

承 认 书

APPROVAL SHEET

客户名称

CUSTOMER NAME: Zhejiang Uniview Technologies Co., Ltd.

产品名称

PRODUCT NAME: 2.4G PCB Antenna

客户料号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB01NJ3D349A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Mark Liang 	
APPROVED BY:	Changxing. Liu	
DATE:	2021/06/29	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Mark.Liang	2021-06-29

Content

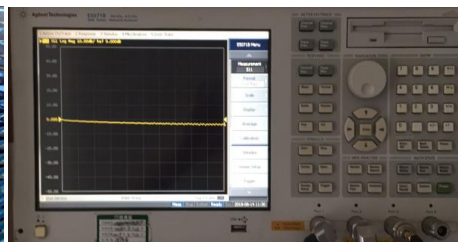
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification

1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	10.9 x 13.0xT0.6	mm
Frequency	2400~ 2500	MHz
Impedance	50	Ω
VSWR	1.92Max	
Polarization	Linear Polarization	
Gain	2±1	dBi
Efficiency	>40	%
Connector Type	PCB DIP	
Operating temperature	-20℃~+70℃	
Storage Temp	-20℃~+50℃	

2.Test Items and Equipment

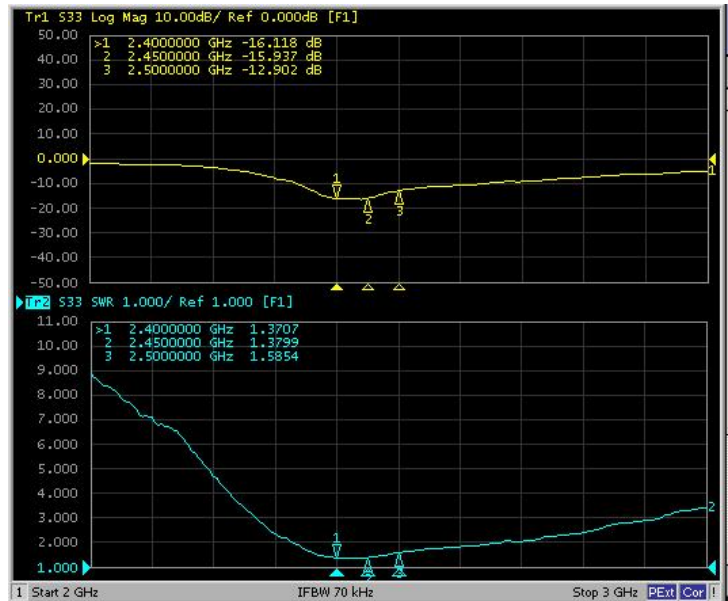
	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave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



3. S Parameter

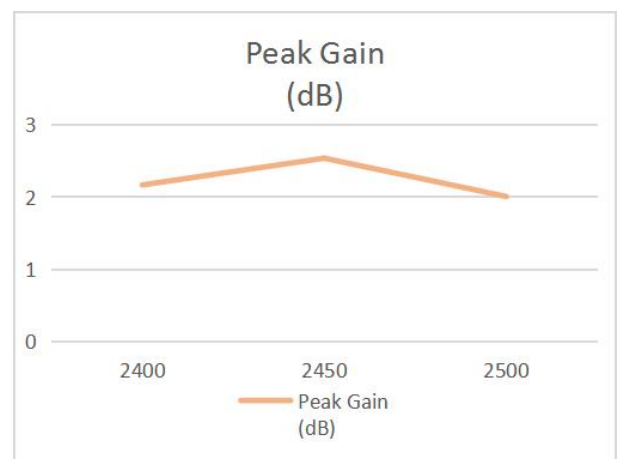
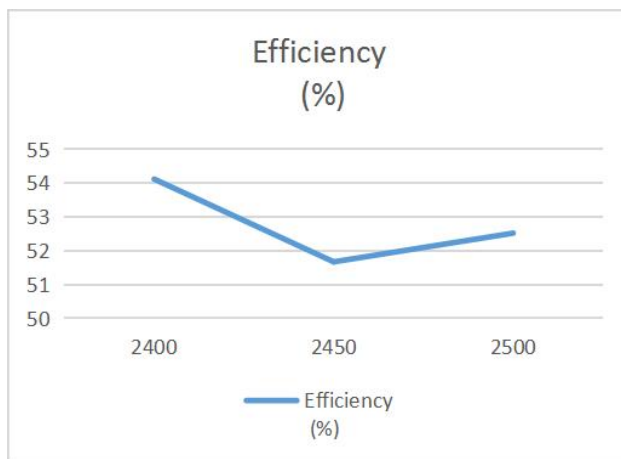
Frequency (MHz)	R L (dB)	VSWR
2400	-16.11	1.37
2450	-15.93	1.37
2500	-12.90	1.58

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



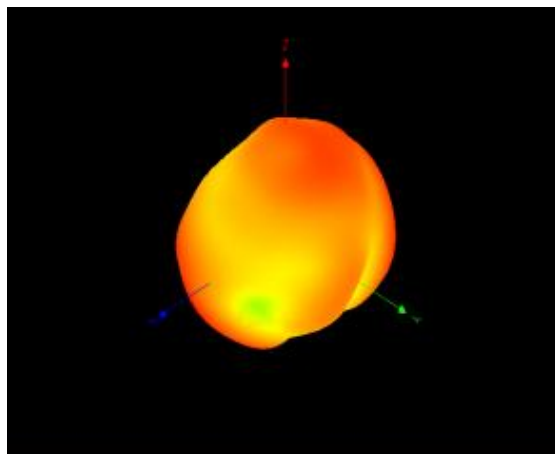
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	43.5	49.1	46.8
Gain (dBi)	2.55	2.84	2.64

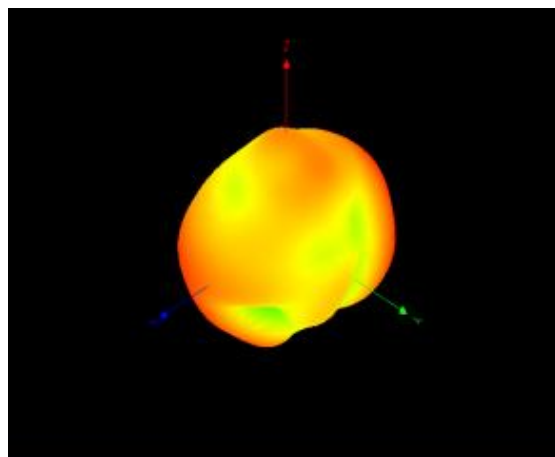


5. Radiation Pattern

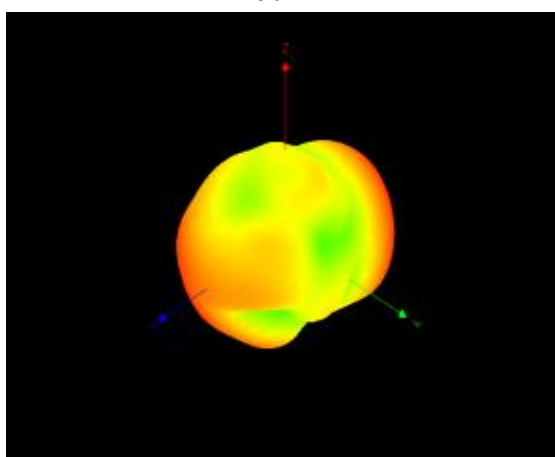
5-1 Antenna 3D Radiation Pattern



2400MHz

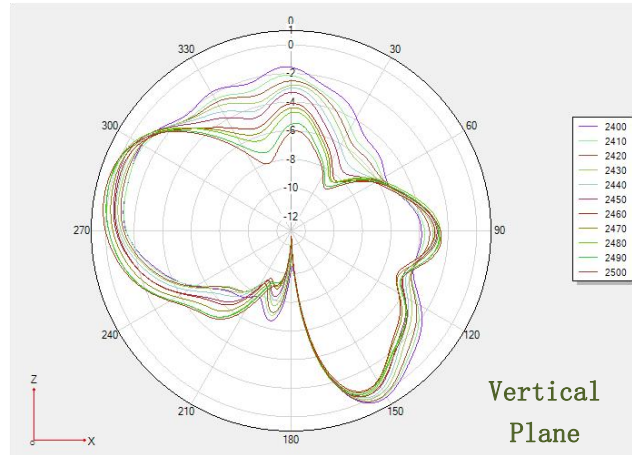


2450MHz

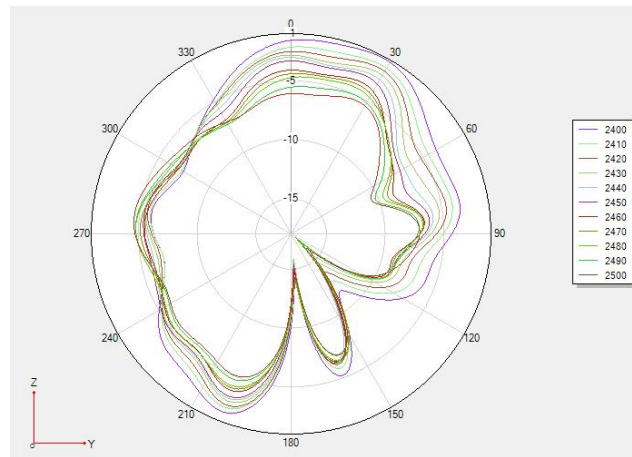


2500MHz

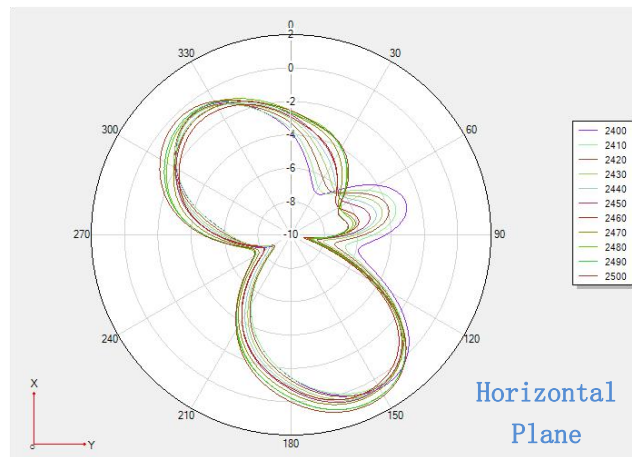
5-1 Antenna 3D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D

6. Mechanical Specification:

