



Dongguan Youbi Electronics Co., Ltd

APPROVAL SHEET

CUSTOMER NAME:

PRODUCT NAME: 2.4G FPC L=180mm+端子terminal

CUSTOMER P/N:

Youbi P/N: UB01C180F3D1368A REV: A

Antenna Type: PIFA antenna

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY:	 Changxing. Liu	
DATE:	2022/10/7	



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Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2022-10-7



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Content

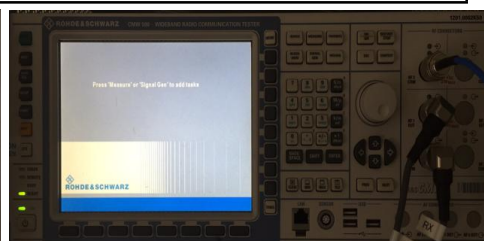
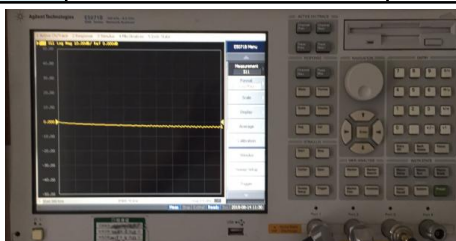
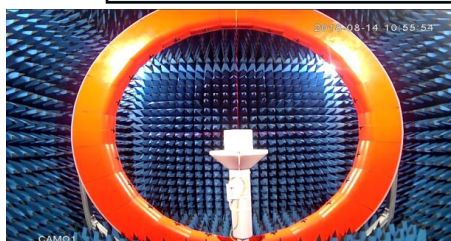
<i>Item</i>	<i>Description</i>
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1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	40x18.5,L180	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 1.92	
Polarization	Linear Polarization	
Gain	5.18	dBi
Efficiency	>50	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

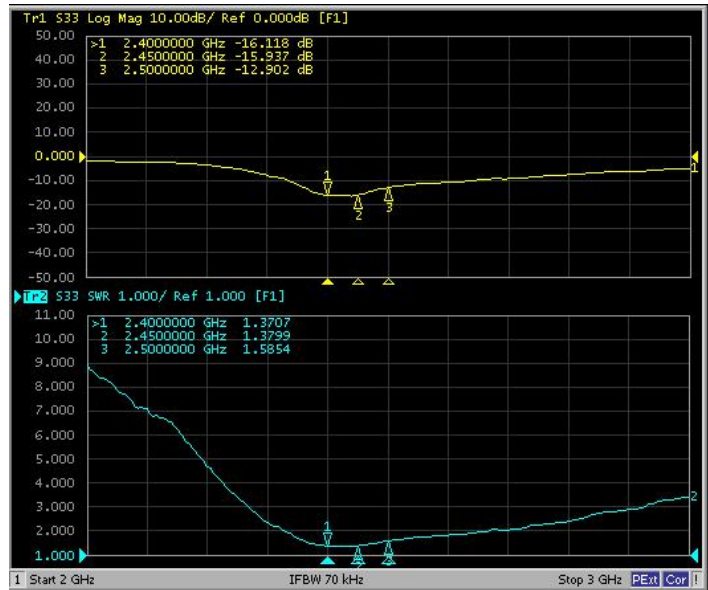
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



3. S Parameter

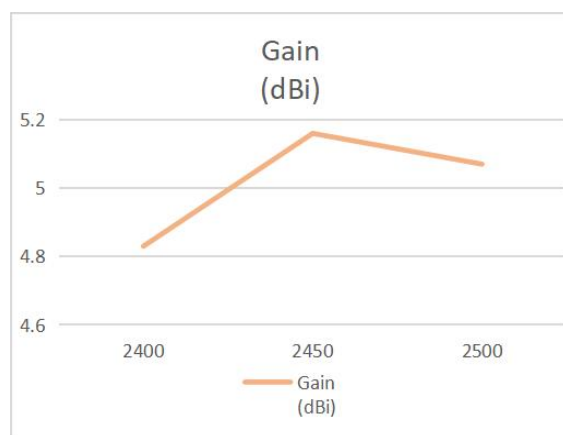
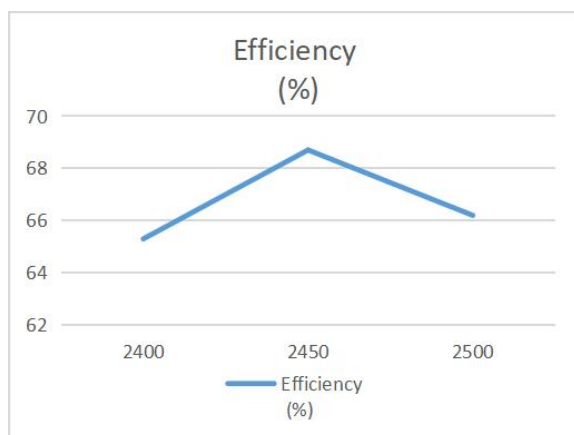
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-16.11	1.37
2450	-15.93	1.37
2500	-12.90	1.58

* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
 $RL = 20 * \log_{10}[(VSWR + 1) / (VSWR - 1)]$



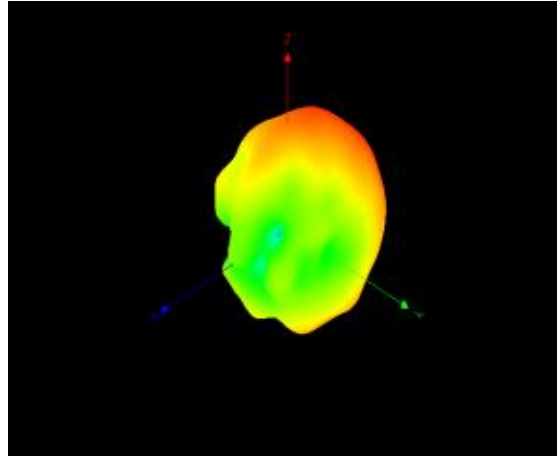
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	65.3	68.7	66.2
Gain (dBi)	4.83	5.18	5.13

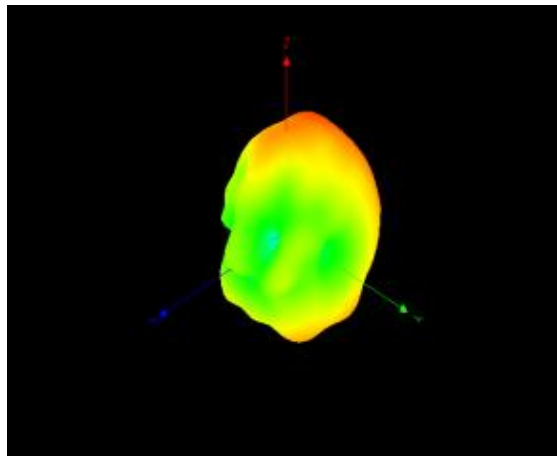


5. Radiation Pattern

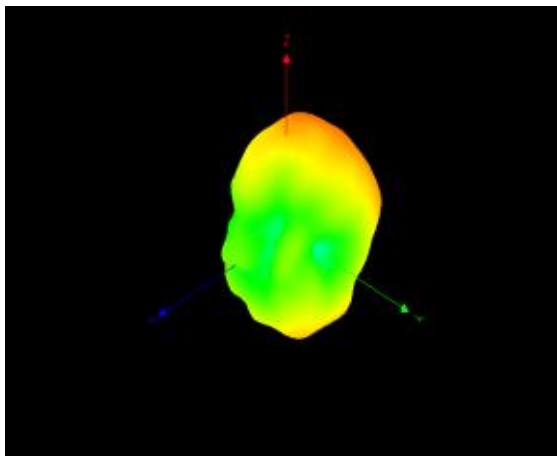
5-1 Antenna 3D Radiation Pattern



2400MHz

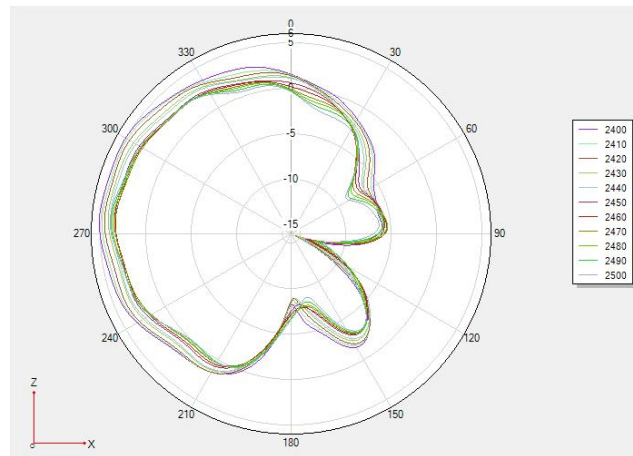


2450MHZ

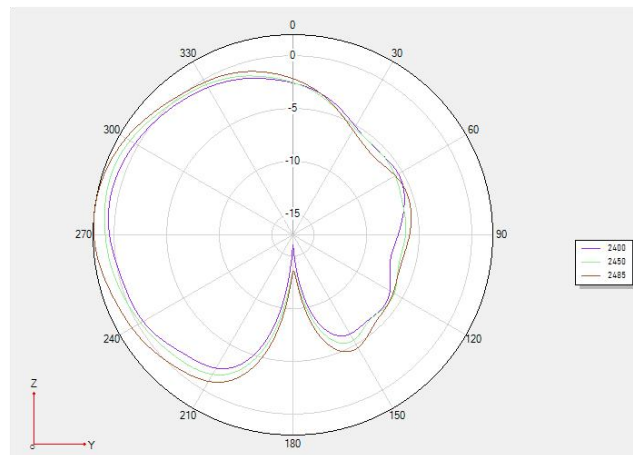


2500MHZ

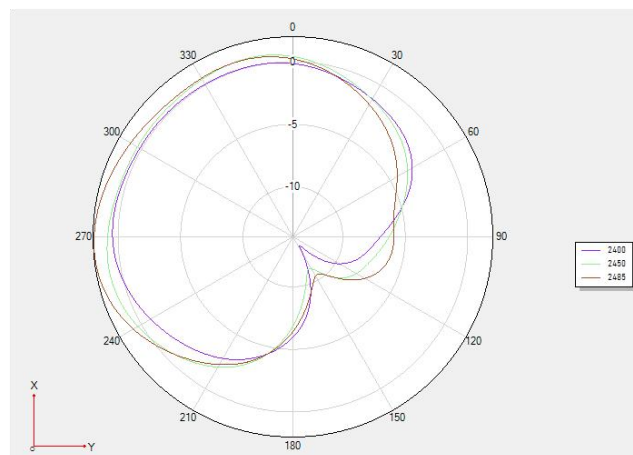
5-2 Antenna 2D Radiation Pattern



Phi 0

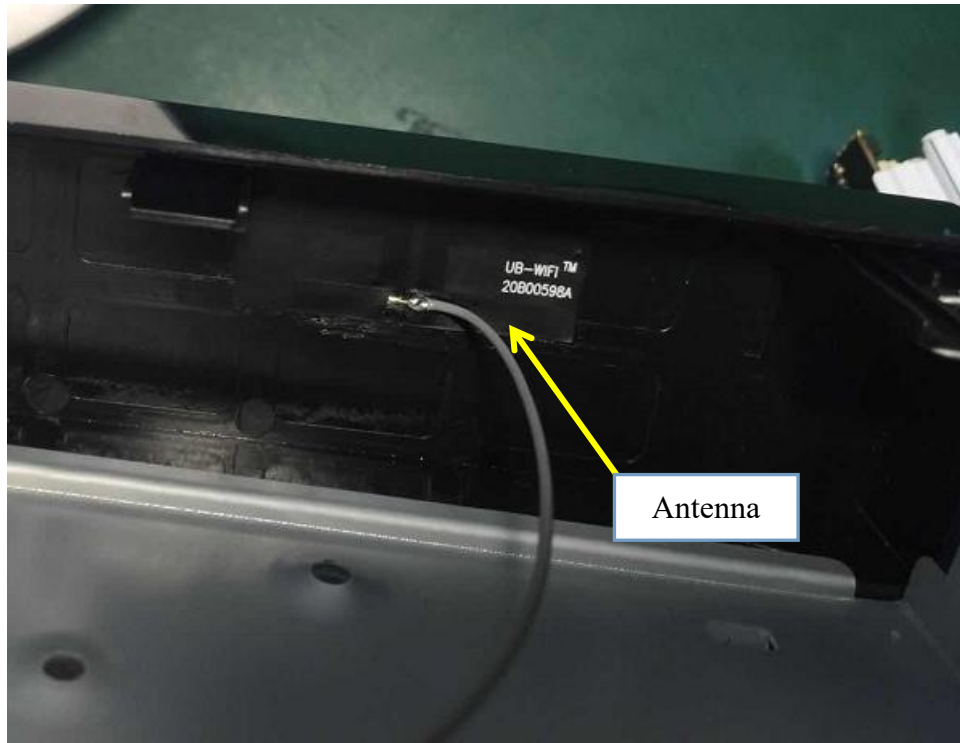


Phi 90



Theta 90

6. Antenna installation diagram



7. Mechanical Specification

