



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: W686-1B125B-A

客户：麦创芯 Customer: maichuagnxin	项目名： Project:	
频段：WiFi/BT FB: WiFi/BT	日期：2024/9/5 Data: 9/5/2024	版本：R:A Version: R:A

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1. Project information and Electrical Specification

Those specifications were specially defined for WIFI/BT model, 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

1-3 Impedance matching

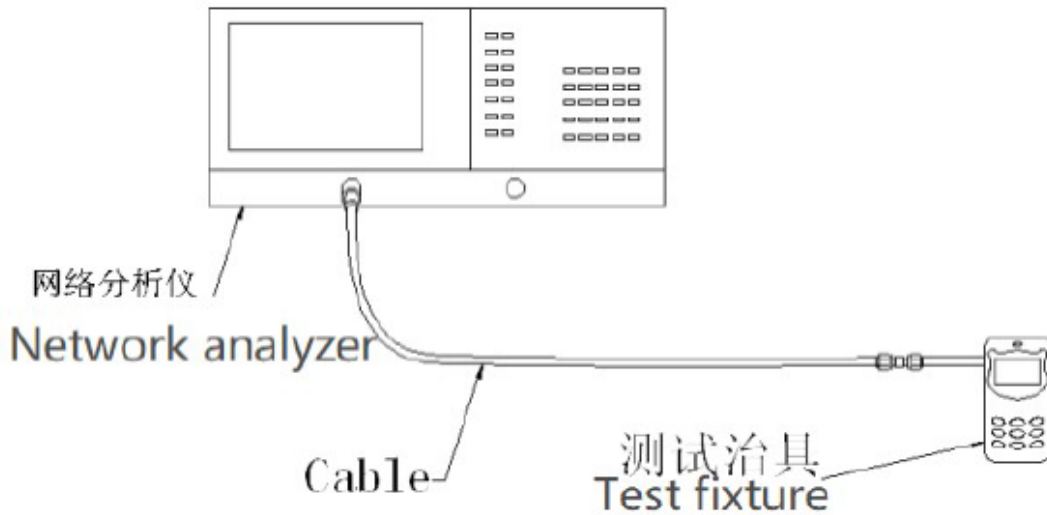
DUT 的 RF 线路上的所有匹配器件都保持不变 All matching devices on the RF circuit of DUT remain unchanged

2.VSWR

2-1 Measuring Method:

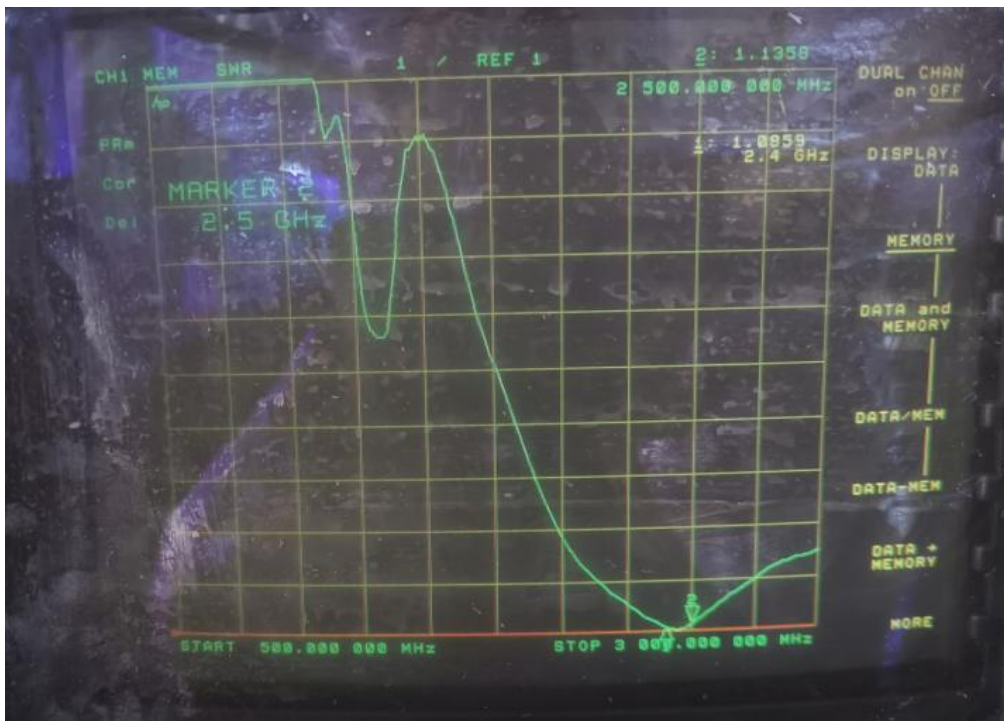
- 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

