

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

客户料号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01NJ2D1426A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	工程专用章 Changxing. Liu	
DATE:	2023/11/15	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2023-11-15

Content

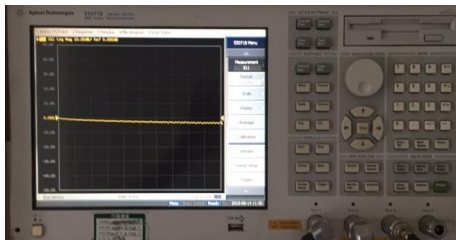
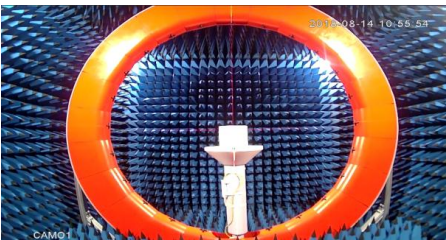
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	12.8x8.5x0.4	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2.5	
Polarization	Linear Polarization	
Gain	1 REF	dBi
Efficiency	>40	%
Connector Type	/	
Operating temperature	-20 $^{\circ}$ C~+85 $^{\circ}$ C	
Storage Temp	-20 $^{\circ}$ C~+50 $^{\circ}$ C	

2. Test Items and Equipment

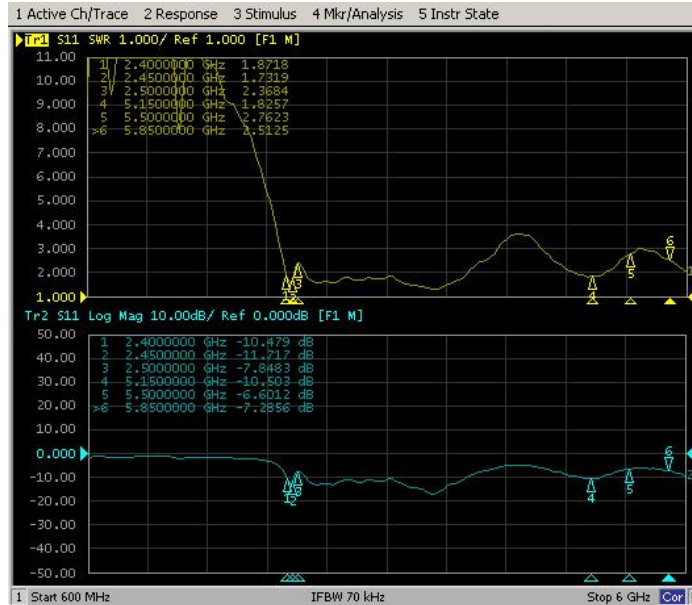
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

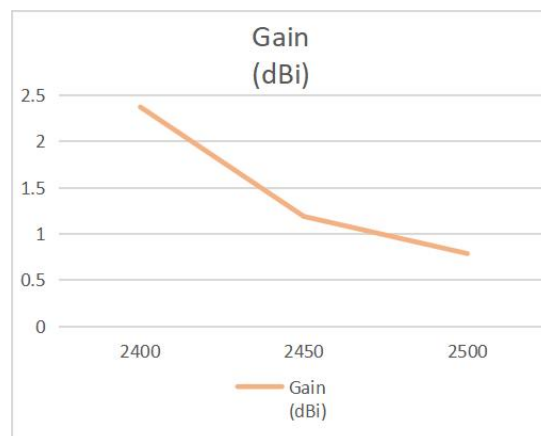
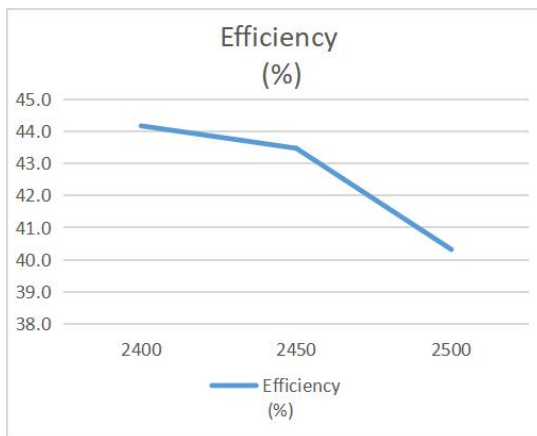
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-10.47	1.87
2450	-11.71	1.73
2500	-7.84	2.36

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



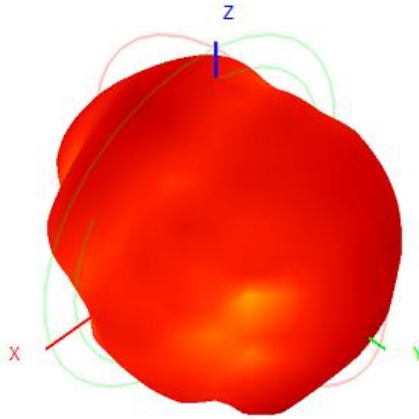
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	44.17	43.47	40.32
Gain (dBi)	2.37	1.19	0.79

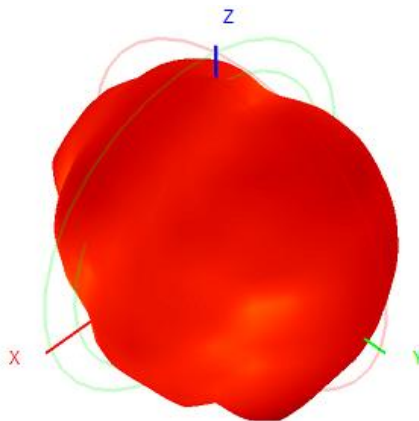


5. Radiation Pattern

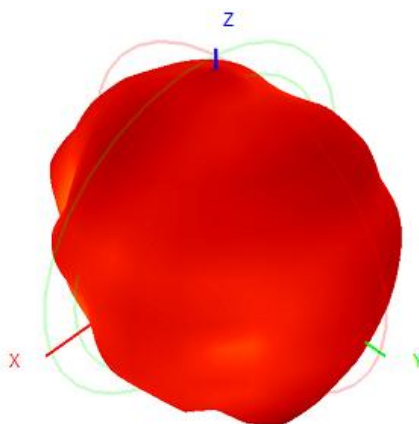
5-1 Antenna 3D Radiation Pattern



2400MHz

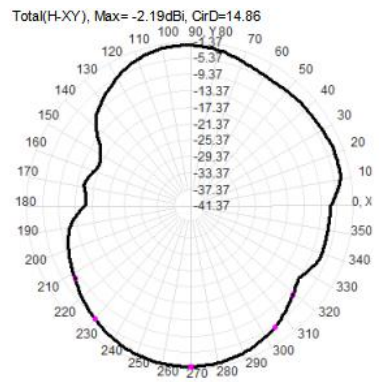
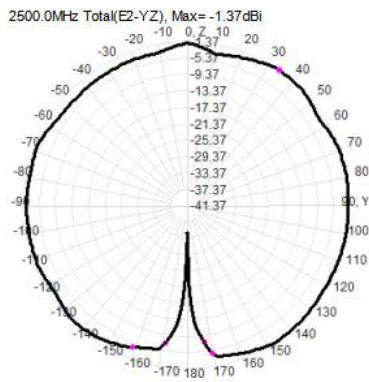
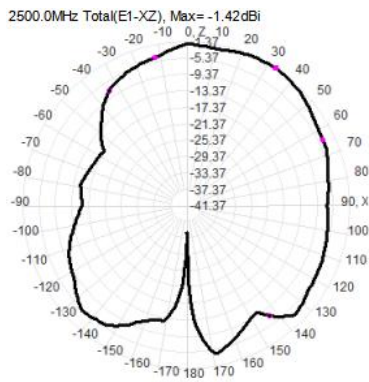
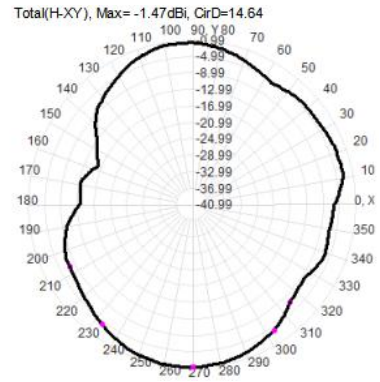
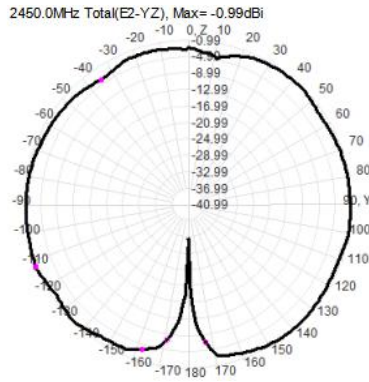
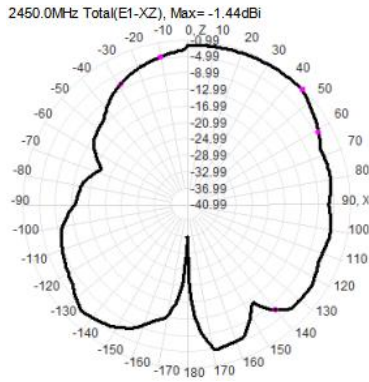
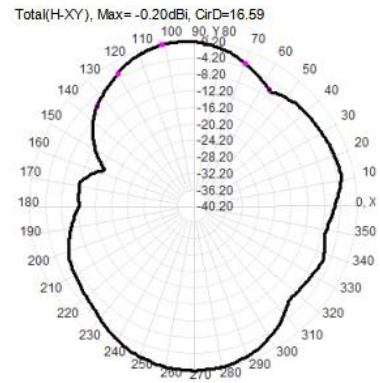
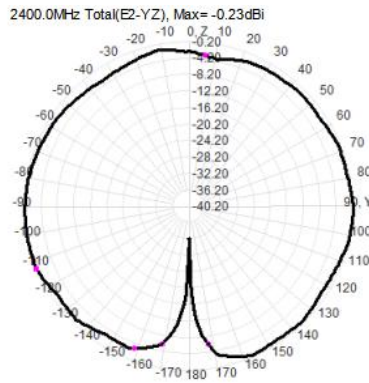
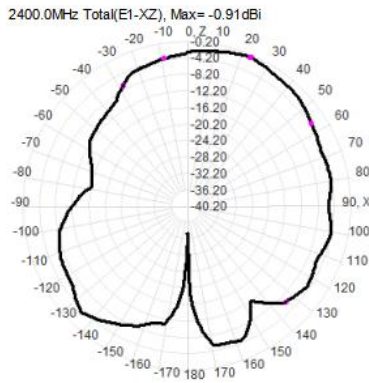


2450MHz



2500MHz

5-2 Antenna 2D Radiation Pattern



6. Mechanical Specification

