



2.4G onboard antenna Product Specifications

version Book	V1.0	frequency part	2400 ~ 2500MHz
Customer Part Number		Kitty Hawk Material Number	VO36T-2_CODE_V10
RF Design	Wen wei	RF Manager	
Structural design		Structural Manager	
Technical Director		day Expect	2025-07-30

Customer Confirmation:

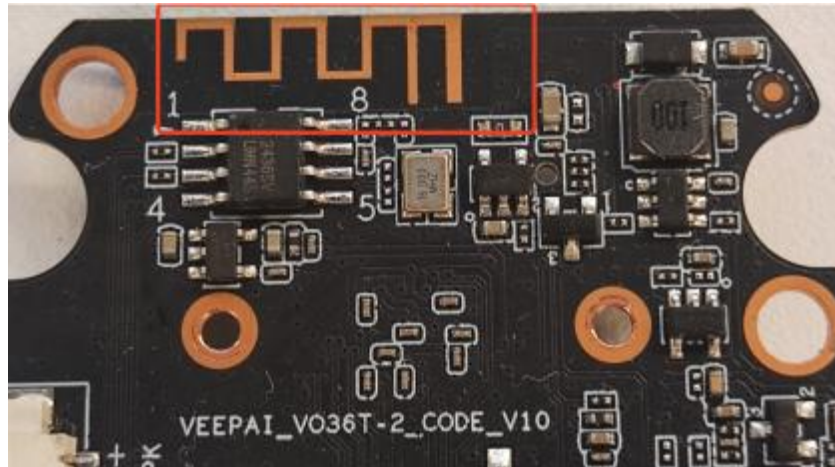
Does the assembly meet your company's requirements? ☐ OK ☐ NG

Shenzhen Kitty Hawk Vision Intelligence Co., Ltd.

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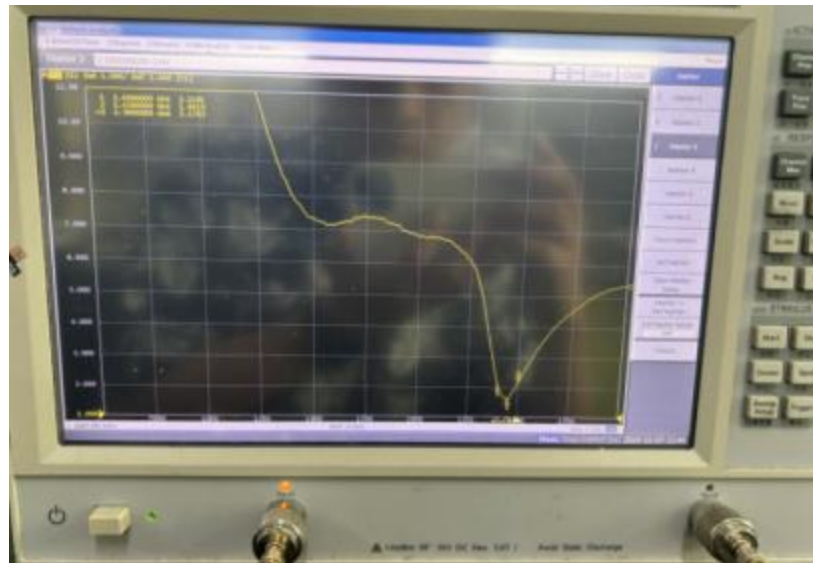
1.Product Pictures



2. Product Parameters

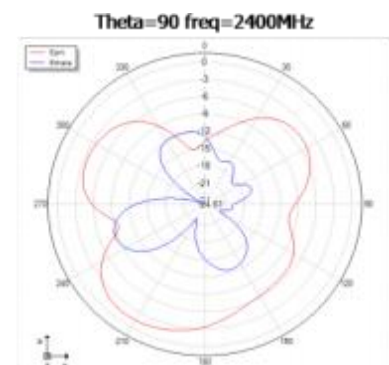
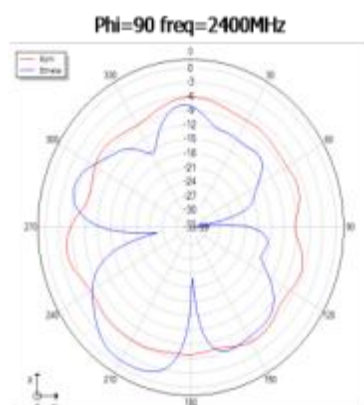
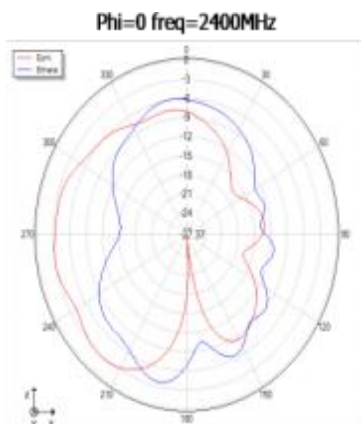
Product Name	2.4G board load antenna	Product Model NO	VO36T-2_CODE_V10
Electrical Specifications			
Frequency range	2400~2500 MHz	Polarization mode	vertical
Input impedance	50 Ω	Direction	Omnidirectional
Standing Wave Ratio (VSWR)	≤ 1.5	Power	15 mW
Gain	1.18 dBi	Bandwidth	100 MHz
Type of Antenna	PCB Antenna		
Mechanical Specifications			
Dimensions	16 mm	Chassis Color	gold
Chassis Material	copper	Connector	none
Operating temperature	-40 ~ +85°C	Operating humidity	20 ~ 85%

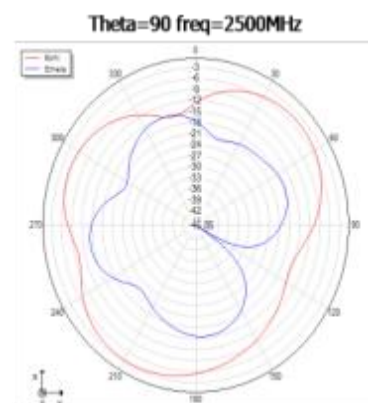
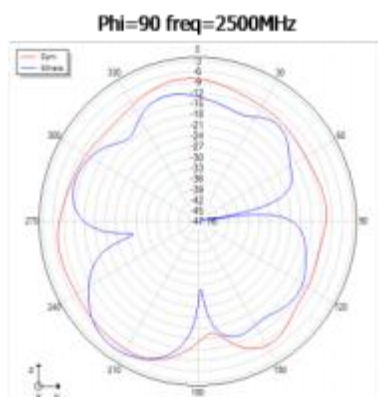
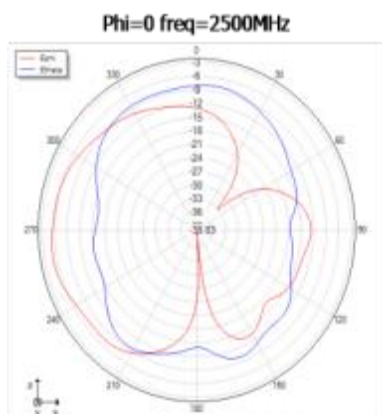
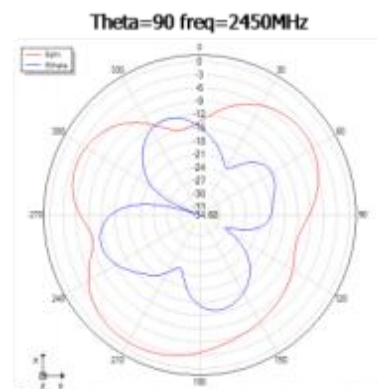
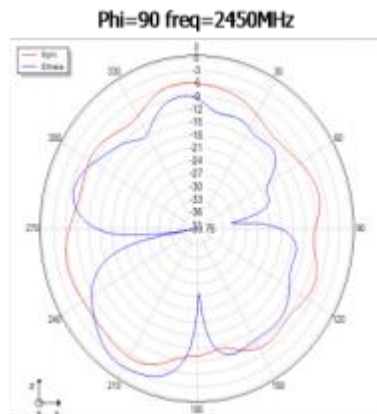
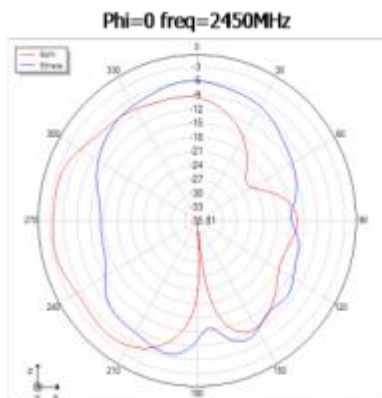
3.S11 data



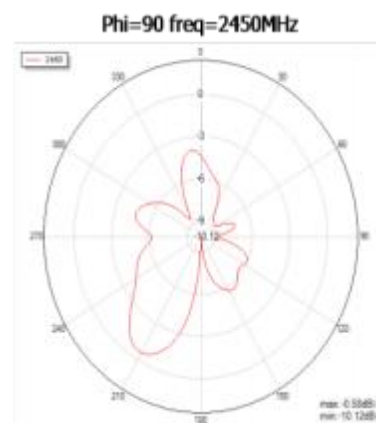
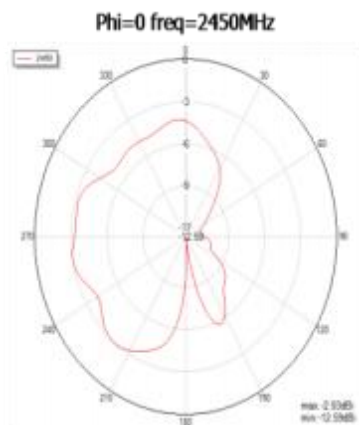
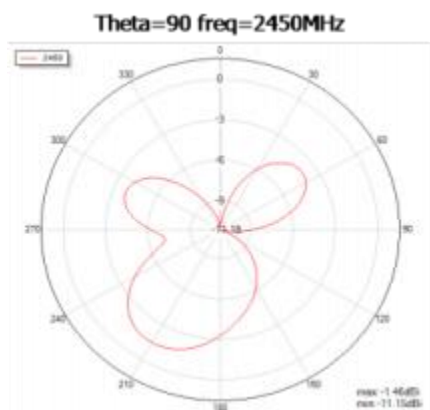
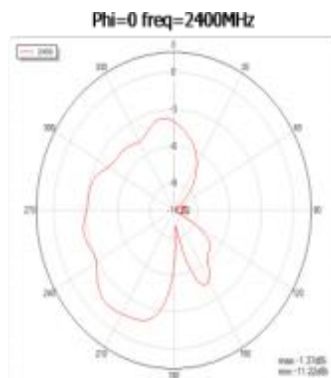
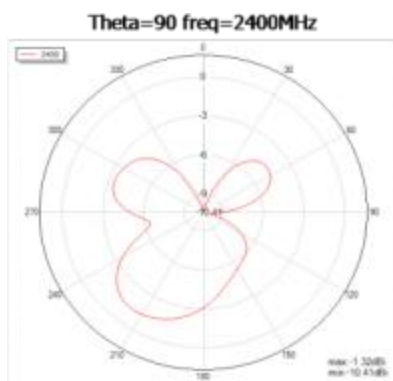
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	0.91	0.51	1.18	0.59	0.09	0.08	-0.17	-0.98	-1.09	-1.60	-2.52
Efficiency (dB)	-4.67	-4.65	-4.40	-5.04	-5.27	-5.44	-5.73	-6.20	-6.22	-6.65	-7.23
Efficiency (%)	34.08	34.27	36.31	31.35	29.71	28.57	26.75	23.99	23.87	21.60	18.93

