

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:		

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Catalogue

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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

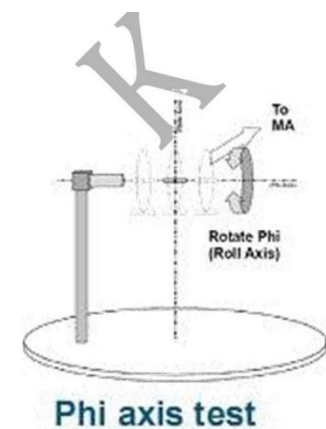
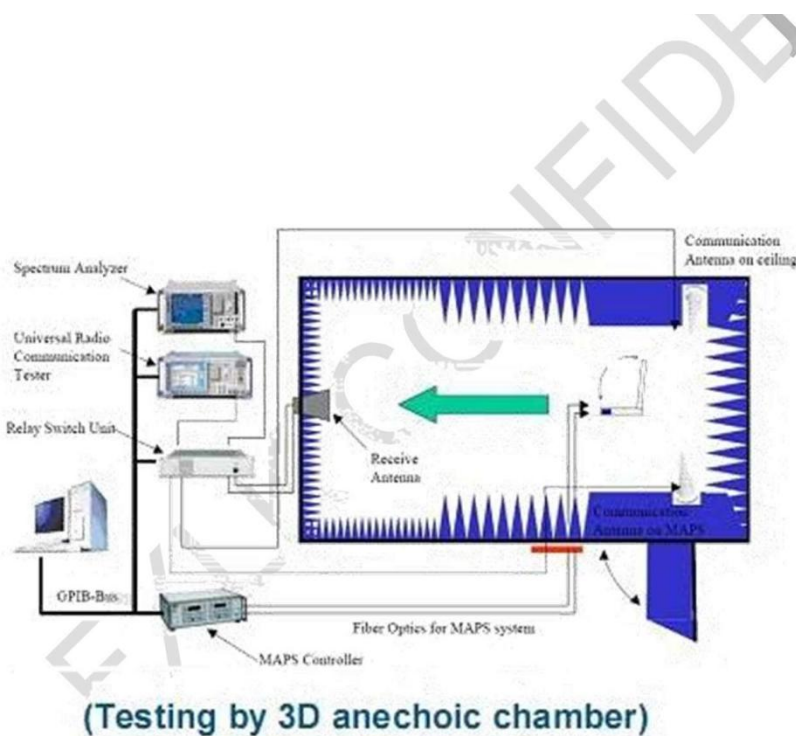
Antenna manufacturer: Shenzhen Feixun Lianke Electronics Co., Ltd

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

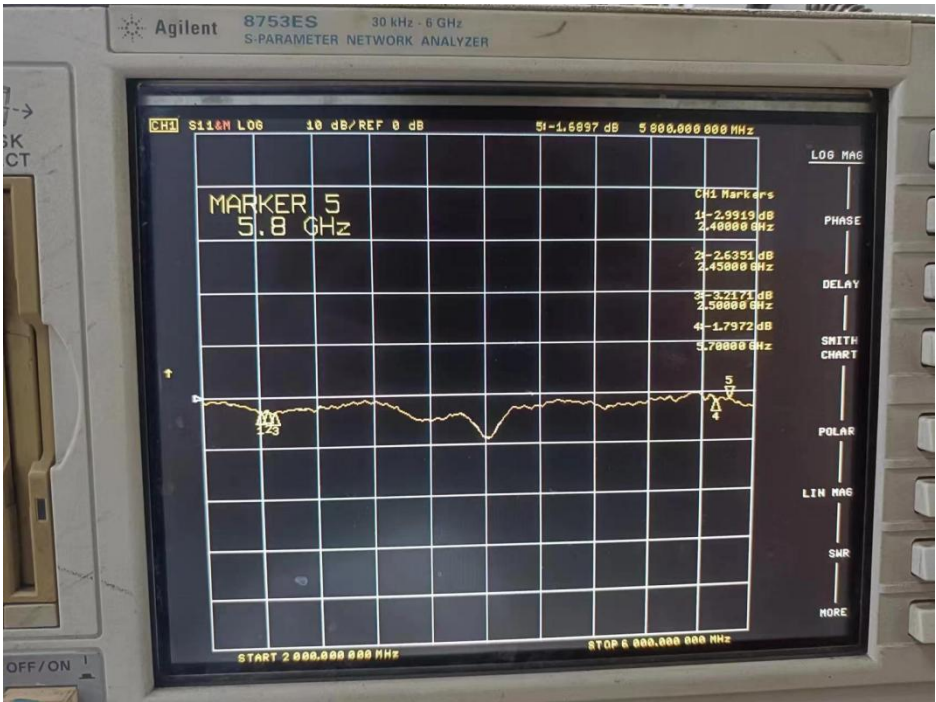


4.picture of real products:



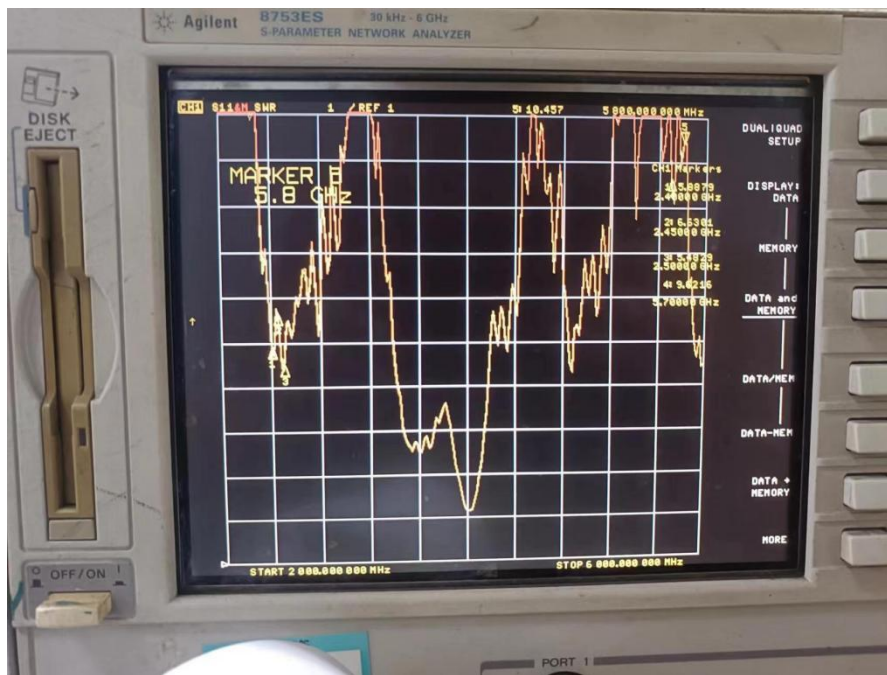
5. The antenna performance test report

- Passive test S11 Return Loss The following image:



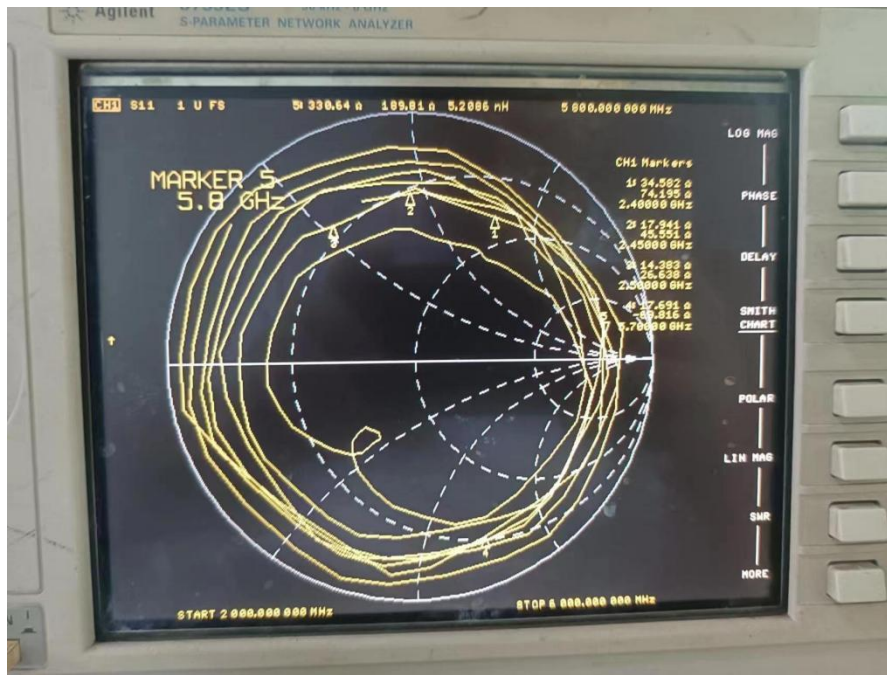
S11 RETRUN LOSS	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
dB	-2.99	-2.63	-3.21	-1.79	-1.68

