承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: 熵基科技股份有限公司

产 品 名 称

PRODUCT NAME: 2.4G FPC 内置天线 L=80mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C80F2D4622A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY:	Changxing.Liu	
DATE:	2024/8/6	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-8-6

Content

ltem ***Description***

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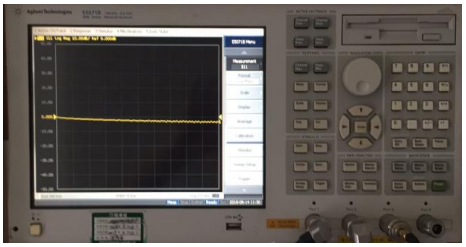
1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	31x14,L80	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	2.0±0.5	dBi
Efficiency	>40	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

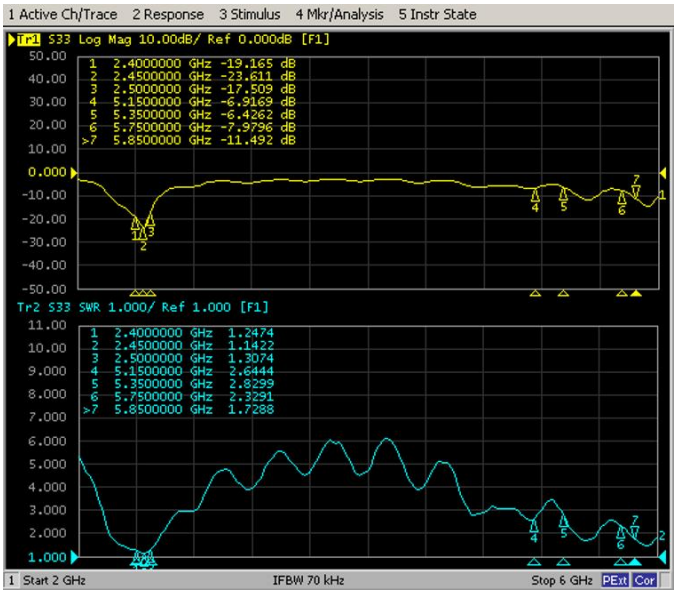
2.Test Items and Equipment

	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

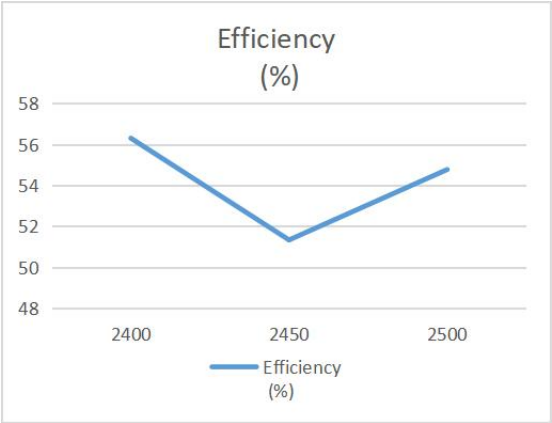
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-19.16	1.24
2450	-23.61	1.14
2500	-17.50	1.30

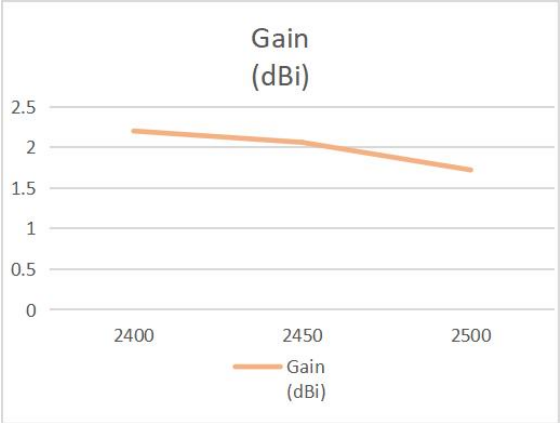


* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
RL=20*log10[(VSWR+1)/(VSWR-1)

4. Efficiency and Gain

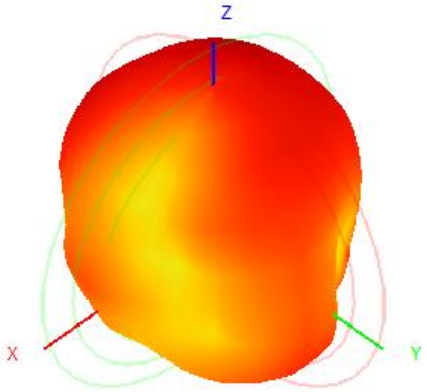
Frequency (MHz)	2400	2450	2500
Efficiency (%)	56.32	51.35	54.79
Gain (dBi)	2.2	2.06	1.72



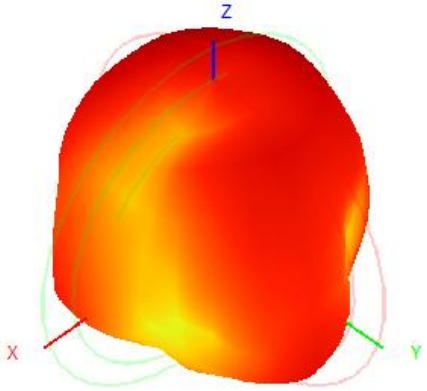


5. Radiation Pattern

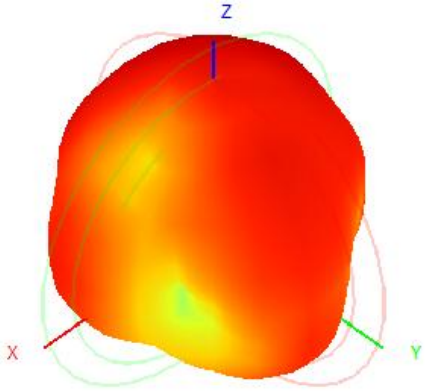
5-1 Antenna 3D Radiation Pattern



2400MHz

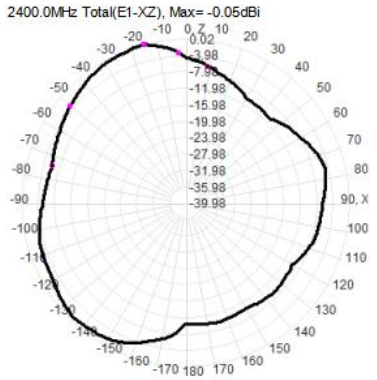


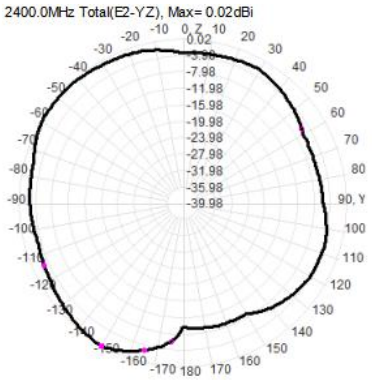
2450MHz

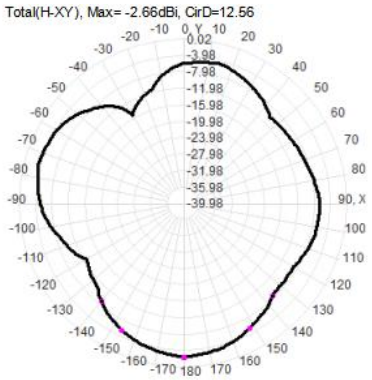


2500MHz

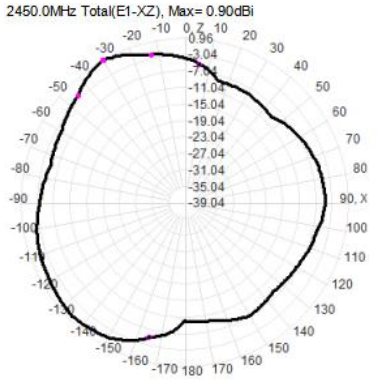
5-2 Antenna 2D Radiation Pattern

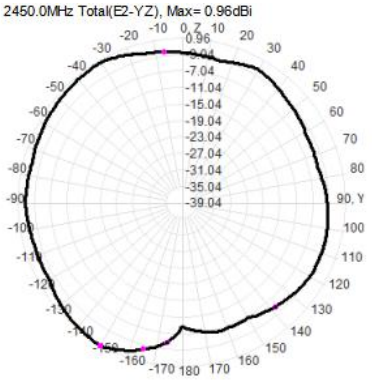


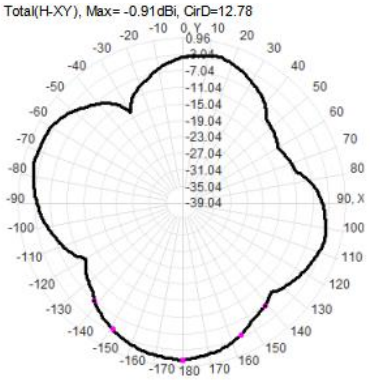




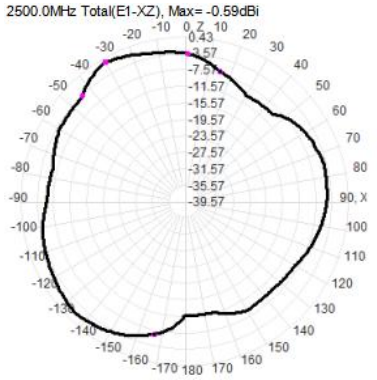
2400MHz

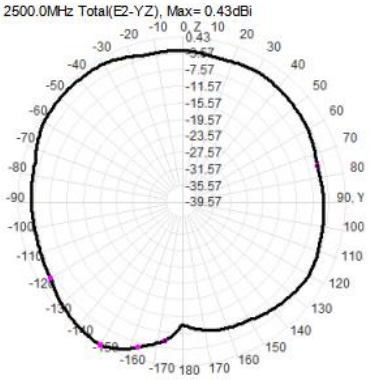


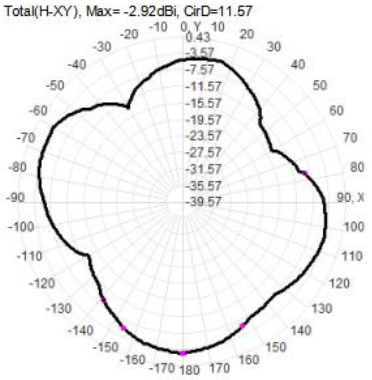




2450MHz

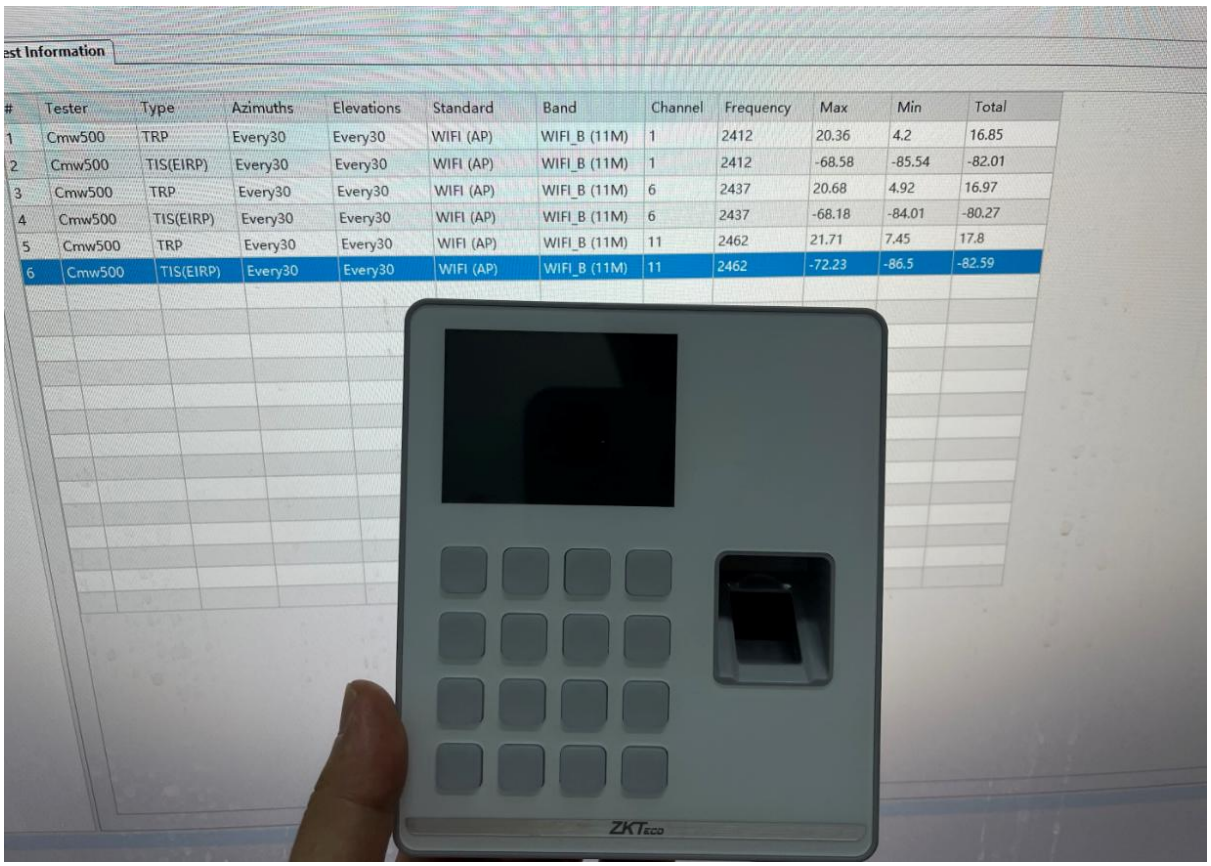






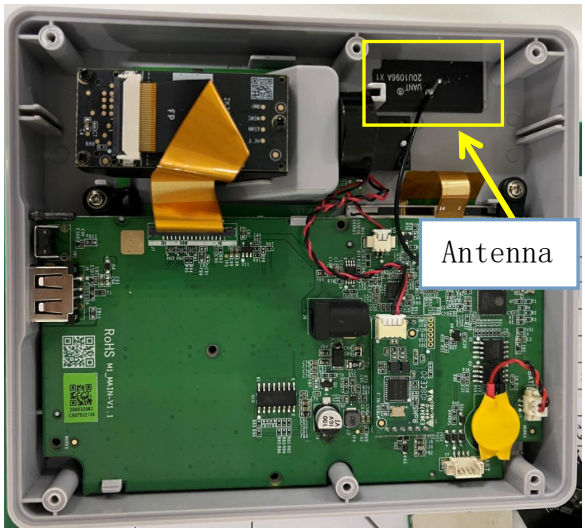
2500MHz

6. Active test data

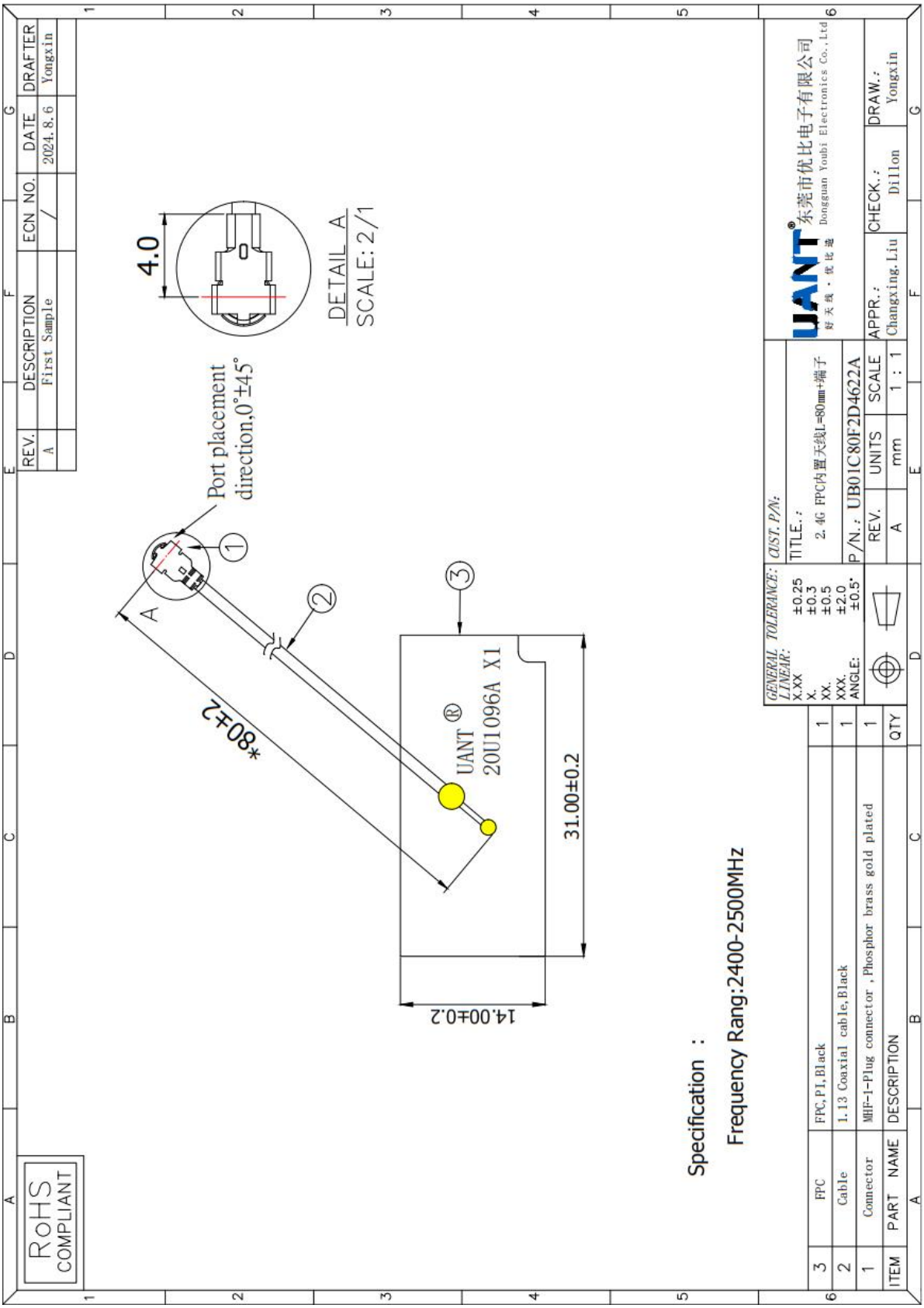


#	Tester	Type	Azimuths	Elevations	Standard	Band	Channel	Frequency	Max	Min	Total
1	Cmw500	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	1	2412	20.36	4.2	16.85
2	Cmw500	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	1	2412	-68.58	-85.54	-82.01
3	Cmw500	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	6	2437	20.68	4.92	16.97
4	Cmw500	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	6	2437	-68.18	-84.01	-80.27
5	Cmw500	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	21.71	7.45	17.8
6	Cmw500	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	-72.23	-86.5	-82.59

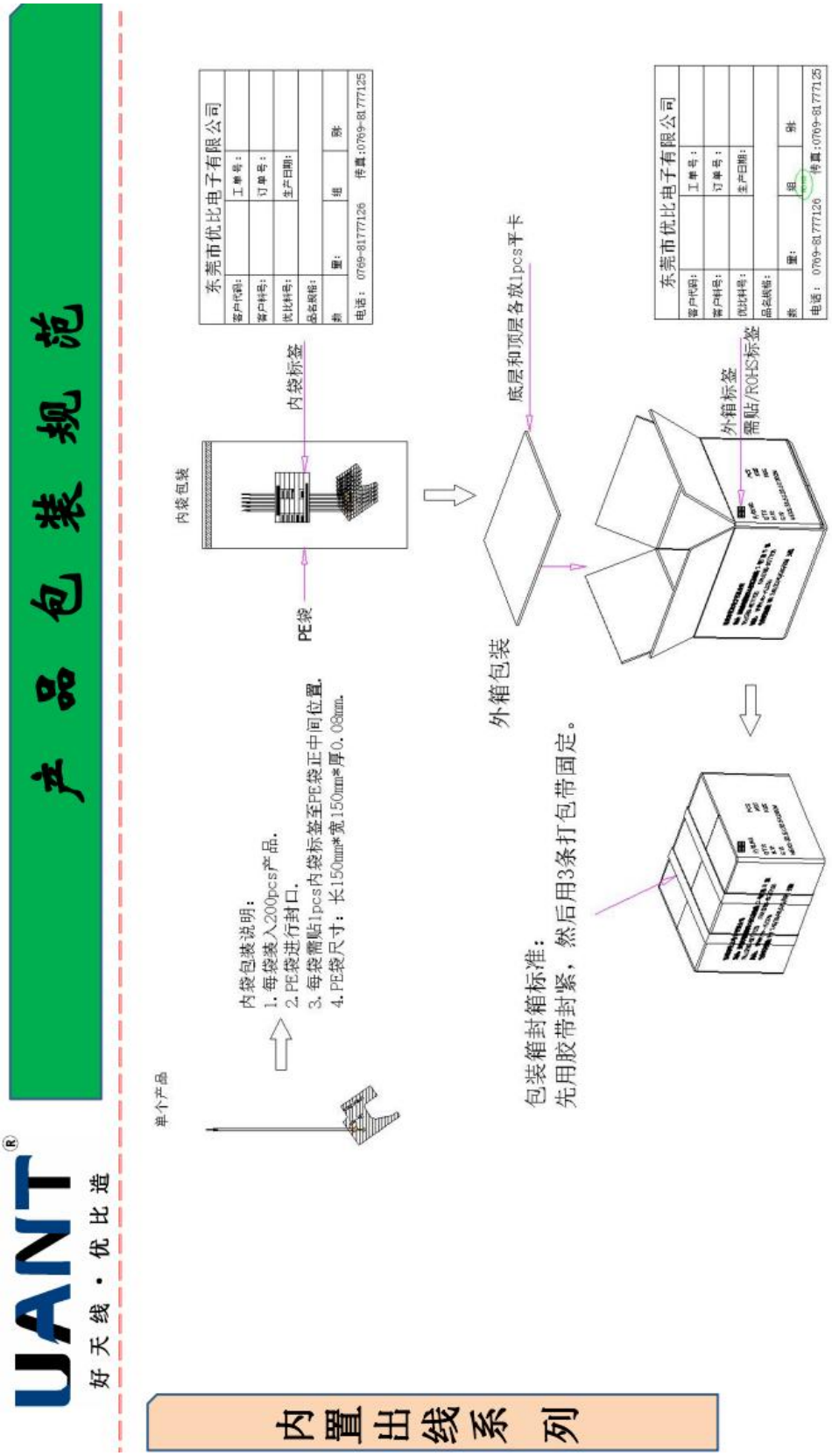
7. Antenna installation diagram



8.Mechanical Specification



9. Packaging


产品包装规范
UANT®
好天线 · 优比造
单个产品
内袋包装说明：
1. 每袋装入200pcs产品.
2. PE袋进行封口.
3. 每袋需贴1pcs内袋标签至PE袋正中间位置.
4. PE袋尺寸：长150mm*宽150mm*厚0.08mm.
内袋包装
PE袋
内袋标签
东莞市优比电子有限公司
客户代码:
工单号:
客户料号:
订单号:
优比料号:
生产日期:
品名规格:
数 量: 组 张
电话: 0769-81777126 传真:0769-81777125
底层和顶层各放1pcs平卡
外箱包装
包装箱封箱标准:
先用胶带封紧，然后用3条打包带固定。
外箱标签
需贴/ROHS标签
东莞市优比电子有限公司
客户代码:
工单号:
客户料号:
订单号:
优比料号:
生产日期:
品名规格:
数 量: 组 张
电话: 0769-81777126 传真:0769-81777125
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.
内置出线系 列

未使用特定化合物声明

兹有我司东莞市优比电子有限公司，应熵基科技股份有限公司要求，我司所交货物料符合 ROHS 2.0 标准，特此声明我司所交物料符合 ROHS 2.0 标准，如有不符合项我司愿意承担一切责任：

欧盟 ROHS 2.0 法规及其豁免条列

铅(Pb)	1000PPM
镉(Cd)	100PPM
汞(Hg)	1000PPM
六价铬(Cr6+)	1000PPM
多溴联苯(PBBs)	1000PPM
多溴联苯醚(PBDEs)	1000PPM
邻苯二甲酸二（2-乙基己基）酯（DEHP）	1000PPM
邻苯二甲酸甲苯基丁酯（BBP）	1000PPM
邻苯二甲酸二丁基酯（DBP）	1000PPM
邻苯二甲酸二异丁酯（DIBP）	1000PPM

公司总经理签字及公司盖章：

日　　期：