



Dongguan Youbi Electronics Co., Ltd

APPROVAL SHEET

CUSTOMER NAME:

PRODUCT NAME:

CUSTOMER P/N:

Youbi P/N: UB01NT2D1487A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY:	Changxing. Liu	
DATE:	2024/3/1	



Dongguan Youbi Electronics Co., Ltd

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-3-1



Content

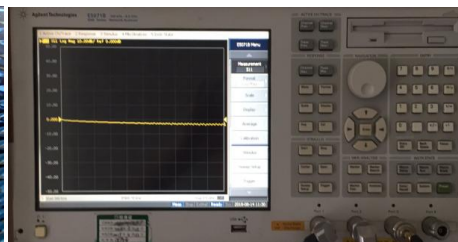
<i>Item</i>	<i>Description</i>
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3.-----	S Parameter
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	16.1x11.6x3.5xT0.4	mm
Frequency	2400-2500 ; 5150-5850	MHz
Impedance	50	Ω
Return Loss	< -10	dB
Polarization	Linear Polarization	
Gain	3 REF	dBi
Efficiency	>50	%
Connector Type	DIP	
Operating temperature	-20°C~+70°C	
Storage Temp	-20°C~+50°C	

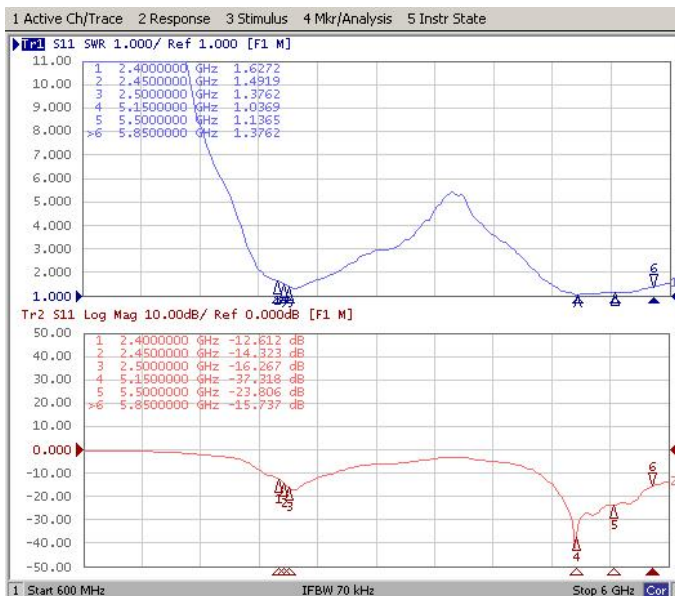
2. Test Items and Equipment

	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

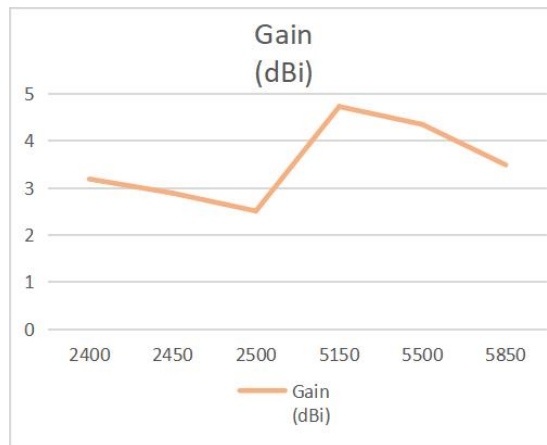
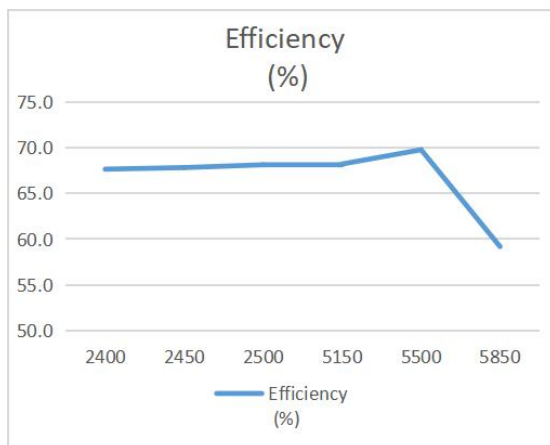
Frequency (MHz)	R L (dB)	VSWR
2400	-12.61	1.62
2450	-14.32	1.49
2500	-16.26	1.37
5150	-37.31	1.03
5500	-23.80	1.13
5850	-15.73	1.37



