

WIFI Antenna Test Report



Manufacturer information	Shenzhen Feixun Lianke Electronics Co., Ltd
Project	C291 2.4G antenna
Antenna type	FPC antenna
Product Description	The FPC soft board is FXLK-FP36.6 * 7.7-2.4G-V1.2, with a wire diameter of 1.13, black, and a wire length of 105mm. The welding ratio of the FPC end is 1:1.5:2, and the client is 1:5:2
Product No	FXLK-FP3707A-HX0-105-2.4G
Antenna frequency band	2400MHz-2500MHz

June 6th, 2024

Purpose

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

Content

1: Product Overview

1.1 Antenna schematic diagram

1.2 Dimensional drawing of antenna shell material

2: Test Result

2.1 RETRUN LOSS

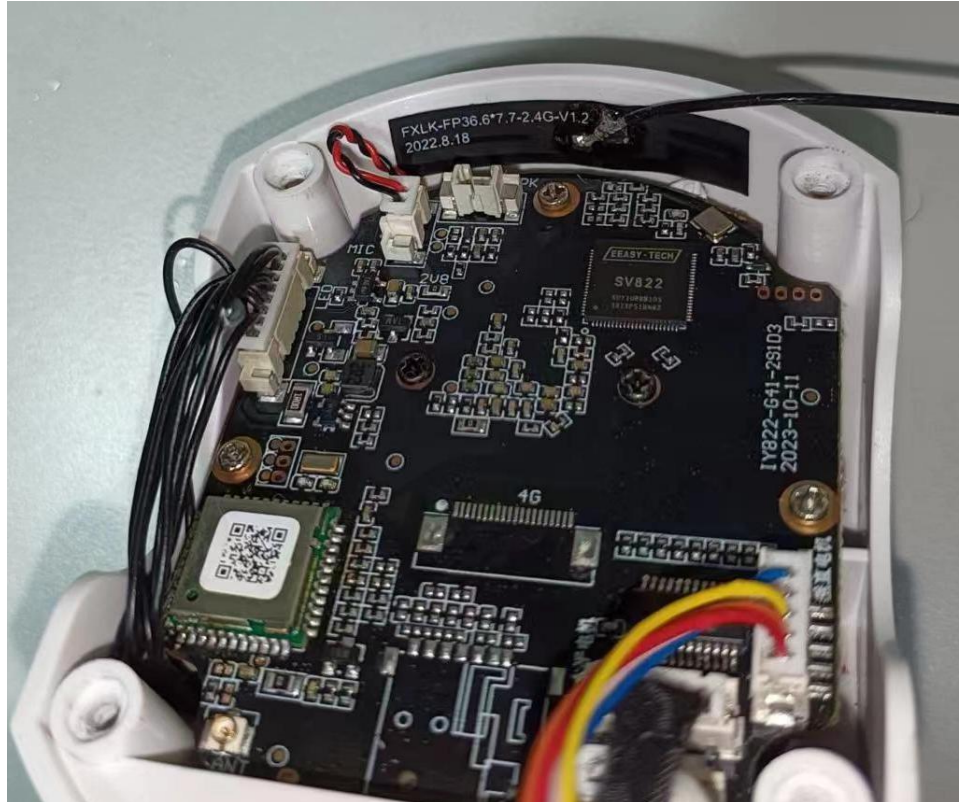
2.2 *Smith Chart*

2.3 GAIN & Efficiency

2.4 *2D&3D Directional pattern*

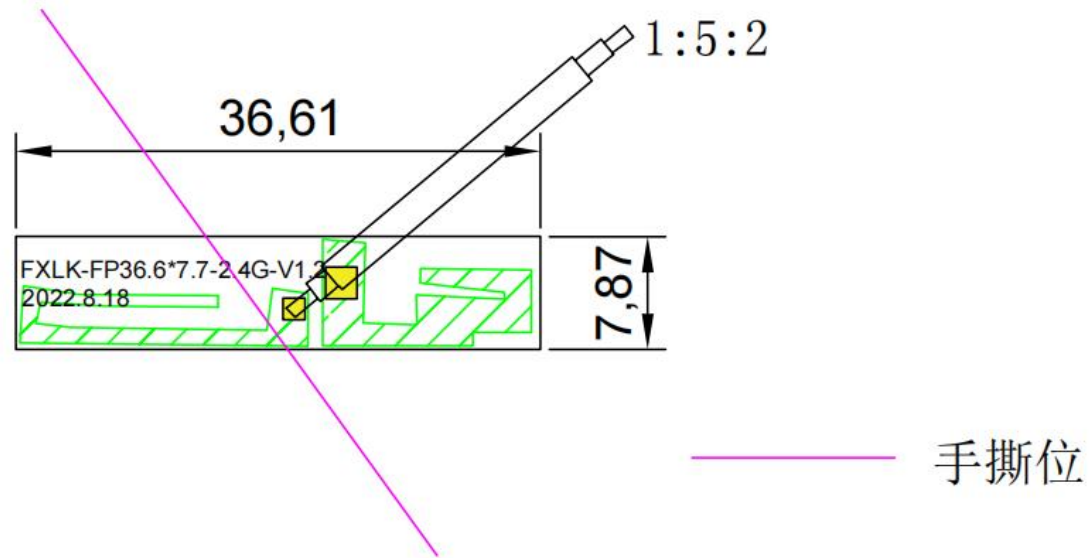
1. Product Overview

1.1 Antenna schematic diagram



1. Product Overview

1.2 Dimensional drawing of antenna shell material



2. Test Result

2.1 2.4G antenna VSWR



Frequency (MHz)	2400	2450	2500
VSWR	1.20	1.59	2.14

2. Test Result

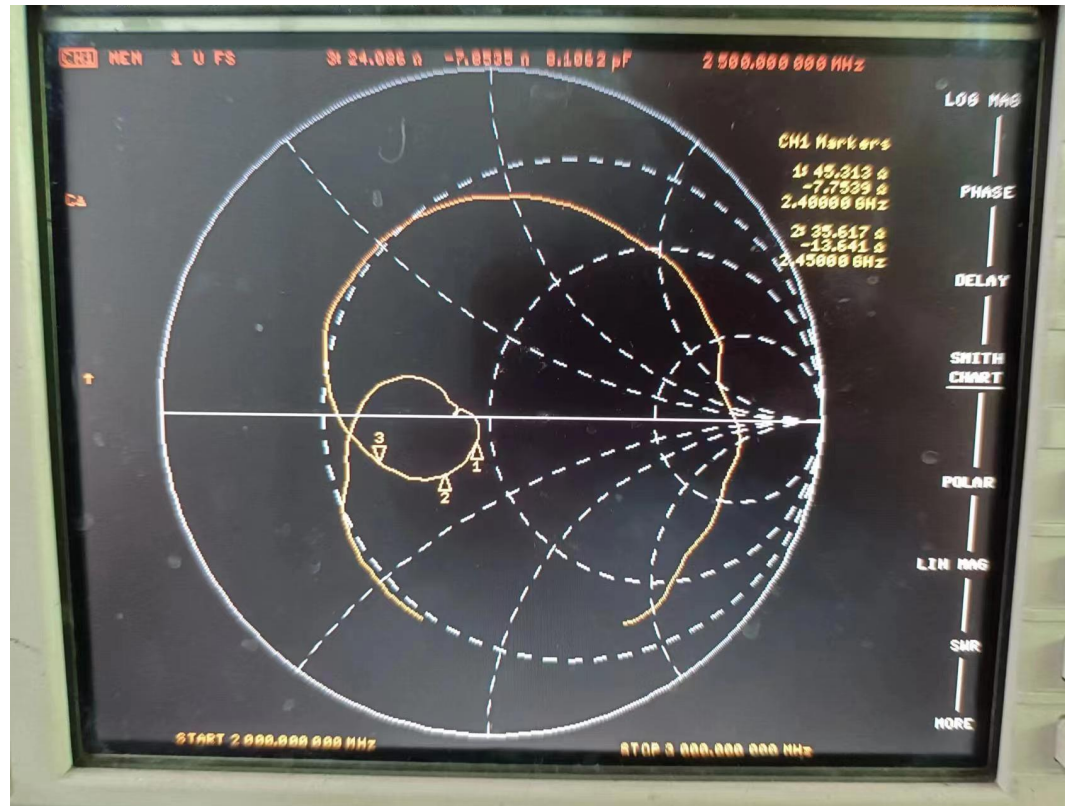
2.1 2.4G antenna *RETRUN LOSS*



Frequency (MHz)	2400	2450	2500
RETRUN LOSS (DB)	-20.46	-12.81	-8.79

2. Test Result

2.2 2.4G antenna Smith Chart



Frequency (MHz)	2400	2450	2500
	45.31	35.61	24.08

2. Test Result

2.3 2.4G antenna *GAIN & Efficiency*

Freq (MHz)	Effi (%)	Gain (dBi)
2400	60.46	3.80
2410	59.15	2.72
2420	53.63	2.23
2430	55.35	2.2
2440	54.82	3.08
2450	55.29	3.03
2460	55.4	3.01
2470	52.78	2.83
2480	57.8	2.39
2490	57.89	2.35
2500	56.93	3.20

2. Test Result

2.4 2.4G antenna 2D&3D Directional pattern

