

TWX-152-011-AUX-V0

天线规格书

客户：Shenzhen Lanjin Technology			项 目 名 称： HCAR4000-MI
频段：2.4G		日期：2021.04.26	版本：R:A
研发	结构：	审核：	批准：
	射频：	审核：	
客户审核：		客户批准：	

天线：2.4g wifi/BT 天线 TWX-152-011-AUX-V0

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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 .

1-1Antenna picture

1-2 Frequency Band:

Frequency Band	MHz
2.4G	2400-2500

1-3 Impedance matching

天线原匹配

2.VSWR

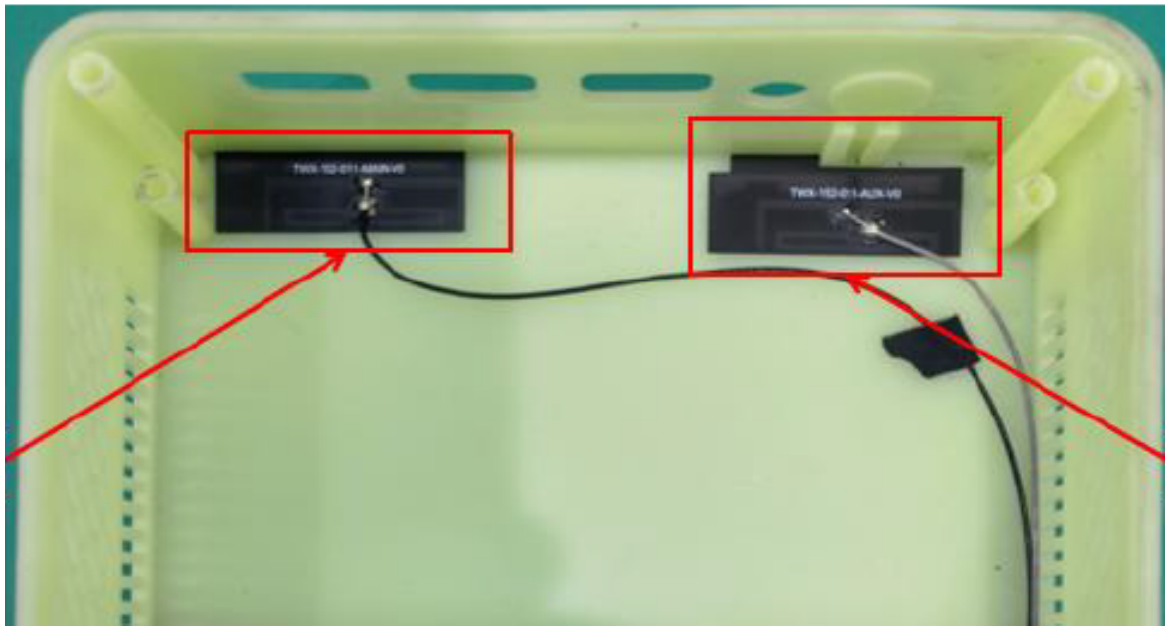
2-1 Measuring Method:

- 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.*

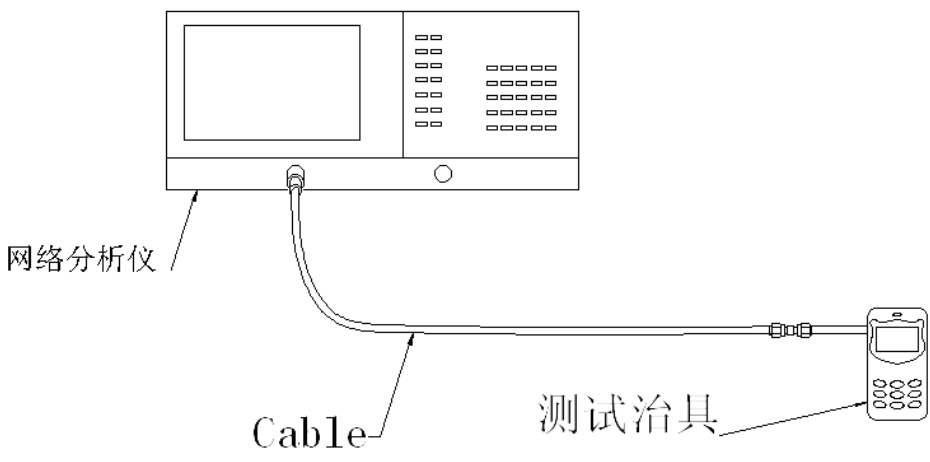
天线装配图跟实物

天线: 2.4g wifi/BT 天线





测试示意图如下：



2-2 S11 parameter values

频率 (MHZ)	2400	2500
驻波	1.3	1.2



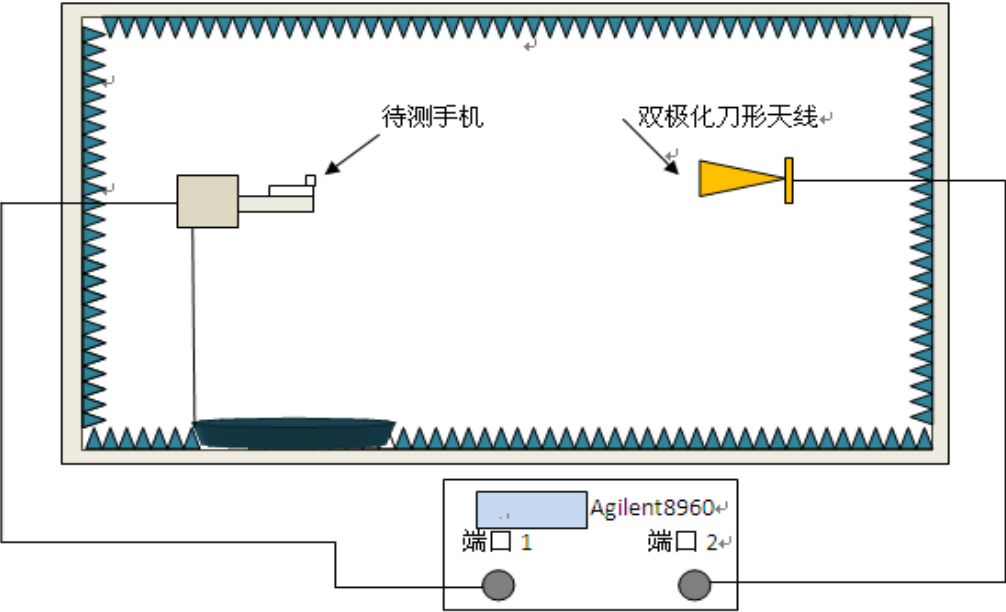
3. Efficiency and Gain

***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:**

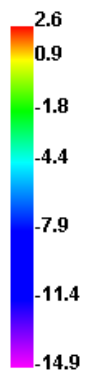
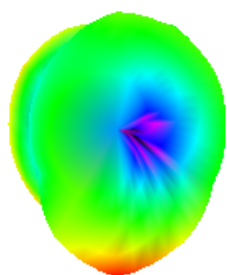
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



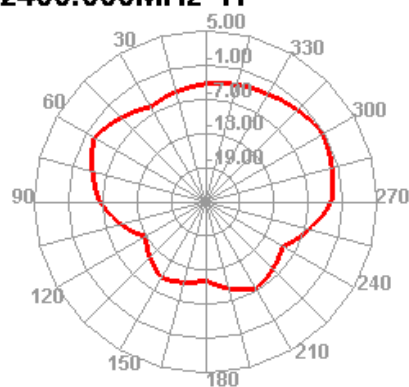
3-1 Efficiency/Gain- WIFI

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

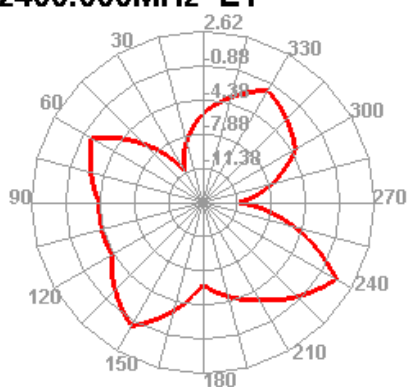
2400.000MHz



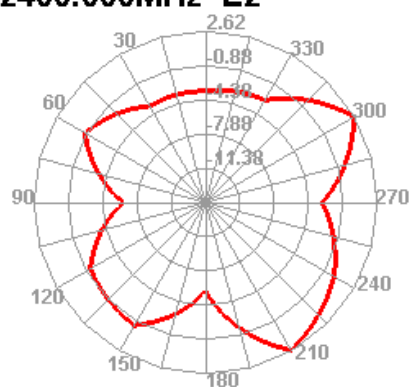
2400.000MHz H



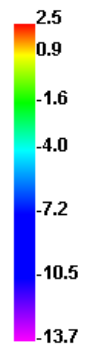
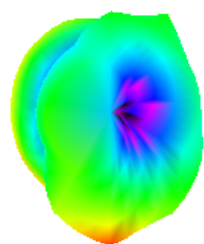
2400.000MHz E1



