

ShenZhen City Flink Wi Technology CO., LTD.

SPECIFICATION FOR APPROVED

CUSTOMER: _____

PRODUCTS: _____ FPC Antenna _____

PART NO: _____

Spec. : _____ YL-H41-V3/YL-H41B-V3 _____

Data: _____ 2023. 04. 13 _____

SUPPLIER		
PREPARED BY	CHECKED BY	APPROVED BY

CUSTOMER		
ACCEPTED BY	CHECKED BY	APPROVED BY

REMARK: Please send us one(or copy) of this approval with stamp after accepting, other copies filed by the customer.

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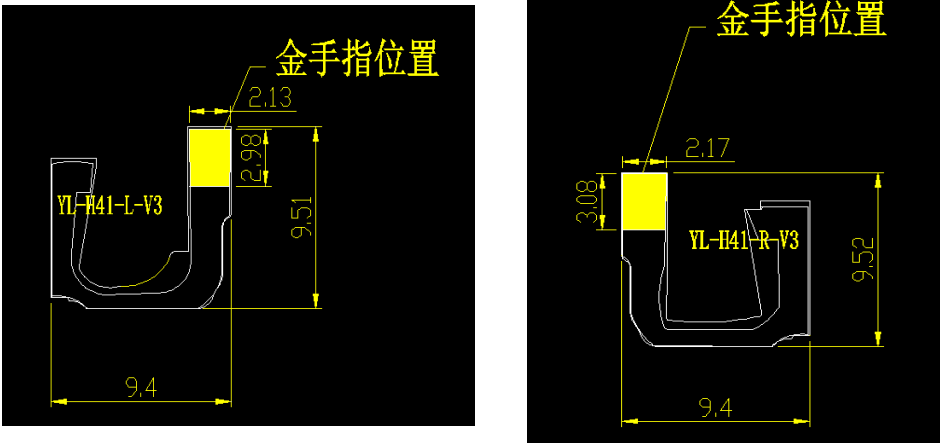
Revision history

VERSIONS	DATE	STATE
V1	2022-10-18	First Version
V2	2023-01-18	Second Version
V3	2023-03-28	Third Version

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1. Project Information

1.1. Appearance and Dimensions

Test point	Specifications	Test result
Overall dimensions	9.51mm*9.4mm (± 0.3 mm)	OK
Golden finger	2.98*2.13mm 3.08*2.17mm	OK
Drawing		

Inspection items		Inspection results
Material specification	25um copper+12.5um glue+12.5umPI	OK
Material	Half and half (Electrolytic copper)	OK
Material	gummed paper (3M300LSE)	OK
Electroplate	Gold plating	OK
Appearance	Surface: matte black	OK

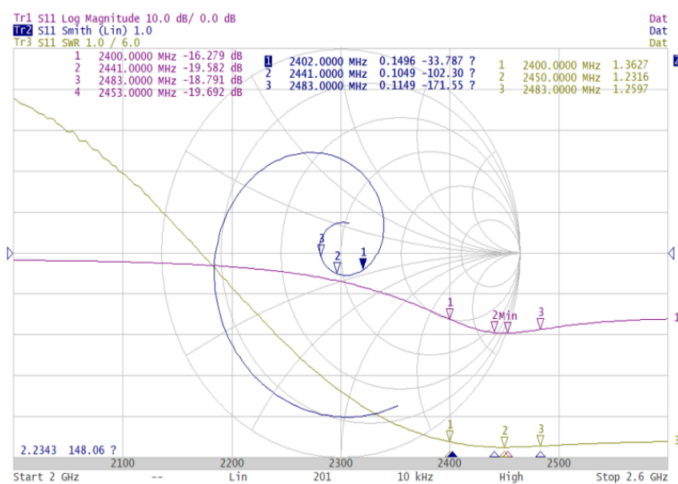
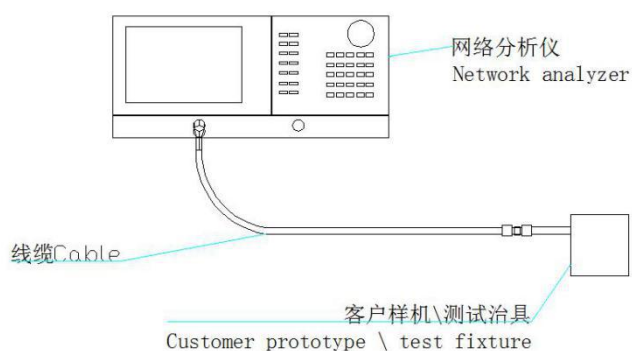
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2. Electrical Characteristics

