



深圳市飞讯联科电子有限公司

承 认 书

SPECIFICATION

产品资料	客户资料
产品名称:内置FPC天线	客户名称:
产品型号:FXLK-FB47x10-2.4G-5G V1 BSV	使用机型: X1
规格摘要:FPC软板FXLK-FP3509B-A一代 端子 黑色 线长150mm	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:		

公司地址: **深圳宝安西乡九围金翔富工业园A2栋5楼**

公司电话: **0755—32936320**

联 系 人: 余光辉

网址: **www.feixunlianke.com/**

公司传真: **0755—32936320**

联系电话: **13715357616**

E-mail: **ygh7616@163.COM**

深圳市飞讯联科天线规格书

FXLK-FP3509B-A

2.4GHz and 5G ISM Band Frequency

Feed Line length:150MM φ : 1.13





Descriptions

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

The F XL K- F P 3 5 0 9 B - A

dipole Antenna**Following features:**

- ◆ IEEE 802.11 b/g/n standards
- ◆ Single Band working
- ◆ 3.13dBi peak gain @2.45GHz
- ◆ 3.46dBi peak gain @5.80GHz
- ◆ Case mount
- ◆ Easy integration

Applications

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



Electrical Specifications

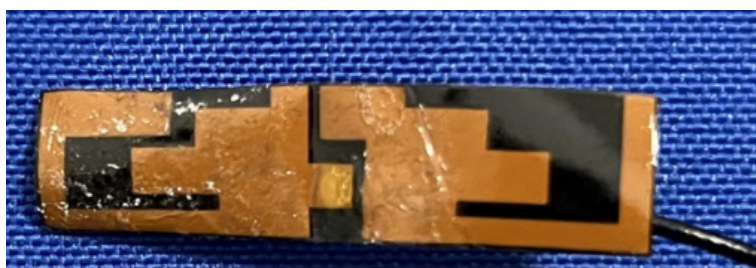
Item	Specification
Frequency Range	2.4 GHz ~ 2.5GHz, 5GHz ~ 6GHz
Peak Gain	3.13dBi @ 2.45G, 3.46@ 5.8GHz
VSWR	2 max.
Polarization	Linear
Feed Impedance	50Ω
Power handling	30dbm
Antenna dimensions	47mm×10mm
Operation Temperature	-40°C ~ +85°C
Antenna color	Black
Feed line color	Black



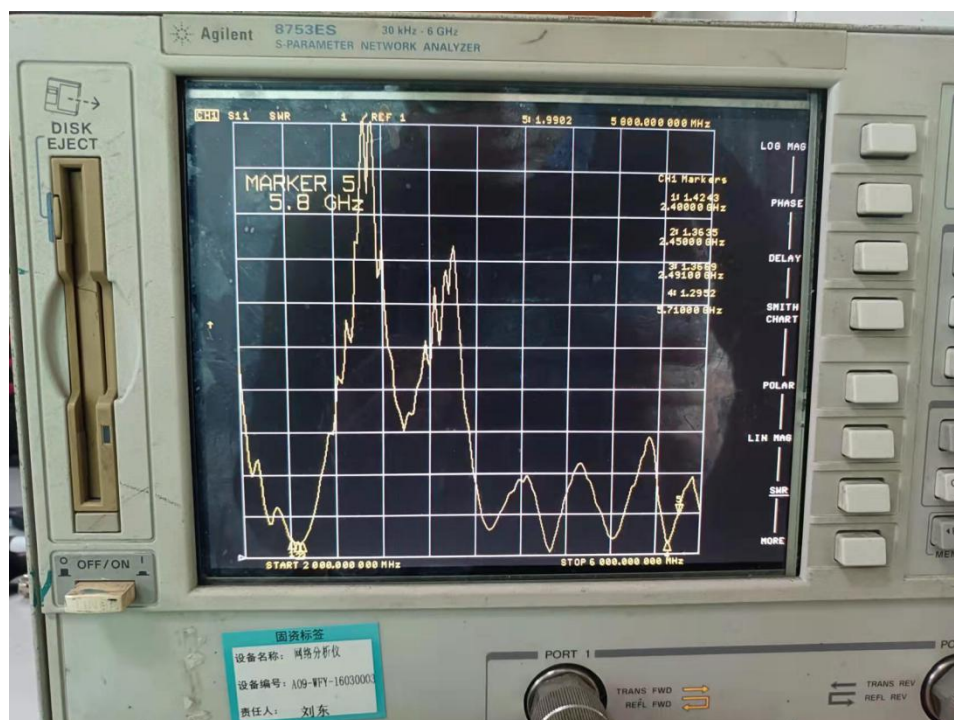
RF Cable Dimensions

FXLK-FP3509B-A

dimensions:34.9MM*9MM



VSWR:





Antenna Test Environment;

1. Network Analysis:

Agilent 8753ES

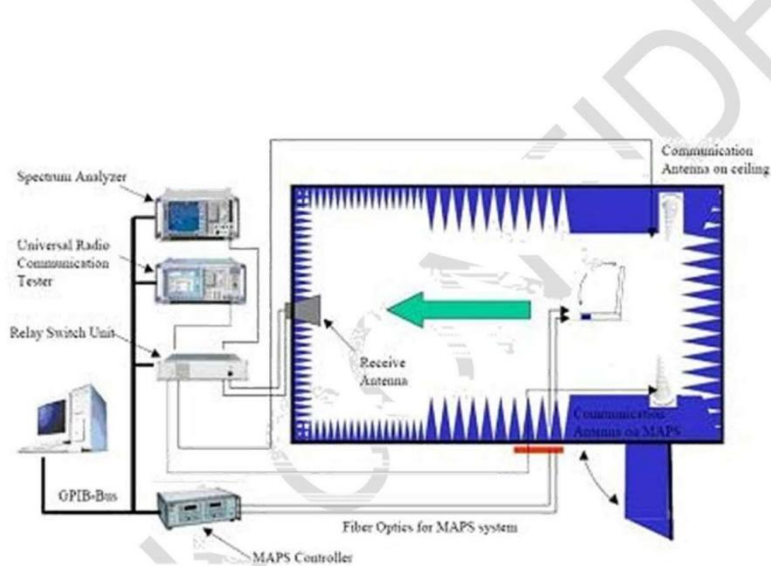
5071C

2. RF Test Equipment:

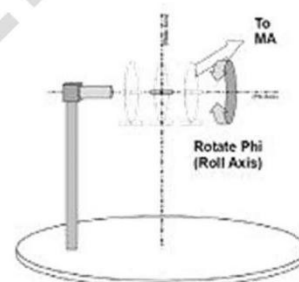
Agilent 8960

CMW500

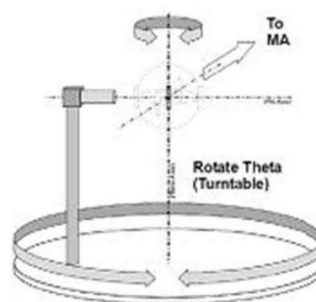
3. Shielding Room Test Environment:



(Testing by 3D anechoic chamber)

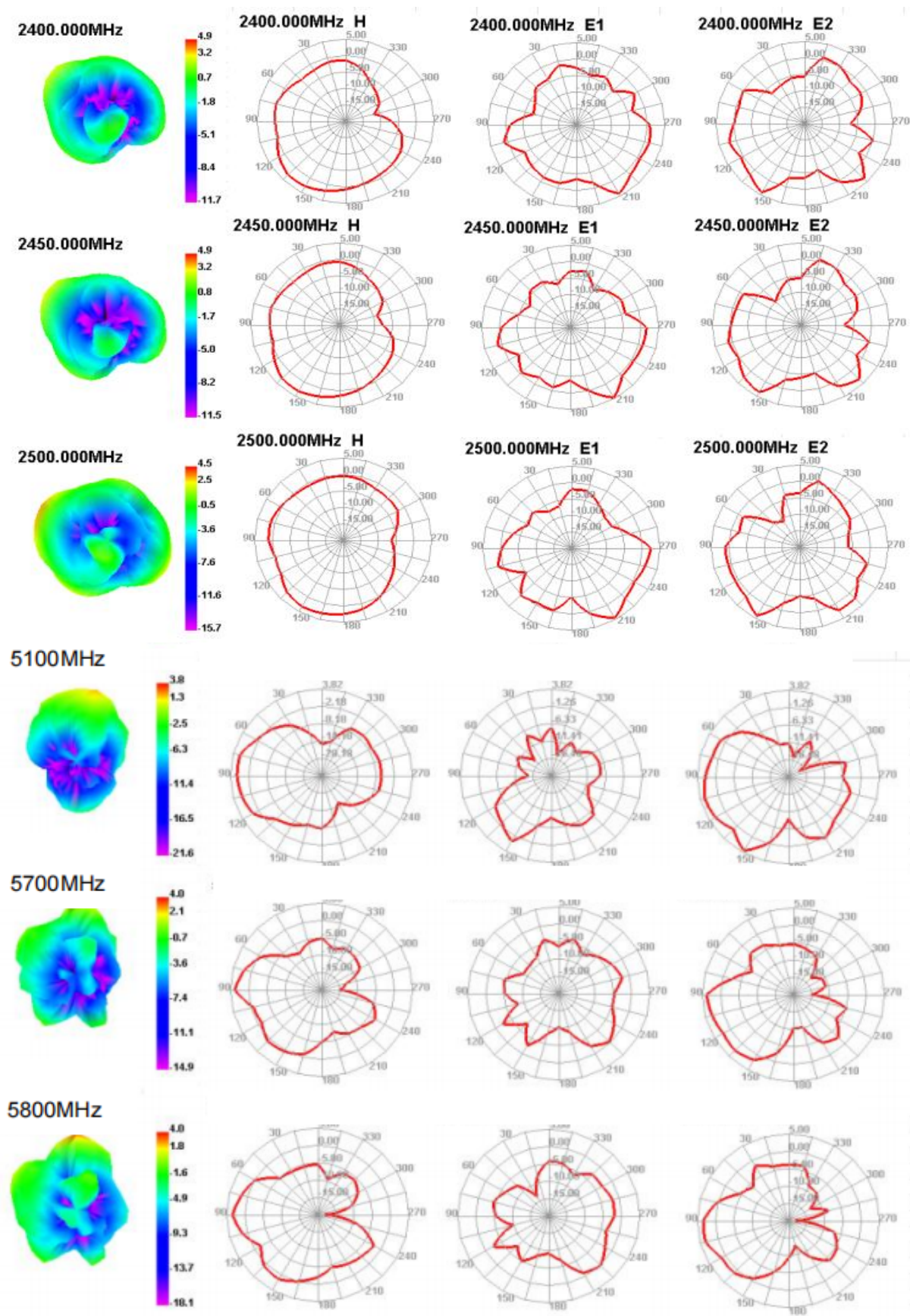


Phi axis test



Theta axis test

WIFI-2D&3D:



WIFI:

Antenna Gain and Efficiency Test Results

2.4G & 5-5.85G Gain and Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	51.55	2.99
2410	49.83	2.95
2420	48.33	2.83
2430	51.55	3.1
2440	48.89	2.75
2450	54.75	3.01
2460	54.62	2.75
2470	50.8	2.55
2480	56.51	3.12
2490	56	3.11
2500	57.4	3.13

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
5050	54.36	2.58	5150	53.47	2.00
5060	53.74	1.92	5160	55.66	2.16
5070	52.69	1.97	5170	54.84	2.22
5080	56.54	2.34	5180	55.55	2.67
5090	57.11	2.91	5190	53.91	2.71
5100	57.80	2.88	5200	56.79	2.87
5110	56.89	2.34	5210	54.97	2.54
5120	56.13	2.36	5220	58.61	2.42
5130	55.29	2.19	5230	54.88	2.34
5140	56.78	2.05	5240	55.74	2.88
5150	53.47	2.00	5250	56.98	2.65

Freq (MHz)	Effi (%)	Gain (dBi)
5260	40.6	2.9
5270	34.73	2.23
5280	35.37	2.32
5290	40.25	2.9
5300	40.96	2.97
5310	37.33	2.55
5320	36.78	2.42
5330	37.08	2.38
5340	40.61	2.69
5350	39.46	2.43
5360	41.08	2.58
5370	42.78	2.7
5380	38.58	2.27
5390	39.18	2.21
5400	40.89	2.37
5410	44.05	2.58
5420	40.96	2.13
5430	37.33	1.62
5440	40.05	1.97
5450	42.57	2.31
5460	37.22	1.74

Freq (MHz)	Effi (%)	Gain (dBi)
5470	41.08	2.58
5480	42.78	2.7
5490	38.58	2.27
5500	39.18	2.21
5510	40.89	2.37
5520	44.05	2.58
5530	40.96	2.13
5540	37.33	1.62
5550	40.05	1.97
5560	42.57	2.31
5570	37.22	1.74
5580	39.85	2.09
5590	36.56	1.7
5600	37.42	1.83
5610	36.58	1.79
5620	38.16	2.03
5630	39.28	2.21
5640	40.48	2.34
5650	35.75	1.78
5660	38.96	2.2
5670	41.85	2.51
5680	41.79	2.49
5690	38.56	2.11
5700	41.01	2.43
5710	40.15	2.33
5720	43.82	2.66
5730	41.89	2.43

Freq (MHz)	Effi (%)	Gain (dBi)
5700	53.26	2.58
5710	53.27	2.62
5720	55.53	2.82
5730	52.47	2.65
5740	58.5	3.18
5750	58.18	3.2
5760	52.82	2.8
5770	52.95	2.82
5780	58.69	3.26
5790	57.4	3.11
5800	56.08	2.96
5810	56.16	2.93
5820	60.25	3.25
5830	62.34	3.41
5840	62.26	3.46
5850	59.89	3.3

The Feed Cable Parameter

Electrical characteristics

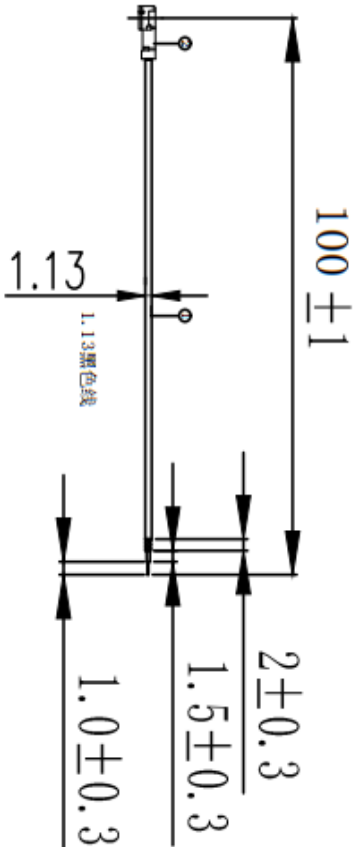
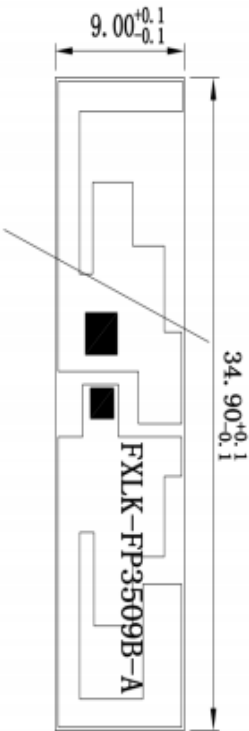
Item	Standard value	Item	Frequency	standard Value Unit: dB/m
Capacitance(pF/m)	98	Attenuation	1GHz	≤2.2
Velocity(%)	70		2GHz	≤3.1
Impedance(Ω)	50±2		3GHz	≤3.8
Standing wave ratio	≤1.3@0~6GHz		4GHz	≤4.4
Max.operating voltage(V)	1000		5GHz	≤4.9
Max.operating frequency(GHz)	6		6GHz	≤5.4

Dependability

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

RoHS

REV.	ECN NO.	LOCAS.	DESCRIPTION	DATE	DESIGN
AO					



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, 镀点抗氧化。
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

DM	TOL	DM	TOL
2X	±0.25	1.13	±0.05
3.0X	±0.20	1.13	±0.05
3.0X	±0.20	1.13	±0.05

DRAW NO.	DATE	DRAW NAME:	P/N NO:
DESIGN	25/04/01	FILE:	DRAWING NO:
CHECK:		QTY:	UNIT:
APPROVED:		SCALE: 1:1	SHEET:
		REV. A	SCALE N/A
			UNIT: mm
			SHEET: N/A