

WIFI Antenna Test Report



Manufacturer information	Shenzhen Feixun Lianke Electronics Co., Ltd
Project	C516 2.4G&5G antenna
Antenna type	monopole antenna
Product Description	The FPC board is FXLK-2.4G * 5G V1 JN, with a wire diameter of 1.13 and a bus length of 85mm in black. The client is a 1st generation terminal, and the solder board ends are 1:2:2
Product No	FXLK-FP4710A-IX1-085-2.4G&5G
Antenna frequency band	2400MHz-2500MHz,5150MHz-5850MHz
Company address	5th Floor, Building A2, Jinxiangfu Industrial Park, Jiuwei 1st Road, Hangcheng Street, Bao'an District, Shenzhen

December 19, 2023

Purpose

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

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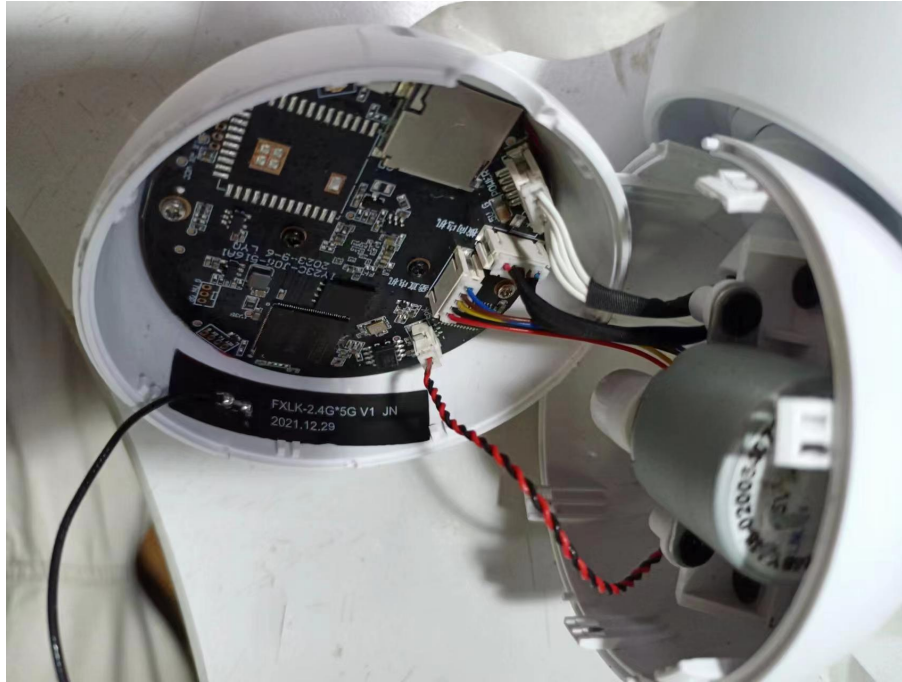
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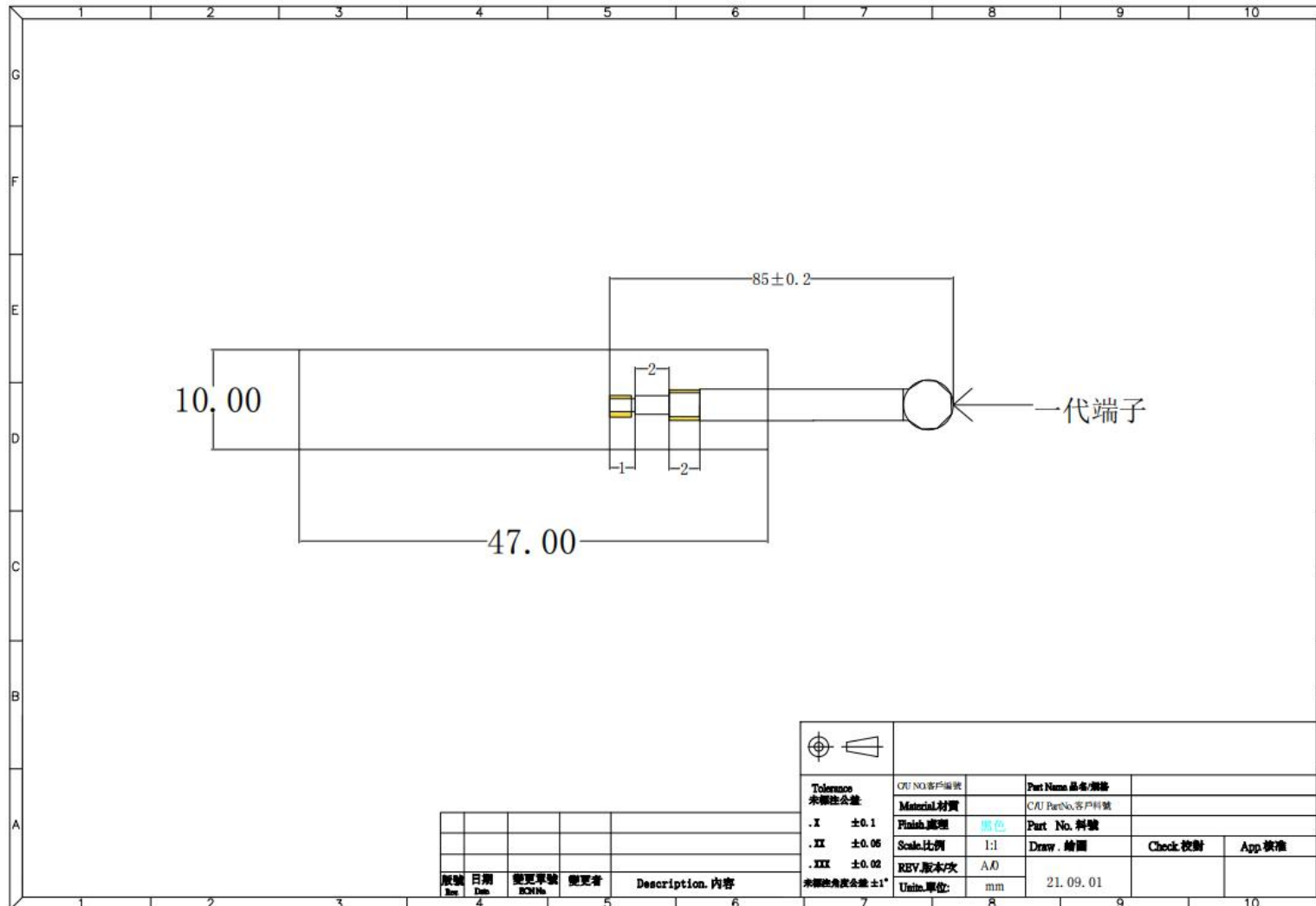
1. Product Overview

