

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G FPC built-in antenna

L=90mm+terminal

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01C90F2D4468A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Eddy 	
APPROVED BY:	Changxing.Liu	
DATE:	2024/7/10	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Eddy	2024-7-10

Content

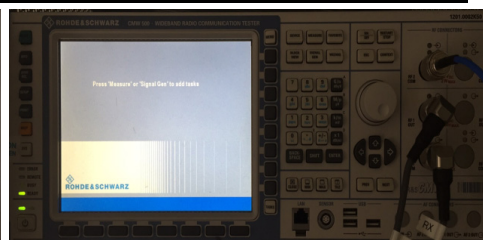
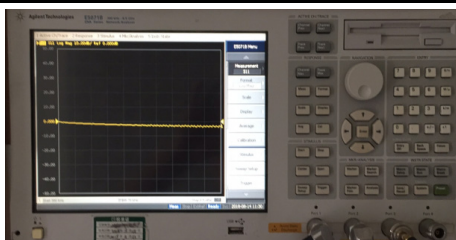
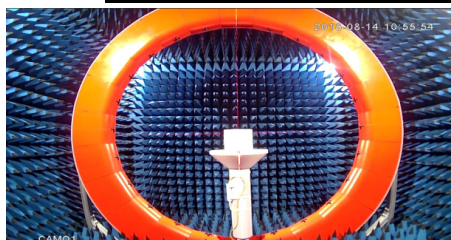
<i>Item</i>	<i>Description</i>
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1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	35.2x8,L90	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	≤ 2	
Polarization	Linear Polarization	
Gain	2.98	dBi
Efficiency	> 50	%
Connector Type	RF 1	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

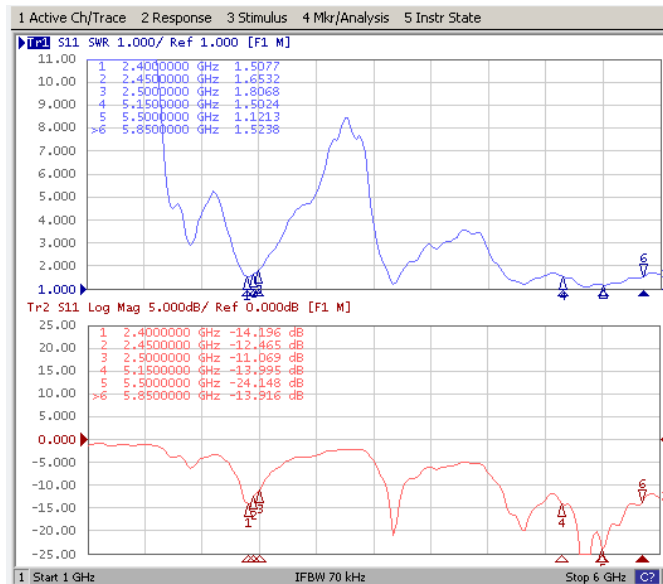
2. Test Items and Equipment

	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

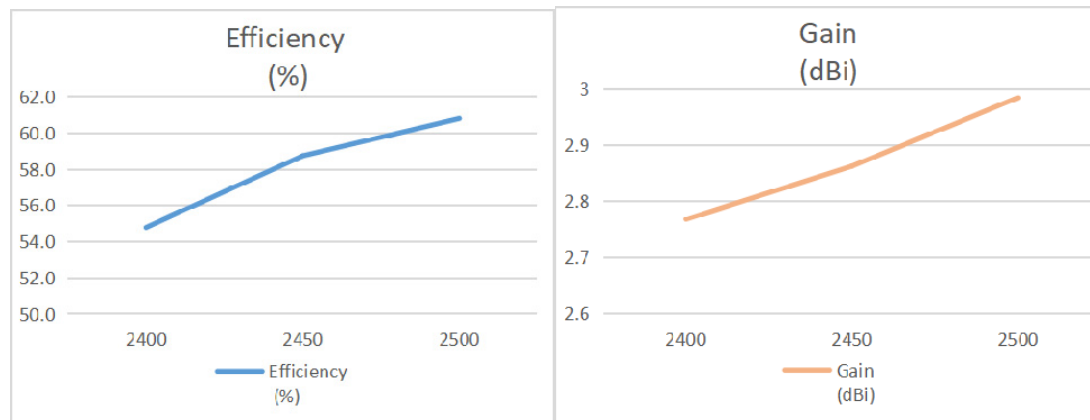
Frequency (MHz)	Return Loss (dB)	VSWR
2400	-14.19	1.50
2450	-12.46	1.65
2500	-11.06	1.80



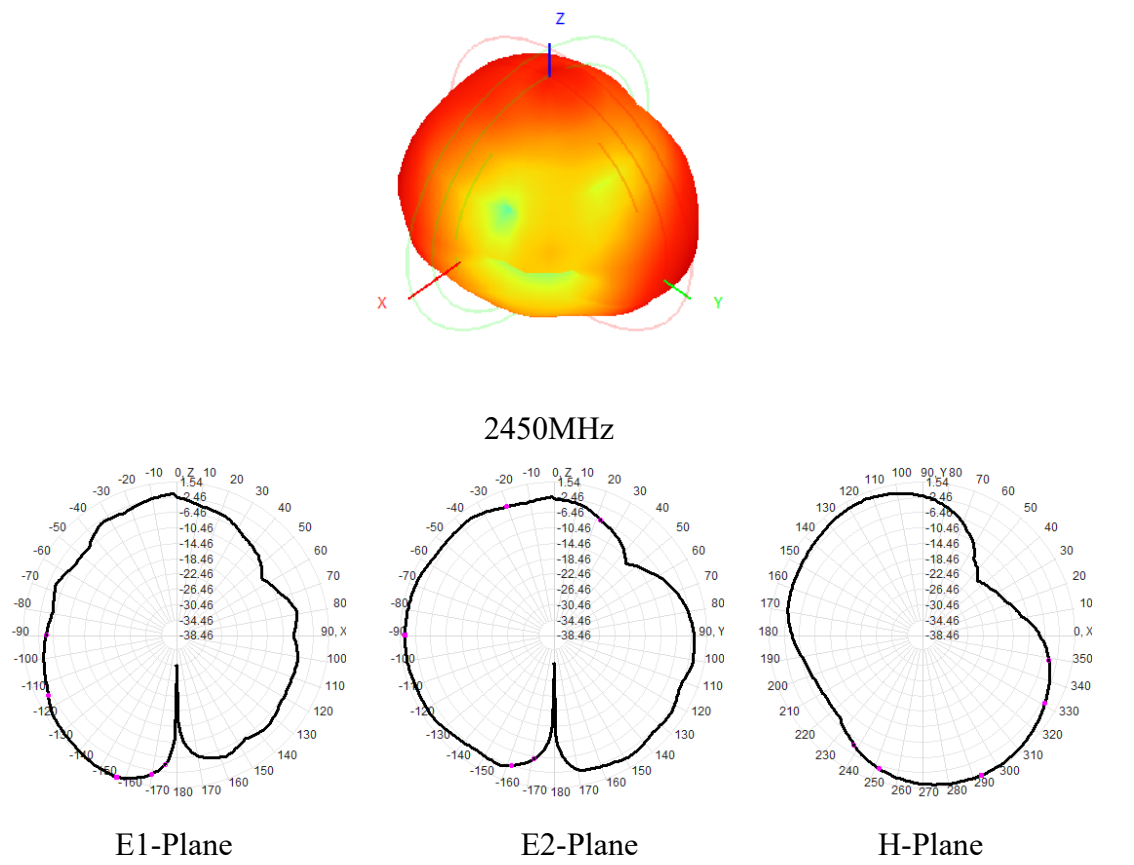
* Voltage Standing Wave Ratio(VSWR)
 Return Loss(RL)
 $RL = 20 * \log_{10}[(VSWR+1)/(VSWR-1)]$

4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	54.79	58.74	60.80
Gain (dBi)	2.77	2.86	2.98



5. Radiation Pattern



6. Active test data

Channel	Measurement	Total-B 模	Total-G 模
1	TRP	17.89	16.50
6	TRP	18.04	16.78
11	TRP	18.50	16.50
1	TIS(EIRP)	-85.39	-74.87
6	TIS(EIRP)	-87.06	-76.24
11	TIS(EIRP)	-89.93	-76.24

7. Mechanical Specification

The drawing shows a rectangular antenna radiator with a width of 8.0 ± 0.3 and a length of 35.2 ± 0.3 . Two yellow circular pads are located on the radiator, with a center-to-center distance of 90 ± 2 . A cable is connected to these pads at a $90^\circ \pm 2$ angle. The cable has a length of 1.13 and is labeled 'Cable'. The connector is labeled 'MIF-1-Plug connector, Phosphor brass gold plated'. A detail view of the connector is shown with a diameter of 4.0 and a scale of $2/1$. The drawing is labeled 'UANT 2000715A X1' and 'Port placement direction, $0^\circ \pm 45^\circ$ '.

Specification :
Frequency Rang:2400-2500;5150-5850 MHz

ITEM	PART NAME	DESCRIPTION	QTY
3	FPC	FPC Antenna radiator ,Pl,Black	1
2	Cable	1.13 Coaxial cable,Black	1
1	Connector	MIF-1-Plug connector ,Phosphor brass gold plated	1

REV.	DESCRIPTION	ECN NO.	DATE	DRAFTER
A	First Sample	/	2024.3.30	Yongxin

UANT® 东莞市优比电子有限公司 Dongguan Youbi Electronics Co., Ltd 好天线 · 优比造	APPR.: Changxing.Liu	CHECK.: Dillon	DRAW.: Yongxin
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