



Shenzhen Feixunlianke Electronics Co., Ltd.

SPECIFICATION

Product information
Product name: WIFI antenna (PCB)
Product model:FXLK-PBCL111V1-IX1-110-A
Specification summary: PCB board is CL111V1, wire is 1.13 wire diameter, gray, wire length is 11mm, solder FPC end ratio: 1:2:2, client is a first-generation terminal.

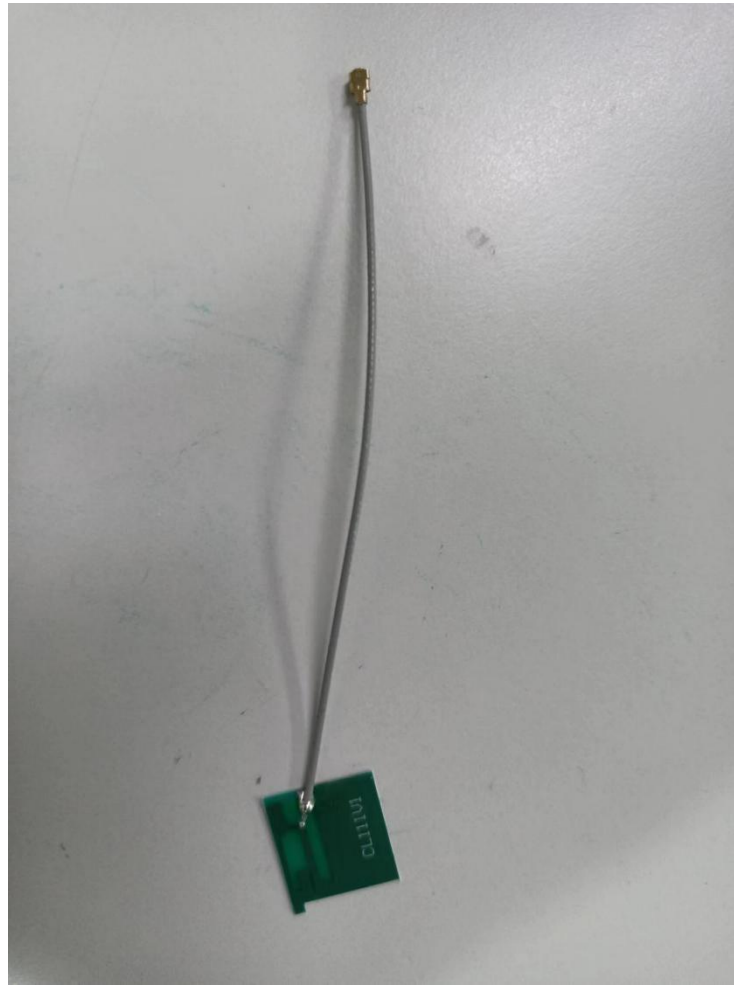
Company Address: 5th Floor, Building A2, Jiuwei Jinxianfu Industrial Park, Xixiang, Bao'an, Shenzhen
Company Phone: 0755-32936320 Company Fax: 0755-3293632
Contact Person: Yu Guanghui Contact Phone: 13715357616 Website: www.feixunlian.com/ E-mail: ygh7616@163.COM



Shenzhen Feixunlianke Electronics Co., Ltd.

2.4GHz&5GHz ISM Band Frequency

Antenna photo:





Descriptions

This antenna is designed for 2.4G&5G ISM Band. Both of wireless LAN IEEE 802.11b/g/n/A ,Bluetooth and Zigbee .This Antenna provides a high Efficiency and good performance

Following features:

- ◆ IEEE 802.11 b/g/n/A standards
- ◆ Single Band working
- ◆ -1.16dBi peak gain @2.45GHz
- ◆ 1.81dBi peak gain @5.8GHz
- ◆ Case mount
- ◆ Easy integration

Applications

- ◆ Wireless LAN
- ◆ ISM band 2.4&5GHz wireless applications
- ◆ BlueTooth
- ◆ Zigbee



Electrical Specifications

Item	Specification
Frequency Range	2.4 GHz ~ 2.5GHz, 5 GHz ~ 5.8GHz
Peak Gain	-1.16dBi @ 2.45GHz, 1.81dBi @ 5.8GHz
VSWR	2 max.
Polarization	Linear
Feed Impedance	50Ω
Power handling	30dbm
Operation Temperature	-40°C ~ +85°C



Antenna Test Environment;