1.1 Antenna schematic diagram



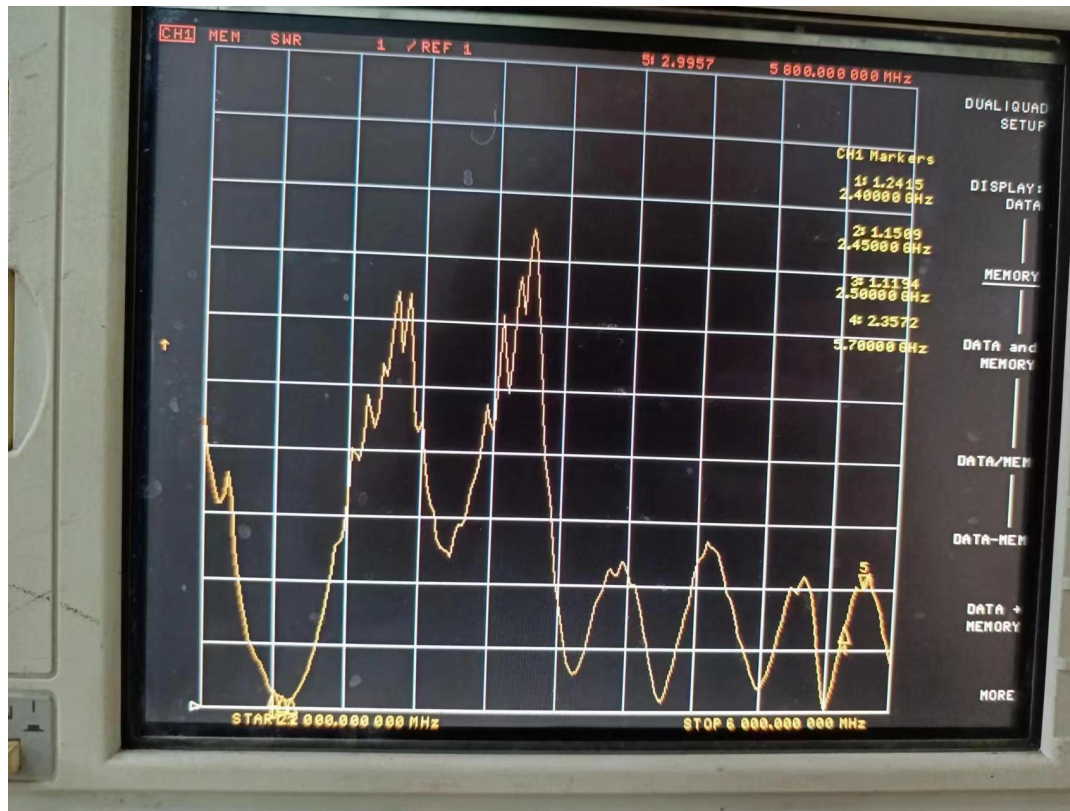
1. Product Overview

1.2 Antenna size diagram



2. Test Result

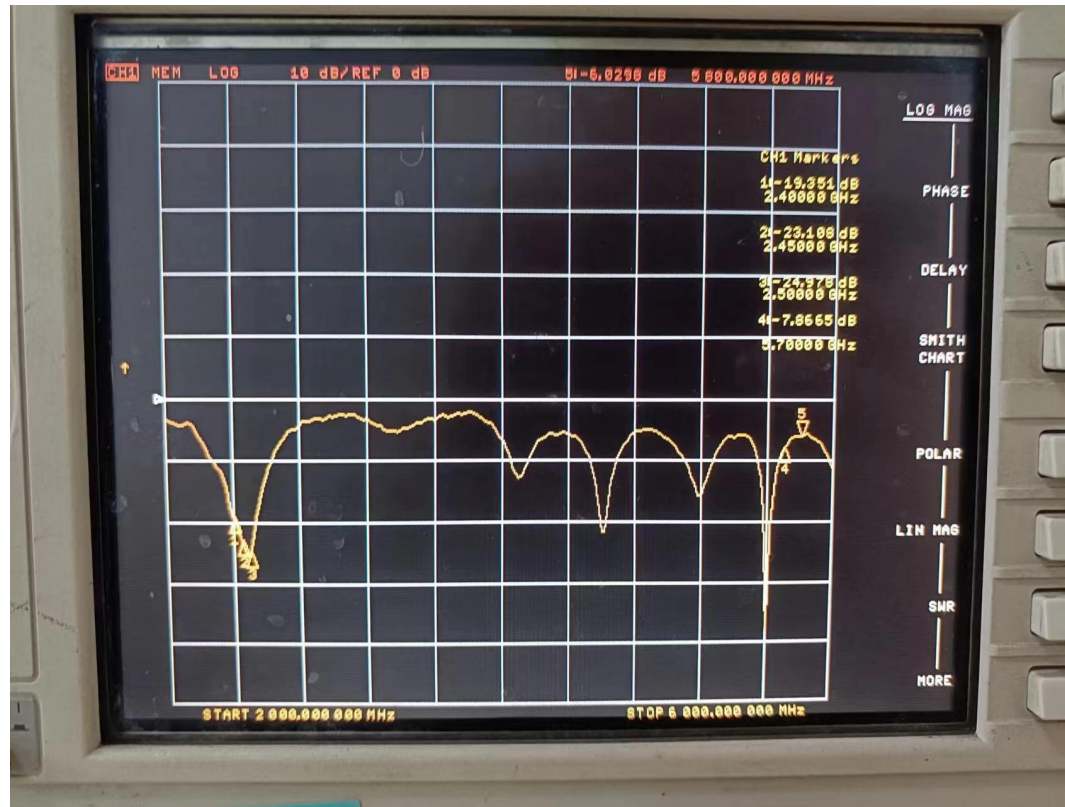
2.1 2.4G&5G antenna VSWR



Frequency (MHz)	2400	2450	2500	5700	5800
VSWR	1.24	1.15	1.11	2.35	2.99

2. Test Result

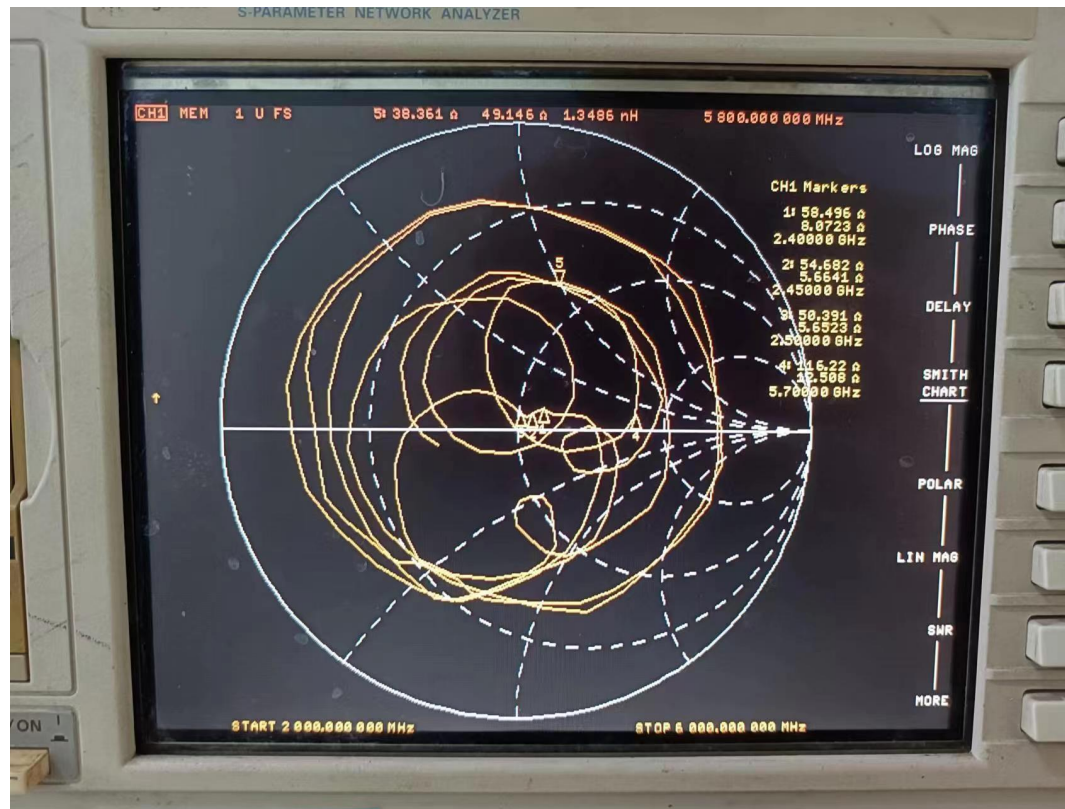
2.2 2.4G&5G antenna *RETRUN LOSS*



Frequency (MHz)	2400	2450	2500	5700	5800
RETRUN LOSS (DB)	-19.35	-23.10	-24.97	-7.86	-6.02

2. Test Result

2.3 2.4G&5G antenna Smith Chart



Frequency (MHz)	2400	2450	2500	5700	5800
	58.49	54.68	50.39	116.22	38.36

2. Test Result

2.4 2.4G&5G antenna *GAIN & Efficiency*

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	62.05	2.5
2410	61.5	3.11
2420	55.39	2.76
2430	59.02	3.15
2440	57.08	3.21
2450	62.58	3.30
2460	59.72	3.39
2470	65.21	2.99
2480	59.26	3.43
2490	59.23	3.61
2500	55.8	3.50

Freq	Effi	Gain
(MHz)	(%)	(dBi)
5150	44.93	2.34
5160	45.1	2.24
5170	43.61	1.93
5180	45.86	2.08
5190	47.46	2.13
5200	46.62	1.89
5210	46.83	1.82
5220	47.63	1.73
5230	50.42	1.99
5240	48.6	1.58
5255	42.15	1.87

Freq	Effi	Gain
(MHz)	(%)	(dBi)
5250	42.15	1.87
5260	41.44	1.93
5270	46	1.37
5280	49.77	1.9
5290	43.15	2.26
5300	49.27	1.77
5310	41.05	1.91
5320	48.39	1.61
5330	45.08	2.22
5340	45.95	2.35
5350	47.15	2.55

2. Test Result

2.4 2.4G&5G antenna *GAIN & Efficiency*

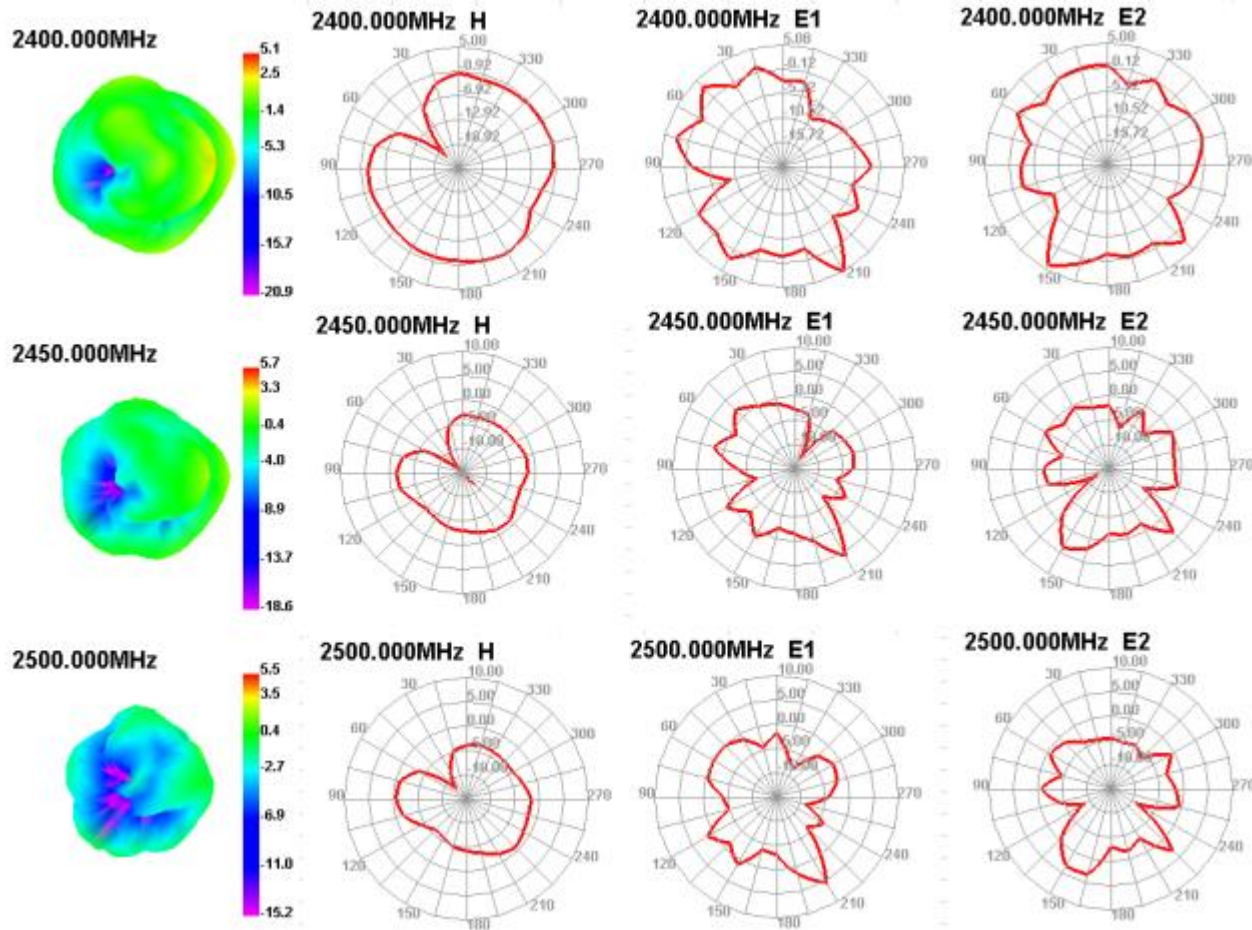
Freq	Effi	Gain
(MHz)	(%)	(dBi)
5470	43.69	2.59
5480	45.83	2.75
5490	42.67	2.32
5500	40.97	2.05
5510	41.17	1.89
5520	42.41	1.88
5530	43.22	1.83
5540	40.69	1.75
5550	43.75	2.27
5560	42.99	2.37
5570	42.57	2.48
5580	43.32	2.71
5590	43.86	2.89

Freq	Effi	Gain
(MHz)	(%)	(dBi)
5600	44.33	3.03
5610	42.35	2.92
5620	41.05	2.84
5630	46.47	3.39
5640	43.97	3.21
5650	43.51	3.14
5660	42.9	3.19
5670	40.67	3
5680	42.61	3.24
5690	42.95	3.22
5700	41.74	3.04
5710	41.62	2.96
5720	41.69	2.93

Freq	Effi	Gain
(MHz)	(%)	(dBi)
5730	40.38	2.69
5740	48.06	3.4
5750	45.76	3.12
5760	42.1	2.66
5770	42.91	2.72
5780	45.96	3.07
5790	45.05	2.94
5800	48.07	3.13
5810	45.85	2.85
5820	50.3	3.24
5830	49.58	3.19
5840	51.99	3.41
5850	52.29	3.24

2. Test Result

2.5 2.4G&5G antenna 2D & 3D Directional pattern



2. Test Result

2.5 2.4G&5G antenna 2D & 3D Directional pattern

