



深圳市飞讯联科电子有限公司

深圳市飞讯联科电子有限公司
Shenzhen Feixun Lianke Electronics Co., Ltd.

承 认 书
SPECIFICATION

产品资料	客户资料
产品名称:WIFI 2.4G天线	客户名称:
产品型号:FXLK-FX-004-B-IX1-025-2.4G	使用机型:
规格摘要:FPC软板为FX-004-B, 1.13线径, 黑色, 1代端子, 另一端焊接比例为1:1.5: 2, 总长25mm, 端子朝下	物料编号:

供方确认

校 对	审 核	批 准
黄志雄	余光辉	张冬晓

购方确认

校 对	审 核	批 准
结论:		

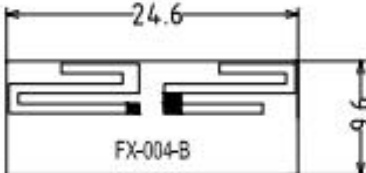
Address:5th Floor, Building A2, Jinxiangfu Industrial Park, Jiwei,
Xiangxiang, Bao'an District, Shenzhen

公司电话: **0755—32936320**
联 系 人: 余光辉
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公司传真: **0755—32936320**
联系电话: **13715357616**
E-mail: ygh7616@163.COM

天线2D图纸:

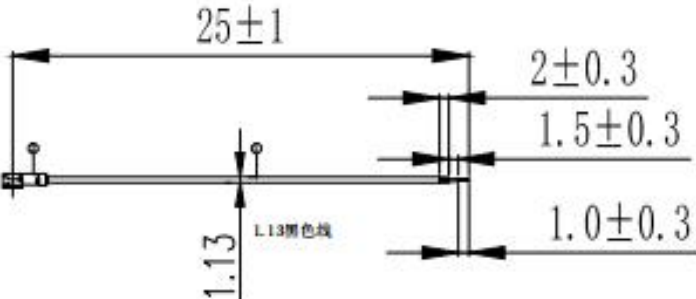
REV.	ECN	NO.	LOCAS.	DESCRIPTION	DATE	DESIGN
AD						



24.6

9.6

FX-004-B



25±1

2±0.3

1.5±0.3

1.0±0.3

1.13

L13黑色线

黑色丝印, 亮黑字符

要求:

1. 材料:FPC, 一对半电解铜, 表面做雾面黑油, 锁点抗氧化。
2. 双面胶用3M-9471, 边缘不能露铜。
3. 表面不可以有污染物、擦伤、黑点, 边缘部分不能出现毛刺等现象。
4. 用1代扣子, 方向朝下, 1.13黑色同轴线

SIZE	TOL	SIZE	TOL
0.4	±0.05	0.7	±0.07
0.4X	±0.20	0.8X	±0.07
0.6X	±0.20	0.6X	±0.07

深圳华信科技有限公司

DRAW NO.	DATE	DRAW NAME: ZC-EA	
DESIGN:	25/04/21	FILE:	P/N NO:
CHECK:		QTY:	DRAWING NO:
APPROVED:		SCALE: 1:1	UNIT: mm
		REV. A	SHEET: N/A



Descriptions

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

Following features:

- ◆ IEEE 802.11 b/g/n standards
- ◆ Single Band working
- ◆ 2.25dBi peak gain @2.45GHz
- ◆ Case mount
- ◆ Easy integration

Applications

- ◆ Wireless LAN
- ◆ ISM band 2.4G wireless applications
- ◆ BlueTooth
- ◆ Zigbee



Electrical Specifications

Item	Specification
Frequency Range	2.4 GHz ~ 2.5GHz
Peak Gain	2.95dBi @ 2.45GHz
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

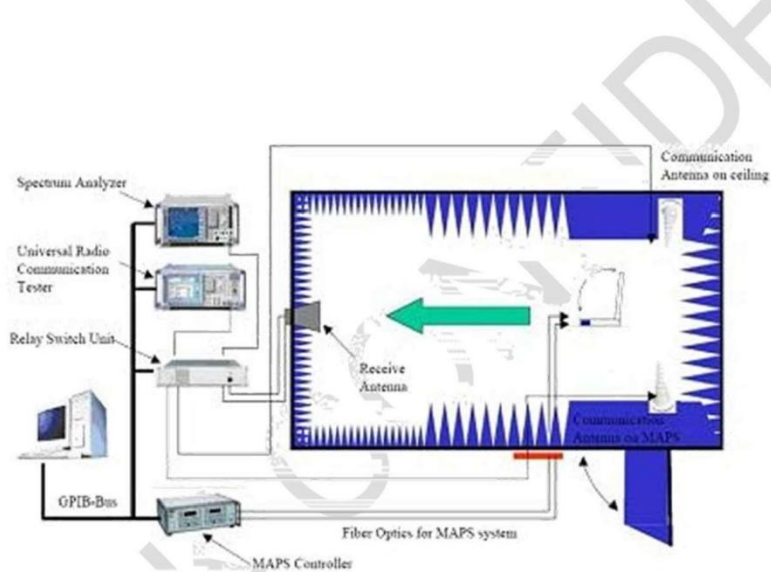
5071C

2. RF Test Equipment:

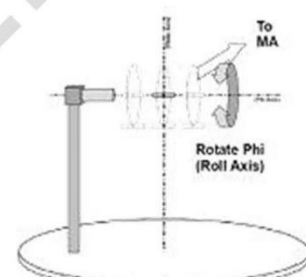
Agilent 8960

CMW500

3. Shielding Rom Test Environment:



(Testing by 3D anechoic chamber)

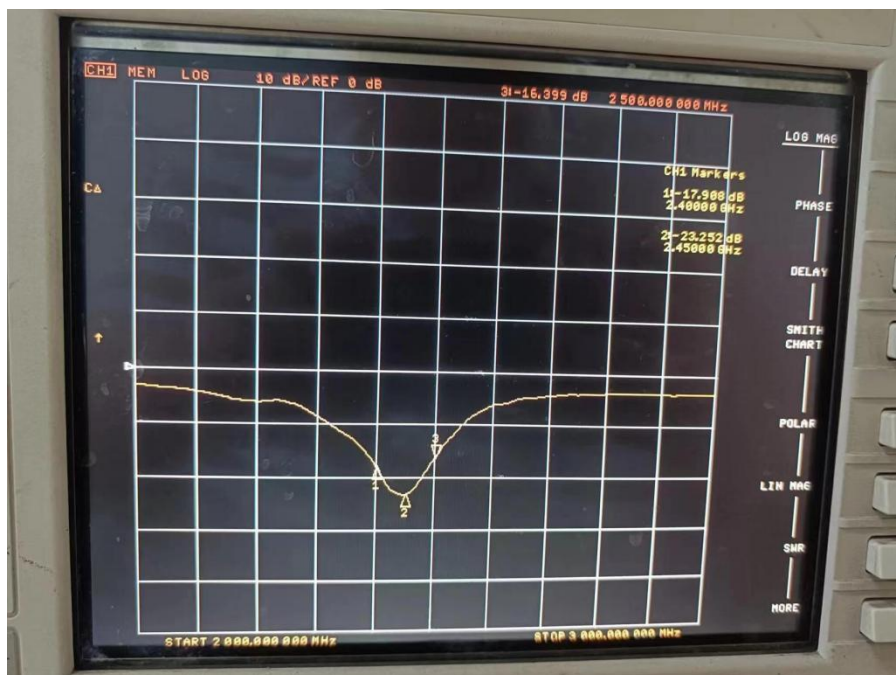




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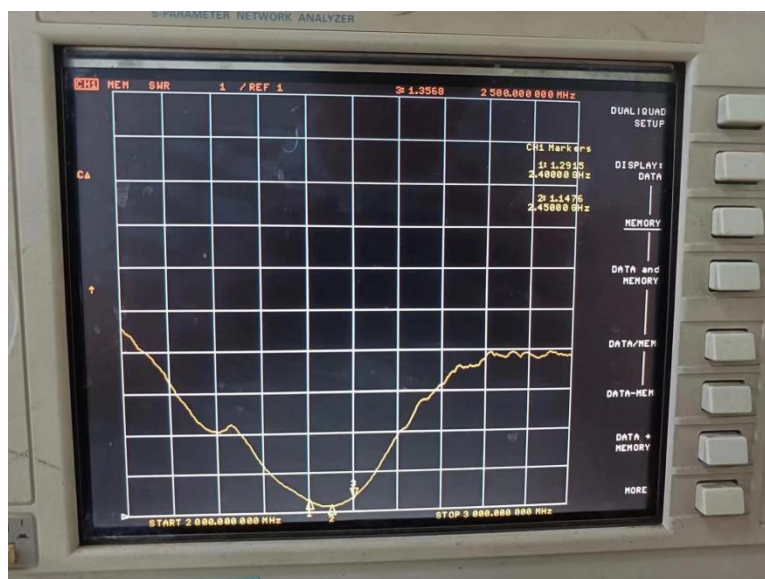
天线无源数据参数:

传导测试 S11 Return Loss 如下 图片:



S11 RETRUN LOSS	2400MHz	2450MHz	2500MHz
dB	-17.90	-23.25	-16.39

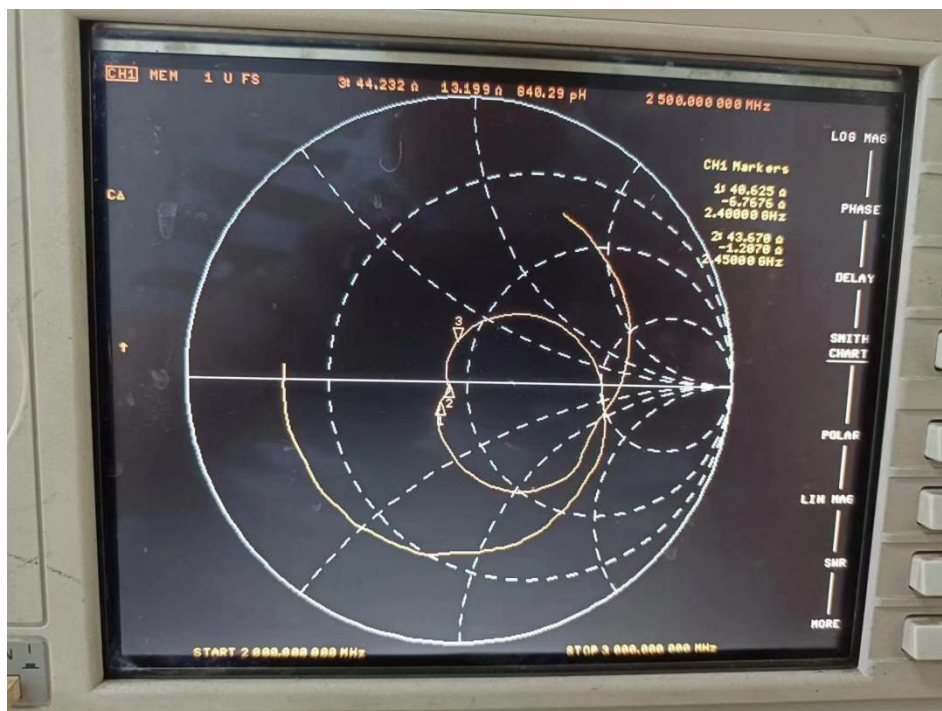
传导测试 S11 VSWR 测试如下图片:



VSWR	2400MHz	2450MHz	2500MHz
	1.29	1.14	1.35



传导测试 Smith Chart 测试如下图片:



IMPADANCE	2400MHz	2450MHz	2500MHz
OHM	40.62	43.67	44.23

Antenna Gain and Efficiency Test Results

2.4G Gain and Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	50.94	2.26
2410	54.33	2.57
2420	49.77	2.24
2430	53.47	2.45
2440	48.5	2.89
2450	54.14	2.25
2460	51.85	2.95
2470	51.08	2.93
2480	49.35	2.37
2490	50.64	2.36
2500	49.9	2.12



The Feed Cable Parameter

Electrical characteristics

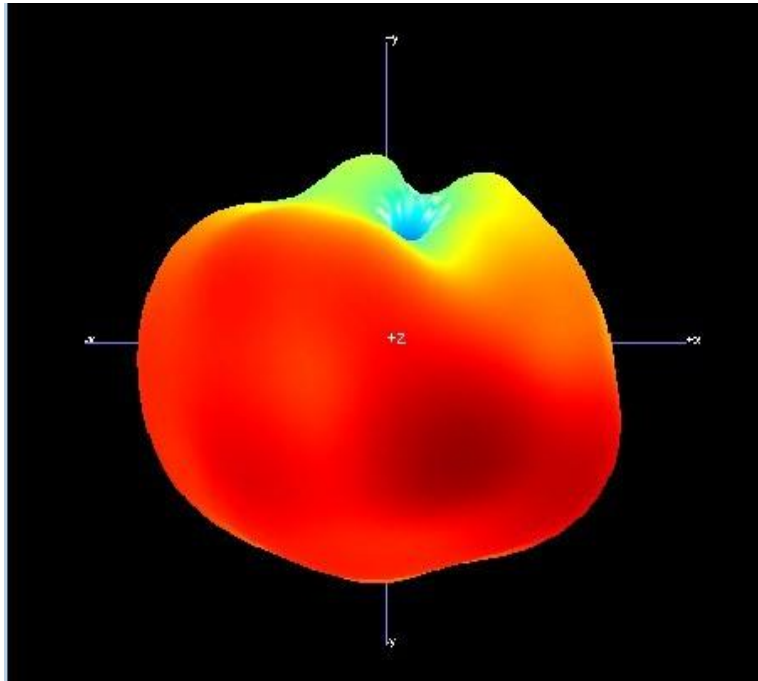
Item	Standard value	Item	Frequency	standard Value Unit: dB/m
Capacitance(pF/m)	98	Attenuation	1GHz	≤2.2
Velocity(%)	70		2GHz	≤3.1
Impedance(Ω)	50±2		3GHz	≤3.8
Standing wave ratio	≤1.3@0~6GHz		4GHz	≤4.4
Max.operating voltage(V)	1000		5GHz	≤4.9
Max.operating frequency(GHz)	6		6GHz	≤5.4

Dependability

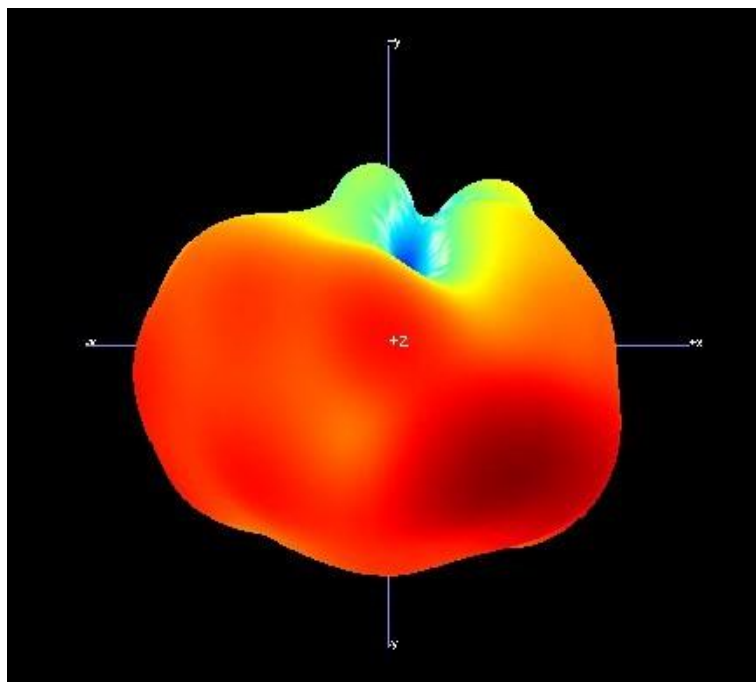
ITEM	Unit	Standard value
Min.bending radius static	mm	/
Operating temperature	°C	-40°C ~ +85°C



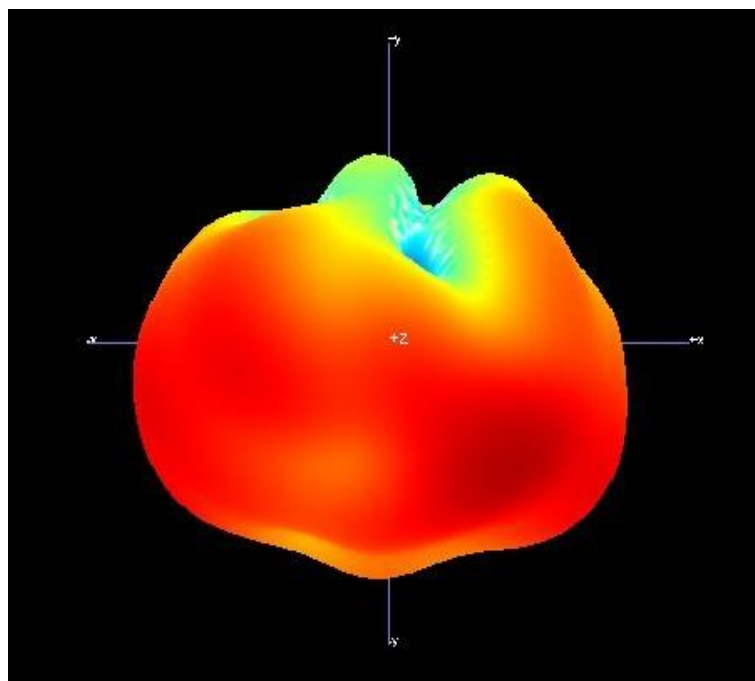
- 3D Radiation Pattern



2400MHz



2450MHz



2500MH