



Dongguan Youbi Electronics Co., Ltd

## APPROVAL SHEET

CUSTOMER NAME:

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PRODUCT NAME:

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CUSTOMER P/N:

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Youbi P/N: UB02C230W2D5422A REV: A

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	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Lina	
APPROVED BY:	Changxing. Liu	
DATE:	2024/7/12	



### Modification History

Version	Content Revision	Issued by	Date
A	Original version	lina	2024-07-12

## *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:

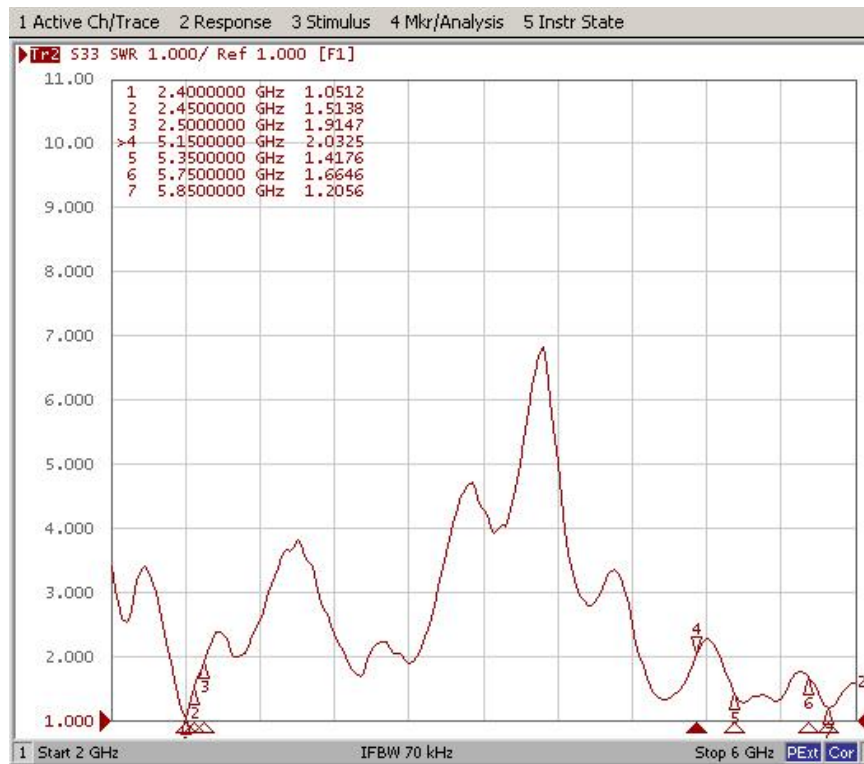
Characteristics	Specifications	Unit
Outline Dimensions	12.9x104.9,L230	mm
Frequency	2400-2500;5150-5850	MHz
Impedance	50	$\Omega$
VSWR	$\leq 2.5$	
Polarization	Linear Polarization	
AVg Gain	2.49	dBi
Efficiency	>50	%
Connector Type	1.13 MHF-1-Plug	
Operating temperature	-40 $^{\circ}$ C~+80 $^{\circ}$ C	
Storage Temp	-40 $^{\circ}$ C~+80 $^{\circ}$ 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)



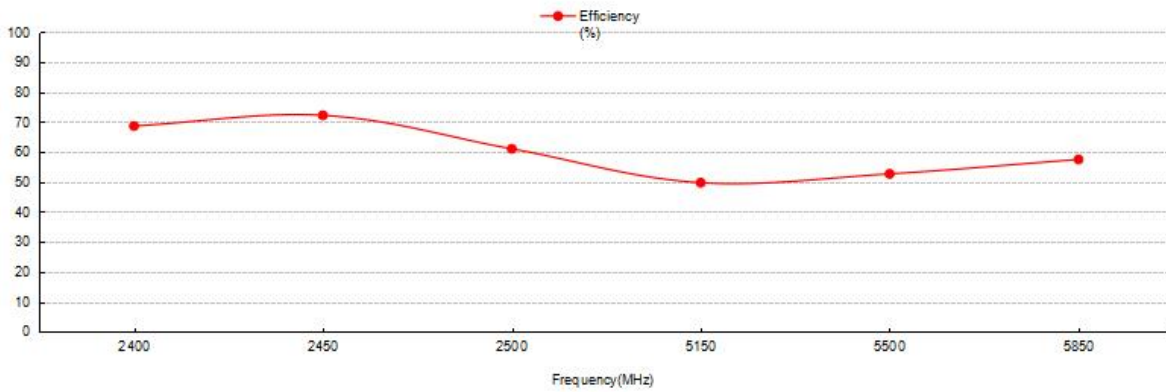
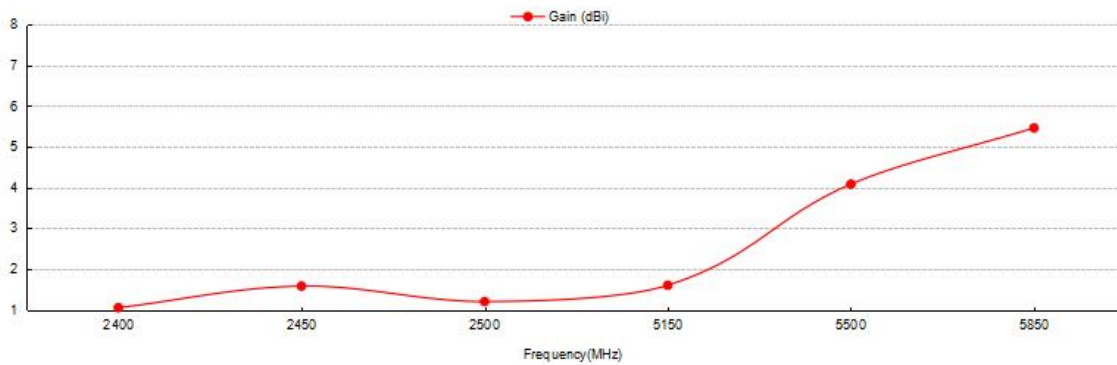
## 3. S Parameter



Frequency (MHz)	VSWR
2400	1.05
2450	1.51
2500	1.91
5150	2.03
5350	1.41
5750	1.66
5850	1.20

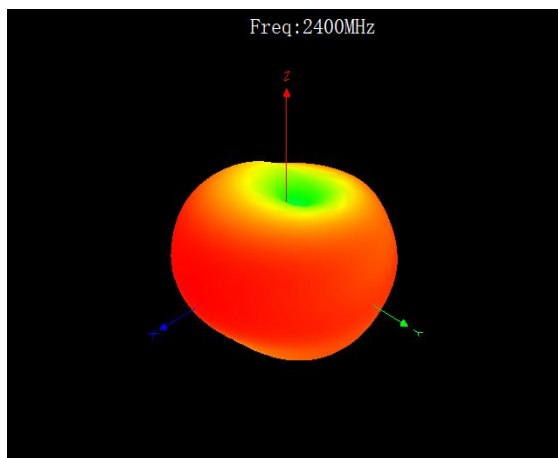
## 4. Efficiency and Gain

<b>Frequency (MHz)</b>	2400	2450	2500	5150	5500	5850
<b>Efficiency (%)</b>	68.7	72.27	61.08	49.76	52.71	57.53
<b>Gain (dBi)</b>	1.05	1.58	1.2	1.6	4.08	5.46

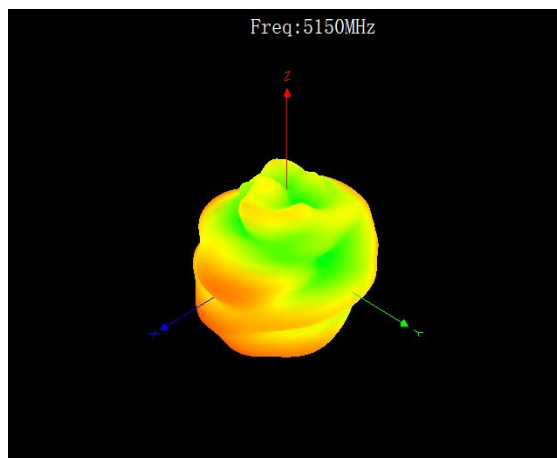


## 5. Radiation Pattern

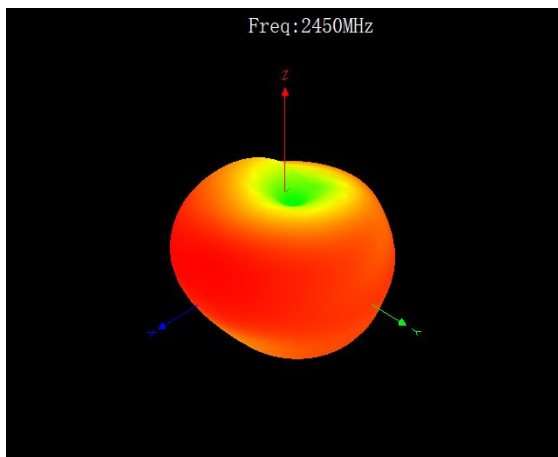
5-1 Antenna 3D Radiation Pattern



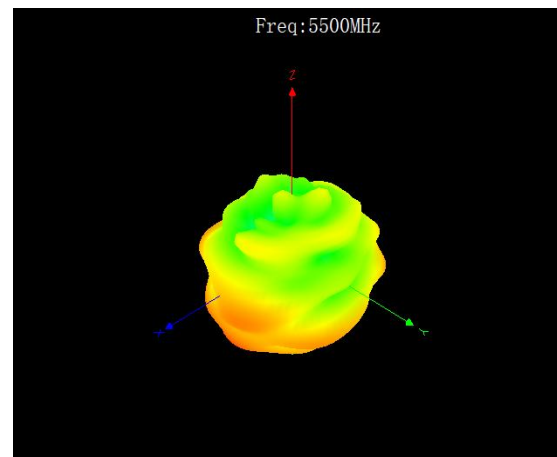
2400MHz



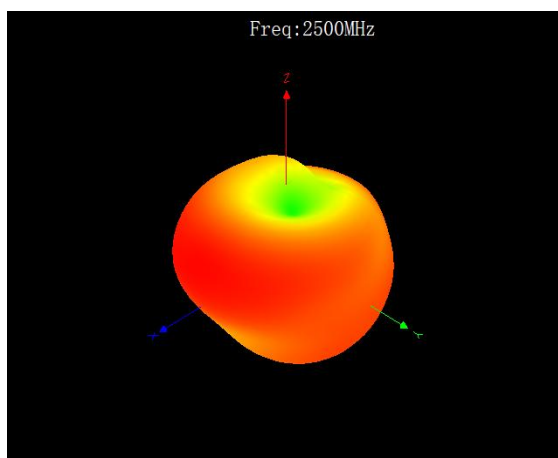
5150MHz



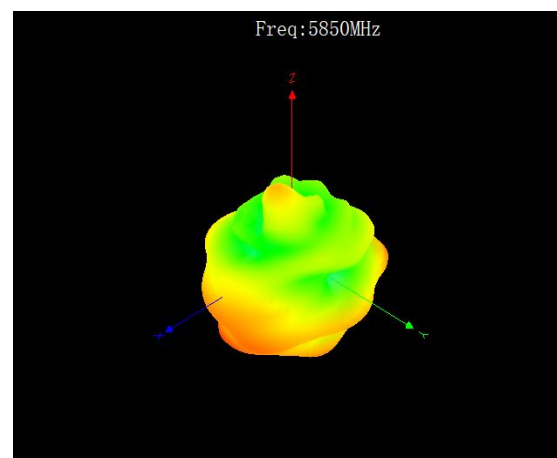
2450MHz



5500MHz

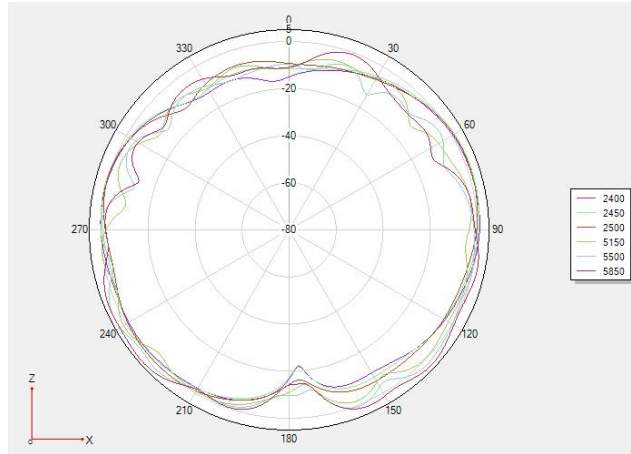


2500MHz

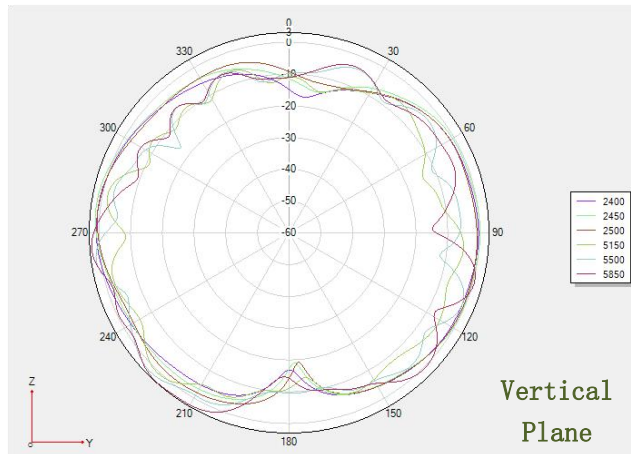


5850MHz

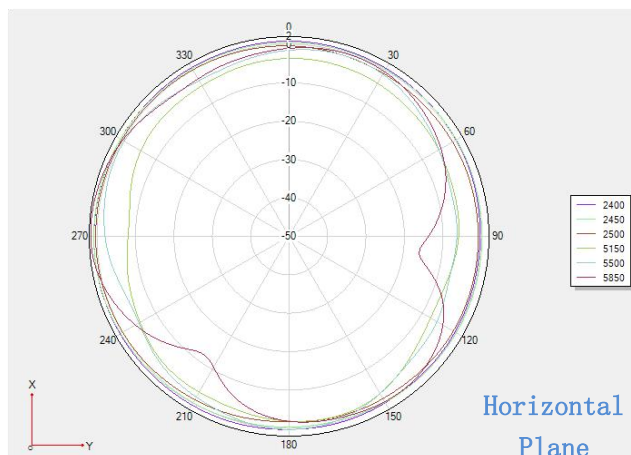
## 5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D



## 6. Mechanical Specification:

ITEM		PART NAME	DESCRIPTION	QTY	GENERAL TOLERANCE: LINEAR: X.XXX ±0.25 X ±0.3 XX ±0.5 XXX ±2.0 ANGLE: ±0.5°	CUST. P/N	TITLE:	P/N.: UB02C230W2D5422A	REV.:	UNITS	SCALE	APPR.:	CHECK.:	DRAW.:
5	Silicone Ring	Silicone Ring		1					A	mm	1 : 1	Changxing Liu	Dillon	Sam
4	Lower cover	Cover, PC+ABS, White		1										
3	Upper cover	Cover, PC+ABS, White		1										
2	Cable	1.13 Coaxial cable, White		1										
1	Connector	MIF-1-Plug connector, Phosphor brass gold plated		1										

REV.	DESCRIPTION	ECN NO.	DATE	DRAFTER
A	First Sample	/	2024.7.12	Sam

ROHS COMPLIANT

Specification:  
 Frequency Range : 2400~2500; 5150~5850MHz  
 VSWR : ≤2.5