



深圳信诺山通信技术有限公司

Shenzhen Signalsen Telecom Technology Co, .Ltd

WIFI Antenna specification sheet

Material No: W574-1B300B-A

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1. Project information and Electrical Specification

Those specifications were specially defined for 2.4G/5G model, and all characteristics were measured under the model's handset testing jig .

1-1Antenna picture



Size: 4.7*0.8CM

1-2 Frequency Band:

Frequency Band	MHz
2.4G/5G	2400-2500/4950-5850

1-3 Impedance matching

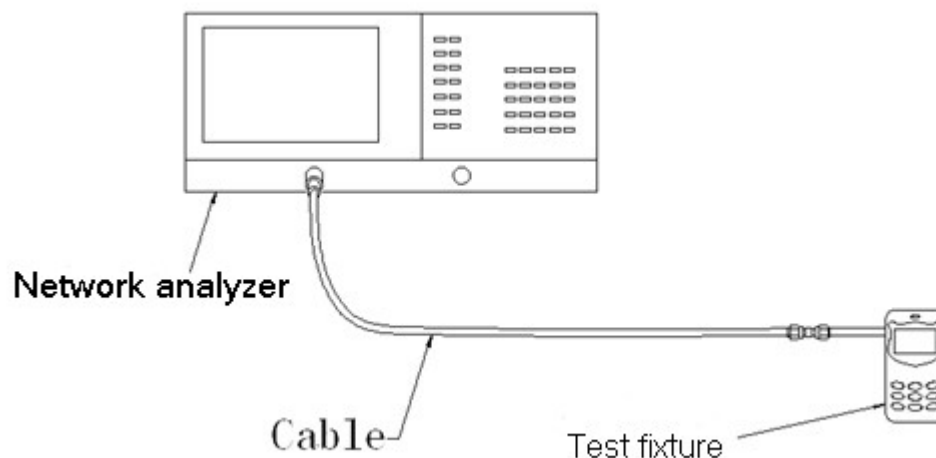
Antenna original matching

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.*

The test schematic is as follows:



2-2 S11 parameter values

Frequency (MHZ)	2400	2500	4950	5400	5850
Standing wave	1.3	1.2	1.78	1.63	1.23



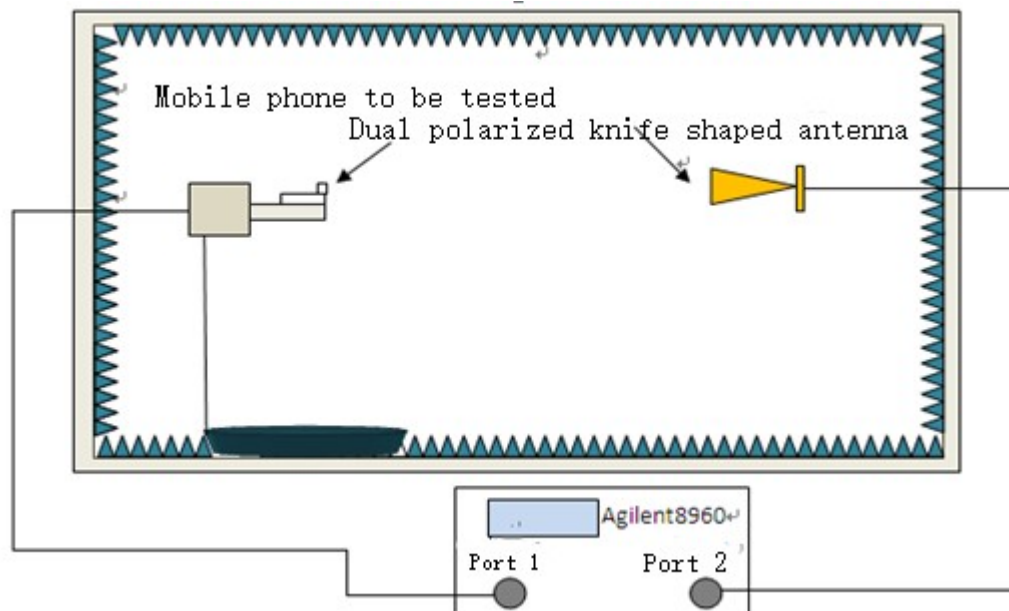
3. Efficiency and Gain

*measuring and test instruments:

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

*test method:

Equipment Fix the H-plane at the center position of the turntable, on the same horizontal line as the center position of the horn antenna.

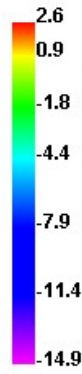
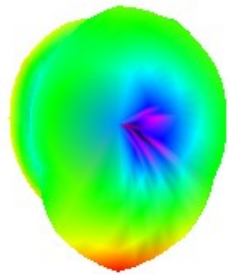


3-1 Efficiency/Gain- WIFI

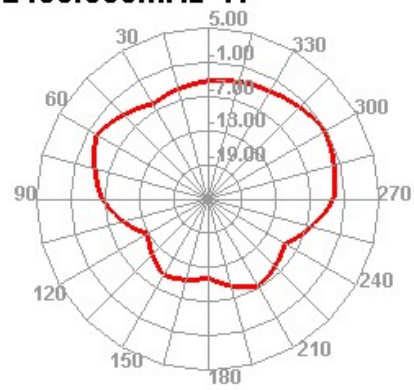
Passive Test For WIFI_BT								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	64.61	-1.9	2.62	0.47	2.62	-14.89	51.03	51.21
2450	59.76	-2.24	2.47	0.32	2.47	-13.7	51.78	51.74
2500	53.62	-2.71	2.2	0.05	2.2	-10.59	51.76	51.66

Passive Test For 5.8								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
4950	53.52	-2.71	2.33	0.18	2.33	-16.16	62.44	62.5
5400	66.72	-1.76	4.64	2.49	4.64	-19.6	63.55	63.99
5850	64.22	-1.92	3.44	1.29	3.44	-11.42	66.35	66.32

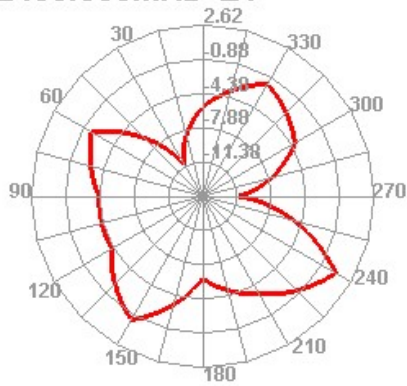
2400.000MHz



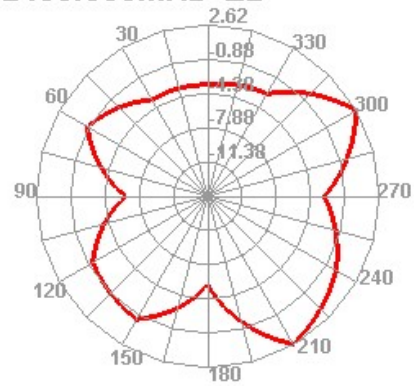
2400.000MHz H



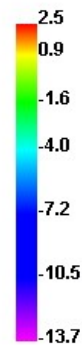
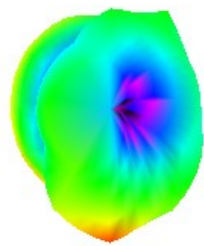
2400.000MHz E1



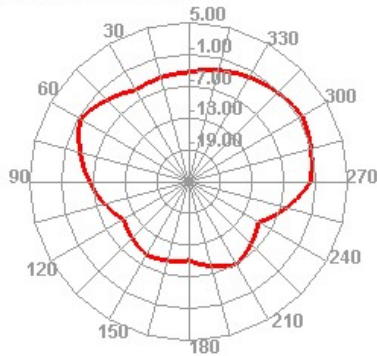
2400.000MHz E2



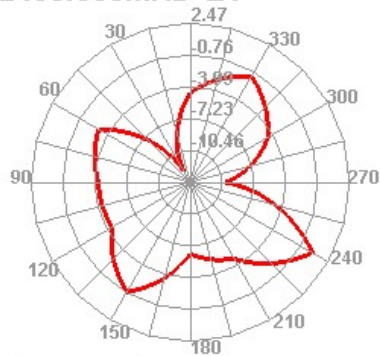
2450.000MHz



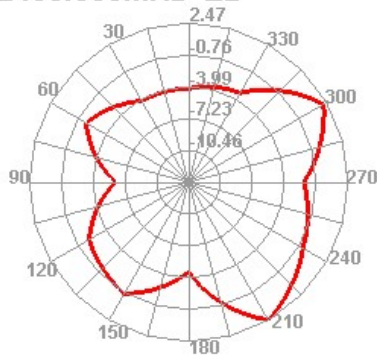
2450.000MHz H



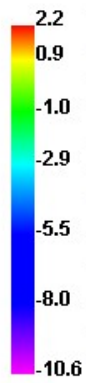
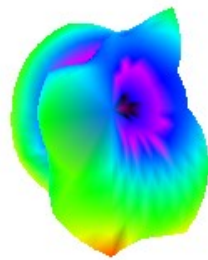
2450.000MHz E1



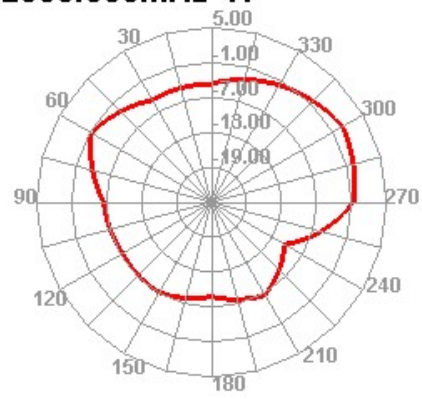
2450.000MHz E2



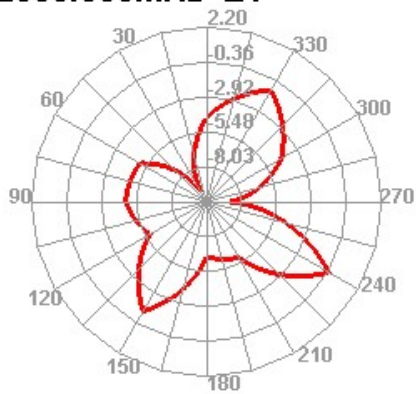
2500.000MHz



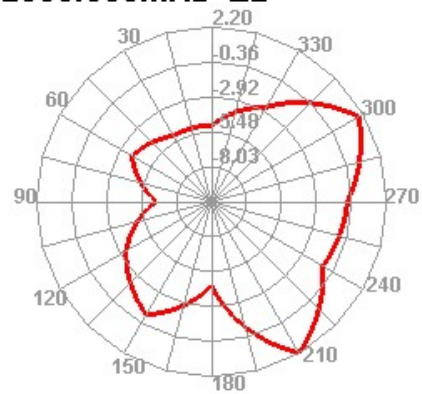
2500.000MHz H



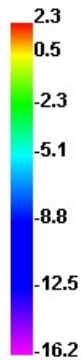
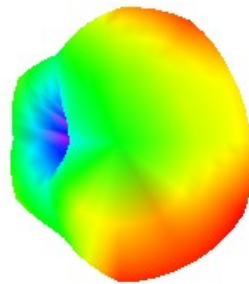
2500.000MHz E1



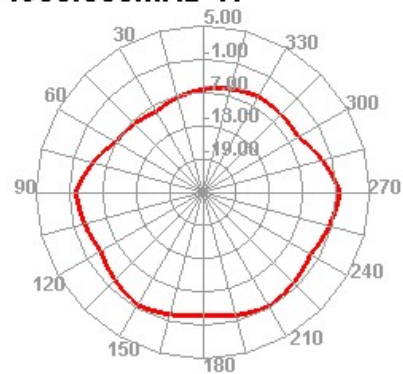
2500.000MHz E2



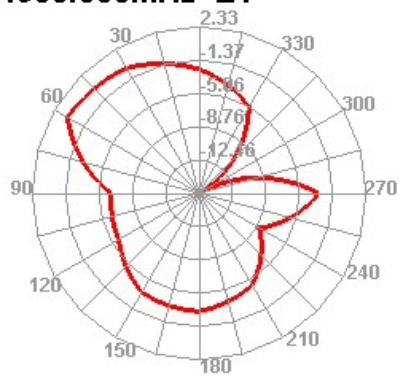
4950.000MHz



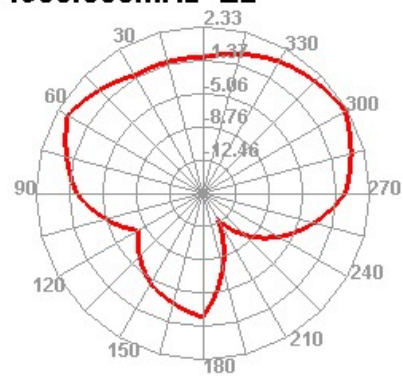
4950.000MHz H



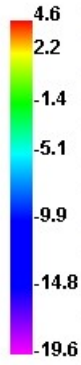
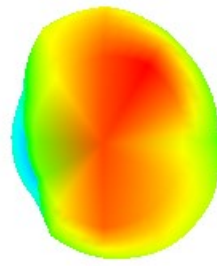
4950.000MHz E1



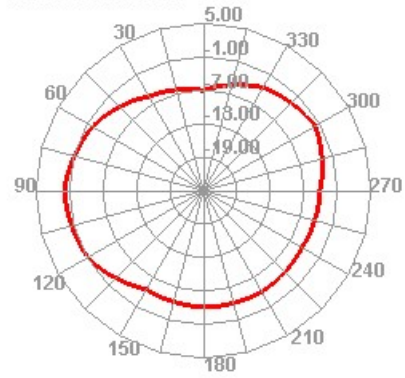
4950.000MHz E2



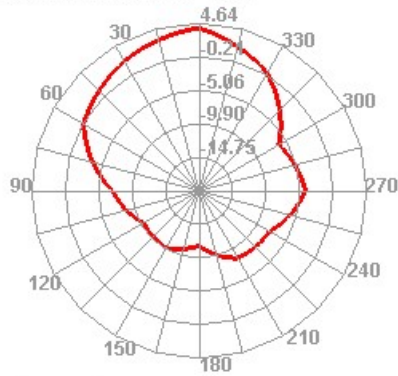
5400.000MHz



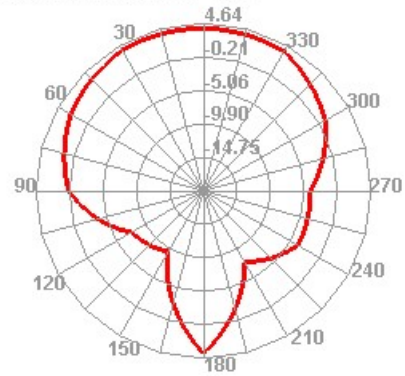
5400.000MHz H



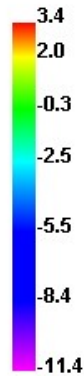
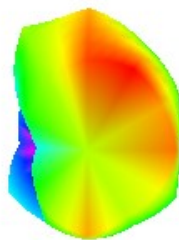
5400.000MHz E1



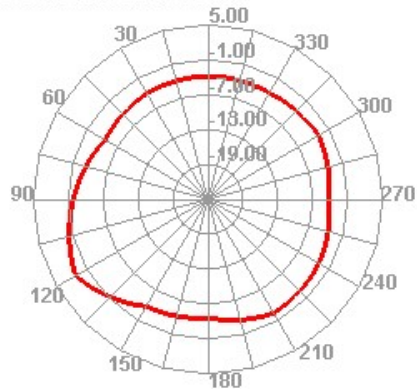
5400.000MHz E2



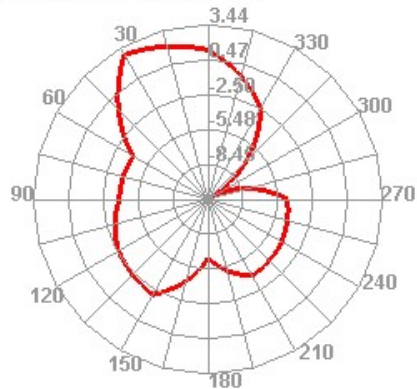
5850.000MHz



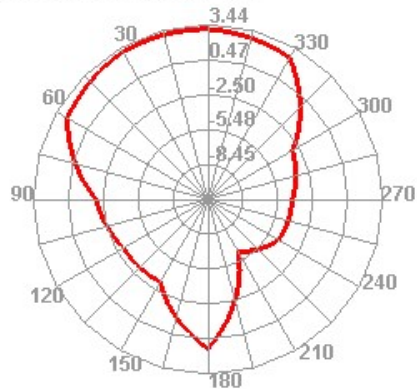
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



4. The production index

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:

frequency	Mass production standards
WIFI (2400-2500Mhz/4950-5850MHZ)	VSWR (Mass production standards) <VSWR(Design samples)+0.5