

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4/5.8G FPC Antenna L=155mm

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C155F2D4502A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:	Changxing.Liu	
DATE:	2024/3/14	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-3-14

Content

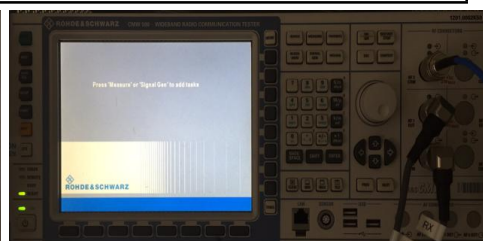
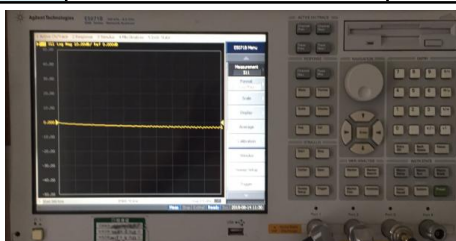
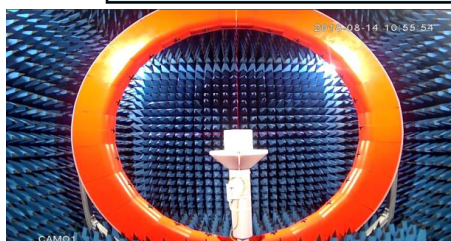
<i>Item</i>	<i>Description</i>
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	28.3x26.1,L155	mm
Frequency	2400-2500 / 5150-5850	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	2.0±0.5 @2.4G 4.5±0.5 @5.8G	dBi
Efficiency	>50	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+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

Frequency (MHz)	Return Loss (dB)	VSWR
2400	-15.49	1.41
2450	-21.31	1.18
2500	-19.18	1.24
5150	-19.97	1.23
5500	-14.97	1.43
5850	-27.39	1.08

* Voltage Standing Wave Ratio(VSWR)

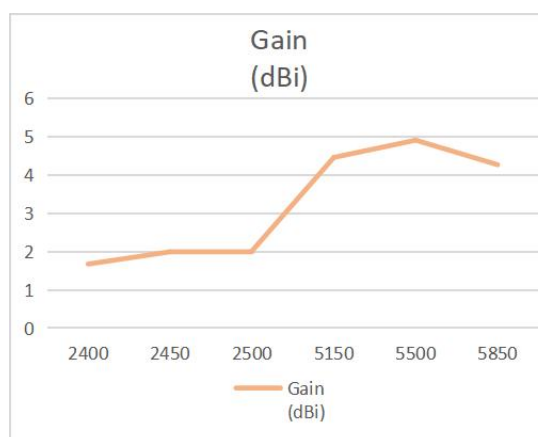
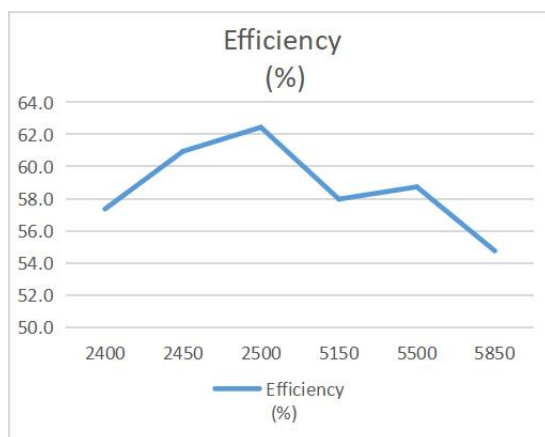
Return Loss(RL)

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

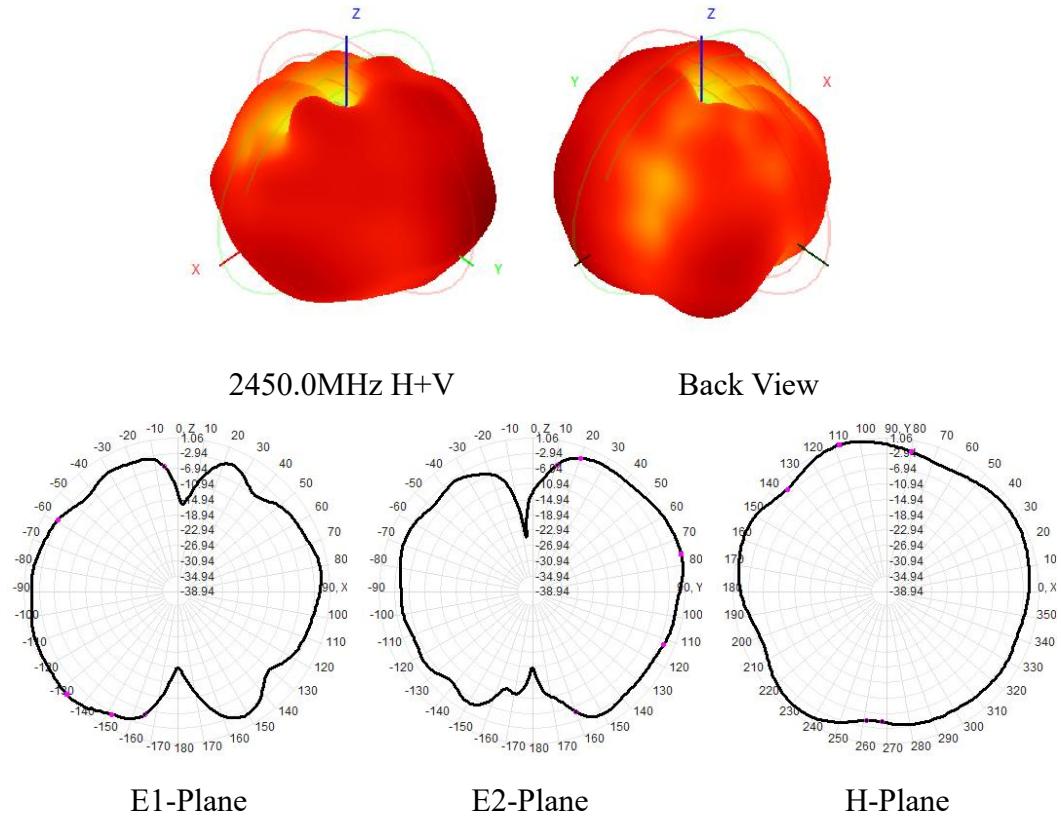


4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	57.35	60.94	62.44	57.97	58.73	54.75
Gain (dBi)	1.67	1.99	2.01	4.45	4.90	4.26



5. Radiation Pattern

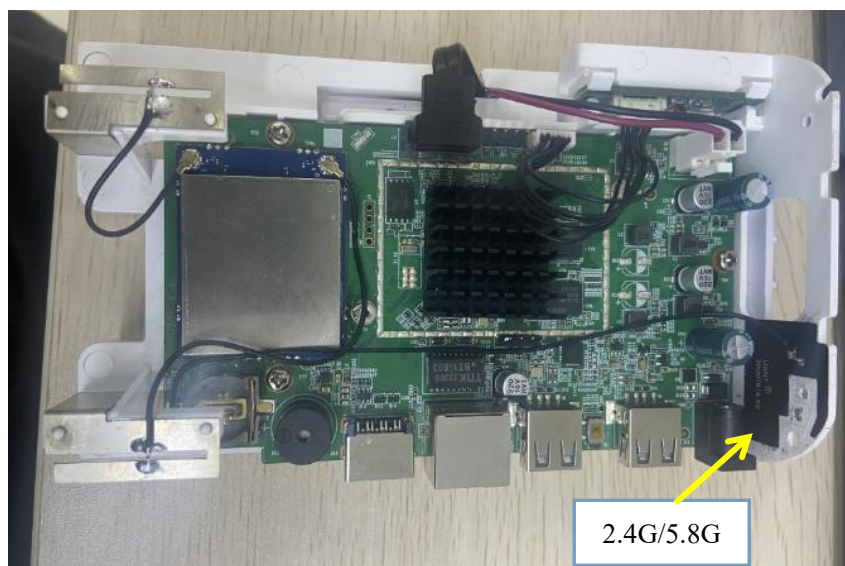


6.Active test data

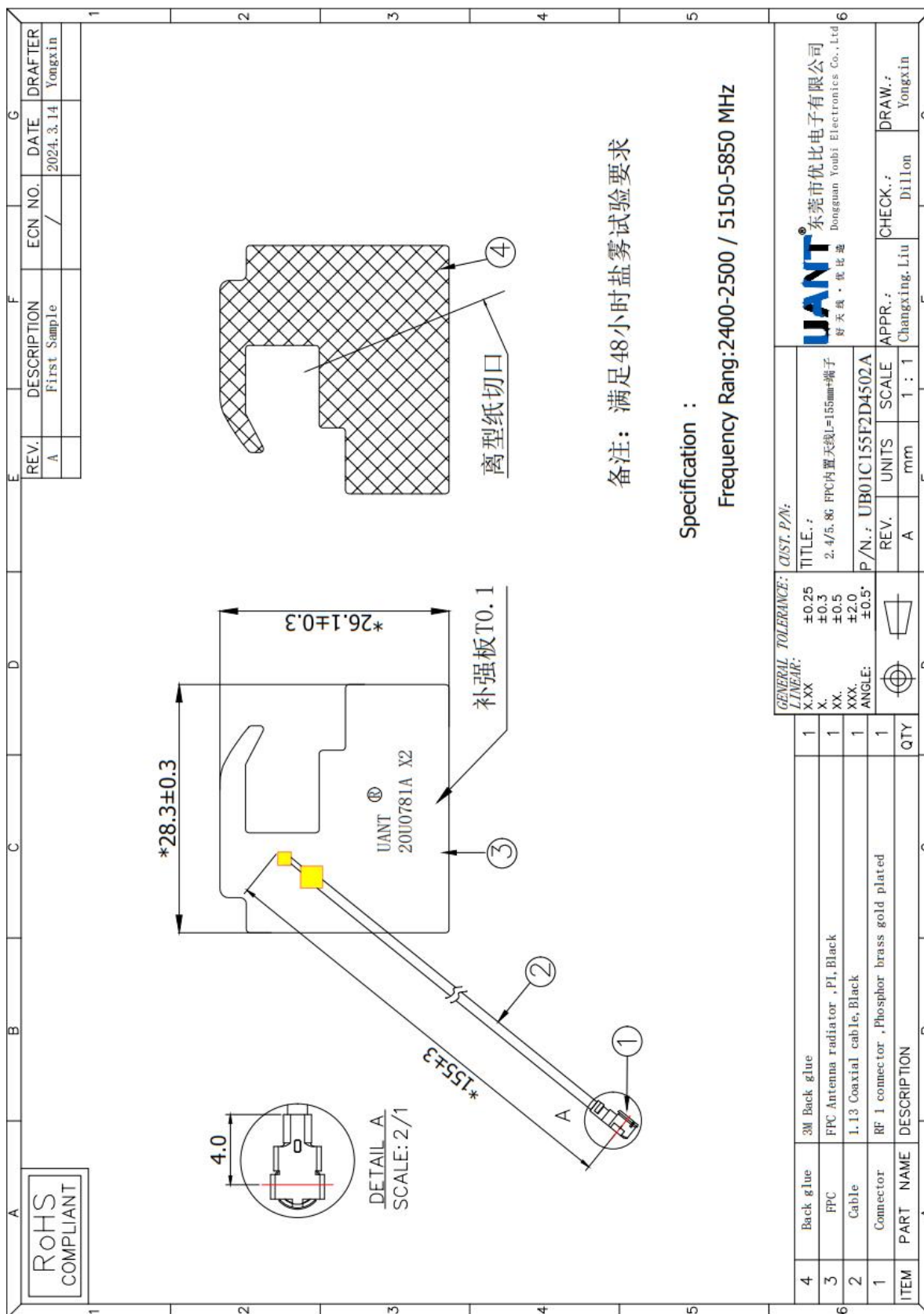
天线OTA测试-802.11b:11Mbps			
Channel	1	6	11
TRP	16.15	16.06	17.02
TIS	-80.12	-82.78	-84.64
天线OTA测试-802.11g:54Mbps			
Channel	1	6	11
TRP	18.58	18.64	18.27
TIS	-65.12	-70.56	-71.41
天线OTA测试-802.11n:MCS7			
Channel	1	6	11
TRP	18.06	18.03	17.12
TIS	-61.12	-64.54	-65.80

天线OTA测试-802.11a:54Mbps			
Channel	36	149	165
TRP	13.34	13.95	14.73
TIS	-70.14	-70.56	-68.28
天线OTA测试-802.11n:MCS7			
Channel	36	149	165
TRP	16.82	17.12	17.27
TIS	-63.22	-66.19	-62.60

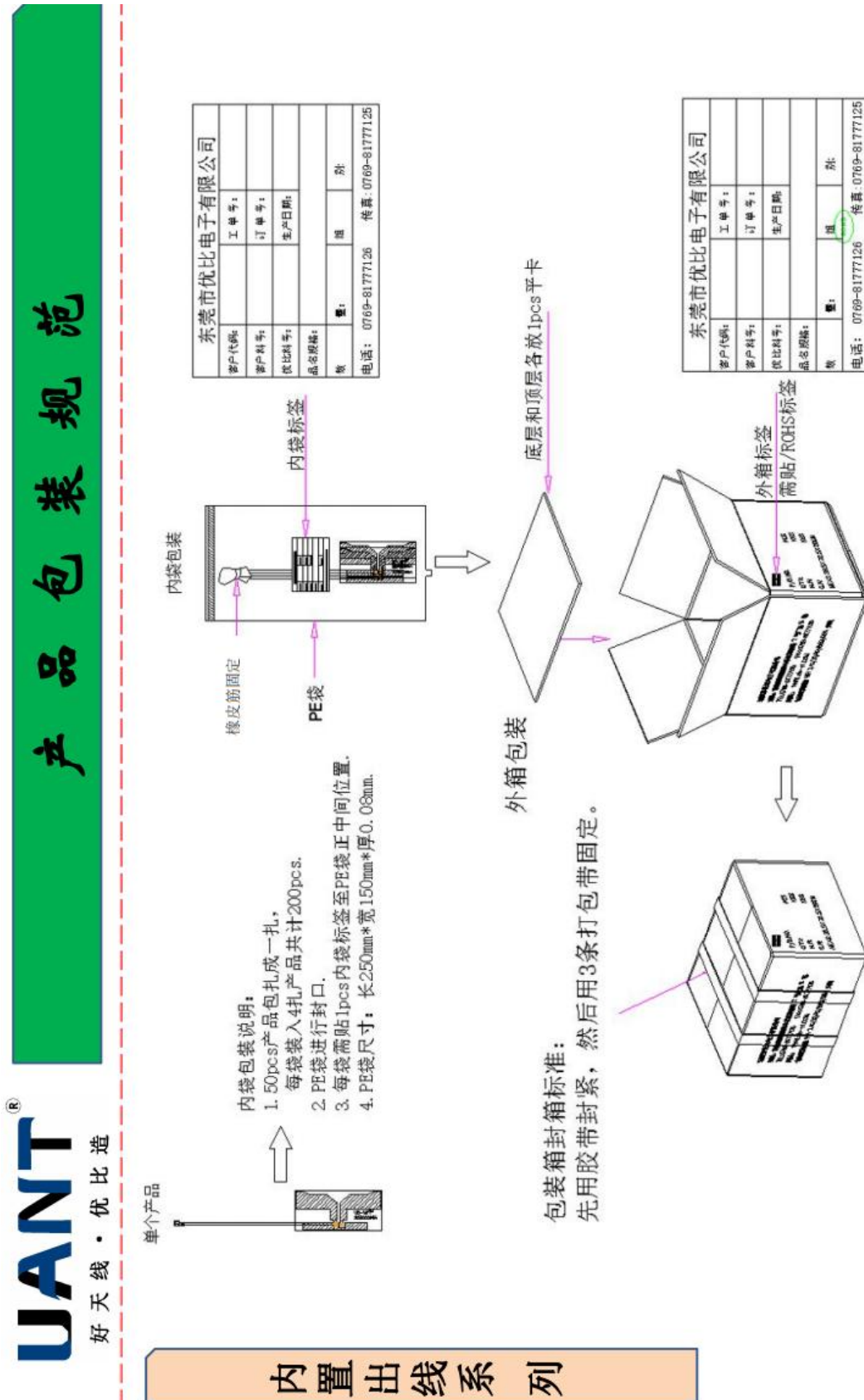
7. Antenna installation diagram



8. Mechanical Specification



9. Packaging



注: 此份包装规范适用于FPC, PCB天线类的线材总长 $\geq 90\text{mm}$ 带ipex和不带ipex产品, 属于通用类型.

1. **中号纸箱**装10000pcs产品每箱.

内置出线系列