



Dongguan Youbi Electronics Co., Ltd

APPROVAL SHEET

CUSTOMER NAME:

PRODUCT NAME: 2.4/5.8G Metal ANT

CUSTOMER P/N:

Youbi P/N: UB01NJ2D1559A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY:	Changxing. Liu	
DATE:	2024/11/7	



Dongguan Youbi Electronics Co.,Ltd

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-11-7



Dongguan Youbi Electronics Co., Ltd

Content

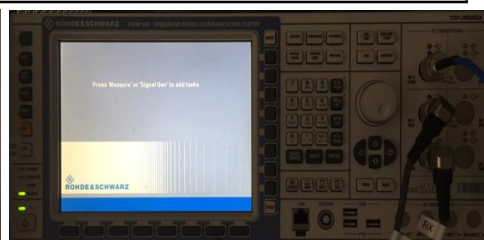
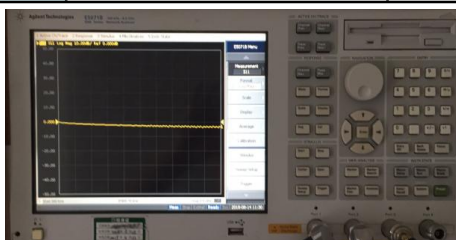
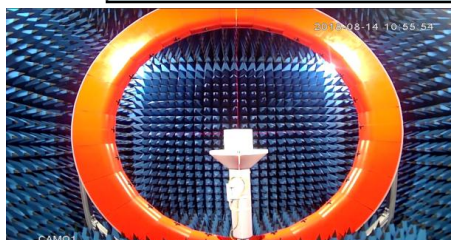
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Antenna installation diagram
7.-----	Mechanical Specification
8.-----	Packaging

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	21.8x13.2x6.7x0.4	mm
Frequency	2400-2500 / 5150-5850	MHz
Impedance	50	Ω
VSWR	≤ 2	
Polarization	Linear Polarization	
Gain	3.76	dBi
Efficiency	> 50	%
Connector Type	MHF-2-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

2. Test Items and Equipment

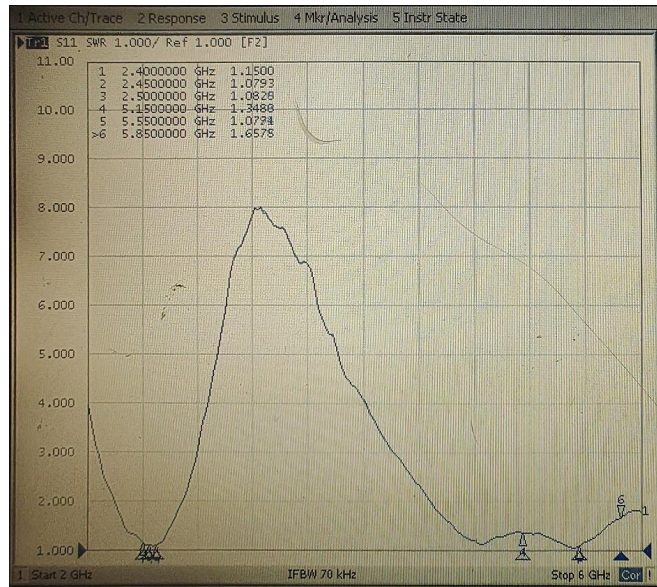
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

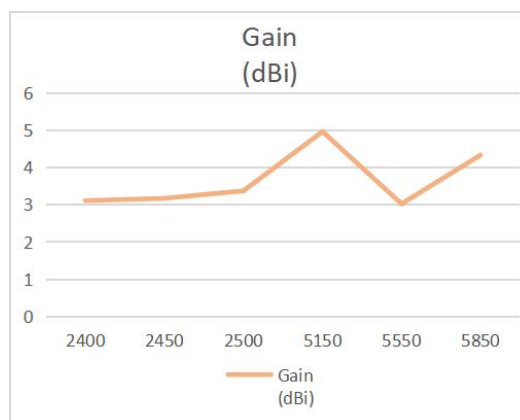
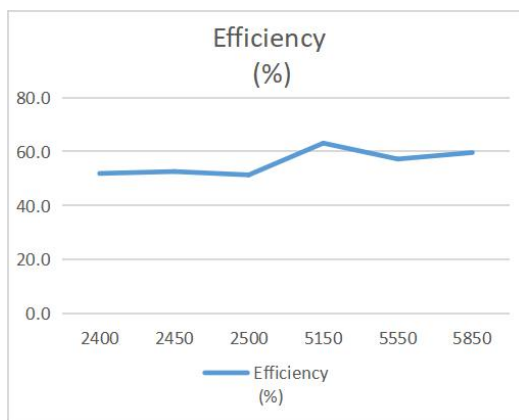
Frequency (MHz)	VSWR
2400	1.15
2450	1.07
2500	1.08
5150	1.34
5500	1.07
5850	1.65

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



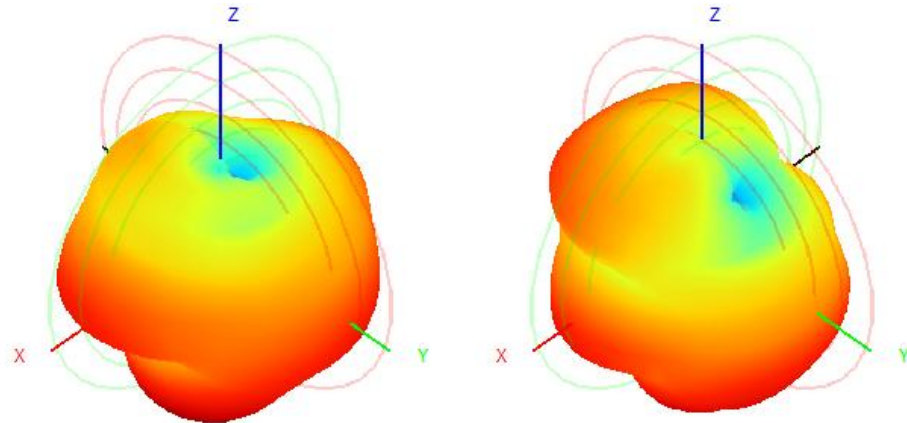
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	51.88	52.59	51.34	63.10	57.22	59.62
Gain (dBi)	3.11	3.18	3.38	3.08	3.03	3.76



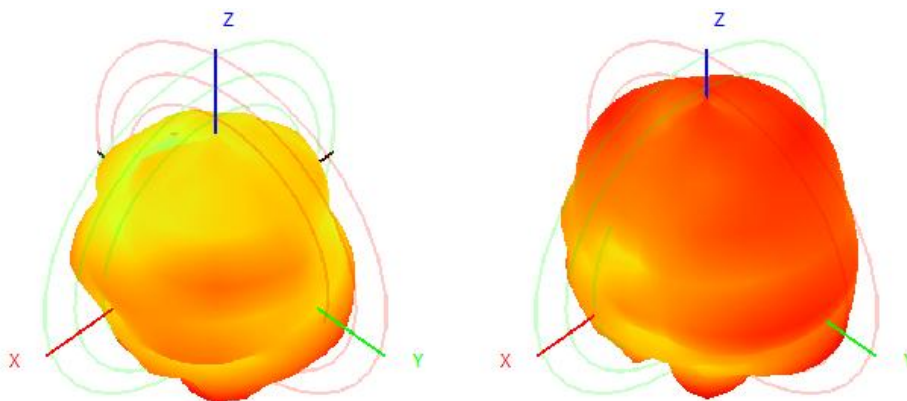
5. Radiation Pattern

5-1 Antenna 3D Radiation Pattern



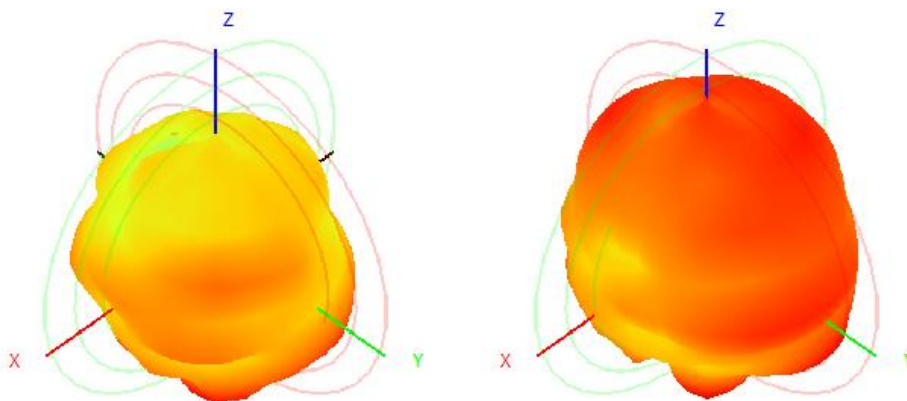
2400MHz

5150MHz



2450MHz

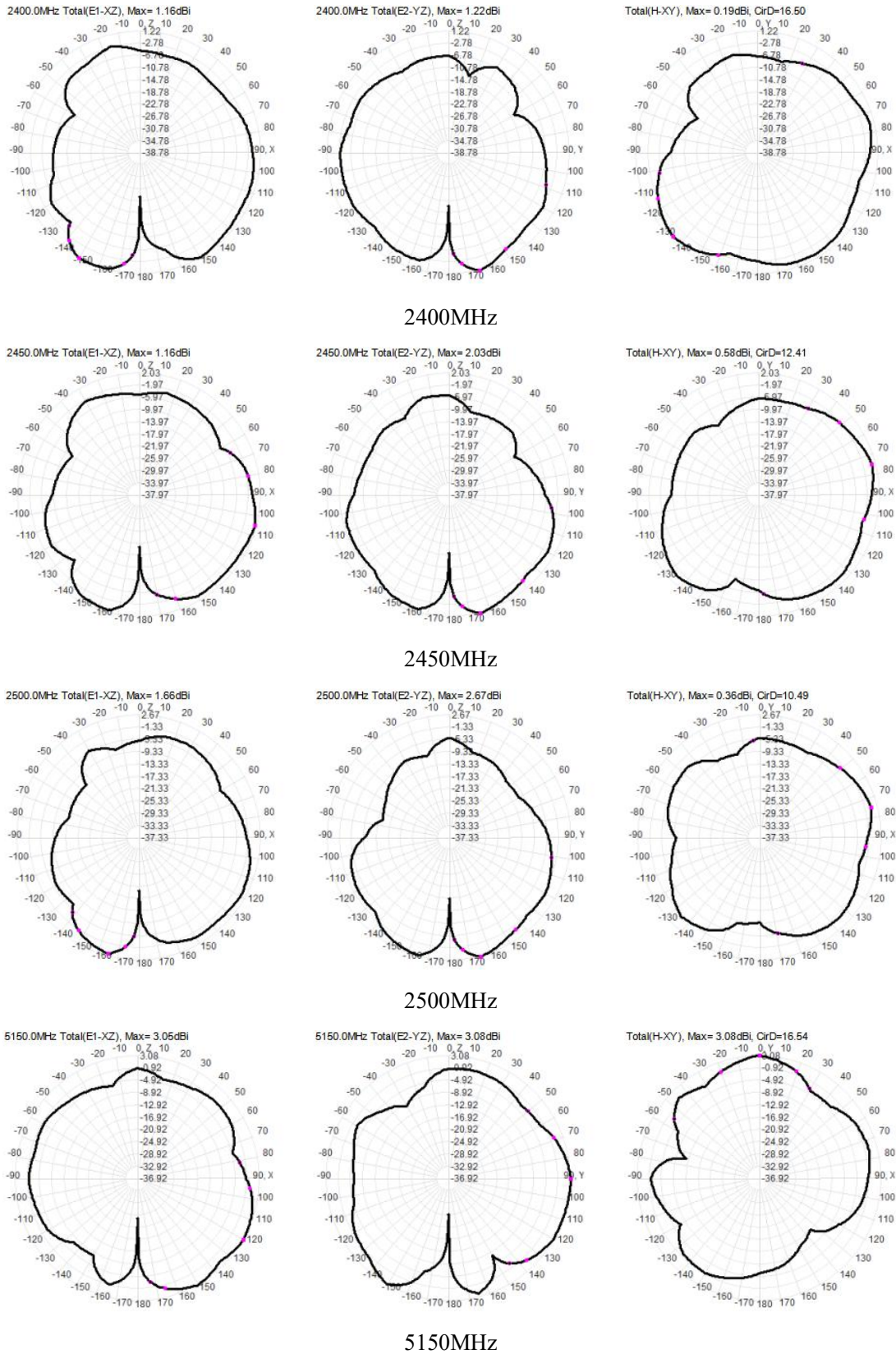
5550MHz

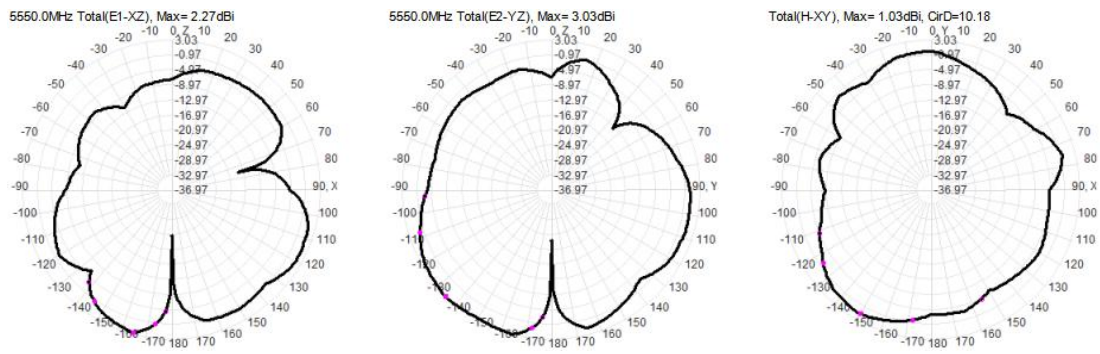


2500MHz

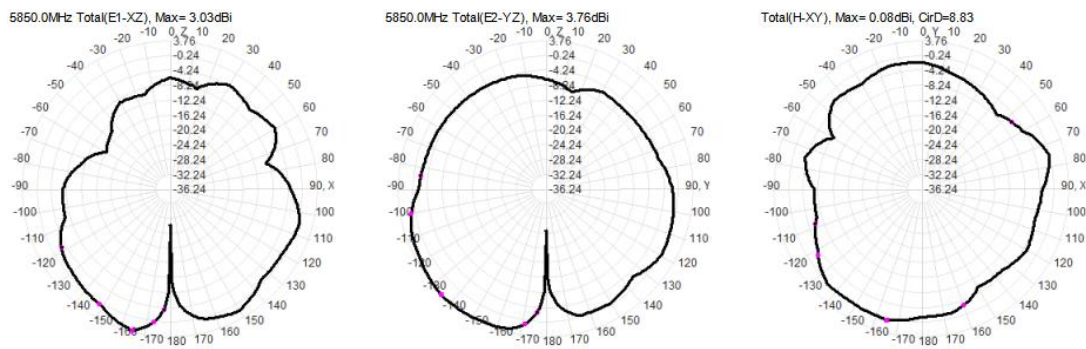
5850MHz

5-2 Antenna 2D Radiation Pattern



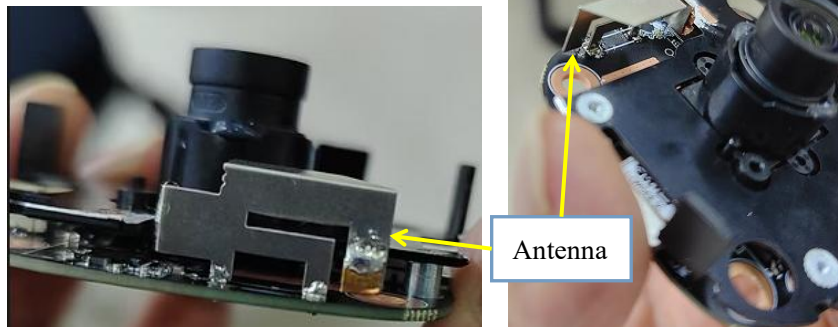


5550MHz



5850MHz

6. Antenna installation diagram



7. Mechanical Specification

