



FX-LINK COMPANY . LTD

DATA SHEET SPECIFICATION

Product Data	Custom Information
Product Name: 2.4GHZ WIFI Antenna	Custom Name: ASJ
Product Type: Outlay Antenna	Custom Product: IPC
Specification:	Material Code:

Manufacture Checked

Checked By	Verified By	Approved By
Oscar	Vincent	Lily

Custom Checked

Checked By	Verified By	Approved By
Conclude :		

Company Address : Bao An district SZ city jin xiang fu industry park

Company TE: 0755 - 32936320

Contact sales : Vincent
www.feixunlianke.com

TEL: 13715357616
E-mail: ygh7616@163.COM

Table of Content

Index

一. Title	1
二. ANT Description	2
三. Electric Spec	3
四. ANT Spec	4-5
五. Test Equipmen	6
六. ANT test Report	7-9
七. Feed Line Descrip tion	10



二. Antenna Description

This antenna Working around 2.4GHZ to 2.5GHZ.
Used for wireless communication, such as WIFI,
Bluetooth and Zigbee ETC.

Feature

ASJ190MM_2G4S_V01 Dipole antenna

- Fit 802.11B/G/N standard
- 4.02 dBi Peak Gain @2.45 GHz
- Easily for build

Application

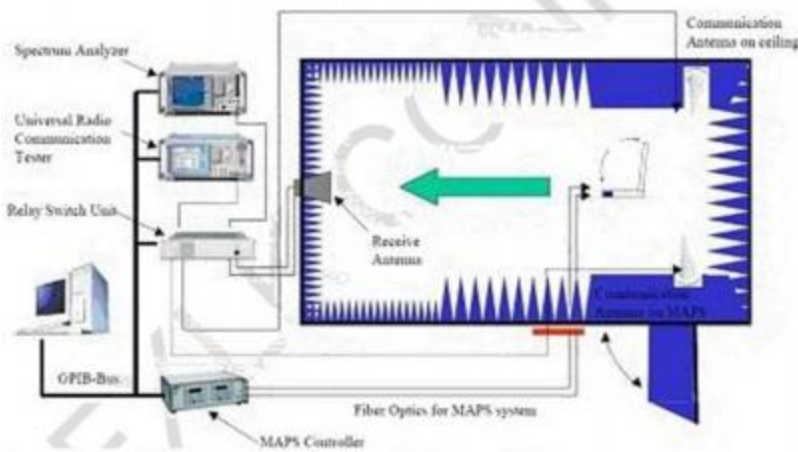
- Wireless LAN
- ISM Band 2.4G
- BlueTooth
- Zigbee

三. Electric Spec

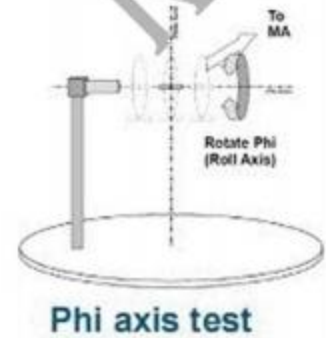
Item	Specification
Frequency Range	2.4 GHz ~ 2.5GHz
Peak Gain	4.02 dBi @ 2.45GHz
VSWR	1.6 max.
Polarization	Linear
Feed Line Impedance	50Ω
Power Handling	30dbm
Antenna dimensions	113.4mm±1mmX Ø13mm±1mm (LxW)
Operation Temperature	-40° C ~ +85° C

五. Test Equipment

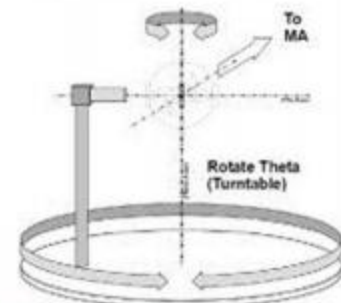
- Network analyzer:
Agilent 8753ES 5071C
- RF test Equipment:
Agilent 8960 CMW500
- Shielding room environment



(Testing by 3D anechoic chamber)



Phi axis test

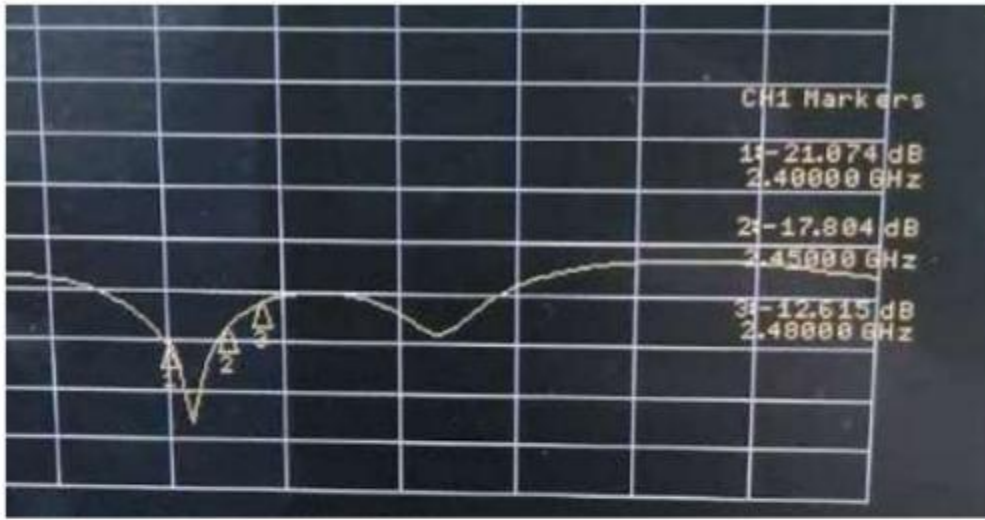


Theta axis test

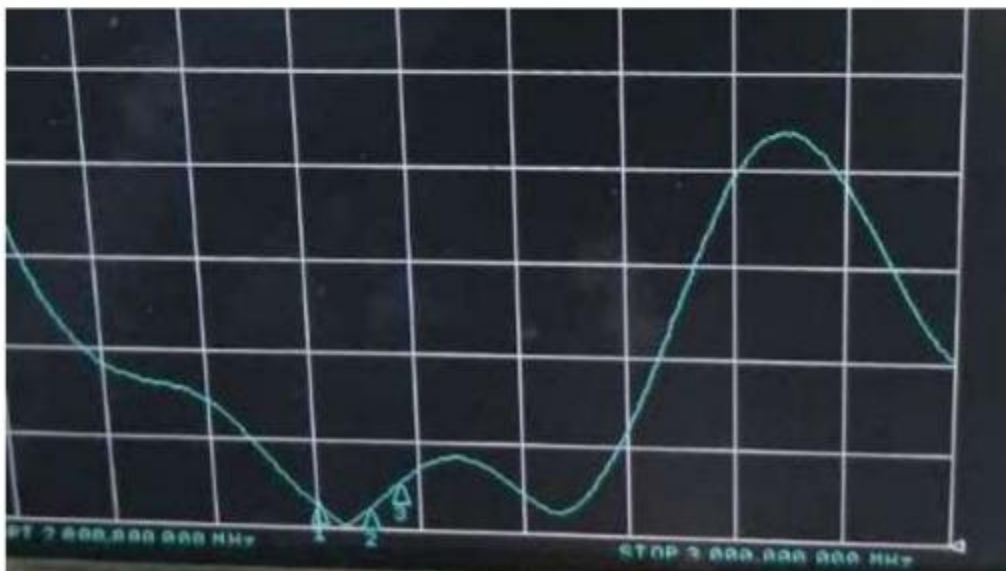


六、 Antenna Performance Test Result

- Conduct S11 Return Loss Test:



- Conduct S11 VSWR test result





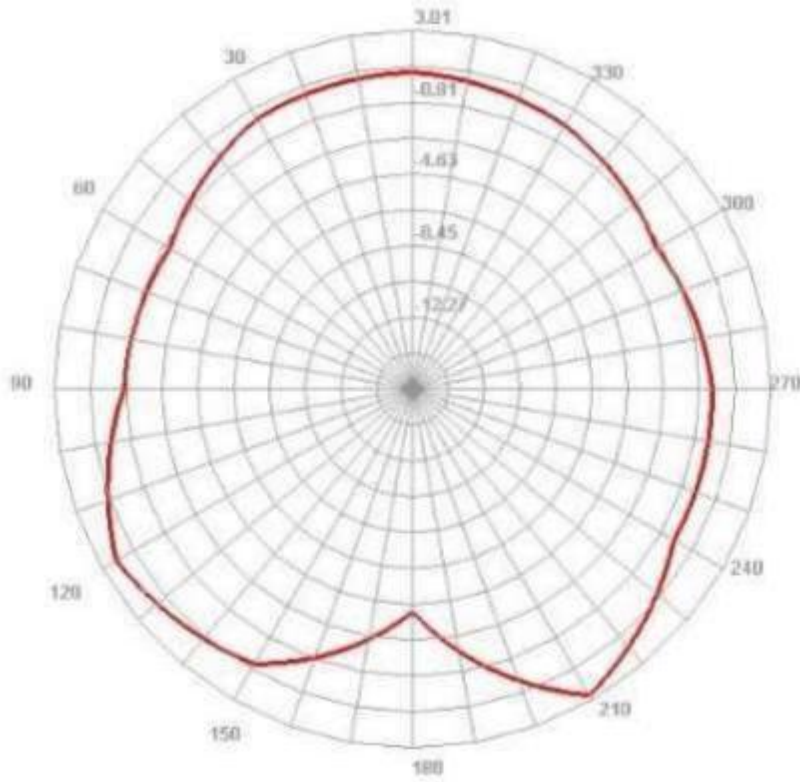
- Conduct smith chart test



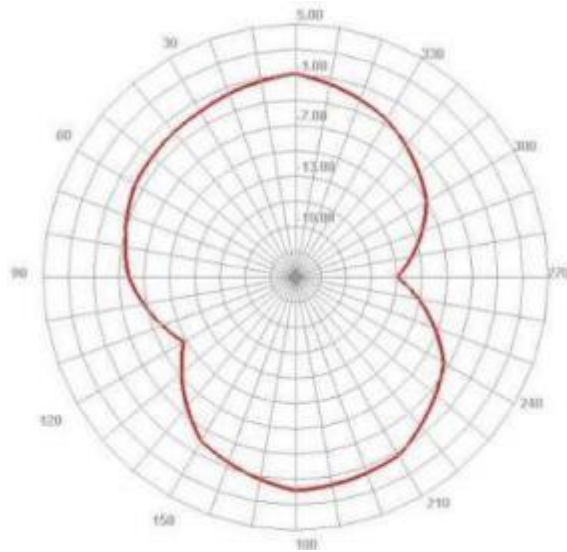
Freq (MHz)	Effi (%)	Gain (dBi)
2400	63.02	3.18
2410	60.58	3.52
2420	62.69	3.79
2430	63.14	3.47
2440	62.08	3.82
2450	64.01	4.02
2460	62.19	3.93
2470	60.82	3.67
2480	63.04	3.58
2490	60.18	3.49
2500	61.87	3.97



- Frequency 2.4GHZ E Plan Radiation Test:



- Frequency 2.4GHZ H Plan Radiation Test:



七、Antenna Feed Line Description

- Structure characteristics

Structure	Item	Standard value
Inner conductor	Material	Tinned copper wire
	Makeup:total / O.D. of every wire(mm)	7/0.08
	(Intertwist)NOM.O.D.(mm)	0.24±0.02
Insulation	Material	FEP
	Color	Clarity
	NOM.O.D.(mm)	0.7±0.03
Outer conductor	Material	Tinned copper wire
	Makeup:total / O.D. of every wire(mm)	4/0.05
	NOM.O.D.(mm)	0.92±0.05
	Coverage ratio(%)	90±5
Jacket	Material	FEP
	Color	Black
	NOM.O.D.(mm)	1.13±0.05

● **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±8		3GHz	≤3.8
Standing wave ratio	≤1.6@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	4
Operating temperature	℃	-40° C ~ +85° C