

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: 熵基科技股份有限公司

产 品 名 称

PRODUCT NAME: 2.4G FPC 内置天线 L=120mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C100F3D4343A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Eddy	
APPROVED BY:	Changxing. Liu	
DATE:	2023/12/7	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2023-12-7

Content

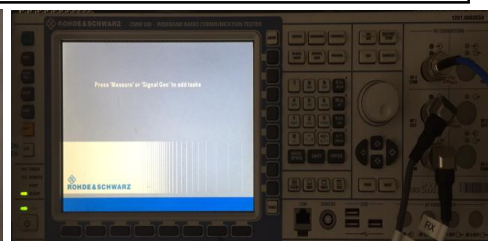
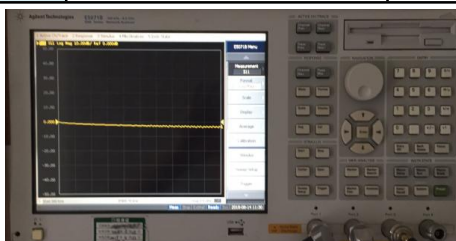
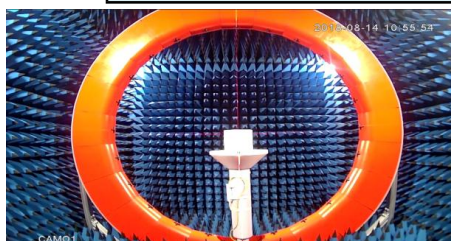
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Antenna installation diagram
7.-----	Mechanical Specification
8.-----	Packaging

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	40x8.2,L120	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	4.08	dBi
Efficiency	>60	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

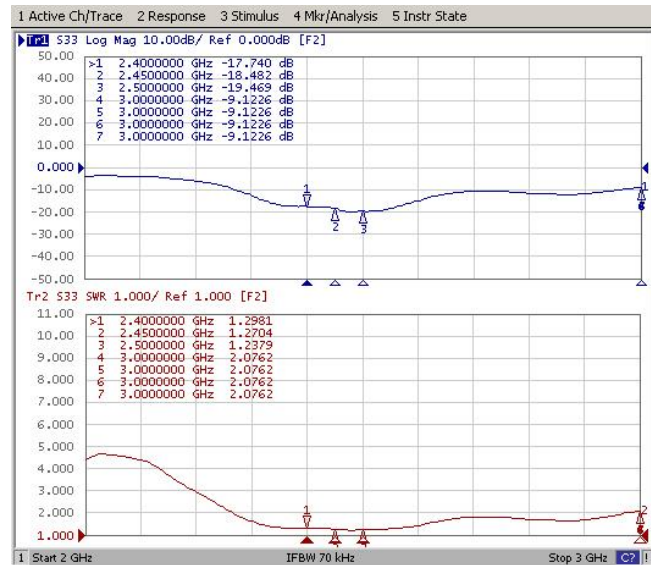
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

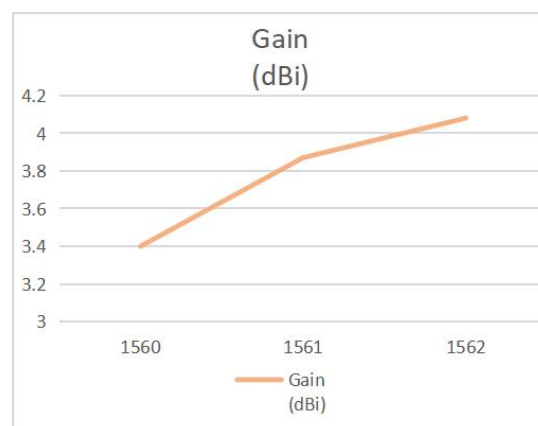
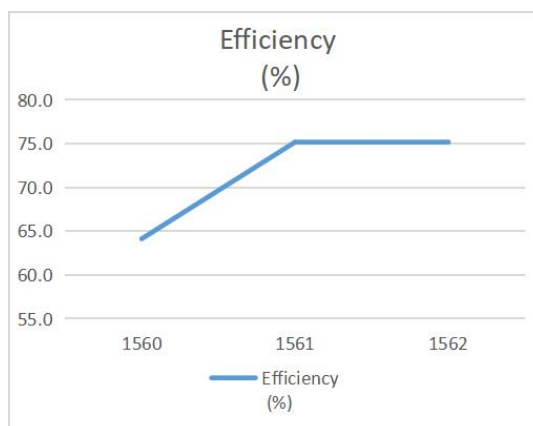
Frequency (MHz)	Return loss (dB)	VSWR
2400	17.74	1.29
2450	18.48	1.27
2500	19.46	1.23

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



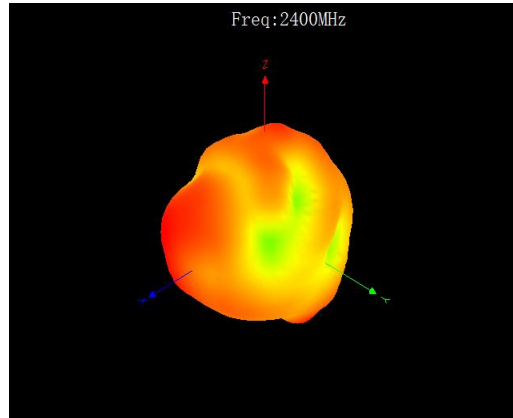
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	64.12	75.16	75.16
Gain (dBi)	3.40	3.87	4.08

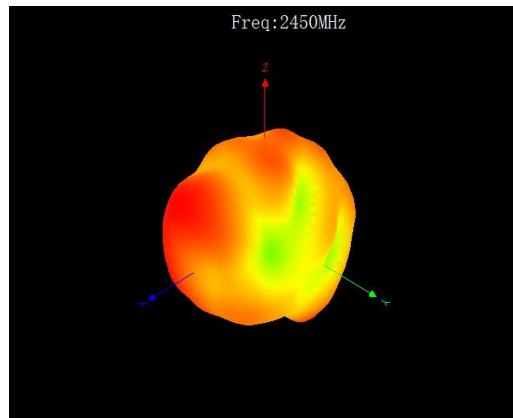


5. Radiation Pattern

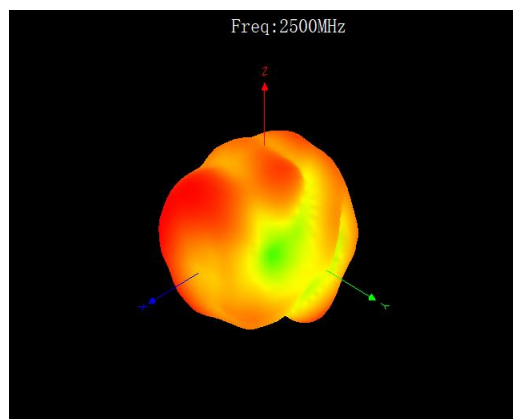
5-1 Antenna 3D Radiation Pattern



2400MHz

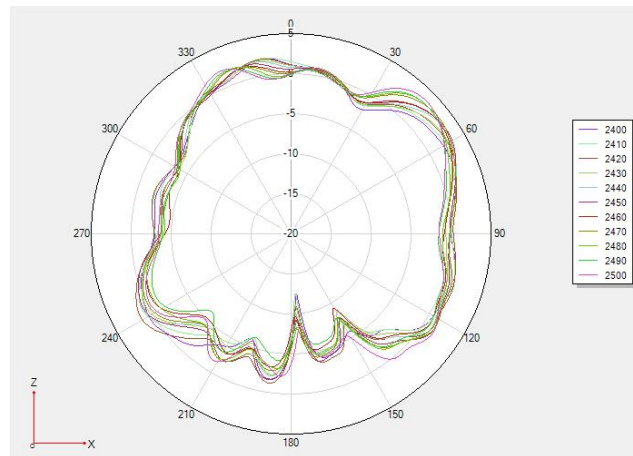


2450MHz

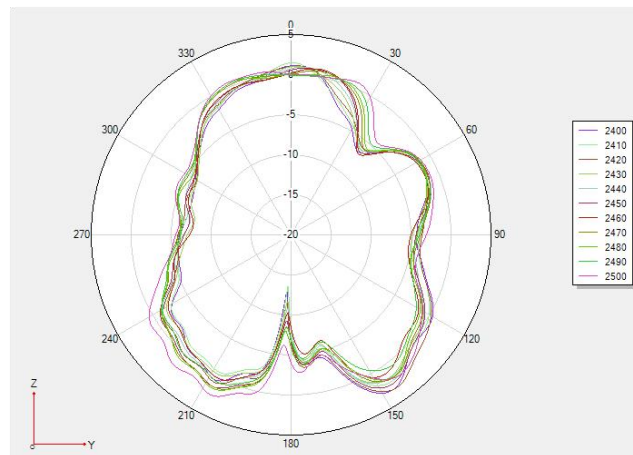


2500MHz

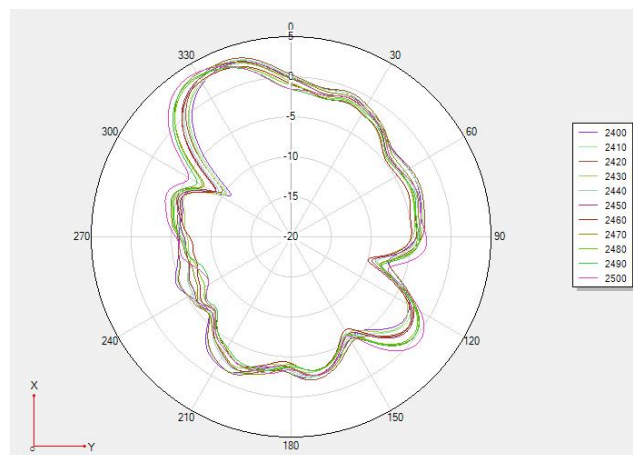
5-2 Antenna 2D Radiation Pattern



Phi 0



Phi 90



Theta 90

6. Mechanical Specification

