



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: W699-1B50B-I

Antenna type:PIFA

客户: Customer:		项目名 Project:
频段: WiFi/BT FB: WiFi/BT	日期: 2024/10/12 Data: 10/12/2024	版本: R:A Version: R:A

Address:

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

contents

1. PROJECT INFORMATION AND ELECTRICAL SPECIFICATION	2
1-1Project 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
*test method:	5
3-1 Efficiency/Gain- WIFI/BT	5
4. STRUCTURAL DRAWINGS	10

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 .

1-1 Project picture



1-2 Frequency Band:

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

1-3 Impedance matching

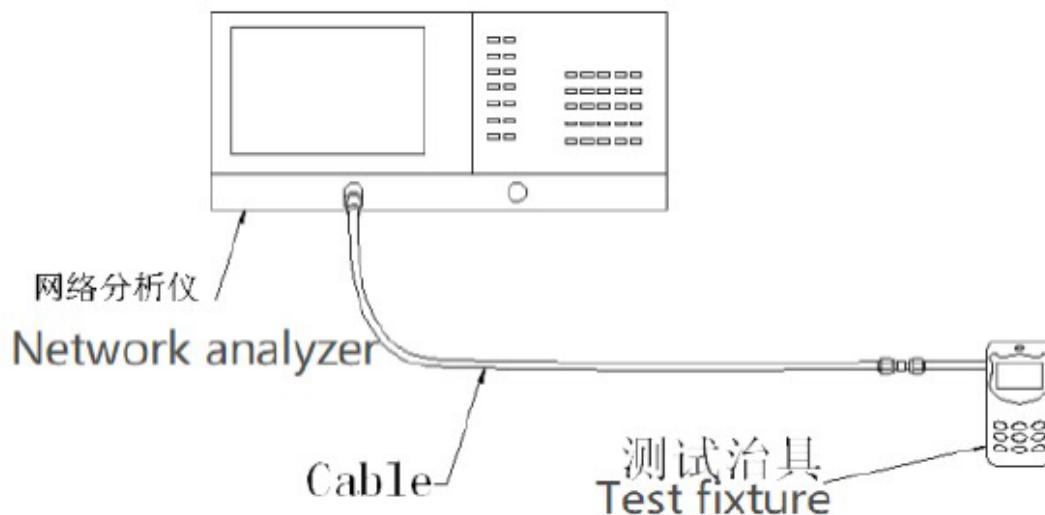
DUT 的 RF 线路上的所有匹配器件都保持不变 All matching devices on the RF circuit of DUT remain unchanged

2.VSWR

2-1 Measuring Method:

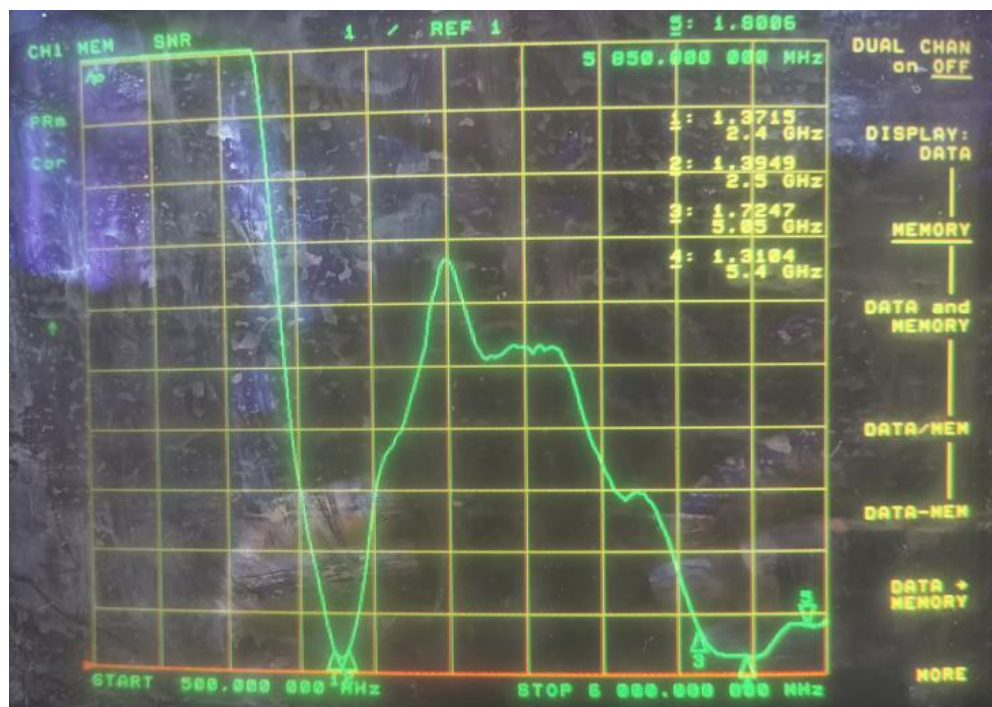
1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

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



2-2 S11 parameter values

频率 Frequency (MHZ)	2400	2500	5050	5400	5850
驻波 Standing wave	1.37	1.39	1.72	1.31	1.80



3. Efficiency and Gain

*measuring and test instruments:

微波暗室 Microwave anechoic chamber

Agilent 网络分析仪 Microwave anechoic chamber

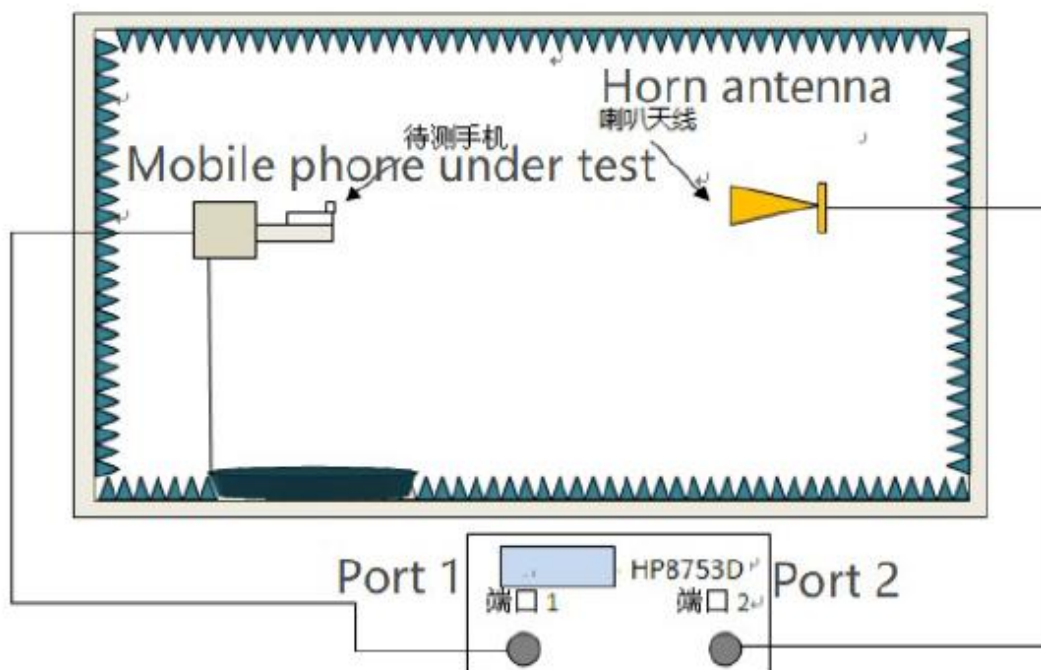
Agilent 频谱分析仪 Spectrum analyzer

8960 综合测试仪 Network analyzer

标准天线 Standard antenna

***test method:**

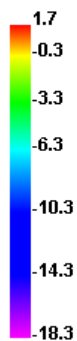
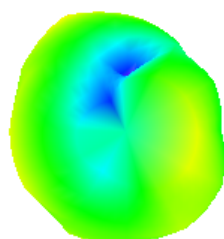
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



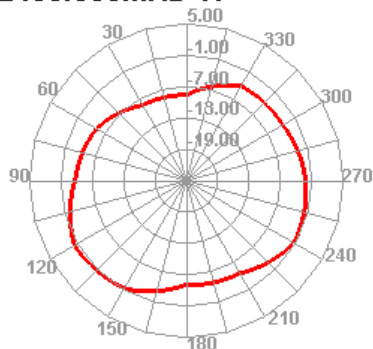
3-1 Efficiency/Gain- WIFI/BT

Freq (MHz)	Effi (%%)	Effi (dB)	Gain (dBi)
2400	50.67	-2.95	1.73
2450	50.75	-2.95	1.69
2500	51.75	-2.86	1.9

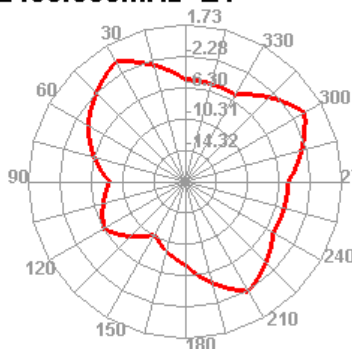
2400.000MHz



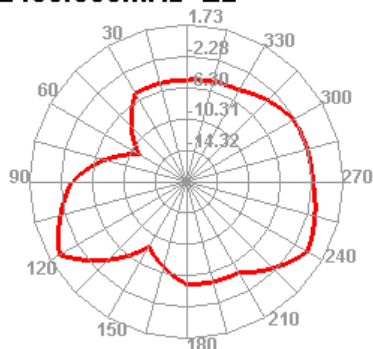
2400.000MHz H



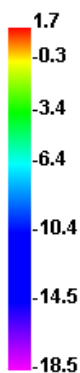
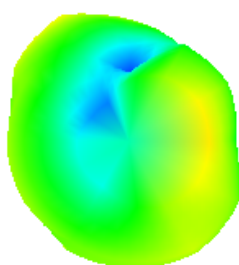
2400.000MHz E1



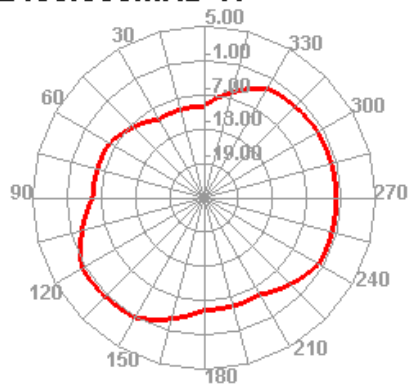
2400.000MHz E2



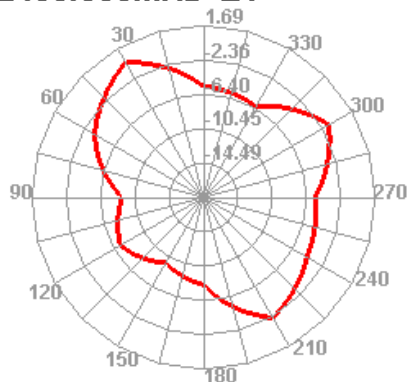
2450.000MHz



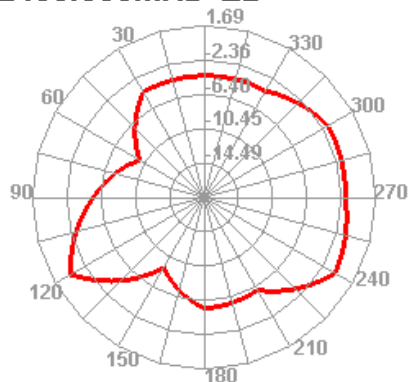
2450.000MHz H



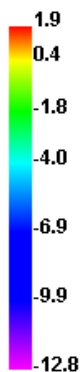
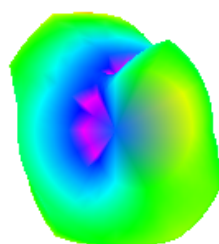
2450.000MHz E1



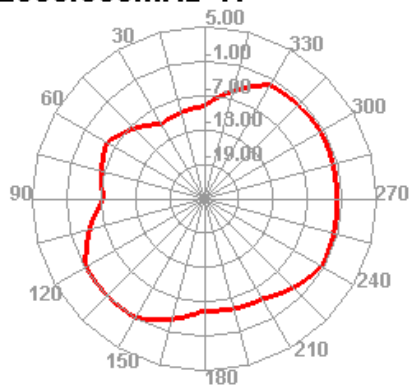
2450.000MHz E2



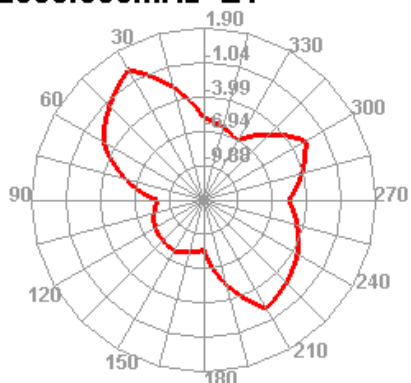
2500.000MHz



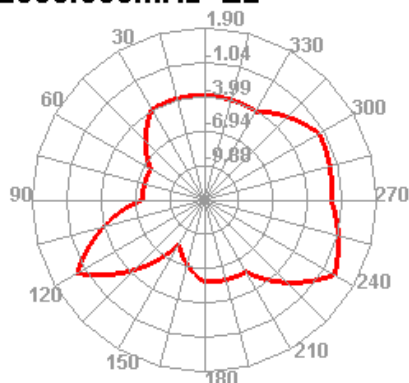
2500.000MHz H



2500.000MHz E1

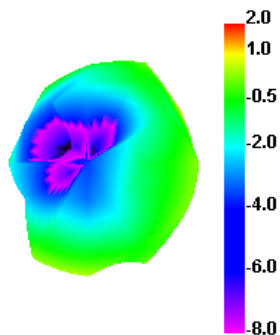


2500.000MHz E2

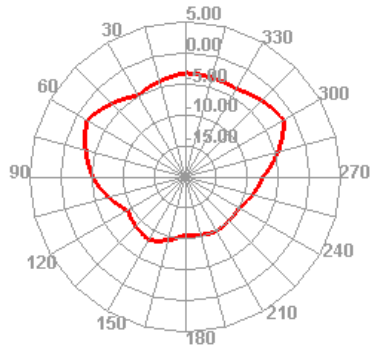


Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5050	42.54	-3.71	1.98
5450	44.24	-3.54	2.43
5850	43.18	-3.65	1.67

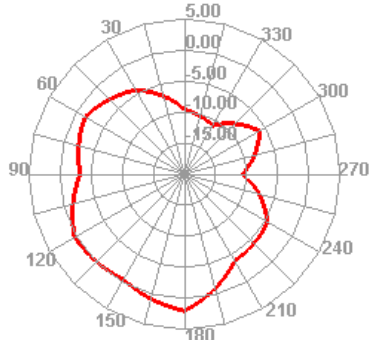
5050.000MHz



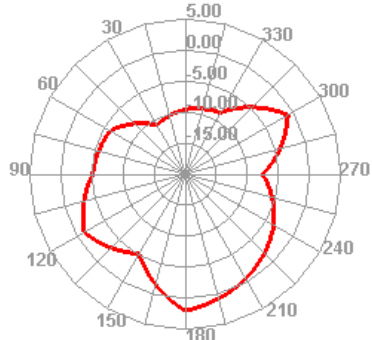
5050.000MHz H



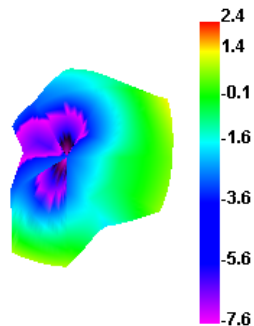
5050.000MHz E1



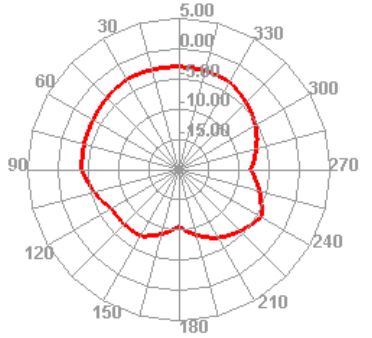
5050.000MHz E2



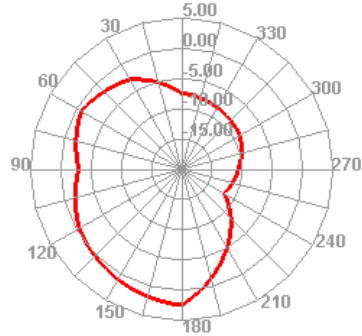
5450.000MHz



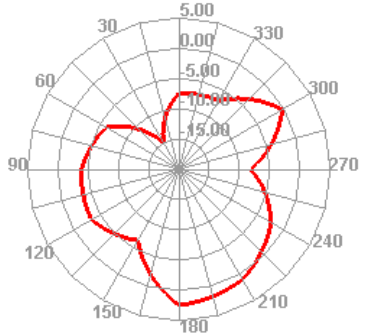
5450.000MHz H



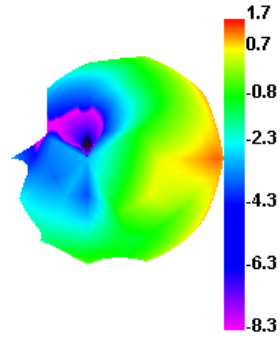
5450.000MHz E1



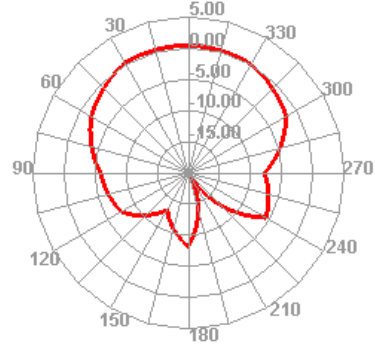
5450.000MHz E2



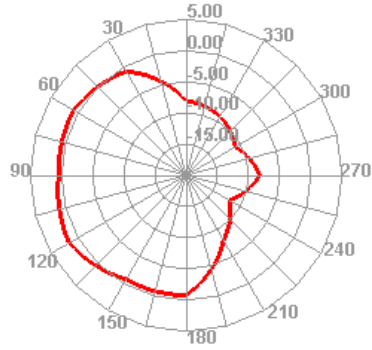
5850.000MHz



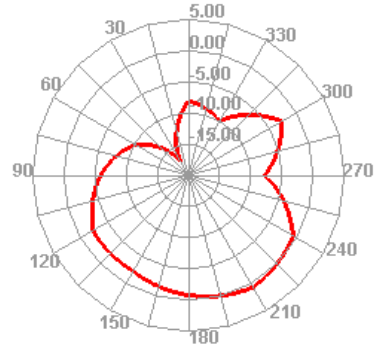
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



4. structural drawings

