

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G 五金内置天线
2.4G Hardware built-in antenna

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01NJ2D785A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	 Changxing.Liu	
APPROVED BY:		
DATE:	2021/10/13	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Yongxin. Lu	2021-10-13



好天线 · 优比造

东莞市优比电子有限公司

Dongguan Youbi Electronics Co., Ltd

Content

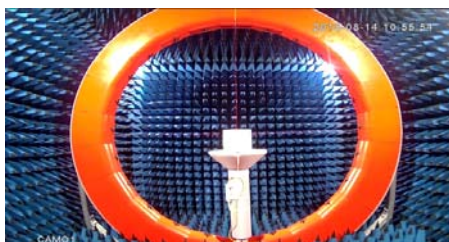
<i>Item</i>	<i>Description</i>
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3.-----	S Parameter
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1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	12.5 x 14.1 xT0.4	mm
Frequency	2400~ 2500	MHz
Impedance	50	Ω
VSWR	1.92Max	
Polarization	Linear Polarization	
Gain	4.0 $\pm$ 0.5	dBi
Efficiency	>40	%
Connector Type	Copper-Nickel Alloy DIP	
Operating temperature	-20℃~+70℃	
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)



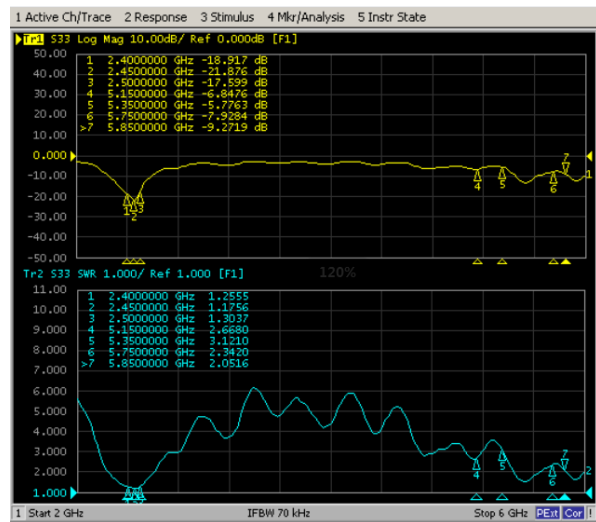
3. S Parameter

Frequency (MHz)	R L (dB)	VSWR
2400	-18.91	1.25
2450	-21.87	1.17
2500	-17.59	1.30

* Voltage Standing Wave Ratio(VSWR)

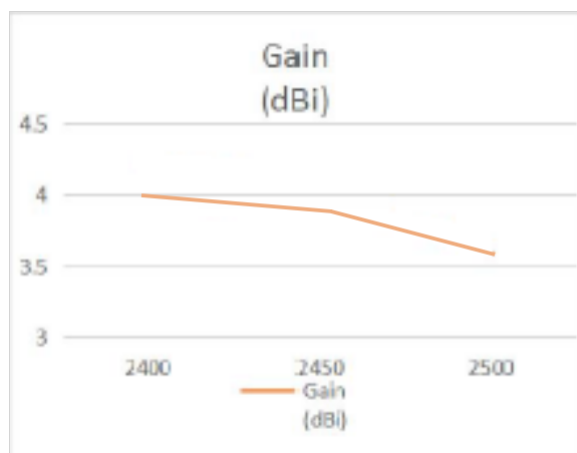
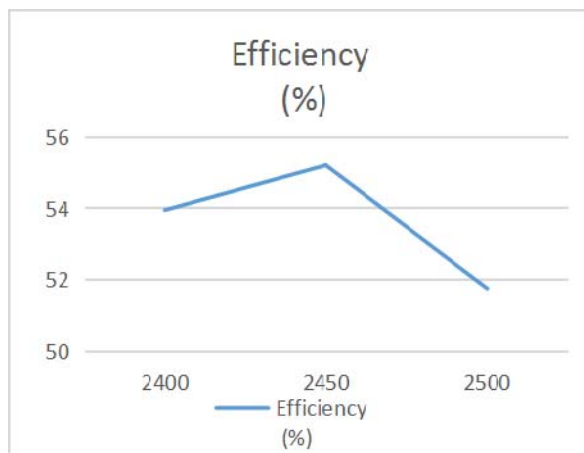
Return Loss(RL)

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



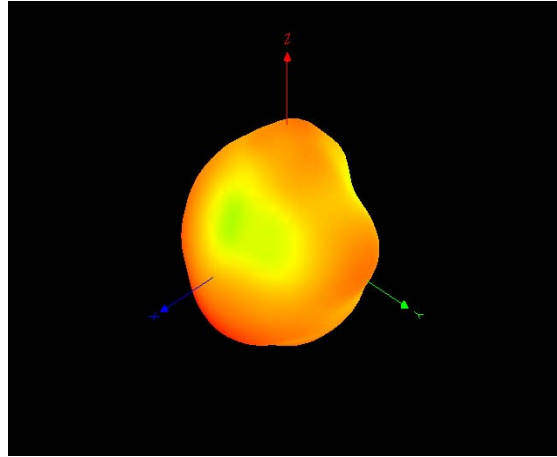
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	53.95	55.21	51.76
Gain (dBi)	4.00	3.88	3.59

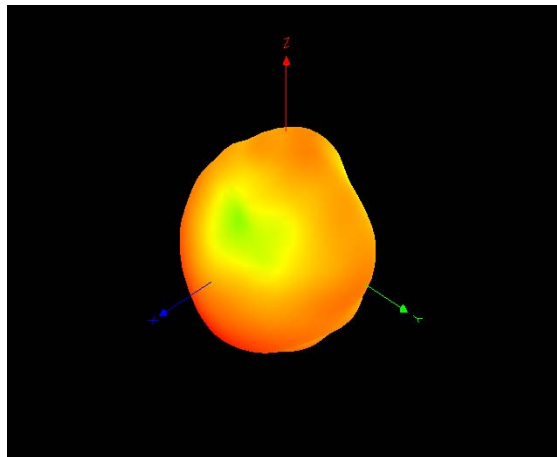


5. Radiation Pattern

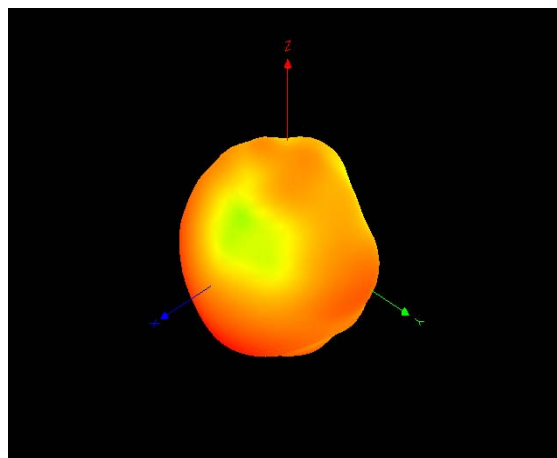
5-1 Antenna 3D Radiation Pattern



2400MHz

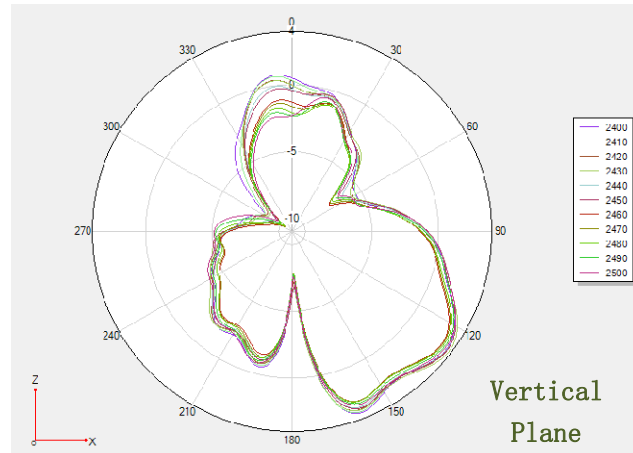


2450MHz

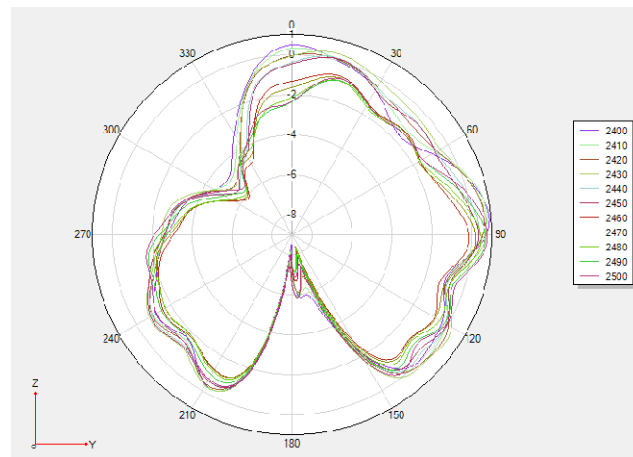


2500MHz

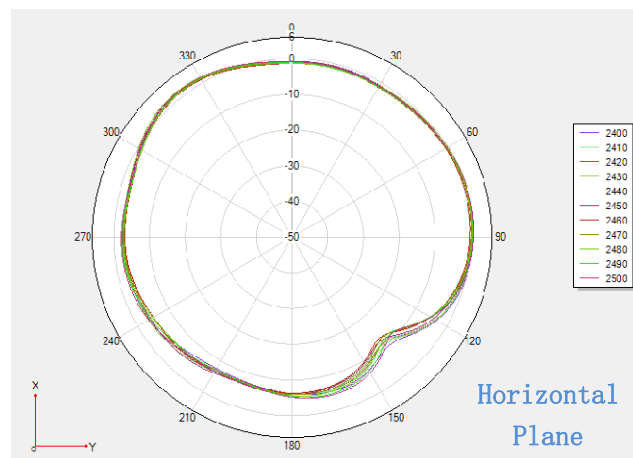
5-2 Antenna 2D Radiation Pattern



Phi 0 2D 图



Phi 90 2D 图



Theta 90 2D 图

6. Antenna installation diagram:

