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

WiFi Antenna specification

我司料号 Our material No：WBP632-1B130B-A

Antenna type:PIFA

客户：维度数码 Customer:		项目名 Project:
频段：WiFi/BT FB：WiFi/BT	日期：2024/10/9 Data：10/9/2024	版本：R:A Version：R:A
天线型号:2.4G&5.8G 双频 WIFI 天线,黑色,同轴线 L=130mm Antenna model: 2.4G&5.8G dual band WIFI antenna, black, coaxial line L=130mm		

Address:

Room 211, Hengbo science and technology Industrial Park, Qingning road, Longhua District, Shenzhen

contents

1. Project information and Electrical Specification

Those specifications were specially defined forWIFI /BTmodel, and all characteristics were measured under the model's handset testing jig .

1-1Project picture

1-2 Frequency Band:

Frequency Band	MHz
WiFi/BT	2400-2500/5050-5850

1-3 Impedance matching

DUT 的 RF 线路上的所有匹配器件都保持不变 All matching devices on the RF circuit of DUT remain unchanged

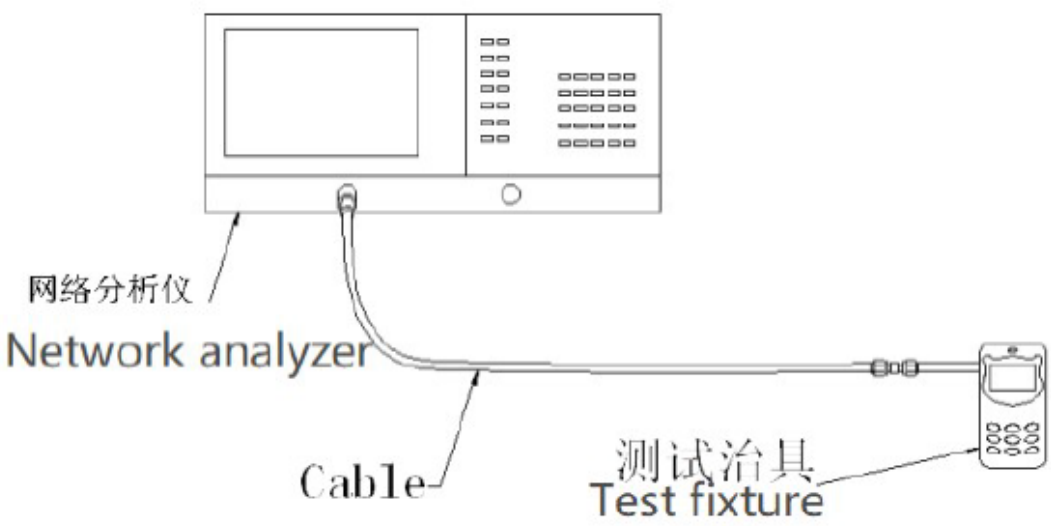
2.VSWR

2-1 Measuring Method:

1. A 50 Ωcoaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,

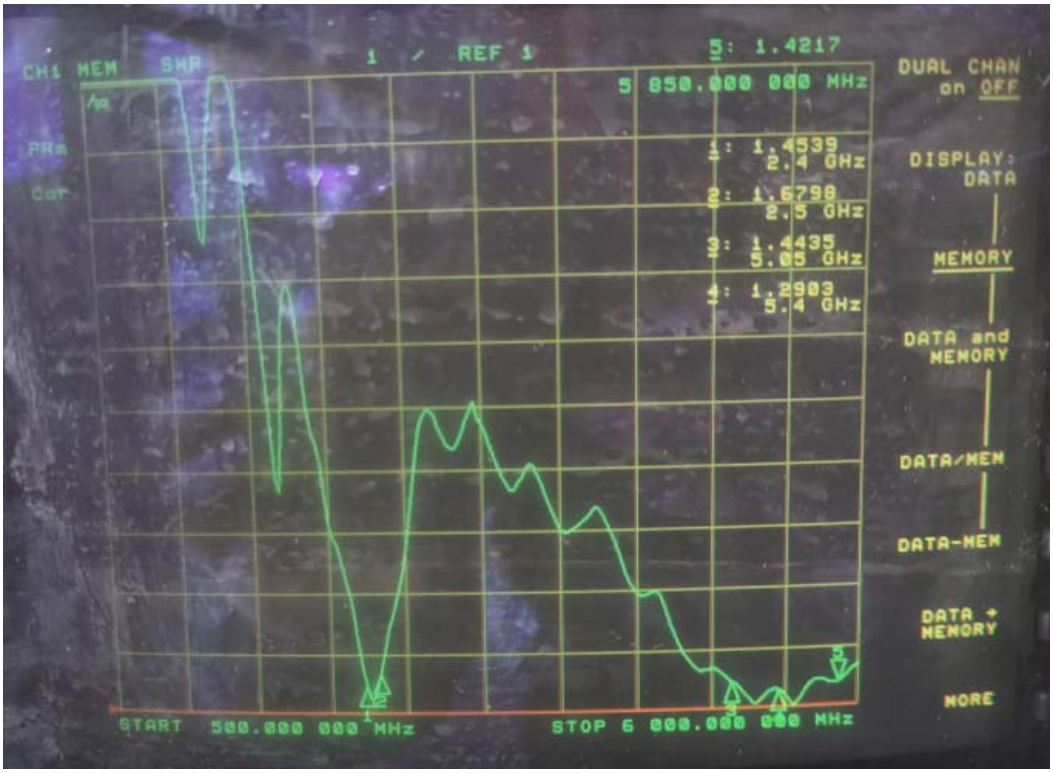
2. Keeping this jig away from metal at least 20cm.

测试示意图如下 The test diagram is as follows:



2-2 S11 parameter values

频率 Frequency（MHZ）	2400	2500	5050	5400	5850
驻波 Standing wave		1.45	1.67	1.44	1.29



3. Efficiency and Gain

***measuring and test instruments:**

微波暗室 Microwave anechoic chamber

Agilent 网络分析仪 Microwave anechoic chamber

Agilent 频谱分析仪 Spectrum analyzer

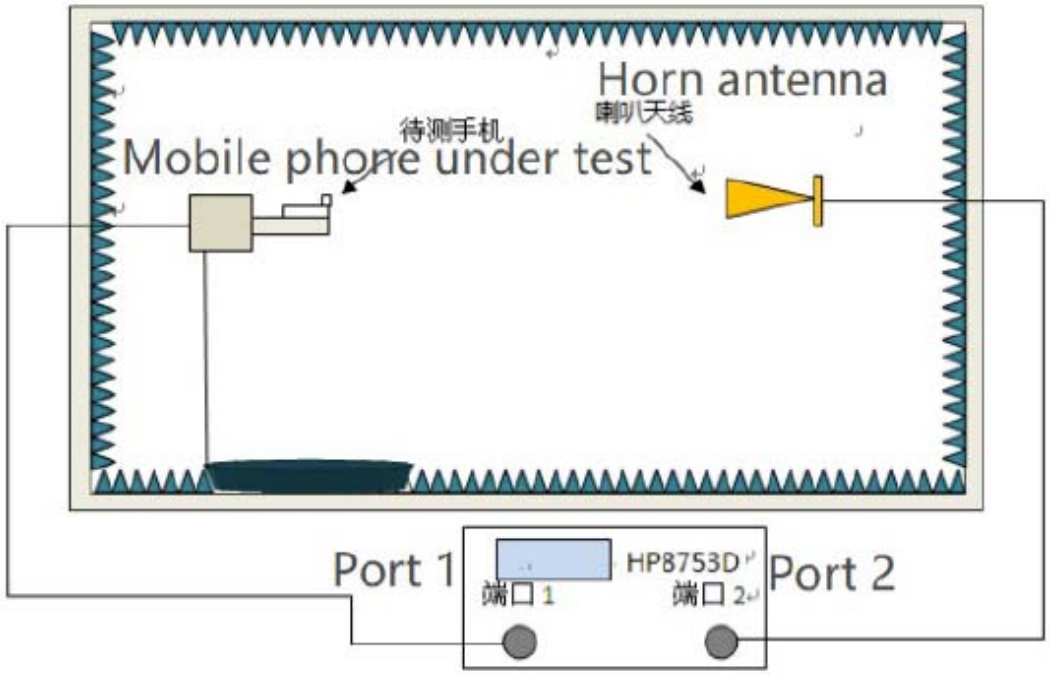
8960 综合测试仪 Network analyzer

标准天线 Standard antenna

***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。

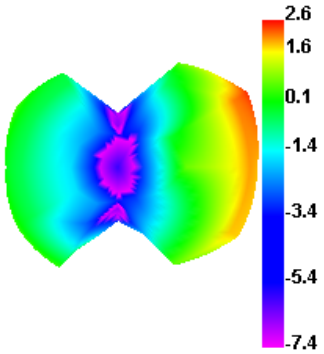
The equipment is fixed in the center position of the turntable with the H-plane, on the same horizontal line as the center position of the horn antenna.



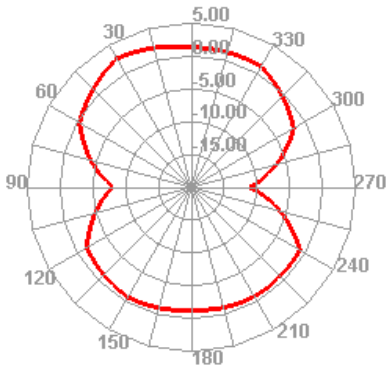
3-1 Efficiency/Gain- WIFI/BT

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	68.42	-1.65	2.63
2450	66.17	-1.79	2.39
2500	62.36	-2.05	2.07

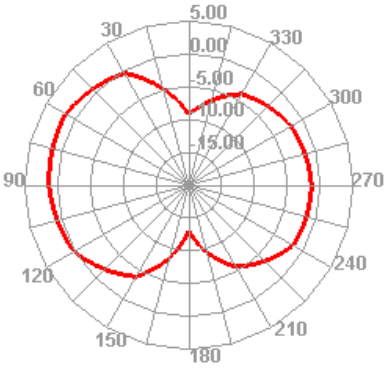
2400.000MHz



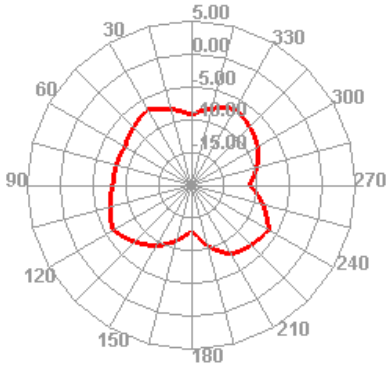
2400.000MHz H



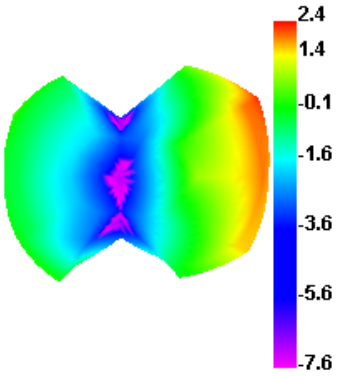
2400.000MHz E1



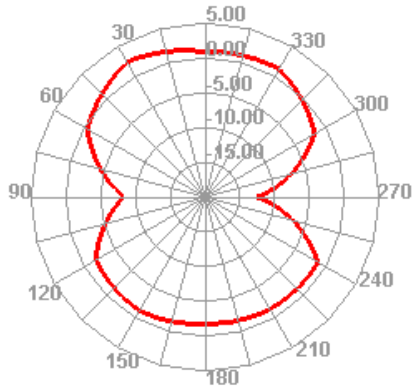
2400.000MHz E2



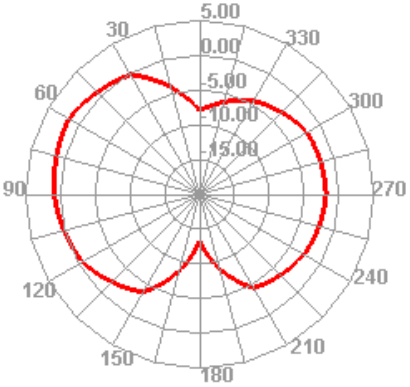
2450.000MHz



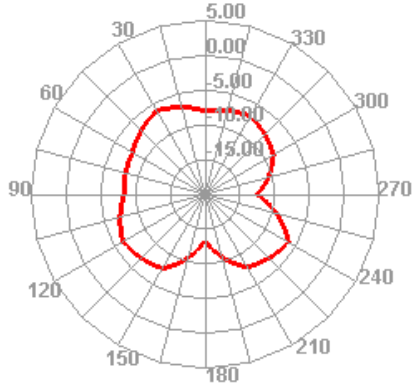
2450.000MHz H

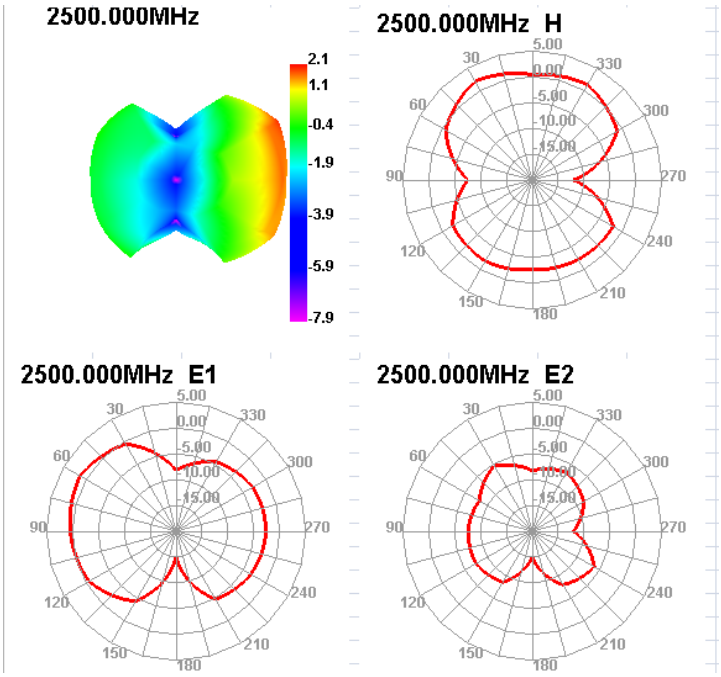


2450.000MHz E1

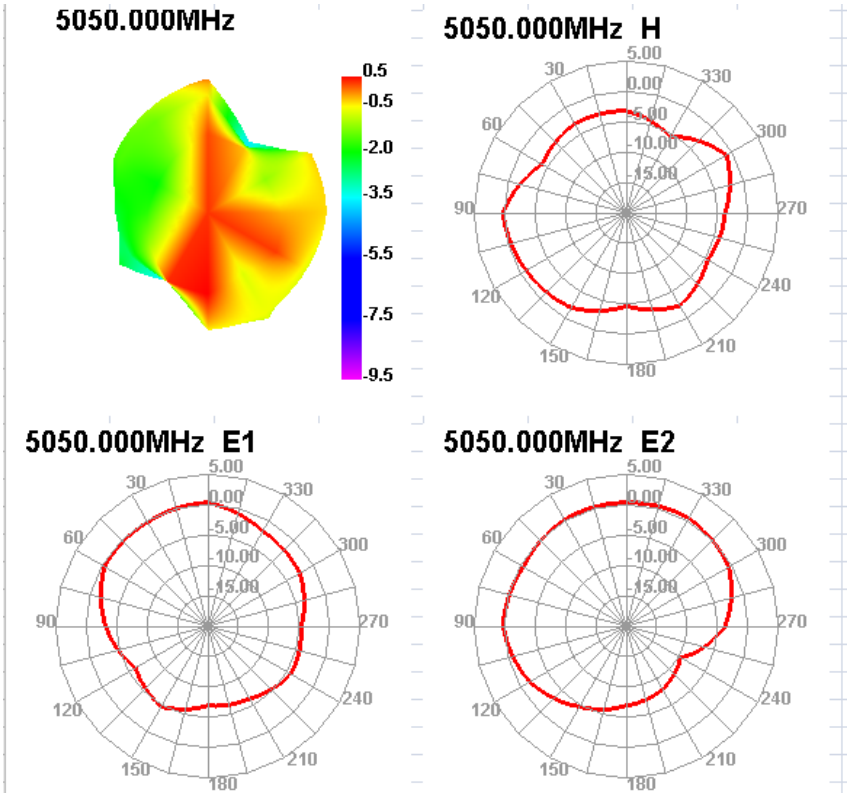


2450.000MHz E2

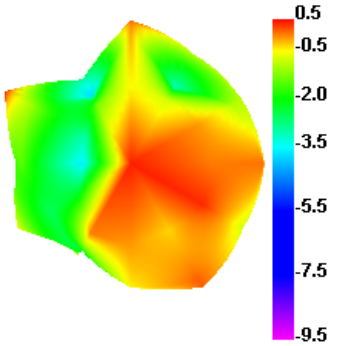




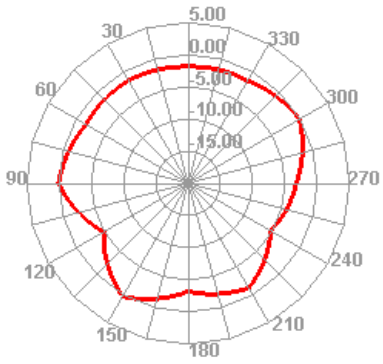
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5050	55.74	-2.54	0.55
5450	59.61	-2.25	0.51
5850	54.53	-2.63	0.6



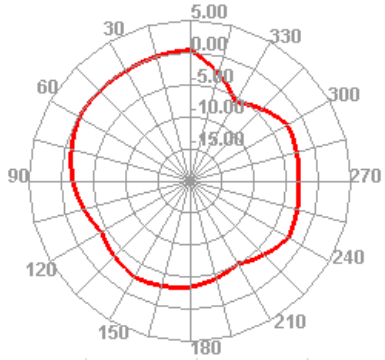
5450.000MHz



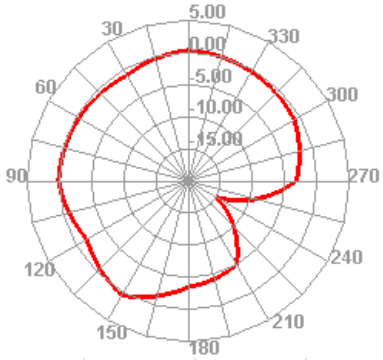
5450.000MHz H



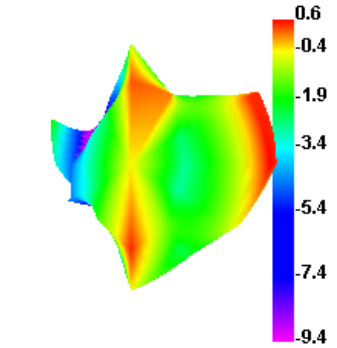
5450.000MHz E1



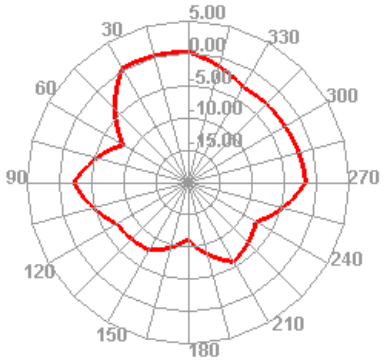
