

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: 安冉

产 品 名 称

PRODUCT NAME: 2.4G FPC 内置天线 L=150mm+IPEX

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C150F2D229A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	Changxing. Liu	
DATE:	2022/2/25	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2022-2-25

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.-----	Mechanical Specification

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	29x15,L150	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
Return Loss	< -10	dB
Polarization	Linear Polarization	
Gain	2.3±0.5	dBi
Efficiency	>50	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

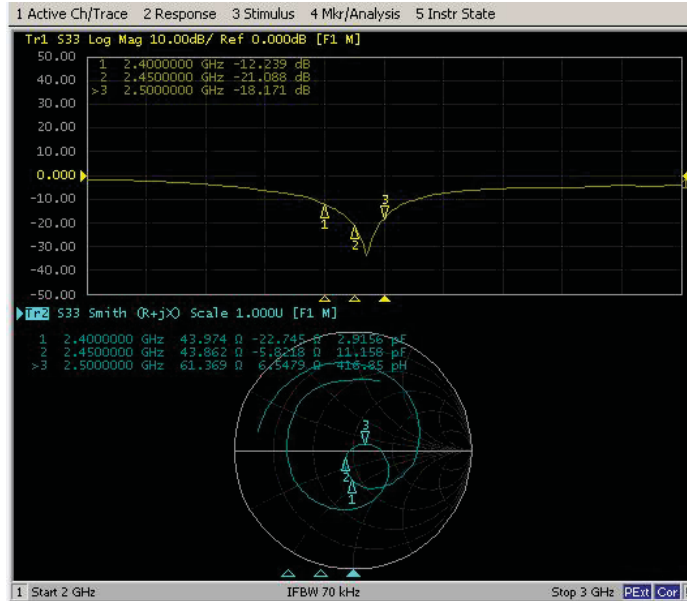
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

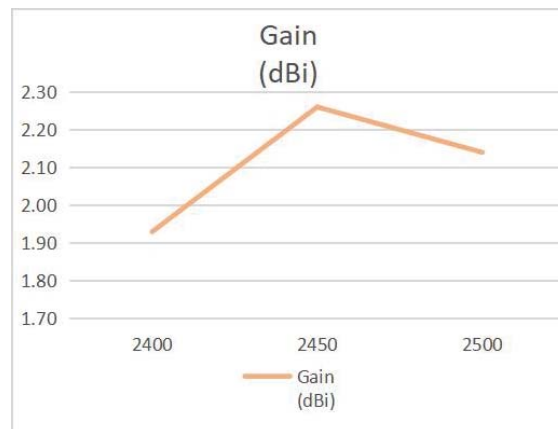
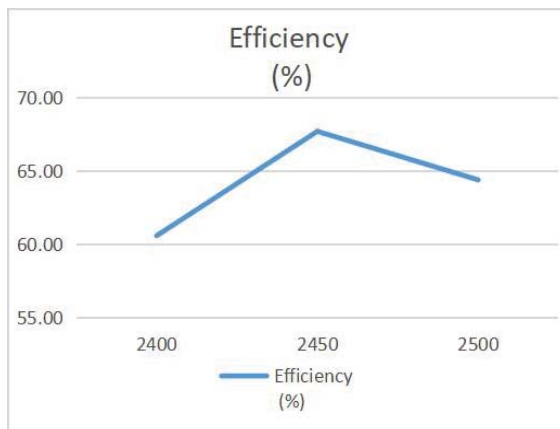
Frequency (MHz)	Return Loss (dB)
2400	-12.23
2450	-21.08
2500	-18.17

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



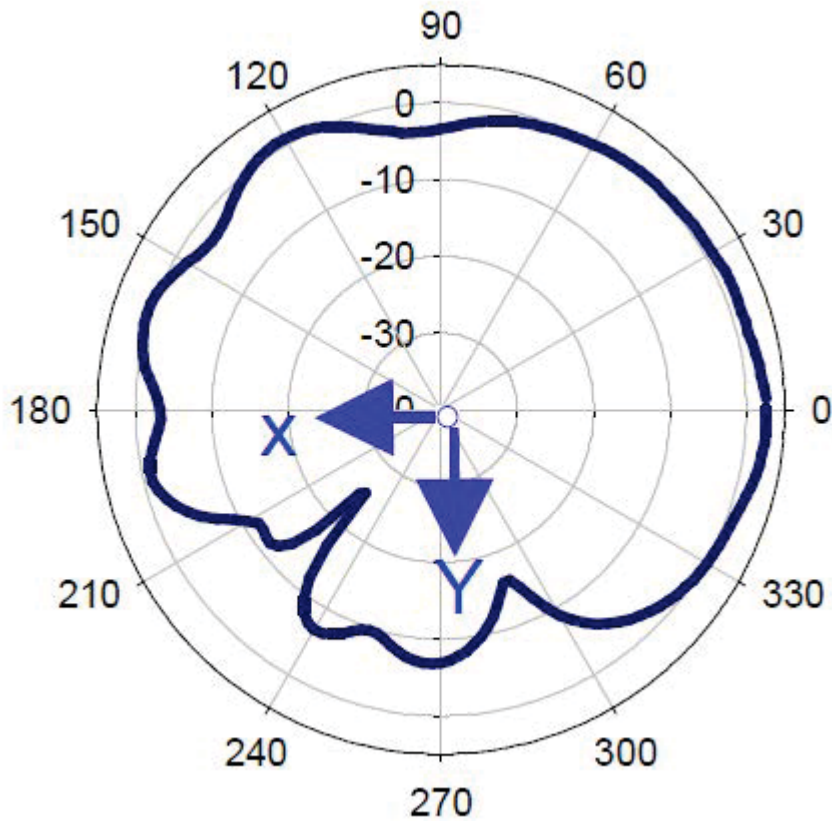
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	60.6	67.7	64.4
Gain (dBi)	1.93	2.26	2.14



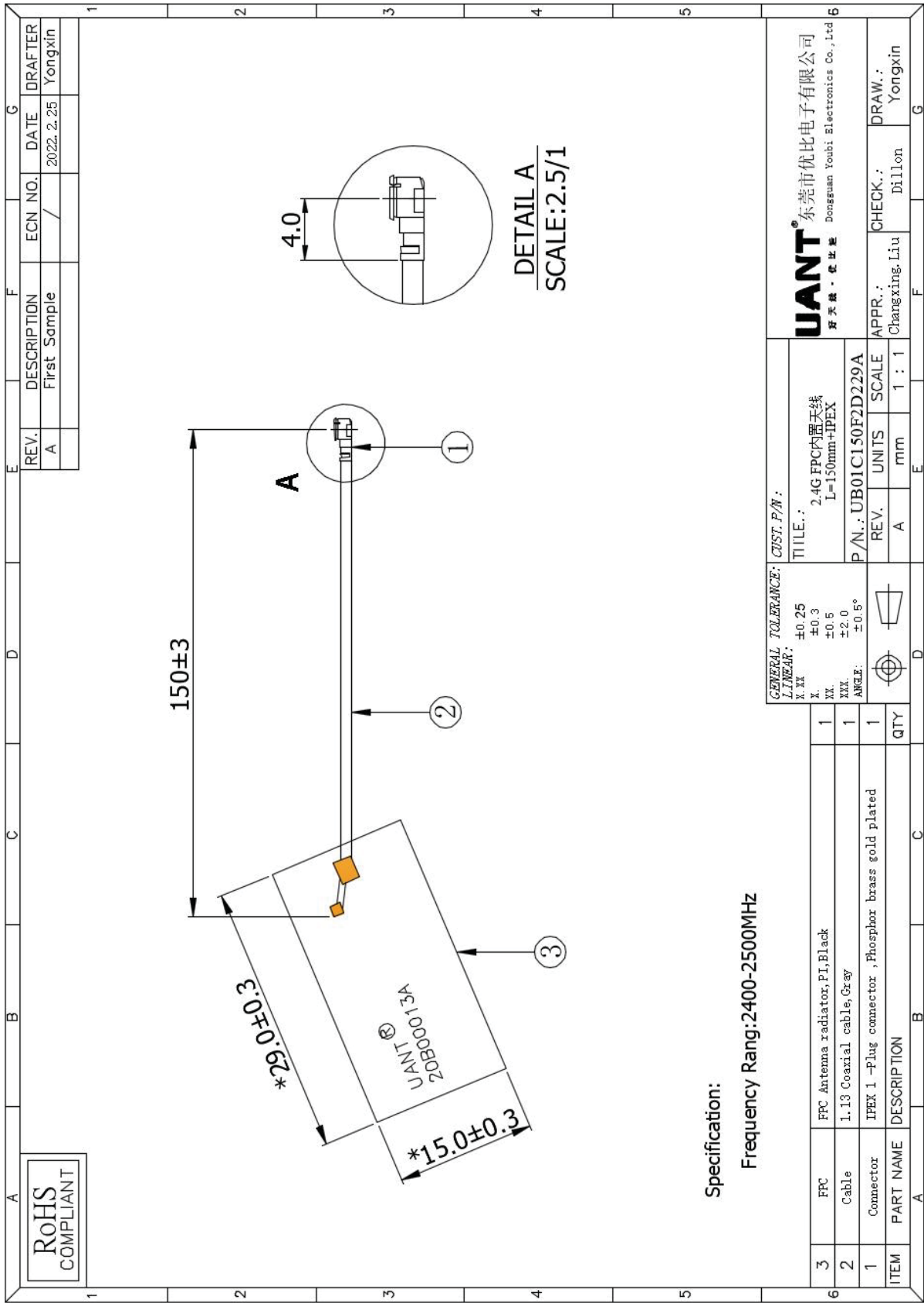
5. Radiation Pattern

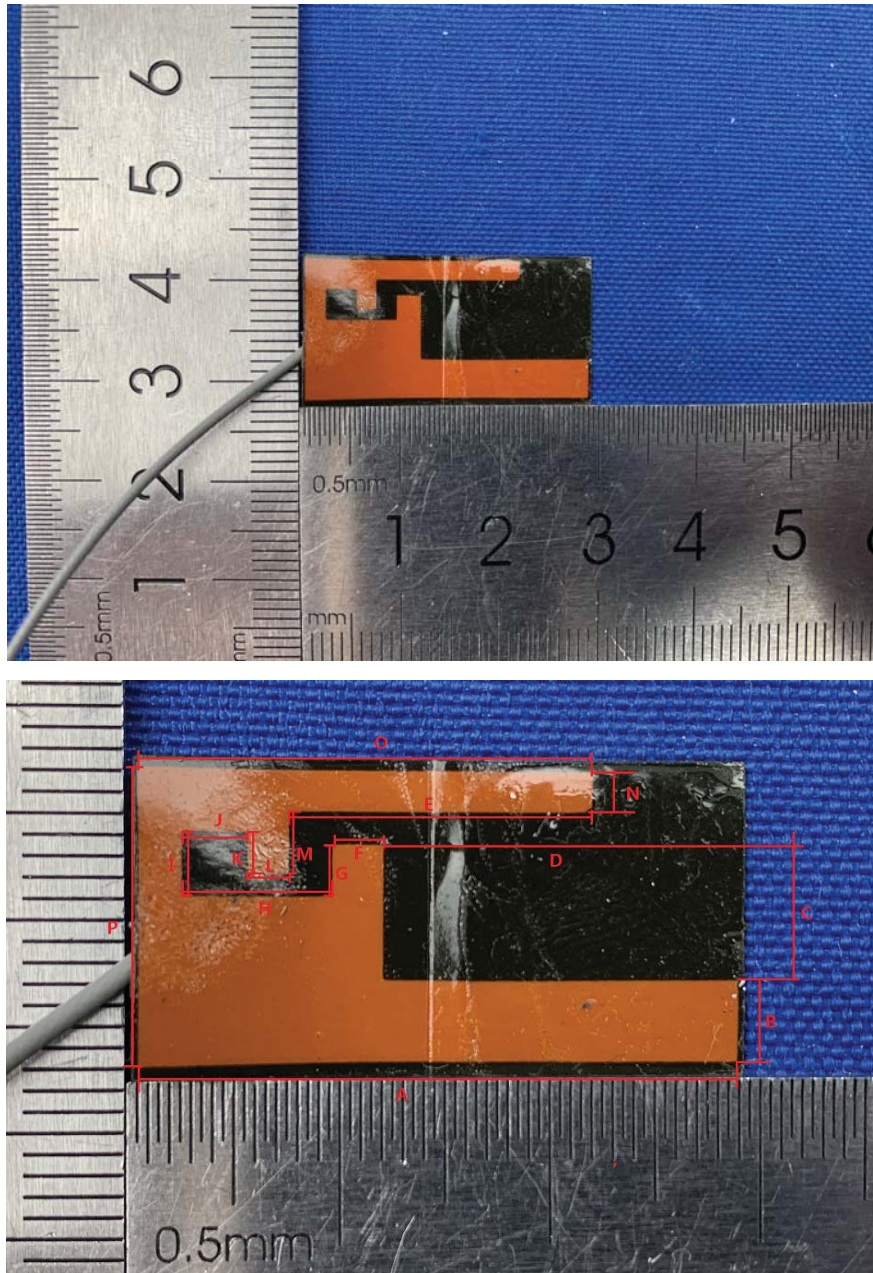
2450MHZ



Peak Gain= 2.26dBi

6. Mechanical Specification





Antenna Size(Unit:mm)					
A: 28	D: 12	G: 2.5	J: 3	M: 3	P: 13.5
B: 4	E: 10	H: 7	K: 2	N: 2	
C: 6.5	F: 2.5	I: 3	L: 2	O: 22	