

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: Yunlian Youke

产 品 名 称 2.4G W98 white short bottom fixed antenna

PRODUCT NAME: L=160mm stripped wire 1.0 * 1.5 * 2.5

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C160W5D2201A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:	Changxing. Liu	
DATE:	2022/06/17	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongixn	2022-06-17

Content

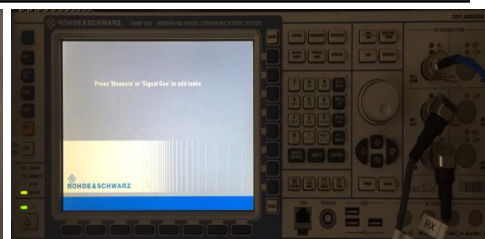
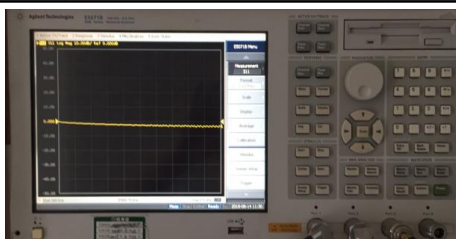
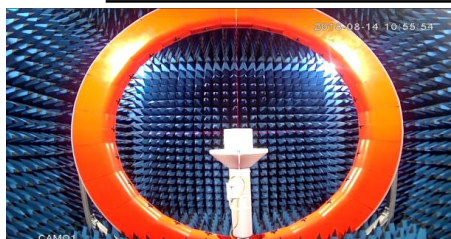
<i>Item</i>	<i>Description</i>
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3.-----	S Parameter
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5.-----	Radiation Pattern
6.-----	Mechanical Specification
7.-----	Packaging

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	12.57x191,L160	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	≤ 2.0	
Polarization	Linear Polarization	
Gain	4.87	dBi
Efficiency	>80	%
Connector Type	OPEN 1/1.5/2.5	
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	-22.53	1.16
2450	-22.02	1.17
2500	-15.79	1.38



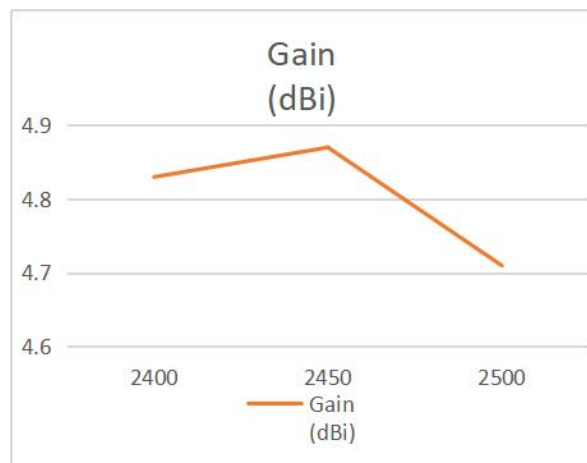
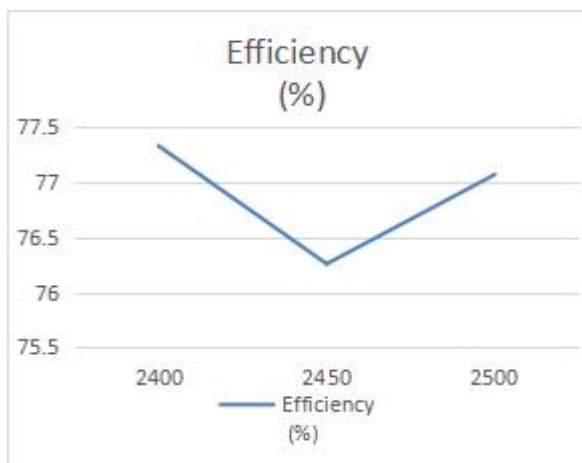
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

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

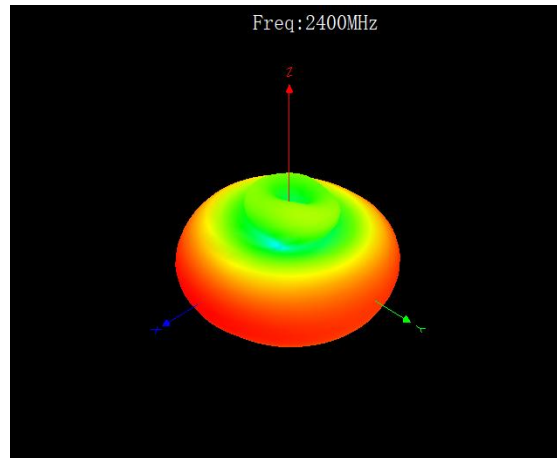
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	77.33	76.26	77.07
Gain (dBi)	4.83	4.87	4.71

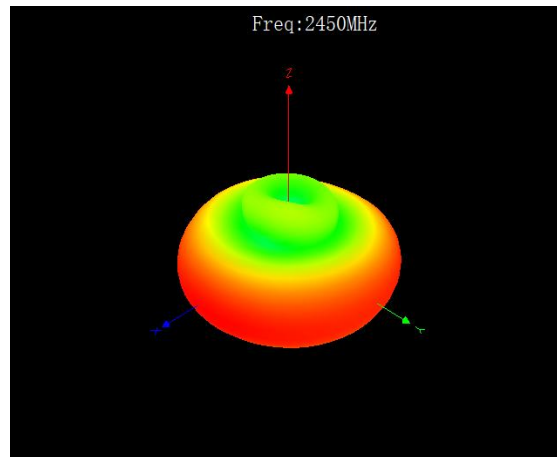


5. Radiation Pattern

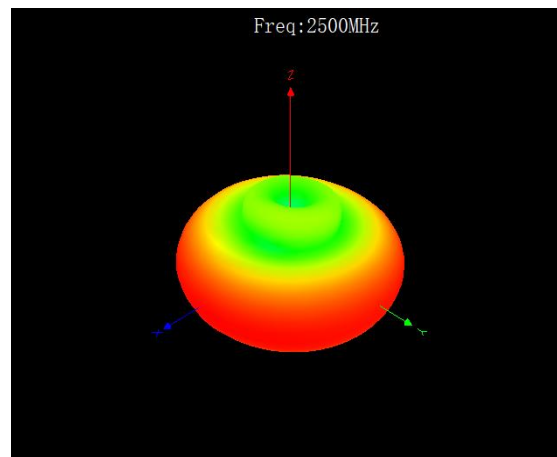
5-1 Antenna 3D Radiation Pattern



2400MHz

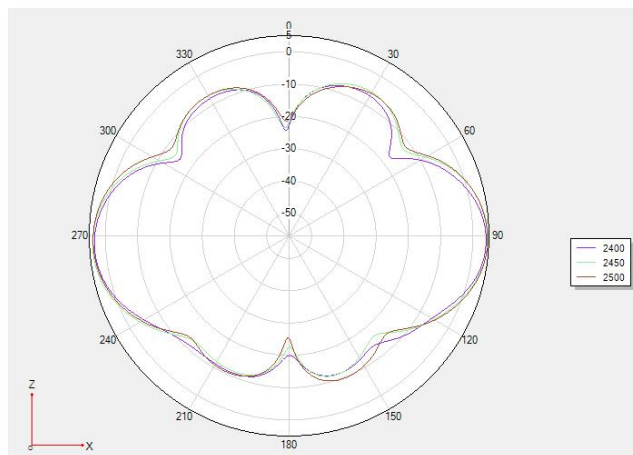


2450MHz

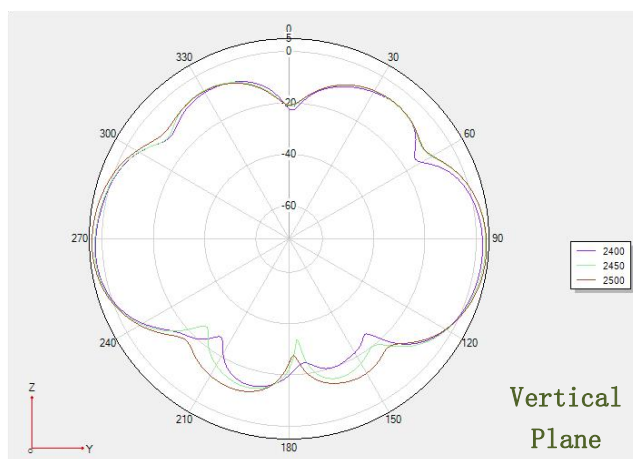


2500MHz

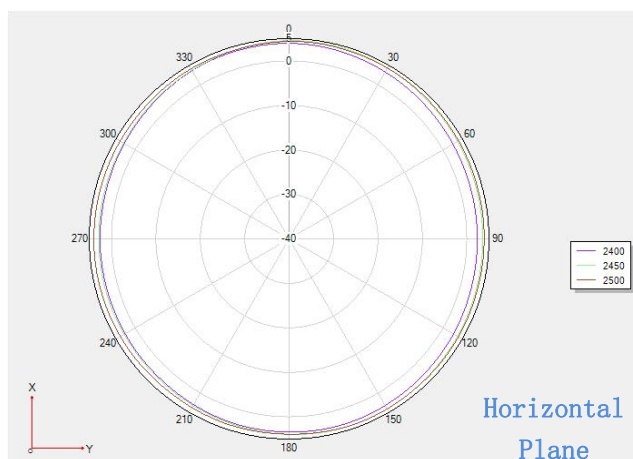
5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D

6. Mechanical Specification

REV. A		DESCRIPTION	ECN NO.	DATE	DRAFTER
First Sample			/	2022.6.17	Yongxin

Technical drawing of a cable assembly. The main view shows a cable with a length of $*191\pm3$ and a diameter of $*12.57\pm1$. Callouts 1 through 8 identify components: 1 (Cable), 2 (Low loss line), 3 (PC+PBT White), 4 (Cover, TPEE, White), 5 (Antenna radiator), 6 (Carbon steel nickel plated), 7 (Drivepipe), 8 (Rivet). A detail view A shows a cross-section of the cable with dimensions: 1.0 Tin plating, 1.50, 2.50 Tin plating, and 8.75 $\pm$ 0.2. Other dimensions include $*160\pm3$ for the cable length and $*180\pm3$ for the cable diameter.

