

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 内置天线 L=68mm+端子

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C68F2D3593A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	工程专用章 Changxing. Liu	
DATE:	2023/3/10	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2023-3-10

Content

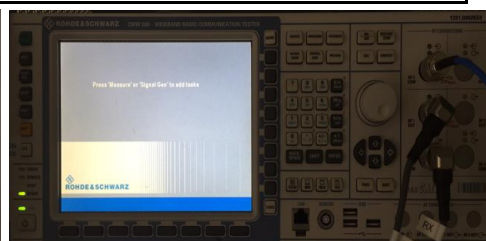
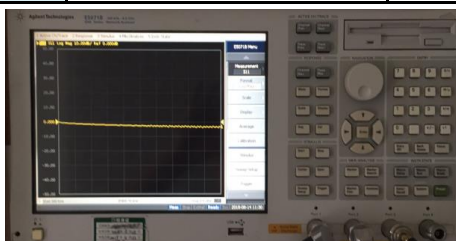
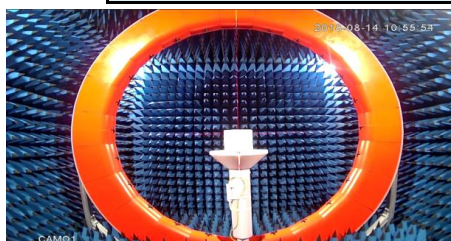
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Active test data
6.-----	Antenna installation diagram
7.-----	Mechanical Specification
8.-----	Packaging

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	30.4x17.5,L68	mm
Frequency	2400-2500;5150-5850	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	4 REF	dBi
Efficiency	>40	%
Connector Type	MHF-1-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2.Test Items and Equipment

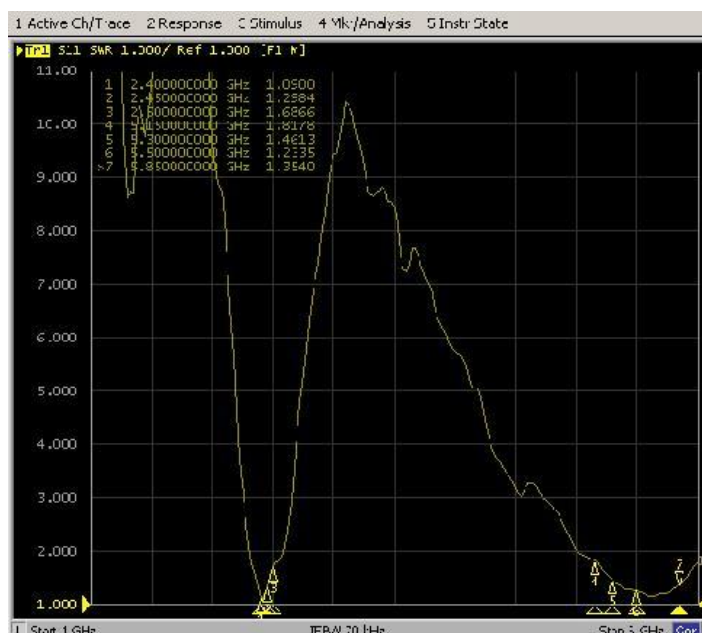
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

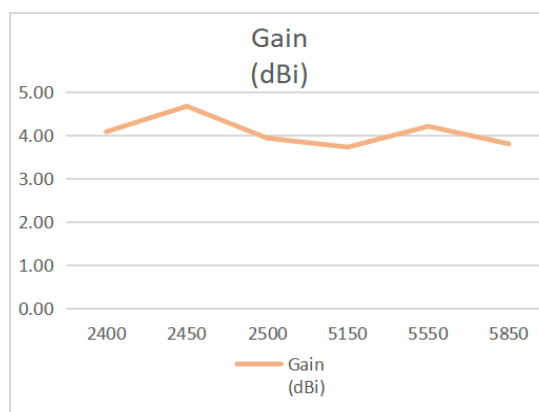
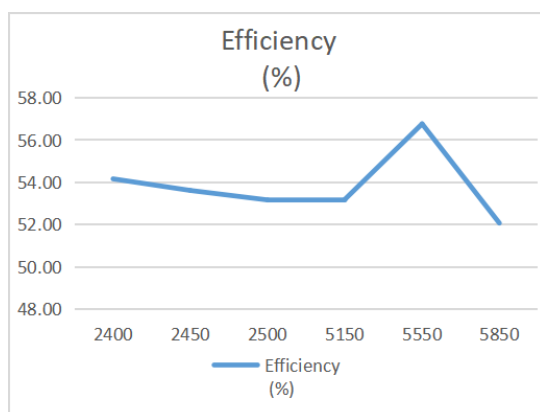
Frequency (MHz)	VSWR
2400	1.09
2450	1.29
2500	1.68
5150	1.81
5300	1.46
5500	1.23
5850	1.35

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



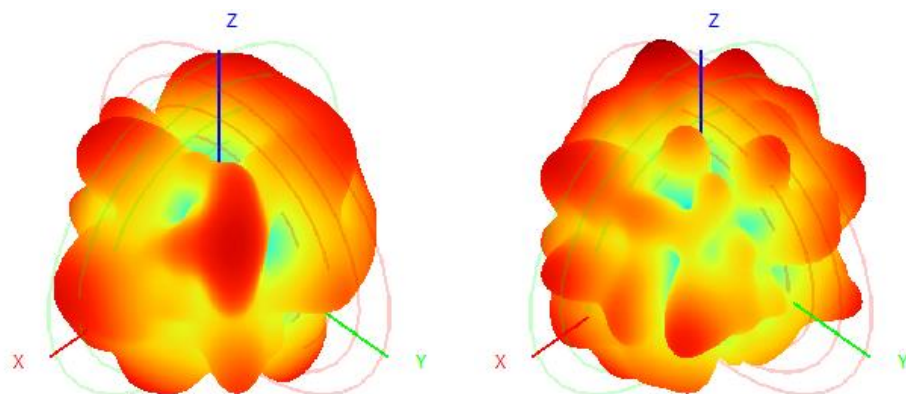
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	54.17	53.62	53.17	53.20	56.77	52.08
Gain (dBi)	4.09	4.67	3.94	3.73	4.21	3.81



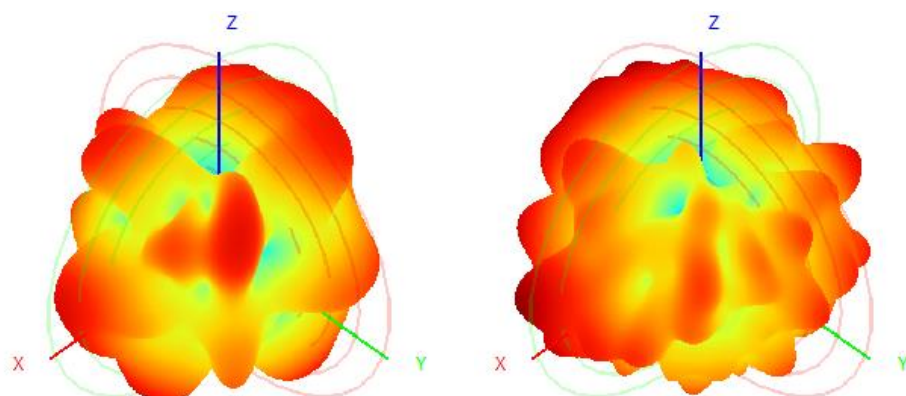
5. Radiation Pattern

5-1 Antenna 3D Radiation Pattern



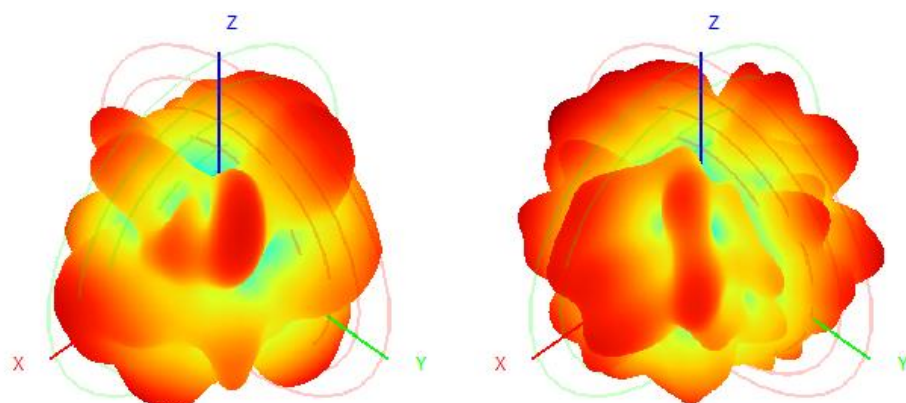
2400MHz

5150MHz



2450MHz

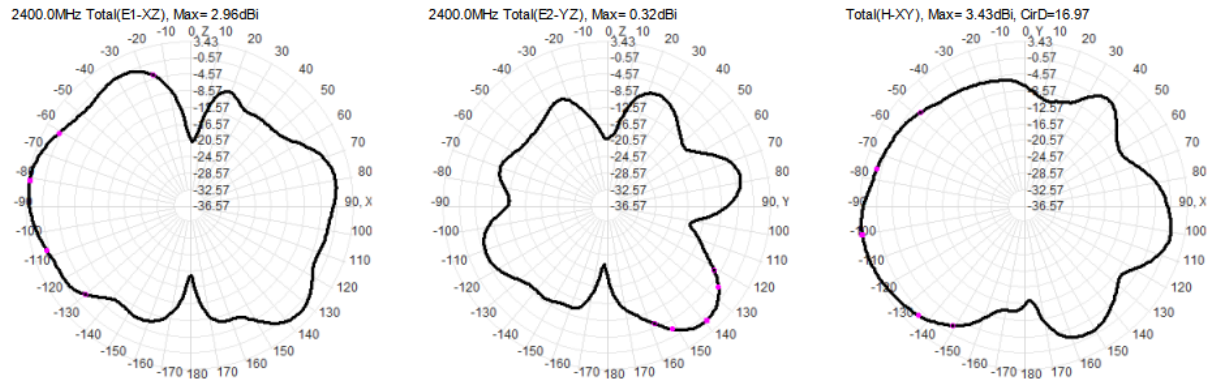
5550MHz



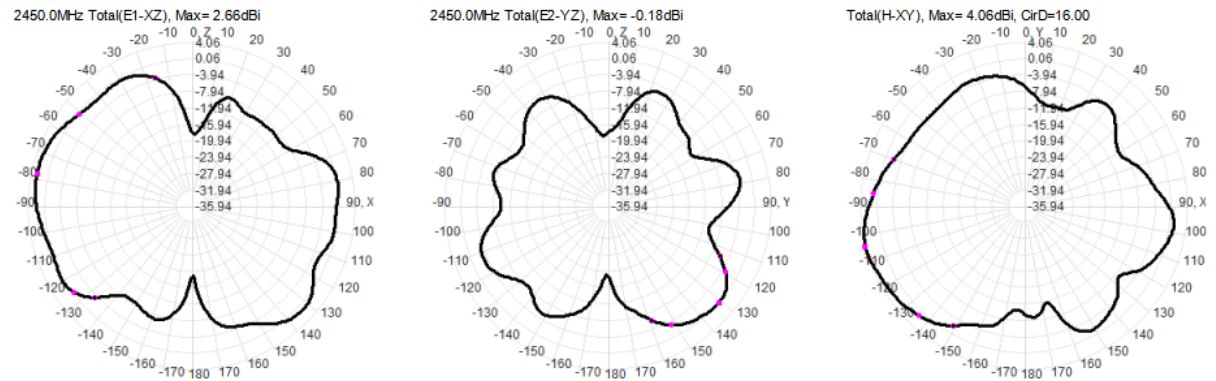
2500MHz

5850MHz

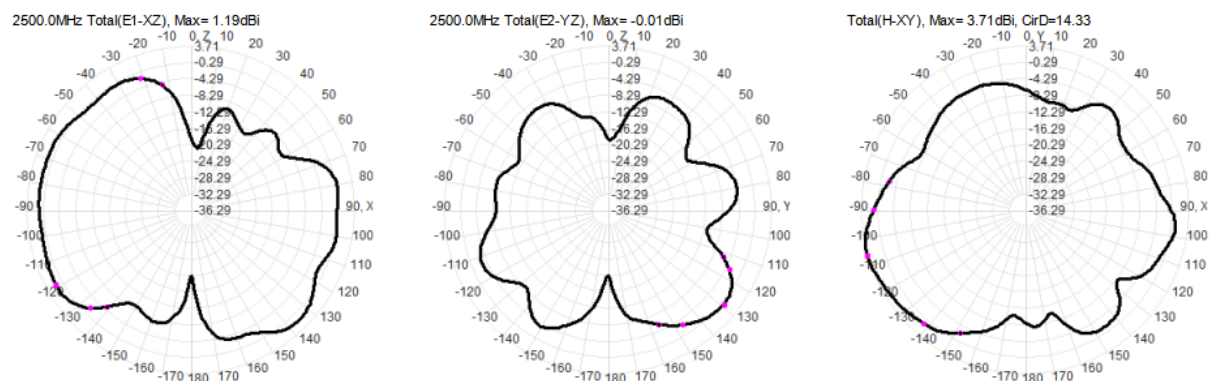
5-2 Antenna 2D Radiation Pattern



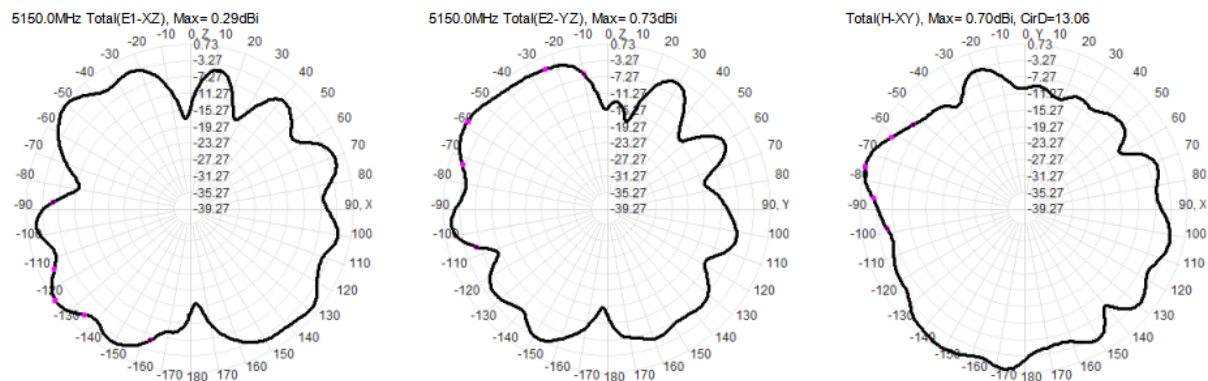
2400MHz



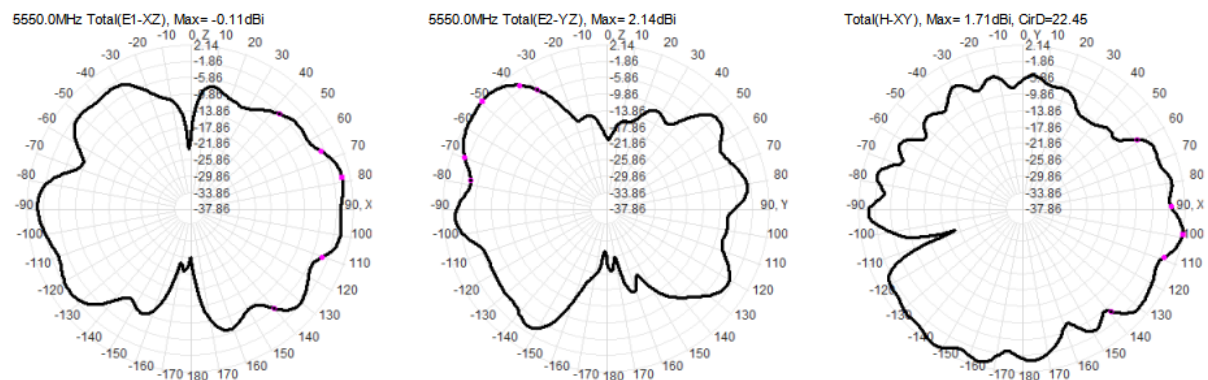
2450MHz



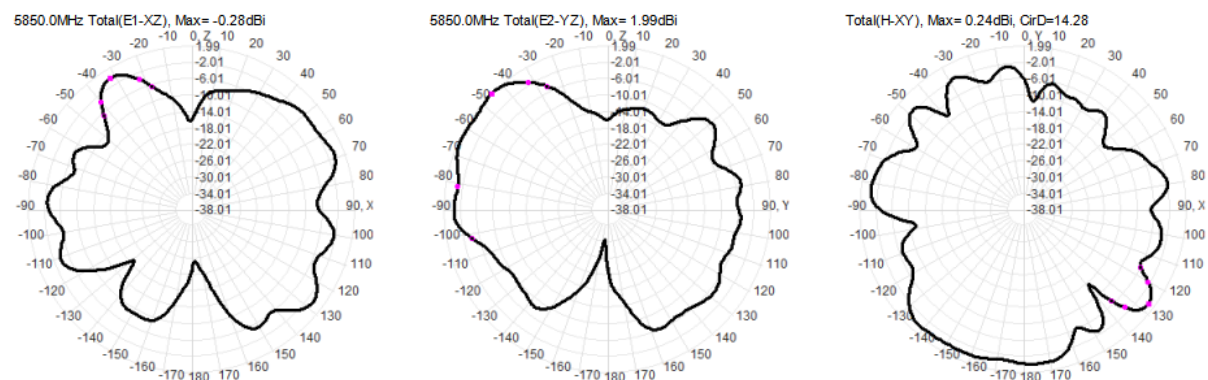
2500MHz



5150MHz



5550MHz



5850MHz

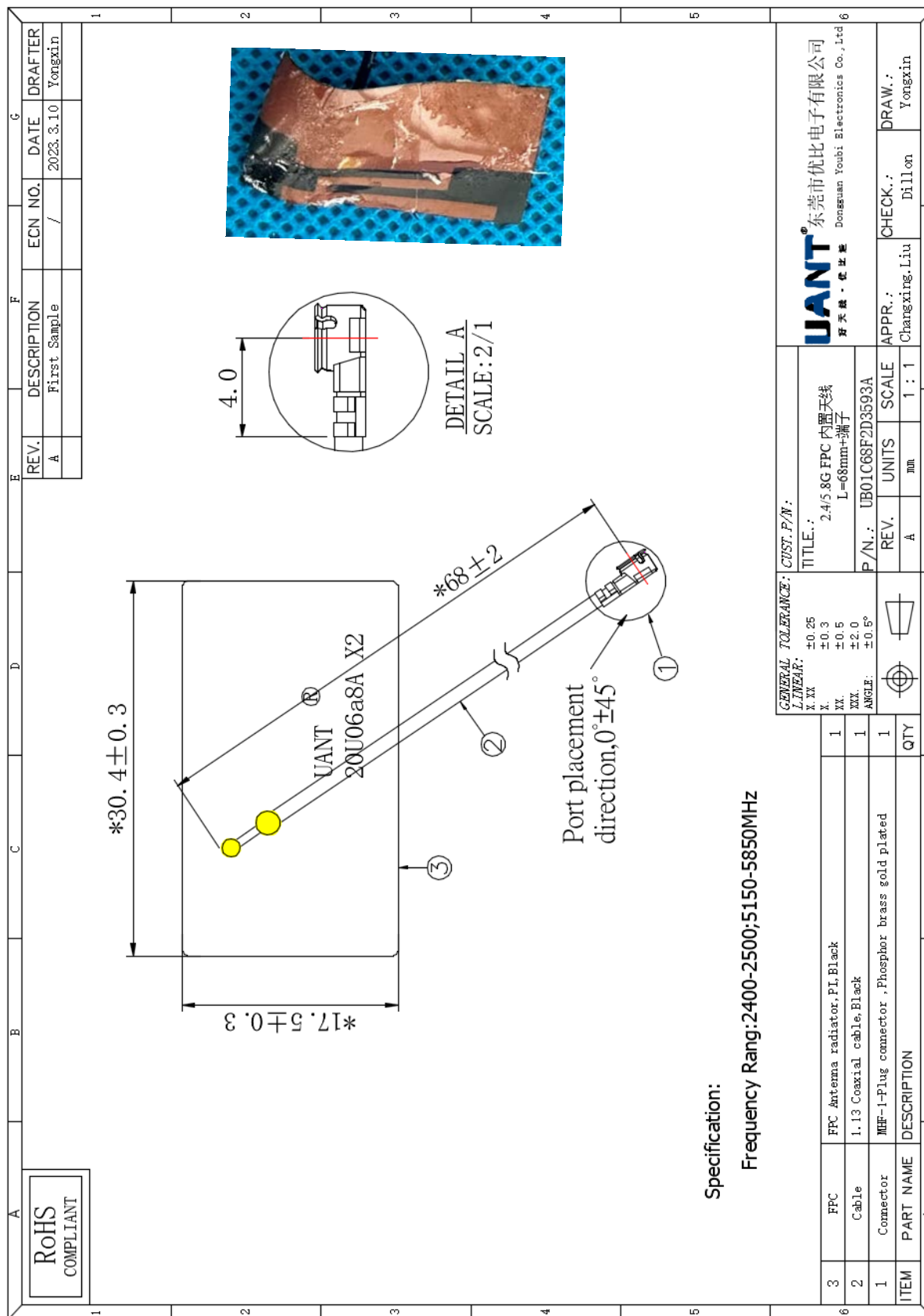
6.Active test data

Item	Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Total
1	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	1	2412	16.67
2	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	1	2412	-77.46
3	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	6	2437	15.78
4	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	6	2437	-83.65
5	TRP	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	15.34
6	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_B (11M)	11	2462	-81.91
7	TRP	Every30	Every30	WIFI (AP)	WIFI_A (54M)	36	5180	18.57
8	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_A (54M)	36	5180	-75.16
9	TRP	Every30	Every30	WIFI (AP)	WIFI_A (54M)	100	5500	17.53
10	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_A (54M)	100	5500	-74.1
11	TRP	Every30	Every30	WIFI (AP)	WIFI_A (54M)	165	5825	17.63
12	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_A (54M)	165	5825	-72.91

7.Antenna installation diagram

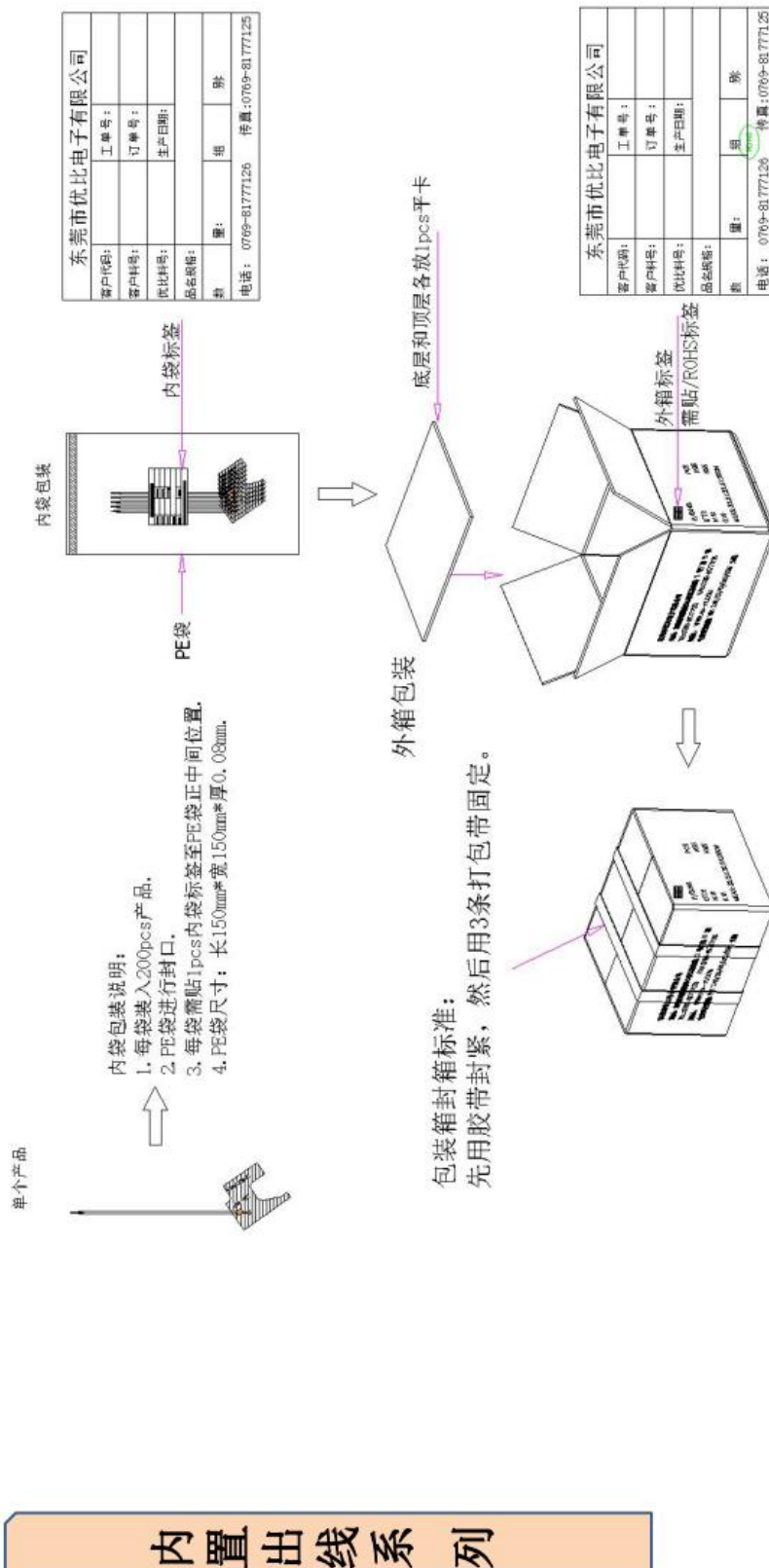


8. Mechanical Specification



9. Packaging

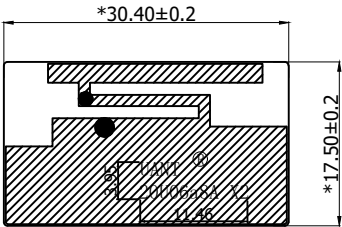
产品包装规范



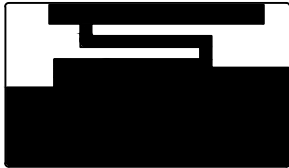
注：
此份包装规范适用于FPC, PCB天线类的线材总长<90mm带ipex和不带ipex产品，属于通用类型。
1. **中号纸箱**装10000pcs产品每箱。

ROHS

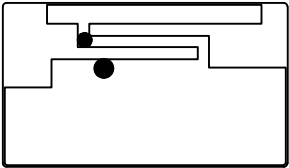
版本	日期	变更内容
A	2022-12-09	新发行



防焊漆



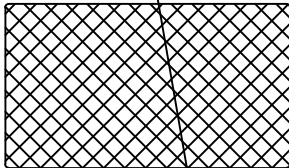
铜箔线路



焊点

0.20±0.1

离型纸切口

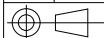


背面

Controlld Document
受控文件

2.4GHz

- 备注:
1. FPC板: PI, 一对半;
 2. 正面黑色防焊漆处理, 焊点OSP处理;
 3. 丝印白色字体, 位置如图;
 4. 背胶: 背胶3M 9471;
 5. 未标注尺寸公差±0.1mm;
 6. 带 * 号为重点管控尺寸;
 7. 产品须符合RoHS 要求

			1		FPC		1		PCS		PI;黑油	
			序号		名称		用量		单位		规格描述	
XXX.	±1.0	核准	客 户:					UANT[®] 东莞市优比电子有限公司 好天线·优比造 Dongguan UB Electronic Co.,Ltd				
XX.	±0.5		客户料号:									
X.	±0.3	审核	产品名称:									
.X	±0.2		优比料号: 20U06a8A									
.XX	±0.1	制图 柯友杰	版本	单位	比例	大小	页码					
			A	mm	1:1	A4	1/1					