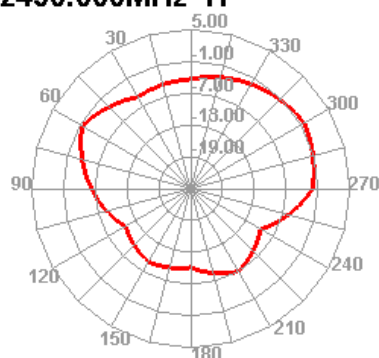
2400.000MHz E2



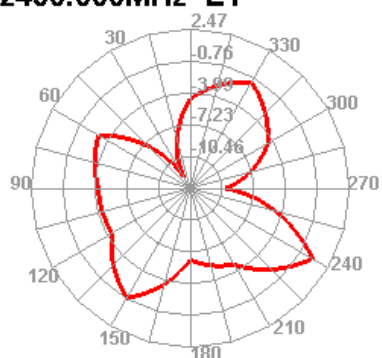
2450.000MHz



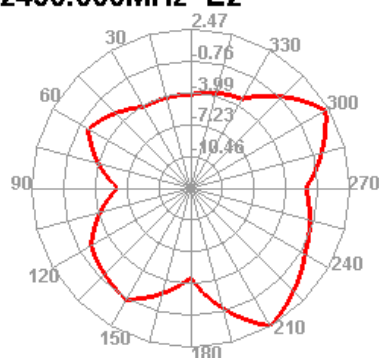
2450.000MHz H

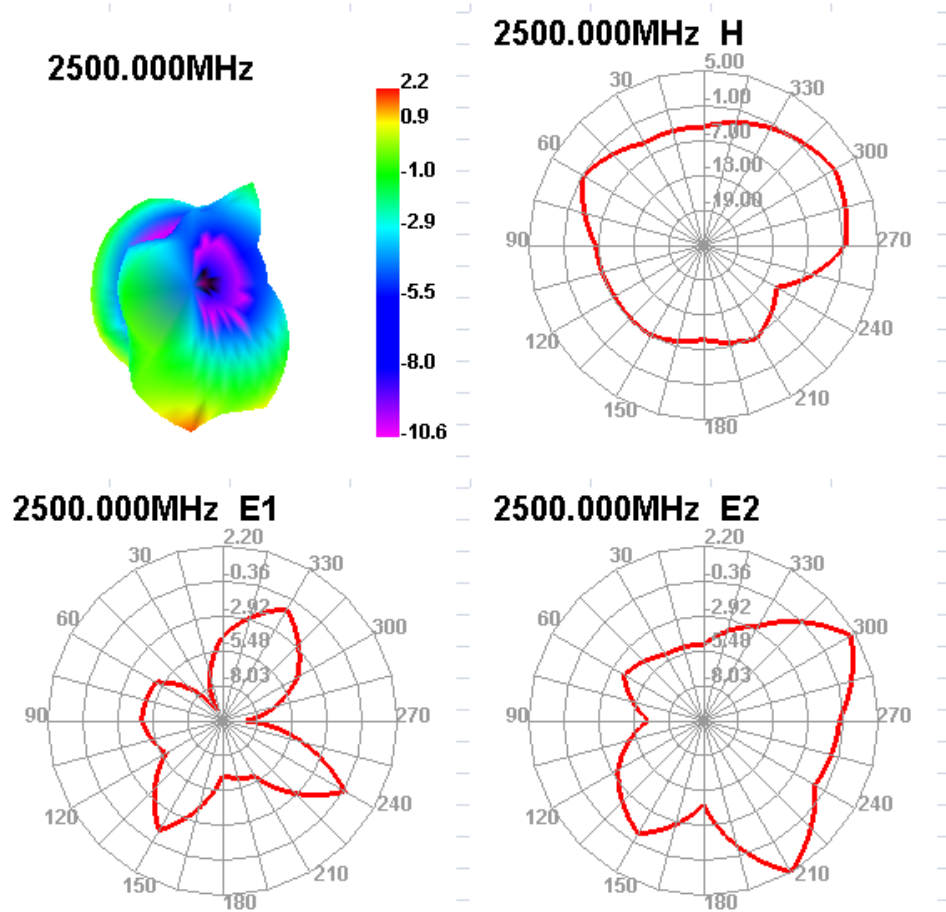


2450.000MHz E1



2450.000MHz 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

