

Declaration APPROVALSHEET

CUSTOMERNAME: Anker

PRODUCT NAME 2.4/5.8G FPC built-in antenna L=39mm 1st
generation terminals

STOMER P/N:

Youbi P/N:

UB01C36F1D5100A

REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Lina	
APPROVED BY :	 Zhi jun. zhu	
DATE:	2025/08/07	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	lina	2025-08-07

Content

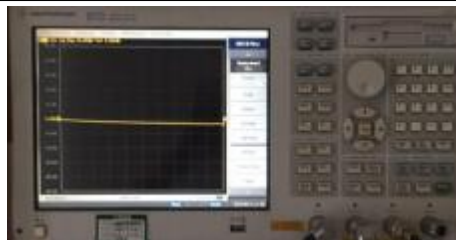
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5. -----	Radiation Pattern
6.-----	Antenna installation diagram
7.-----	Mechanical Specification
8.-----	Packaging

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	20*38 L39	mm
Frequency	2400-2500/5150-5850	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
AVG Gain	4.32	dBi
Efficiency	>70	%
Connector Type	1.13 RF 1	
Operating temperature	-40℃~+85℃	
Storage Temp	-40℃~+85℃	

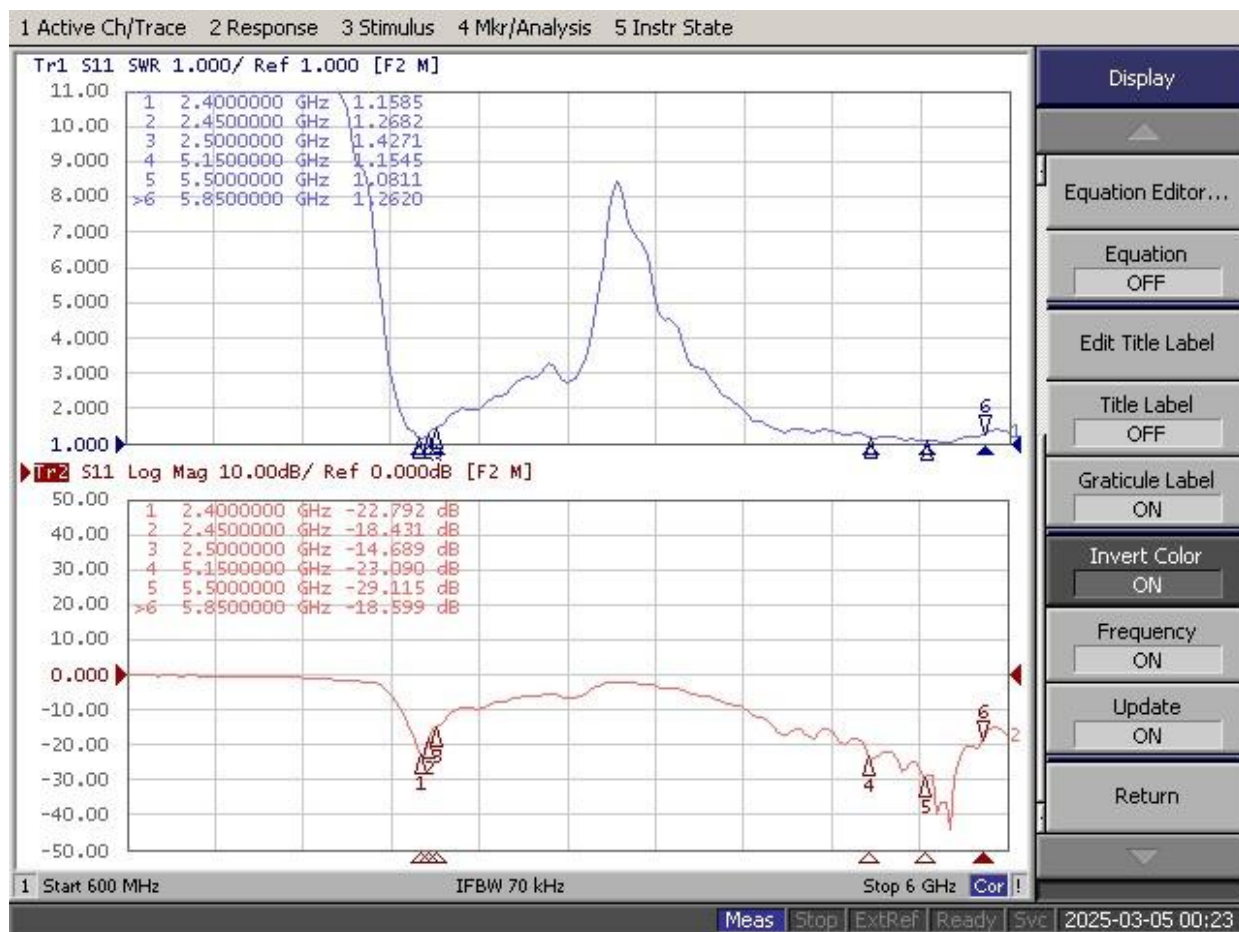
2.Test Items and Equipment

	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	-22.79	1.15
2450	-18.43	1.26
2500	-14.68	1.42
5150	-23.09	1.15
5500	-29.11	1.08
5850	-18.59	1.26



* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

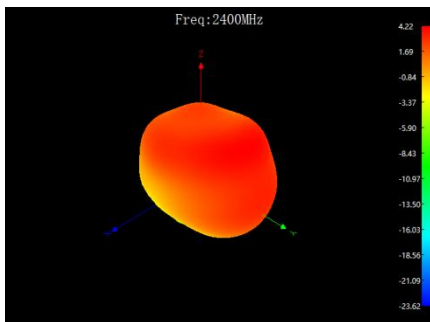
$$RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$$

4. Efficiency and Gain

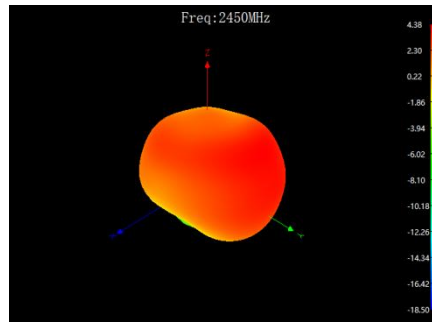
Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi
2400	-1.2	75.86	4.22
2410	-1.16	76.56	4.53
2420	-1.17	76.38	4.3
2430	-1.04	78.7	4.22
2440	-0.97	79.98	4.04
2450	-1.13	77.09	4.38
2460	-1.1	77.62	3.96
2470	-0.98	79.8	4.3
2480	-1.1	77.62	3.97
2490	-1	79.43	4.14
2500	-1.04	78.7	4.3
5150	-1.36	73.11	4.56
5200	-1.38	72.78	4.39
5250	-1.37	72.95	4.35
5300	-1.2	75.86	4.6
5350	-1.17	76.38	4.79
5400	-1.38	72.78	4.5
5450	-1.33	73.62	4.18
5500	-1.16	76.56	4.6
5550	-1.05	78.52	4.76
5600	-1.11	77.45	4.45
5650	-1	79.43	4.35
5700	-1.2	75.86	4
5750	-1.1	77.62	4.01
5800	-1.08	77.98	4.52
5850	-1.01	79.25	4.42

5. 2D/3D Radiation direction

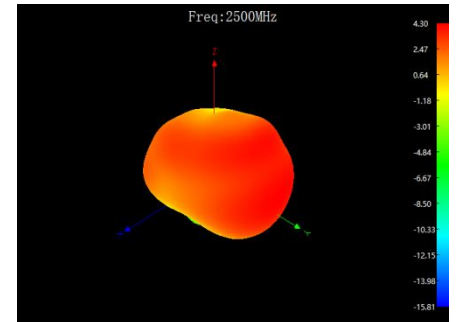
2. 4G



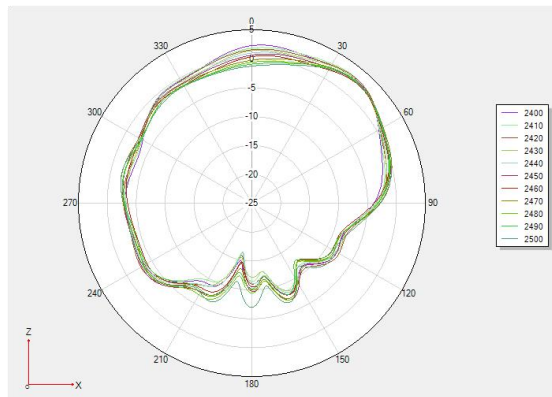
2400MHz



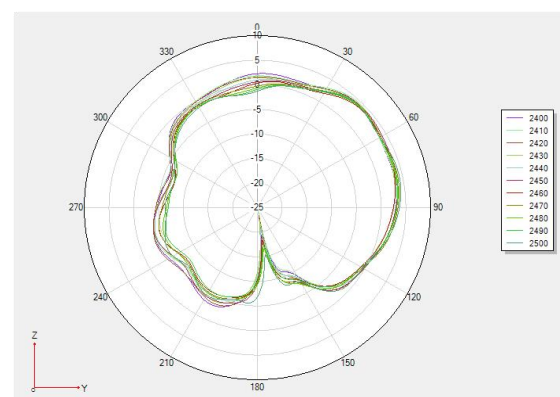
2450MHz



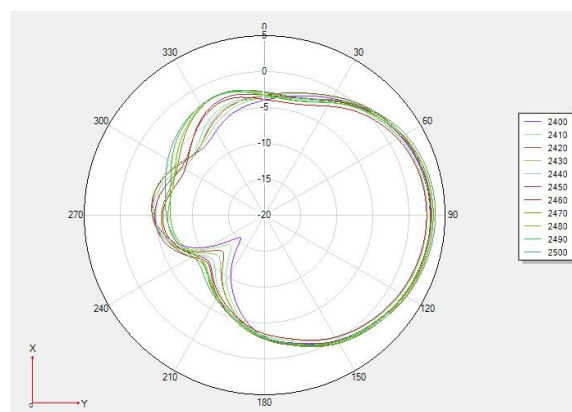
2500MHz



Phi 0 2D

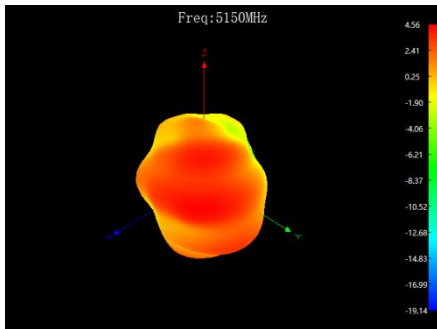


Phi 90 2D

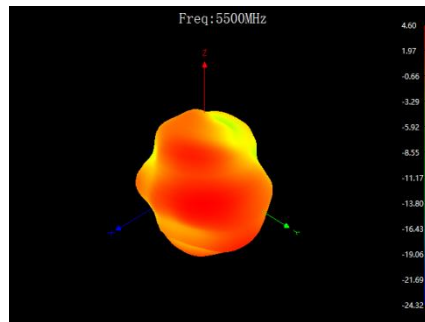


Theta 90 2D

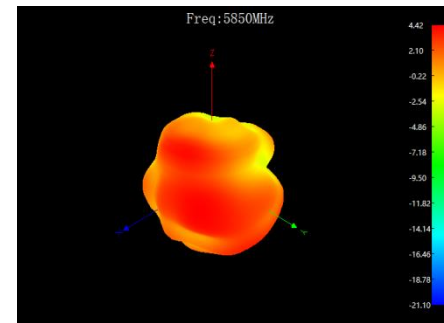
5.8G



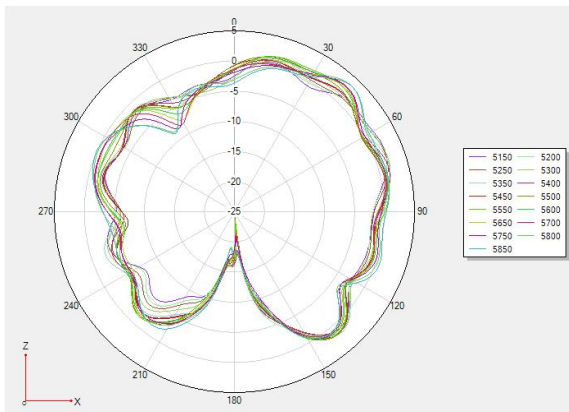
5150MHz



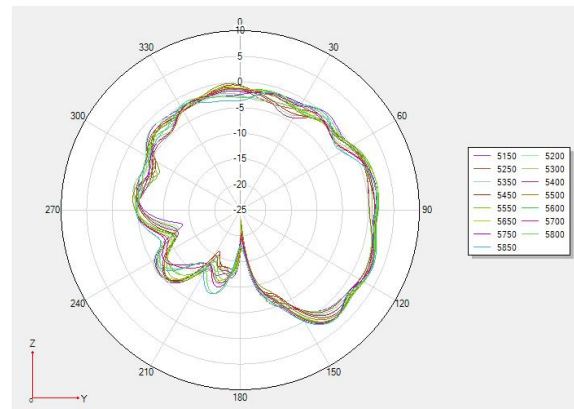
5150MHz



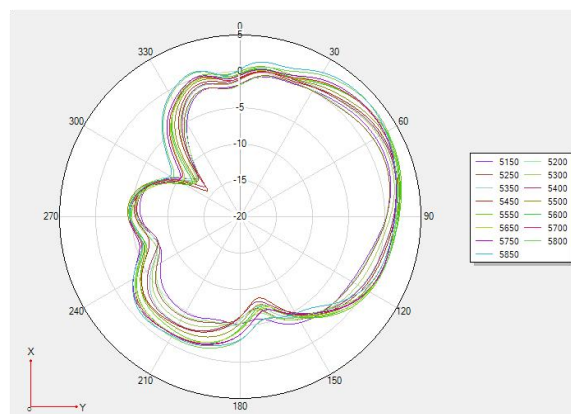
5150MHz



Phi 0 2D

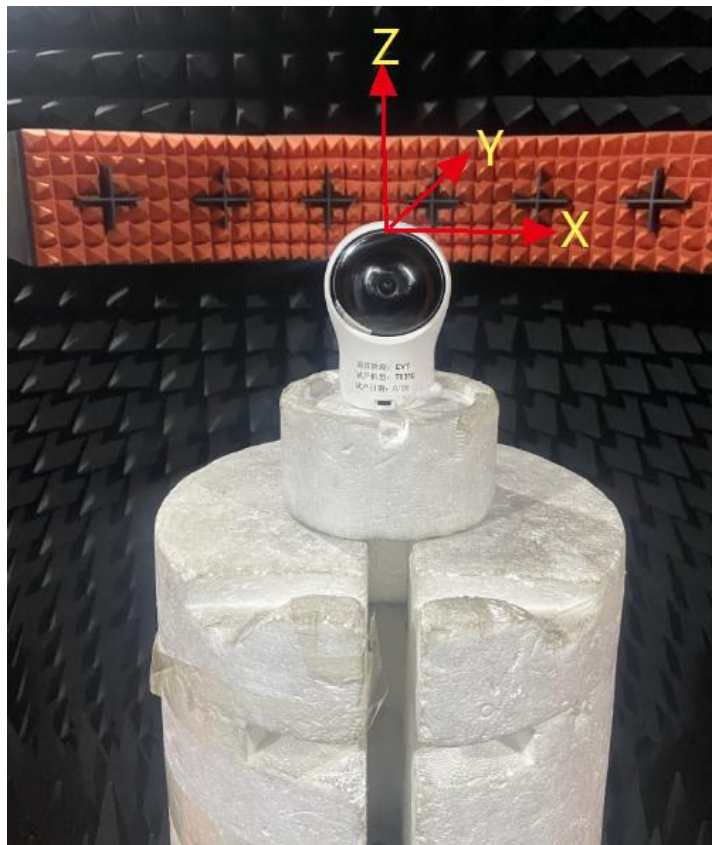
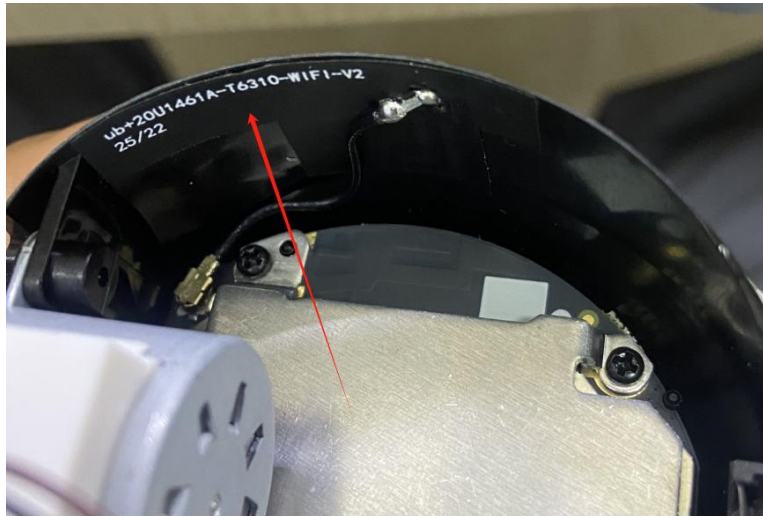


Phi 90 2D

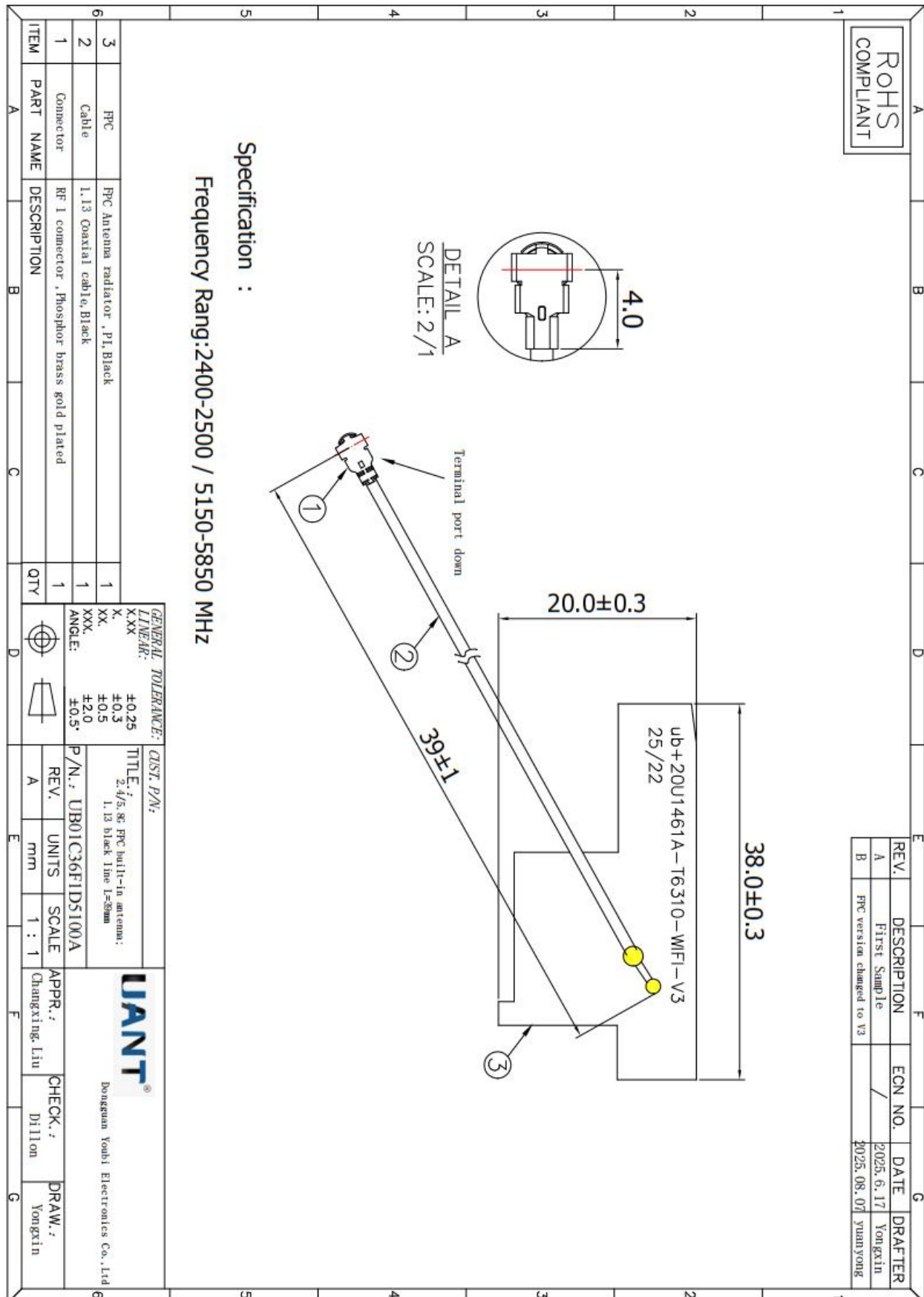


Theta 90 2D

6. Antenna installation diagram



7. Mechanical Specificatio



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Product packaging specifications

