

ShenZhen City Flink Wi Technology CO., LTD.

SPECIFICATION FOR APPROVED

CUSTOMER: _____

PRODUCTS: _____ FPC Antenna _____

PART NO: _____

Spec. : _____ YL-B140-V1 _____

Data: _____ 2024. 09. 02 _____

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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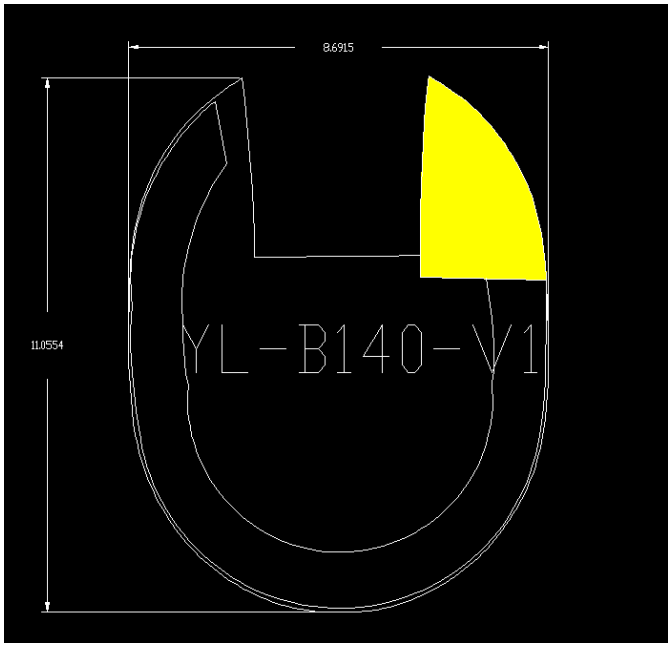
Revision history

VERSIONS	DATE	STATE
V1	2024-8-26	First Version

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1. Project Information

1.1. Appearance and Dimensions

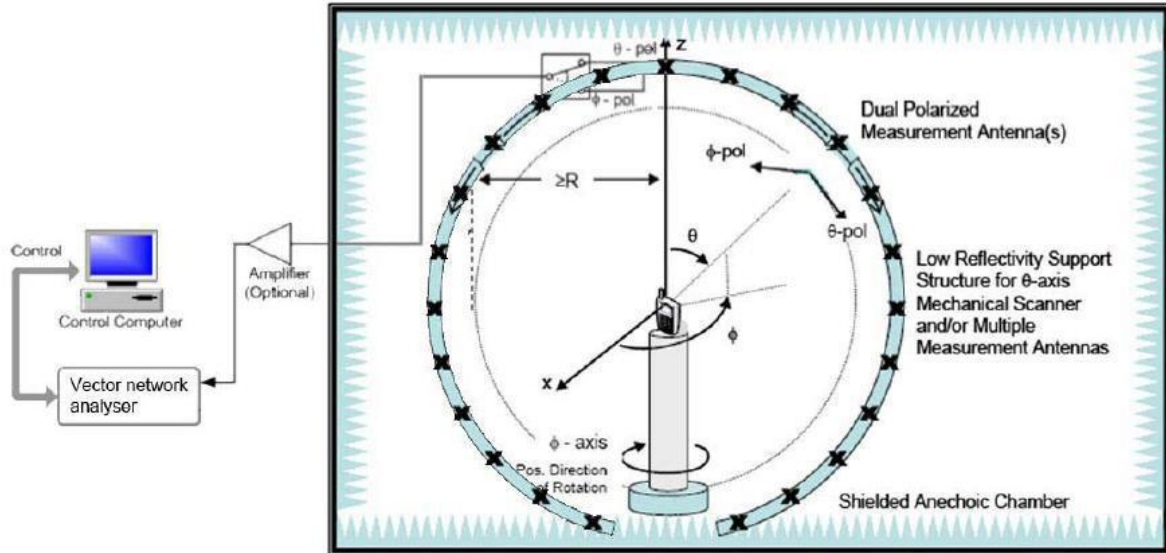
Test point	Specifications	Test result
Overall dimensions	11.05mm*8.7mm	OK
		OK
Drawing		

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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2.3. Efficiency and Gain

2.3.1. Test system

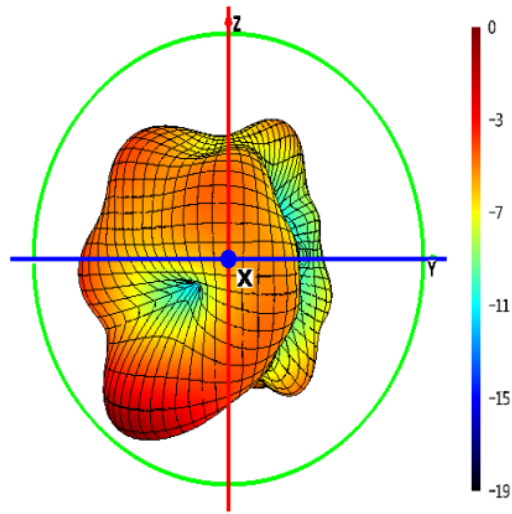


2.3.2. No-source test data

frequency 频率(MHz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
2400	-0.74	-6.32	24.74%
2410	-0.23	-6.53	24.04%
2420	-0.94	-6.32	24.71%
2430	-0.22	-6.51	24.09%
2440	-0.42	-6.61	25.76%
2450	-0.46	-6.5	24.11%
2460	-0.72	-6.62	23.74%
2470	-0.66	-6.45	24.29%
2480	-0.48	-6.18	25.22%
2490	-0.78	-6.41	24.42%
2500	-0.45	-6.99	25.88%

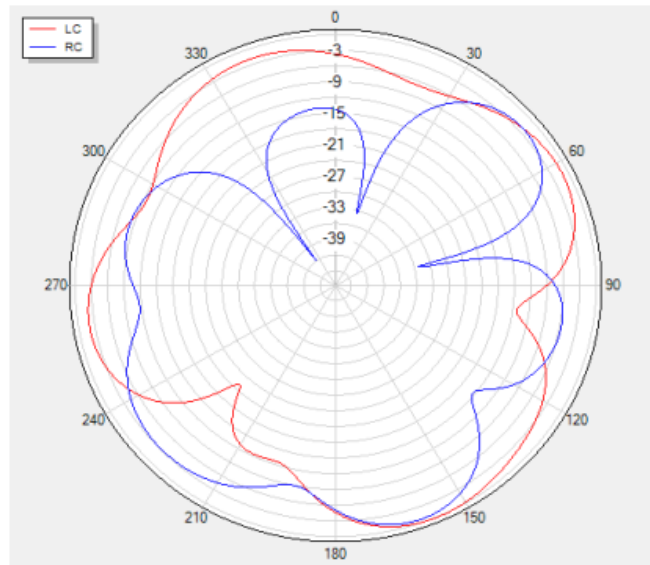
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2.3.3. 3D Radiation Drawing



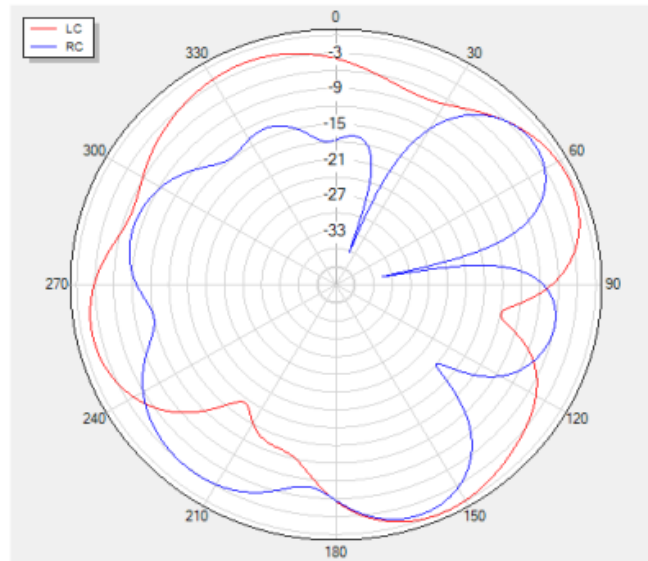
2.3.4. directional drawing of horizontal plane

Theta=90 freq=2400MHz

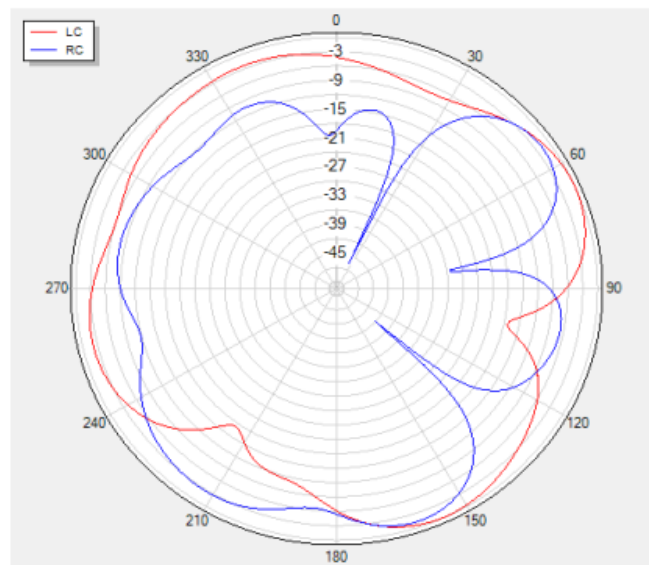


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Theta=90 freq=2450MHz



Theta=90 freq=2480MHz



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	