UANT® Dongguan Youbi Electronics Co.,LTD

acknowledgement

APPROVAL SHEET

customer name

Product Name:

2.4/5.8G Large SMA Male-Male Needle Longyuan Sword Black Antenna

Customer Document Number

Youbi P/N: UB02S58B5D1491A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Lina 东莞市优比电子有限公司 工程专用章	
APPROVED BY:	Zhonglin.liu	
DATE:	2026/05/04	

複製禁止

Modification History

Version	Content Revision	Issued by	Date
A	Original version	lina	2026-05-04

複製禁止

Content

Item ***Description***

1.----------Electrical Specification

2.----------Test Items and Equipment

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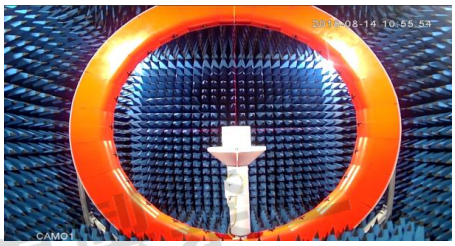
1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	Ø13*200	mm
Frequency	2400-2500/5150-5850MHz	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	4±1	dBi
Efficiency	>60	%
Connector Type	SMA	
Operating temperature	-40℃~+80℃	
Storage Temp	-40℃~+80℃	

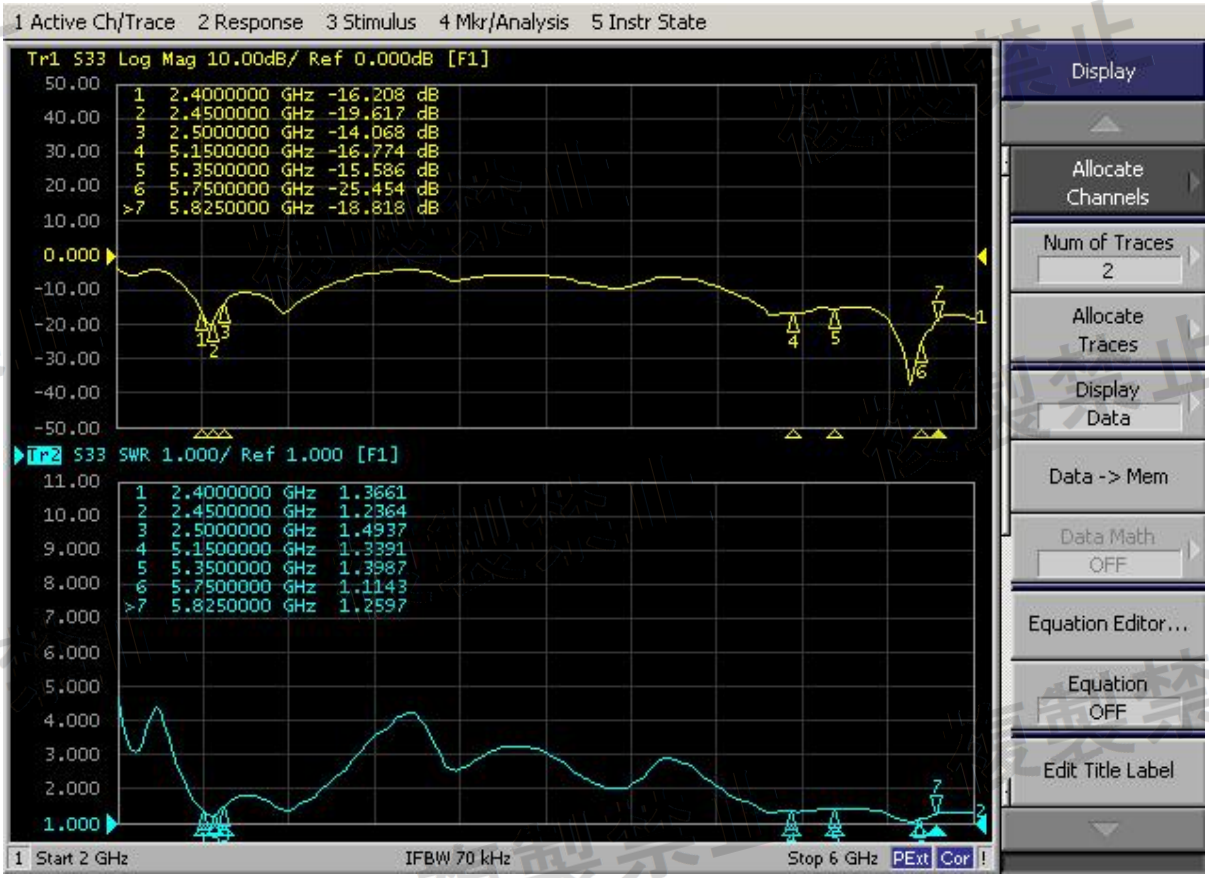
2.Test Items and Equipment

	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)

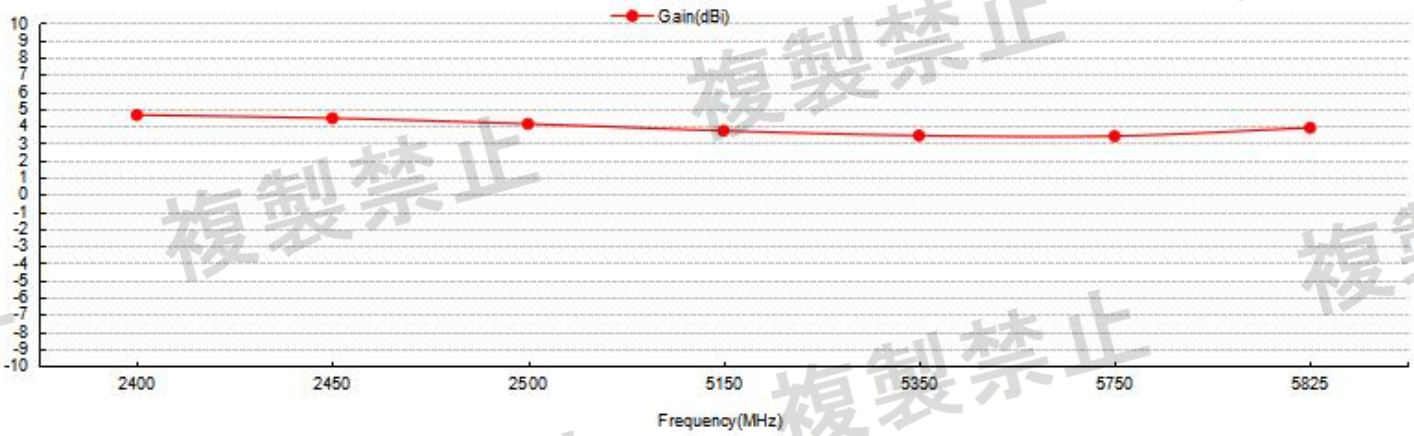


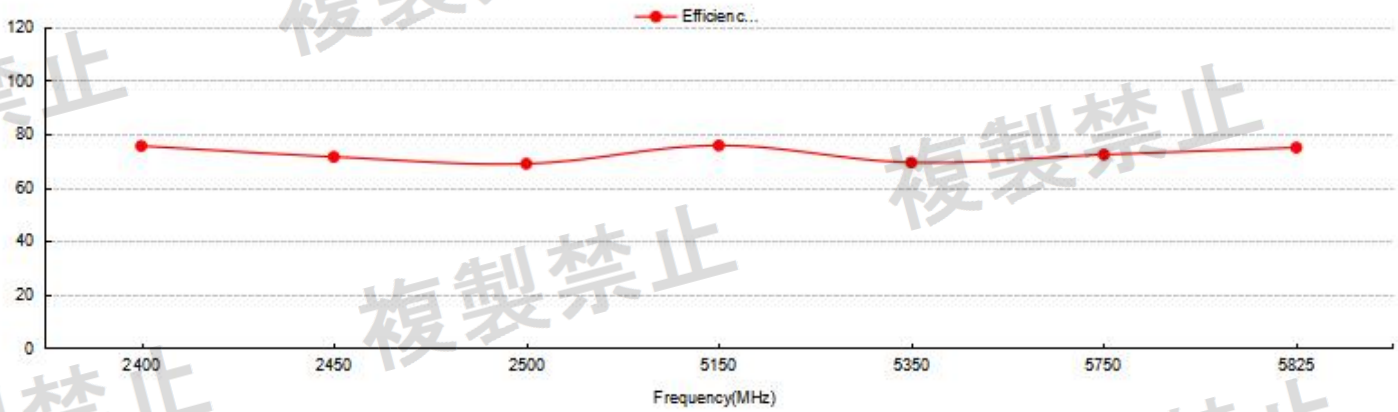
3.S Parameter

Frequency(MHz)	VSWR	Return Loss(dB)
2400	1.36	-16.20
2450	1.23	-19.61
2500	1.49	-14.06
5150	1.33	-16.77
5350	1.39	-15.58
5750	1.11	-25.45
5825	1.25	-18.81



4. Efficiency and Gain

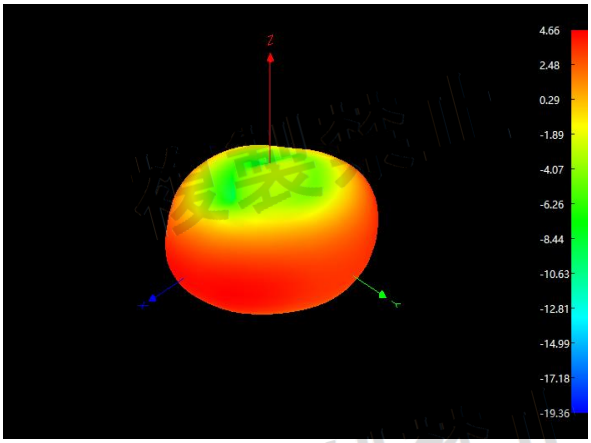




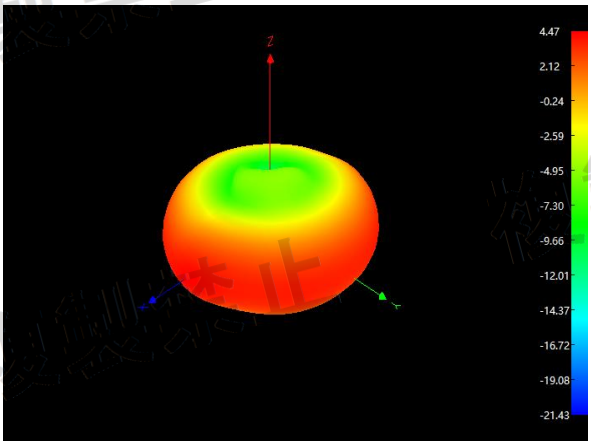
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5825
Efficiency (%)	75.51	71.45	68.87	75.7	69.34	72.28	74.92
Gain(dBi)	4.66	4.47	4.2	3.74	3.46	3.43	3.91

5. Radiation Pattern

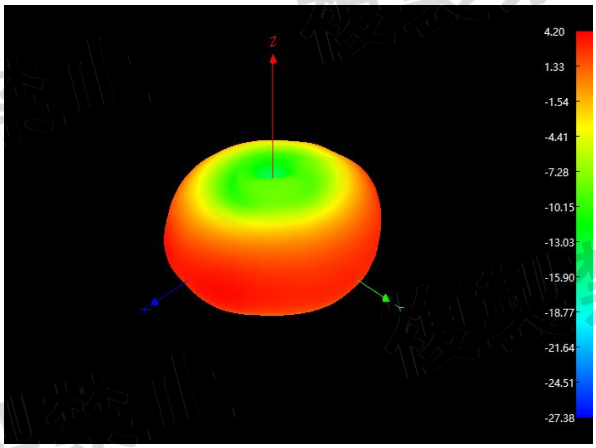
5-1 Antenna 3D Radiation Pattern



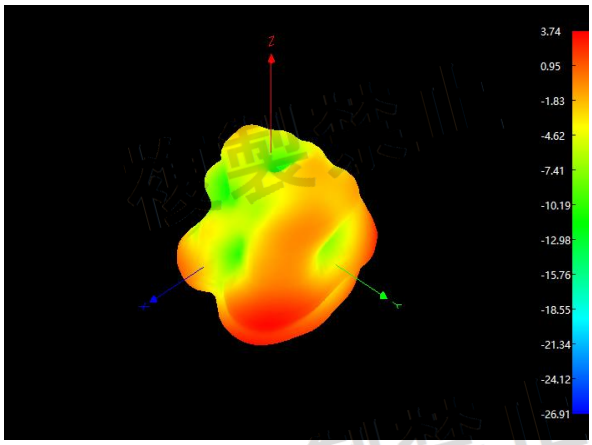
2400MHz



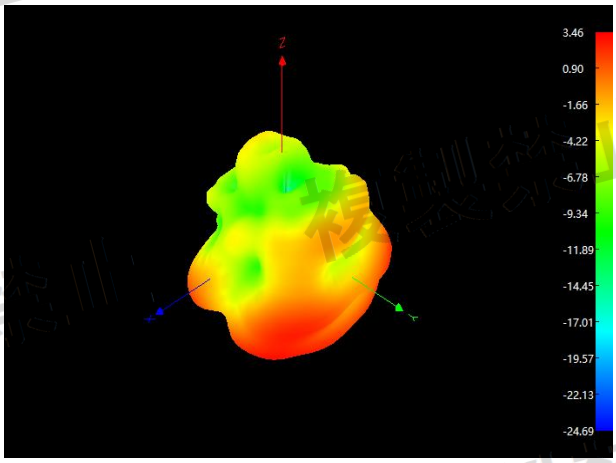
2450MHz



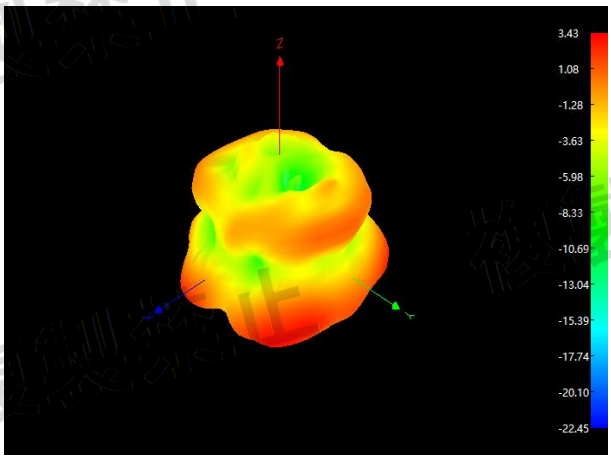
2500MHz



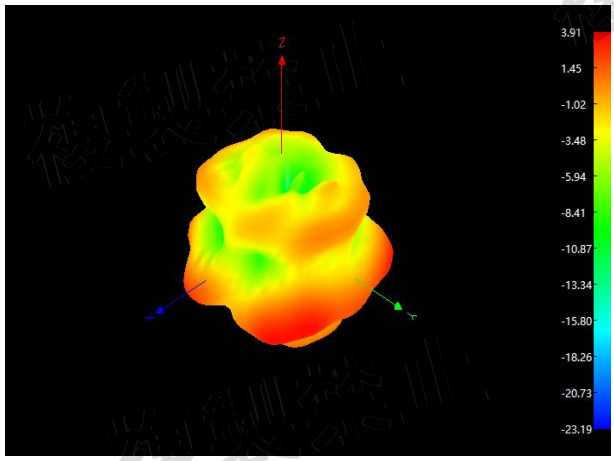
5150MHz



5350MHz

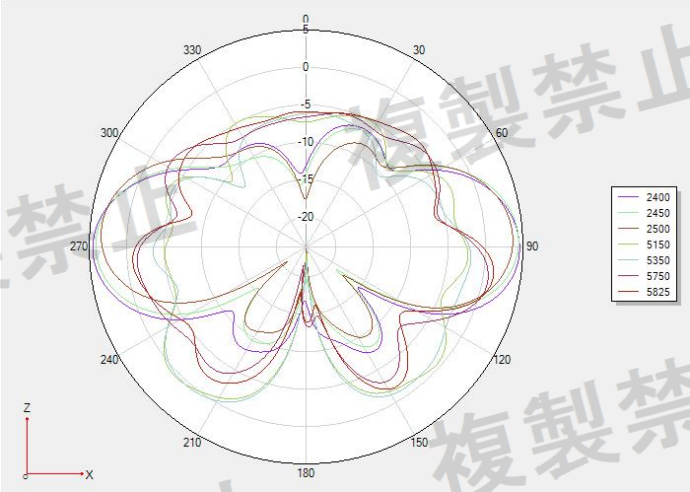


5750MHz

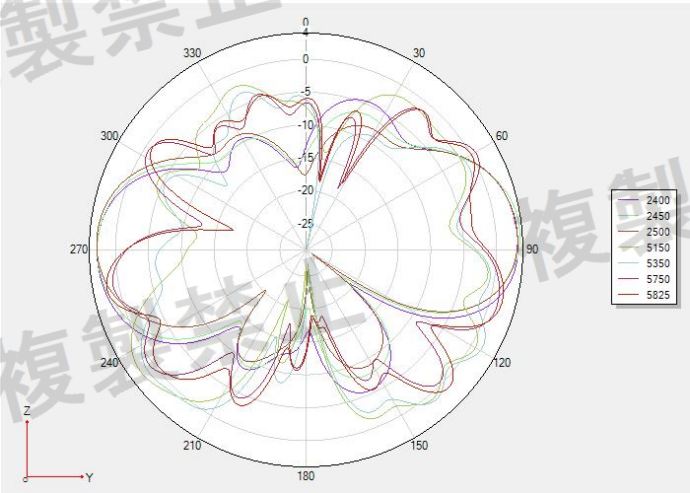


5825MHz

5-2 Antenna 2D Radiation Pattern



Phi0



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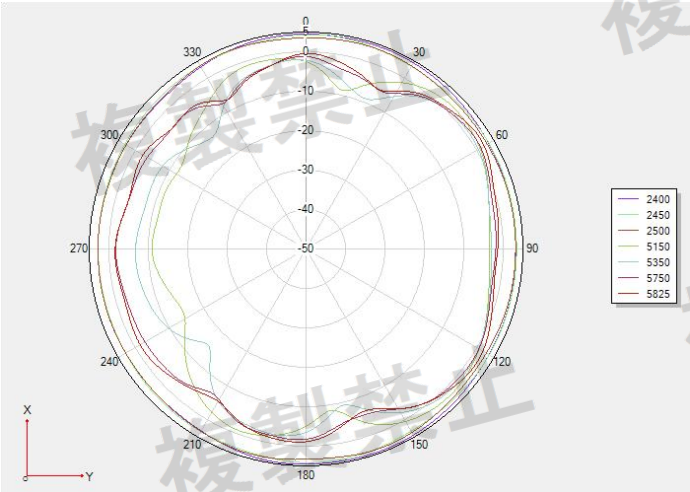
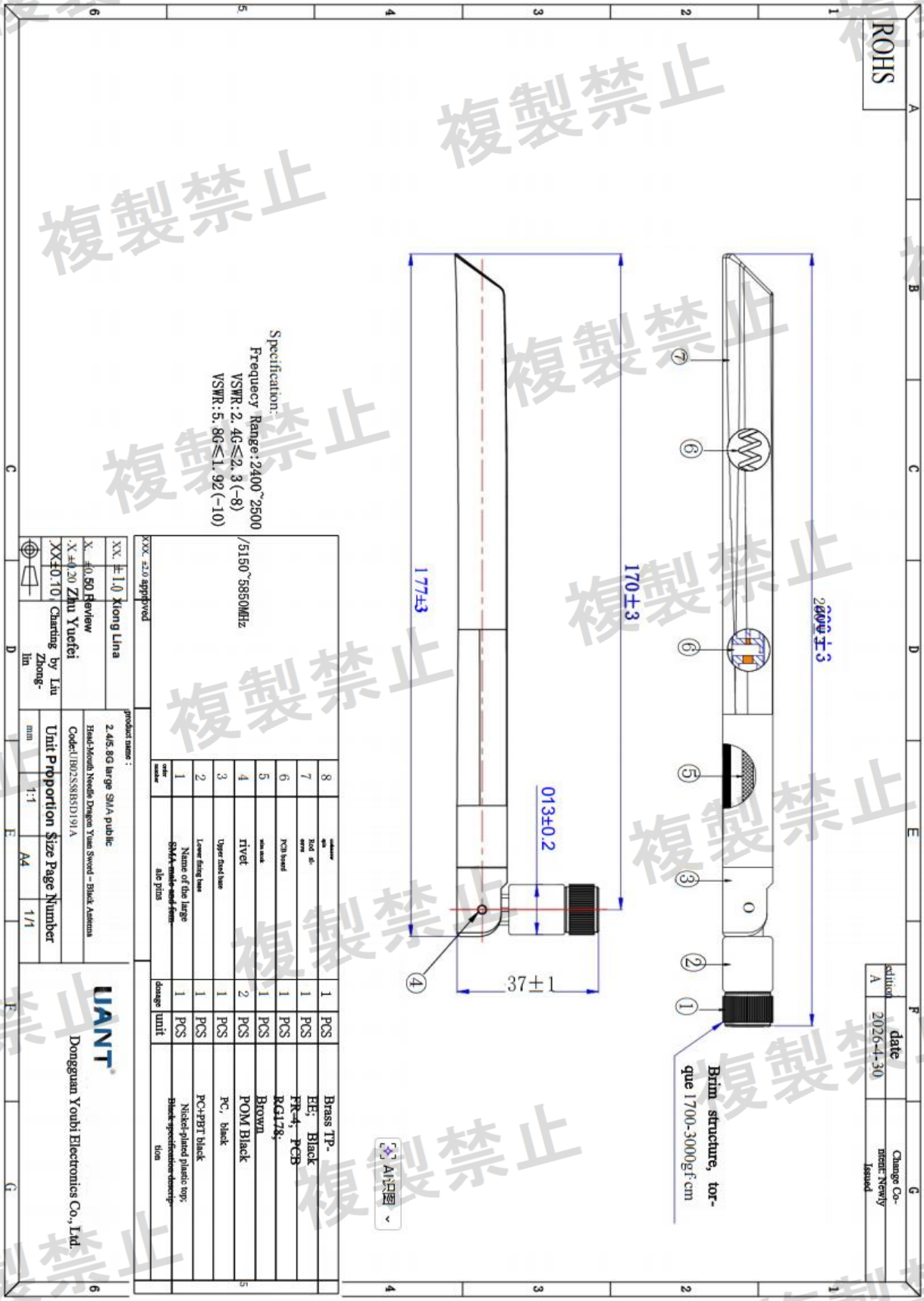


Theta90

6. Mechanical Specification