

# 承 认 书

## APPROVAL SHEET

客户名称

CUSTOMER NAME:

产品名称

PRODUCT NAME: 2.4G W72 白色天线 L=280mm+端子

客户料号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C280W3D2158A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Sam 	
APPROVED BY:	Changxing Liu 	
DATE:	2022-10-27	

### Modification History

Version	Content Revision	Issued by	Date
A	Original version	Sam	2022-10-27

## *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.-----	Mechanical Specification

## 1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	12.92x105,L280	mm
Frequency	2400-2500	MHz
Impedance	50	$\Omega$
VSWR	$\leq 2.0$	
Polarization	Linear Polarization	
Gain	2.5 $\pm$ 0.5	dBi
Efficiency	>60	%
Connector Type	MHF-1-Plug	
Operating temperature	-20 $^{\circ}$ C~+70 $^{\circ}$ C	
Storage Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C	

## 2. Test Items and Equipment

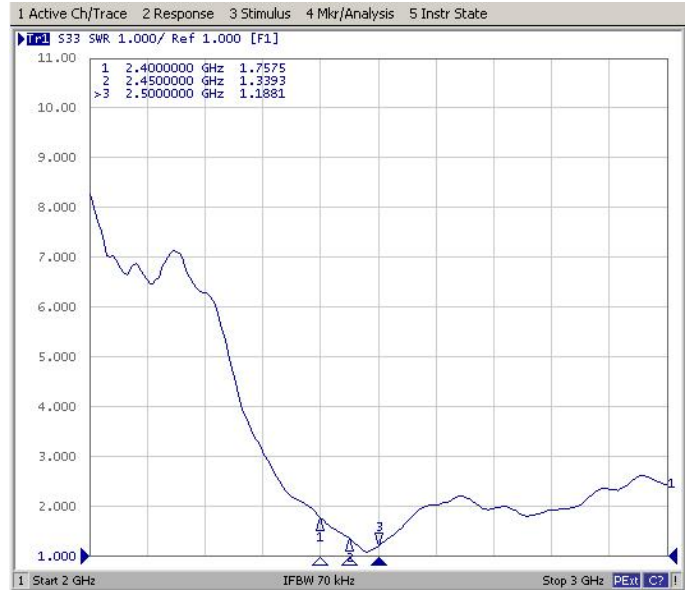
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



### 3. S Parameter

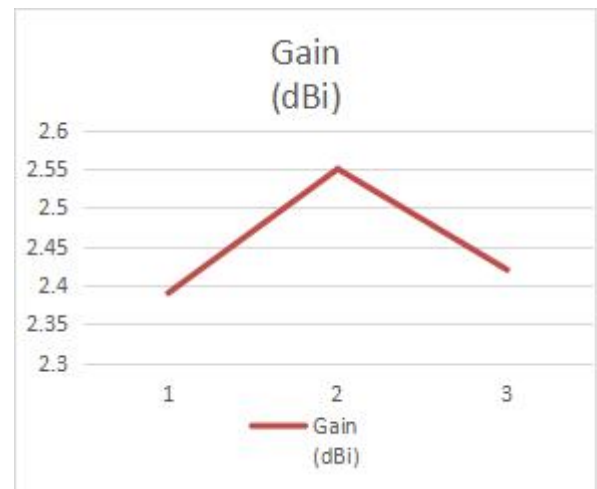
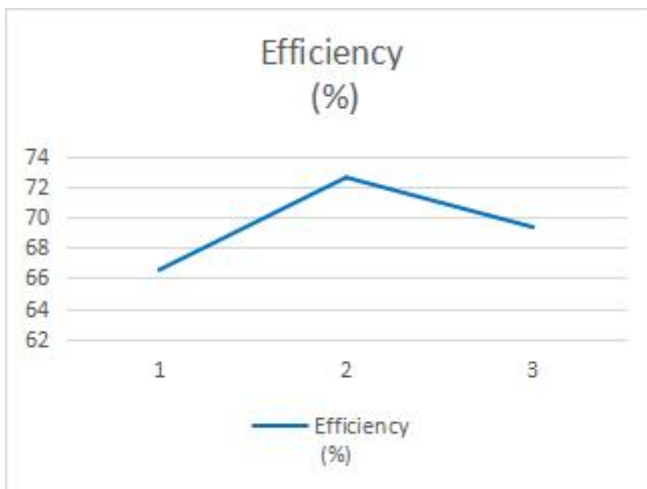
Frequency (MHz)	Return Loss (dB)	VSWR
2400	/	1.75
2450	/	1.33
2500	/	1.18

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



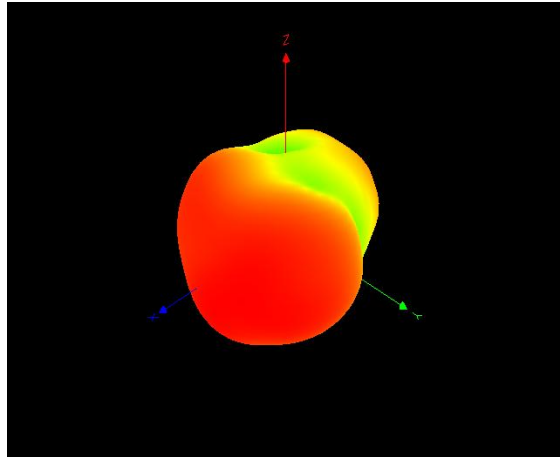
### 4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	66.53	72.61	69.34
Gain (dBi)	2.39	2.55	2.42

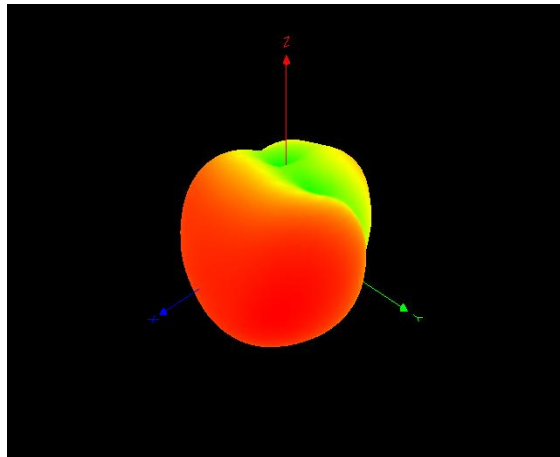


## 5. Radiation Pattern

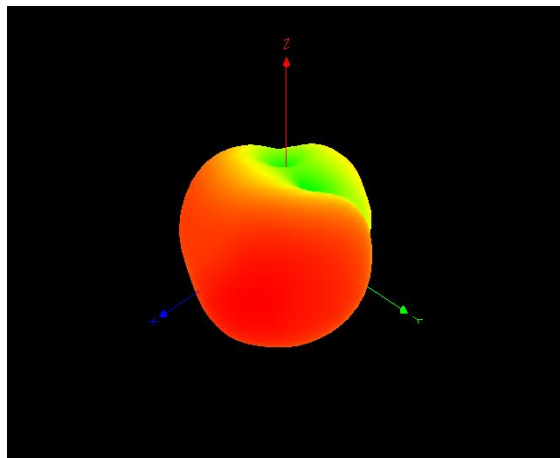
5-1 Antenna 3D Radiation Pattern



2400MHz

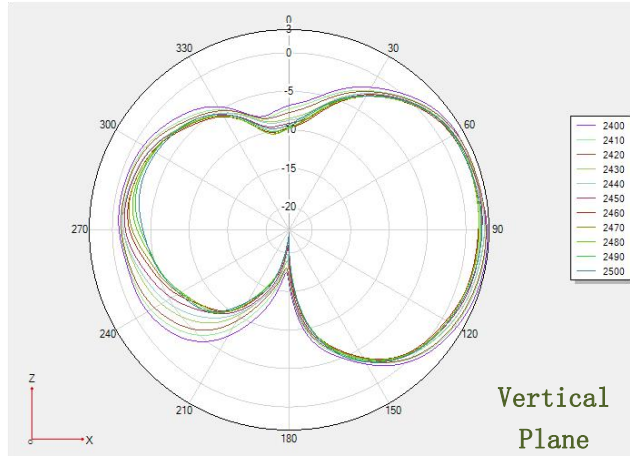


2450MHz

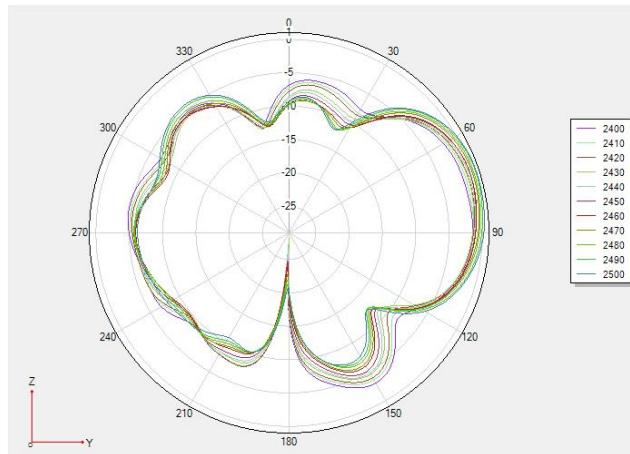


2500MHz

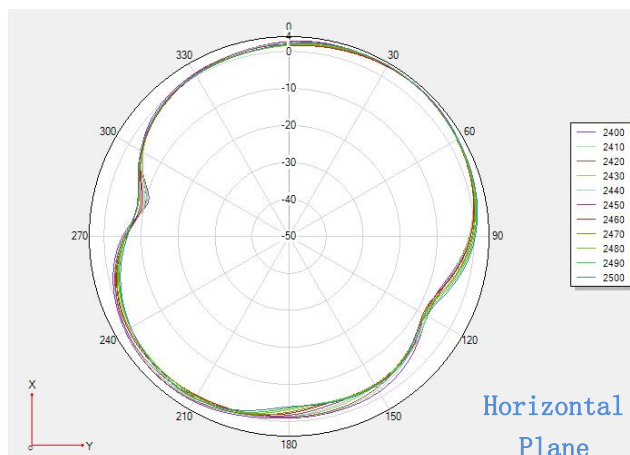
5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D

## 6. Mechanical Specification:

