

PCB Antenna

FC41D Datasheet

Antenna Services

Version: 1.0

Date: 2022-05-26

Status: Preliminary



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Quectel Wireless Solutions Co., Ltd.

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

Tel: +86 21 5108 6236

Email: info@quectel.com

Or our local offices. For more information, please visit:

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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 Ω
VSWR	≤ 3.0
Gain	$\leq 2\text{dBi}$
Polarization Type	Linear

Detailed Passive Electrical Specifications

Frequency	
Range	2400–2500
(MHz)	
VSWR	2.7
(Max.)	
Average	
Efficiency	35
(%)	
Max. Peak	2
Gain (dBi)	

4 Overall Performance

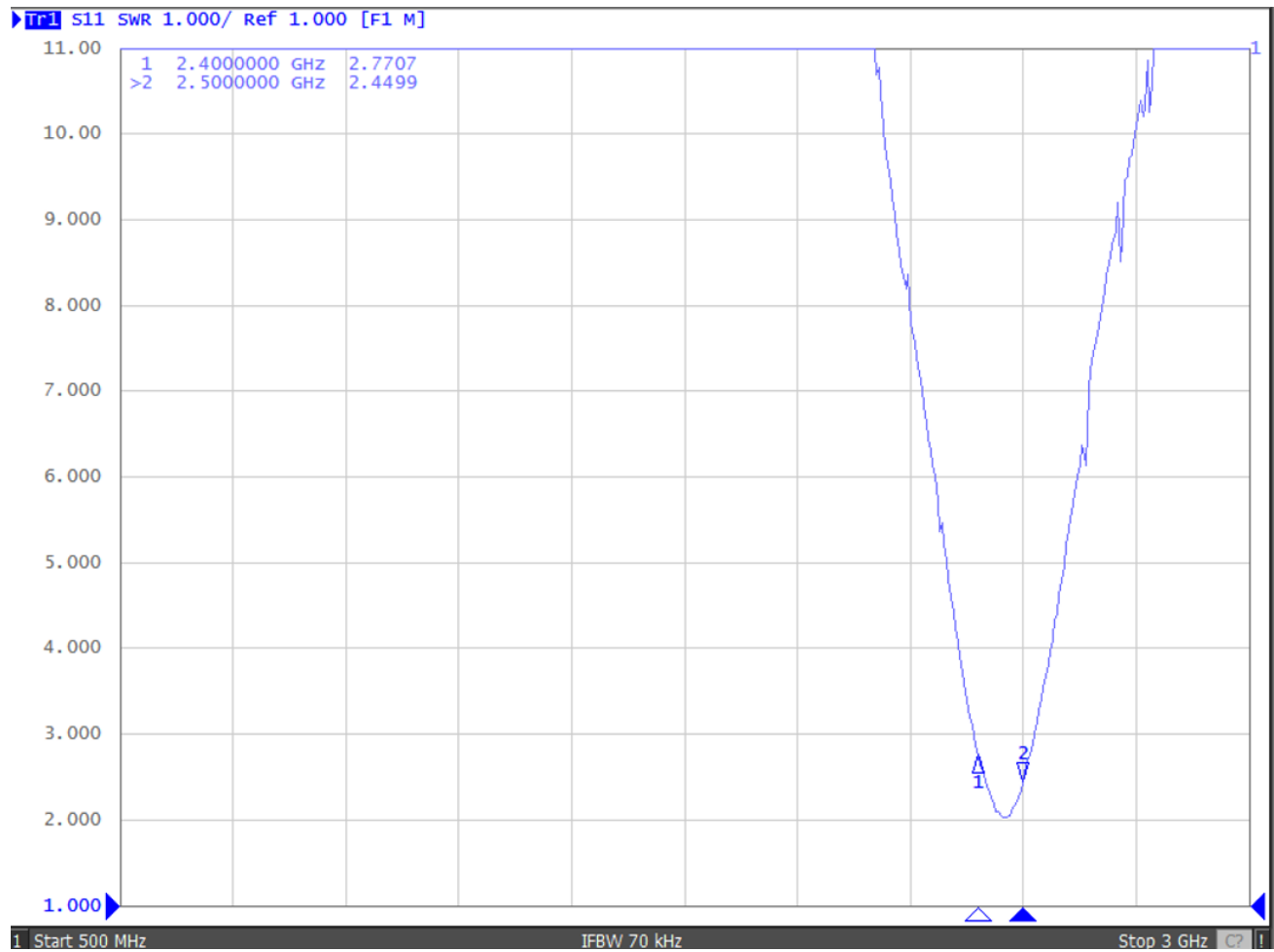
4.1. Test Environment

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



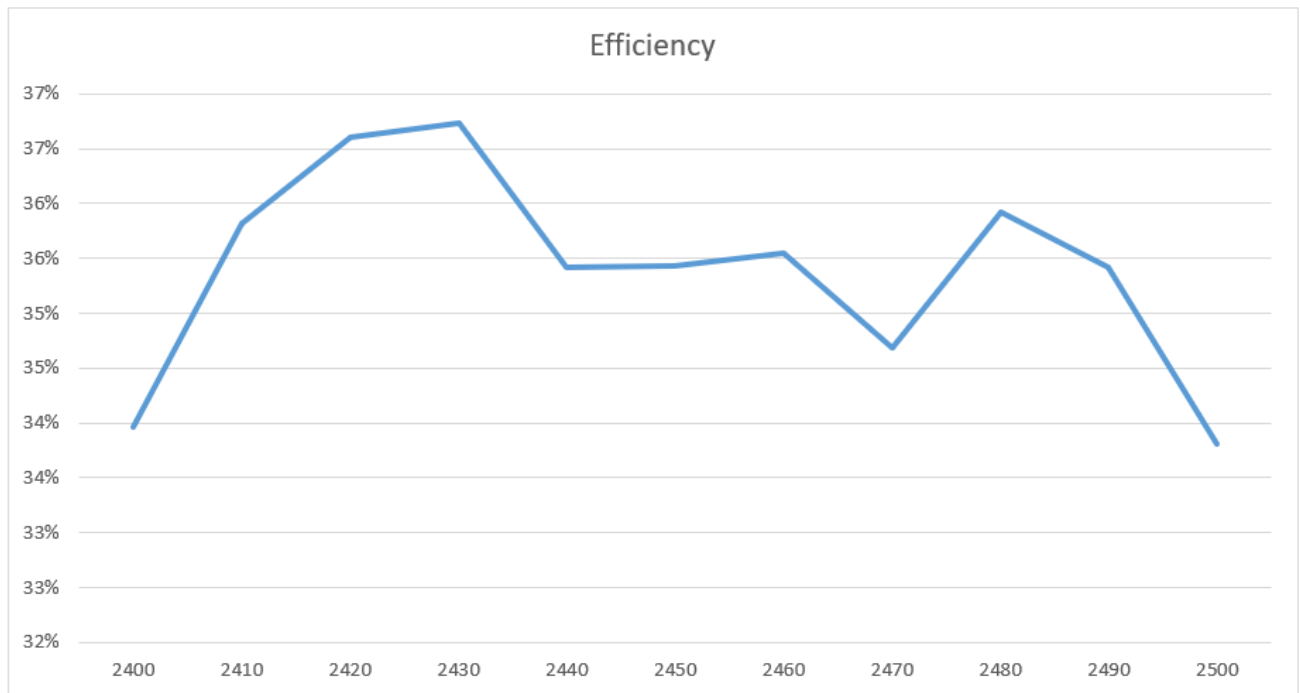
Other description:

4.2. VSWR



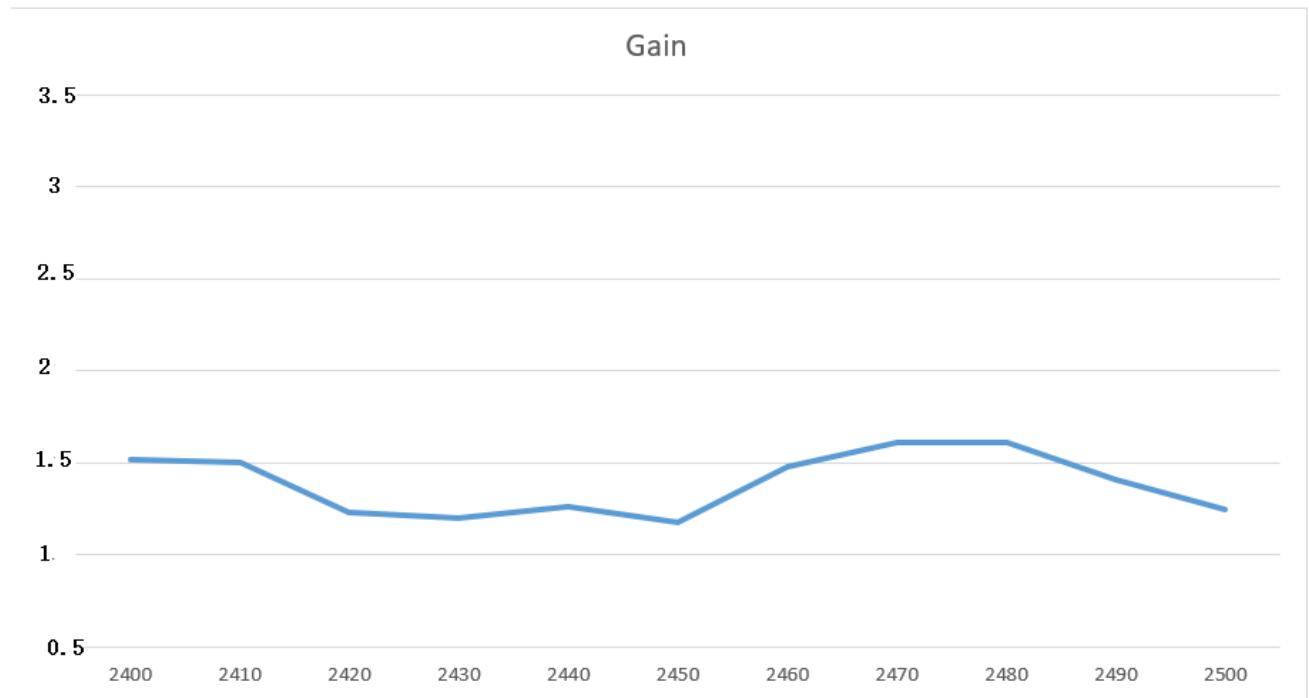
Frequency (MHz)	2400	2500
VSWR	2.77	2.44

4.3. Efficiency



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

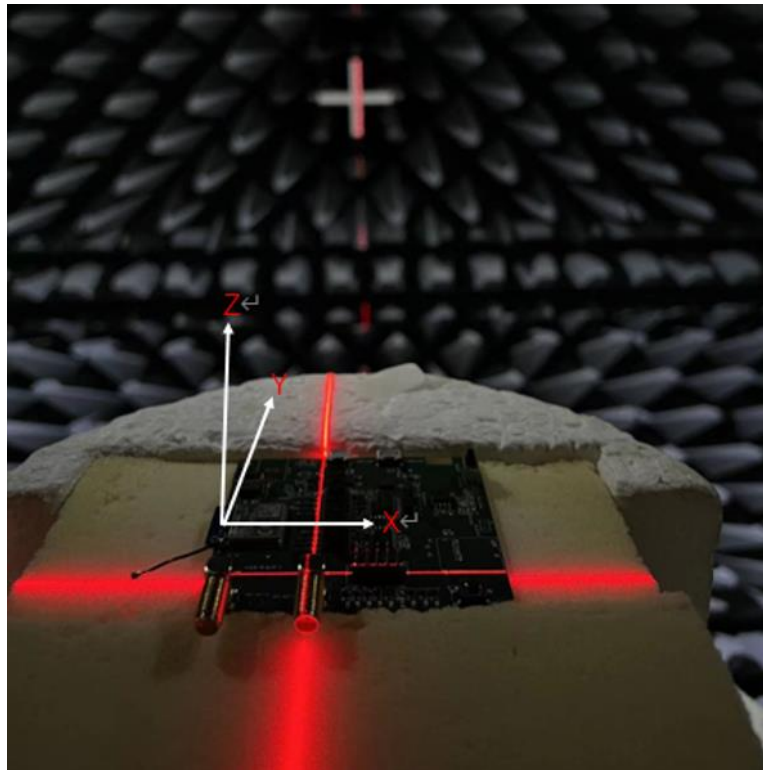
4.4. Gain



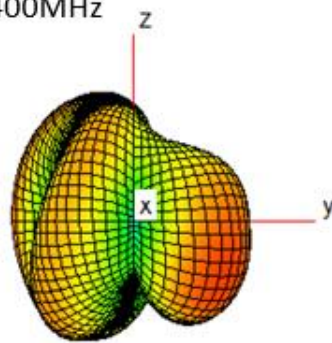
Frequency (MHz)	2400	2500
Gain (dBi)	1.6	1.2

4.5. Radiation Pattern

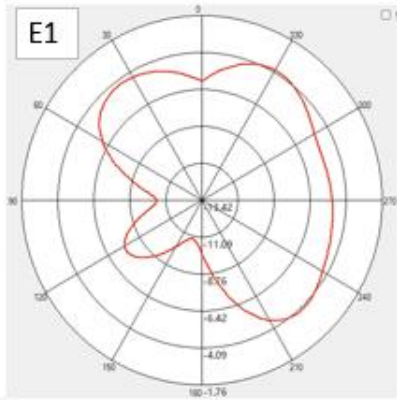
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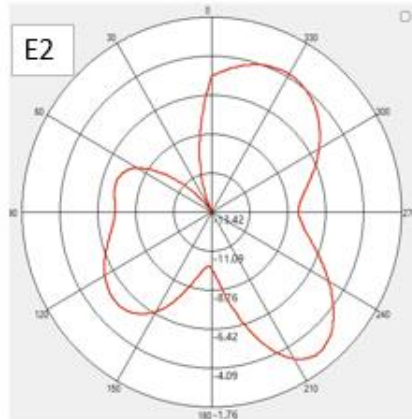
2400MHz



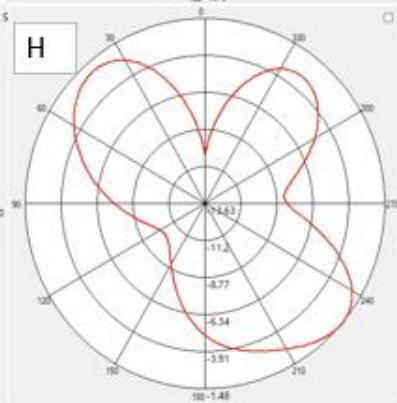
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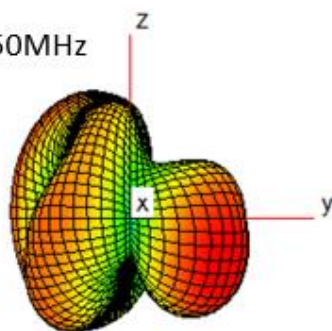
E2



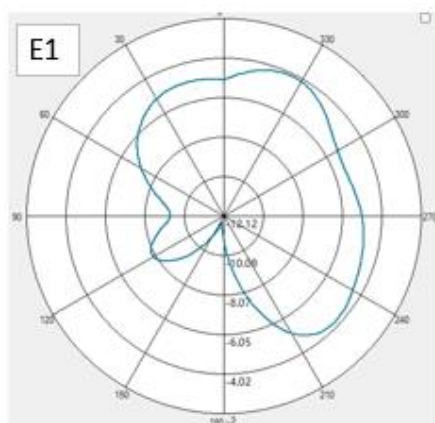
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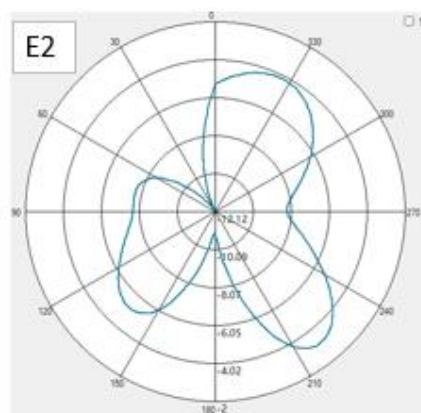
2450MHz



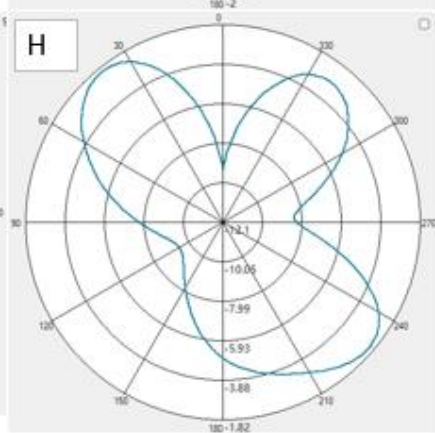
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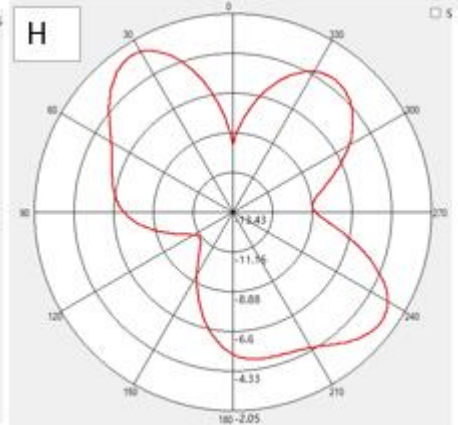
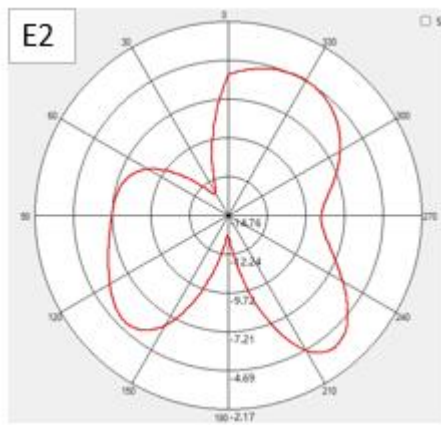
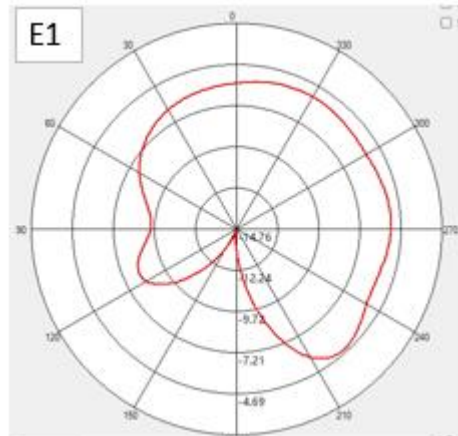
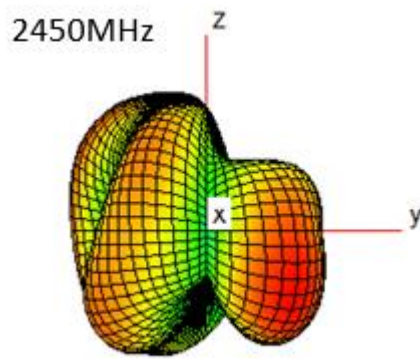


E2



H





5 Product Size (mm)

