

WIFI Antenna Test Report



Manufacturer information	Shenzhen Feixun Lianke Electronics Co., Ltd
Project	C688 2.4G antenna
Antenna type	FPC antenna
Product Description	The FPC board is made of FXLK-FP3509B-A first generation terminals, black, with a wire diameter of 1.13 and a total length of 90mm. The other end is soldered in a ratio of 1:1.5:2 with the terminal facing downwards
Product No	FXLK-FP3509B-IX1-090-2.4G
Antenna frequency band	2400MHz-2500MHz

August 2, 2024

Purpose

This report is to measure the performance of antenna for All test date are showed as below.

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1.1 Antenna schematic diagram

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2.1 RETRUN LOSS

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2.4 *2D&3D Directional pattern*

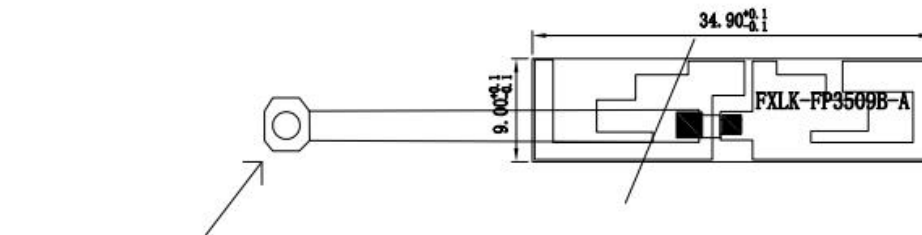
1. Product Overview

1.1 Antenna schematic diagram



1. Product Overview

1.2 Dimensional drawing of antenna shell material



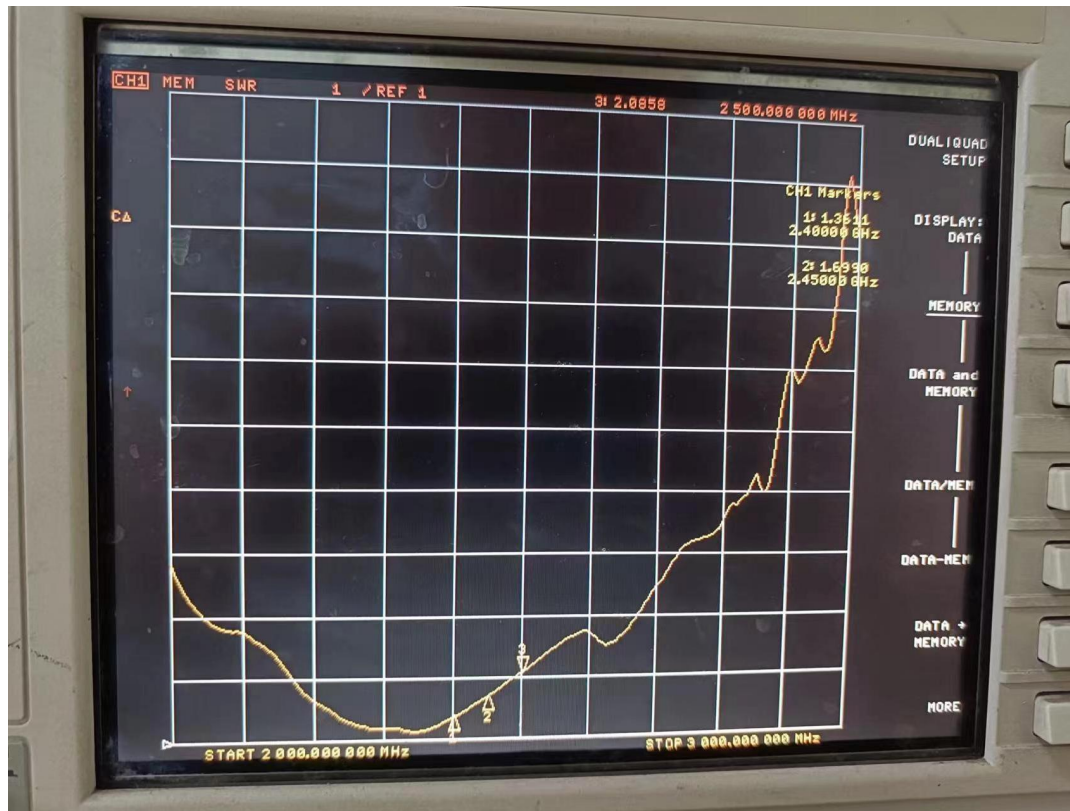
Single sided half to half glued
electrolytic copper
Front silk screen black oil,
bright black characters
antioxidant
Reverse side 3M9471

First generation terminals

— Hand tearing position

2. Test Result

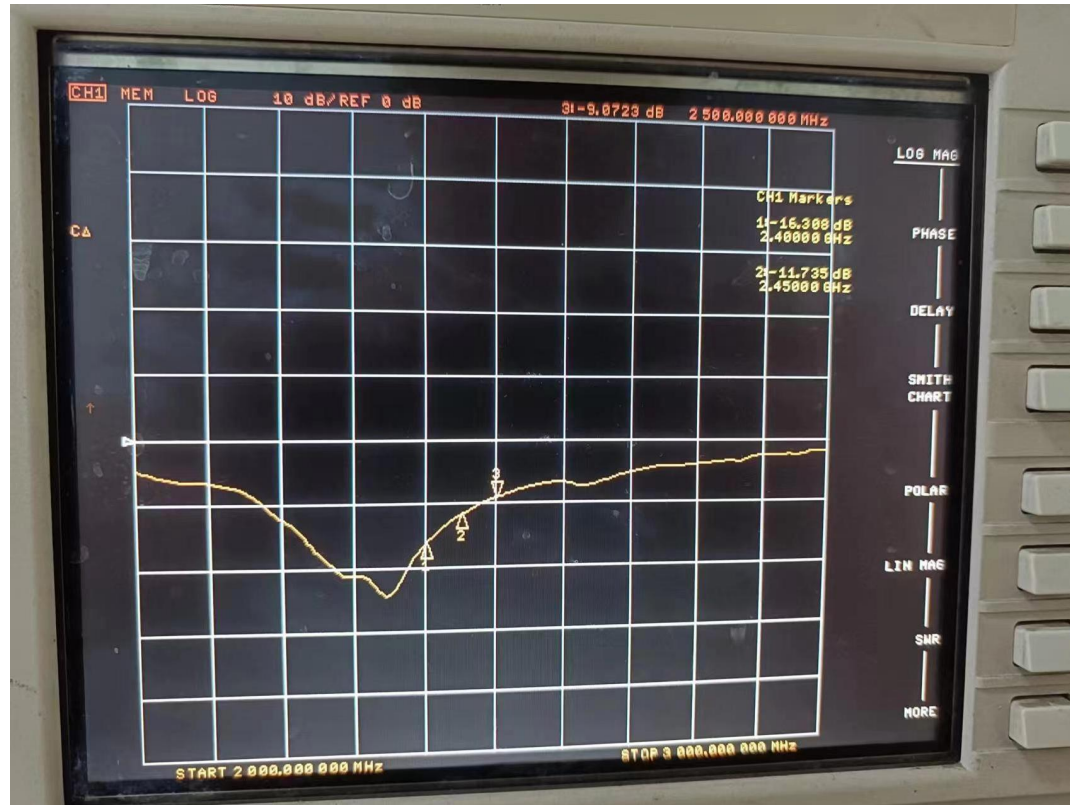
2.1 2.4G antenna VSWR



Frequency (MHz)	2400	2450	2500
VSWR	1.36	1.69	2.00

2. Test Result

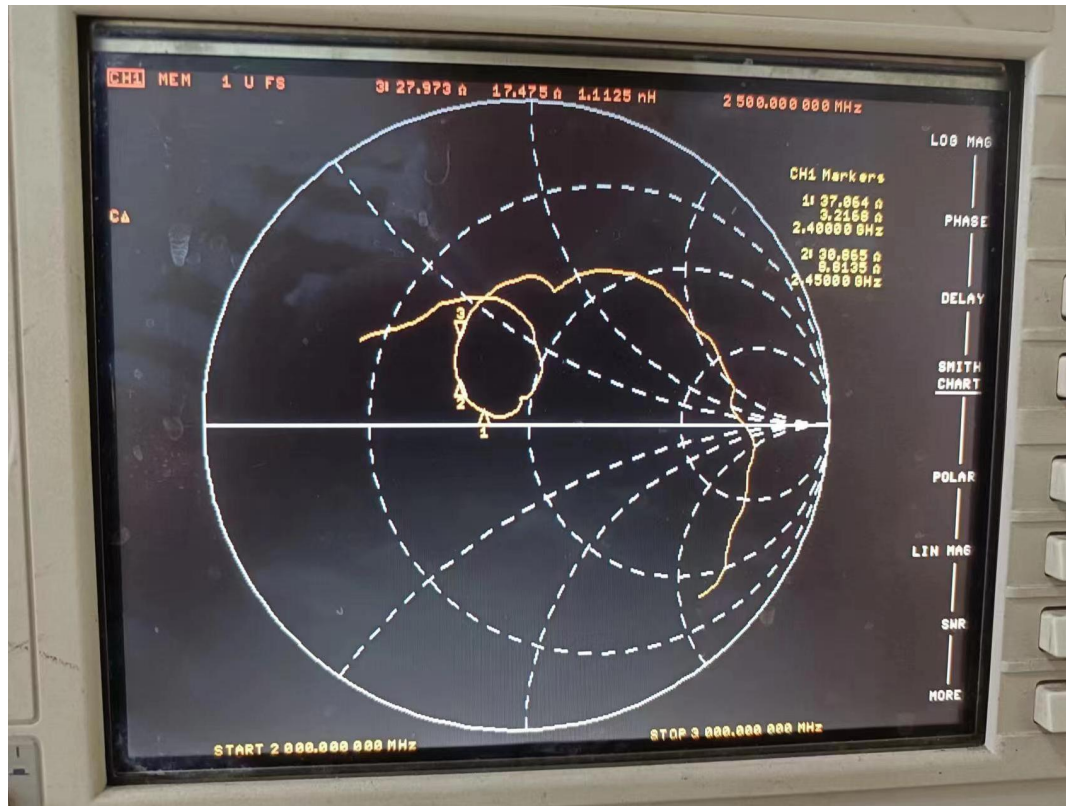
2.1 2.4G antenna *RETRUN LOSS*



Frequency (MHz)	2400	2450	2500
RETRUN LOSS (DB)	-16.30	-11.73	-9.07

2. Test Result

2.2 2.4G antenna Smith Chart



Frequency (MHz)	2400	2450	2500
	37.06	30.86	27.97

2. Test Result

2.3 2.4G antenna *GAIN & Efficiency*

Freq (MHz)	Effi (%)	Gain (dBi)
2400	56.54	3.11
2410	58.51	3.25
2420	53.49	2.78
2430	53.71	2.73
2440	58.85	3.09
2450	60.81	3.09
2460	56.89	2.69
2470	57.46	2.76
2480	64.64	3.31
2490	64.64	3.28
2500	62.95	3.06

2. Test Result

2.4 2.4G antenna 2D&3D Directional pattern

