

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=145mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C145F2D3050A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Eddy	
APPROVED BY:	Changxing. Liu	
DATE:	2022/7/30	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2022-7-30

Content

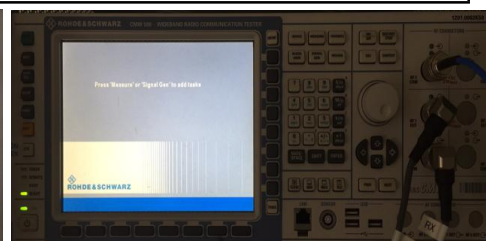
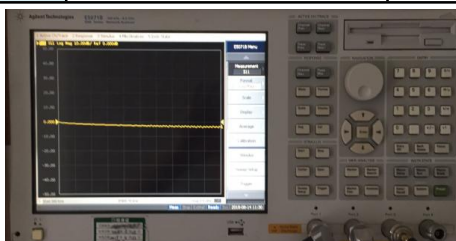
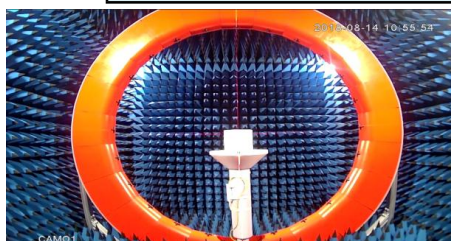
<i>Item</i>	<i>Description</i>
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1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	55.9x15.5,L145	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	2.88	dBi
Efficiency	>40	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

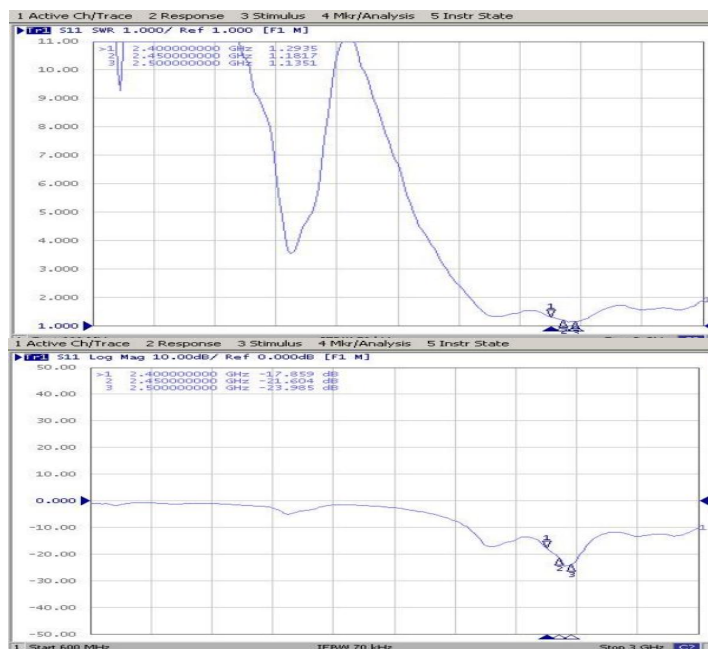
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

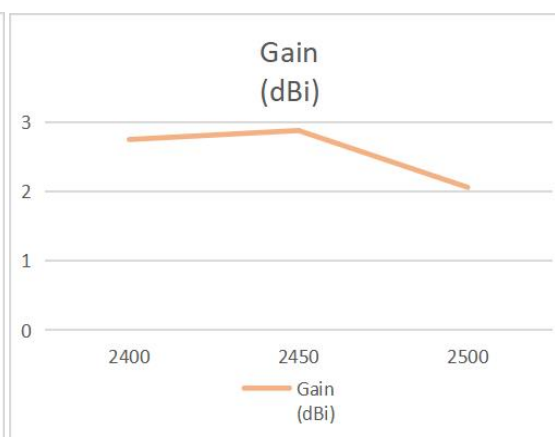
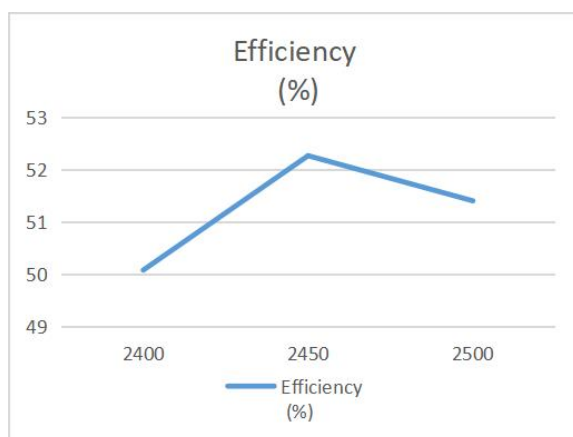
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-17.85	1.29
2450	-21.60	1.18
2500	-23.98	1.13

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



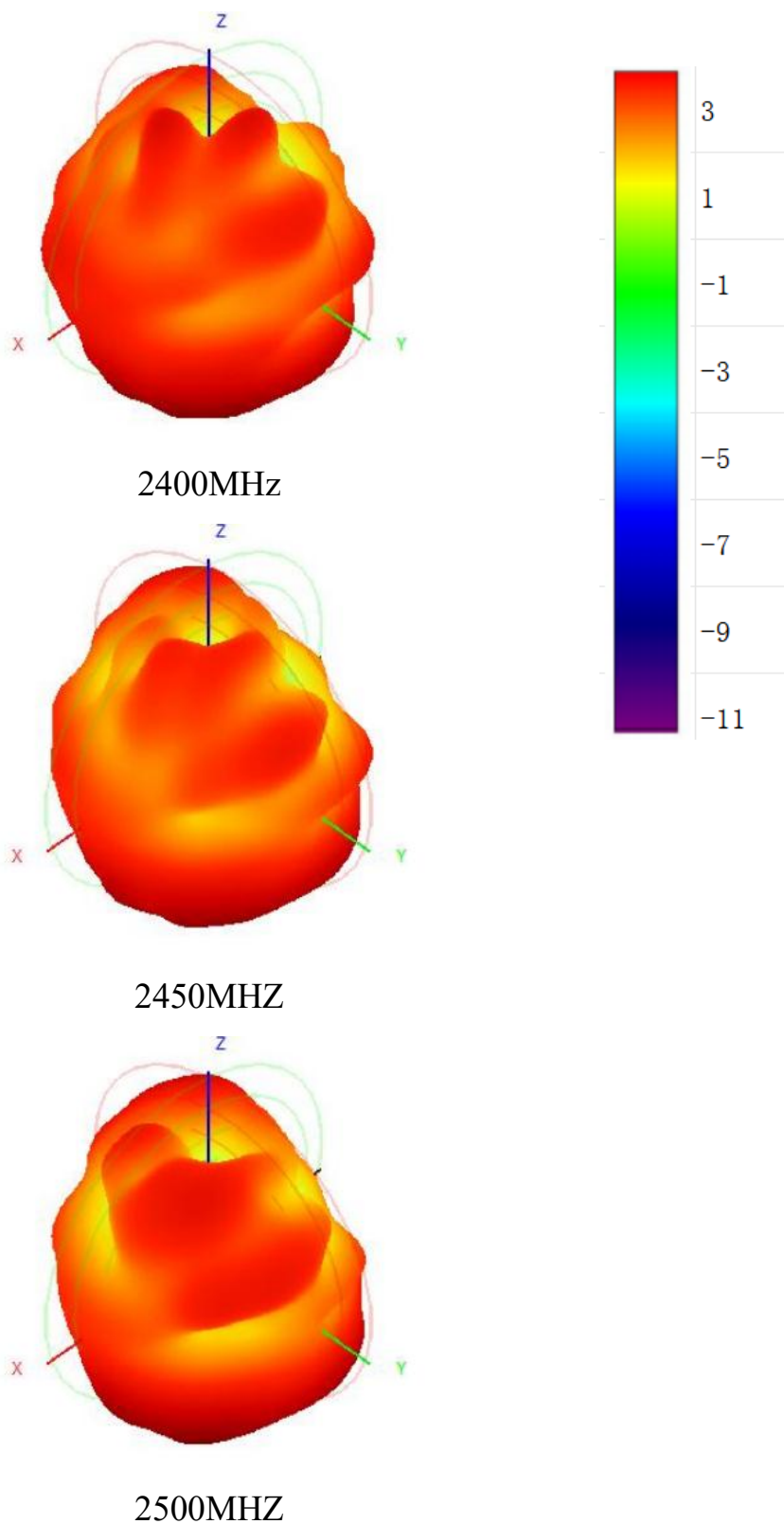
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	50.09	52.27	51.41
Gain (dBi)	2.75	2.88	2.06



5. Radiation Pattern

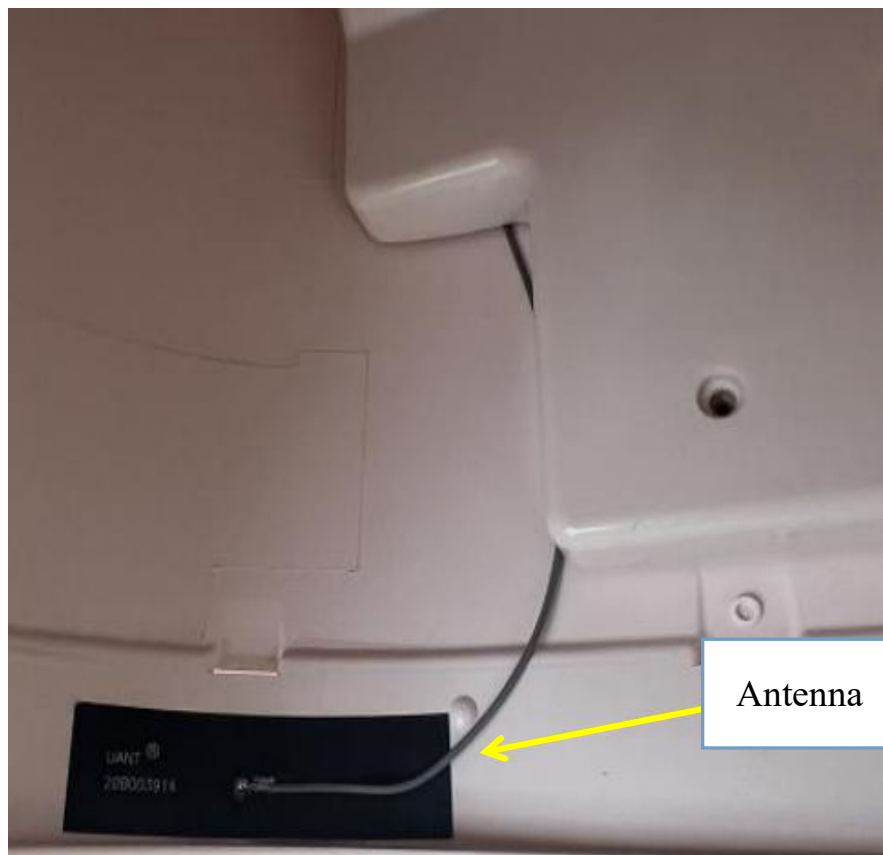
5-1 Antenna 3D Radiation Pattern

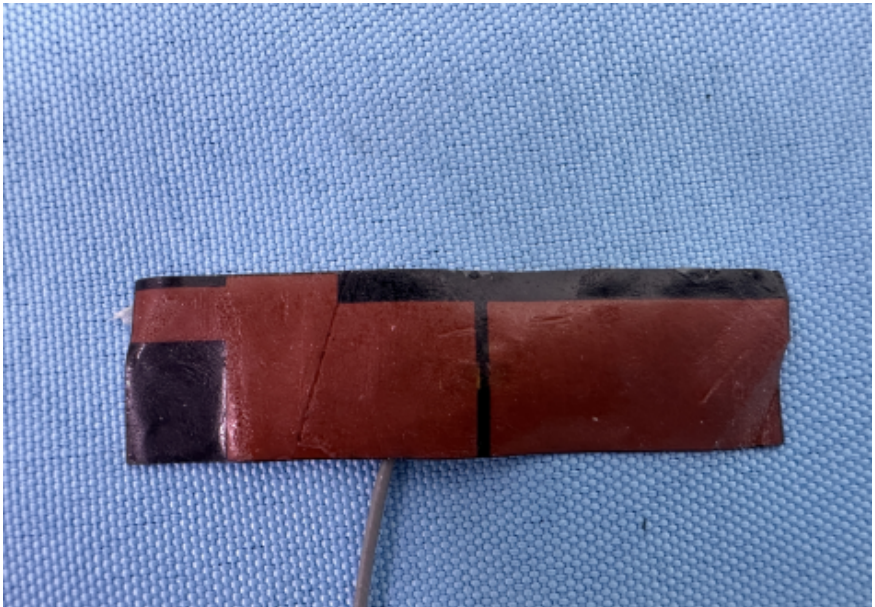


6. Active test data

