



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: W01-1Y80B-Z4

客户：			项目名： Q8		
频段： WIFI		日期： 2022.11.24		版本： R:A	
研发	结构：	审核：		批准：	
	射频：	审核：			
客户审核：			客户批准：		

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1. Project information and Electrical Specification

Those specifications were specially defined for Q8WIFI 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	2400-2500

1-3 Impedance matching

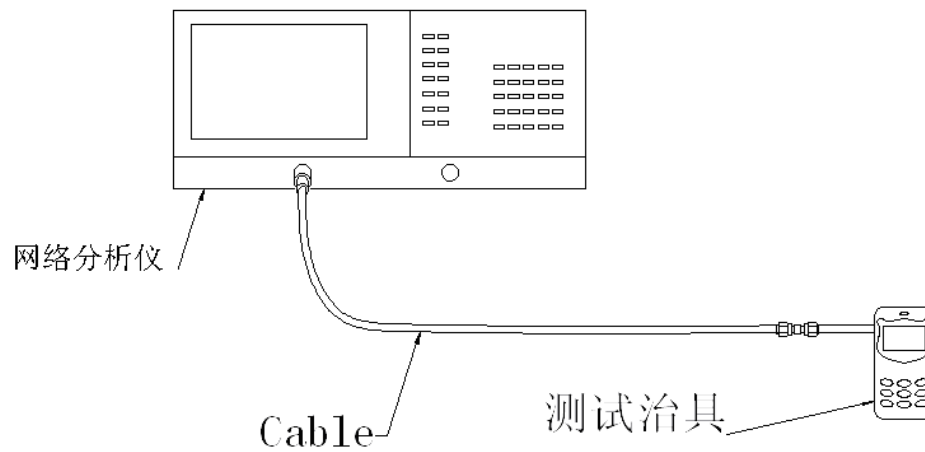
天线原匹配

2.VSWR

2-1 Measuring Method:

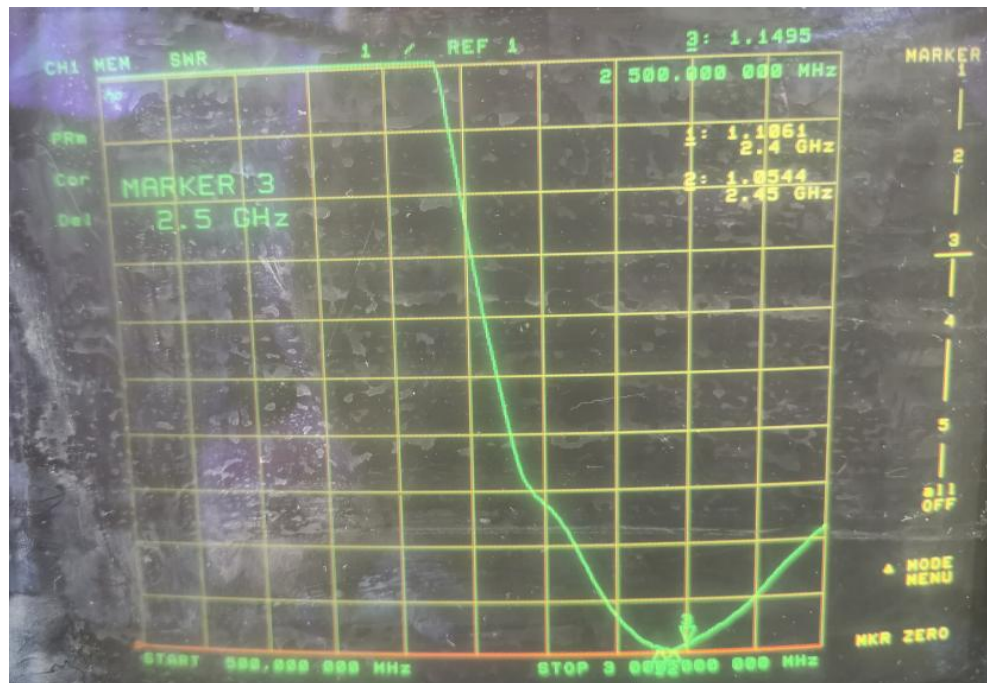
- 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

测试示意图如下:



2-2 S11 parameter values

频率 (MHZ)	2400	2450	2500
VSWR	1.10	1.05	1.14
R. L	-25.95	-31.52	-23.15





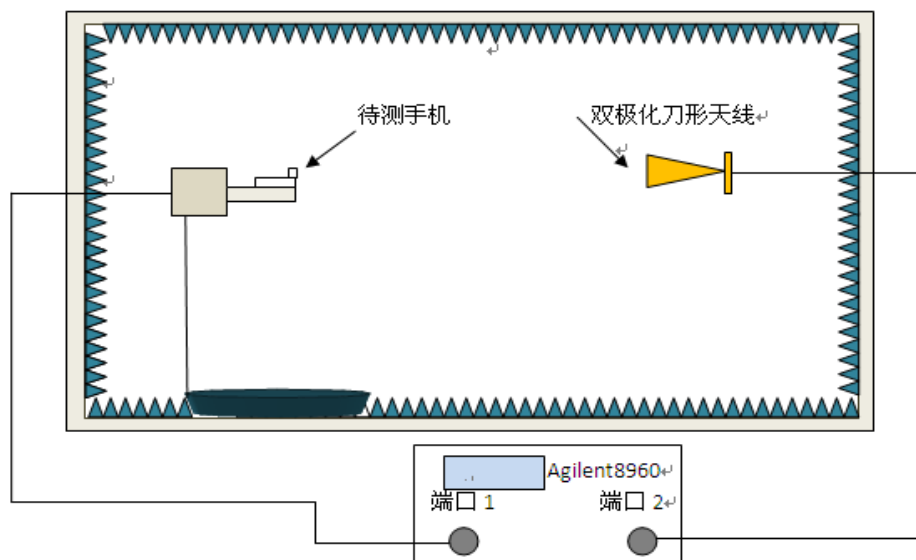
3. Efficiency and Gain

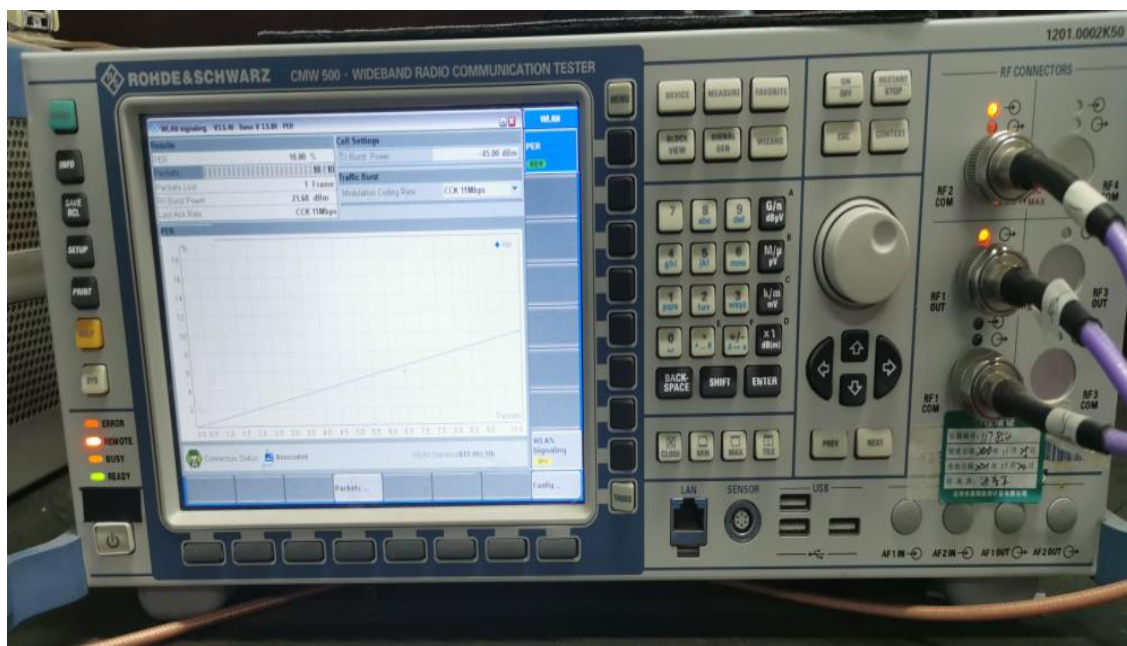
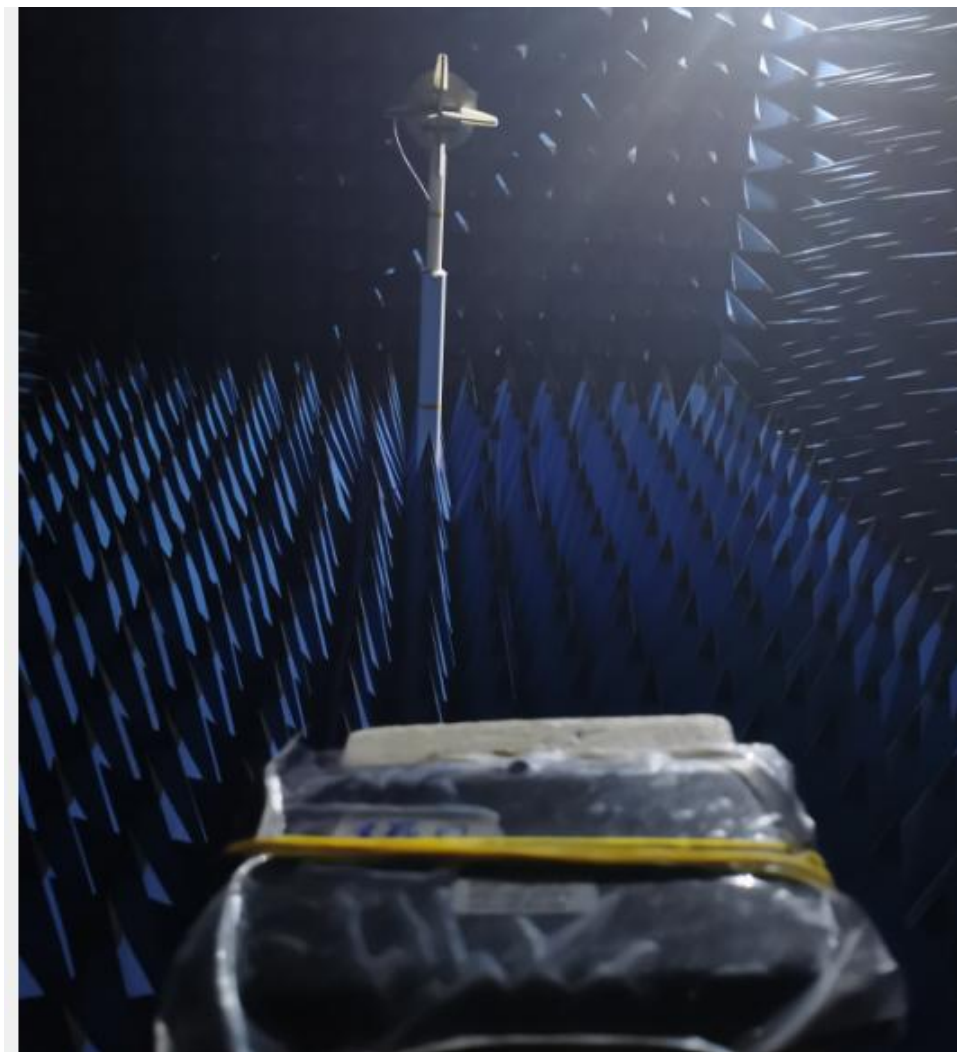
*measuring and test instruments:

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。

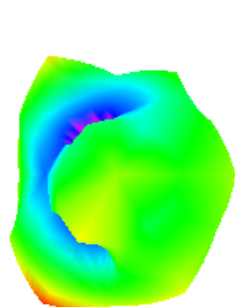




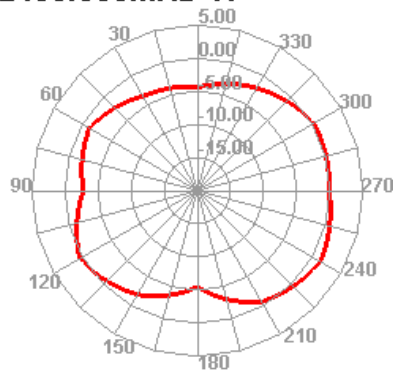
3-1 Efficiency/Peak Gain- WIFI

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	73.28	-1.35	1.59
2410	66.56	-1.77	1.55
2420	71.82	-1.44	1.61
2430	65.79	-1.82	1.65
2440	67.83	-1.69	1.99
2450	68.16	-1.66	2.15
2460	68.81	-1.62	2.16
2470	66.25	-1.79	1.89
2480	70.58	-1.51	2.05
2490	70.85	-1.5	2.22
2500	74	-1.31	2.28

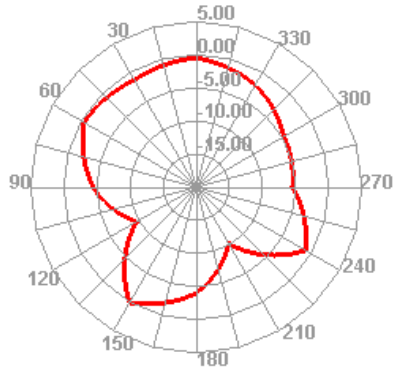
2400.000MHz



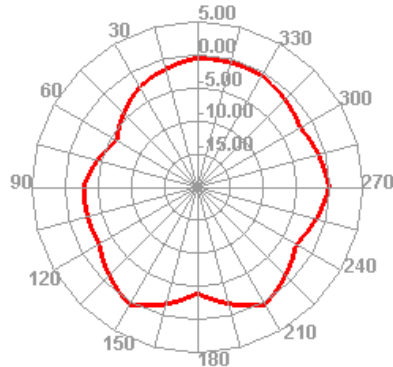
2400.000MHz H



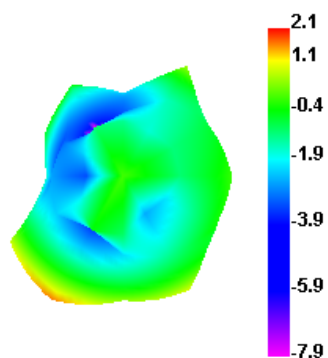
2400.000MHz E1



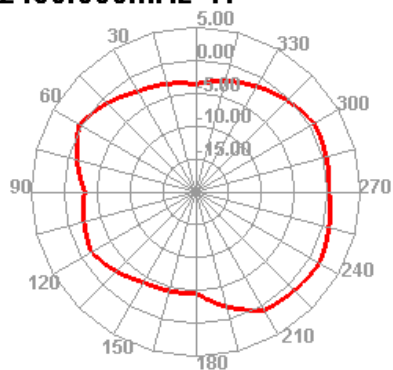
2400.000MHz E2



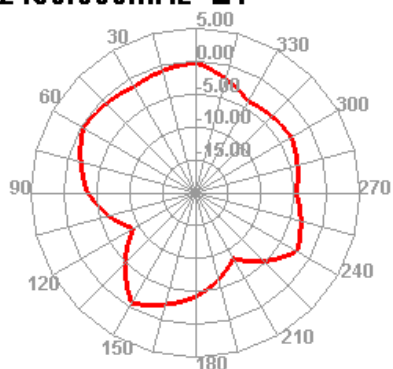
2450.000MHz



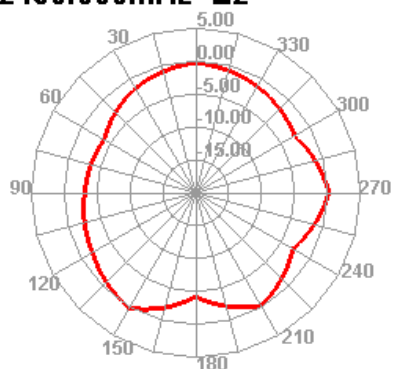
2450.000MHz H



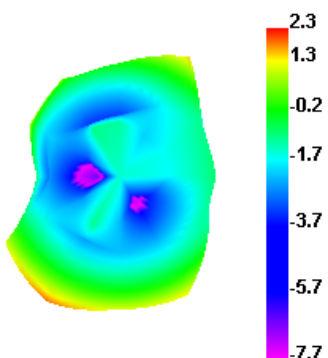
2450.000MHz E1



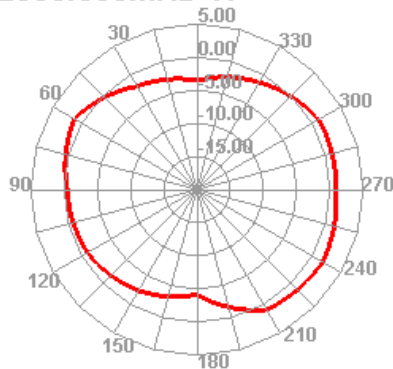
2450.000MHz E2



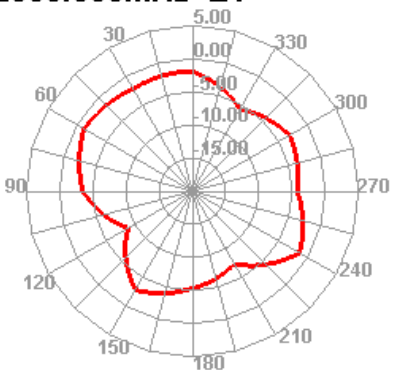
2500.000MHz



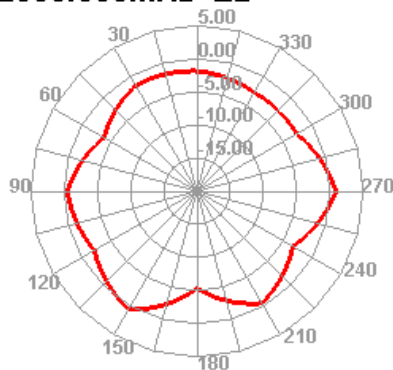
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



WIFI antenna TRP/TIS

b 模 11M

Test	Wifi 2G TRP		
Result	1	6	12
Frequency (MHz)	2412	2437	2467
TRP(dBm)	13.99	14.37	14.27

Test	Wifi 2G TIS		
Result	12	6	1
Frequency (MHz)	2467	2437	2412
TIS(dBm)	-81.61	-81.39	-81.48

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

5. Structural drawings

