

Shenzhen Feixun Lianke Electronics Co., Ltd

Acknowledgment Letter

SPECIFICATION

Product Information	Customers
Product Name: WIFI Dual Band Steel Plate Antenna	Customer Name: Anska
Product model: TH1913A-YBT-A	Model used: monitoring
Specification Summary: Steel Sheet (Made of White Copper)	Material code:

Supplier confirmation

proofread	examine and verify	ratify
Huang Zhixiong	Yu Guanghui	Dong-xiao zhang

The buyer confirms

proofread	Examine and verify	ratify
conclusion:		

Company address: 5th floor, Building A2, Jin Xiangfu Industrial Park,
Xixiang, Baoan, Shenzhen

Company tel.: 0755-32936320
Contact person: Yu Guanghui

URL: www.feixunlianke.com/

Company Fax: 0755-32936320
Contact number: 13715357616

E-mail: ygh7616@163.COM

Catalogue

Index

1. Description of the antenna.....	1
2. Electrical characteristics of the antenna.....	2
3. Antenna test equipment.....	3
4. Picture of real products.....	4
5.The antenna performance test report.....	5-8
6. Antenna size diagram.....	9

1. Description of the antenna

The antenna is specially designed for the 2.4G / 5G industrial frequency band. Mainly used in WLAN B / G / N / A, Bluetooth, Zigbee. Provide high performance throughput as well as high performance of long-distance signal transmission.

feat

The 2.4G / 5G antenna has the following characteristics:

- Meet the B / G / N / A criteria
- -5.51 dBi Peak Gain @2.49 GHz
- -8.49 dBi Peak Gain @5.7 GHz

Easy to integrate and install

applicati

- Wireless LAN
- ISM Band 2.4G, for wireless applications
- ISM Band 5.8G, for wireless applications

Antenna type : Bipolar antenna

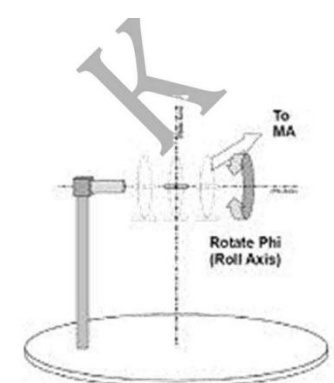
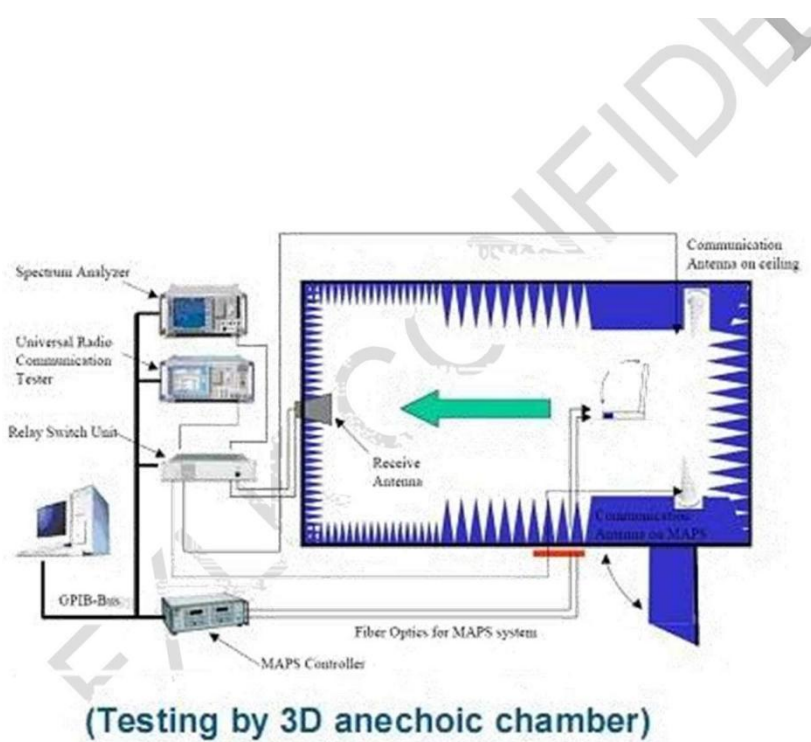
Antenna manufacturer: Shenzhen Feixun Lianke Electronics Co., Ltd

2. Electrical characteristic of the antenna

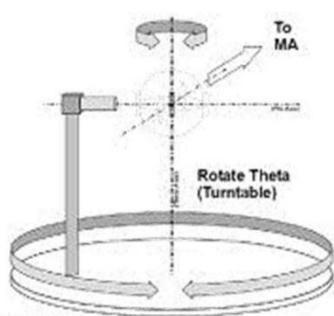
Item	Specification
Frequency Range Frequency range	2.4 GHz ~ 2.5GHz / 5 GHz ~ 5.8GHz
Peak Gain Gain	<u>-5.51dBi @ 2.49GHz / -8.49dBi @ 5.7GHz</u>
VSWR standing-wave ratio	2max.
Polarization Polarization mode	Linear
Feed Impedance Impedance	50Ω
Power handling Maximum input power	30dbm
Operation Temperature	-40°C ~ +85°C

3. Antenna test equipment

- network analyzer:
Agilent 8753ES 5071C
- RF Test
Equipment: CMW500
- Dark room



Phi axis test



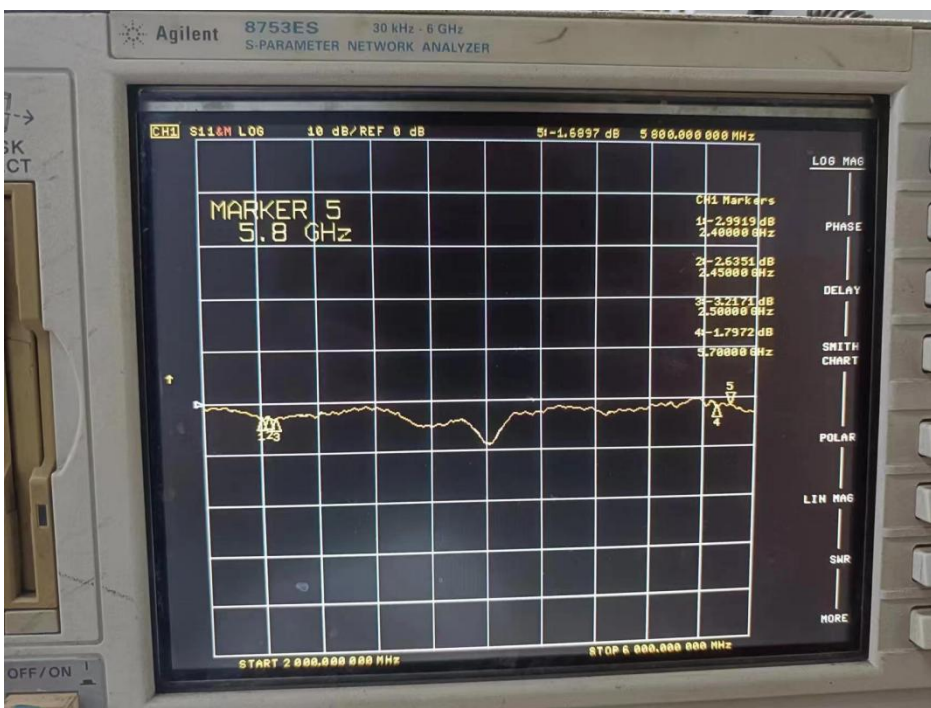
Theta axis test

4.picture of real products:



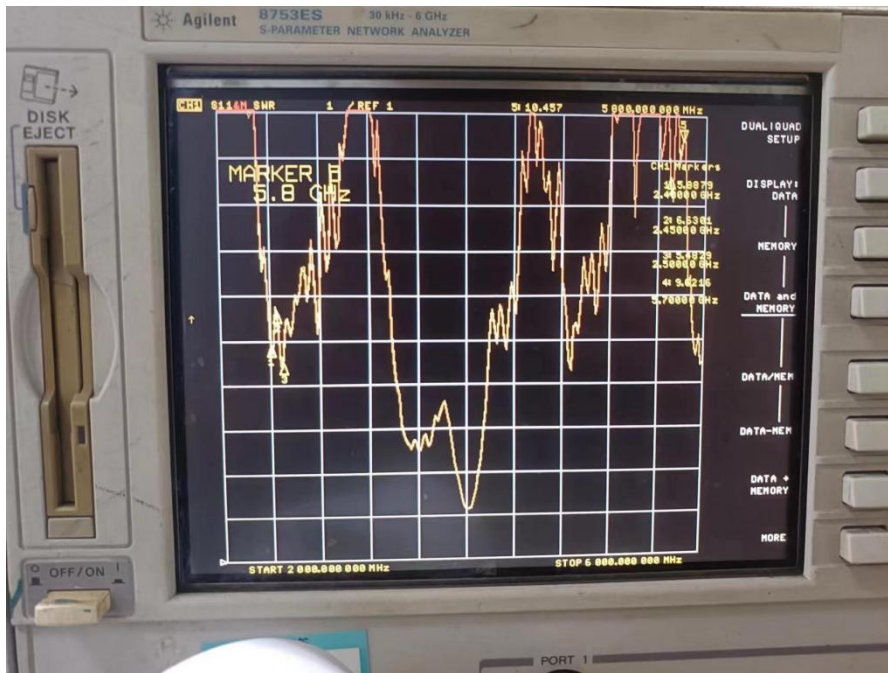
5. The antenna performance test report

- Passive test S11 Return Loss The following image:



S11 RETRUN LOSS	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
dB	-2.99	-2.63	-3.21	-1.79	-1.68

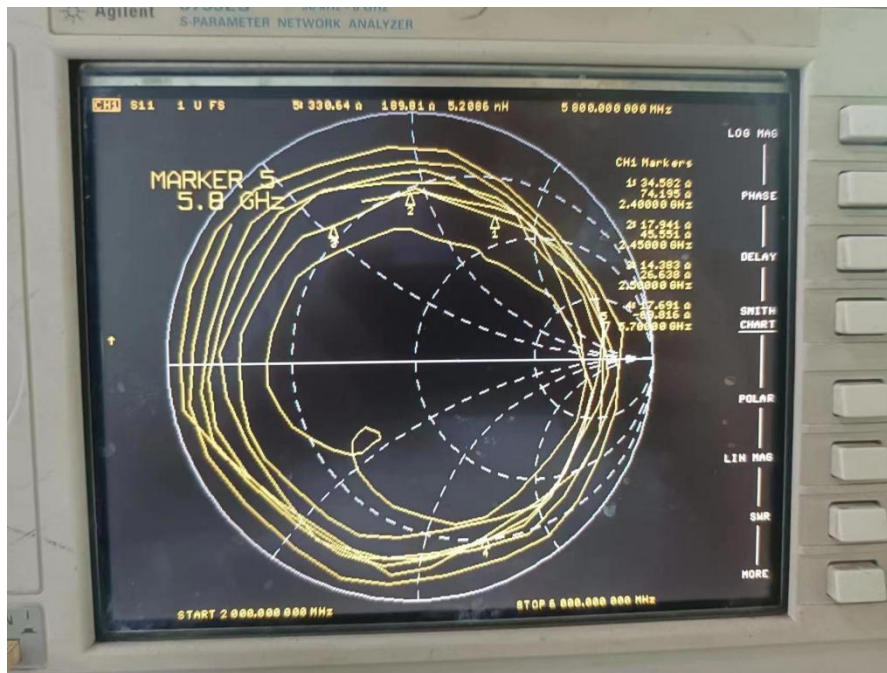
- The following image of the passive test VSWR test:



Frequency (MHz)	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
VSWR	5.88	6.63	5.48	9.62	10.45

F

- The Smith Chart test is shown in the following image:



Frequency (MHz)	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
	34.58	17.94	14.38	17.69	30.64

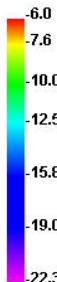
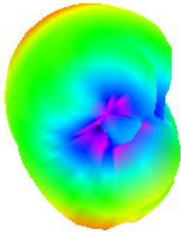
Radiation testing efficiency and gain:

Freq (MHz)	Effi (%)	Gain (dBi)
2400	8.89	-5.96
2410	8.98	-5.76
2420	8.34	-6.02
2430	8.16	-6.13
2440	6.79	-6.8
2450	8.69	-5.63
2460	8.79	-5.59
2470	7.15	-6.39
2480	7.8	-5.95
2490	8.52	-5.51
2500	8.42	-5.66

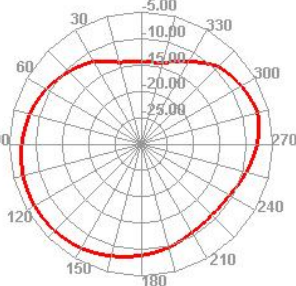
Freq (MHz)	Effi (%)	Gain (dBi)
5700	3.35	-8.49
5710	3.14	-9.02
5720	3.32	-8.85
5730	2.94	-9.62
5740	3.82	-8.65
5750	3.41	-9.33
5760	2.83	-10.13
5770	2.88	-9.96
5780	3.46	-8.97
5790	3.1	-9.44
5800	3.14	-9.36

Antenna radiation 2D&3D diagram:

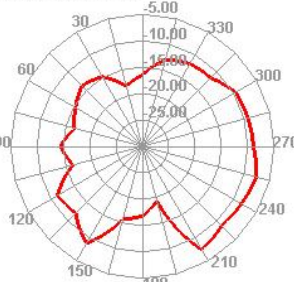
2400.000MHz



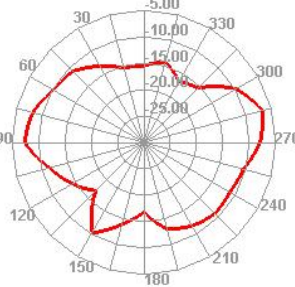
2400.000MHz H



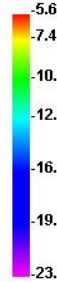
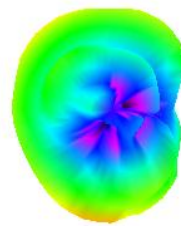
2400.000MHz E1



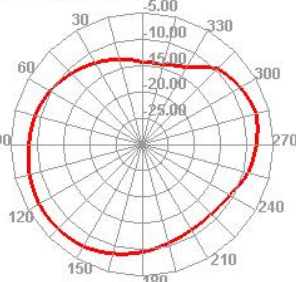
2400.000MHz E2



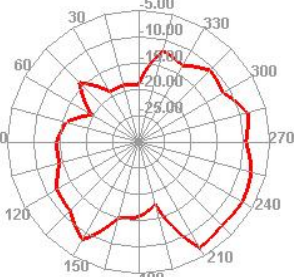
2450.000MHz



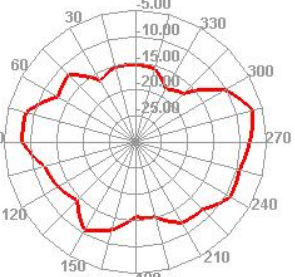
2450.000MHz H



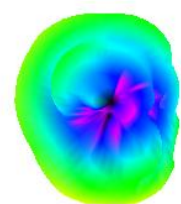
2450.000MHz E1



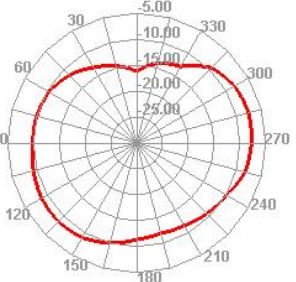
2450.000MHz E2



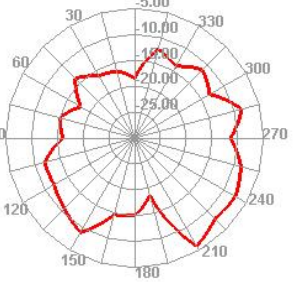
2500.000MHz



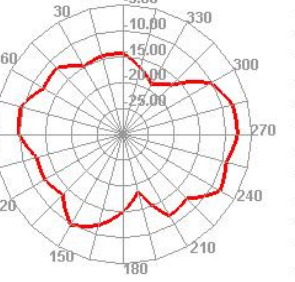
2500.000MHz H



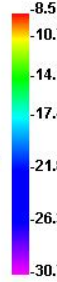
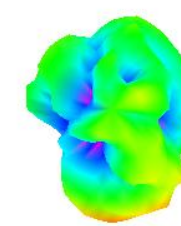
2500.000MHz E1



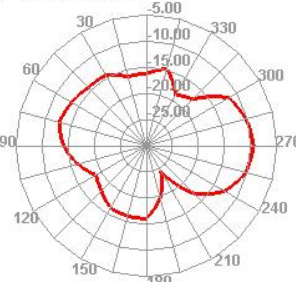
2500.000MHz E2



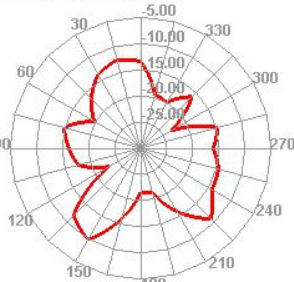
5700.000MHz



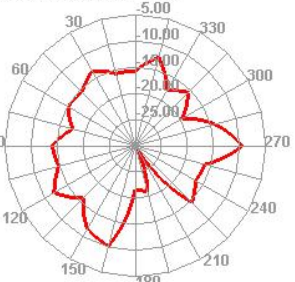
5700.000MHz H



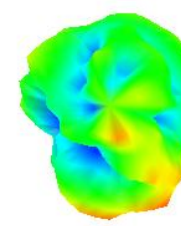
5700.000MHz E1



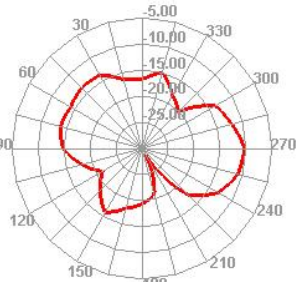
5700.000MHz E2



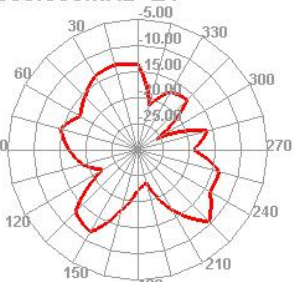
5800.000MHz



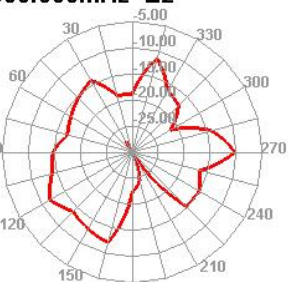
5800.000MHz H



5800.000MHz E1



5800.000MHz E2



6. Antenna size drawings:

