APPROVAL SHEET

CUSTOMER NAME:

PRODUCT NAME: 2.4/5.8G FPC ANT L=100mm

CUSTOMER P/N:

Youbi P/N: UB01C90F2D4468A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy	
APPROVED BY:	Changxing.Liu	
DATE:	2024/2/27	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-2-27

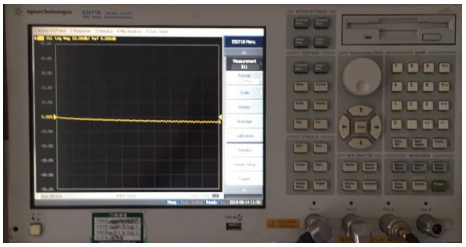
Content

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	35.2x8.0,L90	mm
Frequency	2400-2500;5150-5850	MHz
Impedance	50	Ω
VSWR	< 2	
Polarization	Linear Polarization	
Gain	4 REF	dBi
Efficiency	>60	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

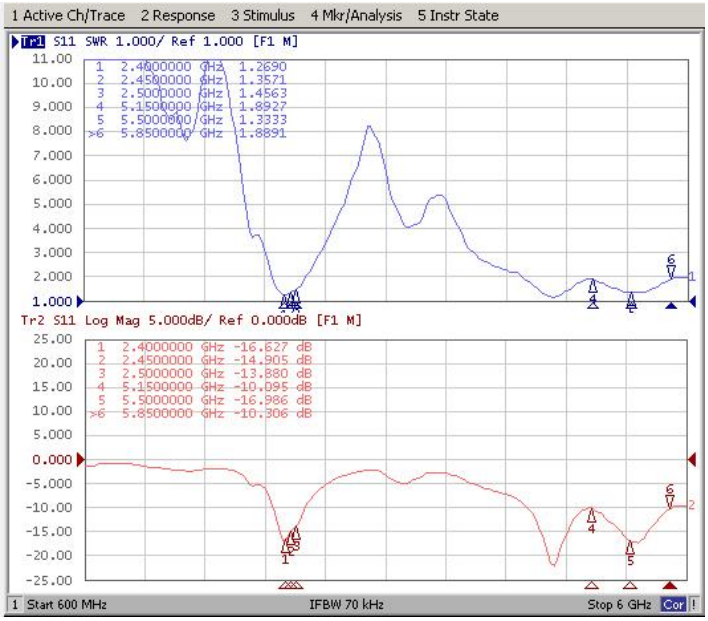
2.Test Items and Equipment

	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)	Return Loss (dB)	VSWR
2400	-16.62	1.26
2450	-14.90	1.35
2500	-13.88	1.45
5150	-10.09	1.89
5500	-16.98	1.33
5850	-10.30	1.88



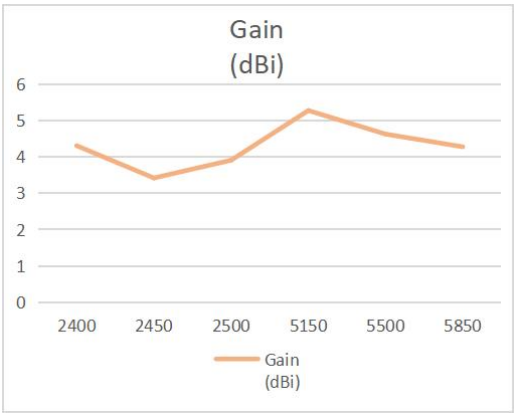
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

RL=20*log10[(VSWR+1)/(VSWR-1)

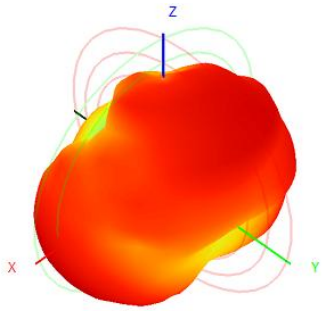
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500	5150	5500	5850
Efficiency (%)	72.88	67.22	65.80	74.36	76.83	68.55
Gain (dBi)	4.31	3.42	3.91	5.28	4.63	4.28

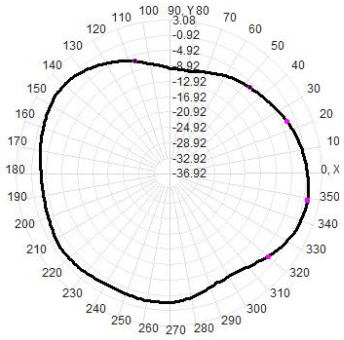


5. Radiation Pattern

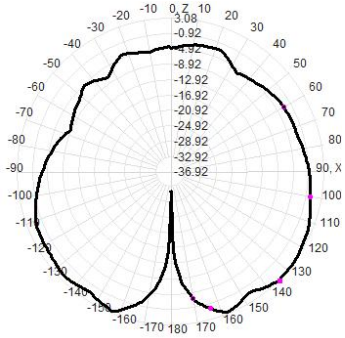
5-1 Antenna 3D Radiation Pattern



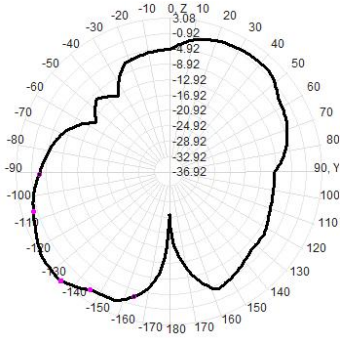
2450MHz



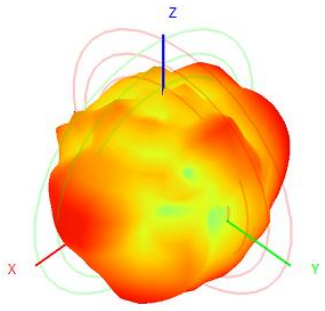
H-XY



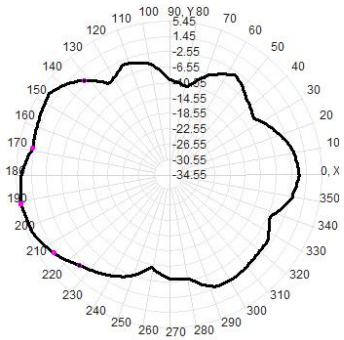
E1-XZ



E2-YZ



5850MHz



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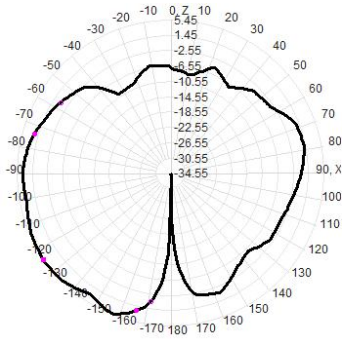
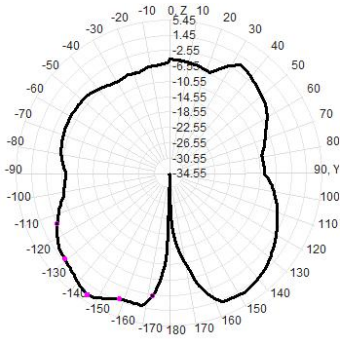


E1-XZ



E2-YZ

6. Active test data

Mode	Test Case	Channel	Date Rate (Mbps)	Test Results (dBm)	Max (dbm)	Min (dbm)
IEEE 802.11b	TRP	1	11	16.38	20.97	6.03
		6		15.79	20.58	5.49
		11		15.20	20.11	5.08
	TIS	1	11	-82.28	-71.33	-86.27
		6		-83.36	-72.56	-87.65
		11		-82.53	-70.44	-86.94

Mode	Test Case	Channel	Date Rate (Mbps)	Test Results (dBm)	Max (dbm)	Min (dbm)
IEEE 802.11a	TRP	36	54	15.28	21.13	2.41
		149		14.24	21.74	5.15
		165		13.33	20.55	1.58
	TIS	36	54	-70.56	-54.88	-77.42
		149		-72.40	-58.97	-78.86
		165		-71.76	-56.05	-76.68

7. Antenna installation diagram

8. Mechanical Specification