

北京瑞迪卡特科技有限公司

Beijing Radiocraft Technology Co.,LTD

北京市通州区后南仓 5 号楼 2 单元 5 层 253

253, Floor 5, Unit 2, Building 5, Hounancang, Tongzhou District, Beijing

SPECIFICATION

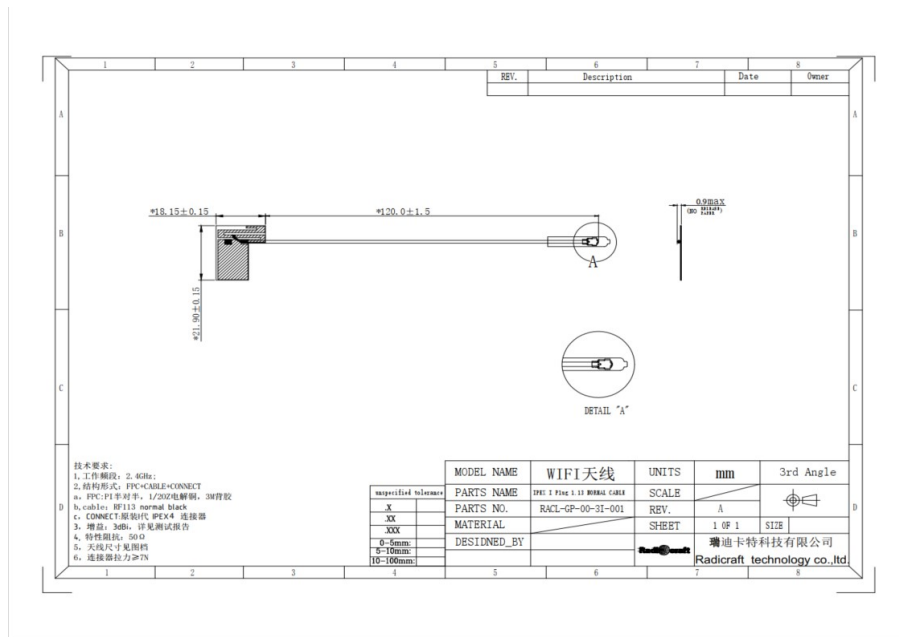
Customer		Hexagon		Project			
Frequency Band		WIFI		P/N		RACL-GP-00-3I-001	
Test Date		2023.06.16		Version		A0	
TEST Personnel		宋文华					
Radiocraft							
Checked by	RF			Design by	RF	宋文华	
	ME				ME	徐雷	
Remark				Remark			

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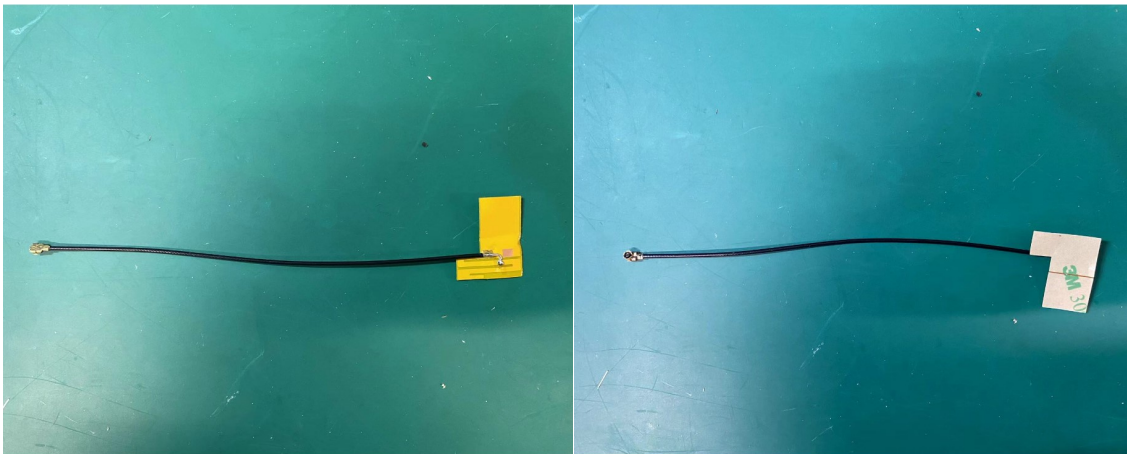
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1. OUTLINE DRAWING AND DIMENSIONS

1.1 Dimensions



1.2 Picture



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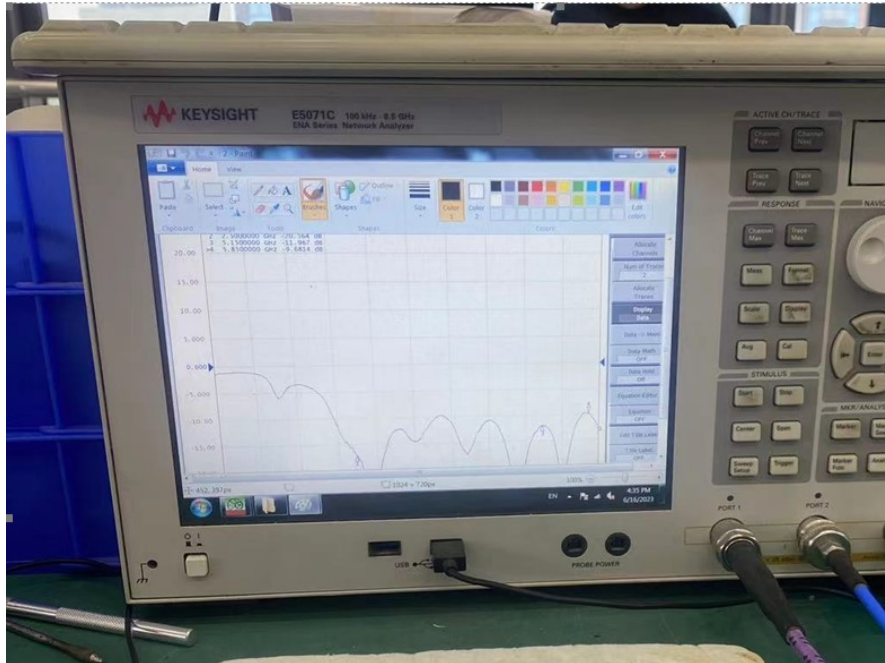
1.3 Antenna Type

FPC antenna.

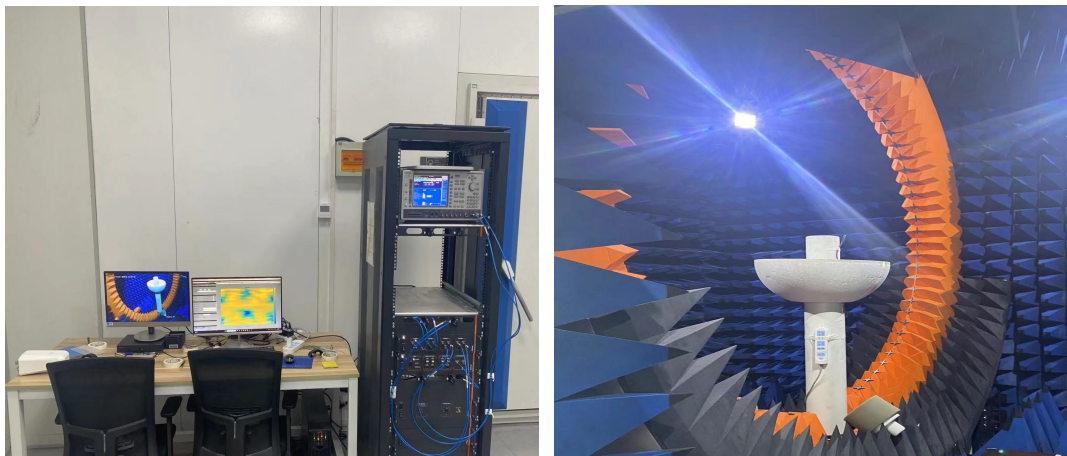
2 TEST

2.1 Test setup

- ① The return loss was measured with Agilent E5071.



- ② The efficiency and gain were measured in MVG-SATIMO Chamber



MVG chamber and measurement system

- ③ Measurement equipment description

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Description	Manufacturer	Model No	Serial No	Calibrated Date	Calibrated Until
Agilent		E5071C	MY46316132	2023/1/13	2024/1/13
SATIMO MVG		SG64	1103277-0001	2023/1/16	2024/1/16
Test software		WaveStudio	2020.2.8		
Analyze software		Satenv	3.0.3.0.23		

2.2 Test step

- ① The instrument is powered on and preheated for more than 30 minutes;
- ② Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- ③ Outline sets the test content objectives and conducts calibration tests;
- ④ Run the software, when the test is completed, export the corresponding test diagram and testdata, and save to the corresponding directory.

3. Electrical Performance

3.1. Return Loss



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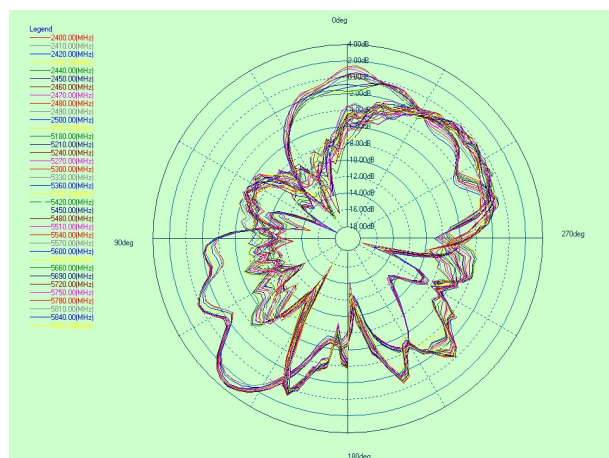
3.2 Efficiency and Peak Gain

Frequency (MHz)	Efficiency (%)	Peak gain	Frequency (MHz)	Efficiency (%)	Peak gain
2400	69%	3. 01	5360	64%	3. 67
2410	68%	2. 93	5390	64%	3. 51
2420	69%	2. 87	5420	65%	3. 81
2430	70%	3. 08	5450	66%	3. 75
2440	72%	3. 48	5480	64%	3. 83
2450	72%	3. 54	5510	66%	3. 98
2460	73%	3. 52	5540	63%	3. 86
2470	75%	3. 44	5570	63%	3. 86
2480	76%	3. 64	5600	64%	4. 02
2490	76%	3. 63	5630	61%	3. 78
2500	74%	3. 58	5660	63%	3. 97
5150	61%	3. 08	5690	63%	3. 88
5180	63%	3. 32	5720	59%	3. 76
5210	64%	3. 13	5750	59%	3. 80
5240	64%	3. 21	5780	58%	3. 72
5270	63%	3. 29	5810	58%	3. 88
5300	62%	3. 27	5840	59%	3. 82
5330	62%	3. 37	5850	58%	3. 75

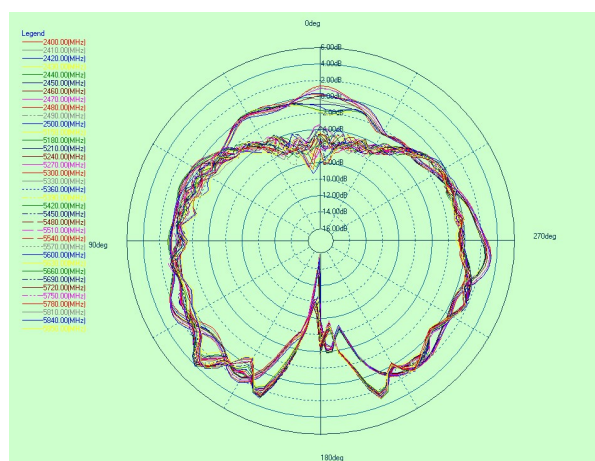
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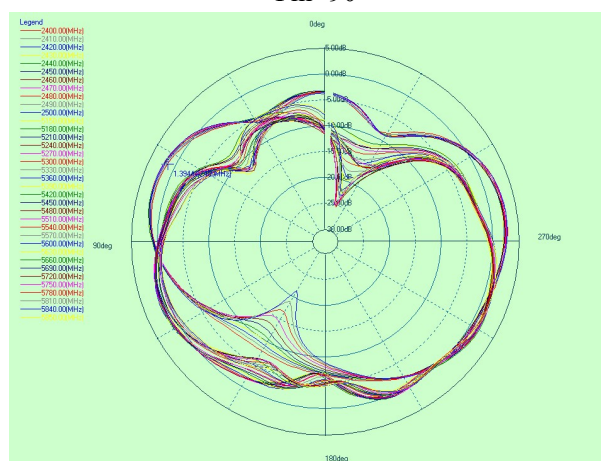
3.3 2D Pattern



Phi=0



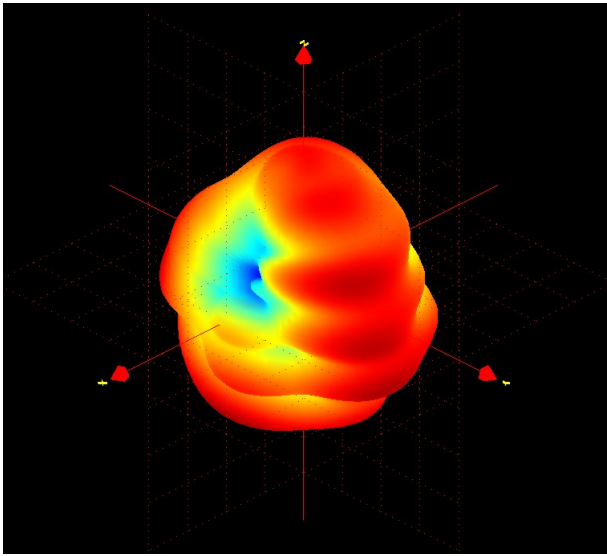
Phi=90



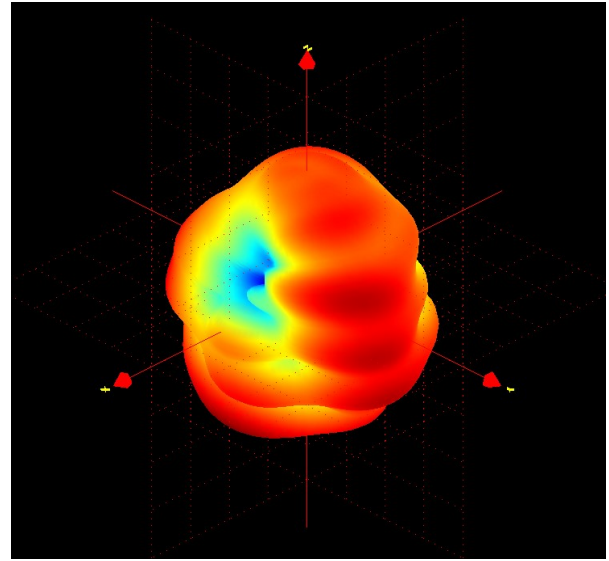
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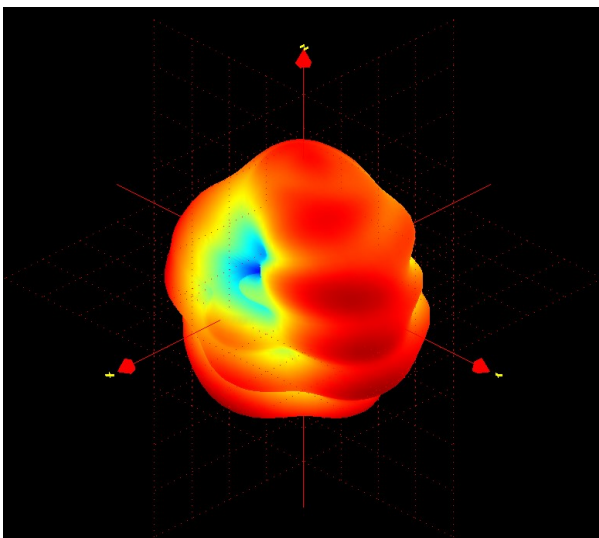
3.4 3D Pattern



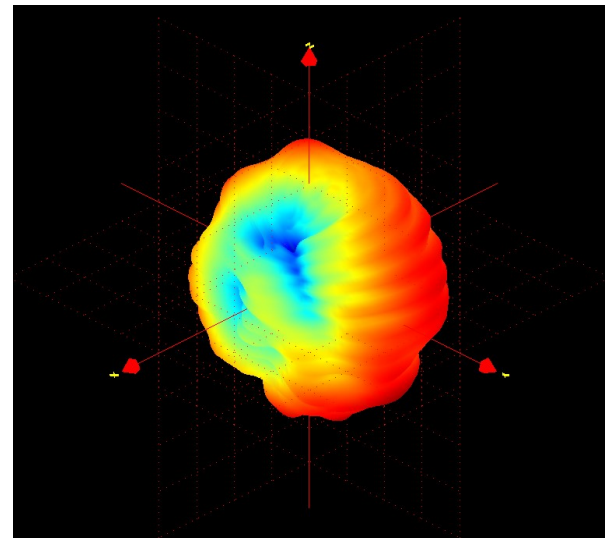
2400MHz



2450MHz



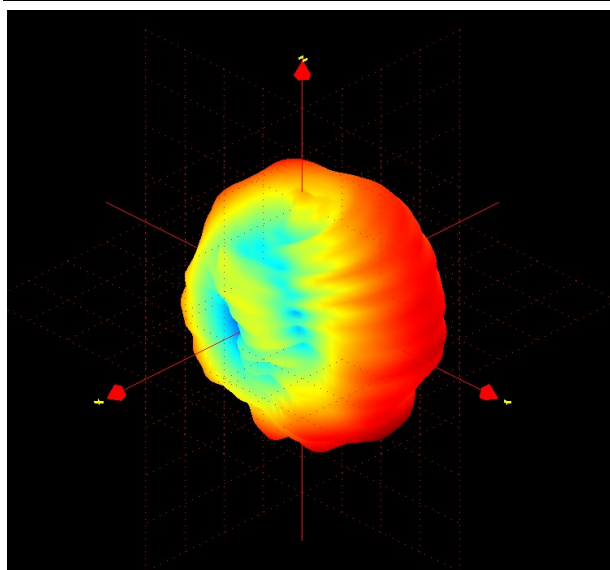
2500MHz



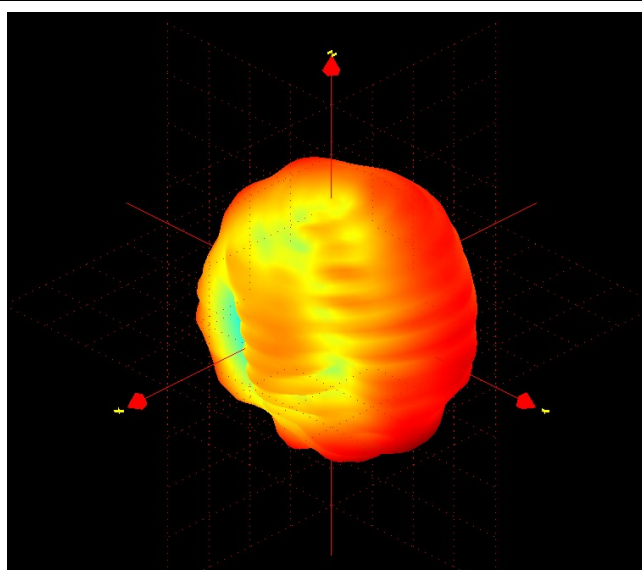
5150MHz

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5510Mhz



5850Mhz

4.Parameter

Electrical

Antenna Model	2.4G&5G FPC antenna
Frequency	2400-2500MHz&5150-5850 MHz
Impedance	50 Ω
Polarization	Omnidirectional
Antenna Gain	Max Gain 2.4G: 3.64 & 5G Max Gain: 4.02
S.W.R	<2

Mechanical

Cable	RF113
Connector	I-PEX 20278-112R-13
Length	120mm
Operation Temperature	-40° C ~80° C

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