Declaration

APPROVAL SHEET

CUSTOMER NAME:

PRODUCT NAME: 2.4G FPC Built-in Antenna L=45mm 1st Generation Connector

CUSTOMER P/N:

Youbi P/N: UB01C80F2D4800A REV: D

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY :	Huang	
DATE:	2024/12/23	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-11-11
B	Add hand-tear position	Eddy	2024-11-13
C	Change FPC	Eddy	2024-12-18
D	Update test data	Eddy	2024-12-23

Content

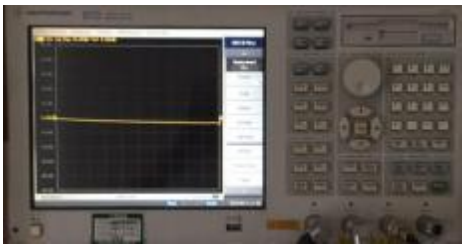
ltem ***Description***

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	44x22.57,L45	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	3.25	dBi
Efficiency	>50	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

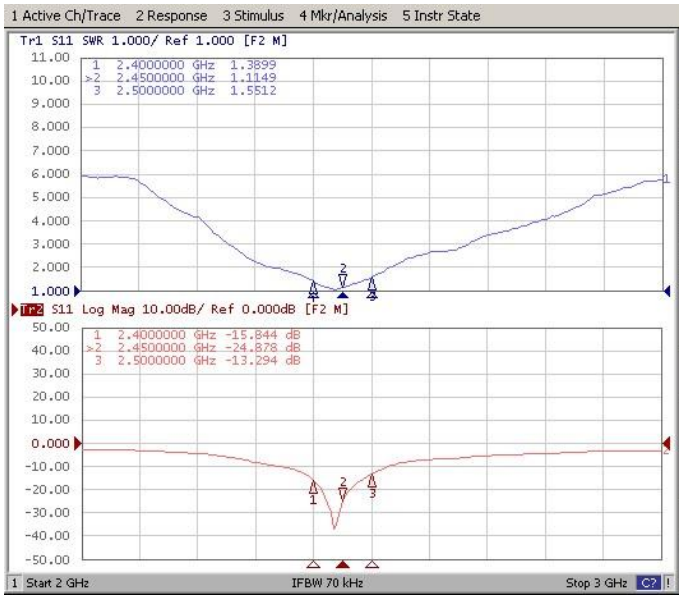
2.Test Items and Equipment

	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	-15.84	1.38
2450	-24.87	1.11
2500	-13.29	1.55

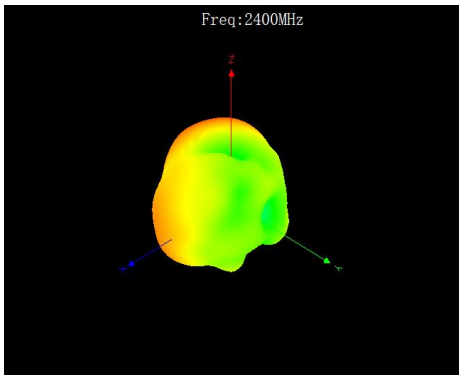


* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
RL=20*log10[(VSWR+1)/(VSWR-1)

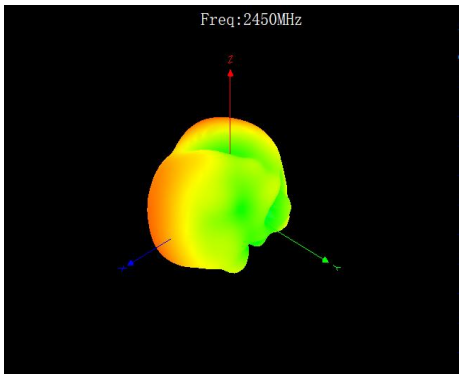
4. Efficiency and Gain

Frequency / MHz	Efficiency / %	Gain/ dBi
2400	57.05	3.16
2410	56.23	2.85
2420	61.21	3.25
2430	60.7	2.90
2440	62.75	2.97
2450	66.26	3.07
2460	60.33	2.50
2470	62.62	2.83
2480	59.58	2.42
2490	56.47	2.47
2500	60.45	2.89

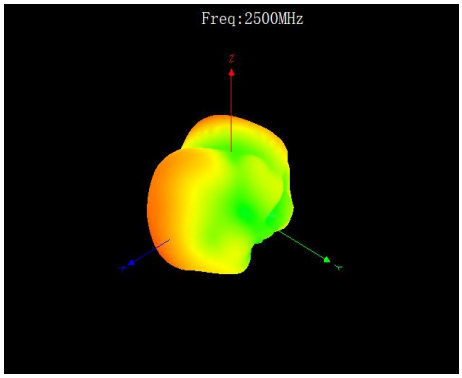
5. Radiation Pattern



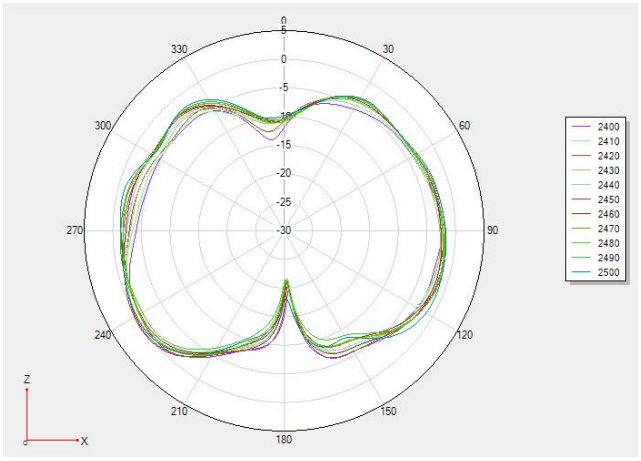
2400MHz



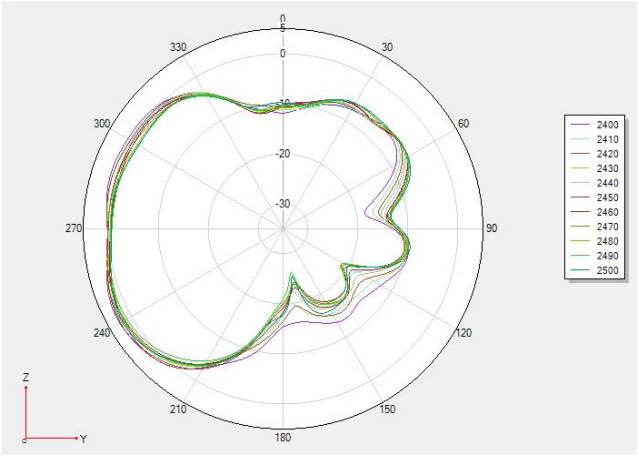
2450MHz



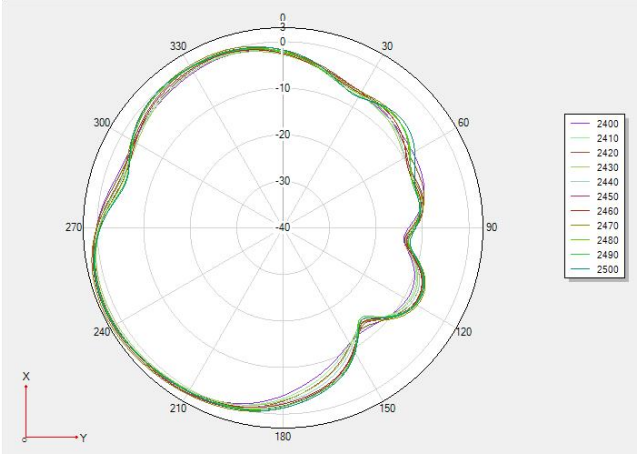
2450MHz



Phi 0 2D

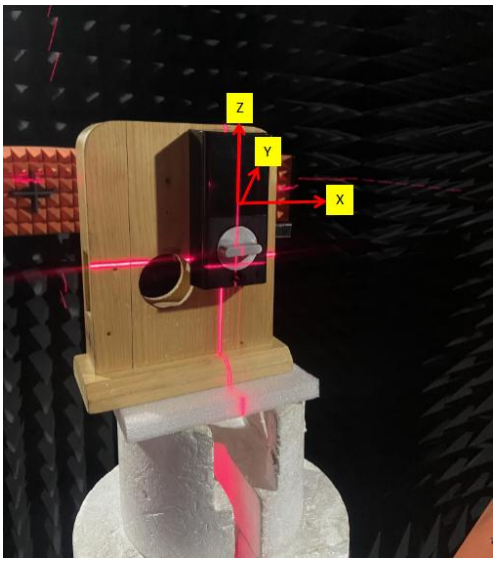


Phi 90 2D

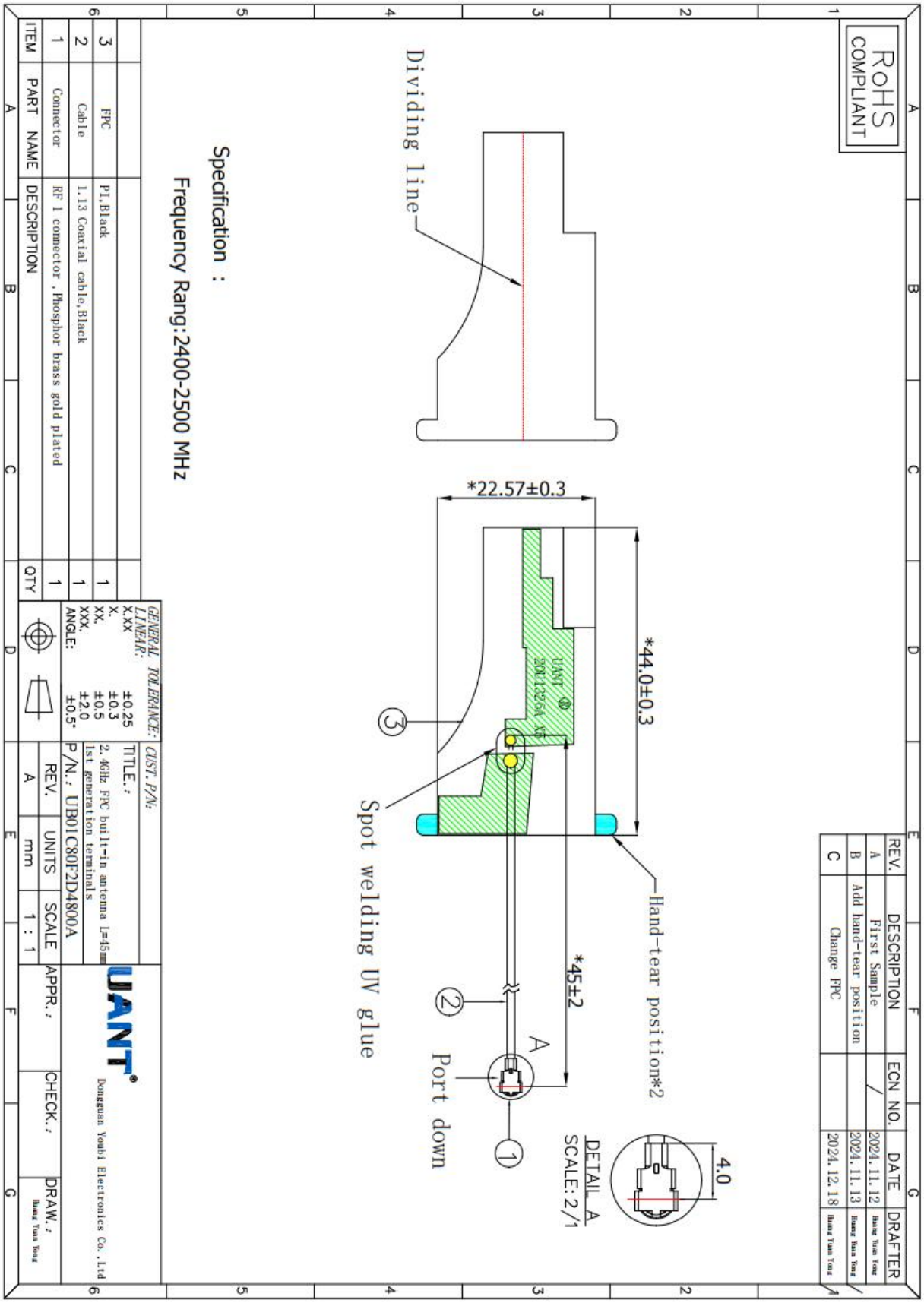


Theta 90 2D

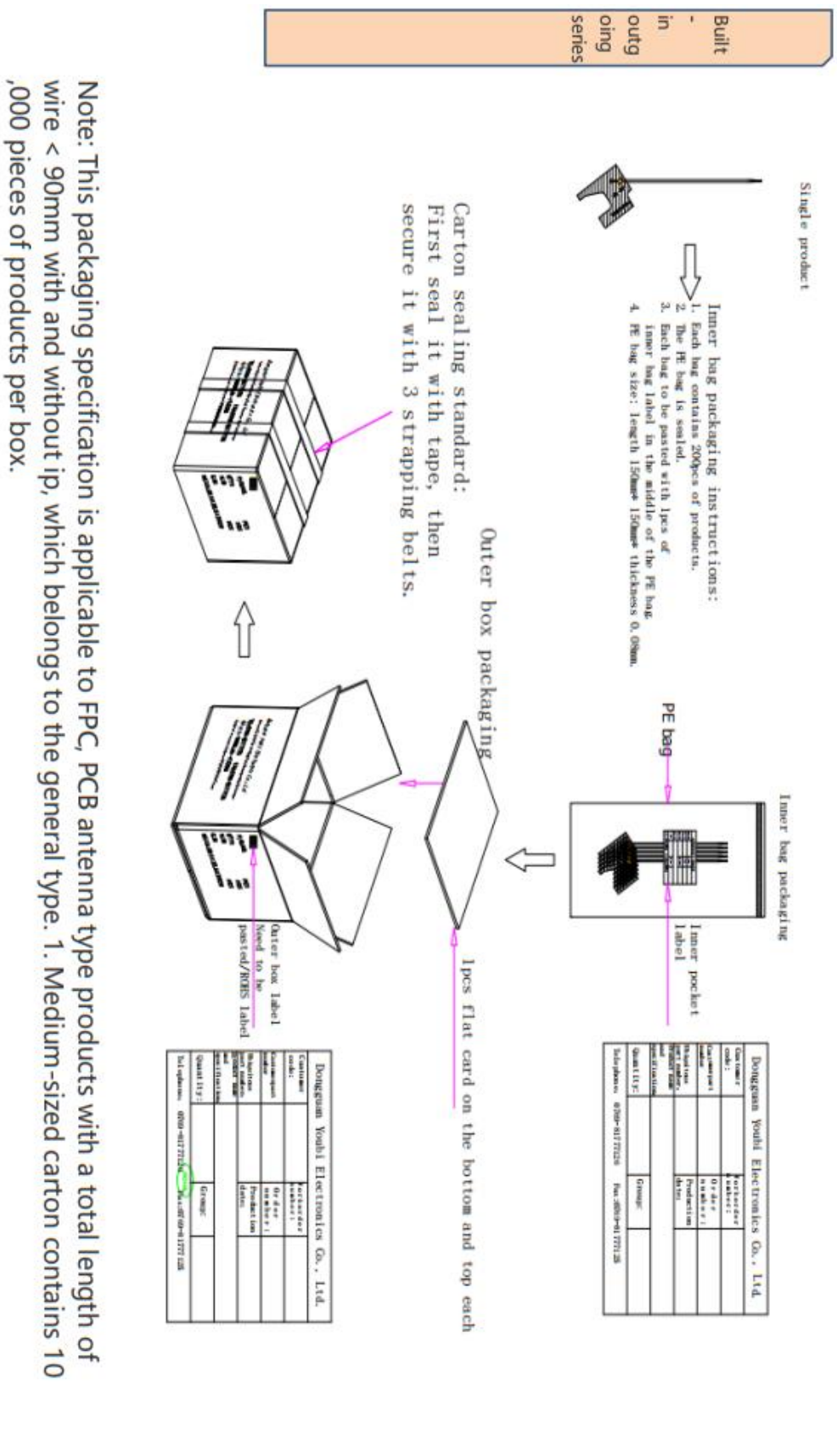
6. Antenna installation diagram



7.Mechanical Specification



8. Packaging


Product packaging specifications
Built-in outgoing series
Single product
Inner bag packaging instructions:
1. Each bag contains 200pcs of products.
2. The PE bag is sealed.
3. Each bag to be pasted with 1pcs of inner bag label in the middle of the PE bag
4. PE bag size: length 150mm*e 150mm thickness 0.08mm.
PE bag
Inner bag packaging
Inner pocket label
Dongguan Youbi Electronics Co., Ltd.
1pcs flat card on the bottom and top each
Outer box packaging
Carton sealing standard:
First seal it with tape, then secure it with 3 strapping belts.
Outer box label
Need to be pasted ROHS label
Dongguan Youbi Electronics Co., Ltd.
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.