Technical drawing of a cable assembly. The main view shows a cable with a length of $*191\pm3$ and a diameter of $*12.57\pm1$. Callouts 1 through 8 identify components: 1 (Cable), 2 (Low loss line), 3 (PC+PBT White), 4 (Cover, TPEE, White), 5 (Antenna radiator), 6 (Carbon steel nickel plated), 7 (Drivepipe), 8 (Rivet). A detail view A shows a cross-section of the cable with dimensions: 1.0 Tin plating, 1.50, 2.50 Tin plating, and 8.75 $\pm$ 0.2. Other dimensions include $*160\pm3$ for the cable length and $*180\pm3$ for the cable diameter.

ITEM	PART NAME	DESCRIPTION	QTY
1	Cable	1.13 Low loss line, Gray	1
2	Seat-1	Seat, PC+PBT White	1
3	Seat-2	Seat, PC+PBT White	1
4	Cover	Cover, TPEE, White	1
5	PCB	PCB, Antenna radiator, RF-4	1
6	Spring	Carbon steel nickel plated	1
7	Drivepipe	No glue sleeve, PVC, Black	1
8	Rivet	POM, White	2

GENERAL TOLERANCE:	CYST P/N:
LINER:	
X, XX	
±0.25	
±0.3	
±0.5	
±2.0	
±0.5	

TITLE:	2.4G W98白色短下圈天线L=160mm
P/N:	UB02C160W5D2201A
REV.	A
UNITS	mm
SCALE	1 : 1

UANT	东莞市优比电子有限公司
好天线 - 优比造	Dongguan Youbi Electronics Co., Ltd
APPR.: Changxing.Liu	CHECK.: Dillon
SCALE: 1 : 1	DRAW.: Yongxin