

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G FPC 内置天线 L=50mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C50F2D2923A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Yongxin Lu	
APPROVED BY:	Changxing. Liu	
DATE:	2022/4/28	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongxin. Lu	2022-4-28

Content

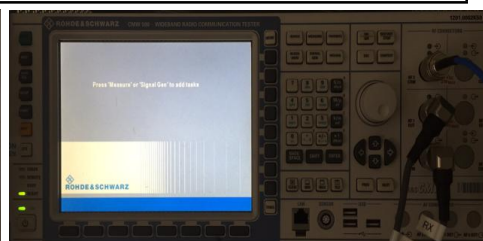
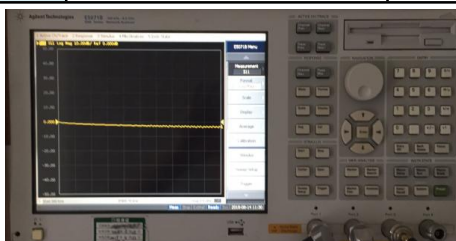
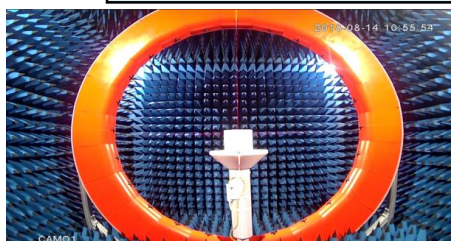
<i>Item</i>	<i>Description</i>
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	10.0x31.5,L50	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	4.0 $\pm$ 0.5	dBi
Efficiency	>50	%
Connector Type	1.13 MHF-1-Plug	
Operating temperature	-20 $^{\circ}$ C~+65 $^{\circ}$ C	
Storage Temp	-20 $^{\circ}$ C~+50 $^{\circ}$ C	

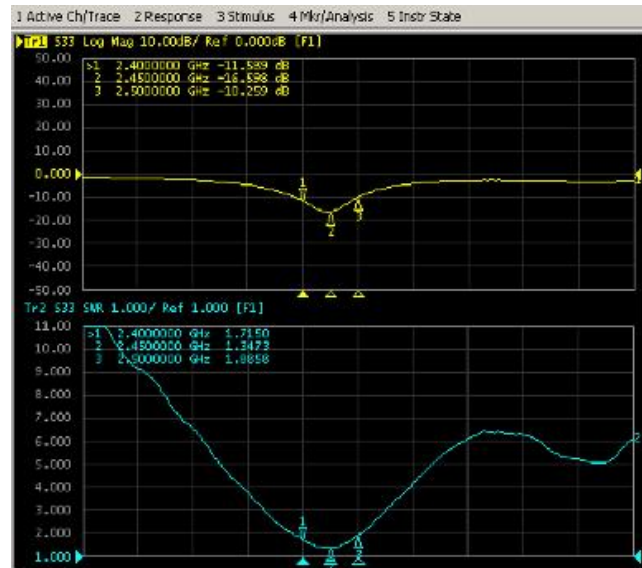
2. Test Items and Equipment

	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

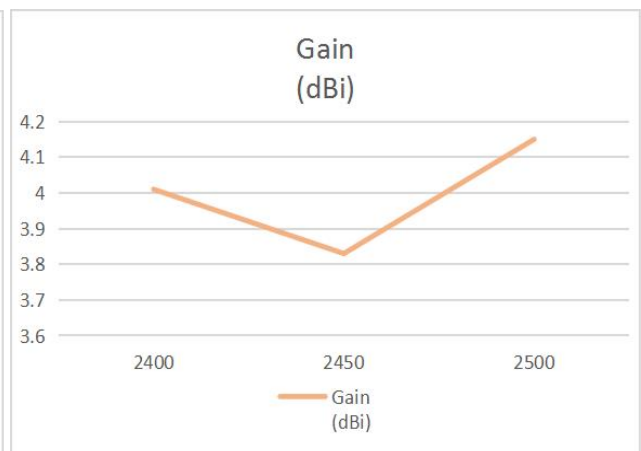
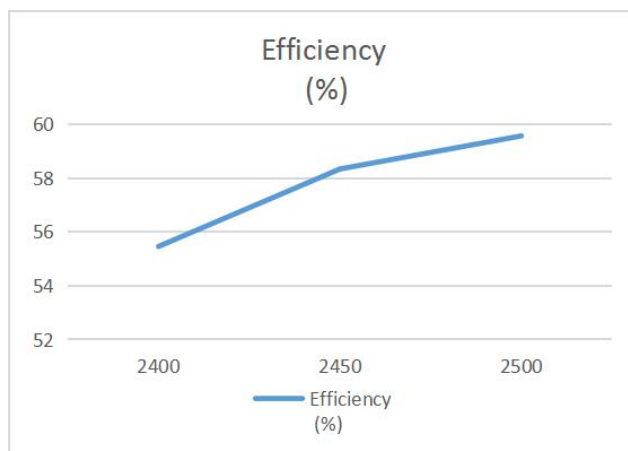
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-11.53	1.71
2450	-16.59	1.34
2500	-10.25	1.88



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

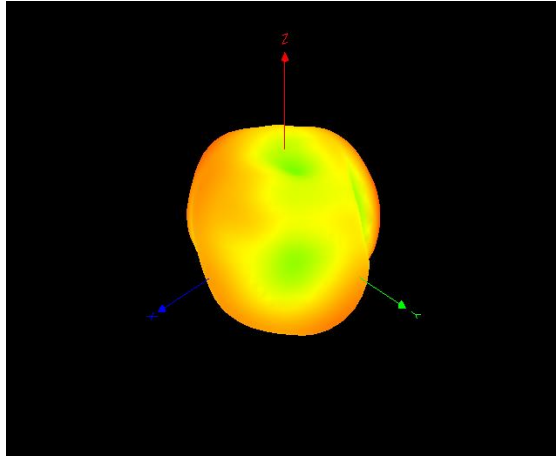
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	55.46	58.34	59.57
Gain (dBi)	4.01	3.83	4.15

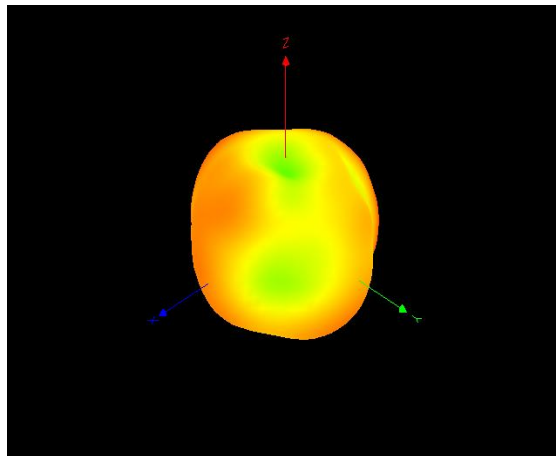


5. Radiation Pattern

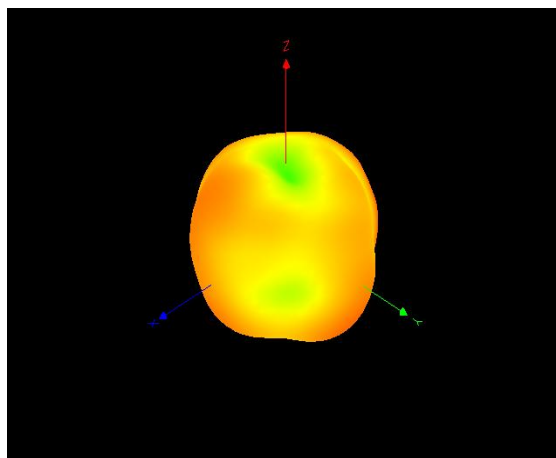
5-1 Antenna 3D Radiation Pattern



2400MHz

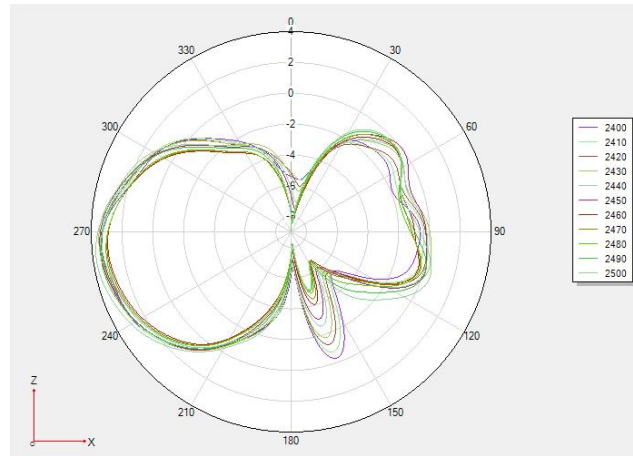


2450MHZ

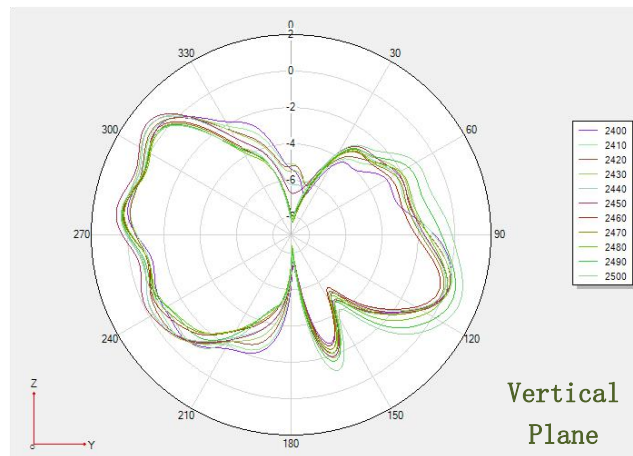


2500MHZ

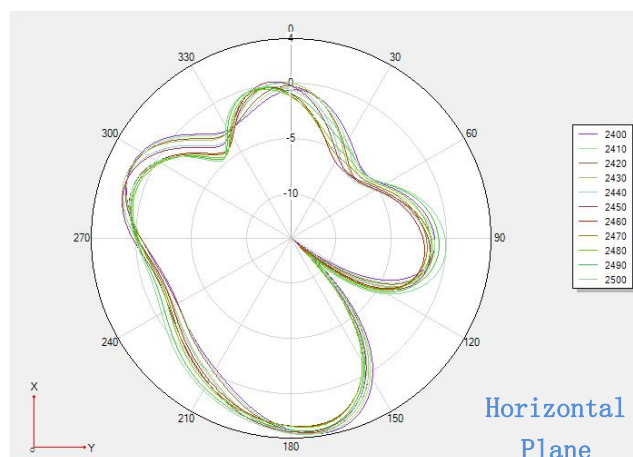
5-2 Antenna 2D Radiation Pattern



Phi 0 2D

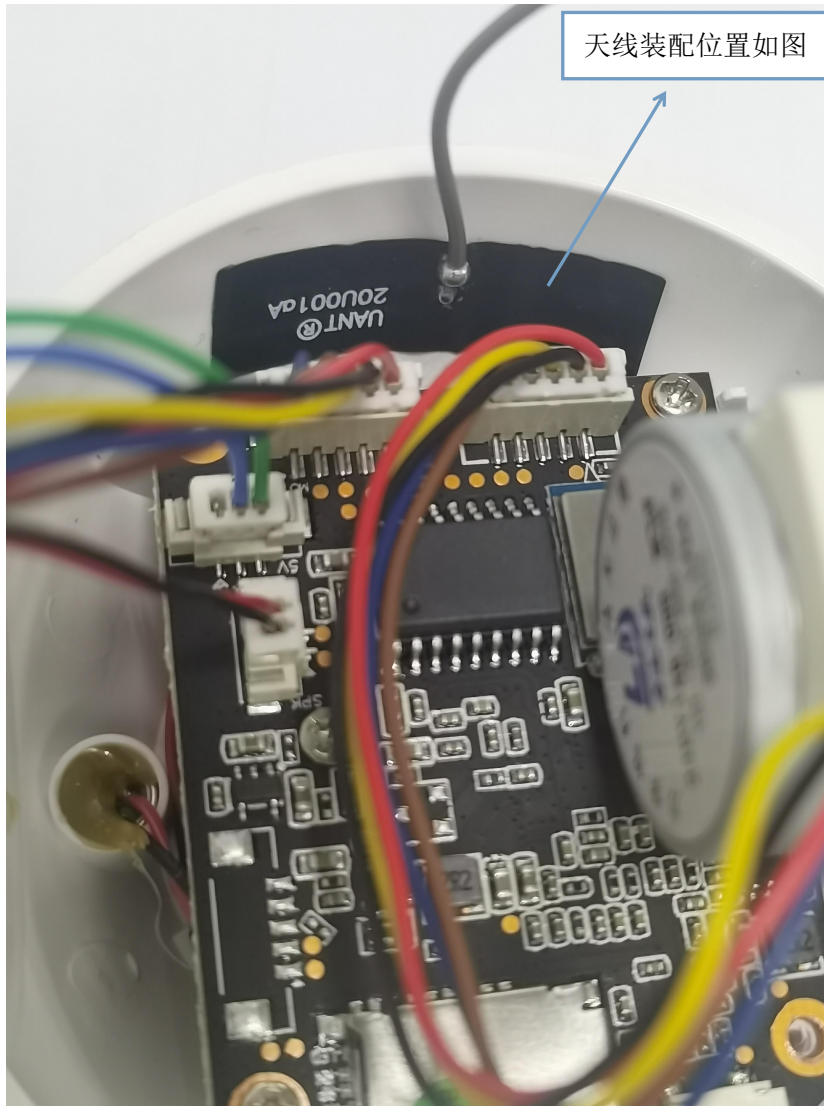


Phi 90 2D

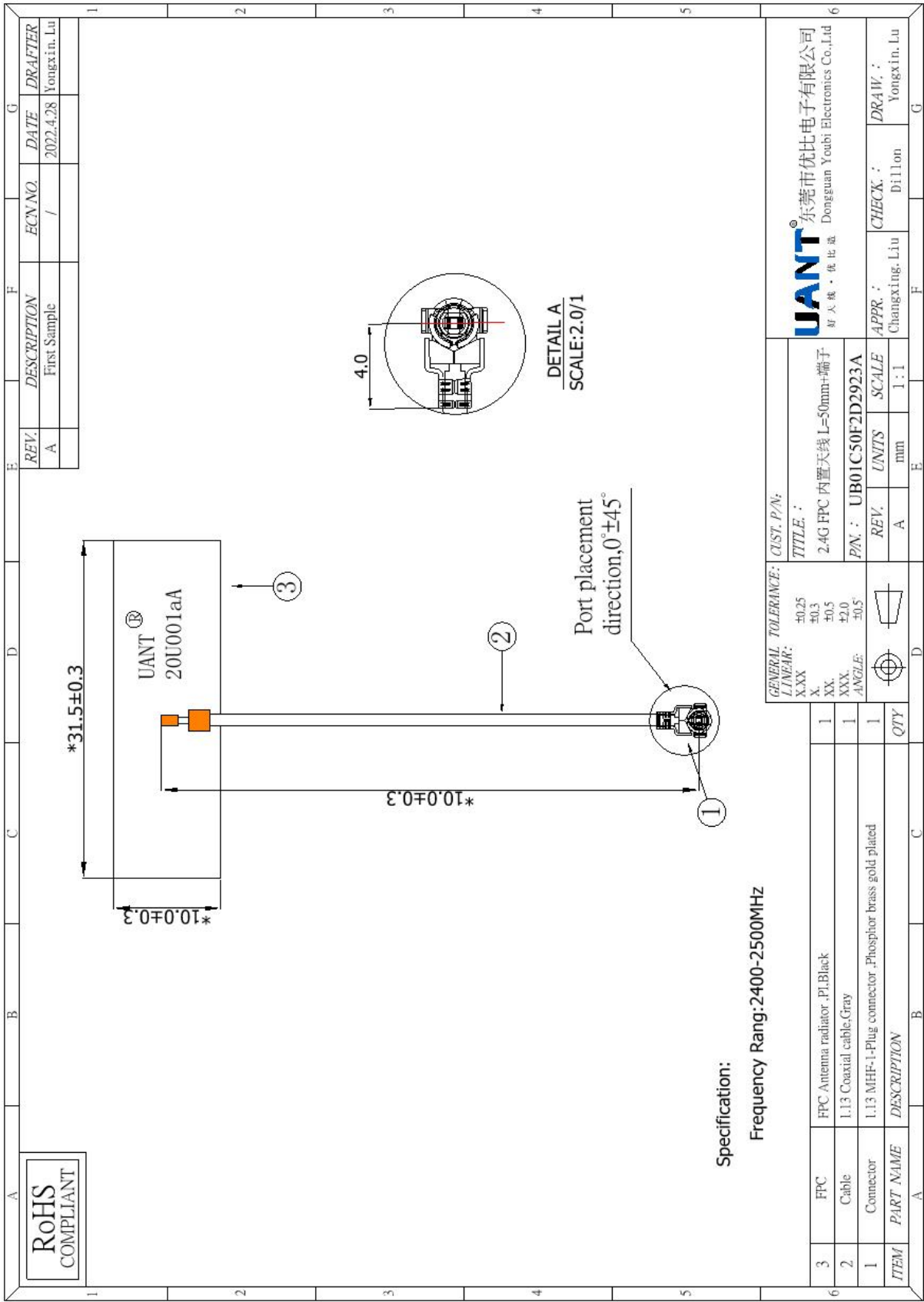


Theta 90 2D

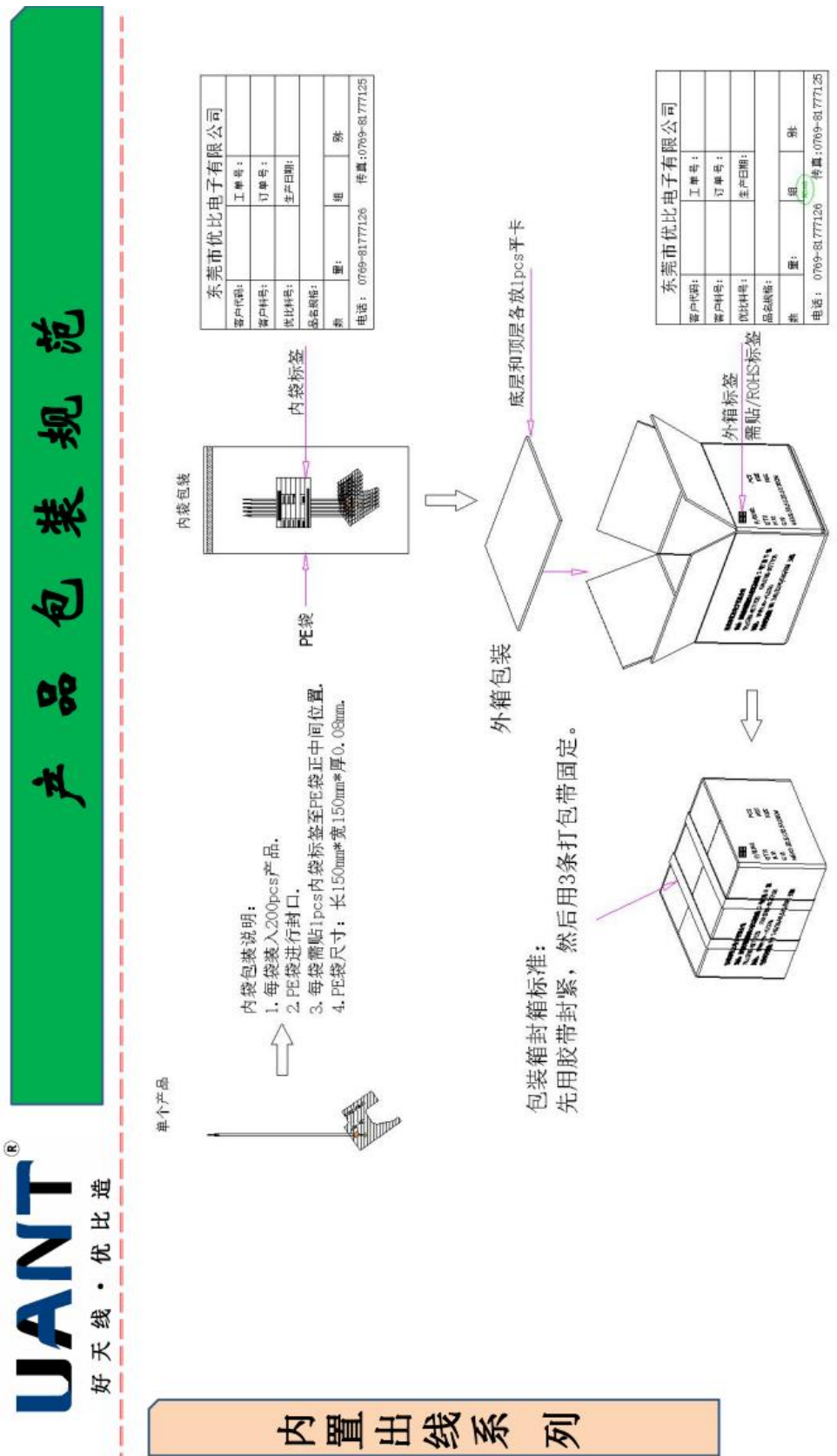
6. Antenna installation diagram



7.Mechanical Specification



8. Packaging



注:
此份包装规范适用于FPC, PCB天线类的线材总长<90mm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.