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



2-2 S11 parameter values

频率 (MHZ)	2400	2500
驻波	1.09	1.13



3. Efficiency and Gain

*measuring and test instruments:

微波暗室 Microwave anechoic chamber

Agilent 网络分析仪 Microwave anechoic chamber

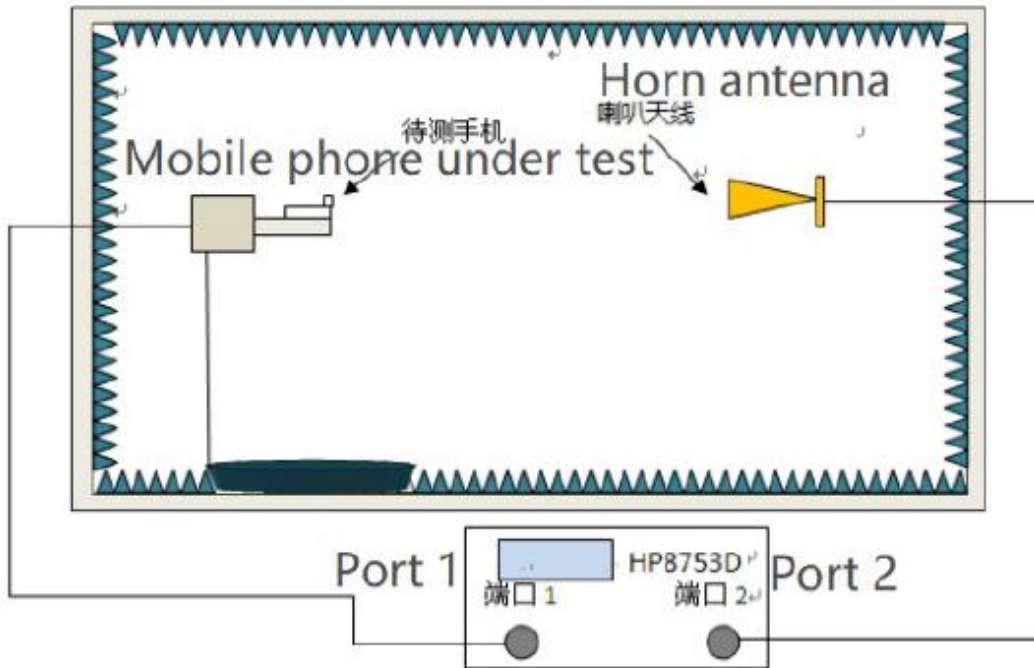
Agilent 频谱分析仪 Spectrum analyzer

8960 综合测试仪 Network analyzer

标准天线 Standard antenna

***test method:**

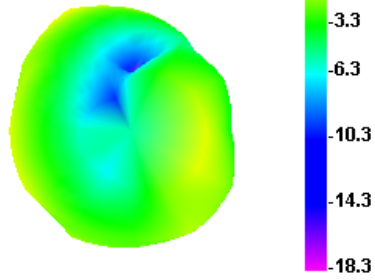
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



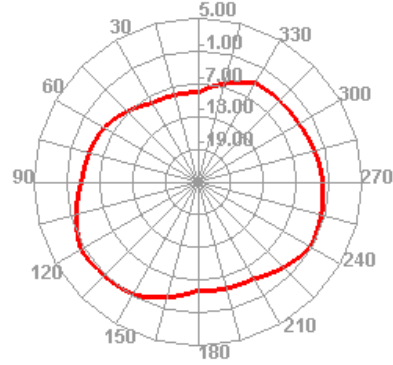
3-1 Efficiency/Gain- WIFI/BT

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

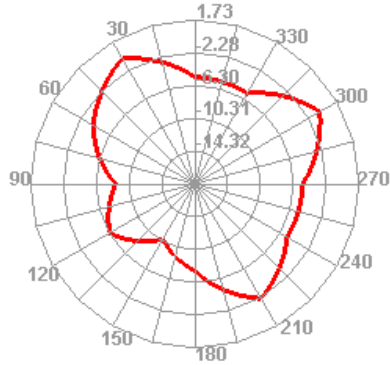
2400.000MHz



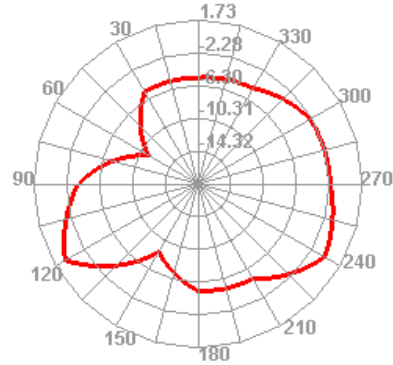
2400.000MHz H



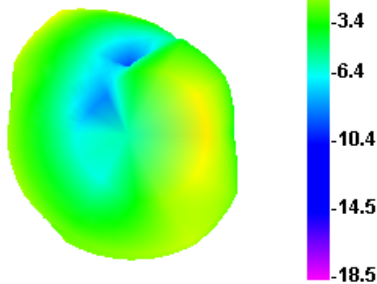
2400.000MHz E1



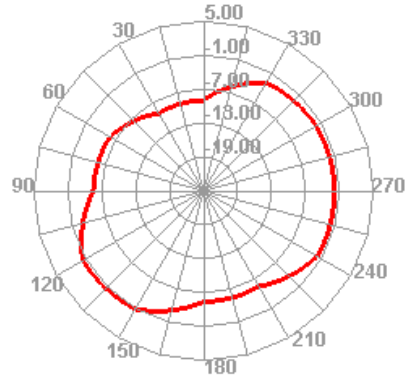
2400.000MHz E2



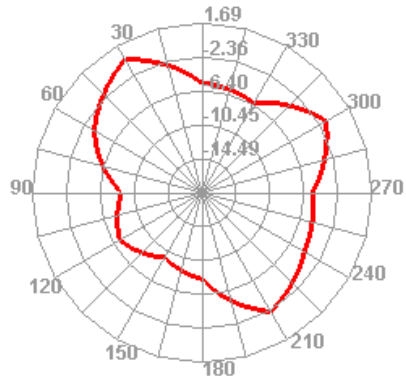
2450.000MHz



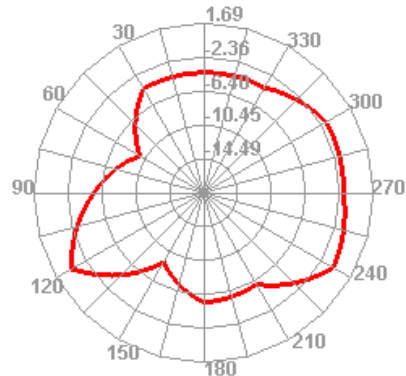
2450.000MHz H



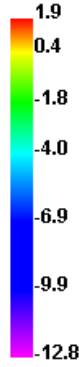
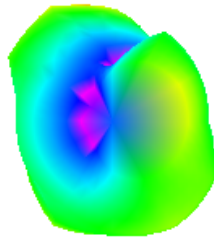
2450.000MHz E1



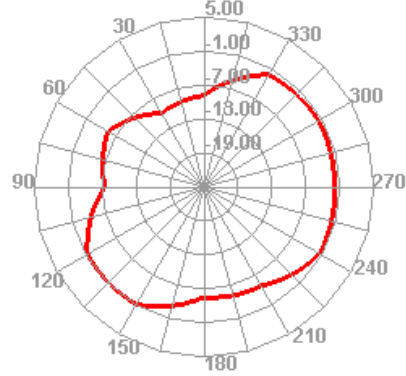
2450.000MHz E2



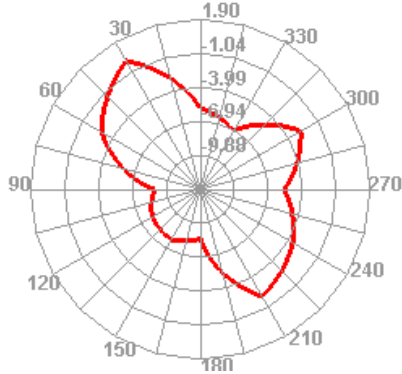
2500.000MHz



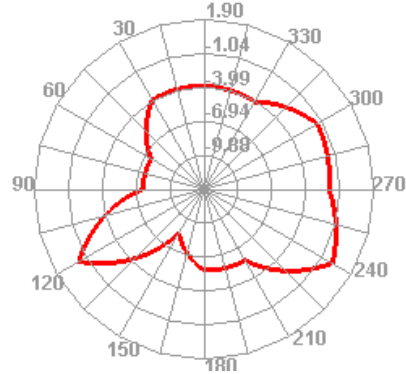
2500.000MHz H



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 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)	VSWR (量产产品 Mass production products) <) <VSWR(设计样品 Design sample)+)+0.5

5. structural drawings

