
F1 Thermal Image Scope Onboard Antenna Specification V1.0

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1. Antenna Characteristic Specification

This specification describes the physical characteristics and electrical performance of the following 2.4 GHz Wi-Fi antennas.

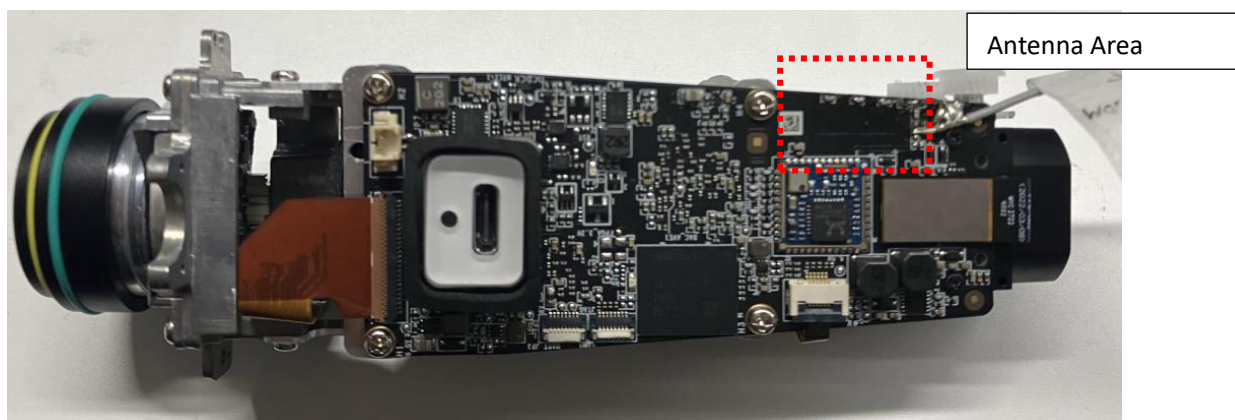


Figure 1. Antenna Actual Effect Picture

1.1 Antenna Structure

The antenna is mainly composed of on-board wiring on the PCB.

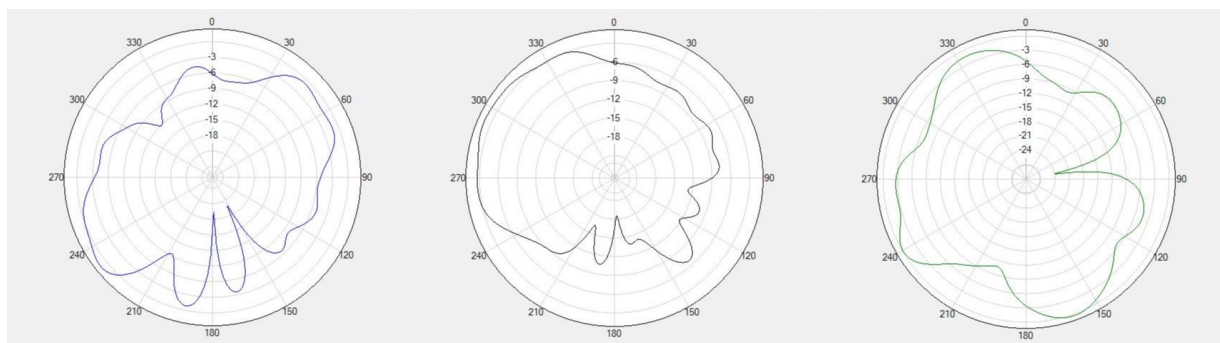
1.2 Antenna Technical Parameters and Interface

Design Specifications	Typical	Units
Form	On-board PCB	\
Frequency	2400-2500	MHz
Gain	High channel: 1.83	dB
	Medium channel: 1.48	dB
	Low channel: 1.1	dB
Antenna Efficiency	38	%
VSWR	< 3	\
Polarization	Linear Polarization	\
Axial Ratio	\	\
Radiation pattern	Omnibearing	\
impedance	50	ohm
Power handling	33	dBm
Interface	\	\
Overall dimensions	15mm*5mm	\
Weight	\	\
Operation Temp.	-30-70	°C

Antenna Efficiency

Frequency /MHz	Efficiency /%
2400	34.04
2410	35.83
2420	37.83
2430	39.41
2440	40.87
2450	40.51
2460	40.63
2470	40.00
2480	39.04
2490	37.62
2500	37.08

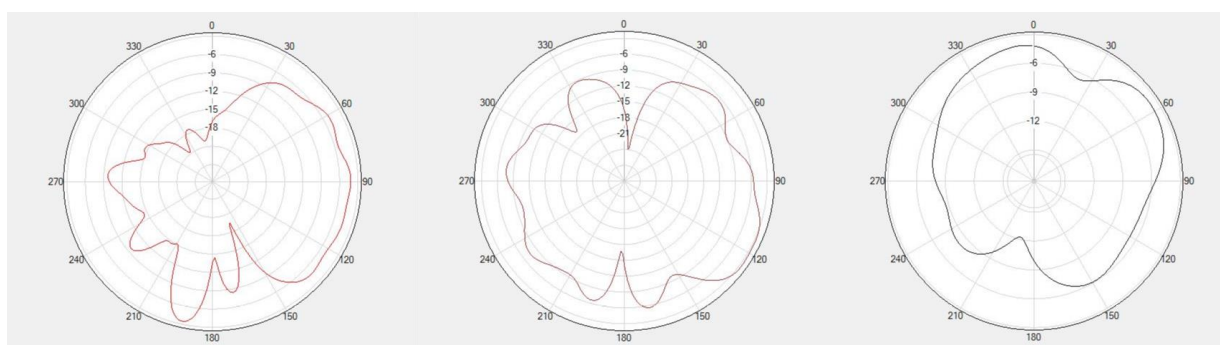
Antenna 2D Radiation Pattern



Phi=0°

phi=90°
2400MHz

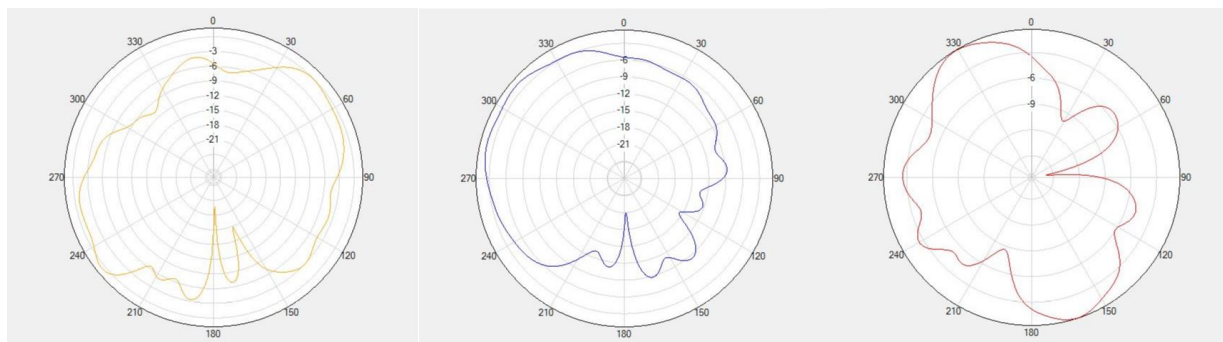
theta=90°



Phi=0°

phi=90°
2450MHz

theta=90°



Phi=0°

phi=90°
2500MHz

theta=90°

Revision History

Revision	Content	Date	Author
V1.0	First Edition	Dec. 22, 2022	黄可成