

# PCB Antenna

# **FC41D** Datasheet

**Antenna Services**

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Status: Preliminary



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# About the Document

## Revision History

Version	Date	Author	Note
-	2022-05-26	Boris.Wang	Creation of the document
1.0	2022-05-26	Boris.Wang	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

- Wifi
- High efficiency
- Excellent performance

### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	2400–2500 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 3.0$
Gain	-1.8dBi
Polarization Type	Linear

#### Detailed Passive Electrical Specifications

<b>Frequency</b>	
Range	2400–2500
(MHz)	
<b>VSWR</b>	
(Max.)	2.7
<b>Average</b>	
Efficiency	35
(%)	
<b>Max. Peak</b>	
Gain (dBi)	-1.8

## 4 Overall Performance

### 4.1. Test Environment

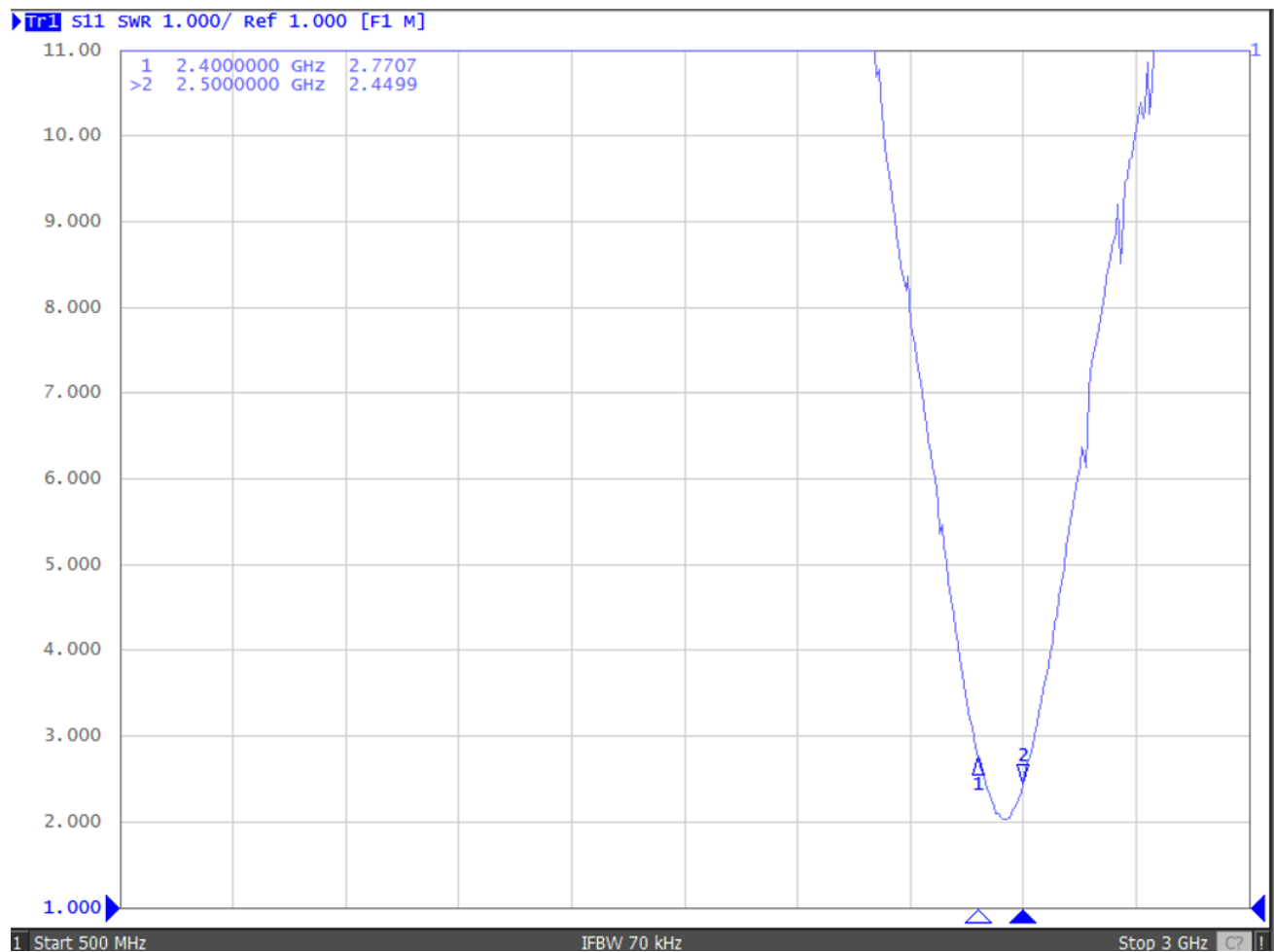
- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz



Other description:

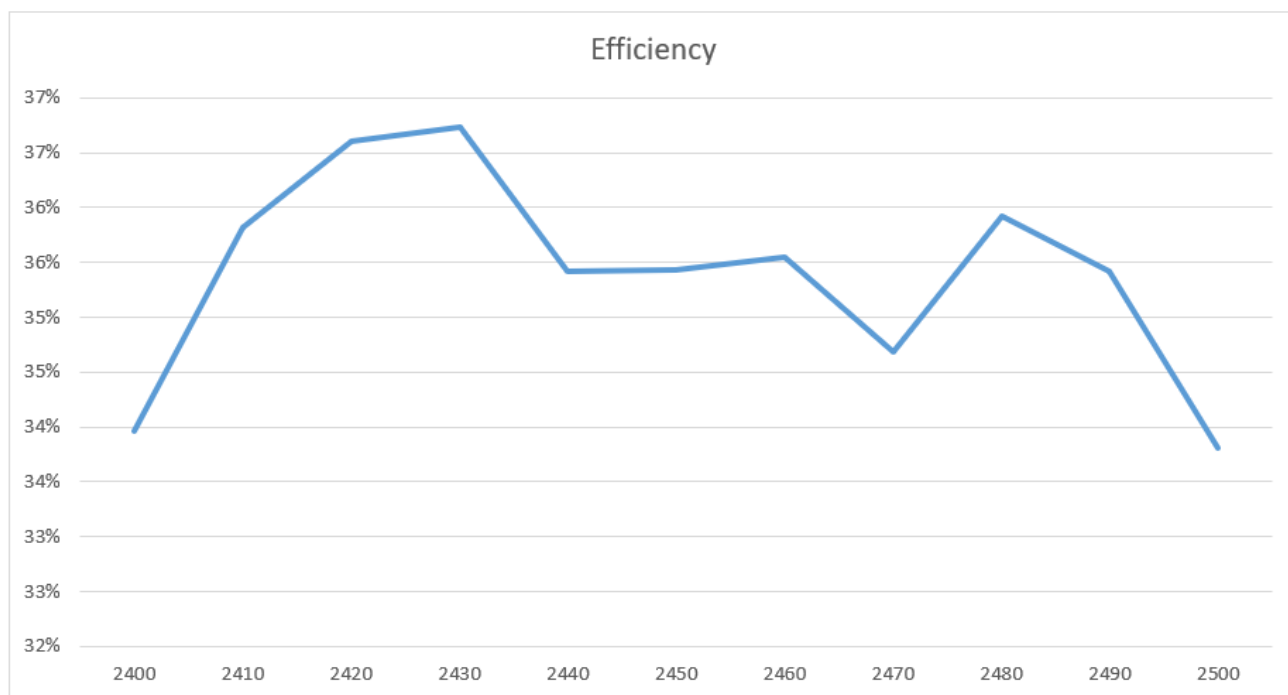


## 4.2. VSWR