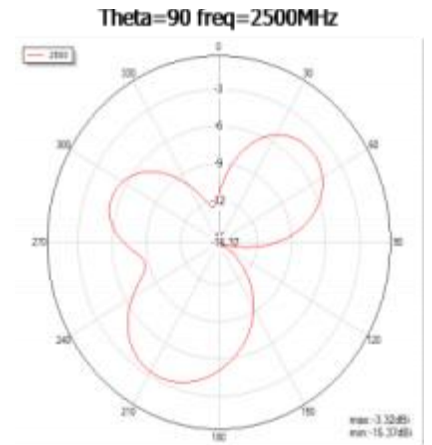
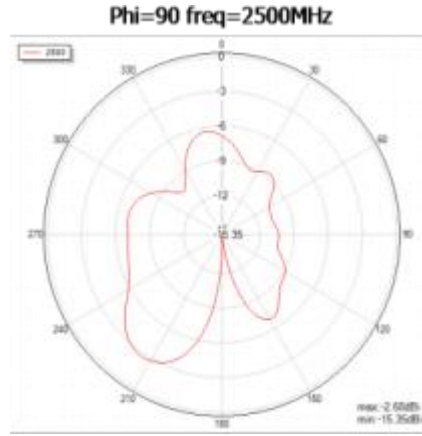
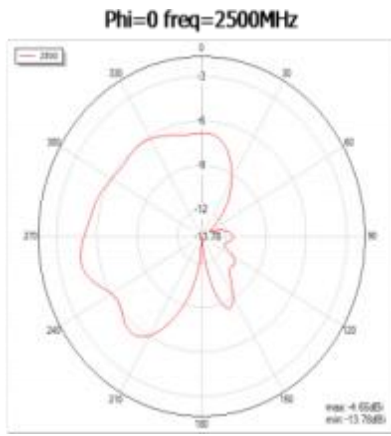
PolarGraphs



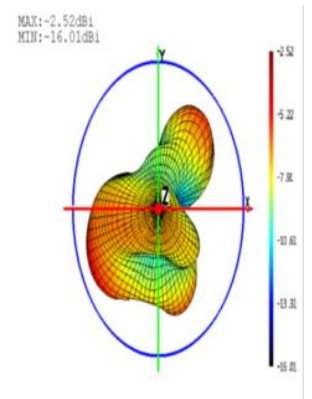
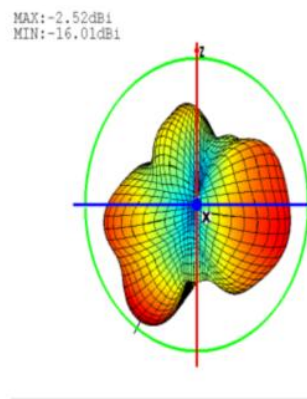
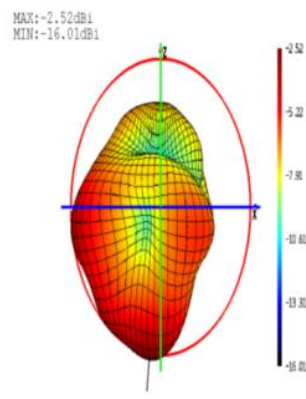
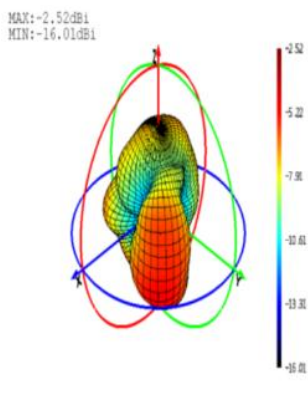
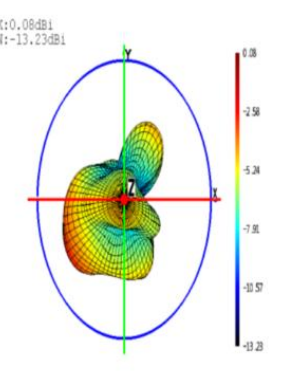
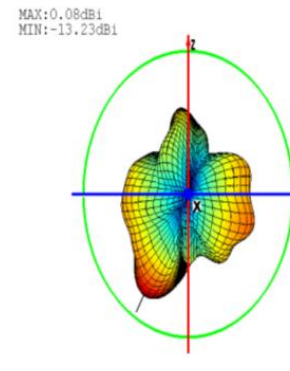
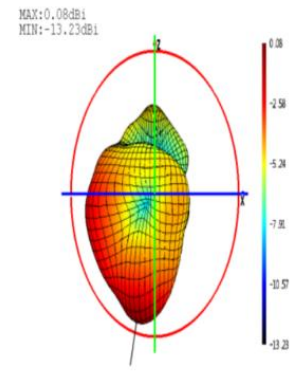
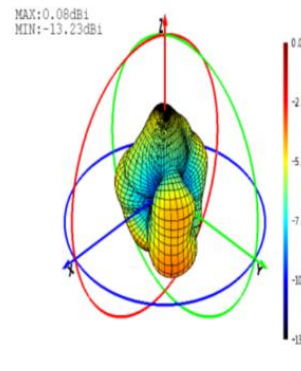
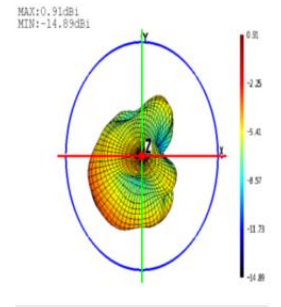
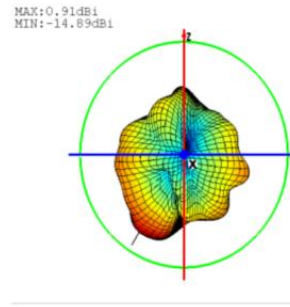
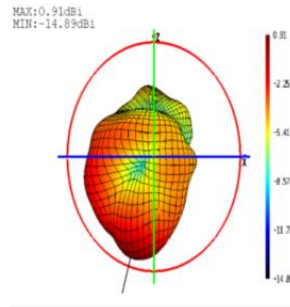
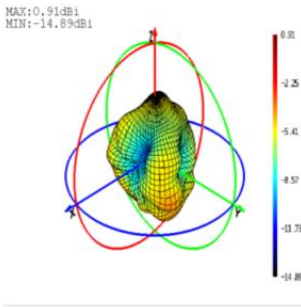


