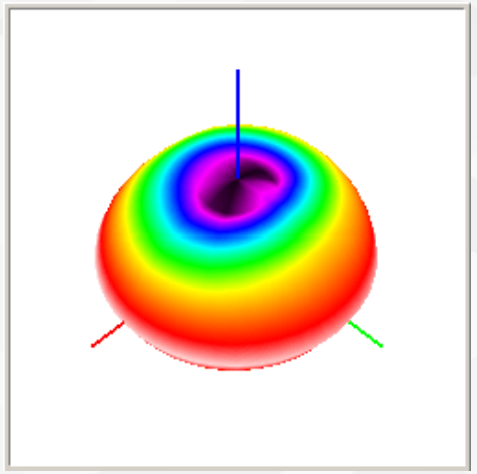
Gain/Efficiency

Freq.(MHz)	Gain(dBi)	Efficiency	Freq.(MHz)	Gain(dBi)	Efficiency
5925	3.48	54.50%	6525	3.62	57.50%
5975	2.04	39.80%	6575	1.34	44.40%
6025	1.72	39.90%	6625	0.83	41.70%
6075	0.34	33.10%	6675	2.62	49.00%
6125	0.99	40.20%	6725	2.27	44.60%
6175	1.96	55.60%	6775	2.66	47.30%
6225	1.75	51.50%	6825	1.5	37.20%
6275	2.04	60.60%	6875	2.03	43.90%
6325	3.76	67.90%	6925	2.2	48.00%
6375	3.46	67.40%	6975	0.87	36.30%
6425	3.59	77.00%	7025	1.33	39.10%
6475	3.38	53.30%	7075	0.77	37.30%
			7125	-0.94	28.70%

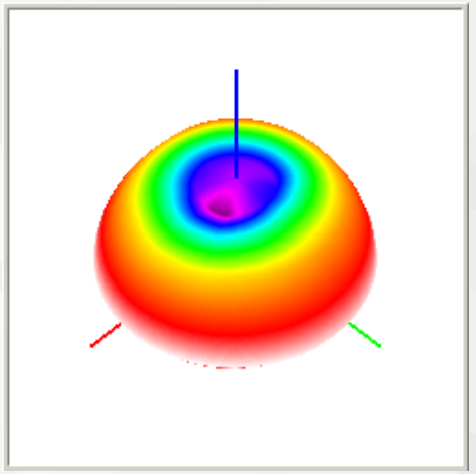
Test Result



2.4GHz

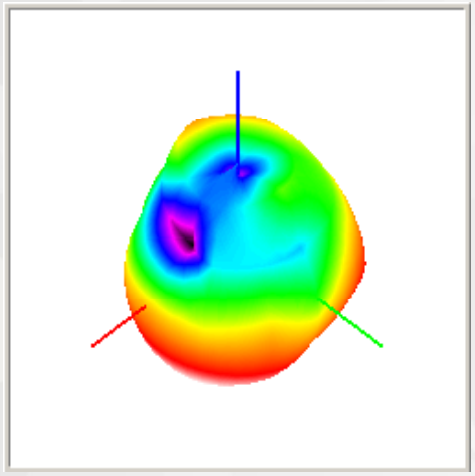


2.45GHz

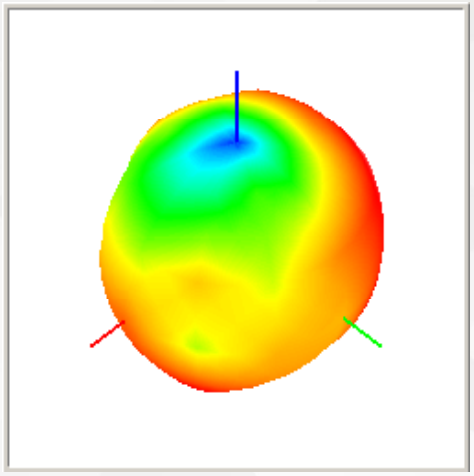


2.5GHz

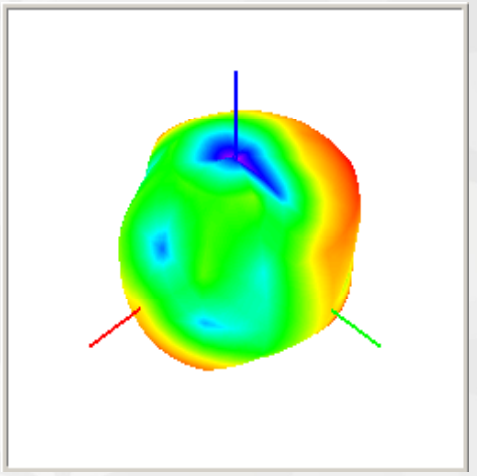
Test Result



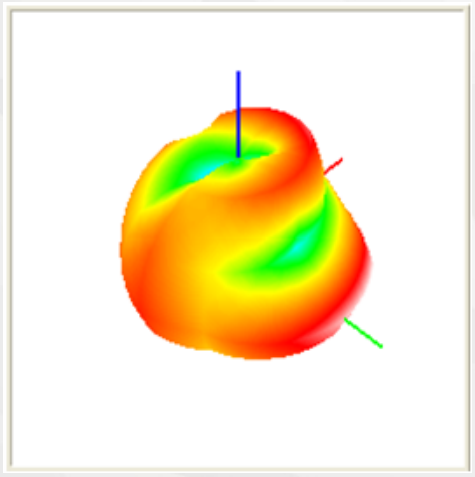
5.15GHz



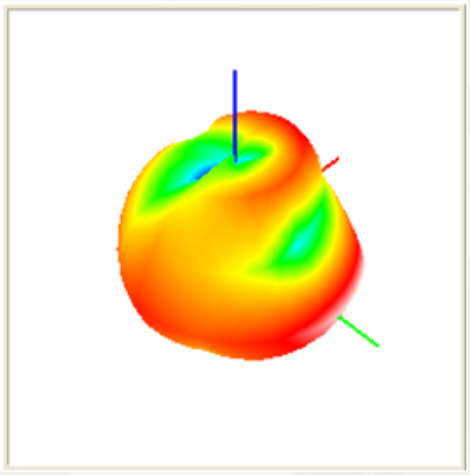
5.5GHz



5.85GHz

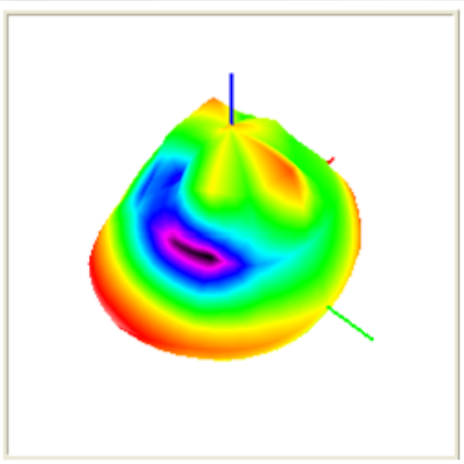


5.865GHz

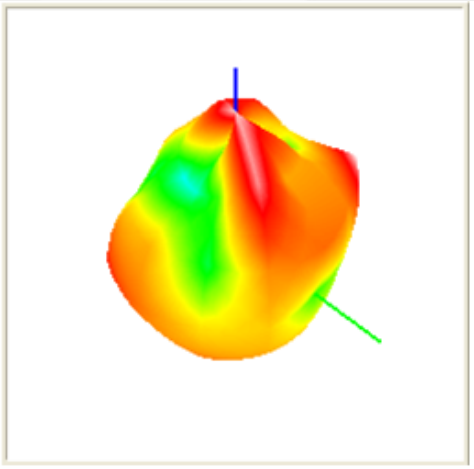


5.895GHz

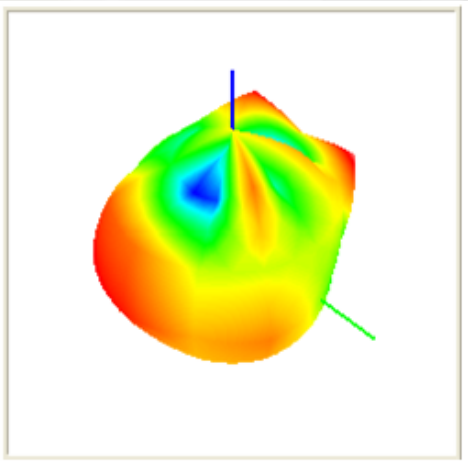
Test Result



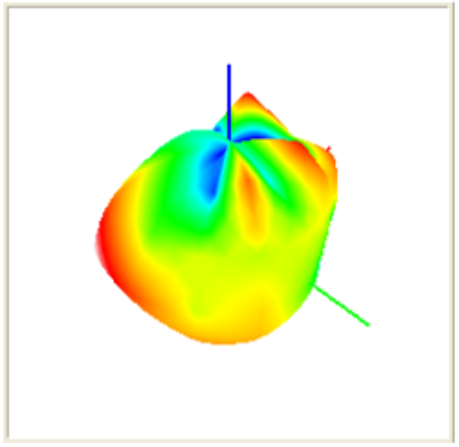
5925MHz



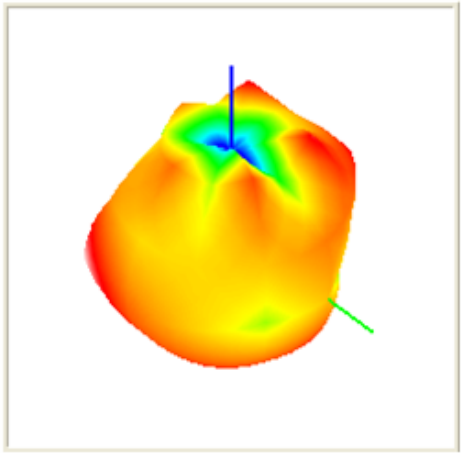
6225MHz



6525MHz



6825MHz



7125MHz