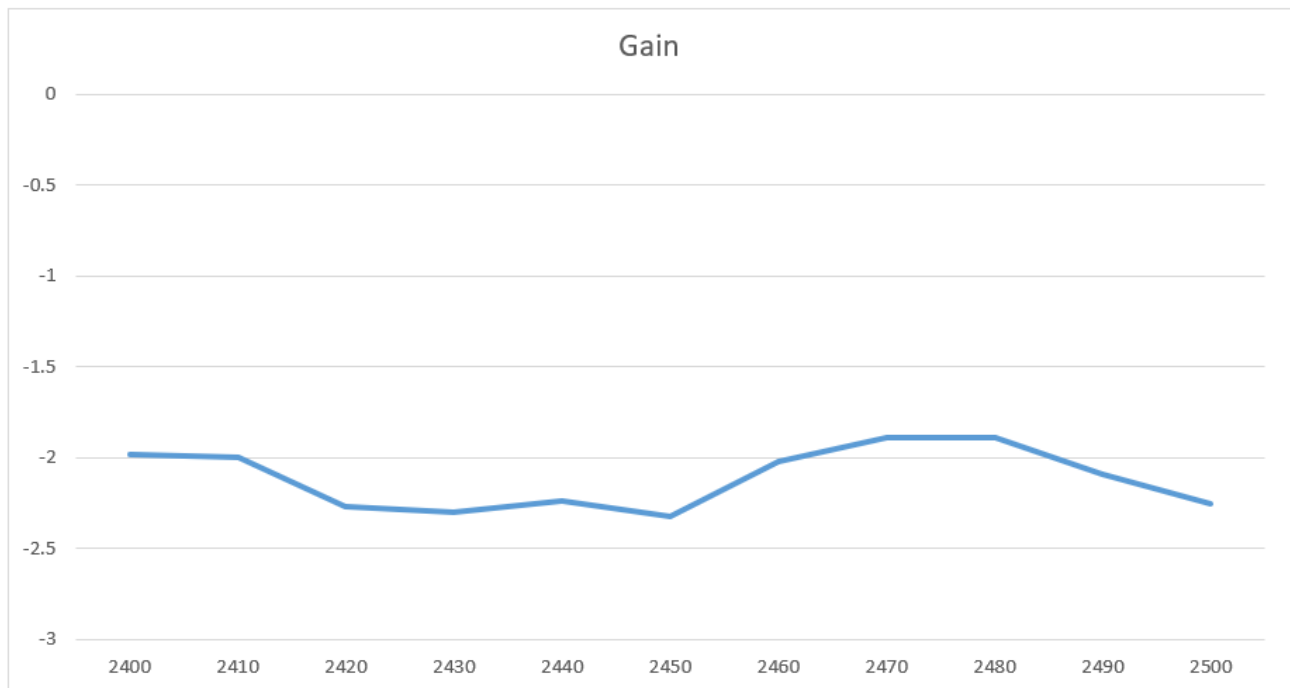
Frequency (MHz)	2400	2500
VSWR	2.77	2.44

### 4.3. Efficiency



Frequency (MHz)	2400	2500
Efficiency (%)	34	33

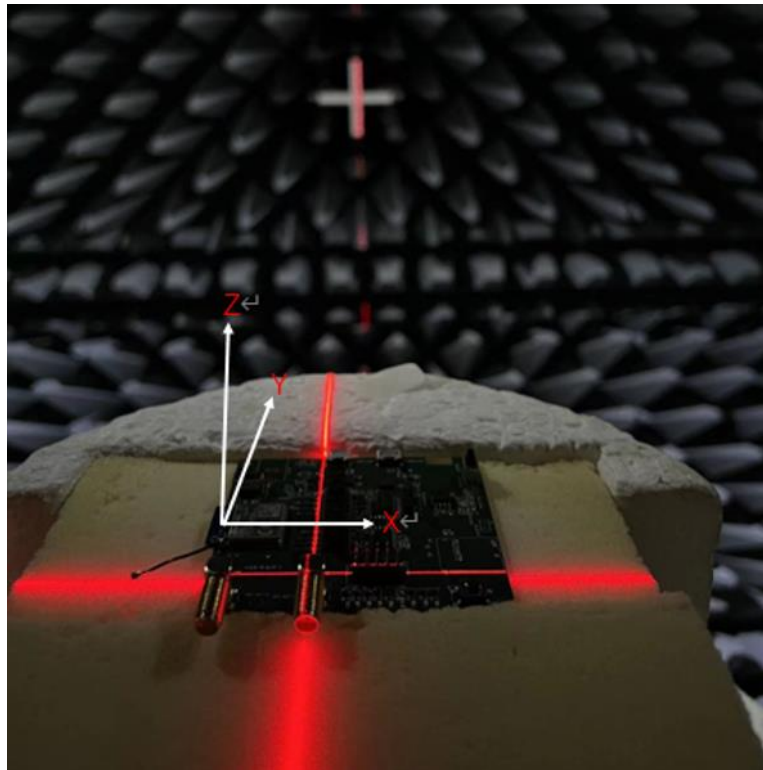
## 4.4. Gain



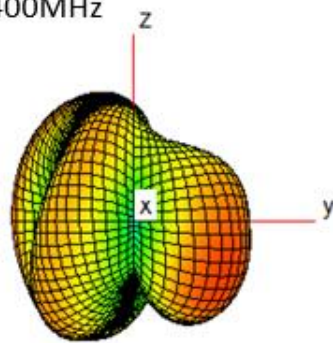
Frequency (MHz)	2400	2500
Gain (dBi)	-2	-2.2

## 4.5. Radiation Pattern

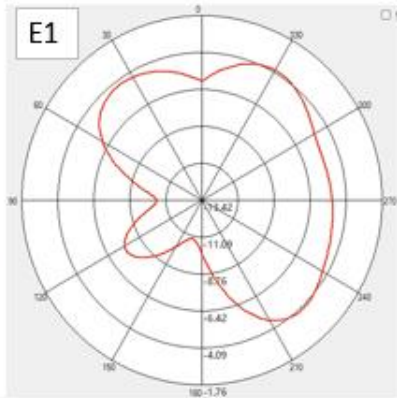
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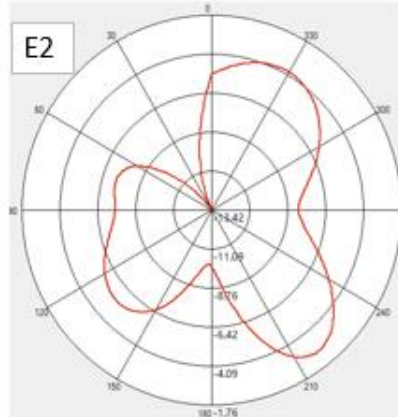
2400MHz



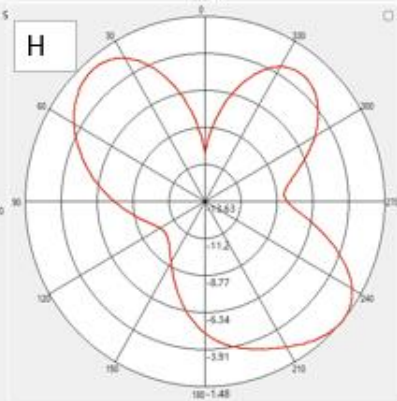
E1



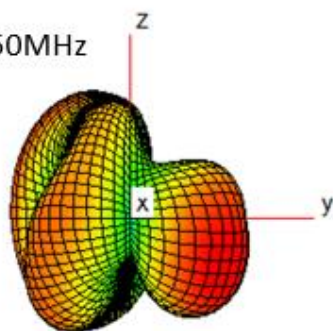
E2



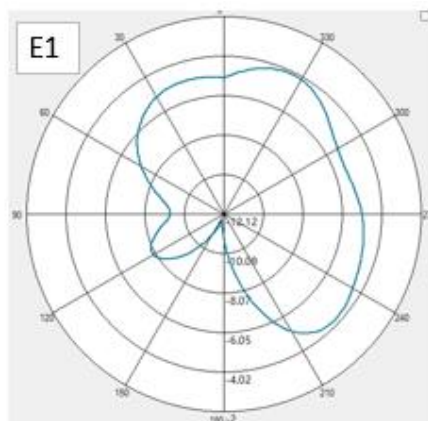
H



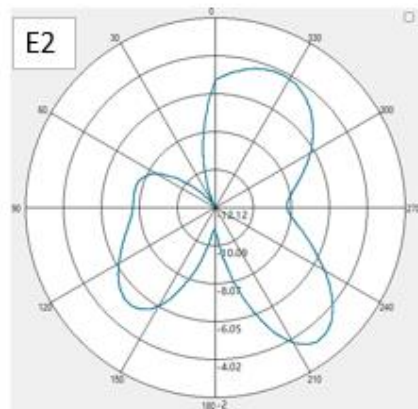
2450MHz



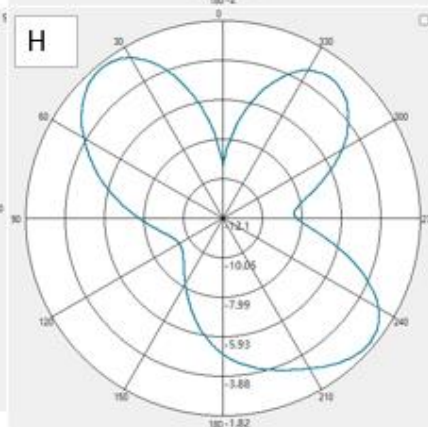
E1

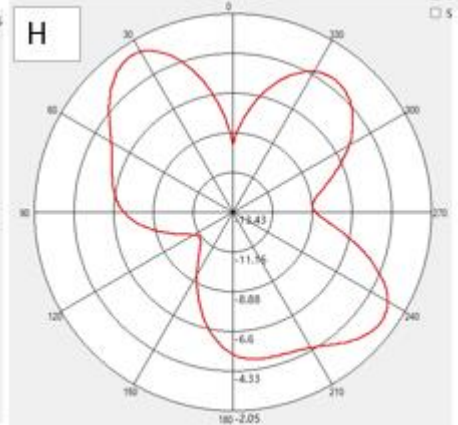
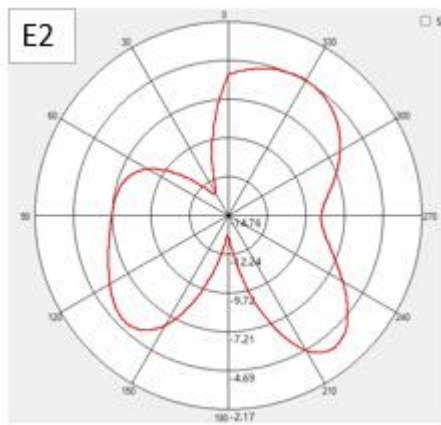
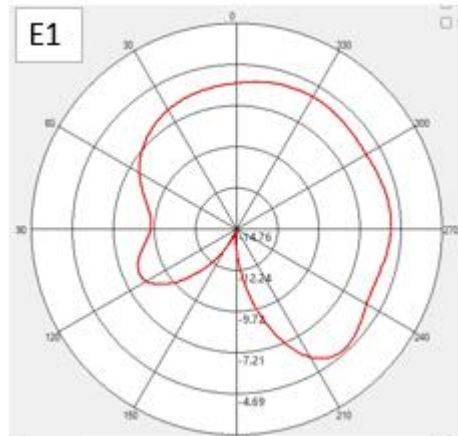
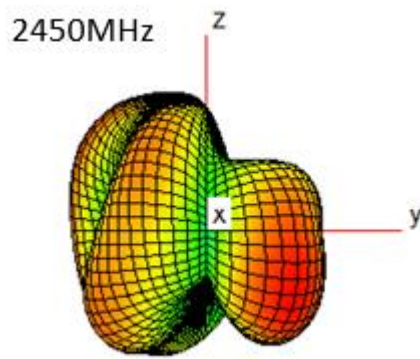


E2



H





## 5 Product Size (mm)

