



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: W01-1B155B-Z

客户：智兴盛			项目名：儿童平板		
频段：WIFI		日期：2022.10.17		版本：R:A	
研发	结构：	审核：		批准：	
	射频：	审核：			
客户审核：			客户批准：		

contents

contents	2
1. PROJECT INFORMATION AND ELECTRICAL SPECIFICATION	3
1-1 Project picture	3
1-2 Frequency Band:	3
1-3 Impedance matching	3
2.VSWR	3
2-1 Measuring Method:	3
2-2 S11 parameter values	4
3. EFFICIENCY AND GAIN	4
3-1 Efficiency/Peak Gain- WIFI	5
4. THE PRODUCTION INDEX	7
5.STRUCTURAL DRAWINGS	8

1. Project information and Electrical Specification

Those specifications were specially defined for WIFI model, and all characteristics were measured under the model's handset testing jig .

1-1 Project picture



1-2 Frequency Band:

Frequency Band	MHz
WiFi	2400-2500

1-3 Impedance matching

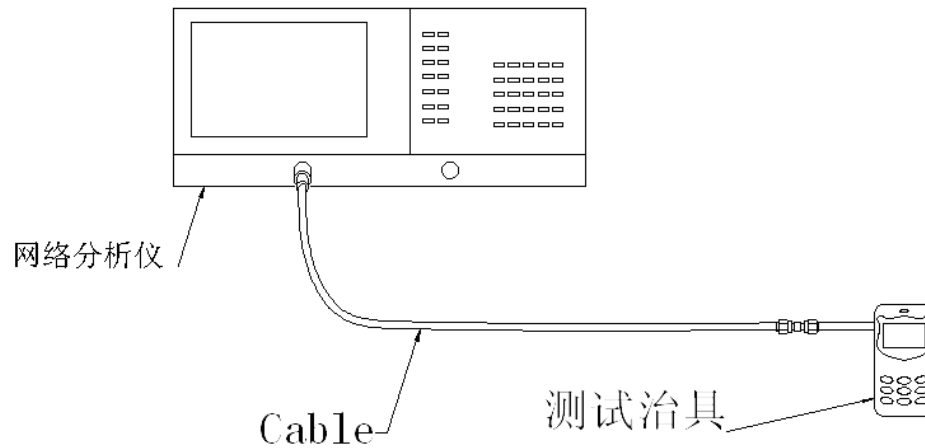
天线原匹配

2.VSWR

2-1 Measuring Method:

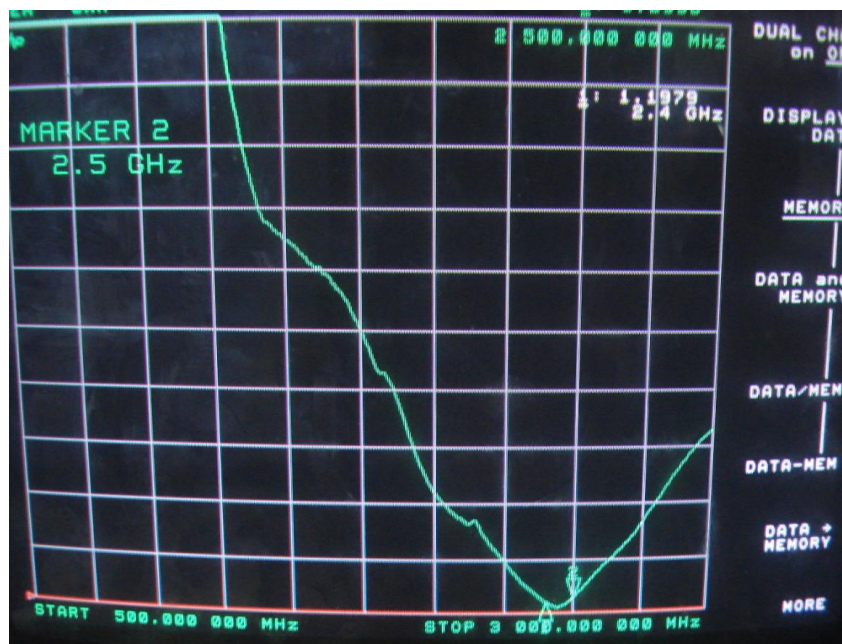
- 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

测试示意图如下:



2-2 S11 parameter values

频率 (MHZ)	2400	2500
驻波	1.19	1.42



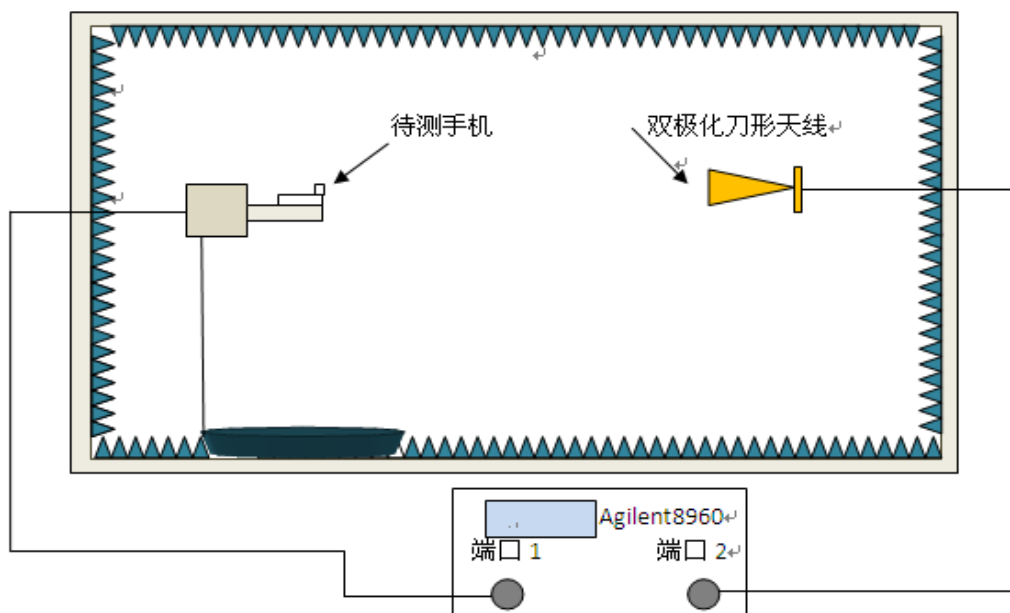
3. Efficiency and Gain

*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:

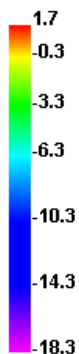
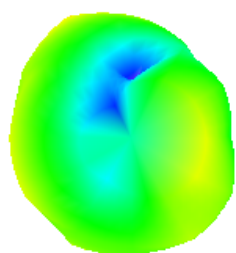
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



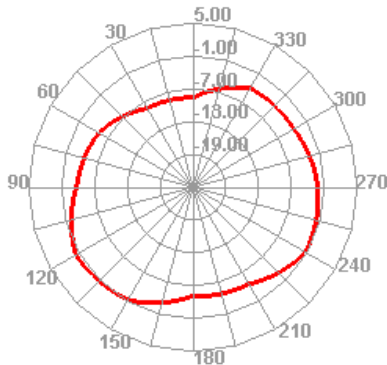
3-1 Efficiency/Peak Gain- WIFI

Passive Test For WIFI_BT								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	50.67	-2.95	1.73	-0.42	1.73	-18.33	51.53	51.61
2450	50.75	-2.95	1.69	-0.46	1.69	-18.53	51.67	51.63
2500	51.75	-2.86	1.9	-0.25	1.9	-12.83	51.56	51.46

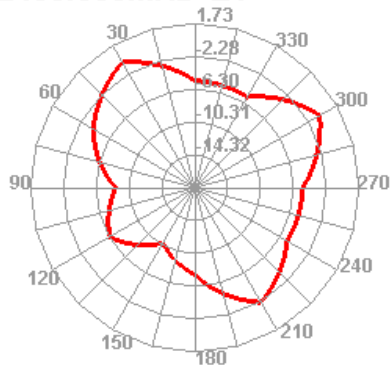
2400.000MHz



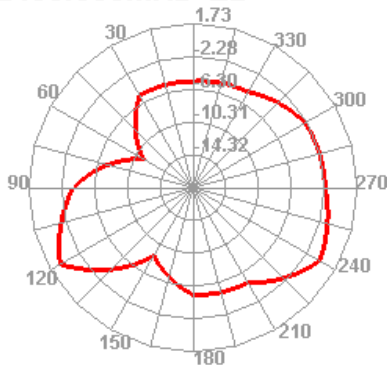
2400.000MHz H



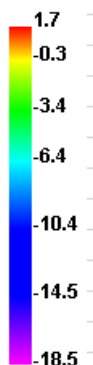
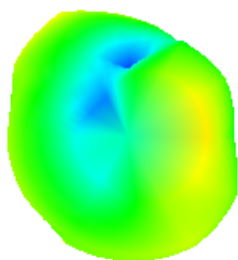
2400.000MHz E1



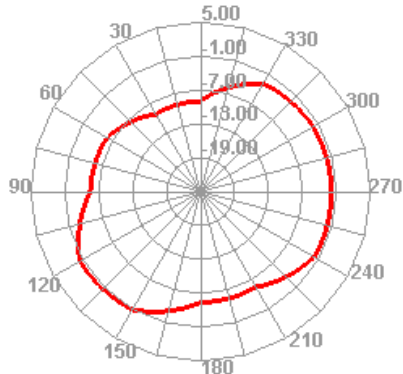
2400.000MHz E2



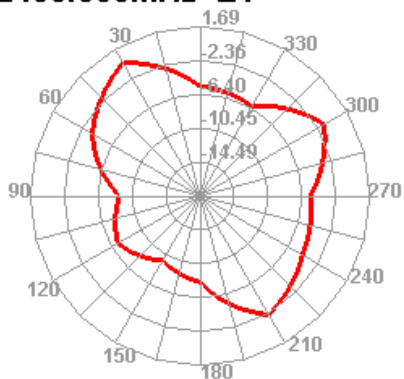
2450.000MHz



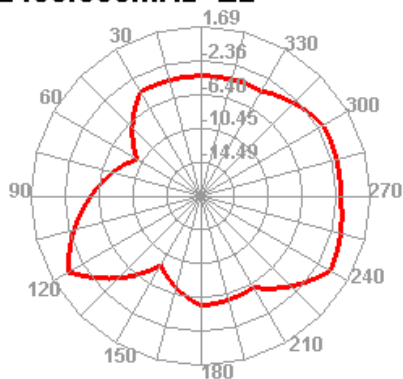
2450.000MHz H



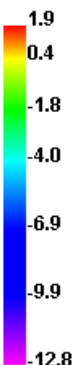
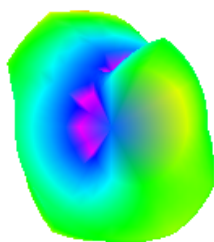
2450.000MHz E1



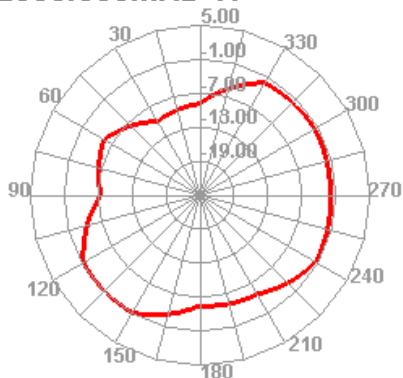
2450.000MHz E2



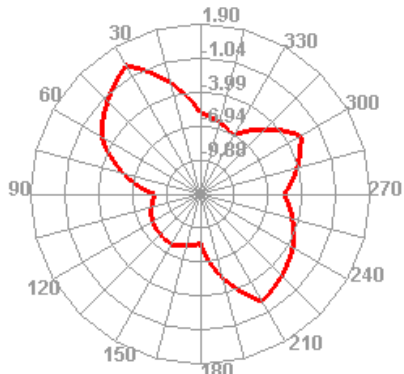
2500.000MHz



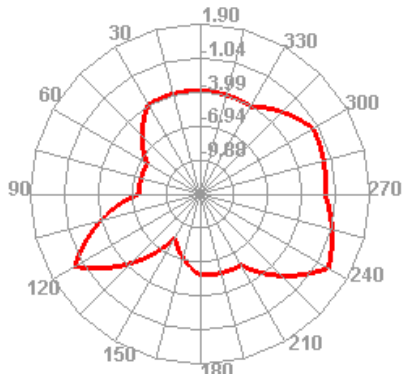
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



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)	VSWR (量产产品) < VSWR(设计样品)+0.5

5. Structural drawings

