UANT®
好天线 · 优比造

东莞市优比电子有限公司
Dongguan UB Electronics Co.,Ltd

承　认　书

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G ANT

客 户 料 号

CUSTOMER P/N:

优比电子料号

UB P/N: UB01NP3D75A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Mark.liang	
APPROVED BY:	Changxing.Liu	
DATE:	2020/12/11	

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变更覆历 Change calendar

版本 Version	修改内容 Content Revised	创建者 Modifier	时间 Date
A	Original version	Mark.Liang	2020-12-11

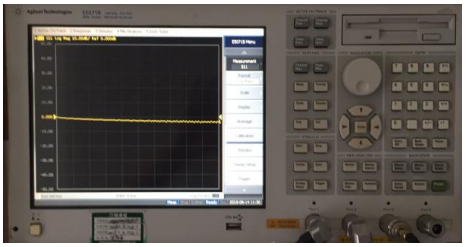
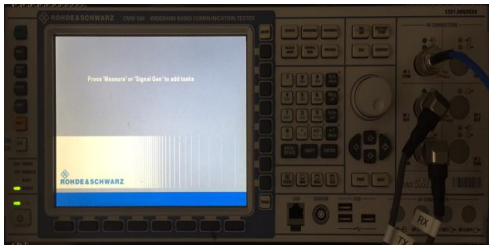
Contents

1.Electrical Specification:

Characteristics	Specifications	Unit
Outline Dimensions	10.4 x 5.4 x3.0	mm
Working Frequency	2400~ 2500	MHz
Input Impedance	50	Ω
VSWR	2.0Max	
Polarization	Linear Polarization	
Gain	3.47	dBi
Efficiency	≥40	%
Connector Type	Open	
Operating temperature	-20℃~+70℃	
Storage Temp	-20℃~+50℃	

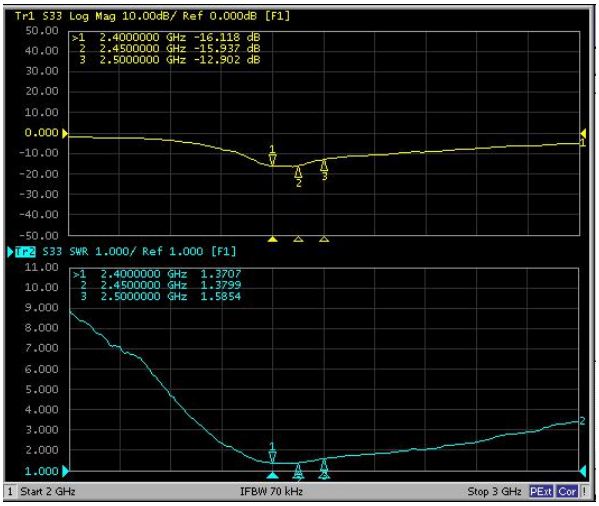
2.Test items and equipment

	Test items	Test equipment
Parameter	1.Return Loss 2. VSWR	Network analyzer (Agilent E5071B)
Passive parameters of the whole machine	1.Frequency 2.Gain 3. Radiation Pattern	1.3D microwave darkroom (5m*5m*4m) 2. Network analyzer (Agilent E5071B)
Active parameters of the whole machine	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*4m) 2. Comprehensive test instrument (CMW500)

