深圳市飞讯联科电子有限公司

Shenzhen Feixunlianke Electronics Co.Ltd

SPECIFCATION

产品资料 Product Information	客户资料 Customer Information
产品名称:WIFI双频天线 Product Name:WIFI Dual Band Antenna	客户名称:好创意 Customer Name: Haochuangyi
产品型号:FXLK-FP4710A-IX1-090-2.4G&5G Model No.:FXLK-FP4710A-IX1-090-2.4G&5G	使用机型: H96 Max Used Model.
规格摘要:FPC软板为FXLK-2.4G*5G V1 JN 一代端子，1.13线径，黑色，总长90mm，另一端焊接比例为1：2：2 端子朝上 Specification Summary: FPC flexible board for FXLK-2.4G*5G V1 JN One generation of terminals, 1.13 wire diameter, black, total length of 90mm, another 1:2:2 soldering ratio on one end, terminal facing upwards.	物料编码: 19.47-NRN007-0010 Material code

供方确认

Supplier Confirmation

校 对	审 核	批 准
黄志雄 Huang Zhixiong	**余光辉** Yu Guanghui	**张冬晓** Zhang Dongxiao

公司地址：深圳宝安西乡九围金翔富工业园A2栋5楼

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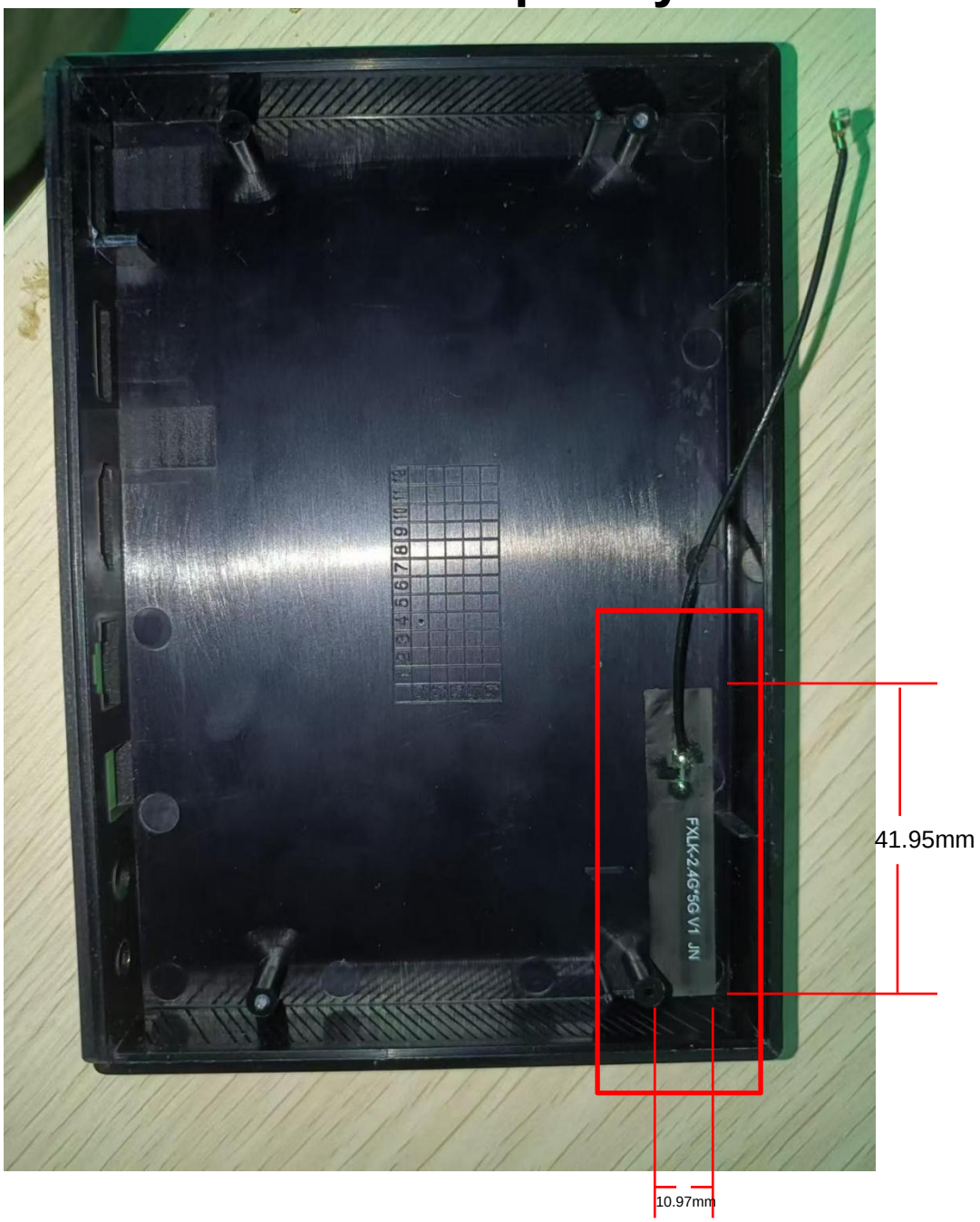
2.4GHz&5GHz ISM Band Frequency

天线实物图：



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
- 2.89dBi peak gain @2.45GHz
- 2.42dBi 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	2.89dBi @ 2.45GHz,2.42dBi @5.8GHz
VSWR	2 max.
Polarization	Linear
Feed Impedance	50Ω
Power handling	30dbm
Operation Temperature	-40°C ~ +85°C

Antenna Test Environment:

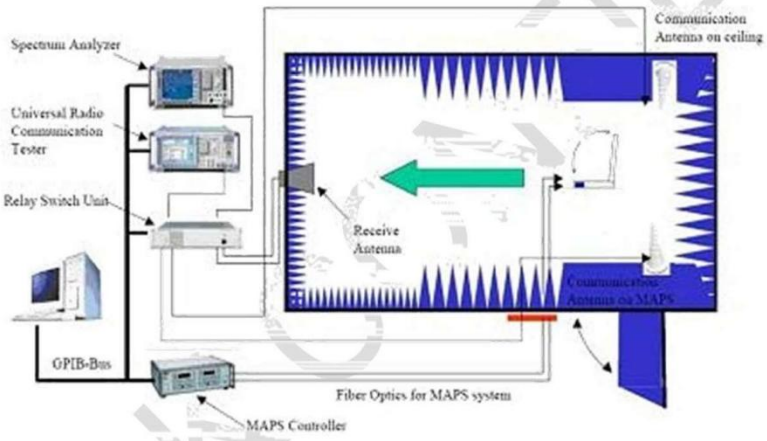
1. Network Analysis:

Agilent 8753ES 5071C

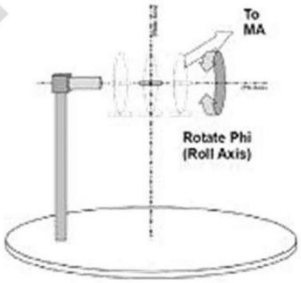
2. RF Test Equipment:

Agilent 8960 CMW500

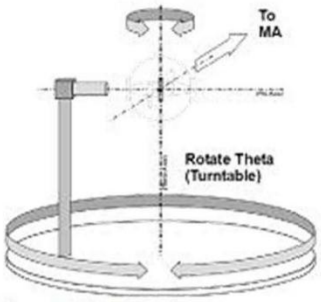
3. Shielding Rom Test Environment:



(Testing by 3D anechoic chamber)



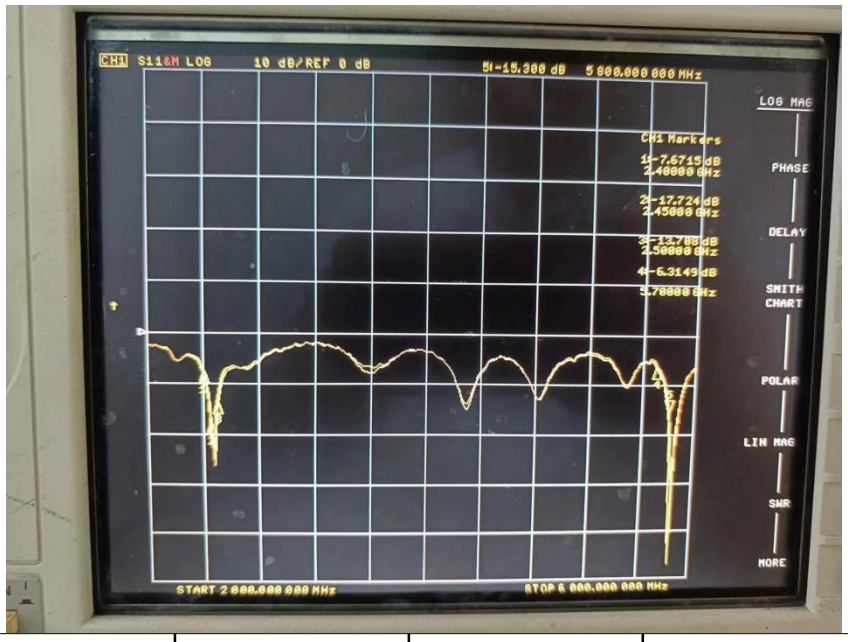
Phi axis test



Theta axis test

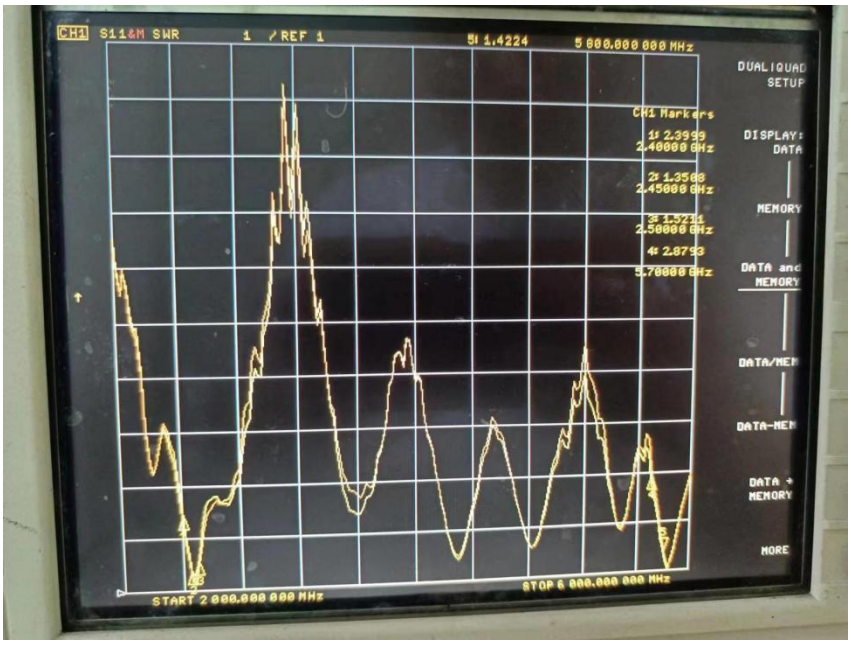
天线无源数据参数:

传导测试 S11 Return Loss 如下 图片:



S11 RETRUN LOSS	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
dB	-7.67	-17.72	-13.70	-6.31	-15.30

传导测试 S11 VSWR 测试如下图片:



VSWR	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
	2.39	1.35	1.52	2.87	1.42

传导测试 Smith Chart 测试如下图片:

IMPADANCE	2400MHz	2450MHz	2500MHz	5700MHz	5800MHz
OHM	30.14	40.83	56.14	32.19	67.30

Antenna Gain and Efficiency Test Results

2.4G&5G Gain and Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	53.75	2.71
2410	53.94	2.06
2420	55.17	2.61
2430	55.25	2.5
2440	54.08	2.8
2450	55.12	2.89
2460	52.12	2.66
2470	51.95	2.71
2480	53.56	2.46
2490	55.38	2.53
2500	53.05	2.66

Freq (MHz)	Effi (%)	Gain (dBi)
5700	53.18	2.21
5710	54.82	2.12
5720	54.76	2.74
5730	55.34	2.14
5740	52.03	2.82
5750	51.11	2.17
5760	52.85	2.74
5770	54.69	2.90
5780	54.46	2.44
5790	53.53	2.37
5800	54.77	2.42

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

Dependability

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