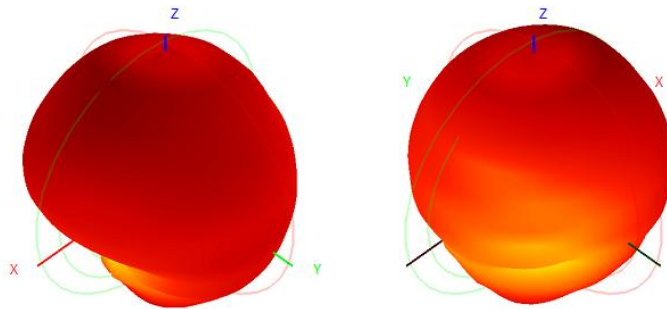
* Voltage Standing Wave Ratio(VSWR)
Return Loss(RL)
 $RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$

4. Efficiency and Gain

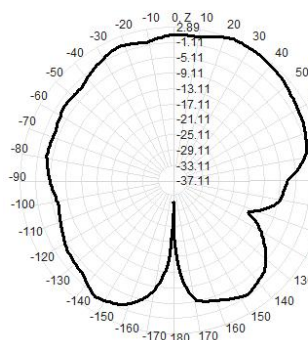
Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	67.64	67.81	68.12	68.20	69.76	59.18
Gain (dBi)	3.19	2.89	2.51	4.73	4.35	3.49



