

ShenZhen Wllink Technology Co.,Ltd

SPECIFICATION FOR APPROVED

PRODUCTS: FPC Antenna

PART NO: C001-L-V5

Data: 2023. 11. 20

SUPPLIER		
PREPARED BY	CHECKED BY	APPROVED BY

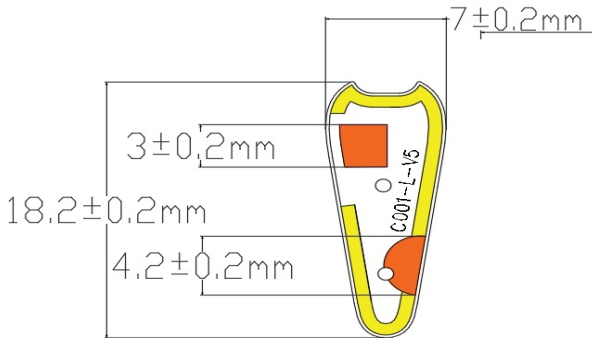
CUSTOMER		
ACCEPTED BY	CHECKED BY	APPROVED BY

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

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1. Project Information

1.1. Appearance and Dimensions

Test point	Specifications	Test result
Overall dimensions	7mm*18.2mm ($\pm 0.2\text{mm}$)	OK
Golden finger		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

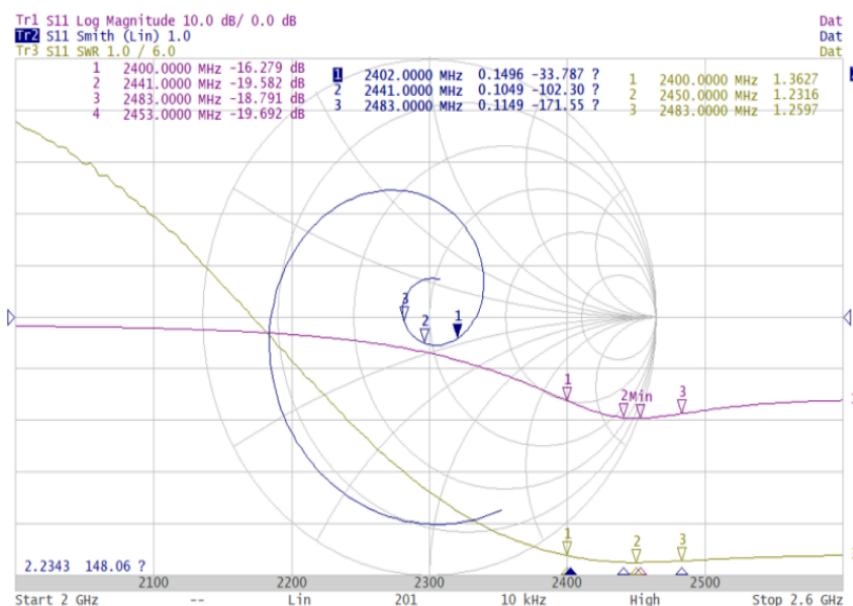
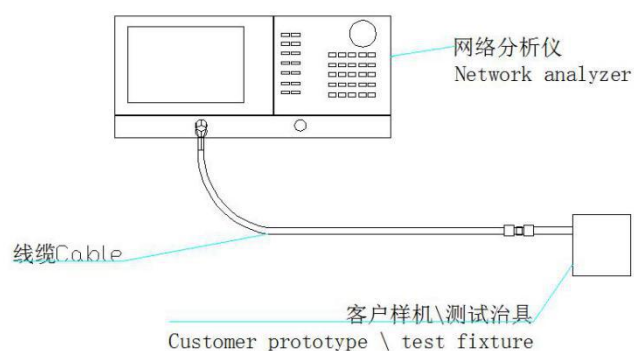
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2. Electrical Characteristics

2.1. Test Environment Conditions

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

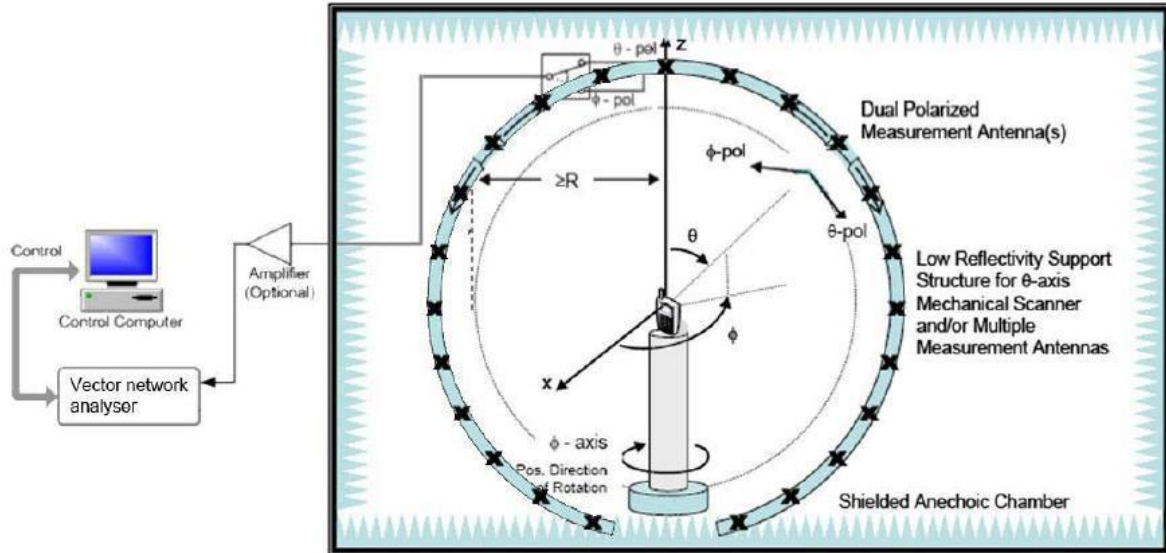
2.2. Measurement method



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2.3. Efficiency and Gain

2.3.1. Test system

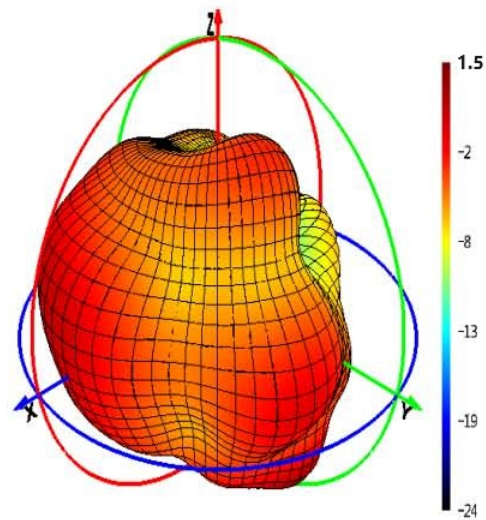


2.3.2. No-source test data

L边-Gain&Efficiency 增益和效率			
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率
2400	1.01	-4.46	32.13%
2410	1.23	-4.29	33.88%
2420	1.38	-4.17	34.09%
2430	1.42	-3.98	35.90%
2440	1.50	-3.62	36.64%
2450	1.46	-3.81	34.82%
2460	1.37	-4.06	32.05%
2470	1.32	-4.21	31.91%
2480	1.33	-4.32	30.98%
2490	1.28	-4.24	30.35%
2500	0.91	-4.34	29.84%

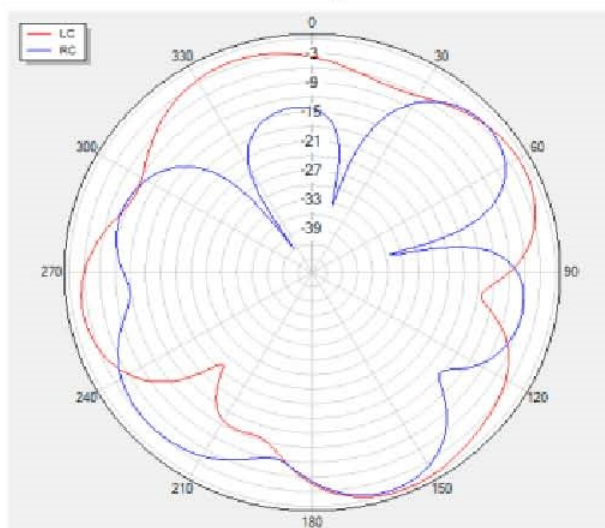
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2.3.3. 3D Radiation Drawing



2.3.4. directional drawing of horizontal plane

Theta=90 freq=2400MHz



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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	$70^{\circ}\text{C} - 20^{\circ}\text{C}$ 5 cycles , Under normal conditions 1-2H	