

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

2.4-5.8G FPC 内置天线 L=70mm

PRODUCT

NAME:

1.13 灰色线+4 代端子

客 户 料 号

CUSTOMER

P/N:

优比电子料号

Youbi

P/N:

UB01C70F2D5500A

REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:		
DATE:	2025/9/2	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	lina	2025-9-2

Content

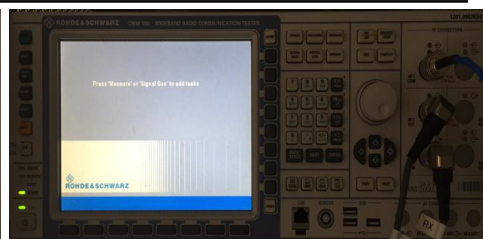
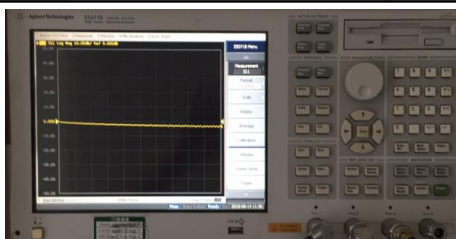
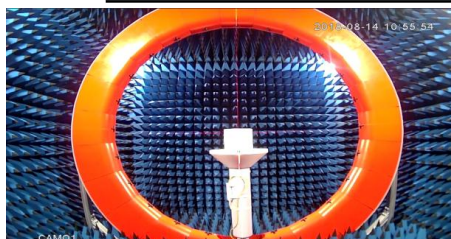
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter_Single antenna test
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification
7.-----	Assembly drawing

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	11.2*48.5 L=70	mm
Frequency	2400-2500/5150-5850	MHz
Impedance	50	Ω
VSWR	< 1.92	
Polarization	Linear Polarization	
Gain	4 $\pm$ 1	dBi
Efficiency	>50	%
Connector Type	MHF-4-Plug	
Operating temperature	-30℃~+85℃	
Storage Temp	-30℃~+85℃	

