

Shenzhen Nano-ant communication
Techology Co. Ltd
深圳纳安特通信科技有限公司天线规格书
影冠投影仪天线

APPROVED BY	SIGNATURE	DATE
Mechanical Engineer:	蒋喜喜	2022-08-10
RF Engineer:	李国栋	2022-08-10
Engineering Manager:	肖大田	2022-08-10
Approved By Customer (as required):		

1.0 DESCRIPTIONS AND PART NUMBER:

1.1 DESCRIPTION;

Model Name	FPC antenna
MAX.Gain	3.54dBi

2.0 ELECTRICAL SPECIFICATIONS:

2.1 FREQUENCY BAND

2. 4G/5. 8GWIFI

测试设备:

E5071C 网络分析仪



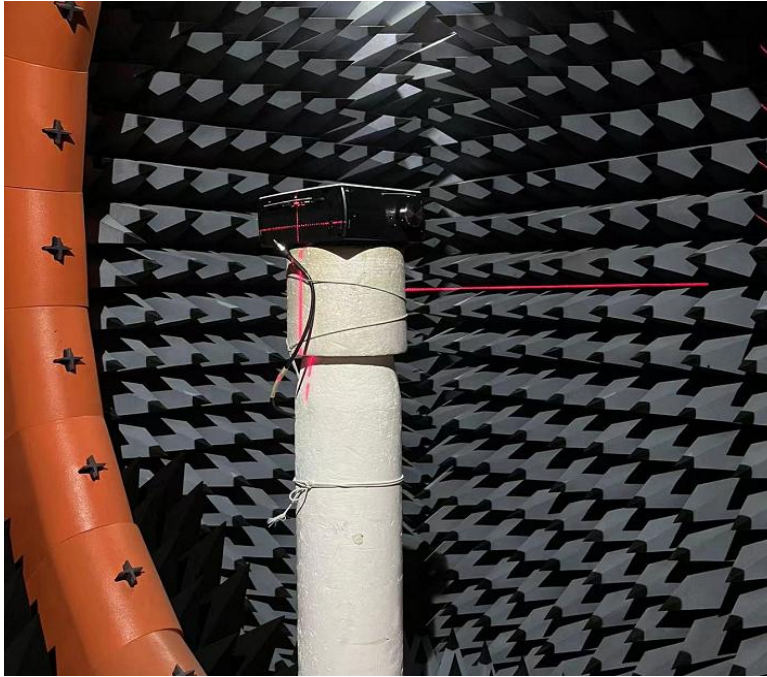
SG24 微波暗室



2 匹配电路 Matching circuit

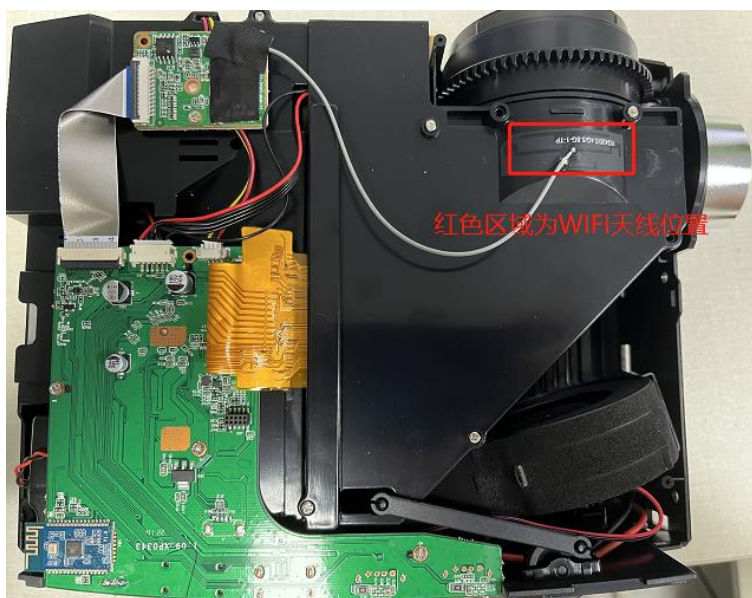
匹配无改动

3. 测试机器



4 天线位置

位置说明：所有天线都在机器上盖，具体如图所示。



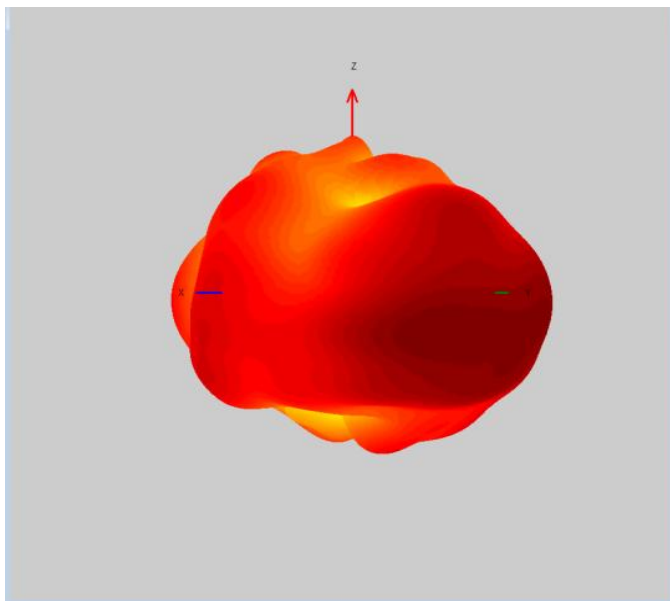
5. 无源测试数据 Passive result

下图为 2.4G 5G 天线效率

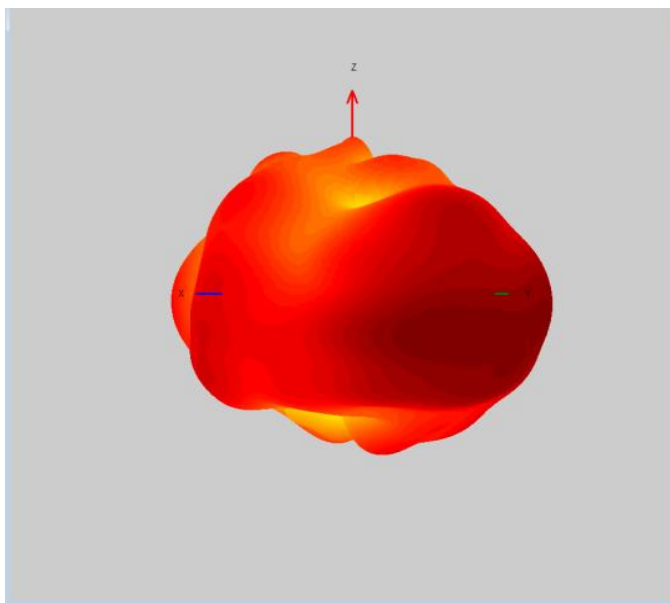
Gain&Efficiency 增益和效率			
frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
2400M	3.5	-2.93	50.94%
2410M	3.33	-2.97	50.5%
2420M	3.35	-3.01	50%
2430M	3.1	-3.12	48.8%
2440M	2.95	-3.22	47.63%
2450M	3.31	-3.03	49.74%
2460M	2.96	-3.18	48.06%
2470M	2.61	-3.16	48.3%
2480M	2.41	-3.29	46.92%
2490M	2.1	-3.27	47.07%
2500M	1.71	-3.4	45.76%

Gain&Efficiency 增益和效率			
frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
5150M	2.47	-3.28	47%
5175M	3.54	-3.14	48.58%
5200M	3.2	-3.26	47.24%
5225M	2.65	-3.56	44.1%
5250M	2.93	-3.35	46.24%
5275M	3.45	-3.1	48.93%
5300M	3.16	-3.2	47.91%
5325M	2.96	-3.31	46.63%
5350M	2.71	-3.35	46.23%
5375M	2.82	-3.4	45.73%
5400M	2.3	-3.57	44%
5425M	2.54	-3.11	48.82%
5450M	2.8	-3.43	45.43%
5475M	2.92	-3.7	42.62%
5500M	3.05	-3.5	44.68%
5525M	2.88	-3.71	42.55%
5550M	2.81	-3.7	42.7%
5575M	3.07	-3.43	45.42%
5600M	2.87	-3.43	45.37%
5625M	2.41	-3.69	42.78%
5650M	2.82	-3.37	45.98%
5675M	2.86	-3.23	47.51%
5700M	3.21	-3.13	48.64%
5725M	3.24	-2.93	50.95%
5750M	2.92	-3.16	48.31%
5775M	2.44	-3.44	45.26%
5800M	2.48	-3.37	46.03%

6. 方向图



2.4G 方向图

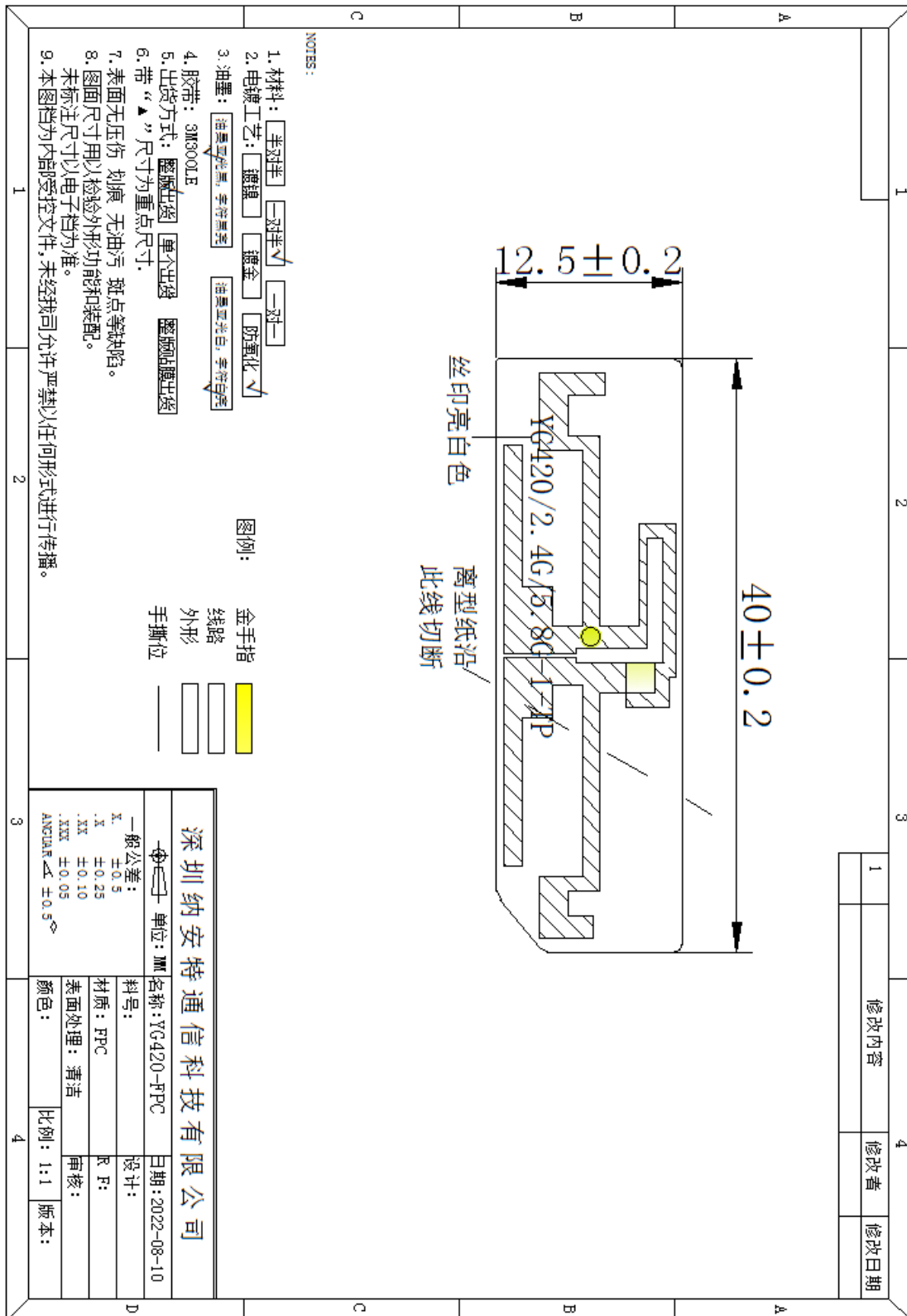


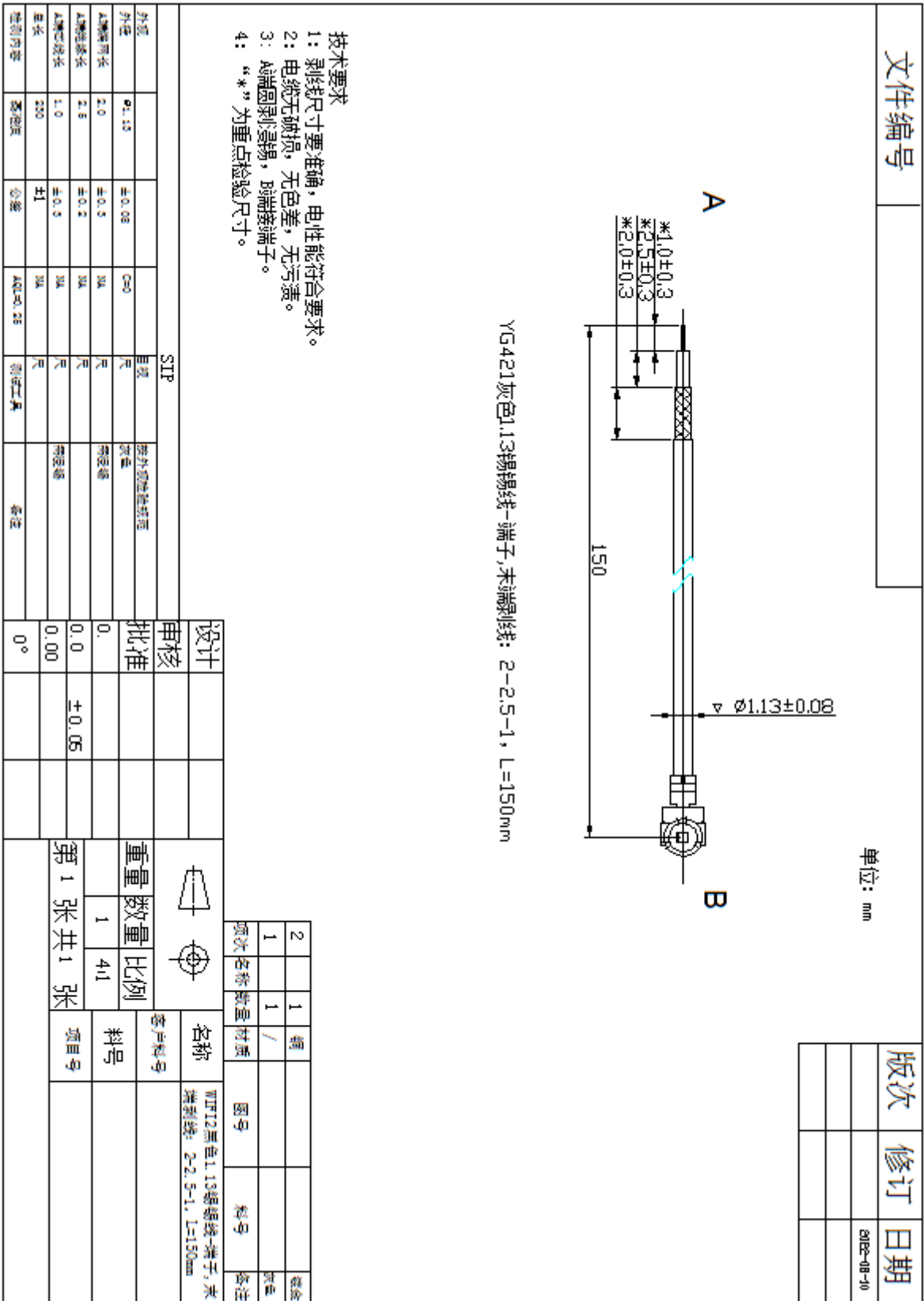
5G 方向图

7. 有源测试数据

Format for OTA Test				
WIFI				
Band	Channel	Freespace	Channel	Freespace
		TRP		TIS(-)
WIFI B	1	11.6	2412	-80.6
	6	13.1	2437	-79.2
	13	13.5	2472	-78.1
	AVE	12.7	AVE	-79.3
WIFI A	36	11.6	5745	-68.2
	149	10.3	5785	-67.4
	165	11.8	5825	-67.2
	AVE	11.2	AVE	-67.6

8 天线截图





9. 总结及建议

1. 从目前测试数据来看，天线位置与测试性能基本可以满足使用要求。

10.0 MECHANICAL SPECIFICATIONS:

10.1 MECHANICAL CONFIGURATION

The appearance of the antenna is in accordance with drawingSZ6070L

10.2 CONNECTOR TYPE

The connector type is an embedded type

11.0 ENVIRONMENTAL SPECIFICATIONS

11.1 TEMPERATURE

Operating Temperature Range: -40 C~ +85 C

Storage Temperature Range: -40 C~ +120 C

11.2 SALT SPRAY TEST

Antenna be exposed in a 35°C, 5% salt fog chamber for 24 hours then check the appearance and performance against the specifications in normal temperature.

11.3 STATIC HUMIDITY TEST

The antenna is subjected to the following test:

Temperatures: +70°C and 90%--95%RH

Test Duration: 24 Hours

The antenna should not undergo any structural or functional change and remain within the electrical/mechanical specification.

12.0 PACKAGING

The antennas will be packed in bags, There are 100 or 200 antennas per bag. The bags are packed in corrugated fibreboard over box

Drawing