- 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

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



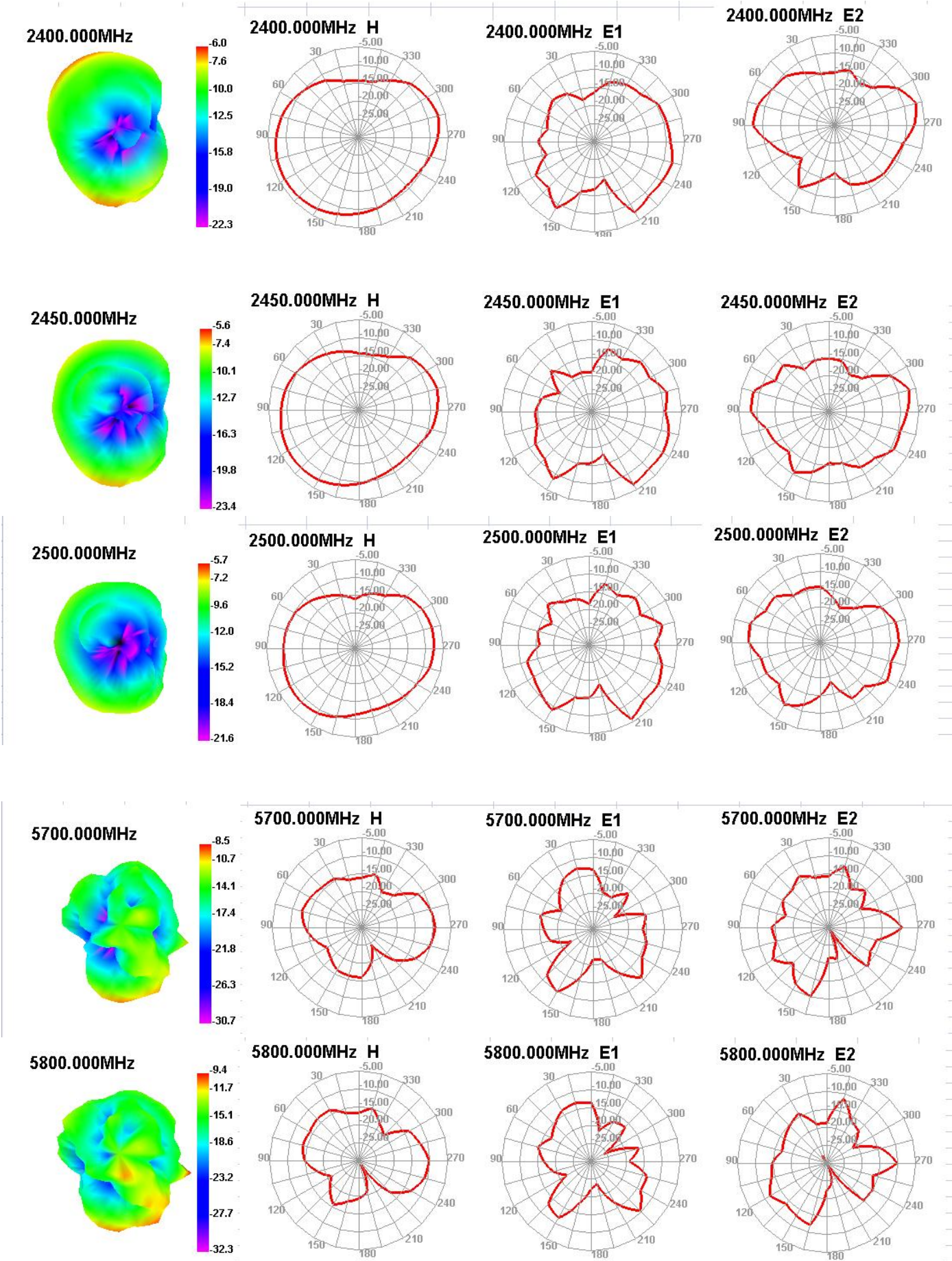
Frequency (MHz)	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
	34.58	17.94	14.38	17.69	30.64

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:



6. Antenna size drawings:

