

# Antenna

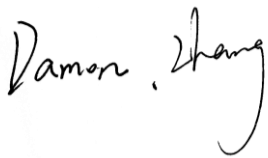
# FCM362K Datasheet

## Antenna Services

Version: 1.0

Date: 2023-11-01

Status: Preliminary

A handwritten signature in black ink that reads "Damon Zhang". The signature is written in a cursive style with a long, sweeping tail on the letter "g".

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# About the Document

## Revision History

Version	Date	Author	Note
-	2023-11-01	Damon Zhang	Creation of the document
1.0	2023-11-01	Damon Zhang	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 $\Omega$
VSWR	$\leq 4.0$
Gain	$\leq 1.0$ dBi
Polarization Type	Linear
Antenna type	PCB Printed Antenna

#### Mechanical Specifications

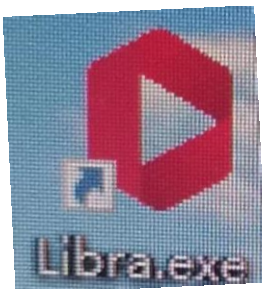
Antenna Size(mm)	11.5 x 6
Material	FR4
Color	Green
Working Temperature	-40 °C to +105 °C

## 4 Overall Performance

### 4.1. Test Environment

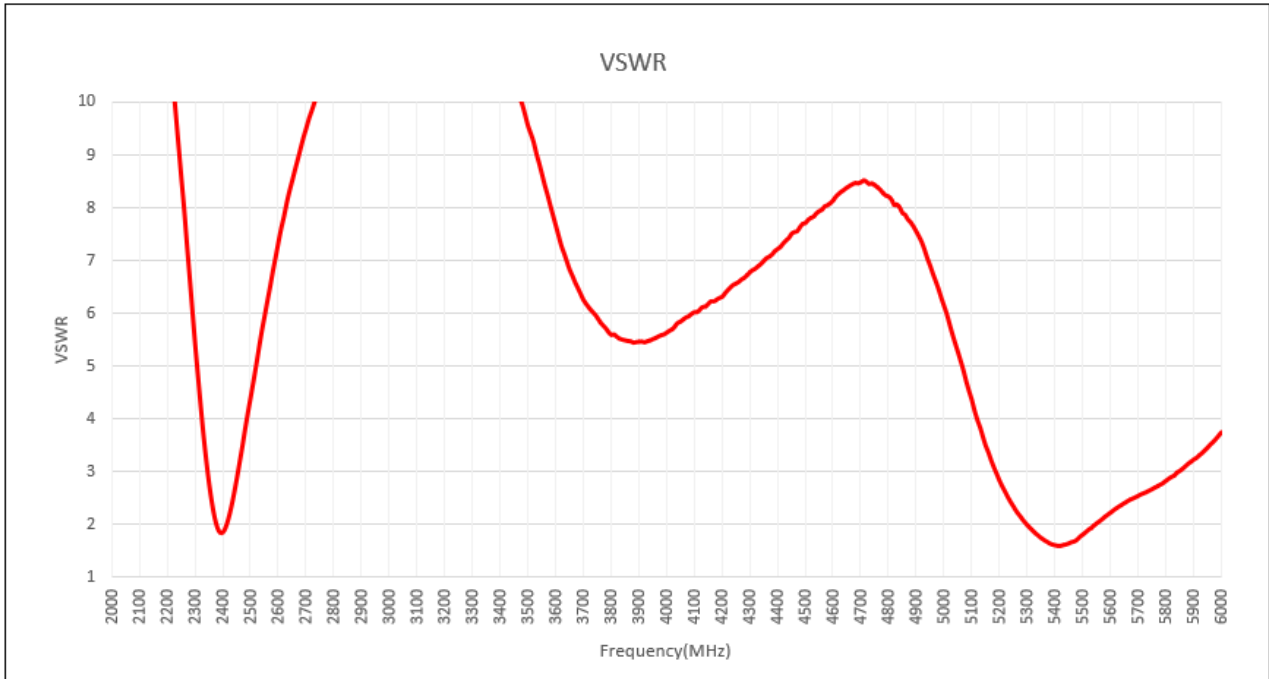
- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz
- Calibration date 2023/10/30

- Test the software: Libra



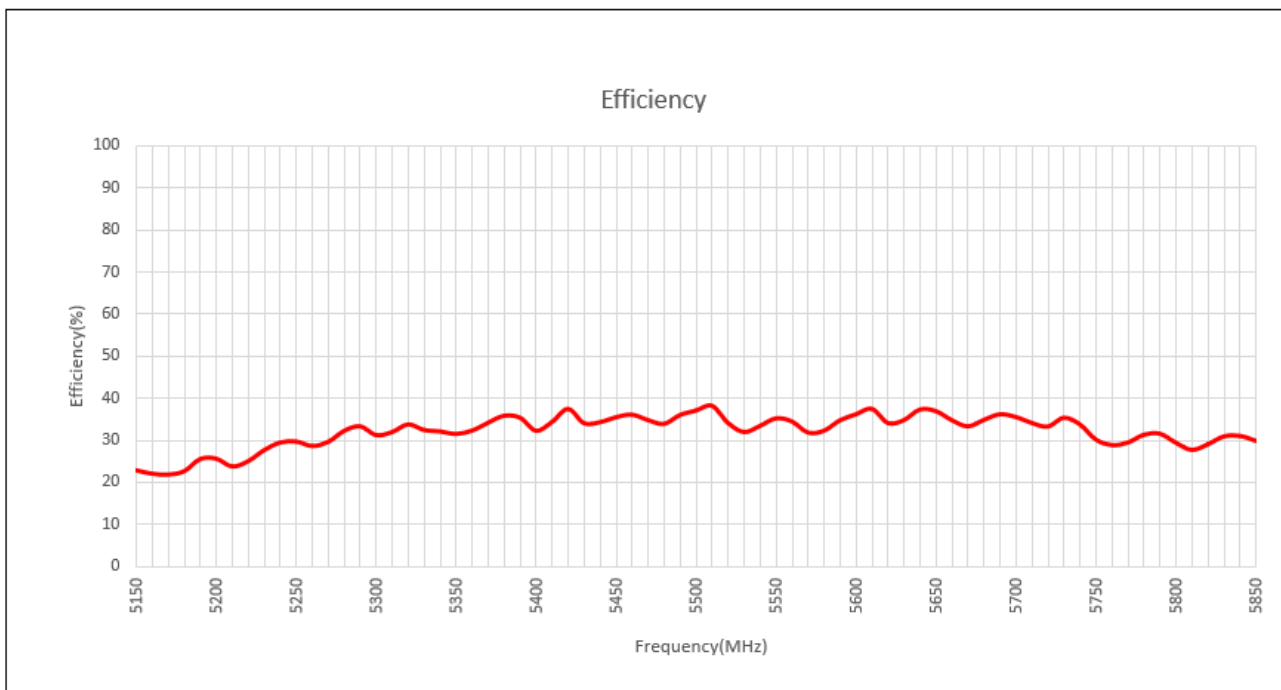


## 4.2. VSWR



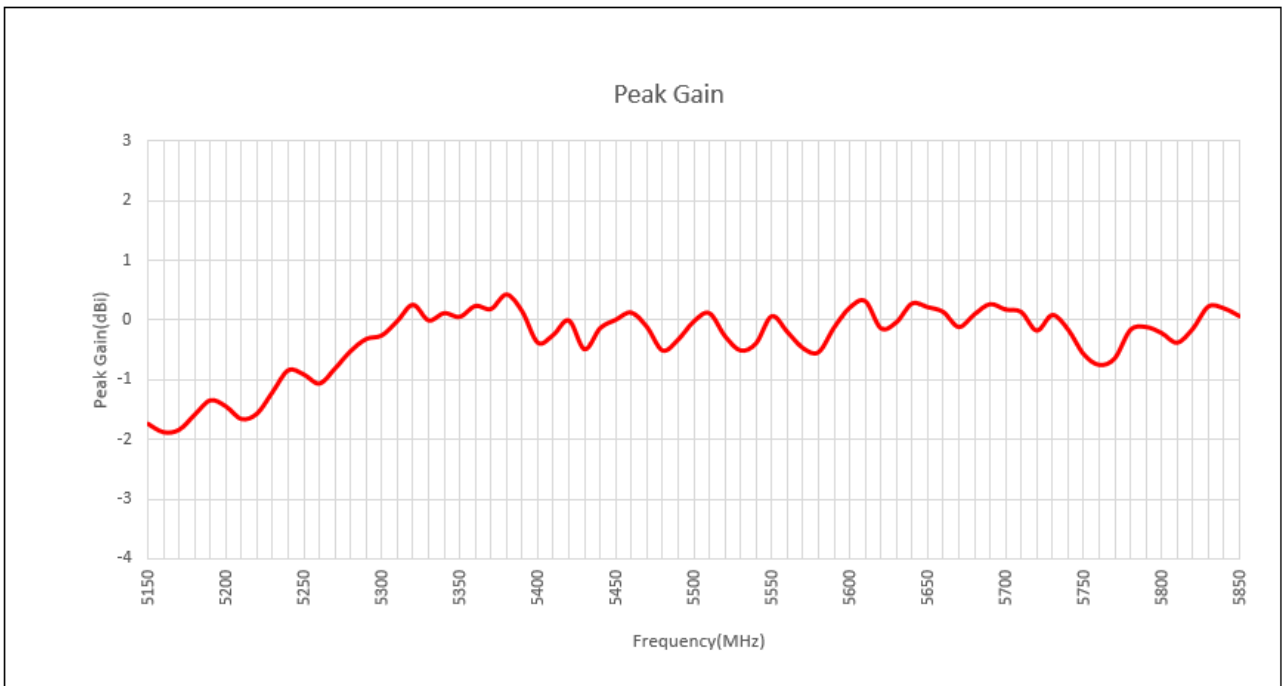
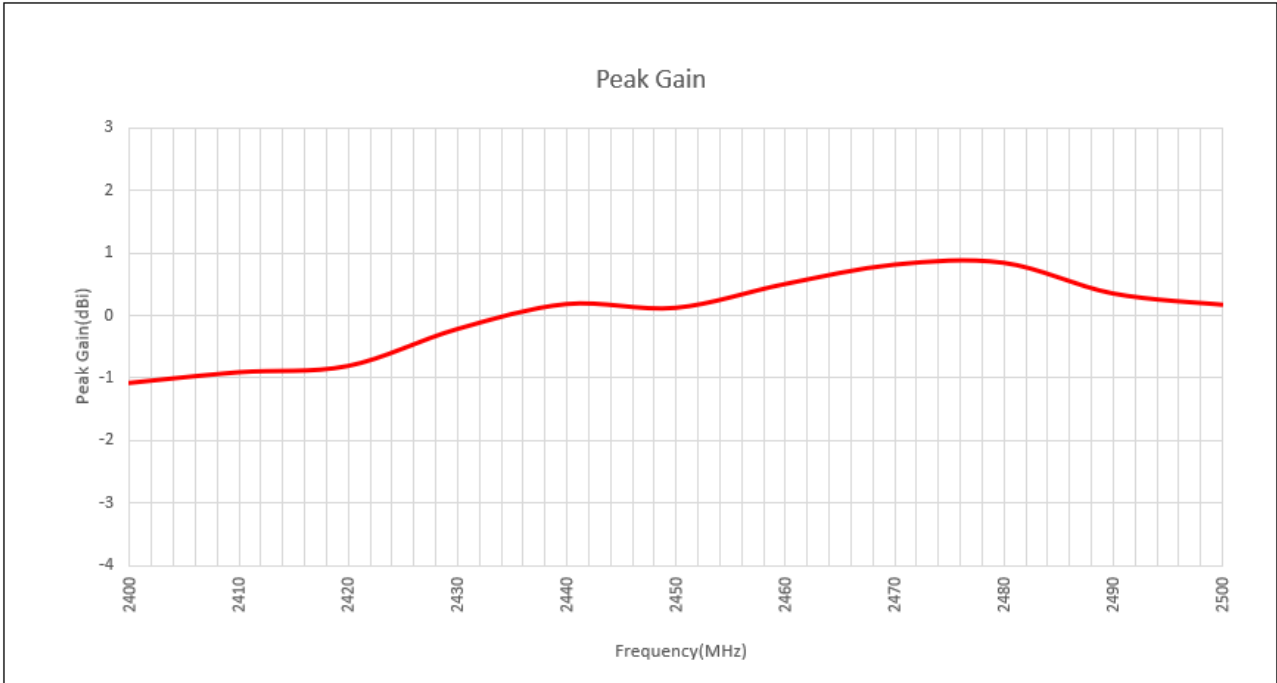
<b>Frequency (MHz)</b>	2400	2450	2500	5150	5350	5500	5750	5850
<b>VSWR</b>	1.8	2.6	4.0	3.5	1.7	1.8	2.7	3.0

### 4.3. Efficiency



<b>Frequency (MHz)</b>	2400	2450	2500	5150	5350	5500	5750	5850
<b>Efficiency (%)</b>	32	43	38	23	32	35	30	30

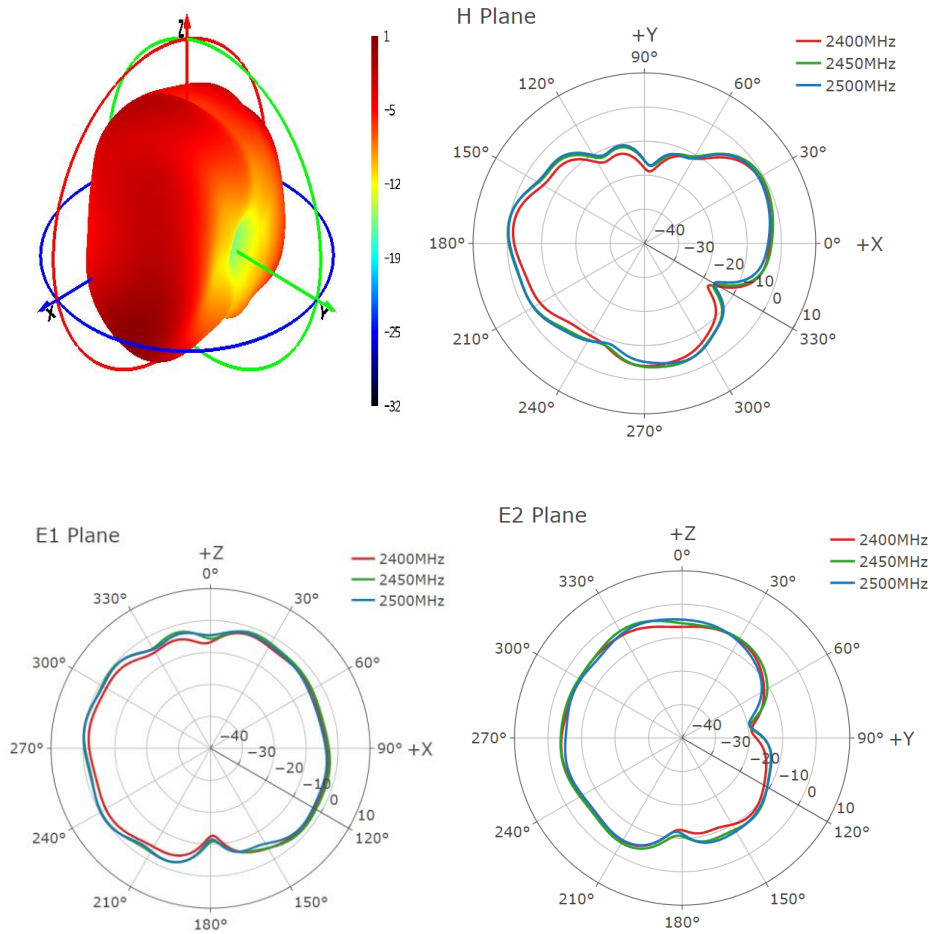
### 4.4. Gain



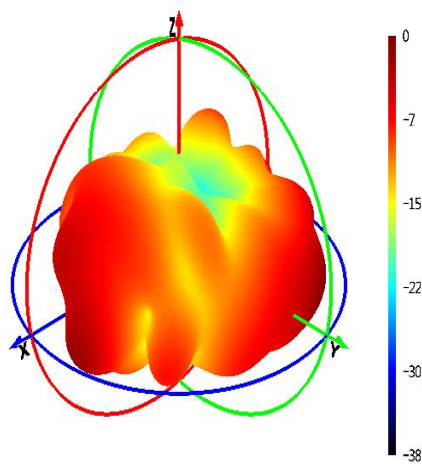
<b>Frequency (MHz)</b>	2400	2450	2500	5150	5350	5500	5750	5850
<b>Gain (dBi)</b>	-1.0	0.1	0.2	-1.8	0	0.1	-0.2	0

## 4.5. Radiation Pattern

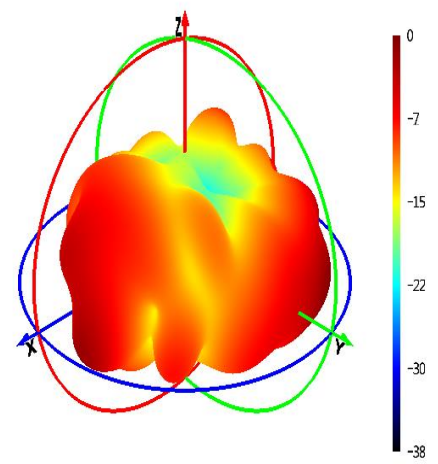
2450MHz



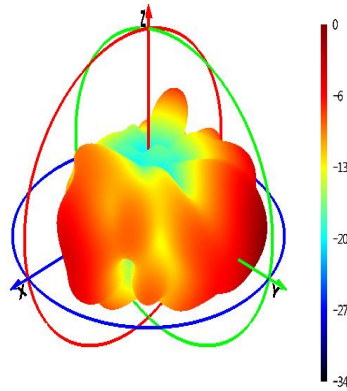
5150MHz



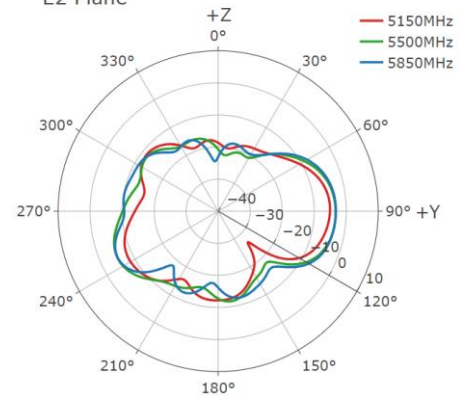
5500MHz



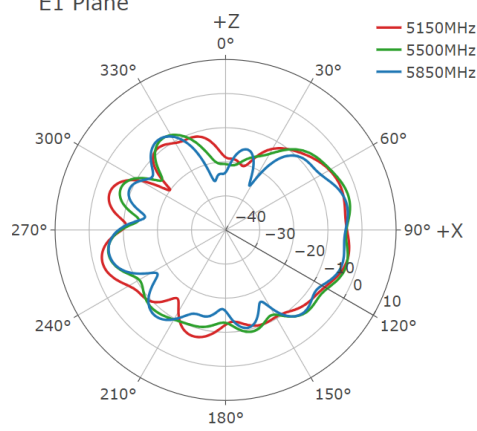
5850MHz



E2 Plane



E1 Plane



H Plane