EtotalGraphs





3D_Graphs(Total)



Performance Summary

PARAMETER		UNIT	Comments
Tx Max Output Power	10	dBm	
Rx Sensitivity(1Mbps)	-97	dBm	
ACS	-6	I/C dB	co-channel rejection
	9	I/C dB	Selection +-1MHz
	40	I/C dB	Selection +-2MHz
	40	I/C dB	Selection +-3MHz
	40	I/C dB	Selection +-4MHz
	50	I/C dB	Selection >+-5MHz
Sleep Current	2	uA	with 32.768k Timer Wakeup
	4	uA	With 32.768k Timer Wakeup and 32KB SRAM Retention
Off Current	0.7	uA	IO Wakeup Only
Connectable Adv Current	28	uA	Adv Interval=1s, 3x Tx +Rx
Unconnectable Adv Current	22	uA	Adv Interval=1s, 3x Tx
Connected Current	14	uA	Connect Interval = 1s, 1x Tx+Rx

4. Product Structure Diagram



Width:4.5 MM

length: 15MM

line width:0.5 MM

line distance: 2 MM

5. Environmental performance test

project	Test conditions	Specification
Storage environment	When not specified, the test temperature, humidity and air pressure are as follows: 1. Temperature is -30°C ~ +80°C 2. Relative humidity is 45%-85% 3. Air pressure is 86 kpa -106 kpa	Electrical and mechanical performance is normal
High and low temperature tests	Perform 5 cycles between 70°C and 40°C, then keep under normal conditions for 1-2 hours. Check the appearance quality.	The size should meet the requirements and should meet the requirements of Sufficient for machinery, Electrical performance
Resistant to constant humidity and heat test	Relative humidity 95± 3%, test temperature: 40°C After 2 hours of continuous action , the electrical performance of the test piece shall be measured within 5 minutes after the test piece is taken out. The test piece shall be tested under normal conditions for 1-2 hours. Check appearance quality	The size should meet the requirements and should meet the requirements of Sufficient for machinery, Electrical performance
Vibration test	Frequency range: 10-55 HZ , displacement amplitude: 0.35 MM , acceleration amplitude: 50.0M/S, sweep cycle number: 30 times	Electrical and mechanical performance is normal
drop test	1M high altitude free fall 3 times along mutually perpendicular axes	Electrical and mechanical performance is normal

6. contact information

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★ Sales of digital video surveillance systems; sales of mobile terminal equipment; sales of Internet of Things equipment ★

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