

Antenna

FCM362K Datasheet

Antenna Services

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Status: Preliminary



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About the Document

Revision History

Version	Date	Author	Note
-	2024-12-17	Jaden Feng	Creation of the document
1.0	2024-12-17	Jaden Feng	First official release

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1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Features

- BT&WIFI
- High efficiency
- Excellent performance

3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz; 5150-5850MHz
Input Impedance	50 Ω
VSWR	≤ 8.7
Gain	≤ 1.1 dBi
Polarization Type	Linear
Antenna type	PCB Printed Antenna

Mechanical Specifications

Antenna Size(mm)	11.5 × 6
Material	FR4
Color	Green
Working Temperature	-40 °C to +105 °C

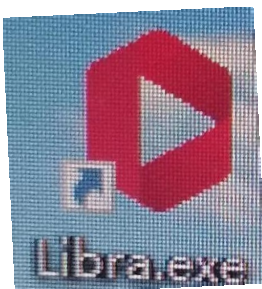
4 Overall Performance

4.1. Test Environment

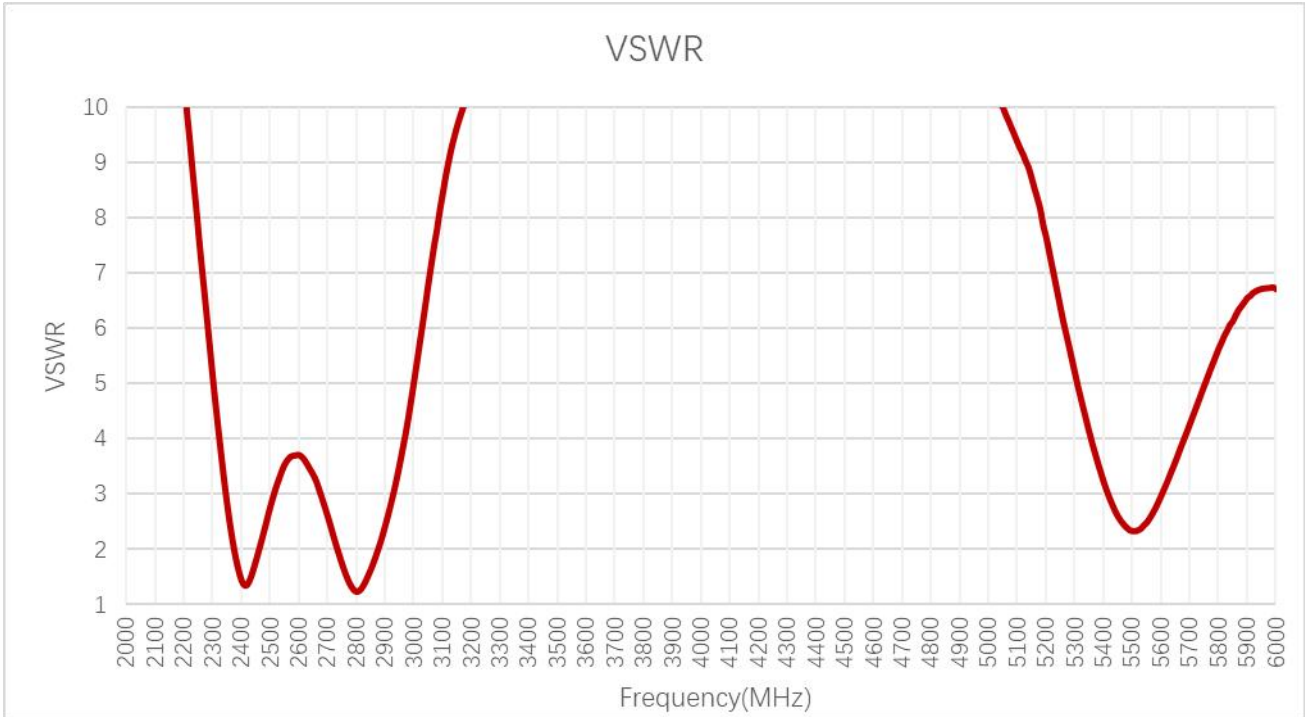
- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz
- Calibration date 2023/10/30



- Test the software: Libra

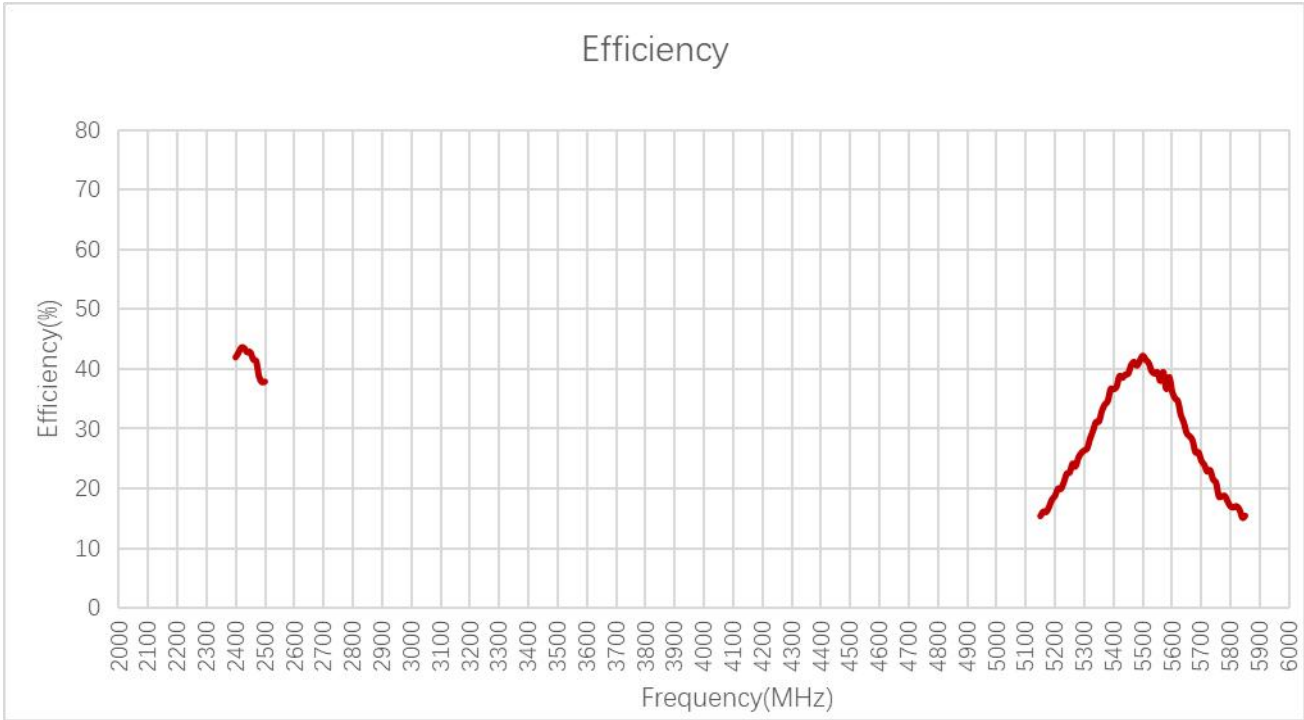


4.2. VSWR



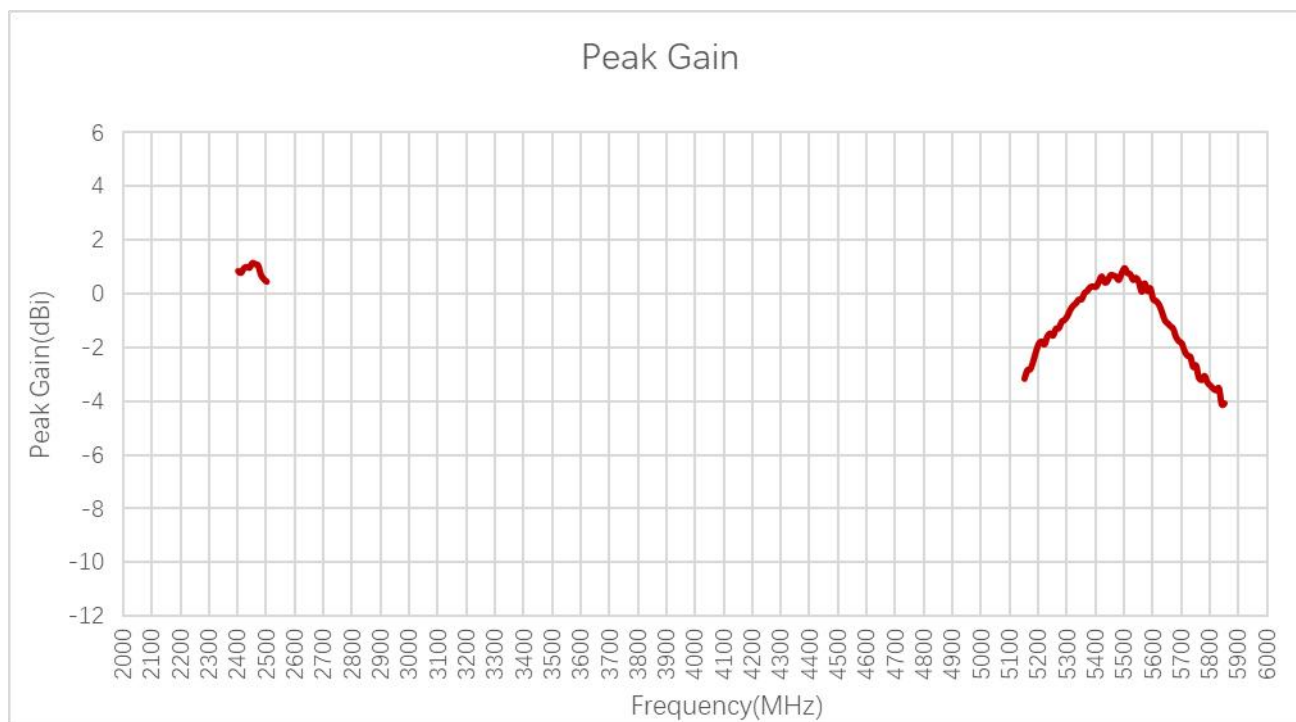
Frequency (MHz)	2400	2450	2500	5150	5350	5500	5750	5850
VSWR	1.4	1.8	2.8	8.7	4.1	2.3	5.0	6.1

4.3. Efficiency



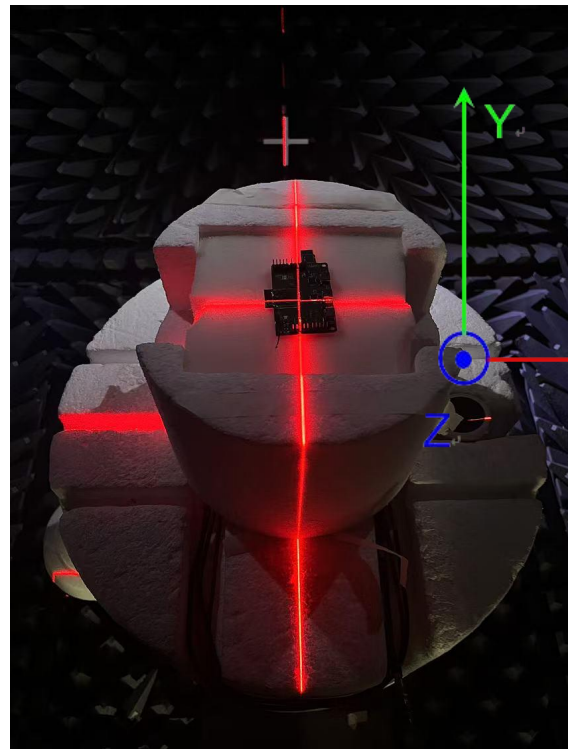
Frequency (MHz)	2400	2450	2500	5150	5350	5500	5750	5850
Efficiency (%)	41.9	42.8	37.9	15.4	31.2	42.2	21.0	15.5

4.4. Gain

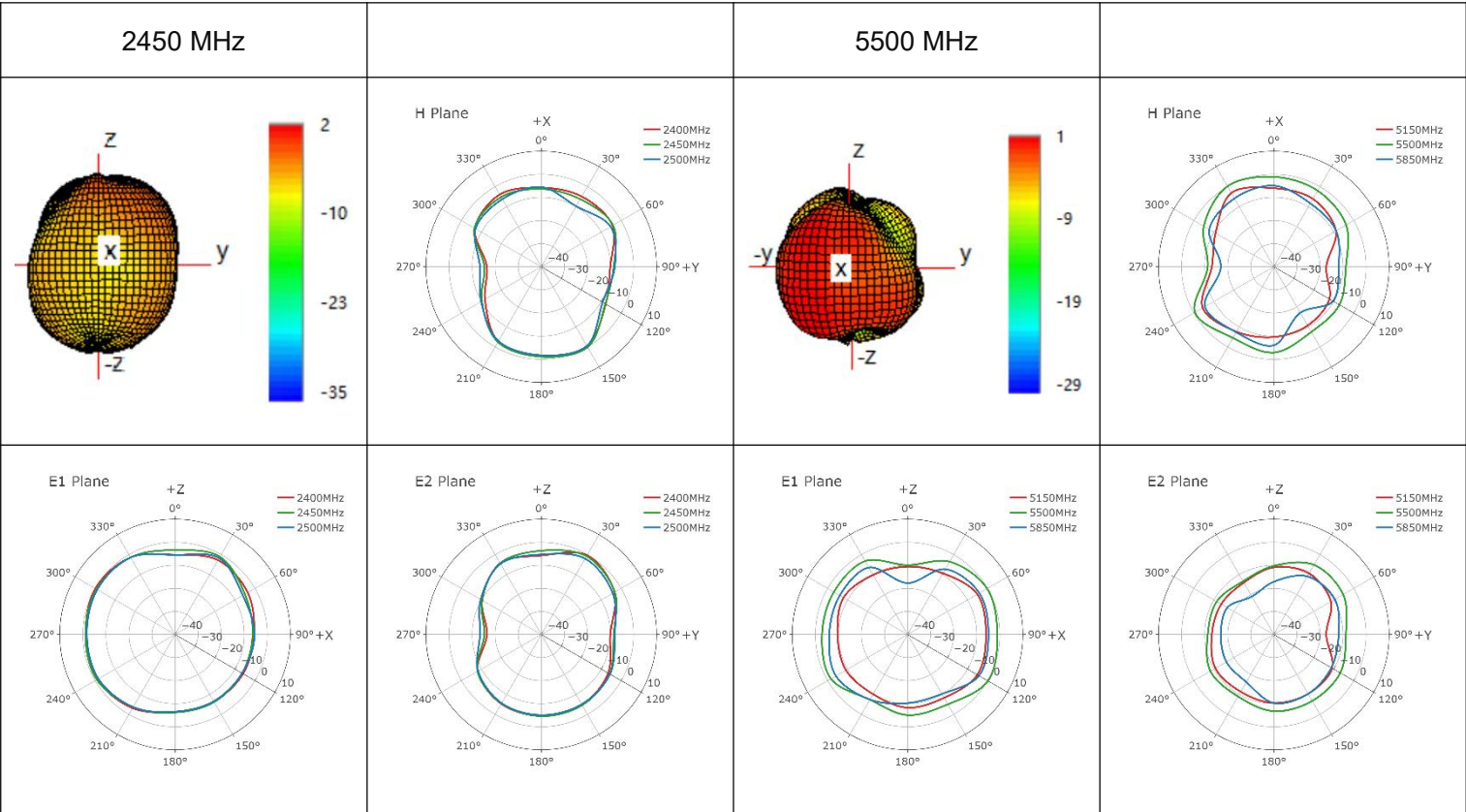


Frequency (MHz)	2400-2450	2450-2500	5150-5250	5250-5350	5470-5725	5725-5850
Gain (dBi)	1.1	1.1	-1.5	-0.2	1.0	-2.4

4.5. Radiation Pattern



H plane: the tangent of XY
E1 plane: the tangent of XZ
E2 plane: the tangent of YZ



5 Product Size (mm)