3. Return Loss and VSWR

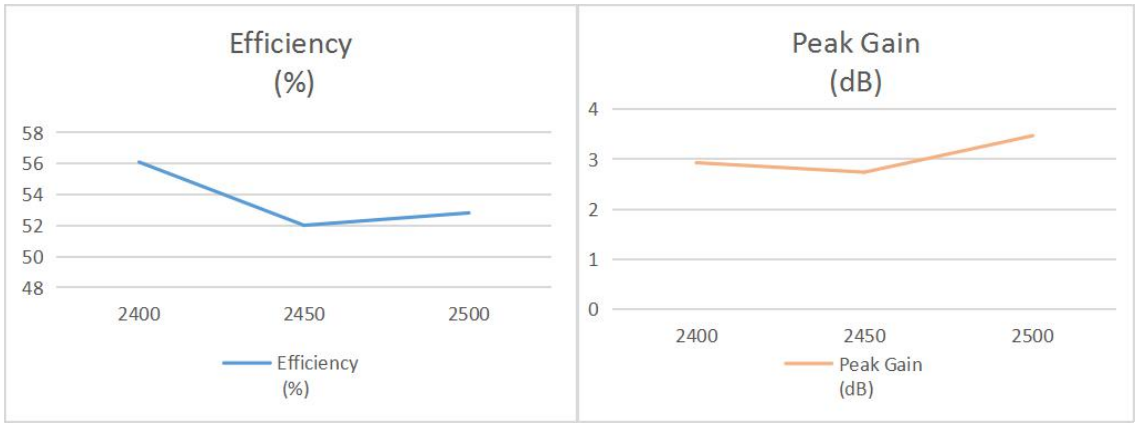
Frequency (MHz)	Return Loss	VSWR
2400	-16.118	1.37
2450	-15.937	1.37
2500	-12.902	1.58



* Voltage Standing Wave Ratio(VSWR)
  Return Loss(RL)
  RL=20*log10[(VSWR+1)/(VSWR-1)

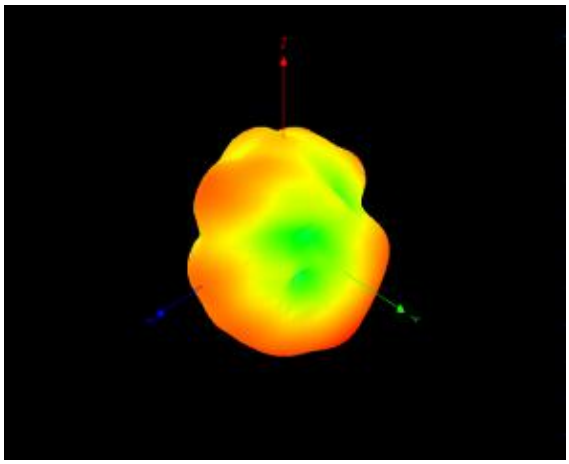
4. Efficiency and Gain Value

Frequency (MHz)	2400	2450	2500
Efficiency (%)	56.1	52.02	52.82
Peak Gain (dBi)	2.93	2.74	3.47

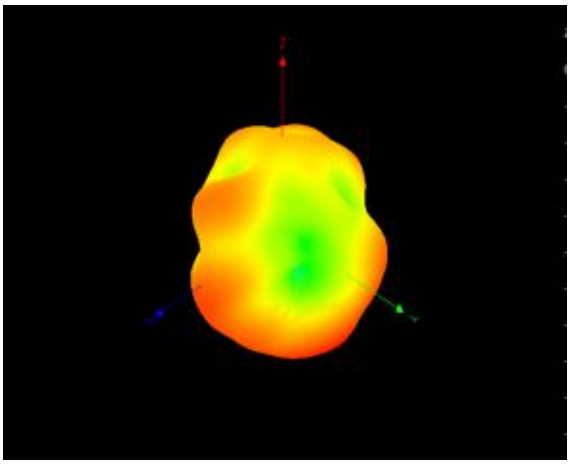


5. Radiation Pattern

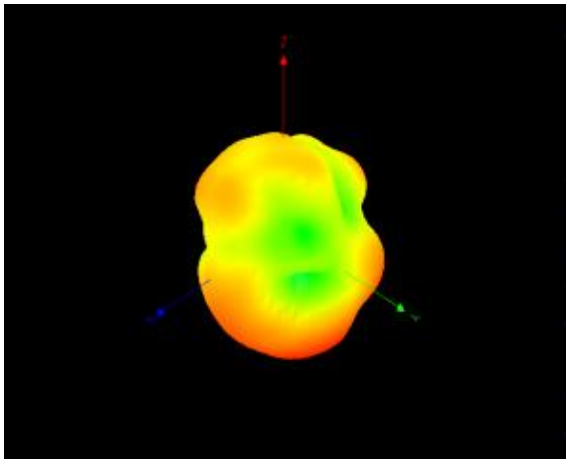
5-1 Antenan 3D Radiation Pattern



2400MHz

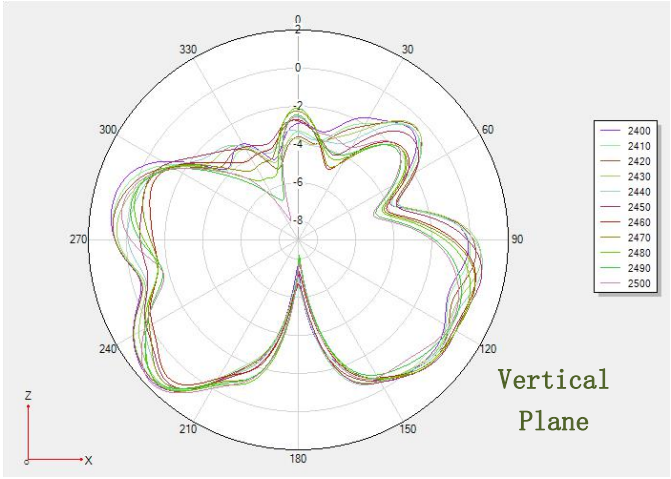


2450MHz

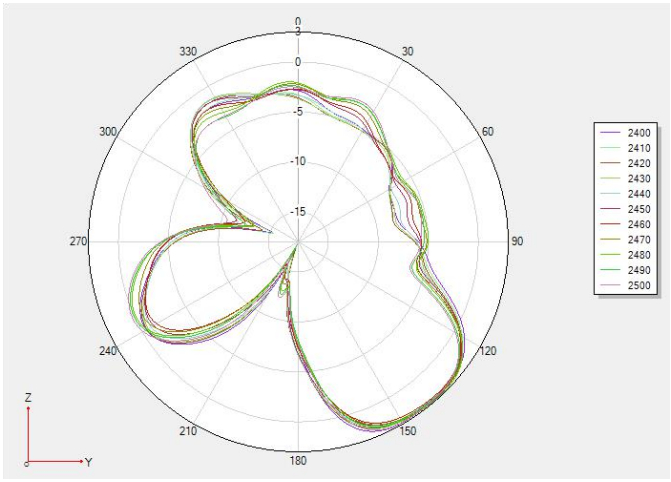


2500MHz

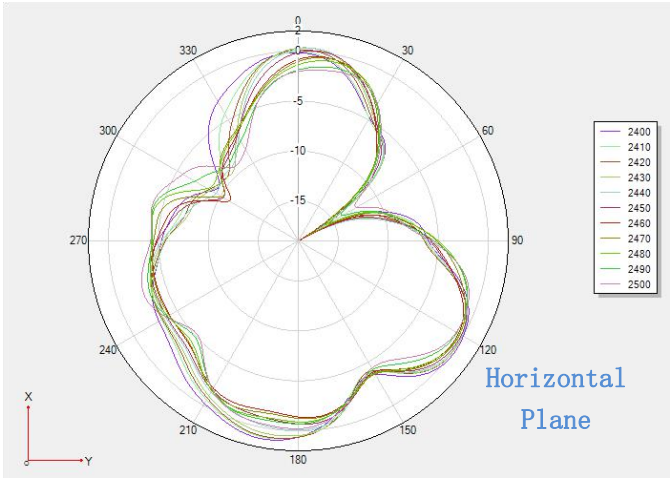
5-2 Antenan 2D Radiation Pattern



Phi 0 2D



Phi 90 2D



Theta 90 2D

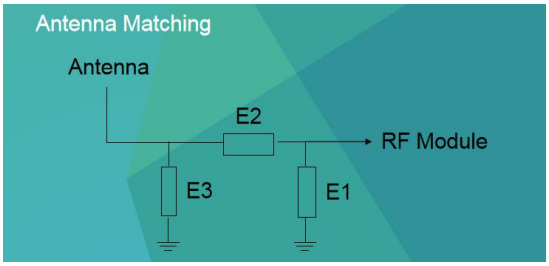
6. Active test data:

Antenna complete machine test

Item	Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Max	Min	Total
1	TRP	Every30	Every30	WIFI (Station)	WIFI_B (11M)	10	2457	21.92	-9.57	17.03
2	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_B (11M)	10	2457	88.46	56.96	83.59

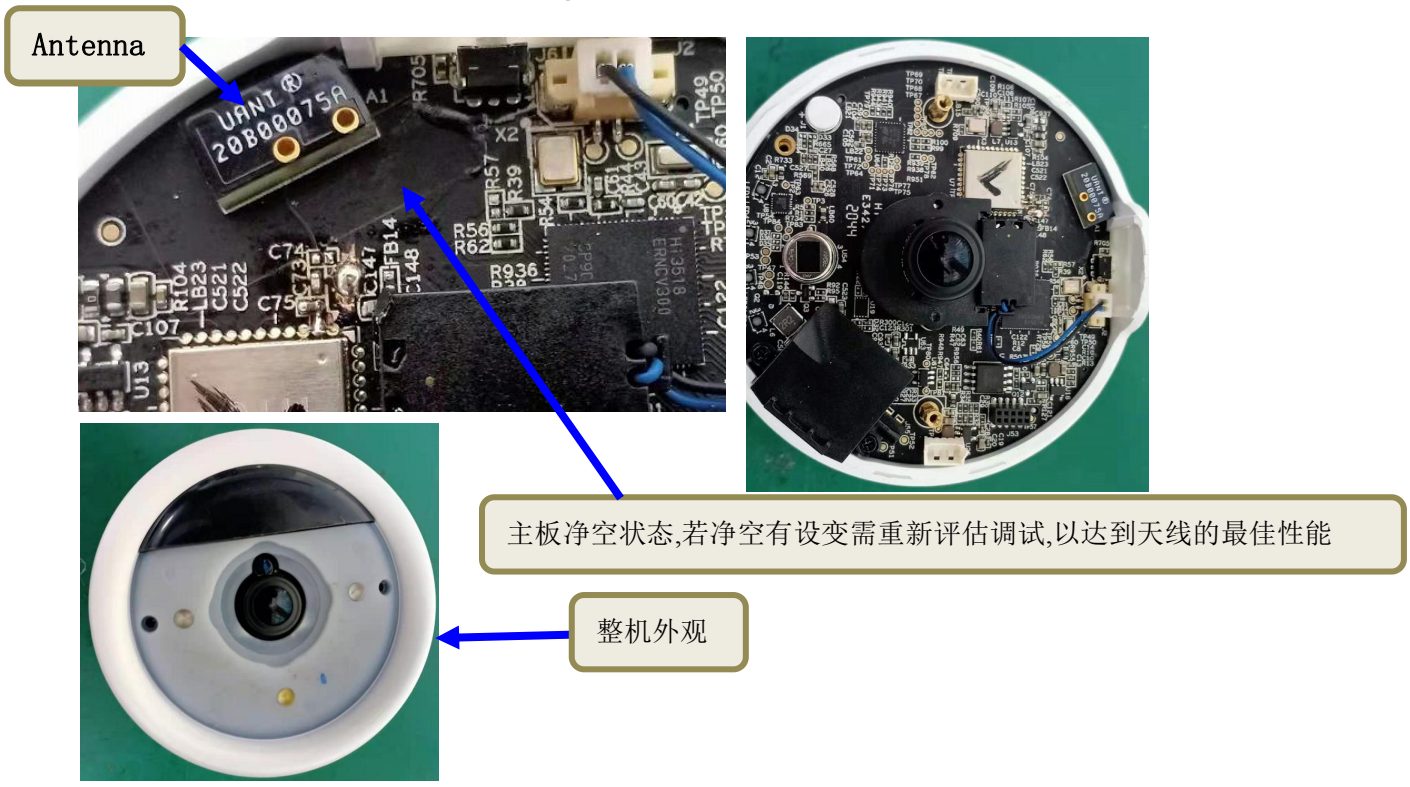
7. Antenna Matching Network

Element	Value
E1	0.5 PF
E2	3.9 NH
E3	N/A



*Match the electronic components according to the above to achieve the reported antenna performance

8. Antenna installation diagram



9.Mechanical Specification