

承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G Antenna

客 户 料 号

CUSTOMER P/N:

优比电子料号

Youbi P/N: UB02C320W5D37a9A REV: A

Antenna Type: Dipole Antenna

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:	工程专用章 Changxing.Liu	
DATE:	2022/08/10	

Modification History

Version	Content Revision	Issued by	Date
A	Original version	King	2022-08-10

Content

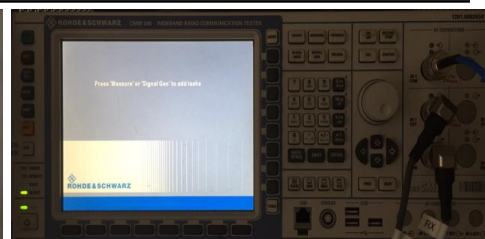
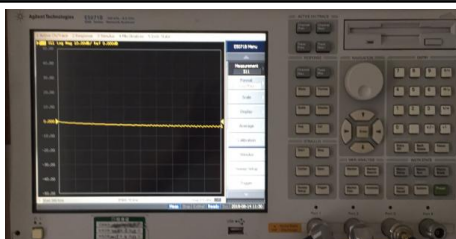
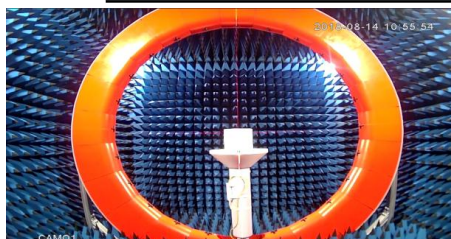
<i>Item</i>	<i>Description</i>
1.-----	Electrical Specification
2.-----	Test Items and Equipment
3.-----	S Parameter
4.-----	Efficiency and Gain
5.-----	Radiation Pattern
6.-----	Mechanical Specification

1. Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	13x182,L320	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	4.85 REF	dBi
Efficiency	>60	%
Connector Type	1.13 MHF-1-Plug	
Operating temperature	-20℃~+65℃	
Storage Temp	-20℃~+50℃	

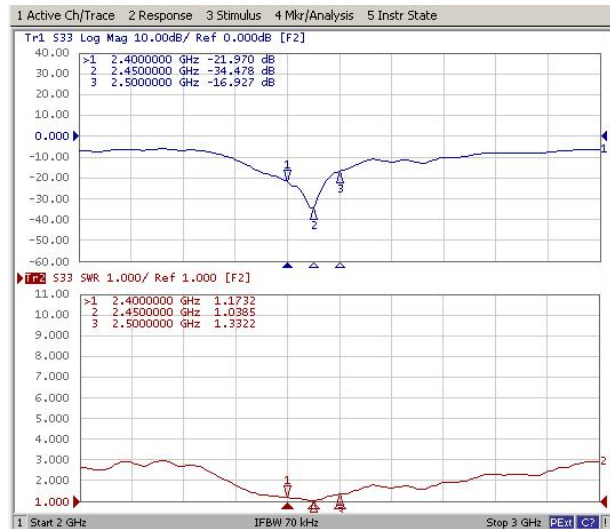
2. Test Items and Equipment

	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	-21.9	1.17
2450	-34.4	1.03
2500	-16.9	1.33



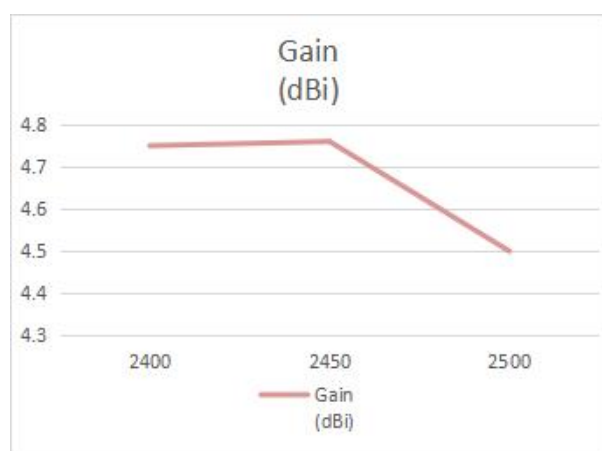
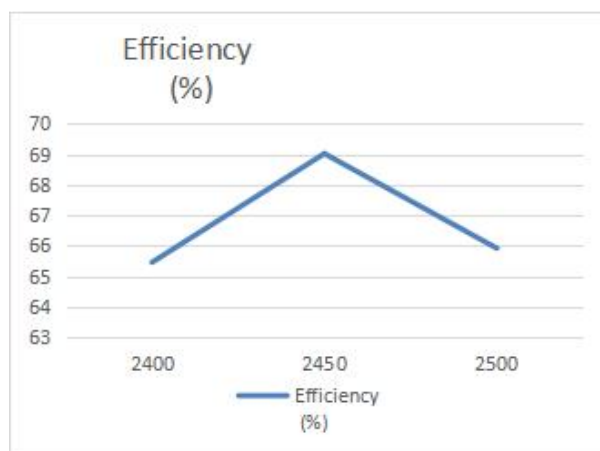
* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

$$RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$$

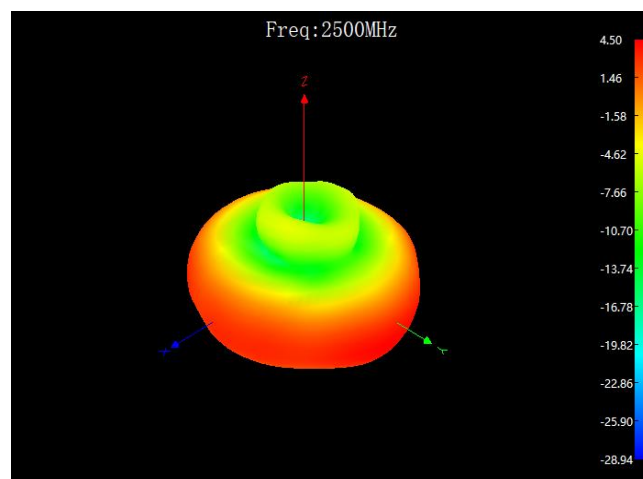
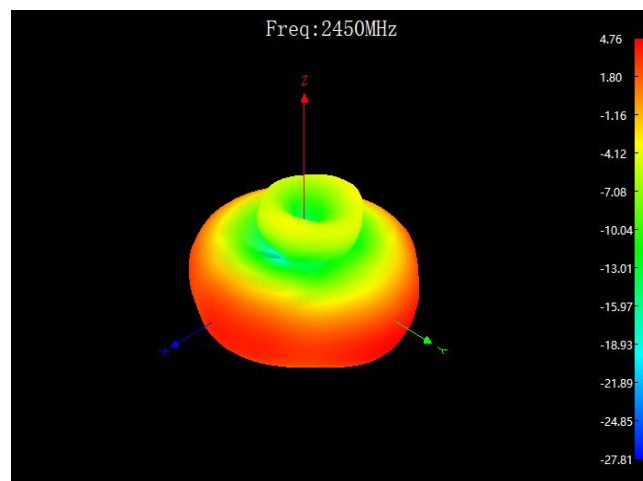
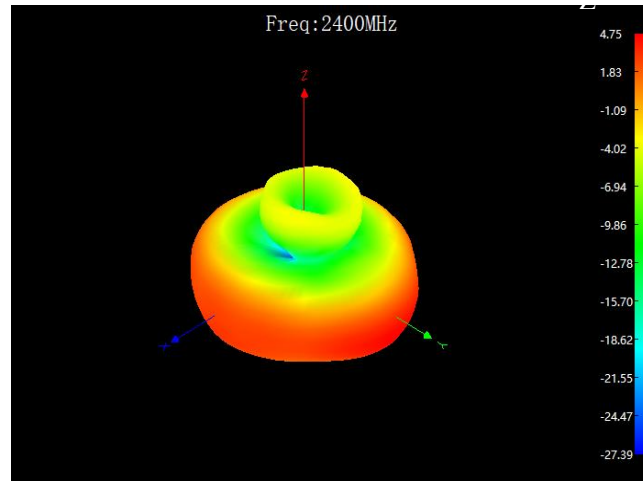
4. Efficiency and Gain

Frequency (MHz)	2400	2450	2500
Efficiency (%)	65.46	69.02	65.92
Gain (dBi)	4.75	4.85	4.5

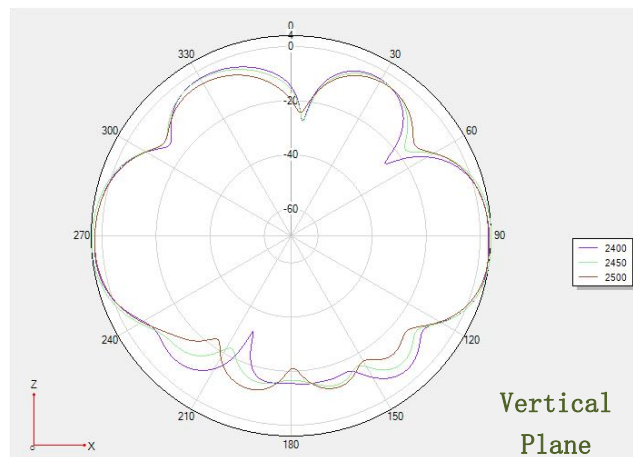


5. Radiation Pattern

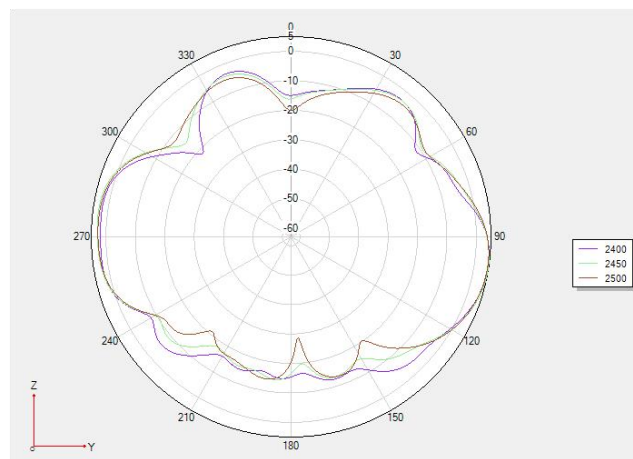
5-1 Antenna 3D Radiation Pattern



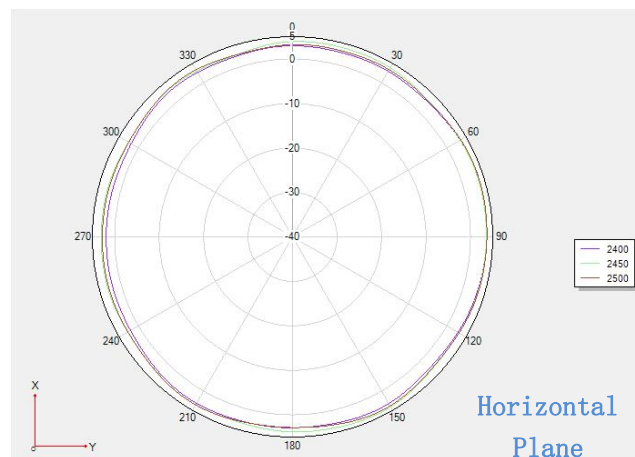
5-2 Antenna 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D

6. Mechanical Specification:

