UANT®

东莞市优比电子有限公司

好天线·优比造

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.Jiang	
APPROVED BY:	Changxing.Liu	
DATE:	2020/12/11	

东莞市塘厦镇林村社区新太阳工业城 79 栋

Tangxia Town, Dongguan City, Lincun community, new Sun Industrial City 79

0769-81777126

0769-81777126

www.ubuant.com

1

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)
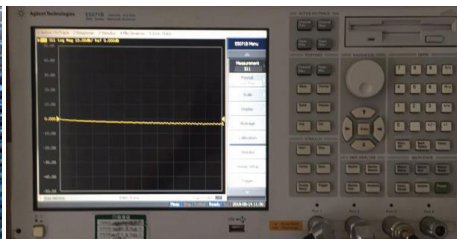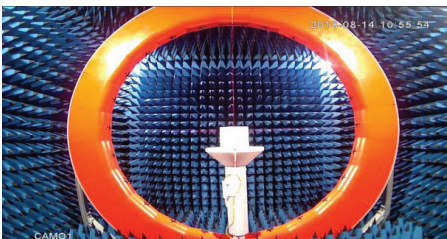
3. Return Loss and VSWR

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)

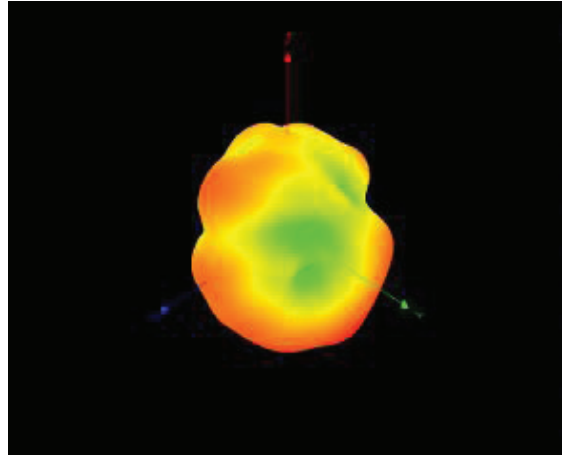Return Loss(RL)

RL=20*log10[(VSWR+1)/(VSWR-1)
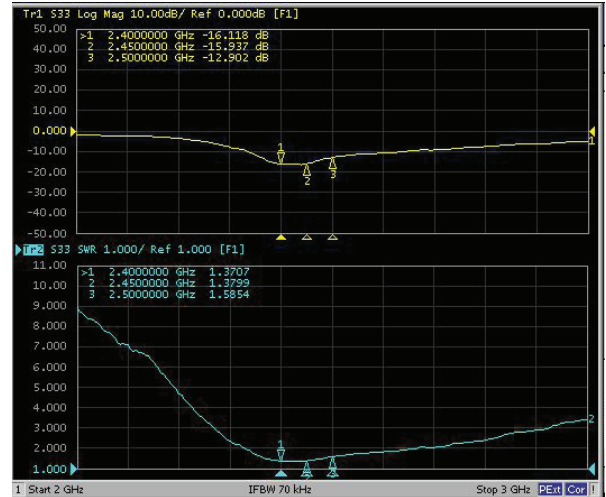
4. Efficiency and Gain Value

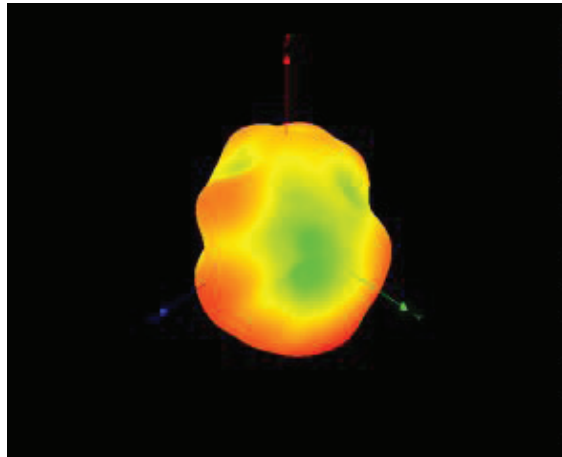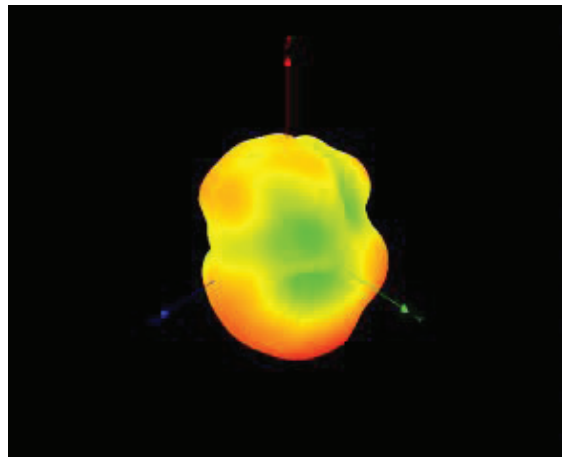| Frequency (MHz)	2400	2450	2500
Efficiency (%)	56.1	52.02	52.82
Peak Gain (dBi)	2.93	2.74	3.47
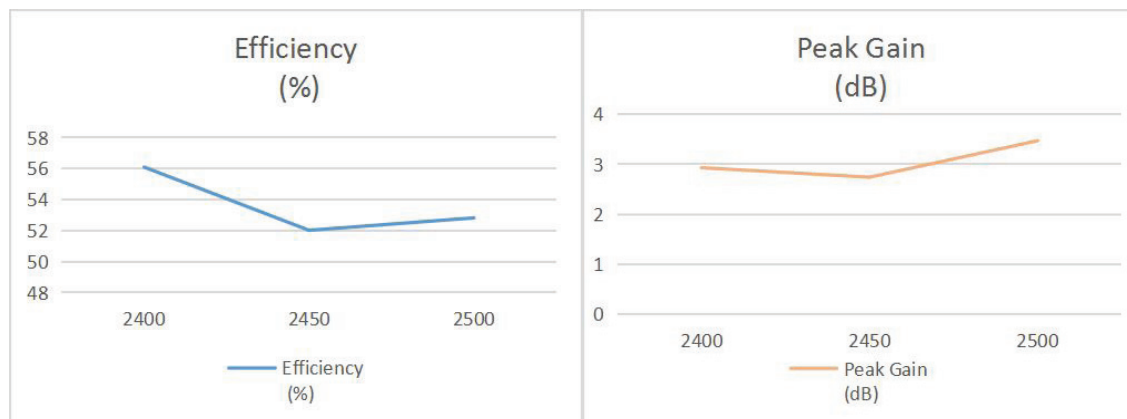
5. Radiation Pattern

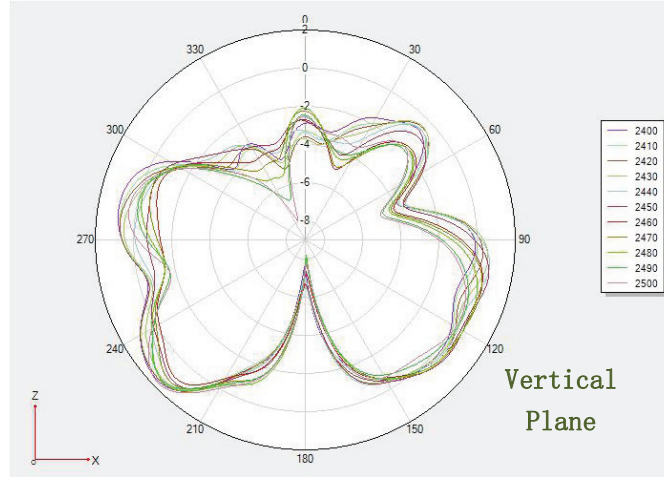5-1 Antenan 3D Radiation Pattern

2400MHz

2450MHz

2500MHz

5-2 Antenan 2D Radiation Pattern

Phi 0 2D
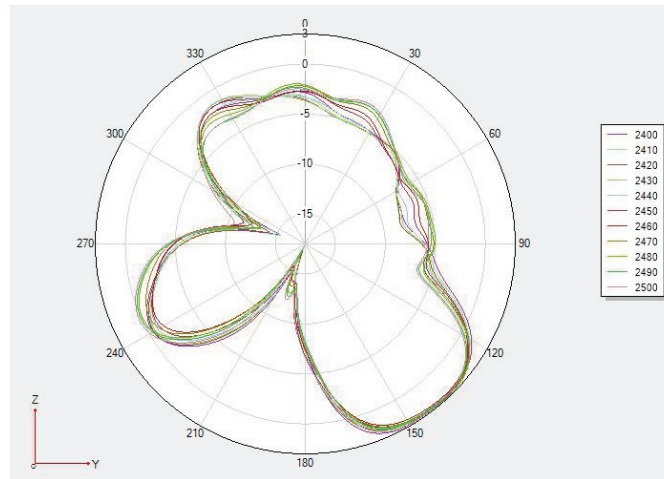
Phi 90 2D
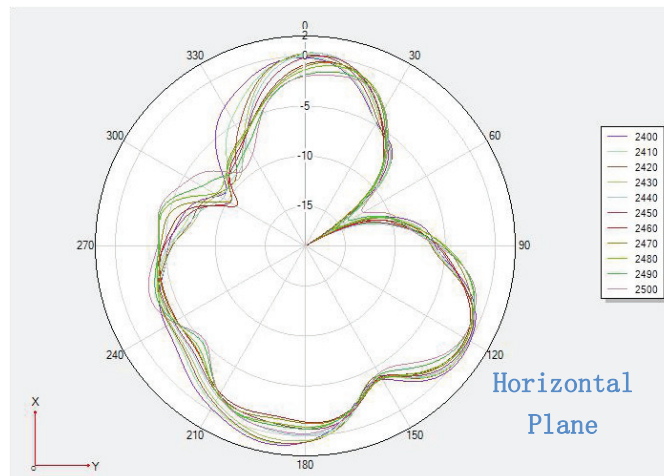
Theta 90 2D

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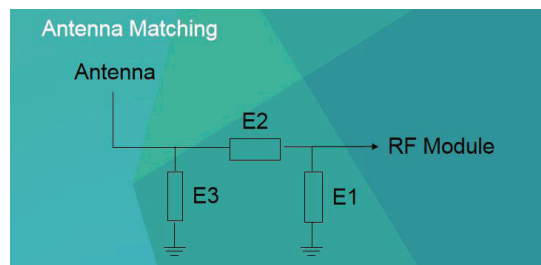
*Match the electronic components according to the above to achieve the reported antenna performance

8.Mechanical Specification

A Face

B Face

SECTION A-A

UANT
20B00075A

10.4±0.5
5.40±0.5
4.00
3.00±0.5

1.80
2.00
2.00
2-Φ1.0

24.05
12

Blister Tray; 1500pcs / Tray

Specification (Antenna complete machine test) :

Frequency Rang:2400-2500MHz

Return Loss:-10dB Max

VSWR:1.92:1 Max

Peak Gain:3.0±1.0dBi

	REV.	DESCRIPTION	ECN.NO.	DATE	DRAFTER	
	A	First Sample	/	2019.09.20	Mark	

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

CUST.P/N:			
TITLE. : PCB-3dB陶瓷内置贴片天线(75A)			
UB P/N : UB01NP3D75A			DRAW. : Mark.Liang
REV. A	UNITS mm	SCALE 1:1	CHECK. : Dillon
			APPR. : Changxing.Liu

GENERAL TOLERANCE:
LINEAR:
X.XXX   ±0.1
X.   ±0.3
XX.   ±0.5
XXX.   ±2.0
ANGLE: ±0.5°

RoHS COMPLIANT

ITEM	PART NAME & DESCRIPTION	QTY
1	Ceramic Patch antenna,Ceramic powder+PCB	1