

## SPECIFICATION FOR APPROVAL

### APPROVAL SHEET

CUSTOMER NAME:

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PRODUCT NAME: 2.4G W71 White antenna L=290mm

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CUSTOMER P/N:

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Youbi P/N: UB02C290W3D2730A REV: A

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	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	King	
APPROVED BY:	Changxing. Liu	
DATE:	2022-10-12	

### Modification History

Version	Content Revision	Issued by	Date
A	Original version	King	2022-10-21

## *Content*

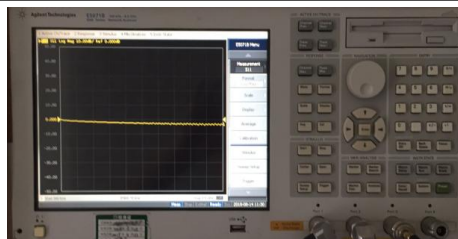
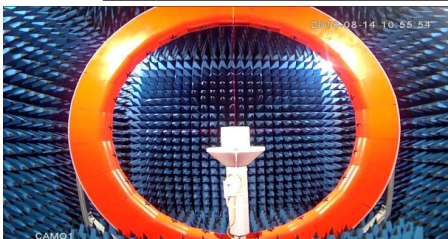
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification
7.-----	Packaging

### 1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	12.9x105,L=290	mm
Frequency	2400-2500	MHz
Impedance	50	$\Omega$
VSWR	$\leq 1.92$	
Polarization	Linear Polarization	
Gain	3.2	dBi
Efficiency	>50	%
Connector Type	1.13 MHF-1-Plug	
Operating temperature	-20 $^{\circ}$ C~+65 $^{\circ}$ C	
Storage Temp	-20 $^{\circ}$ C~+50 $^{\circ}$ C	

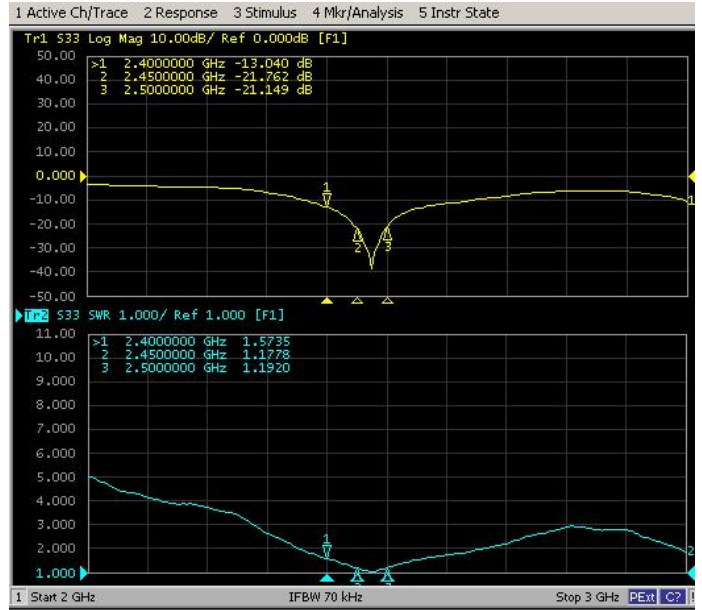
### 2. Test Items and Equipment

	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

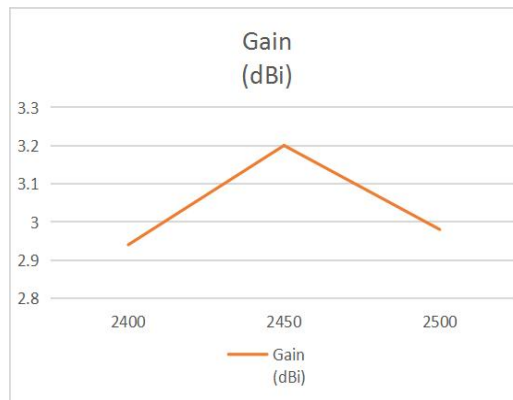
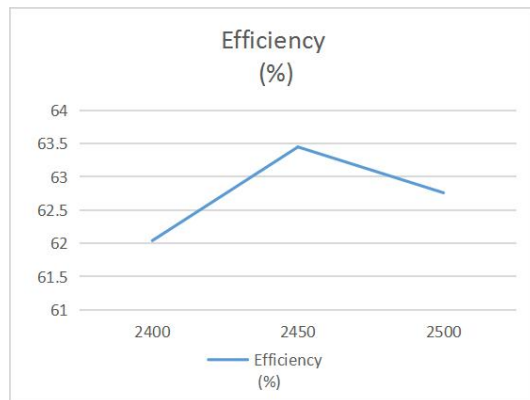
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-13.04	1.57
2450	-21.76	1.17
2500	-21.14	1.19



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

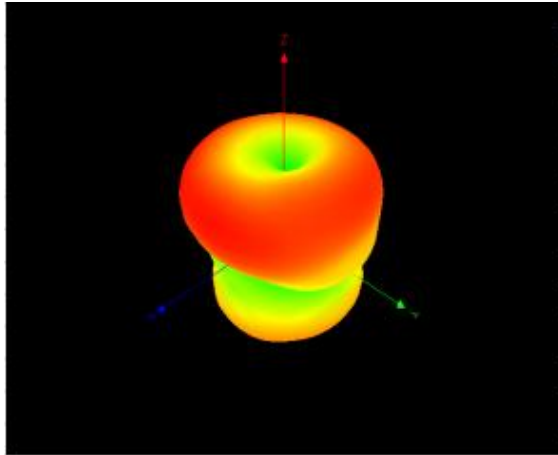
### 4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	62.04	63.45	62.76
Gain (dBi)	2.94	3.2	2.98

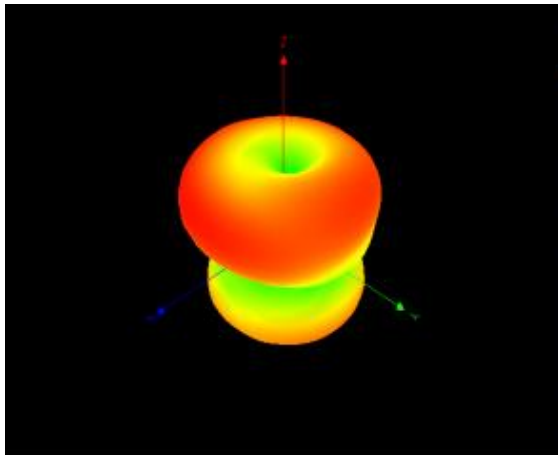


## 5. Radiation Pattern

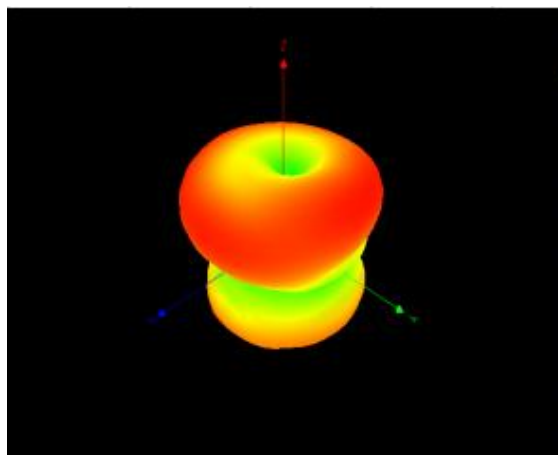
5-1 Antenna 3D Radiation Pattern



2400MHz

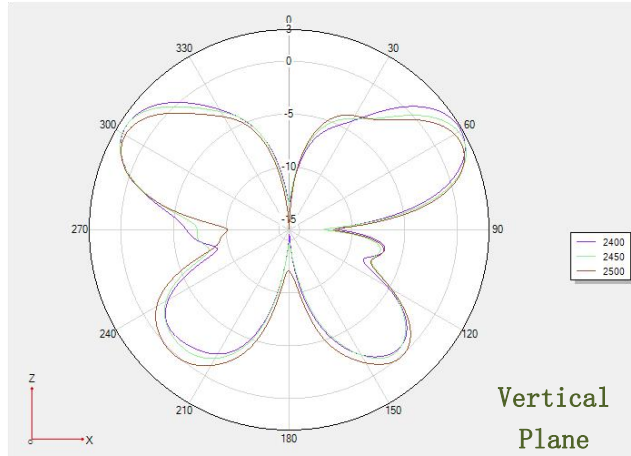


2450MHz

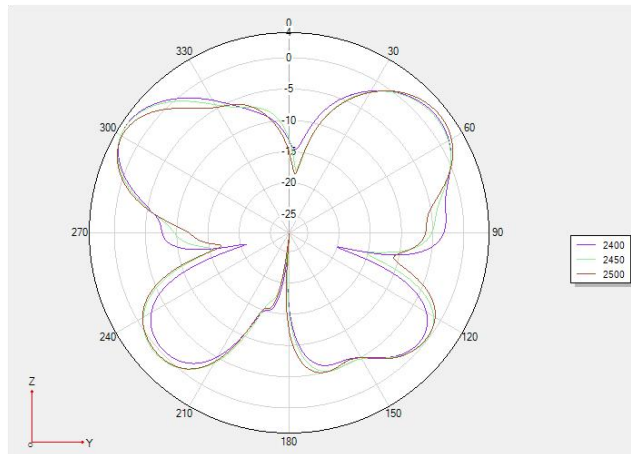


2500MHz

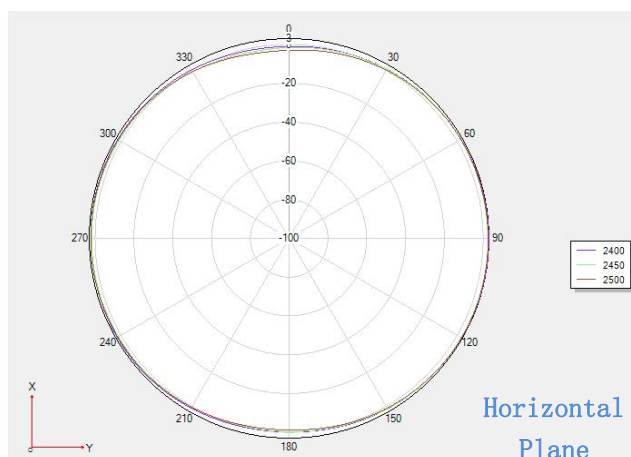
5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D



## 6. Mechanical Specification:

