

# Antenna

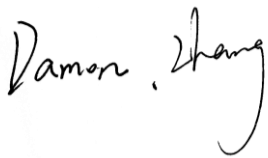
# FCM561D-P Datasheet

**Antenna Services**

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Status: Preliminary



At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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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

## Contents

About the Document.....	3
Contents.....	4
<b>1 Product Description.....</b>	<b>5</b>
<b>2 Product Features .....</b>	<b>5</b>
<b>3 Product Specifications .....</b>	<b>6</b>
<b>4 Overall Performance.....</b>	<b>7</b>
4.1. Test Environment .....	7
4.2. VSWR.....	8
4.3. Efficiency .....	9
4.4. Gain.....	10
4.5. Radiation Pattern .....	11
<b>5 Product Size .....</b>	<b>14</b>

## 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 manufacturer

- Quectel
- Wuhan R&D Center: Floor 4-5, A2 Hua Xiang Center, 776 Gao Xin Avenue, Dong Hu New Technology Development Zone, Hong Shan District, Wuhan City, Hubei, China.

## 4 Product Specifications

### Passive Electrical Specifications

Frequency Range	2400–2500 MHz
Input Impedance	50 $\Omega$
VSWR	$\leq 3.0$
Gain	$\leq 1.3$ dBi
Polarization Type	Linear
Antenna type	PCB Printed Antenna

### Mechanical Specifications

Antenna Size(mm)	17 × 5.5
Material	FR4
Color	Green
Working Temperature	-40 °C to +105 °C

## 5 Overall Performance

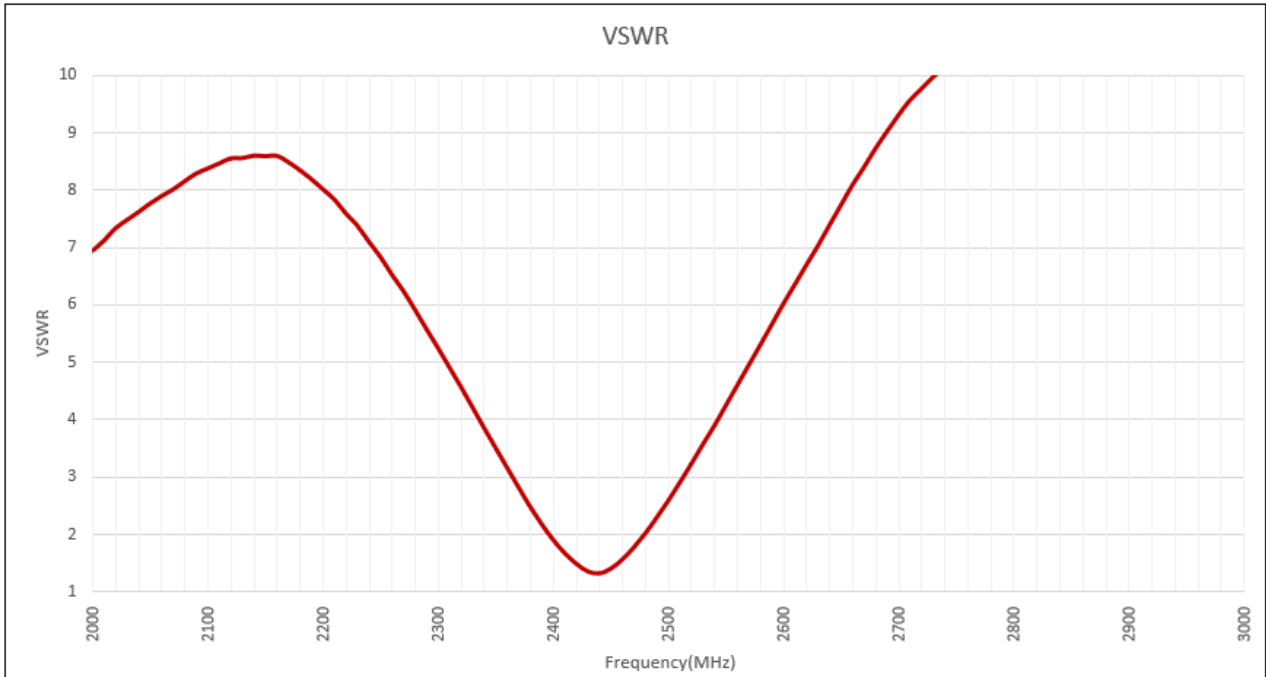
### 5.1. Test Environment

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



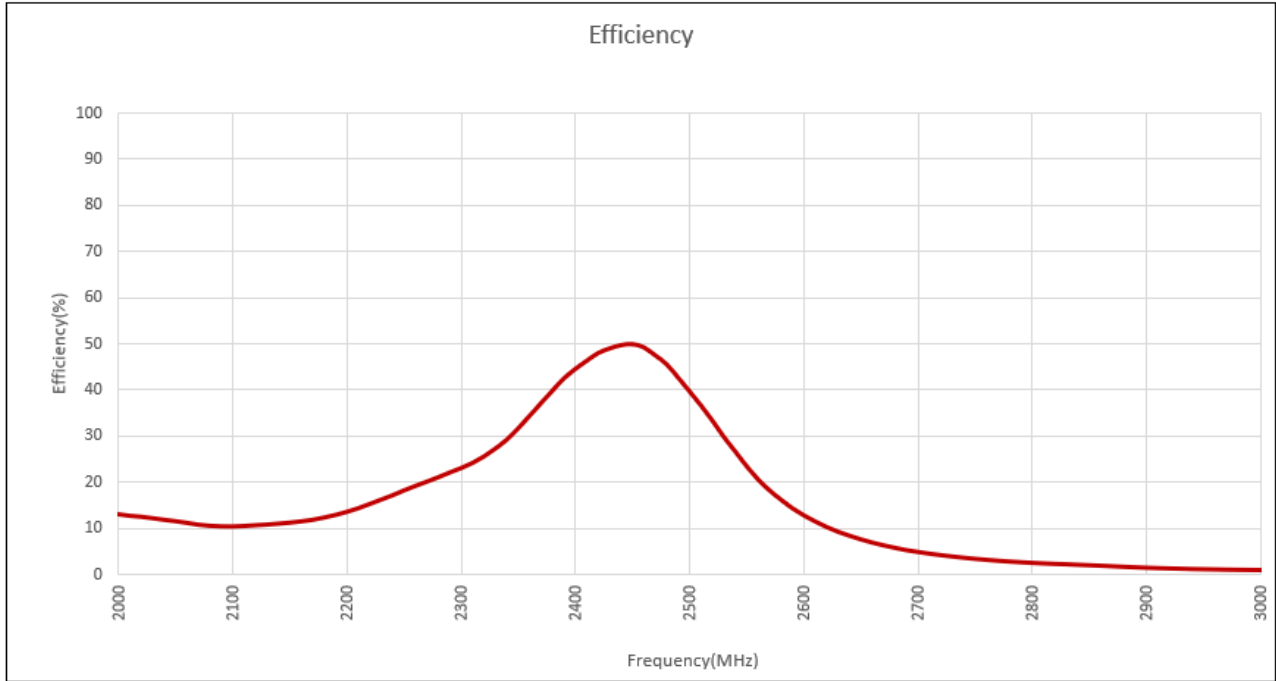


## 5.2. VSWR



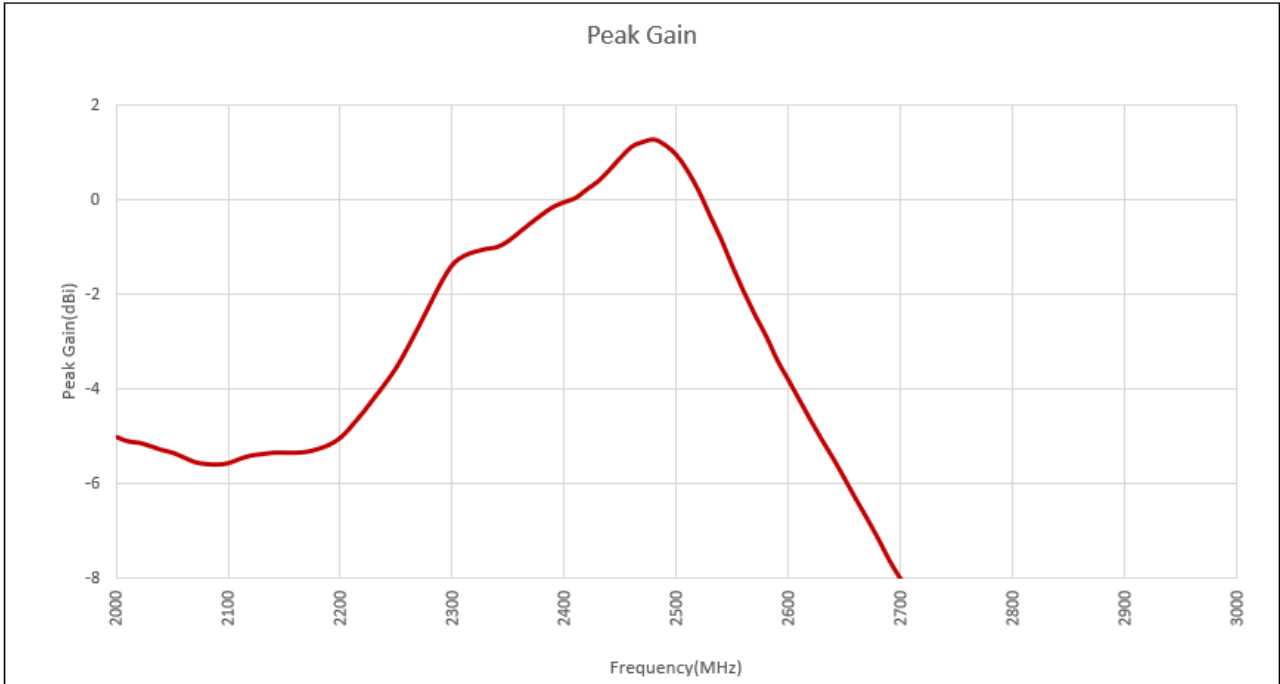
<b>Frequency (MHz)</b>	2400	2450	2500
<b>VSWR</b>	1.9	1.4	2.6

### 5.3. Efficiency



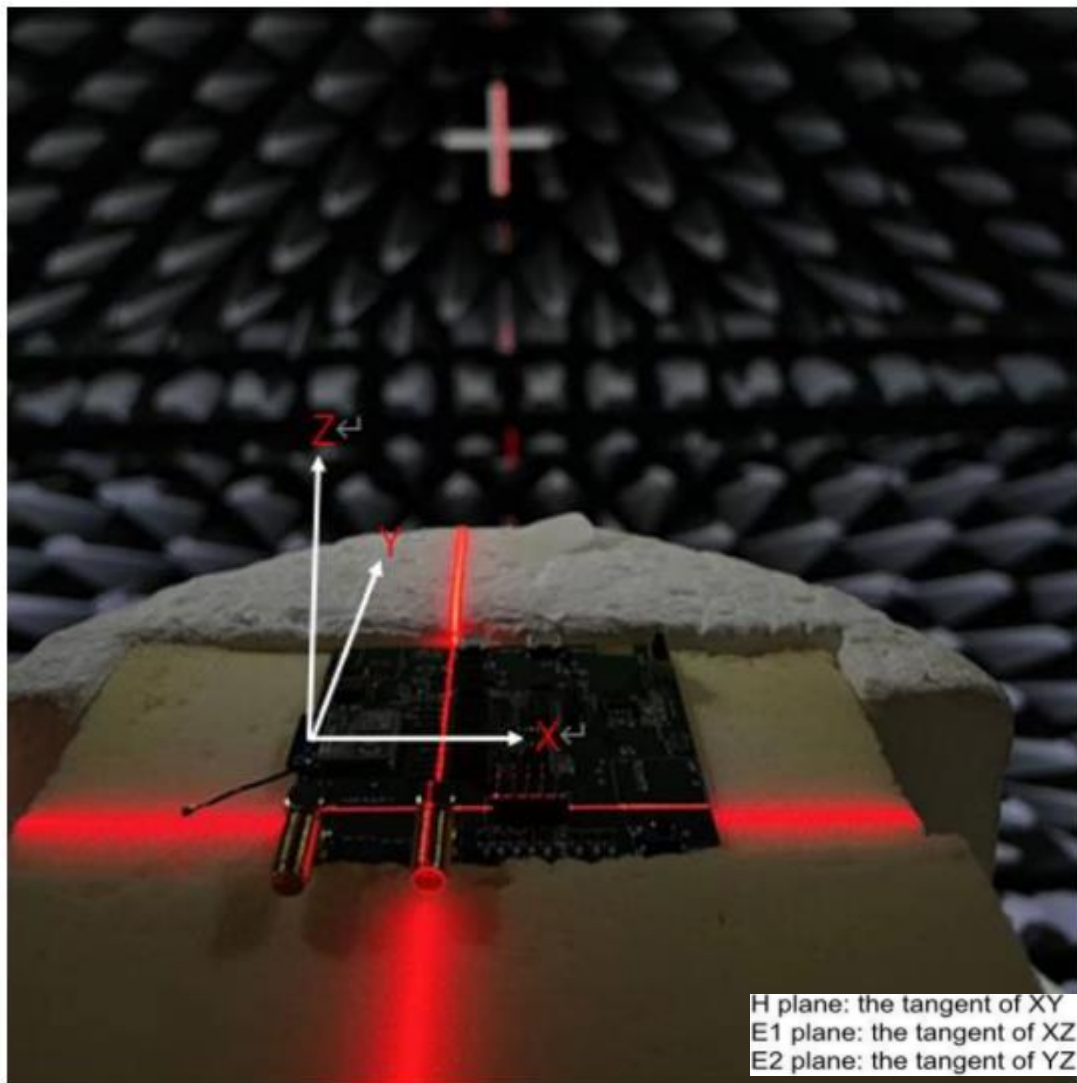
<b>Frequency (MHz)</b>	2400	2450	2500
<b>Efficiency (%)</b>	44	50	40

### 5.4. Gain

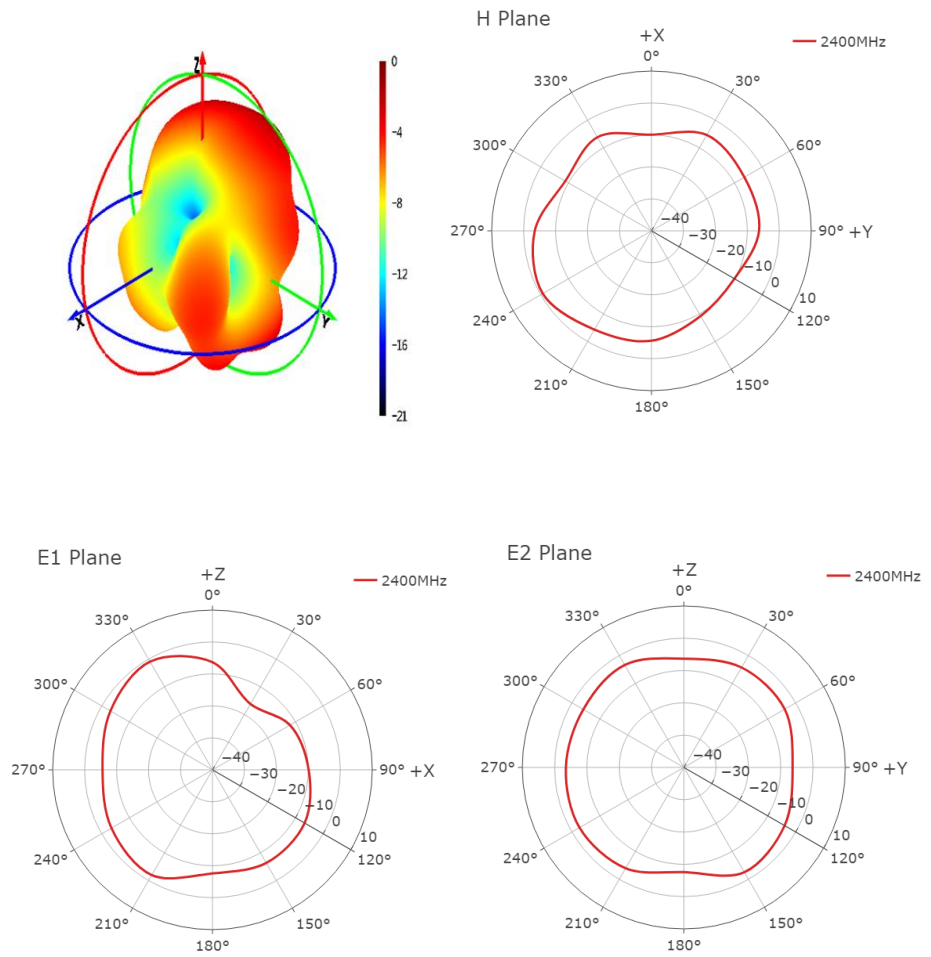


<b>Frequency (MHz)</b>	2400	2450	2500
<b>Gain (dBi)</b>	0	0.9	0.9

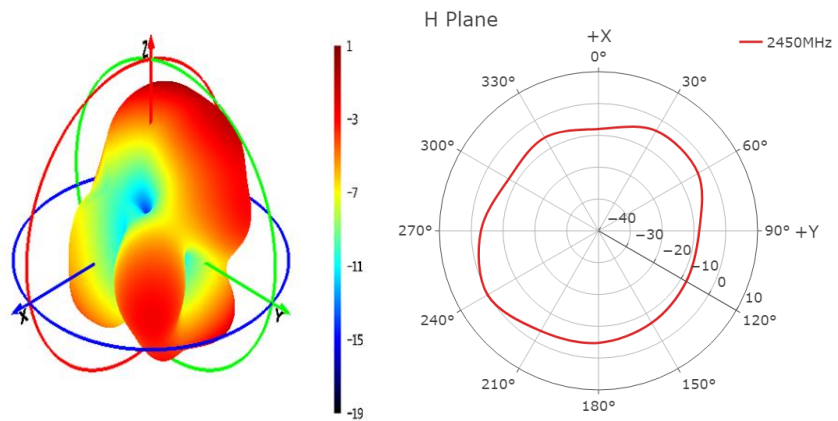
### 5.5. Radiation Pattern

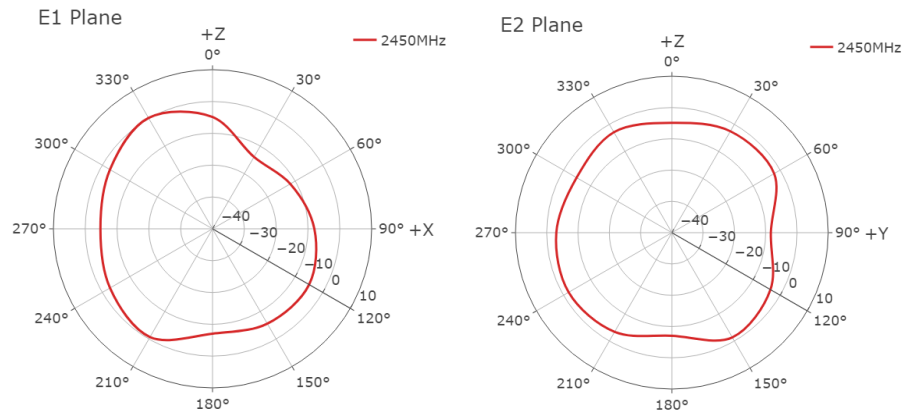


2400MHz

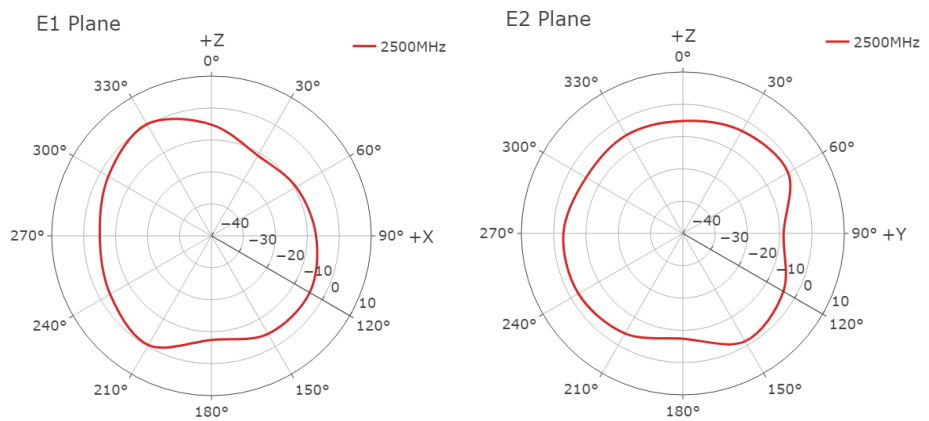
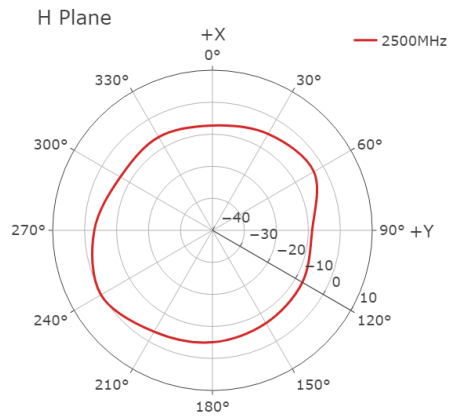
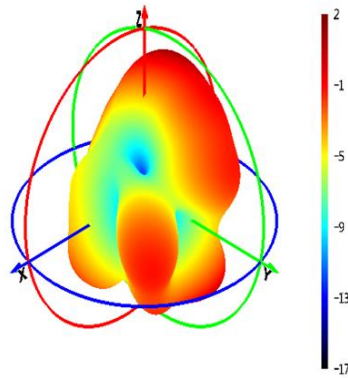


2450MHz





2500MHz



**6 Product Size (mm)**