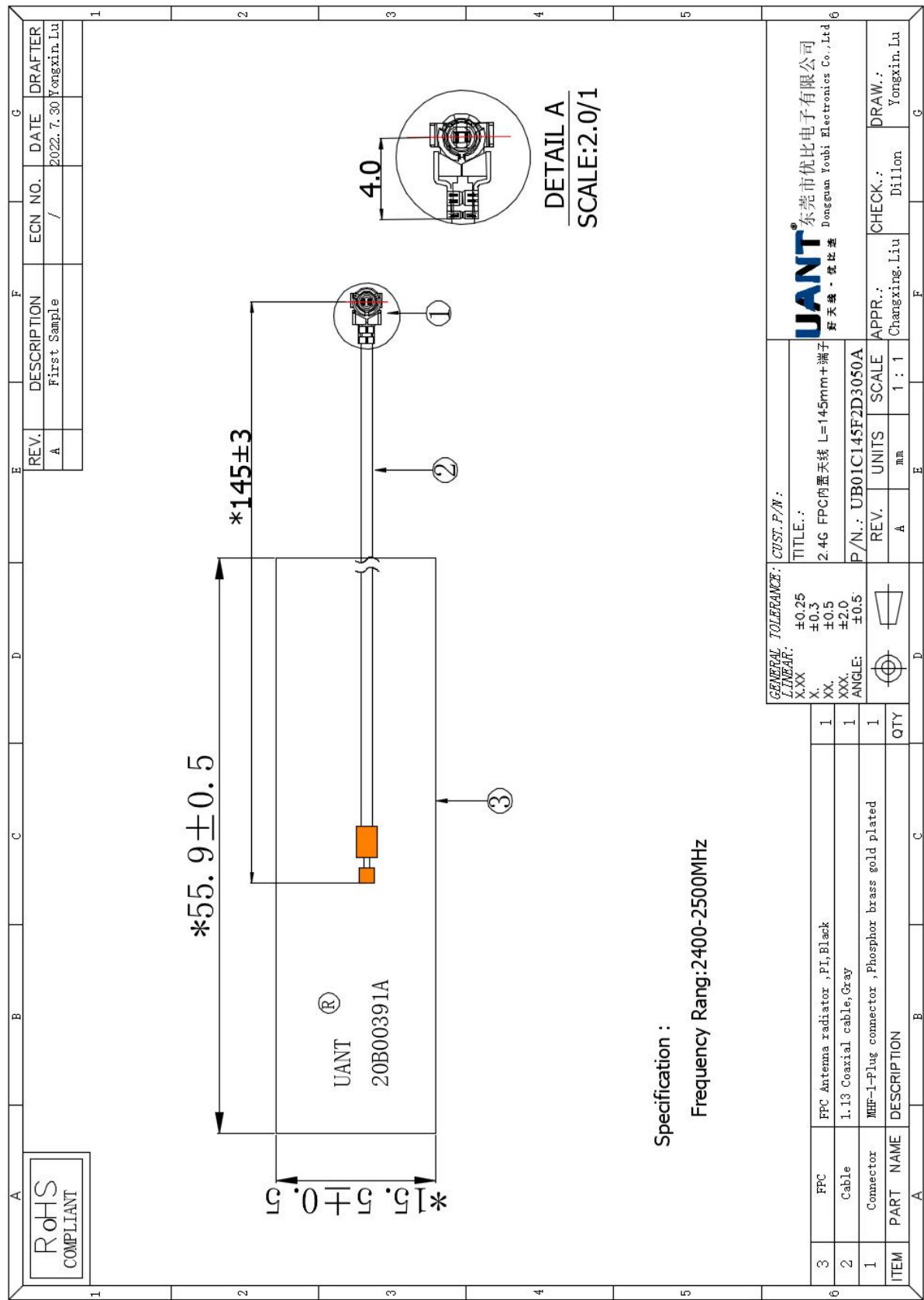
Item	Measurement	Total
1	TRP	17.05
6	TRP	16.44
11	TRP	16.68
1	TIS(EIRP)	-85.25
6	TIS(EIRP)	-85.41
11	TIS(EIRP)	-86.23

7. Antenna installation diagram

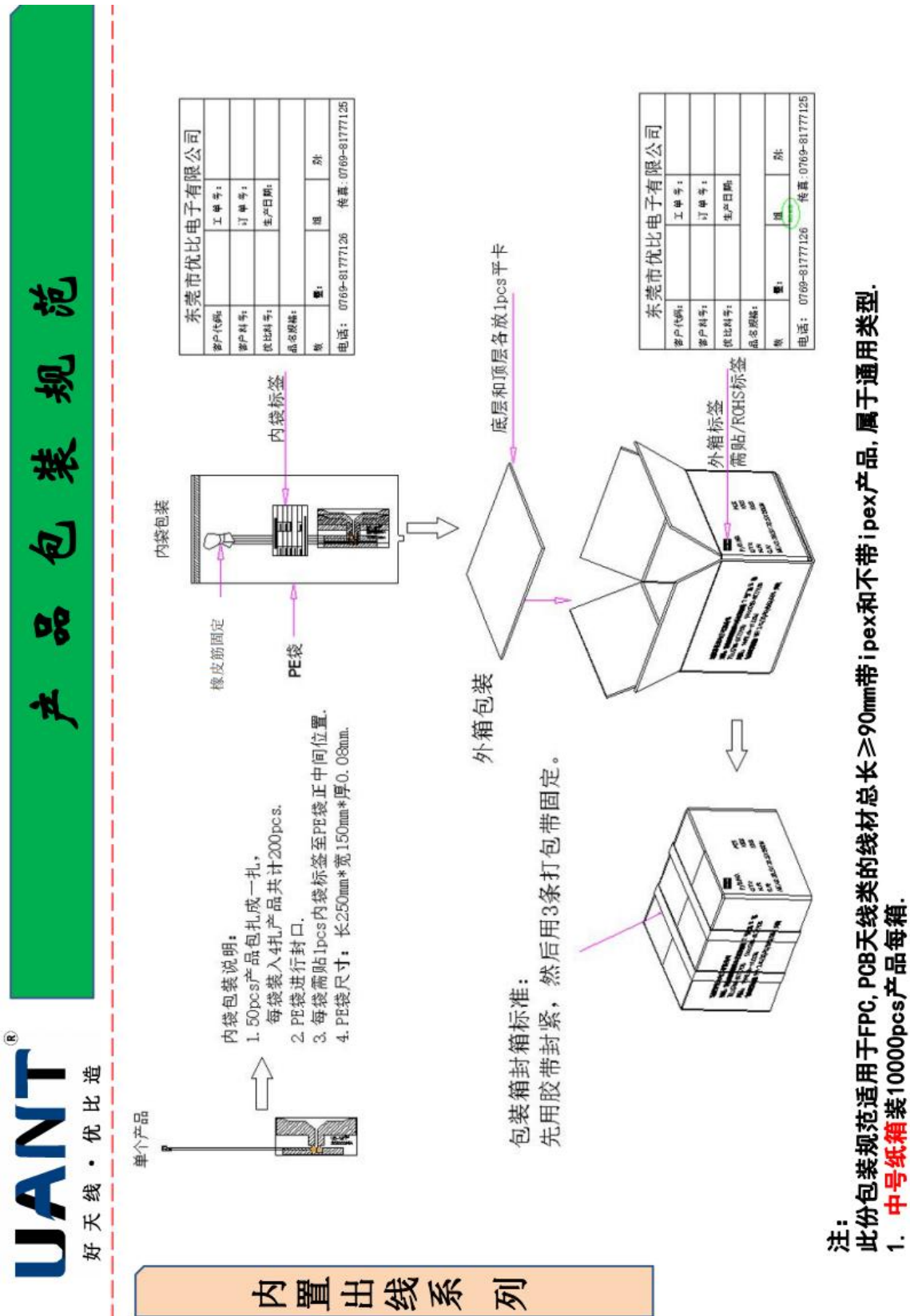




8. Mechanical Specification



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.