1. Network Analysis:

Agilent 8753ES

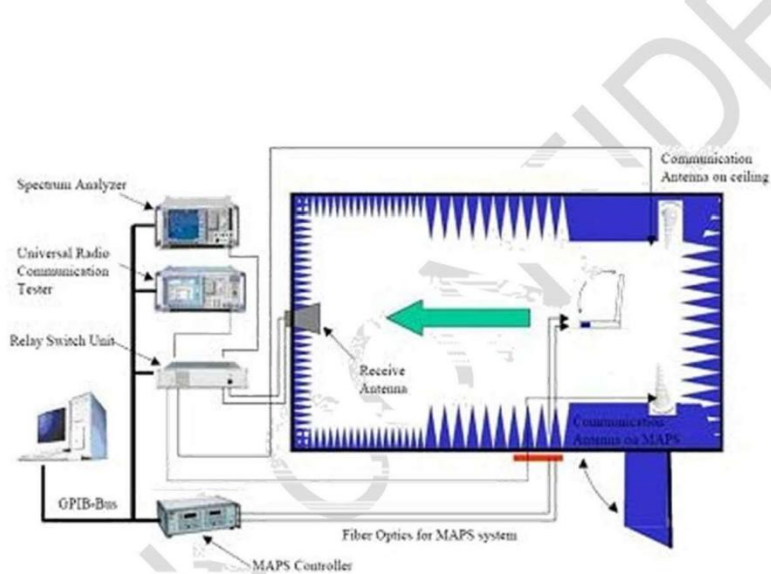
5071C

2. RF Test Equipment:

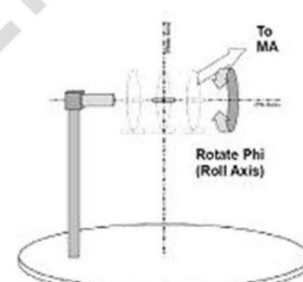
Agilent 8960

CMW500

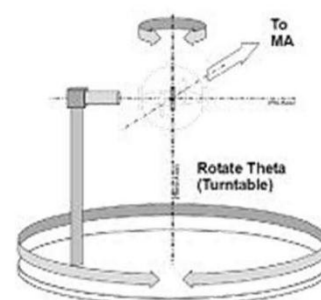
3. Shielding Rom Test Environment:



(Testing by 3D anechoic chamber)

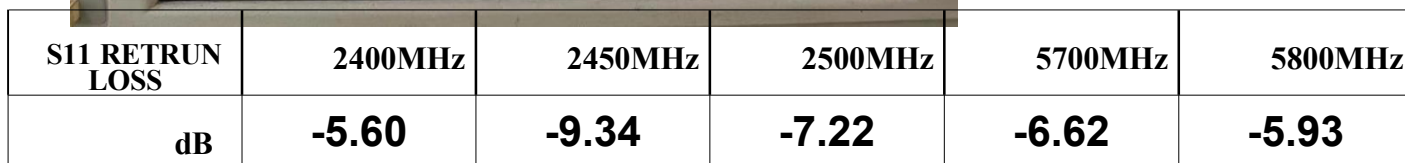


Phi axis test

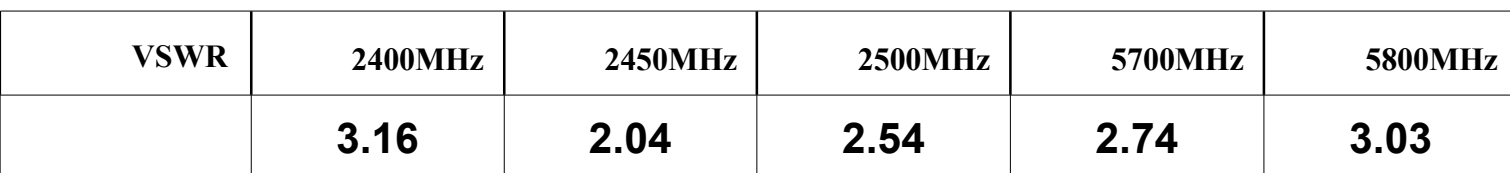


Theta axis test

Conduction test S11 Return Loss As shown in the picture:

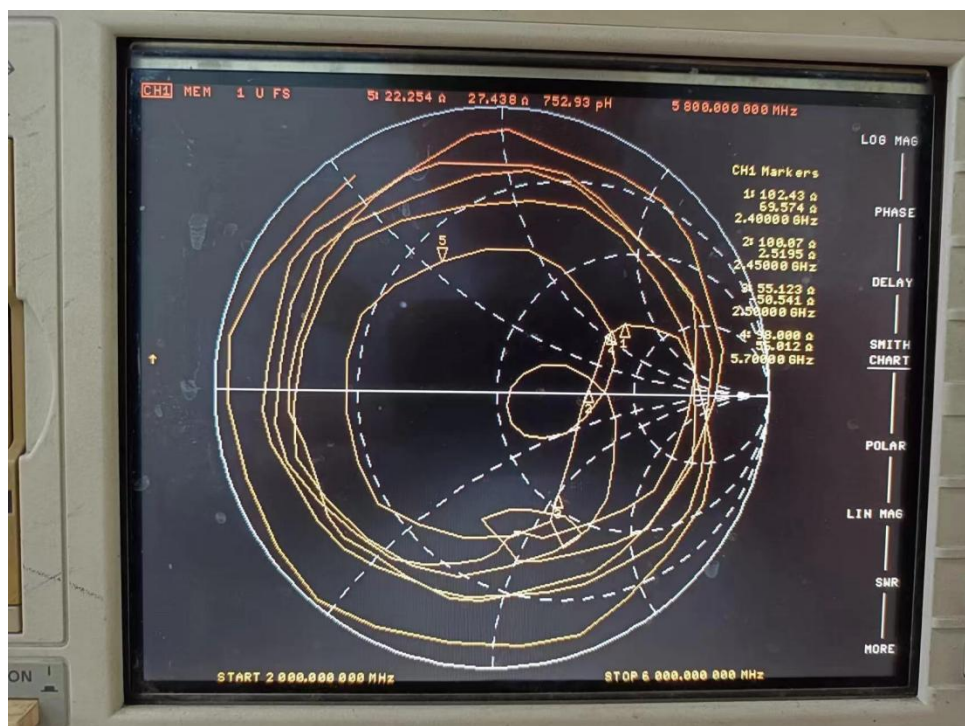


Conduction test S11 VSWR test as shown in the following picture:





Conductive test Smith Chart test as shown in the following picture:



IMPADANC E	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
OHM	102.4	100.0	55.12	38.00	22.25

Antenna Gain and Efficiency Test Results

2.4G&5G Gain and Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	25	-1.21
2410	23.91	-1.75
2420	24.86	-2.05
2430	28.25	-1.45
2440	32.82	-0.69
2450	28.81	-1.16
2460	33.96	-0.37
2470	37.13	0.07
2480	38.41	0.21
2490	41.82	0.58
2500	43.51	0.9

Freq (MHz)	Effi (%)	Gain (dBi)
5050	46.26	1.62
5100	46.61	1.29
5150	47.28	1.26
5200	48.22	1.81
5250	43.19	1.29
5300	42.44	1.24
5350	41.11	1.15
5400	47.02	1.69
5450	45.41	1.24
5500	44.8	1.52
5600	44.27	1.15



Freq (MHz)	Effi (%)	Gain (dBi)
5700	40.78	1.3
5710	42.72	1.44
5720	45.91	1.32
5730	41.13	1.4
5740	44.85	1.45
5750	42.25	1.66
5760	49.98	1.55
5770	44.62	1.63
5780	43.66	1.68
5790	43.99	1.73
5800	41.54	1.81
5810	42.66	1.59
5820	43.66	1.64
5830	42.89	1.74

The Feed Cable Parameter

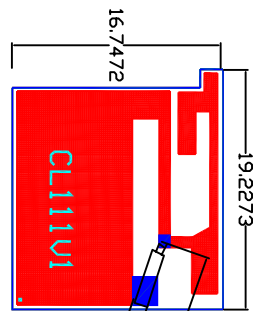
Electrical characteristics

Item	Standard value	Item	Frequency	standard Value Unit: dB/m
Capacitance(pF/m)	98	Attenuation	1GHz	≤2.2
Velocity(%)	70		2GHz	≤3.1
Impedance(Ω)	50±2		3GHz	≤3.8
Standing wave ratio	≤1.3@0~6GHz		4GHz	≤4.4
Max.operating voltage(V)	1000		5GHz	≤4.9
Max.operating frequency(GHz)	6		6GHz	≤5.4

ITEM	Unit	Standard value
Min.bending radius static	mm	/
Operating temperature	°C	-40°C ~ +85°C

Antenna drawing:

unit: mm



IPEX1 plug terminal