

Acknowledgement

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME: Zhuhai Anlian Rui Shi Technology Co., Ltd.

产 品 名 称 2.4/5.8G FPC built-in antenna L=28mm terminal

PRODUCT NAME:

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C28F2D4733A REV: B

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	Changxing. Liu	
DATE:	2026-04-16	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-11-5
B	Add data	Lina	2026-04-16

Content

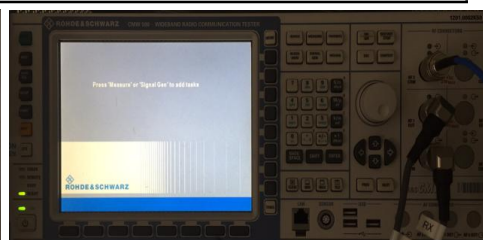
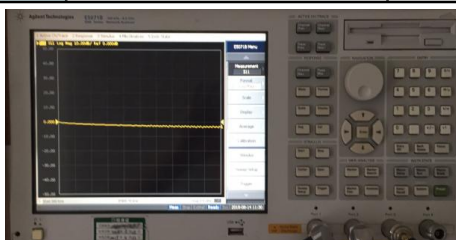
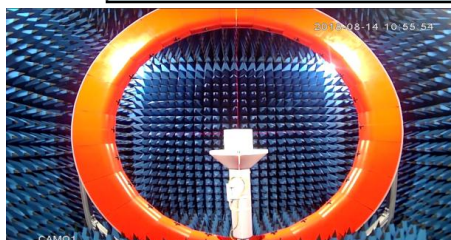
<i>Item</i>	<i>Description</i>
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	35.2x12.61,L28	mm
Frequency	2400-2500 / 5150-5850	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	2 REF	dBi
Efficiency	>40	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

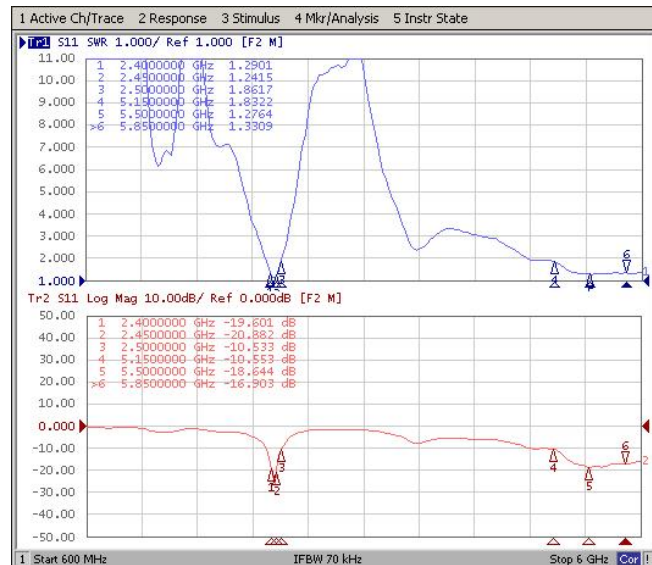
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

