



深圳信诺山通信技术有限公司

Shenzhen Signalsen Telecom Technology Co, .Ltd

## WIFI 天线规格书

物料编号：W574-1B400B-A（点胶）

天线型号：2.4G/5G 天线，线长=400mm 带扣

客户：		项目名：	
频段：2.4G/5G	日期：2021.08.10	版本：R:A	
研发	结构：	审核：	批准：
	射频：	审核：	
客户审核：		客户批准：	

Manufacturers:Shenzhen Xinnuoshan Communication Technology Co. , Ltd.

Add: Room 211, Hengbo Innovation & Technology Industrial Park, Qingji Road, Longhua Street office, Longhua New District, Shenzhen

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# 1. Project information and Electrical Specification

*Those specifications were specially defined for 2.4G/5G model, and all characteristics were measured under the model's handset testing jig .*

1-1 Antenna picture

1-2 Frequency Band:

Frequency Band	MHz
2.4G/5G	2400-2500/4950-5850

1-3 Impedance matching

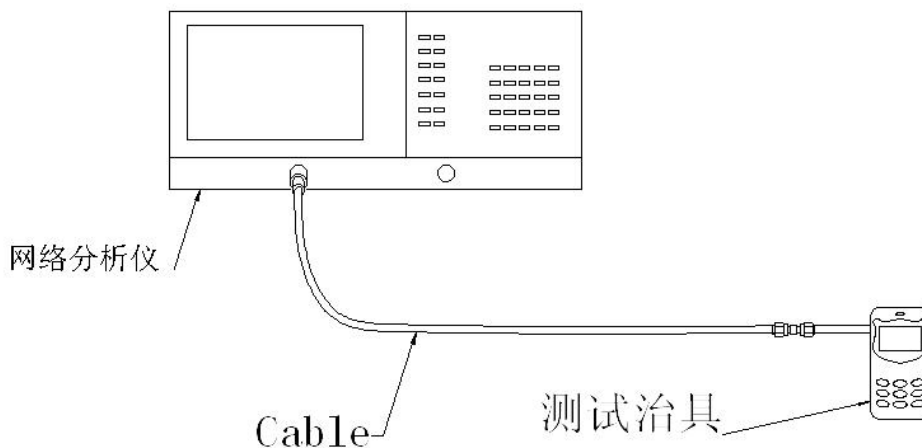
天线原匹配

## 2.VSWR

### 2-1 Measuring Method:

- 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

测试示意图如下:



### 2-2 S11 parameter values

频率 (MHZ)	2400	2500	4950	5400	5850
驻波	1.3	1.2	1.78	1.63	1.23



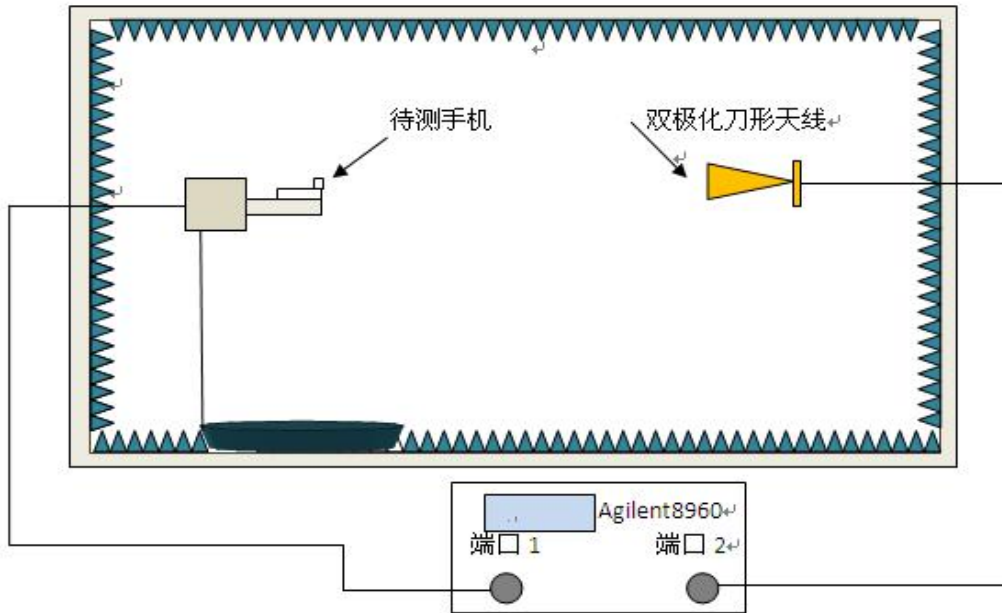
### 3. Efficiency and Gain

**\*measuring and test instruments:**

微波暗室, Agilent 网络分析仪, Agilent 频谱分析仪, 8960 综合测试仪, 标准天线

**\*test method:**

equipment 以 H 面放于转台中心位置固定, 与喇叭天线中心位置在同一个水平线上。

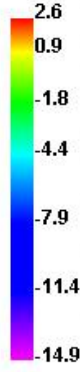
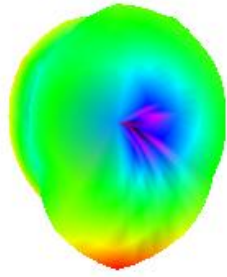


### 3-1 Efficiency/Gain- WIFI

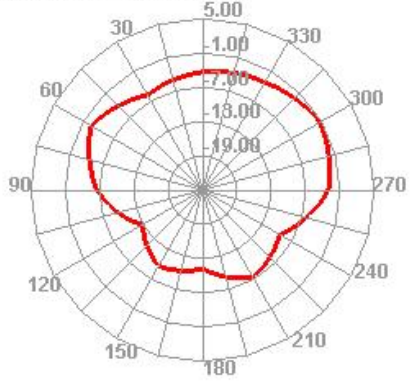
Passive Test For WIFI_BT								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	64.61	-1.9	2.62	0.47	2.62	-14.89	51.03	51.21
2450	59.76	-2.24	2.47	0.32	2.47	-13.7	51.78	51.74
2500	53.62	-2.71	2.2	0.05	2.2	-10.59	51.76	51.66

Passive Test For 5.8								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
4950	53.52	-2.71	2.33	0.18	2.33	-16.16	62.44	62.5
5400	66.72	-1.76	4.64	2.49	4.64	-19.6	63.55	63.99
5850	64.22	-1.92	3.44	1.29	3.44	-11.42	66.35	66.32

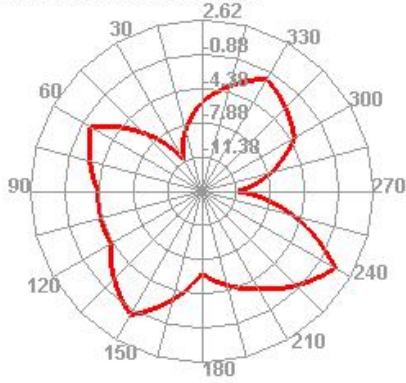
2400.000MHz



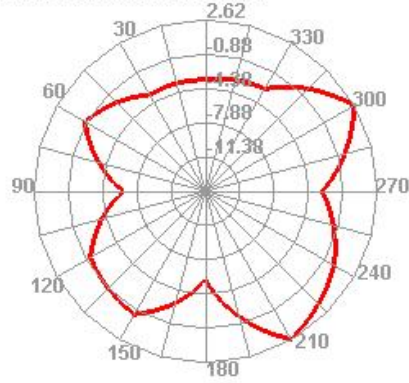
2400.000MHz H



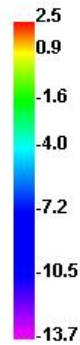
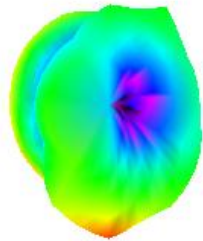
2400.000MHz E1



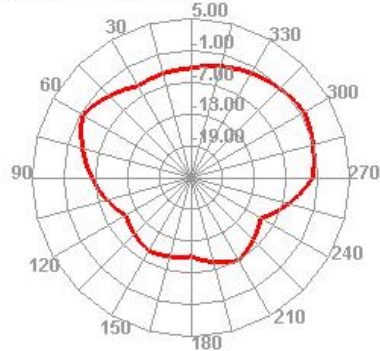
2400.000MHz E2



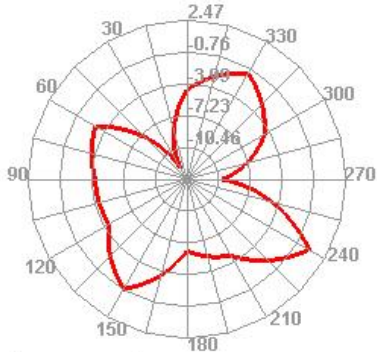
2450.000MHz



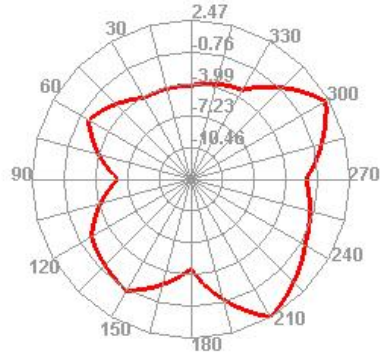
2450.000MHz H



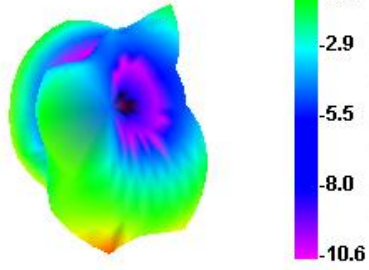
2450.000MHz E1



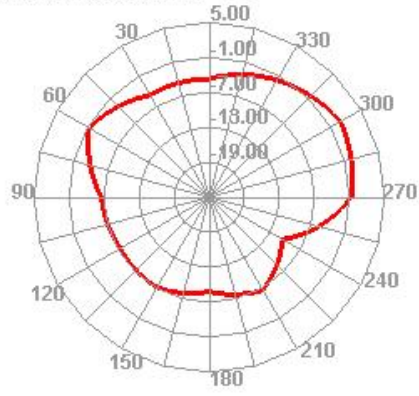
2450.000MHz E2



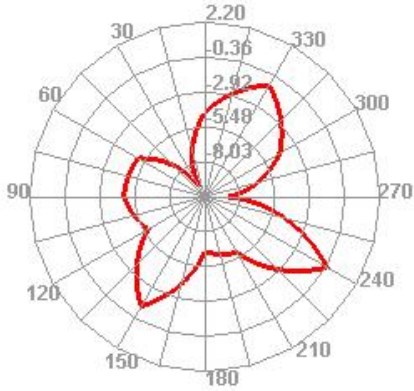
2500.000MHz



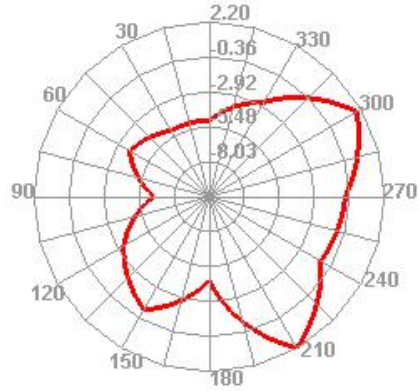
2500.000MHz H



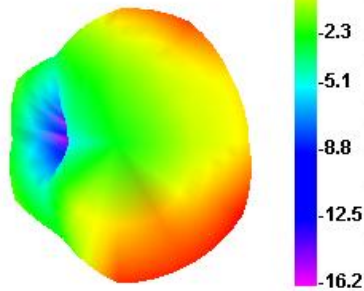
2500.000MHz E1



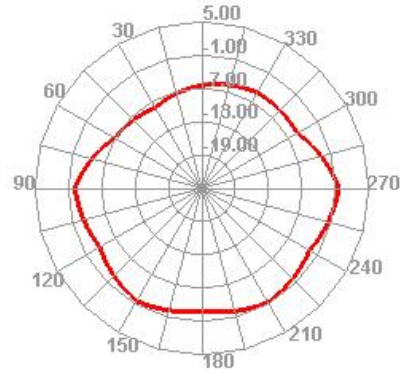
2500.000MHz E2



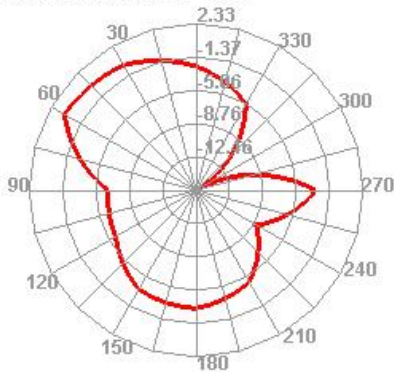
4950.000MHz



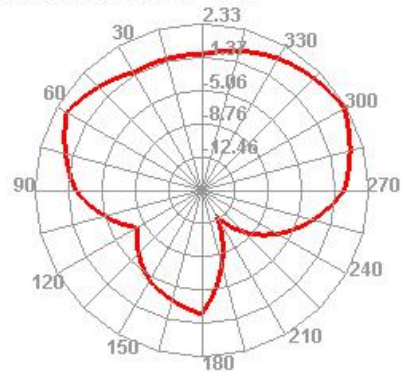
4950.000MHz H



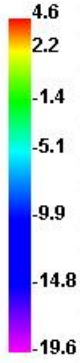
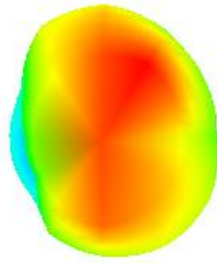
4950.000MHz E1



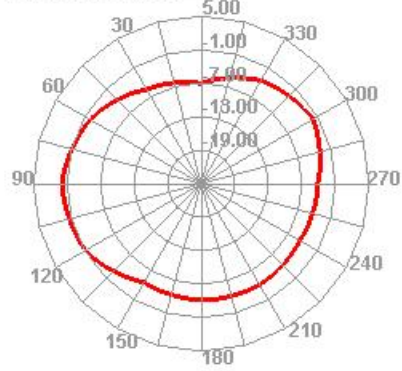
4950.000MHz E2



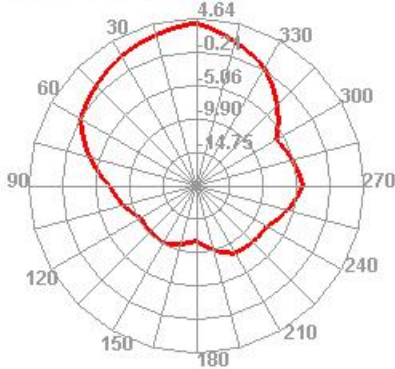
5400.000MHz



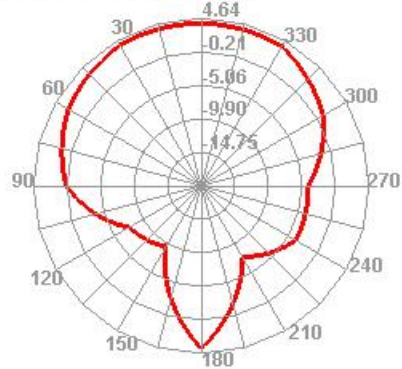
5400.000MHz H



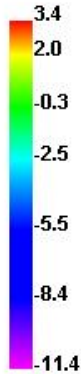
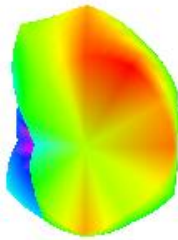
5400.000MHz E1



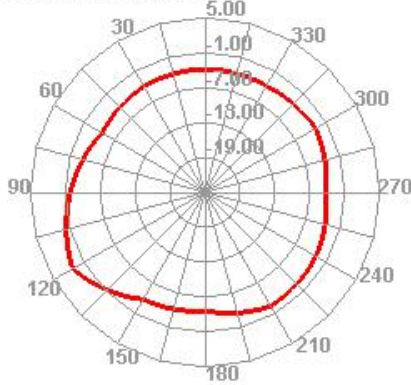
5400.000MHz E2



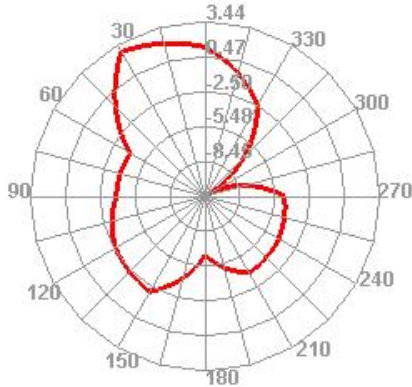
5850.000MHz



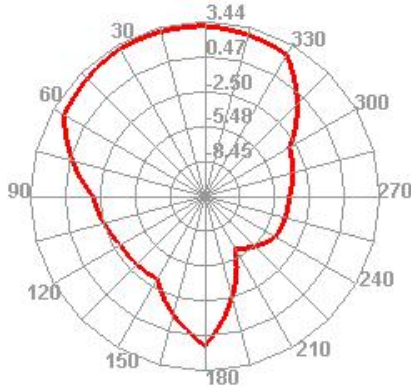
5850.000MHz H



5850.000MHz E1



5850.000MHz E2





#### 4. The production index

天线量产时，以驻波比作为量产测试标准。

根据项目本身的差异,给出如下标准:

频率	量产标准
WIFI (2400-2500Mhz/4950-5850M HZ)	$V_{SWR}(\text{量产产品}) < V_{SWR}(\text{设计样品}) + 0.5$

# 5. structural drawing