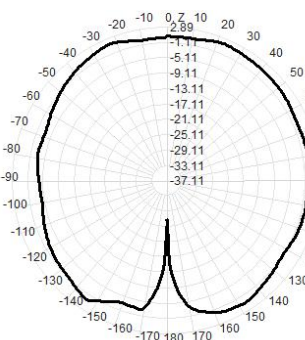
5. Radiation Pattern



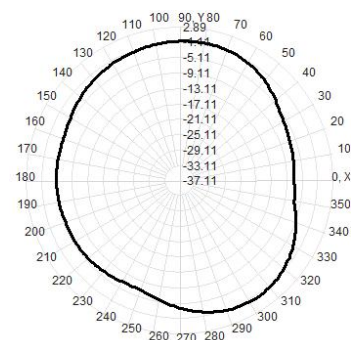
2450MHz



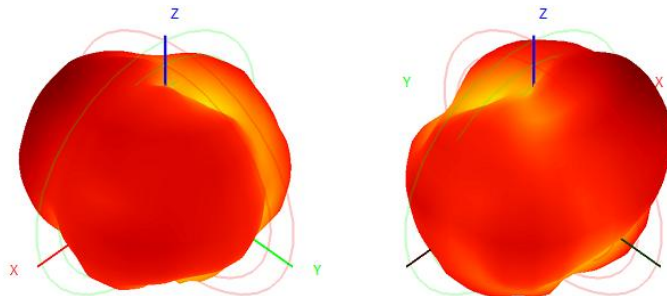
E1-XZ



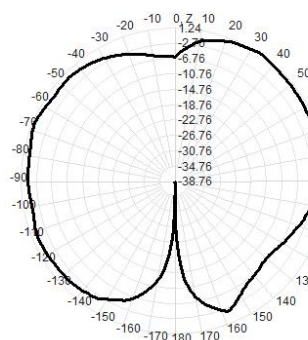
E2-YZ



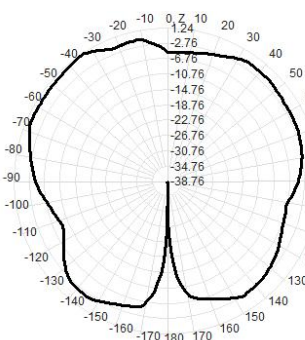
H-XY



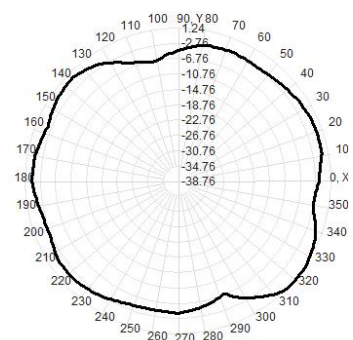
5850MHz



E1-XZ



E2-YZ

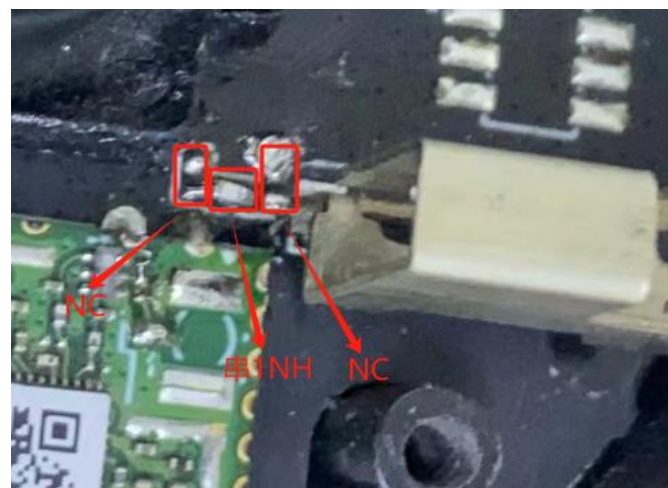
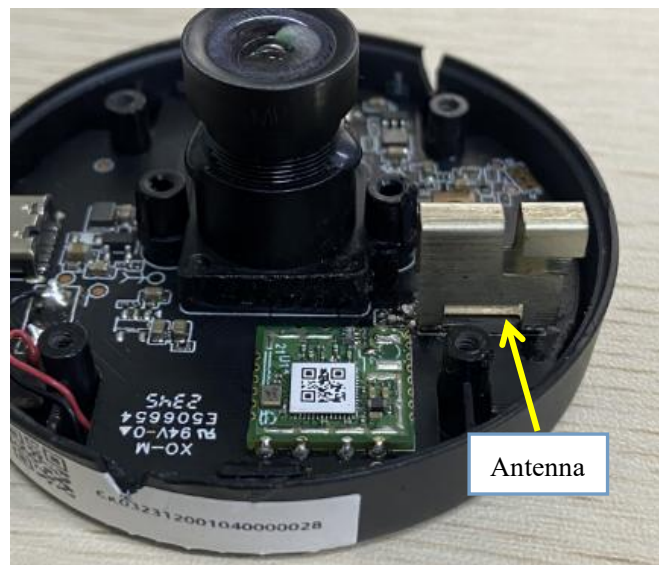


H-XY

6. Active test data

OTA						
Mode	TestCase	Channel	DateRate (Mbps)	TestResults (dBm)	Max (dbm)	Min (dbm)
IEEE802.11B	TRP	1	11	16.34	21.70	11.14
		6		15.21	20.34	8.80
		11		16.83	22.17	12.85
	TIS	1	11	-87.30	-83.70	-94.26
		6		-87.03	-80.86	-92.40
		11		-88.14	-83.88	-93.41
IEEE802.11a	TRP	36	54	17.63	23.39	11.97
		149		17.34	22.33	13.86
		165		17.12	21.42	12.99
	TIS	36	54	-76.24	-71.43	-82.85
		149		-75.35	-71.87	-80.34
		165		-75.38	-71.80	-80.23

7. Antenna installation diagram



8. Mechanical Specification

