承 认 书

APPROVAL SHEET

客 户 名 称

CUSTOMER NAME: Alcidae

产 品 名 称

PRODUCT NAME: 2.4G ANT

客 户 料 号 PS430H

CUSTOMER P/N: Item：HQ5C/HQ5C 2K/HQ8C/HQ8C 2K

优比电子料号

Youbi P/N: UB06000613A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:		
DATE:		

Modification History

Version	Content Revision	Issued by	Date
A	Original version	Mark	2022-2-21
B	Thickness change	Mark	2022-5-21

Content

Item ***Description***

1.----------Electrical Specification

2.----------Test items and Equipment

3.----------S Parameter

4.----------Efficiency and Gain

5.----------Radiation Pattern

6.----------Active test data

7.----------Antenna installation diagram

8.----------Mechanical Specification

1.Electrical Specification:

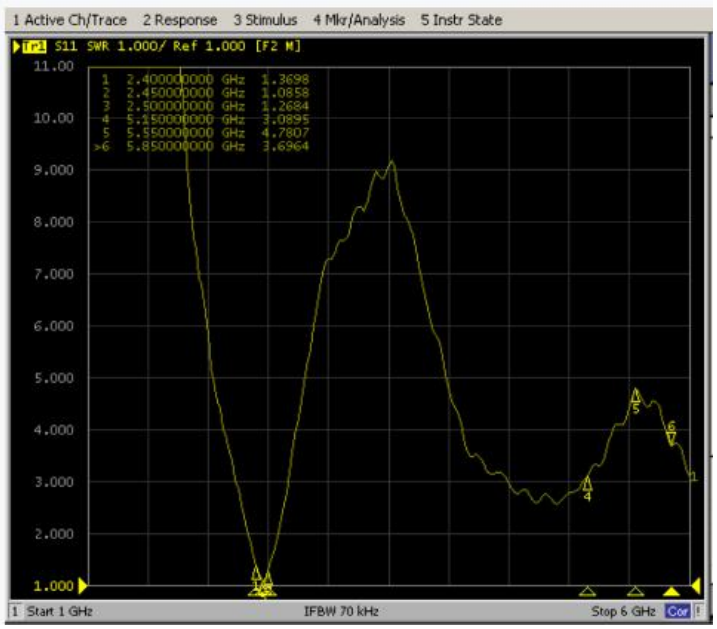
Characteristics	Specifications	Unit
Outline Dimensions	17.0x10.7x3.2xT0.4	mm
Frequency	2400~ 2500	MHz
Impedance	50	Ω
VSWR	< 2.0	
Polarization	Linear Polarization	
Gain	2.65	dBi
Efficiency	>50	%
Connector Type	DIP	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

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

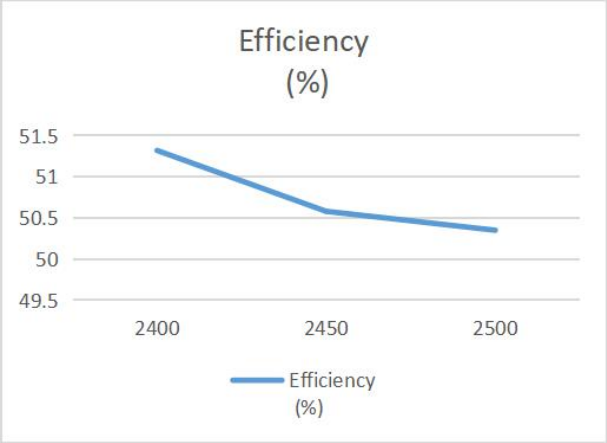
Frequency (MHz)	R L(dB)	VSWR
2400	-16.13	1.36
2450	-27.71	1.08
2500	-18.53	1.26

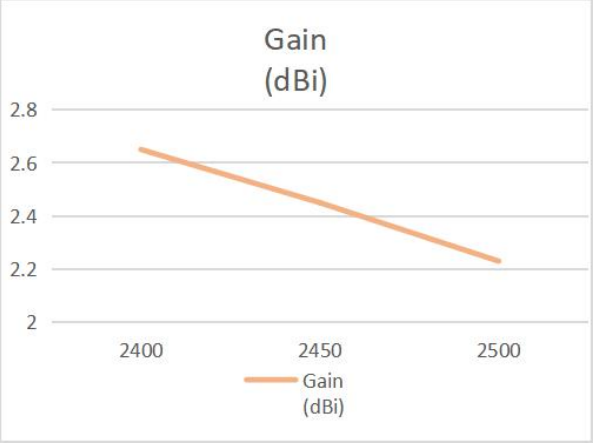


* Voltage Standing Wave Ratio(VSWR)
  Return Loss(RL)
  RL=20*log10[(VSWR+1)/(VSWR-1)

4. Efficiency and Gain

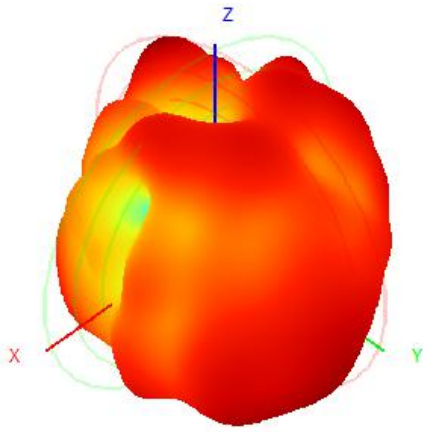
Frequency (MHz)	2400	2450	2500
Efficiency (%)	51.32	50.58	50.35
Gain (dBi)	2.65	2.45	2.23



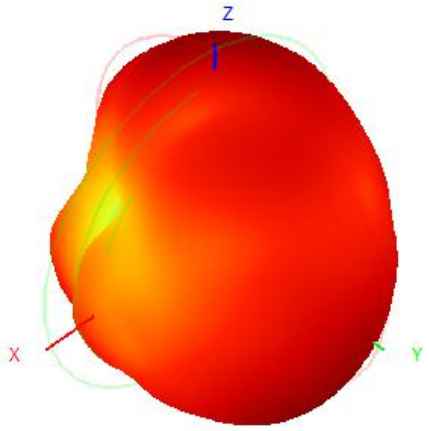


5. Radiation Pattern

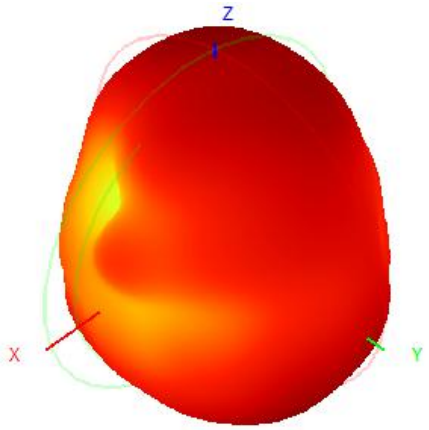
5-1 Antenna 3D Radiation Pattern



2400MHz

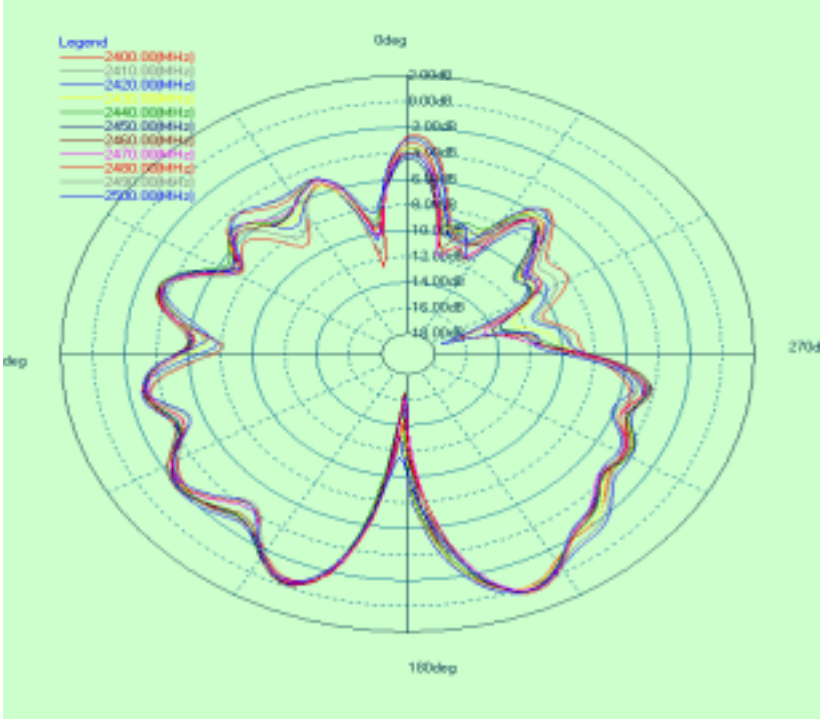


2450MHz

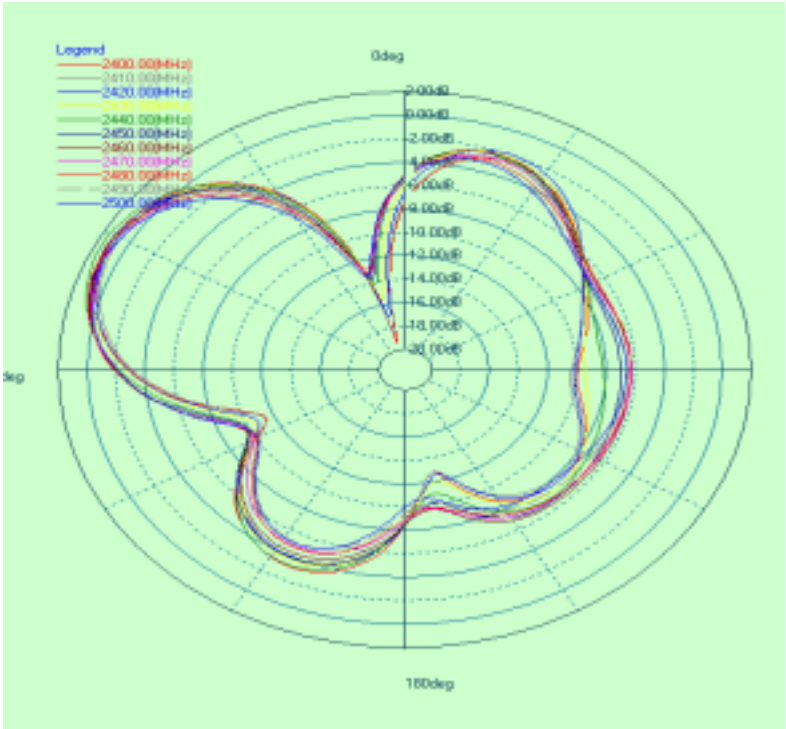


2500MHz

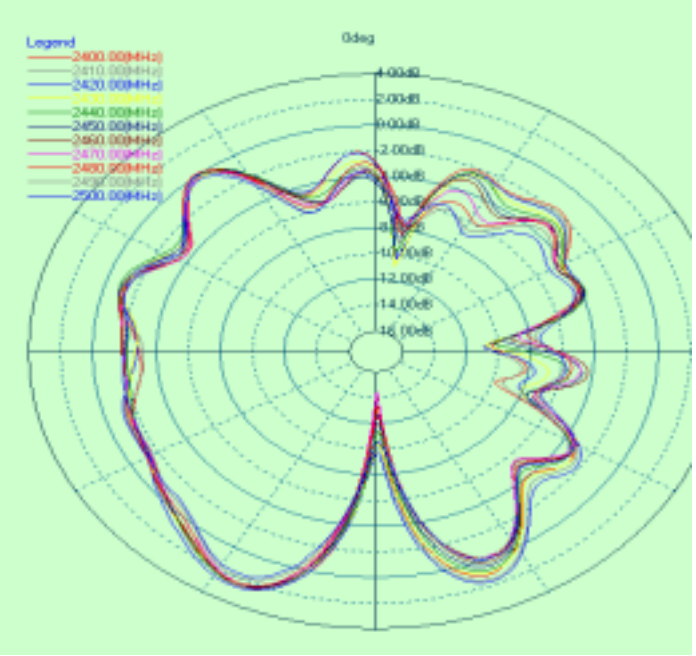
5-2 Antenna 2D Radiation Pattern



2400MHz



2500MHz


Legend
0deg
2400.00MHz
2410.00MHz
2420.00MHz
2440.00MHz
2450.00MHz
2460.00MHz
2470.00MHz
2480.00MHz
2490.00MHz
2500.00MHz
4.00dB
2.00dB
0.00dB
-2.00dB
-4.00dB
-6.00dB
-8.00dB
-10.00dB
-12.00dB
-14.00dB
-16.00dB

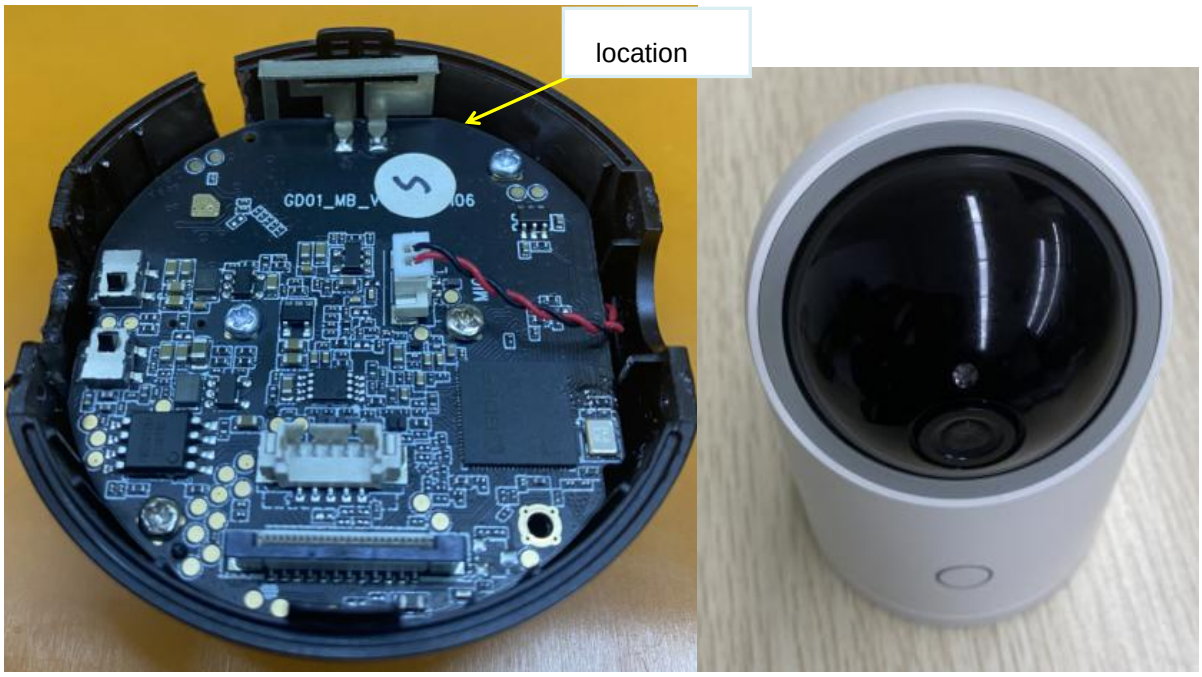
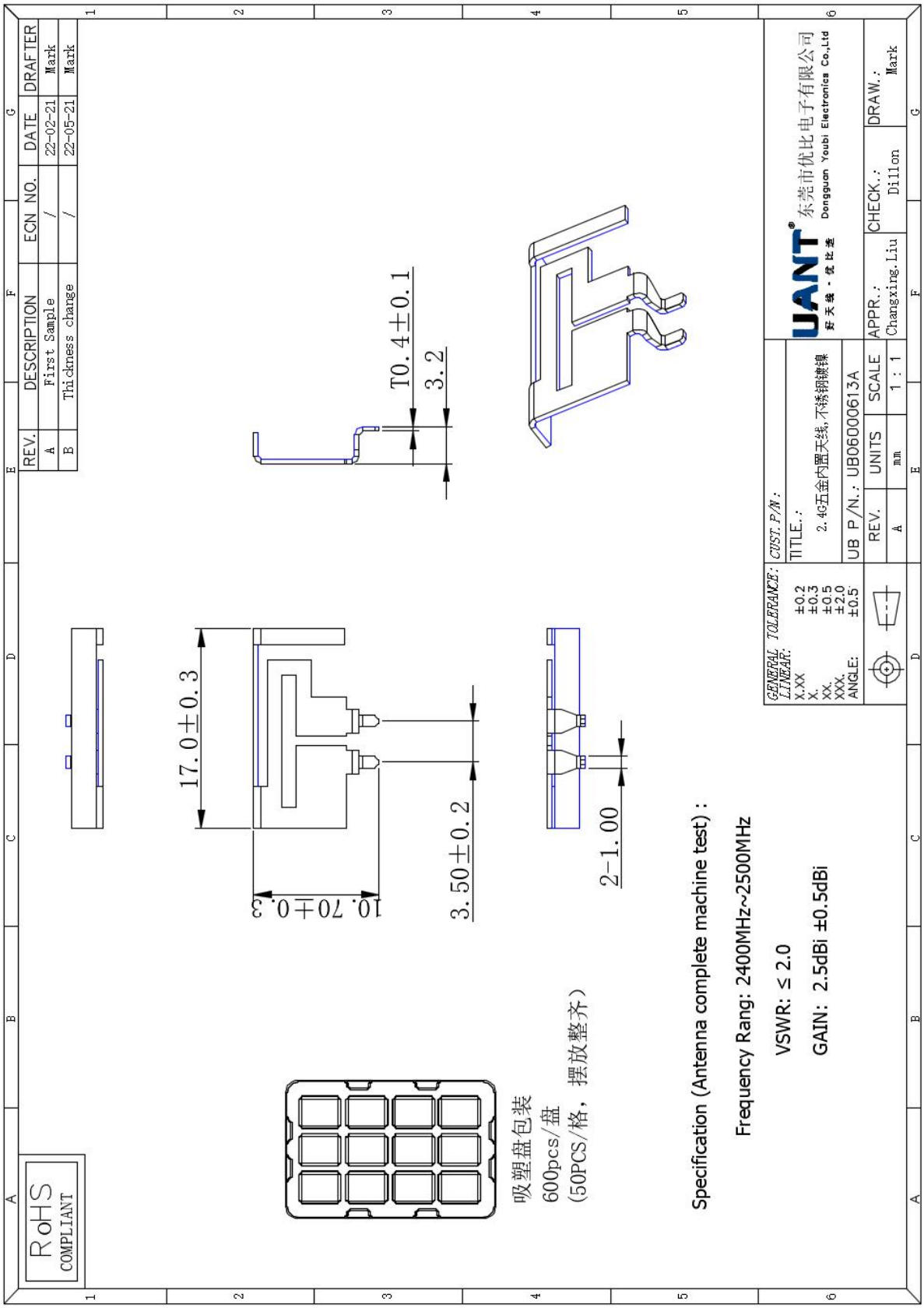
2500MHz

6. Active test data

Antenna complete machine test

Item	Measurement	Total
1	TRP	12.85
2	TRP	13.23
3	TRP	14.19
4	TIS(EIRP)	-71.17
5	TIS(EIRP)	-70.56
6	TIS(EIRP)	-70.35

7. Antenna installation diagram:



8. Mechanical Specification: