



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: W765-1B320B-D

W765-1B480B-D

试用水印

Customer: Rakoit			Project: Amplifier		
Frequency channel: 2.4G		Date: 2024.3.7		Version: R:A	
R&D	ME:	Audit:		Approval:	
	TX:	Audit:			
Customer Audit:			Customer approval:		

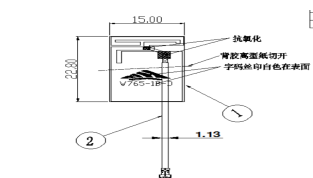
contents

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	5
3-1 Efficiency/Peak Gain- 2.4G.....	5
4. THE PRODUCTION INDEX	错误！未定义书签。
5.STRUCTURAL DRAWINGS	错误！未定义书签。

1. Project information and Electrical Specification

Those specifications were specially defined for 2.4G 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/BT	2400-2500

1-3 Impedance matching

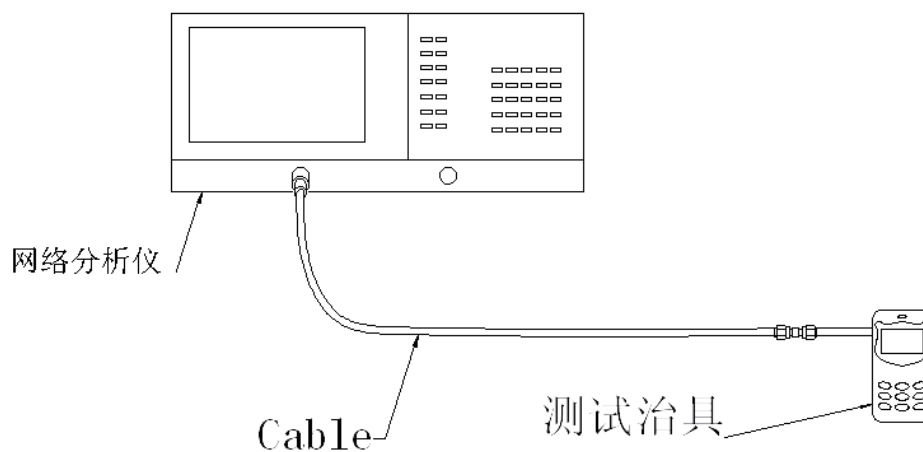
天线原匹配

2.VSWR

2-1 Measuring Method:

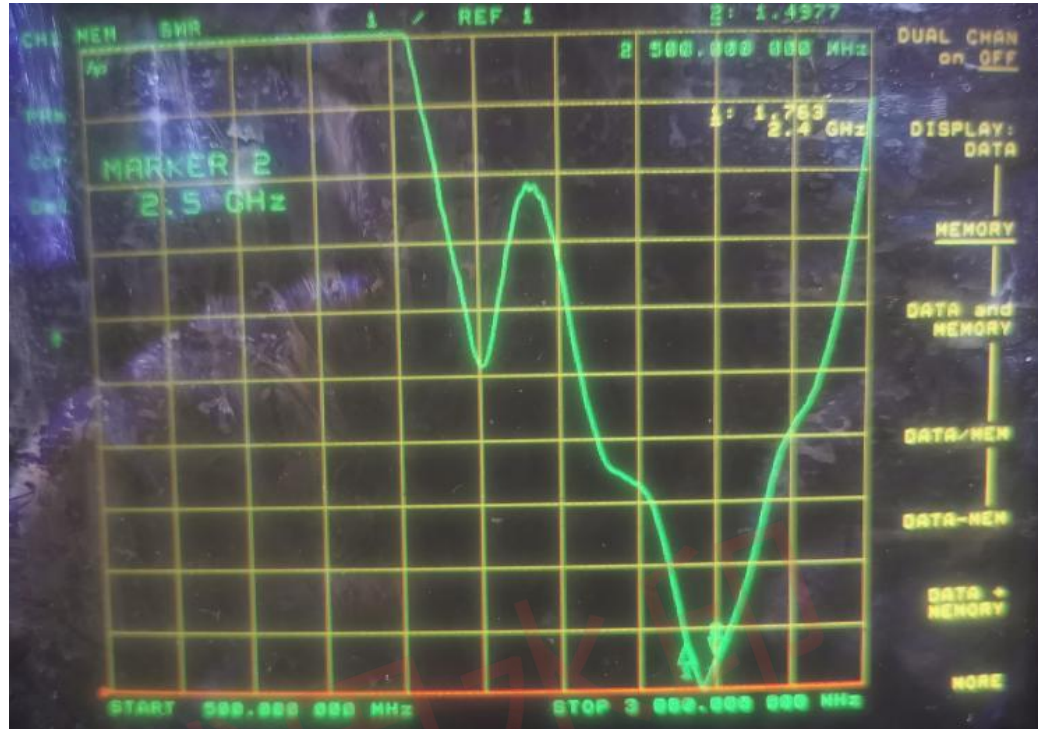
1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

测试示意图如下: Test as below

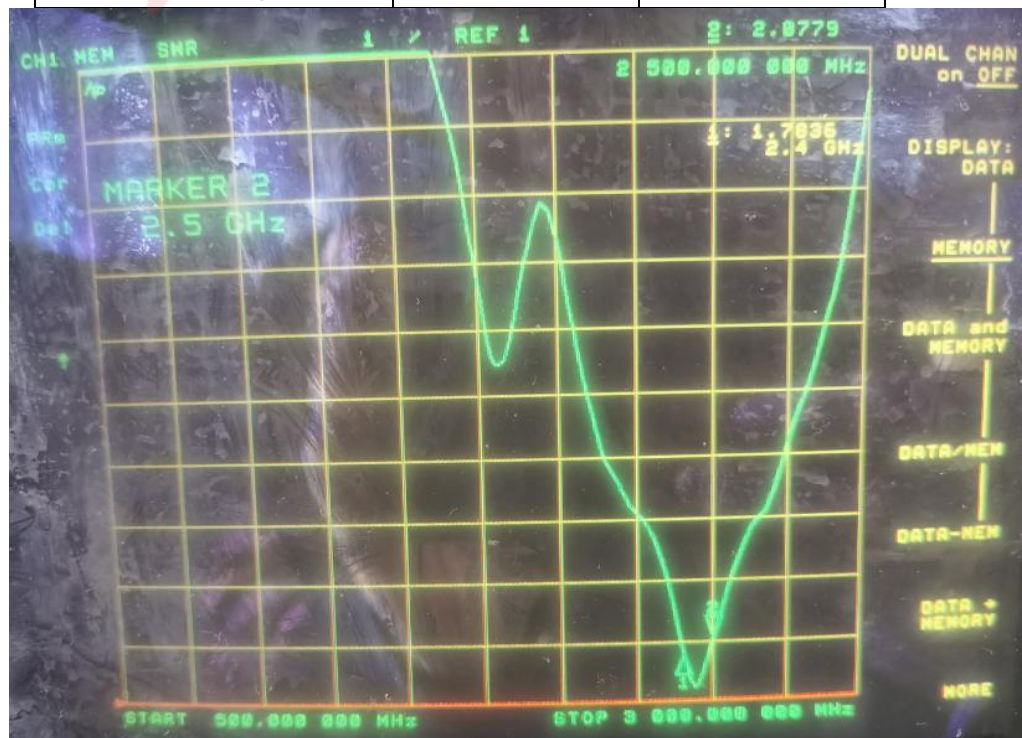


2-2 S11 parameter values

频率 (MHZ)	2400	2500
驻波standing wave	1.76	1.49



频率 (MHZ)	2400	2500
驻波standing wave	1.78	2.0

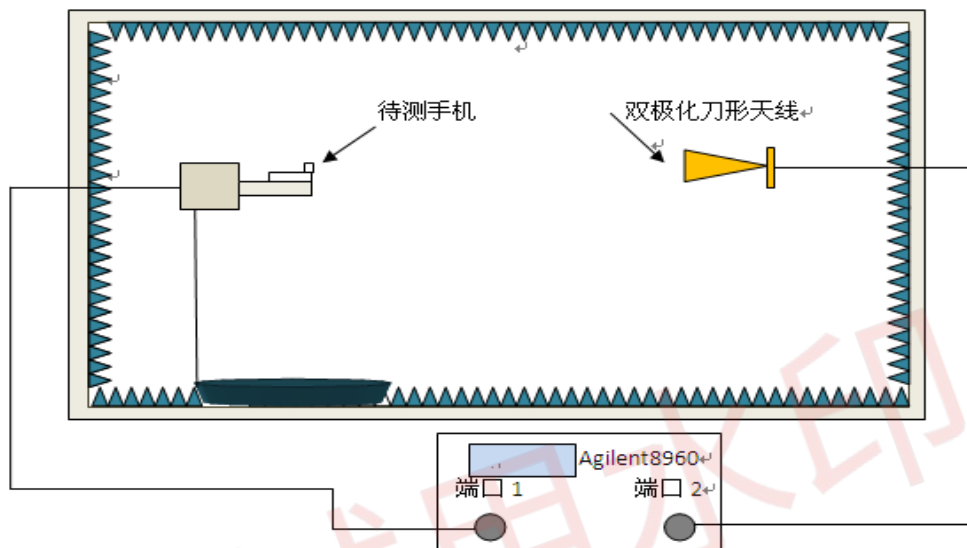


3. Efficiency and Gain measuring and test instruments:

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
Microwave darkroom, Agilent network analyzer, Agilent spectrum analyzer, 8960
comprehensive tester, standard antenna

*test method:

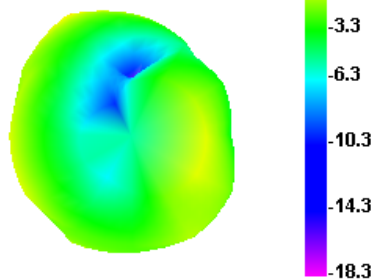
equipment 以 H 面放于转台中心位置固定, 与喇叭天线中心位置在同一个水平线上。
The equipment is fixed at the center position of the turntable on the H-
plane, and is on the same horizontal line as the center position of the
horn antenna.



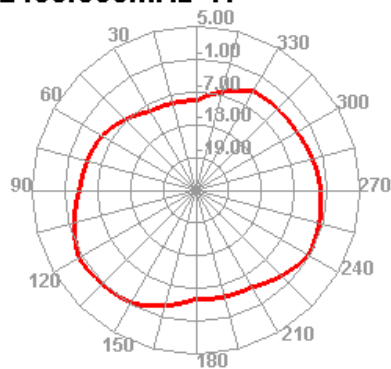
3-1 Efficiency/Peak Gain- WIFI/BT

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

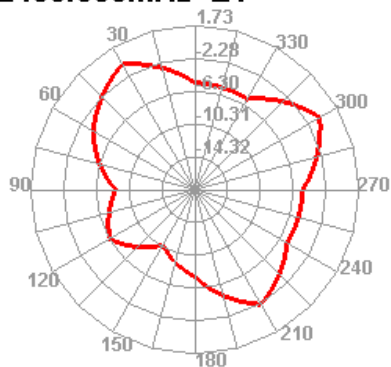
2400.000MHz



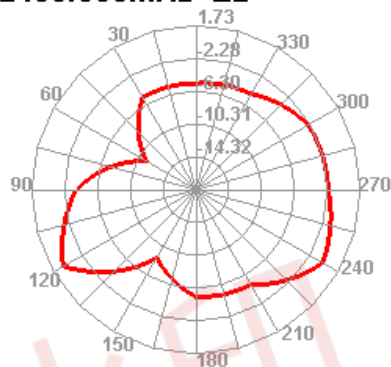
2400.000MHz H



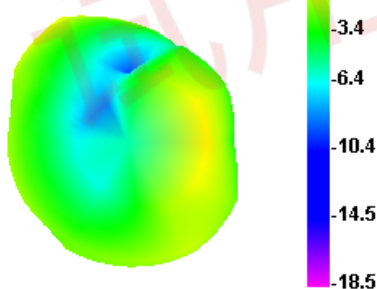
2400.000MHz E1



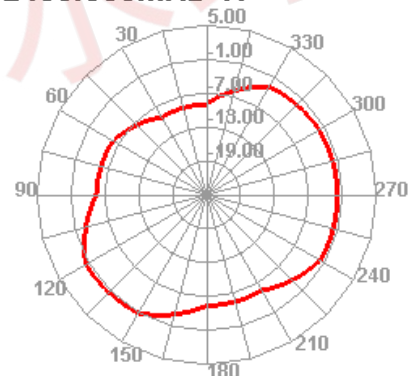
2400.000MHz E2



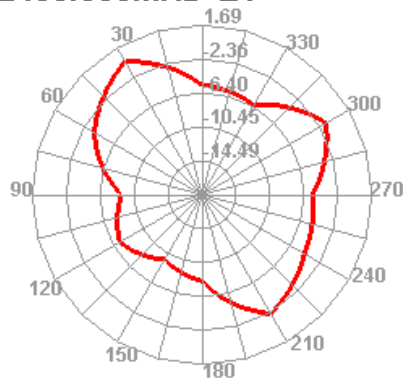
2450.000MHz



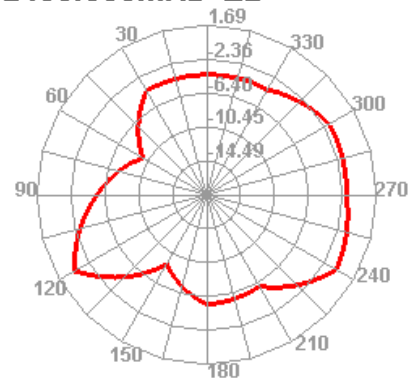
2450.000MHz H

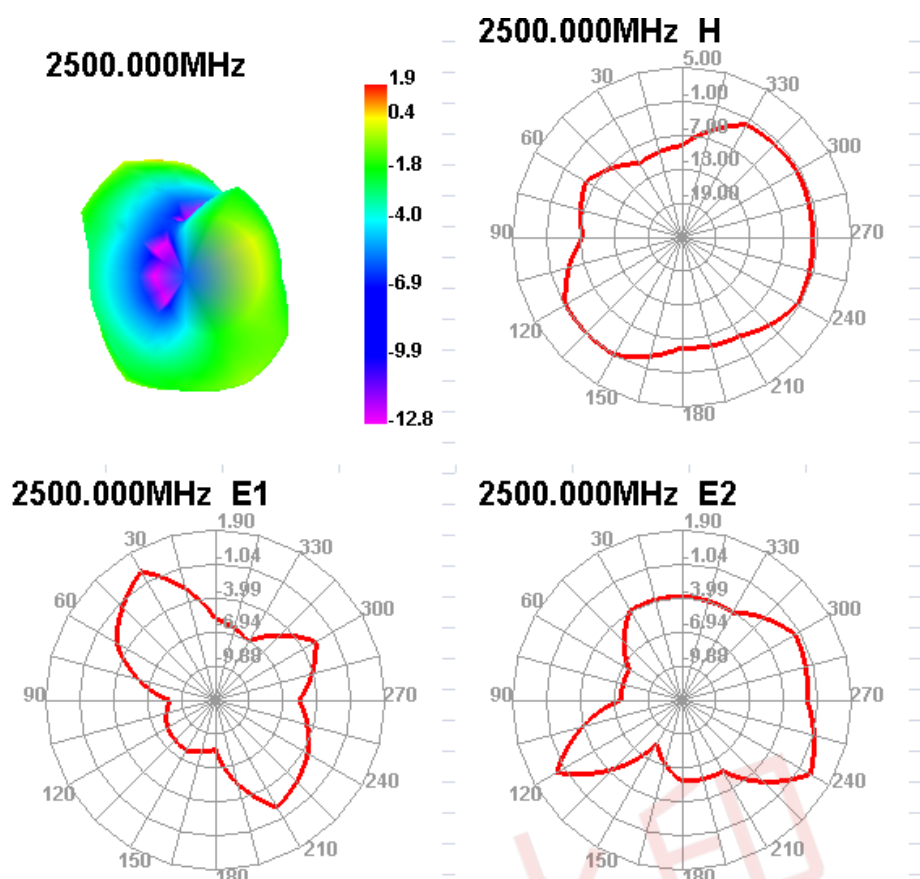


2450.000MHz E1



2450.000MHz E2





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:

When producing antennas, the standing wave ratio is used as the production testing standard.

Based on the differences in the project itself, the following standards are provided:

频率 Frequency	量产标准Mass production standard
WIFI/BT (2400-2500MHZ)	VSWR(MP Products)<VSWR(Design samples)+0.5

5. Structural drawings

