

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: Xietron Data Technology Co., LTD

产 品 名 称

PRODUCT NAME: 2.4/5.8G Metal Antenna

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01NJ2D1504A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Eddy	
APPROVED BY:	Changxing.Liu	
DATE:	2024/4/2	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-4-2



好天线 · 优比造

东莞市优比电子有限公司

Dongguan Youbi Electronics Co., Ltd

Content

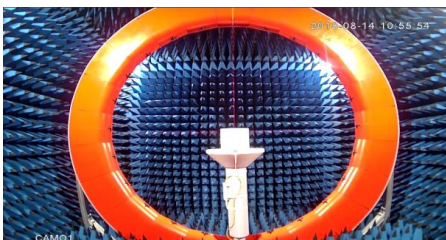
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Active test data
7.-----	Antenna installation diagram
8.-----	Mechanical Specification

1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	17.1x16.3x3.5xT0.5	mm
Frequency	2400-2500 / 5150-5850	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	2.0 $\pm$ 0.5@2.4G 4.0 $\pm$ 0.8@5.8G	dBi
Efficiency	>50	%
Connector Type	DIP	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

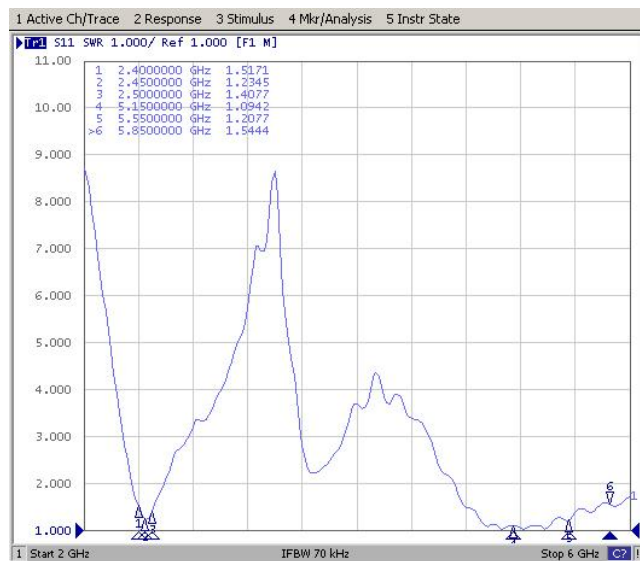
2.Test Items and Equipment

	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	1.51
2450	1.23
2500	1.40
5150	1.09
5550	1.20
5850	1.54



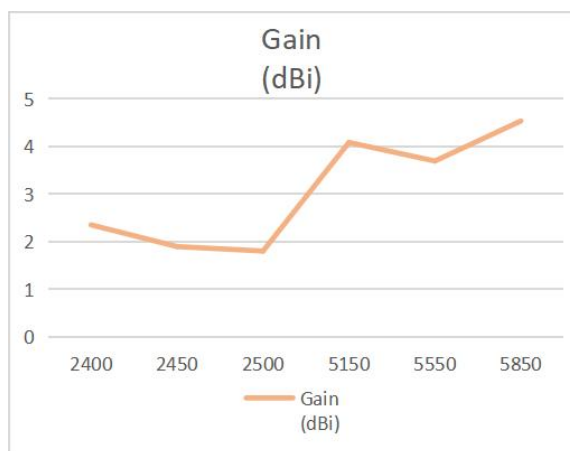
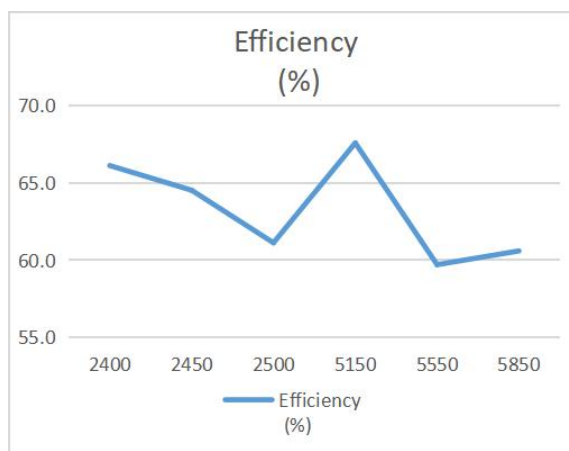
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

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

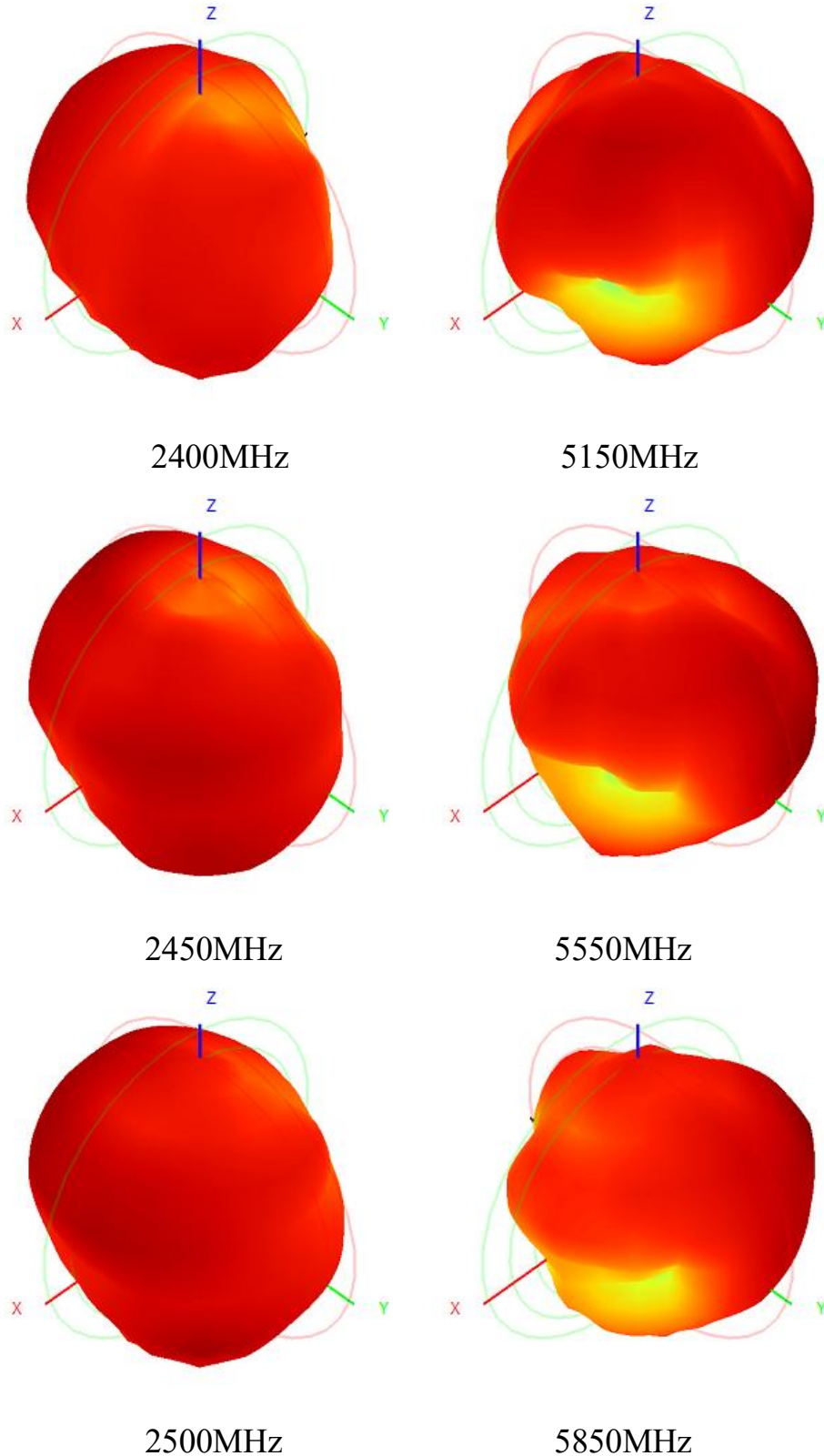
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	66.10	64.51	61.11	67.56	59.70	60.59
Gain (dBi)	2.35	1.90	1.80	4.09	3.69	4.54



5. Radiation Pattern

5-1 Antenna 3D Radiation Pattern



6.Active test data

Item	Measurement	Total
1	TRP	16.47
6	TRP	17.50
11	TRP	17.66
1	TIS(EIRP)	-85.72
6	TIS(EIRP)	-84.87
11	TIS(EIRP)	-85.42

Item	Measurement	Total
36	TRP	12.42
149	TRP	13.71
165	TRP	13.26
36	TIS(EIRP)	-72.46
149	TIS(EIRP)	-72.55
165	TIS(EIRP)	-72.55

7.Antenna installation diagram



Frequency Rang:2400-2500 / 5150-5850MHZ