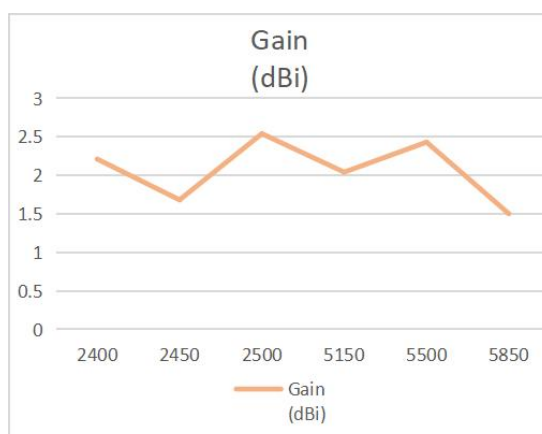
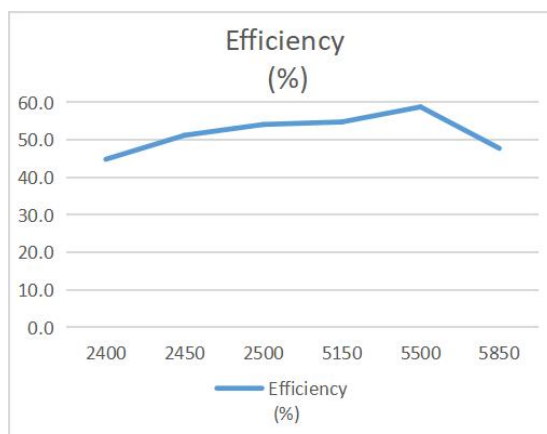
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-19.60	1.29
2450	-20.88	1.24
2500	-10.53	1.86
5150	-10.55	1.83
5500	-18.64	1.27
5850	-16.90	1.33

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

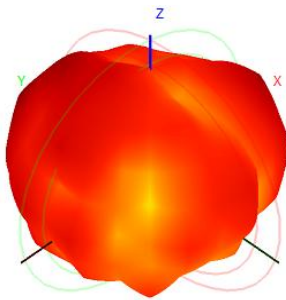


4. Efficiency and Gain

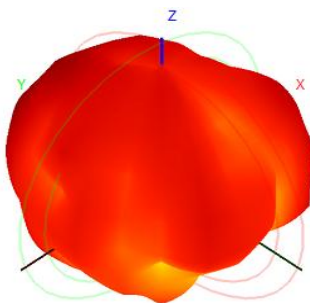
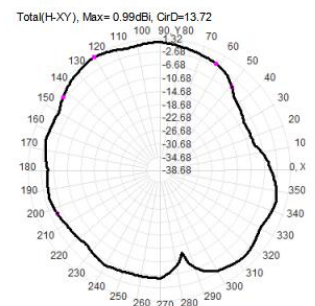
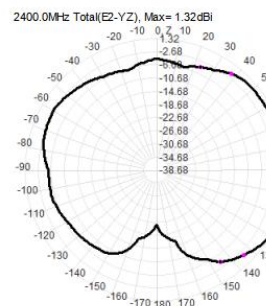
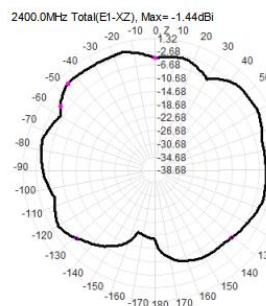
Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	44.80	51.19	54.07	54.75	58.76	47.72
Gain (dBi)	2.21	1.68	2.54	2.04	2.43	1.50



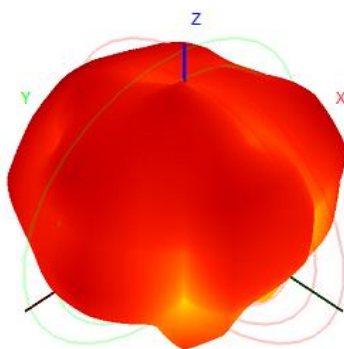
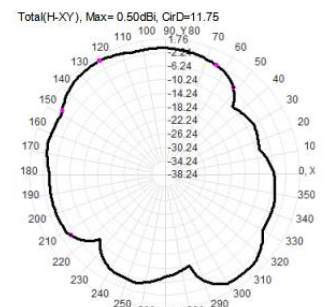
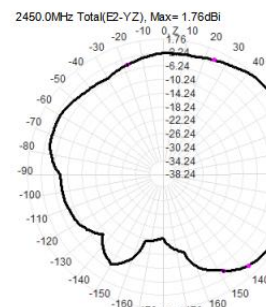
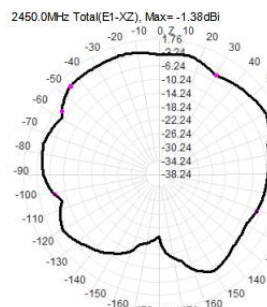
5. Radiation Pattern(2D&3D)



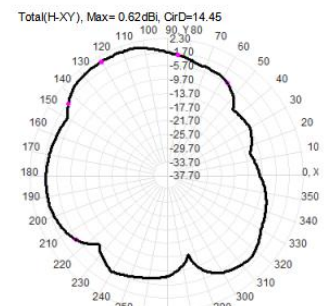
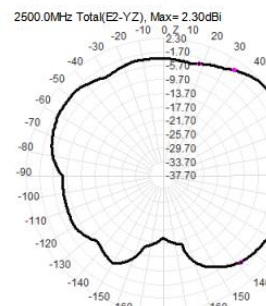
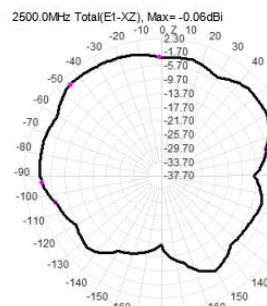
2400MHz

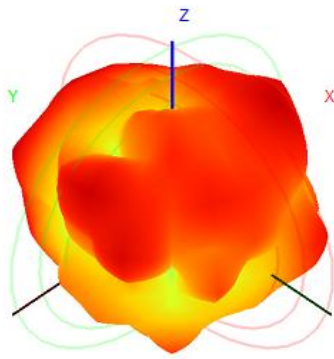


2450MHz

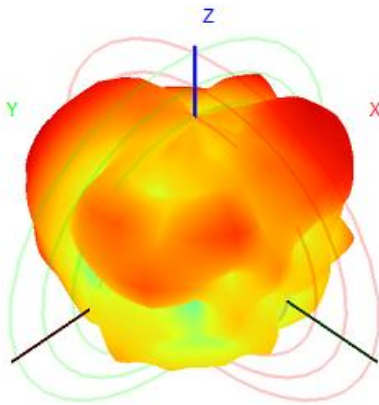
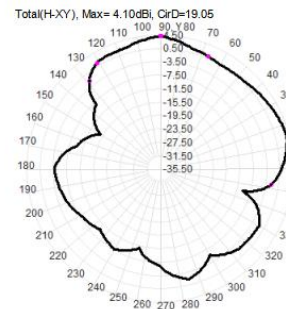
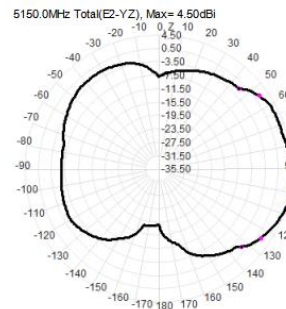
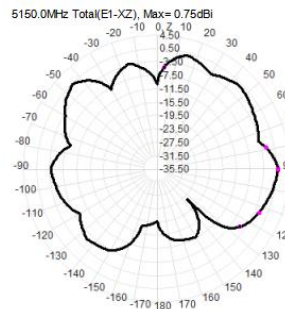


2500MHz

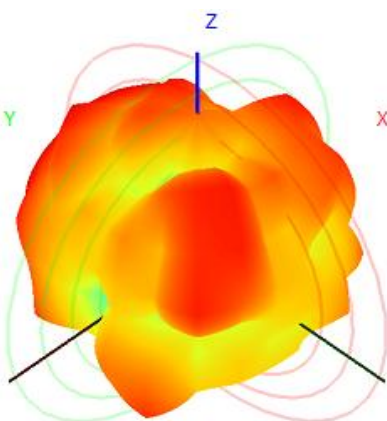
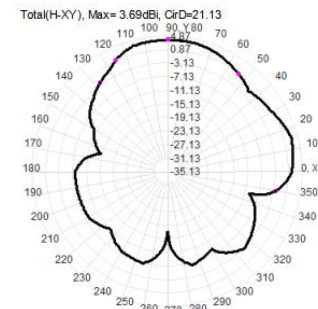
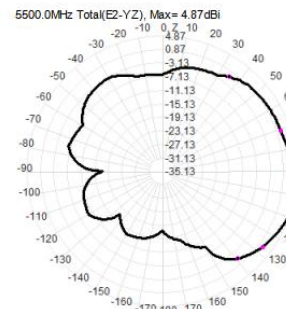
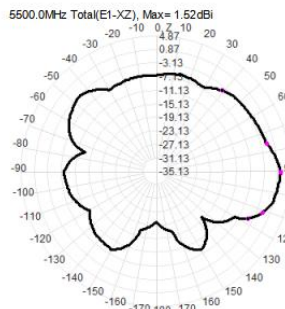




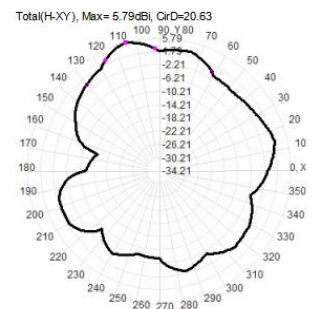
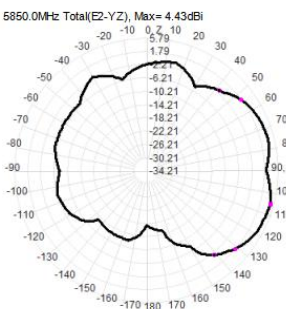
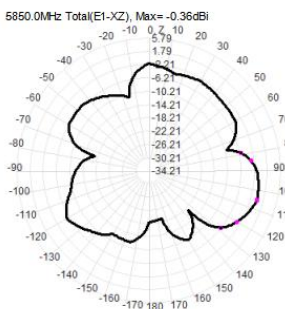
5150MHz



5500MHz



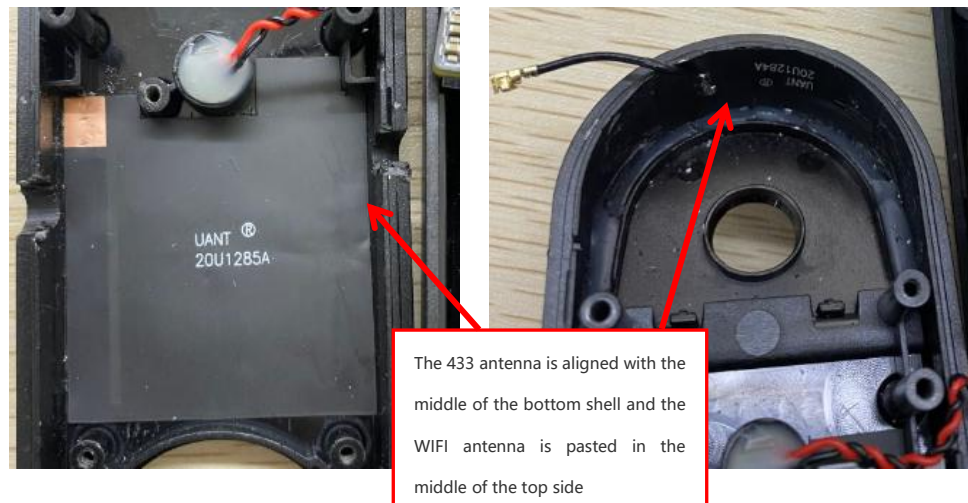
5850MHz



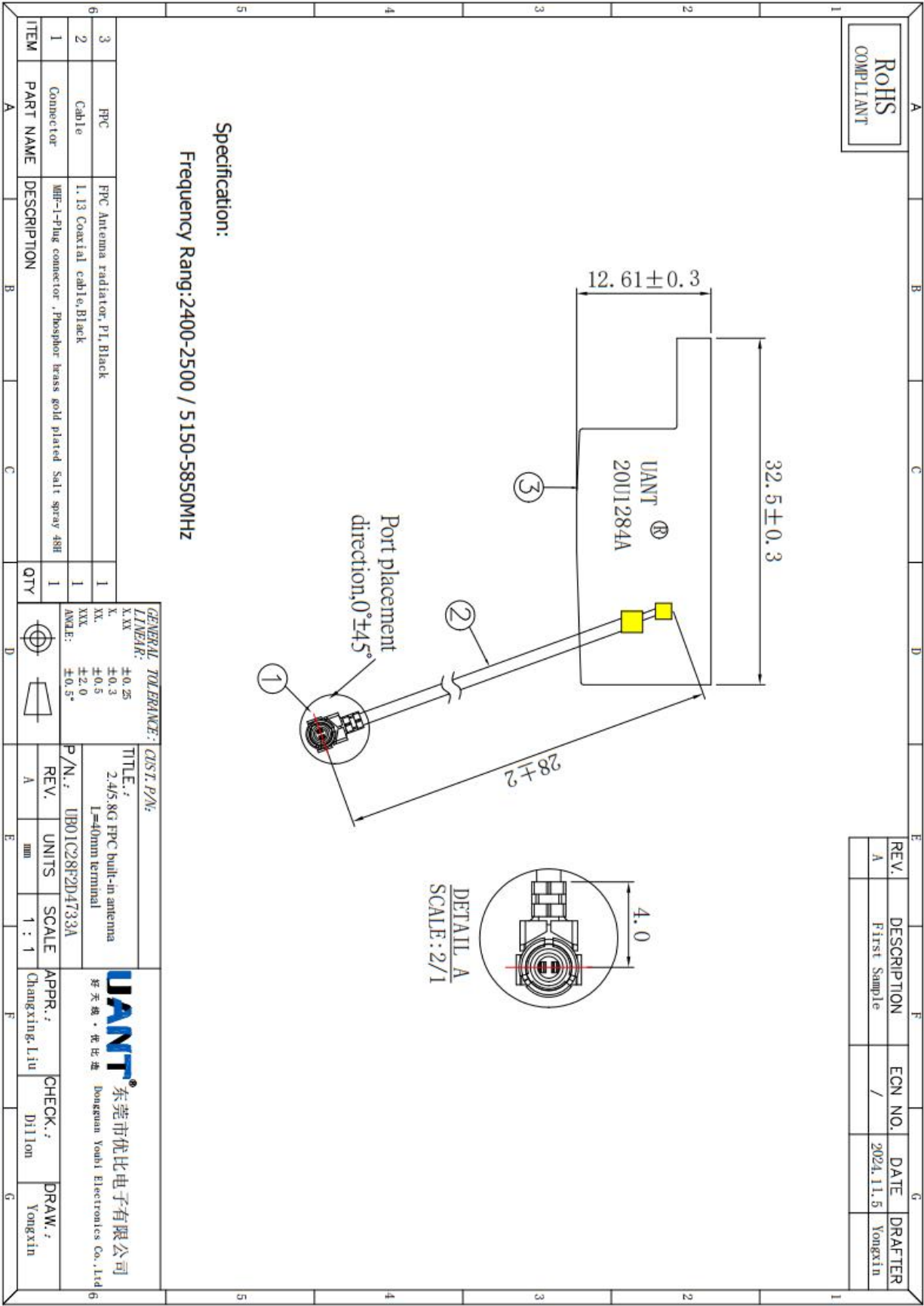
6.Active test data

Channel	Measurement	Total-Bmodel	Total-A model
1	TRP	15.61	13.92
6	TRP	16.15	13.14
11	TRP	16.12	13.38
1	TIS(EIRP)	-80.46	-72.60
6	TIS(EIRP)	-81.12	-72.42
11	TIS(EIRP)	-80.46	-74.53

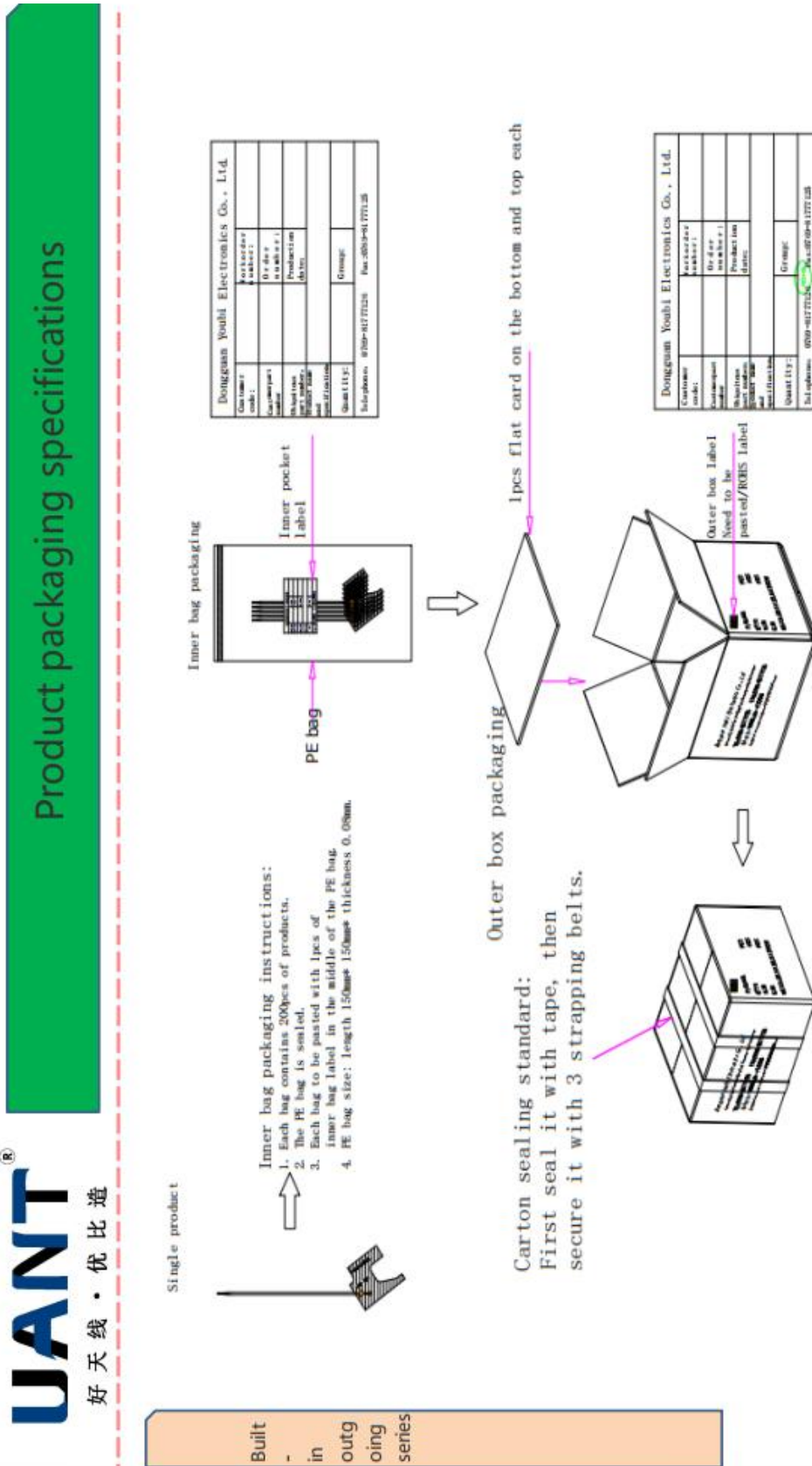
7.Antenna installation diagram



8.Mechanical Specification



9. Packaging



Note: This packaging specification is applicable to FPC, PCB antenna type products with a total length of wire < 90mm with and without ip, which belongs to the general type. 1. Medium-sized carton contains 10,000 pieces of products per box.