ShenZhen City WINWAVE Technology CO.,LTD.

SPECIFICATION FOR APPROVED

CUSTOMER: _____

PRODUCTS: FPC Antenna

PART NO: BTW98-FPC Antenna

Spec.: YL-BTW98-V2

Data: 2022.8.10

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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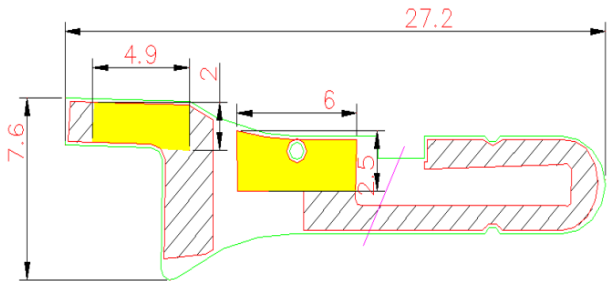
ANTENNASPECIFICATION

Revision history

VERSIONS	DATE	STATE
V1	2022-01-10	First Version
V2	2022-03-21	Second Version

1. Project Information

1.1. Appearance and Dimensions

Test point	Specifications	Test result
Overall dimensions	27.2mm*7.6mm	OK
Golden finger	4.9*2mm, 6*2.5mm	OK
Drawing		

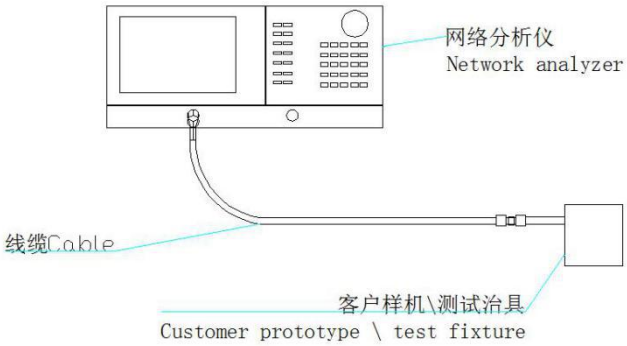
Inspection items		Inspection results
Material specification	25um copper+12.5um glue+12.5umPI	OK
Material	Half and half (Electrolytic copper)	OK
Material	gummed paper (3M300LSE)	OK
Electroplate	Gold plating	OK
Appearance	Surface: matte black	OK

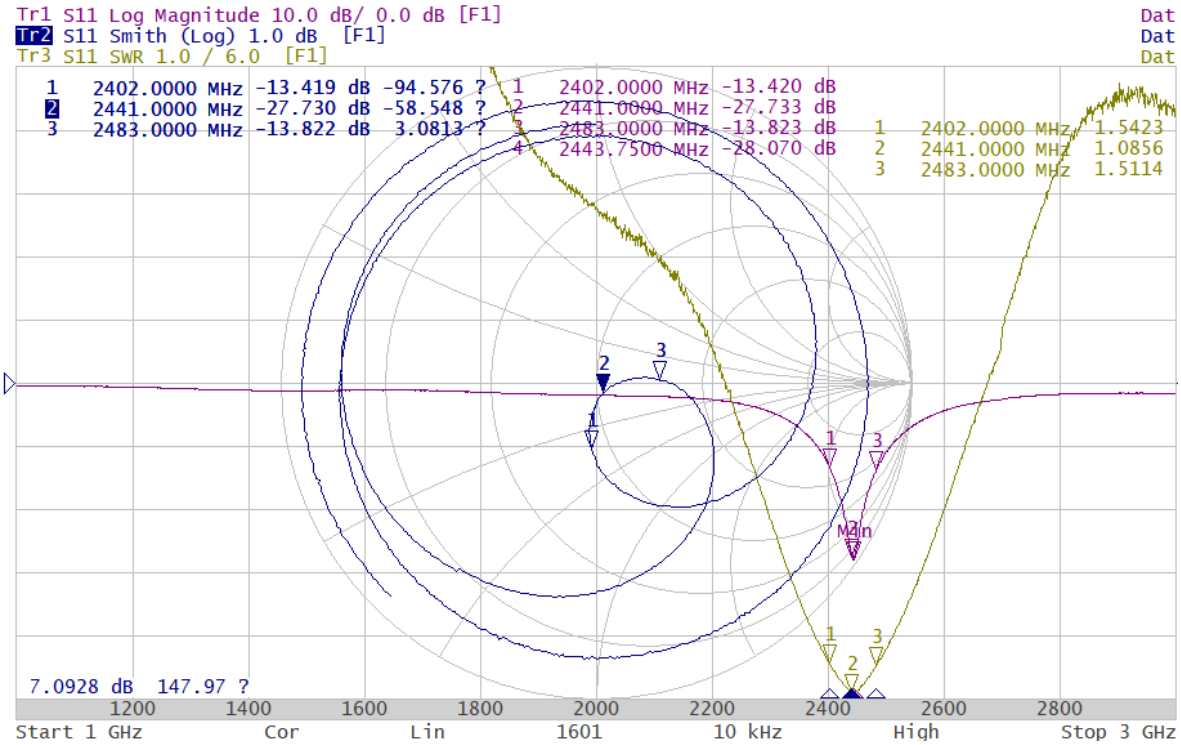
2. Electrical Characteristics

2.1. Test Environment Conditions

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

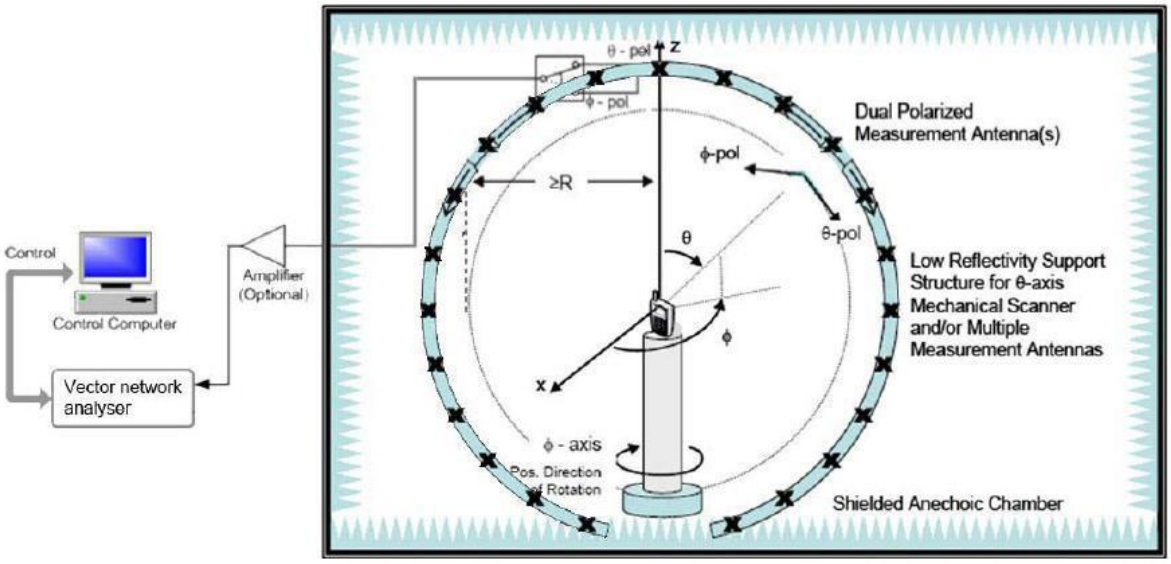
2.2. Measurement method





2.3. **Efficiency** and Gain

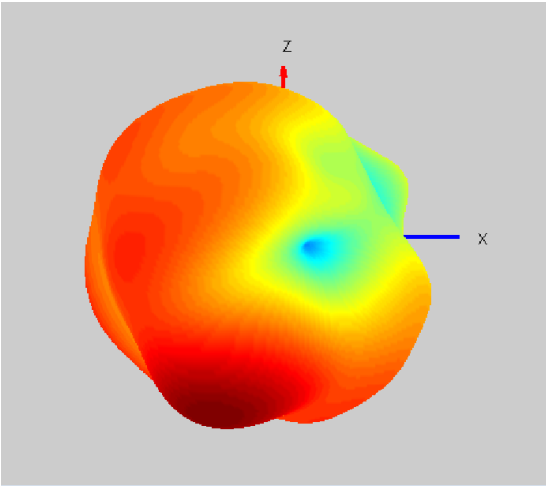
2.3.1. Test system



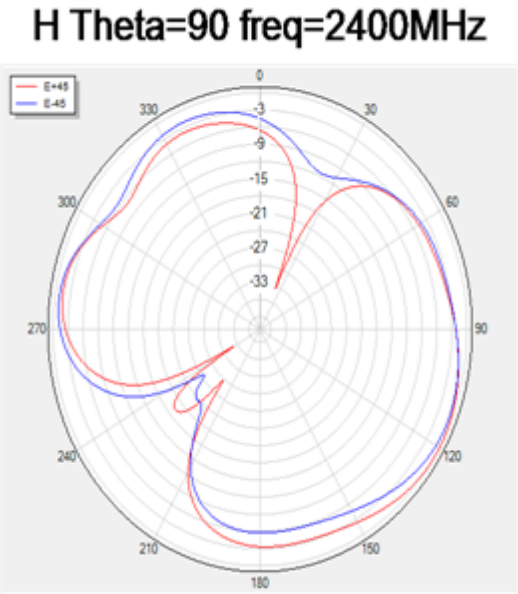
2.3.2. No-source test data

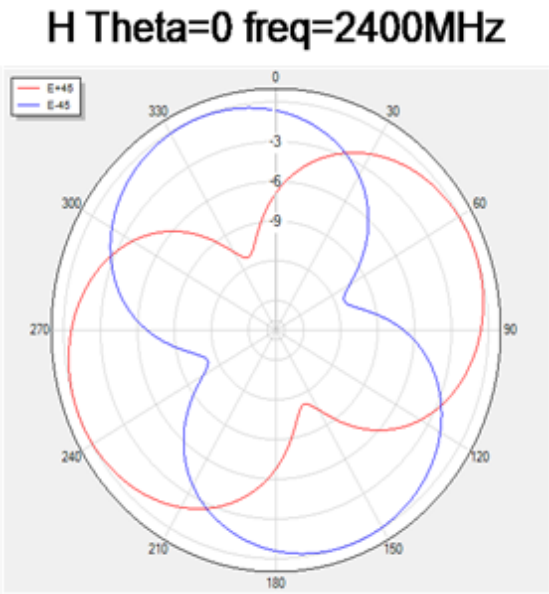
frequency 频率(MHz)	gain 增益(dB)	efficiency 效率
2400	1.18	40.52%
2410	1.15	37.87%
2420	1.66	40.81%
2430	1.69	39.48%
2440	1.83	38.87%
2450	2.12	39.64%
2460	2.12	38.40%
2470	2.29	38.87%
2480	2.6	40.46%
2490	2.23	35.96%
2500	2.59	37.91%

2.3.3. 3D Radiation Drawing

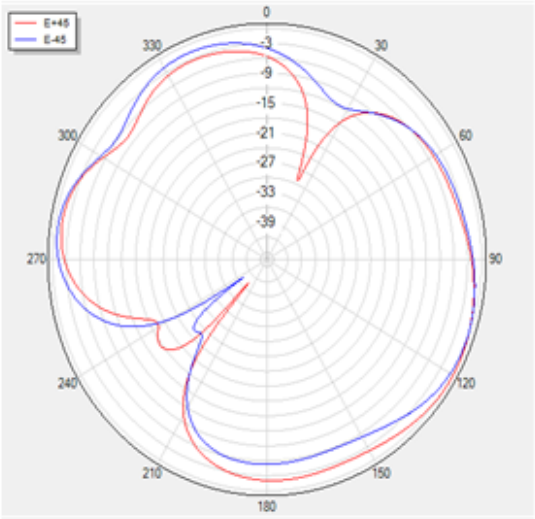


2.3.4. directional drawing of horizontal plane

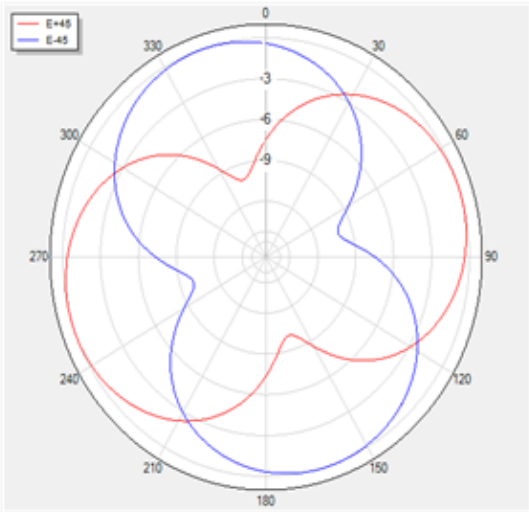




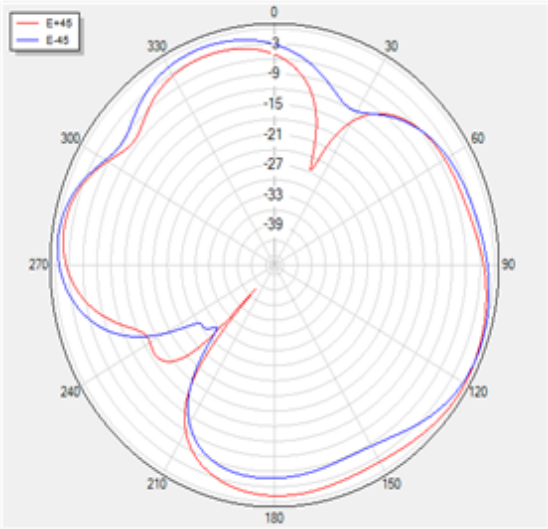
H Theta=90 freq=2450MHz



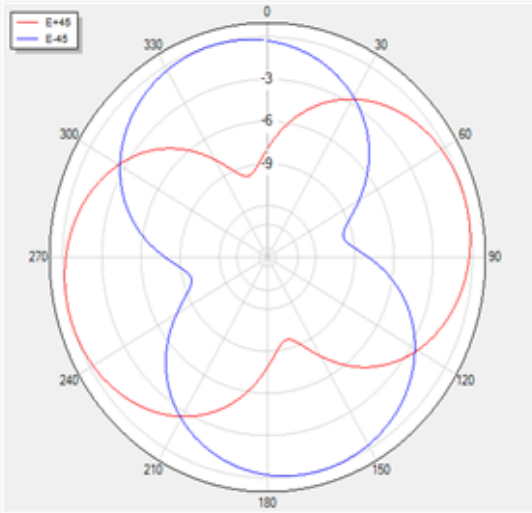
H Theta=0 freq=2450MHz



H Theta=90 freq=2480MHz



H Theta=0 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.

4. Reliability test

Item	Test methods and conditions	Specifications and requirements
Storage conditions	Temperature, humidity and air pressure are as follows: 1、Temperature:-30℃~+80℃ 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 ±1℃;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≧4N	
Constant temperature and humidity	humidity : 40℃± 2℃,90-95%RH Duration: 4H recovery time: 1-2H	
High and low temperature test	70℃ -20℃ 5 cycles , Under normal conditions 1-2H	