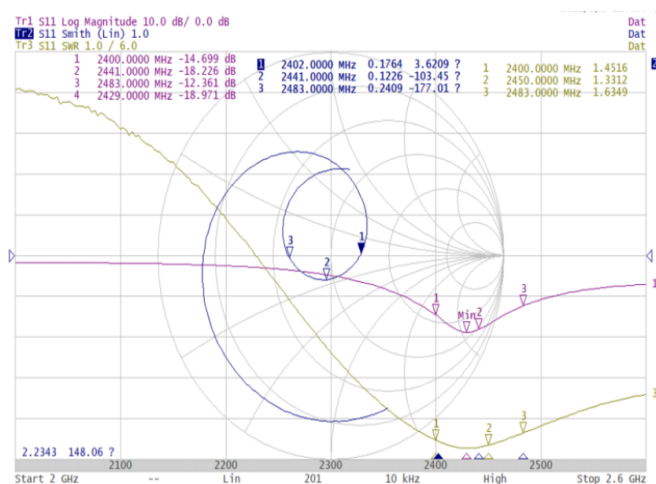
2.1. Test Environment Conditions

Temperature	Ordinary Temperature (5 to 35℃)
Humidity	Ordinary Humidity (25 to 85% RH)

2.2. Measurement method



Left

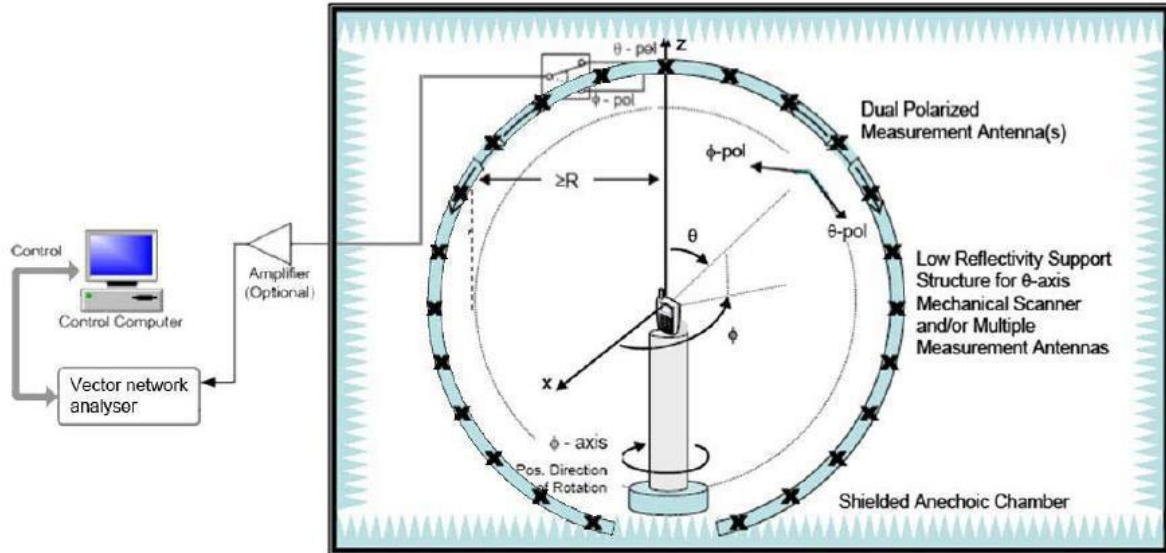


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2.3. Efficiency and Gain

2.3.1. Test system

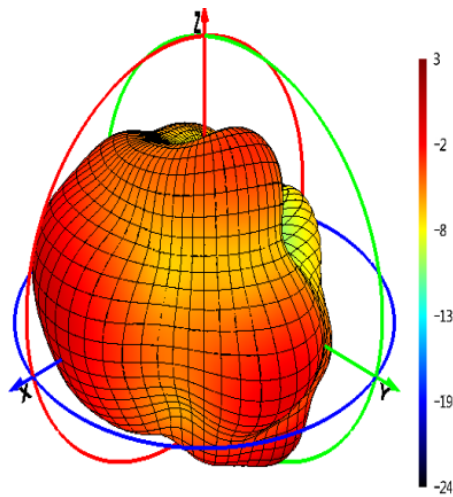


2.3.2. No-source test data

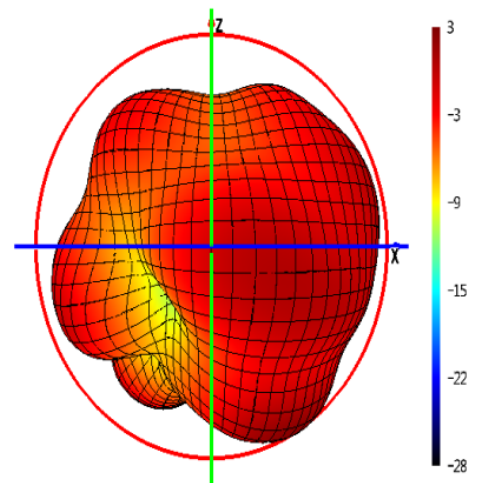
Gain&Efficiency			
frequency 频率	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	2.11	-2.82	46.24%
2410	1.76	-3.01	47.06%
2420	2.52	-2.65	50.31%
2430	2.6	-2.74	49.22%
2440	2.07	-2.81	49.41%
2450	2.62	-2.68	50%
2460	2.65	-2.8	48.46%
2470	2.38	-2.77	48.86%
2480	2.82	-2.63	47.54%
2490	2.25	-3.15	44.41%
2500	2.4	-2.95	44.74%

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2.3.3. 3D Radiation Drawing



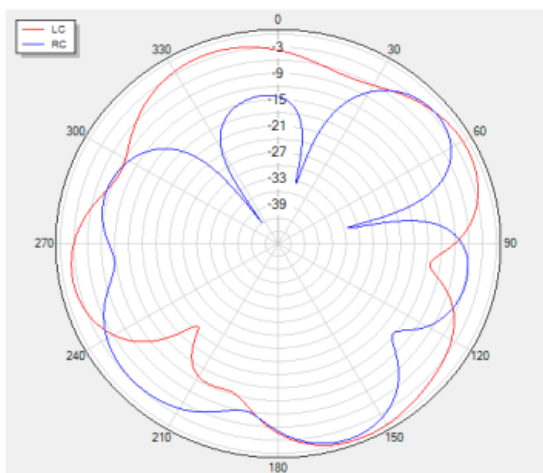
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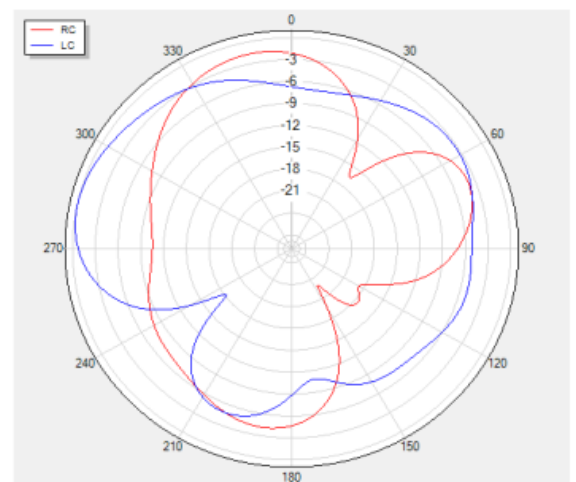
2.3.4. directional drawing of horizontal plane

Theta=90 freq=2400MHz



Left

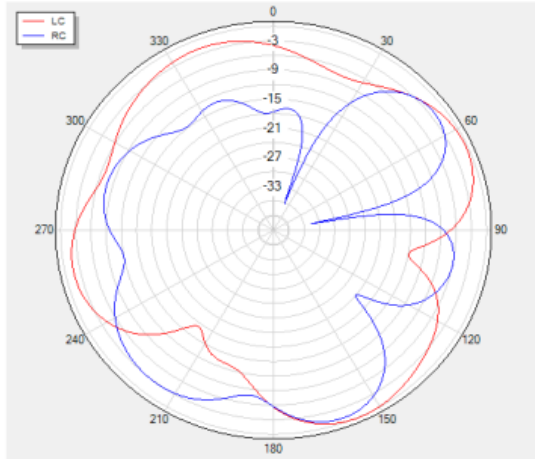
Theta=90 freq=2400MHz



Right

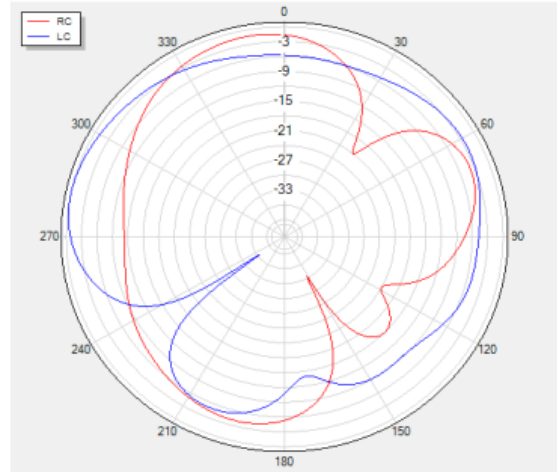
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Theta=90 freq=2450MHz



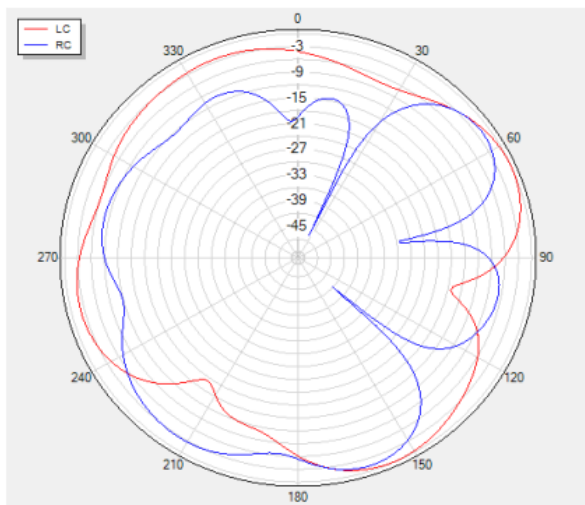
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Theta=90 freq=2450MHz



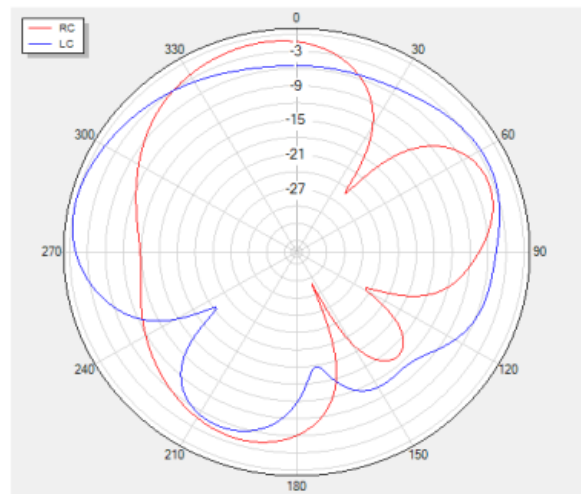
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Theta=90 freq=2480MHz



Left

Theta=90 freq=2480MHz



Right

3. Notes

- 1、Pay attention not to be too close to the metal during installation to avoid affecting the antenna performance.
- 2、This antenna is only suitable for this model, and the position of the antenna cannot be changed.

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4. Reliability test

Item	Test methods and conditions	Specifications and requirements
Storage conditions	Temperature, humidity and air pressure are as follows: 1、Temperature: $-30^{\circ}\text{C}\sim+80^{\circ}\text{C}$ 2、Air pressure: 45%-85% 3、Pressure :86Kpa-106Kpa	There is no change in appearance, and all antenna parameters are consistent with those of previous tests
Salt spray test	salinity is in range of 5% ;PH6.5-7.2;Temperature $35\pm 1^{\circ}\text{C}$;Corrosion time 16H.	
Vibration test	10-2000-10HZ amplitude 1.52mm Ten times along the X,Y,Z direction	
Drop Test	Drop from 1m onto the board	
Pull test	Bearing capacity $\geq 4\text{N}$	
Constant temperature and humidity	humidity : $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 90-95%RH Duration: 4H recovery time: 1-2H	
High and low temperature test	70°C - 20°C 5 cycles , Under normal conditions 1-2H	