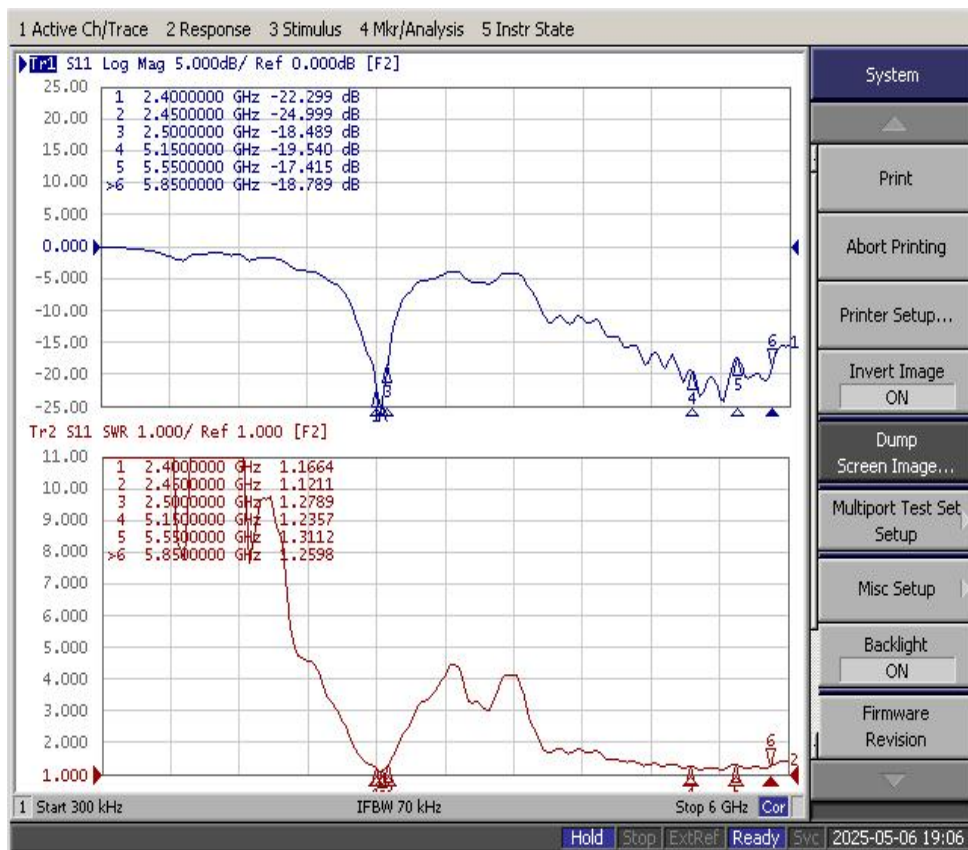
2. Test Items and Equipment

	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_Single antenna test

Frequency (MHz)	Return Loss (dB)	VSWR
2400	-22.29	1.16
2450	-24.99	1.12
2500	-18.48	1.27
5150	-19.54	1.23
5500	-17.41	1.31
5850	-18.78	1.25



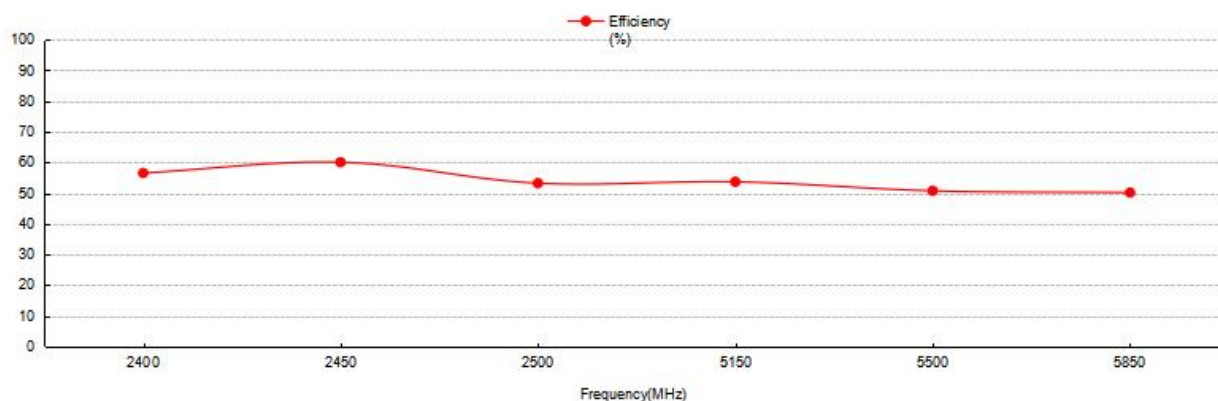
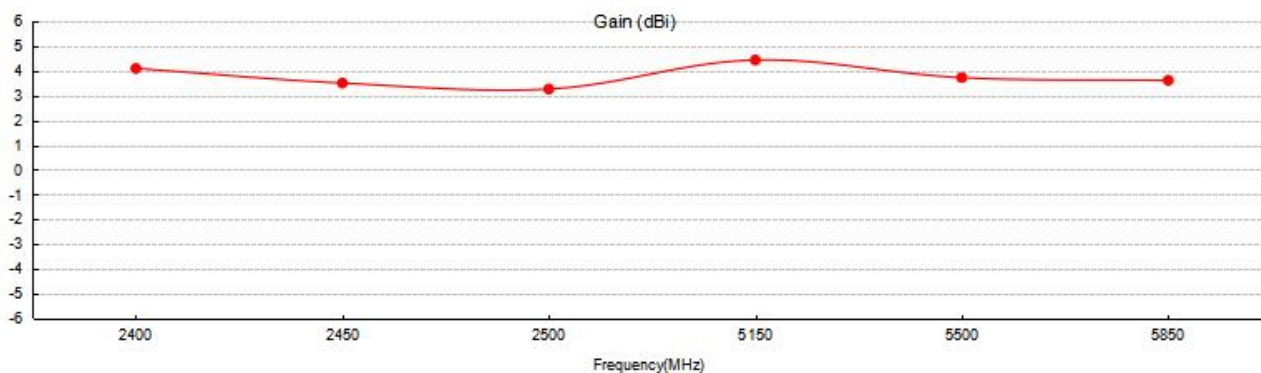
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

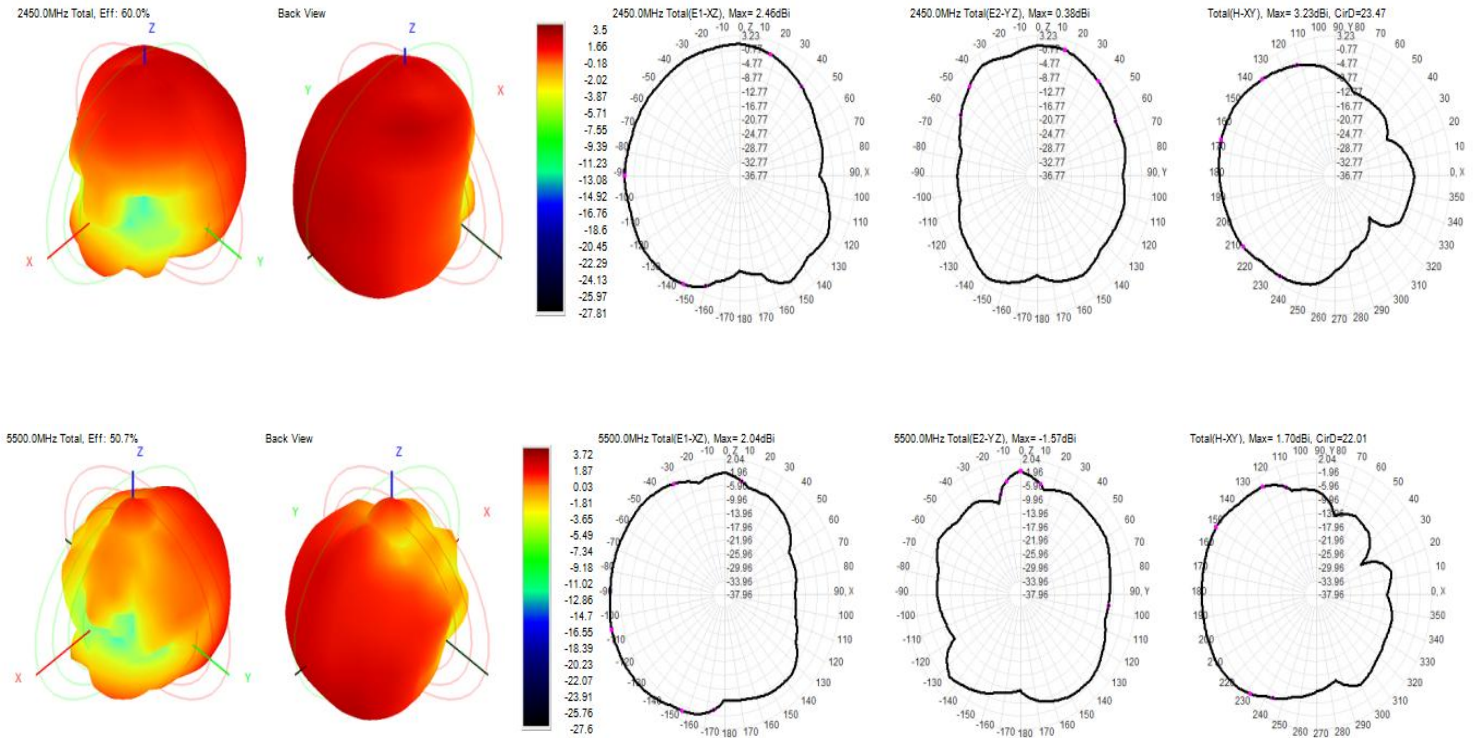
$$RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$$

4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	56.52	60.04	53.21	53.66	50.72	50.15
Gain (dBi)	4.09	3.5	3.26	4.43	3.72	3.61



5. Antenna 2D&3D Radiation Pattern

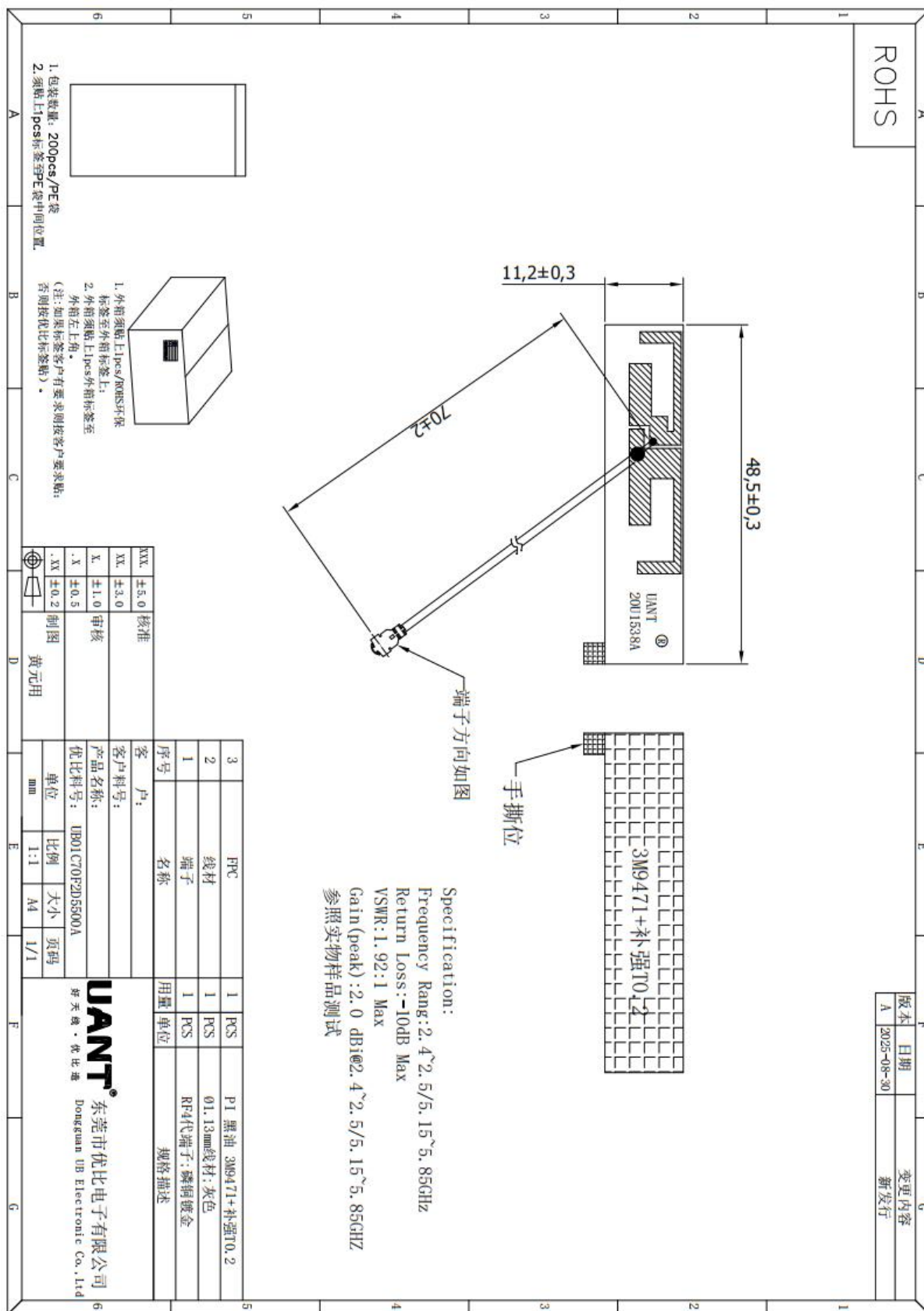


5.1 3D Free Space

OTA

WIFI	Channel	TRP	TIS
2.4G 802.11B-11Mbps	1	14.42	-88.13
	6	14.59	-87.70
	11	13.99	-87.53
2.4G 802.11N-MCS7	1	16.8	-70.37
	6	16.62	-70.16
	11	16.25	-70.01
5.8G 802.11A-54Mbps	36	12.44	-73.25
	149	13.00	-73.08
	165	13.77	-73.81

6. Mechanical Specification:



7.Assembly drawing