5450.000MHz E2



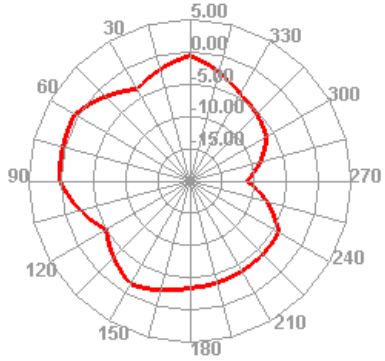
5850.000MHz



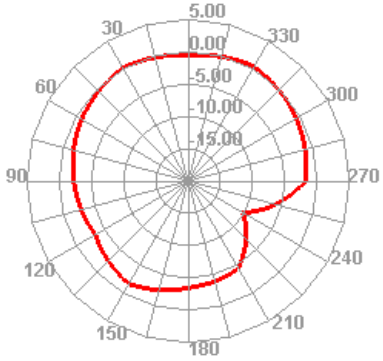
5850.000MHz H



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 In the mass production of antenna, the standing-wave ratio is used as the test standard.

根据项目本身的差异,给出如下标准 According to the differences of the project itself, the following standards are given：

频率 Frequency（MHZ）	量产标准 Mass production standard
WIFI (2400-2500/5050-5850)	VSWR（量产产品 Mass production products）<）<VSWR(设计样品 Design sample)+)+0.5

5. structural drawings