

# Antenna

# YKW00A0FA Datasheet

**Antenna Services**

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# About the Document

## Revision History

Version	Date	Author	Note
-	2022-07-15	Aslan Chen /Joye WANG	Creation of the document
1.0	2022-07-15	Aslan Chen /Joye WANG	First official release

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## 1 Product Description

Quectel Wi-Fi antenna covers 2.4 GHz, 5 GHz, and up to 7 GHz bands, fully satisfying customers' requirements for Wi-Fi 5, Wi-Fi 6, and Wi-Fi 6E. There are various antenna types, including built-in FPC antenna, ceramic patch antenna, and other external antennas of different shapes or sizes. The antenna performance meets the customers' demands for efficiency, gain, and radiation and ensures the superior experience of the customers' products in use.

## 2 Product Features

- 2.4G WIFI
- High efficiency
- Excellent performance

### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	2400–2500 MHz
Input Impedance	50 $\Omega$
VSWR	$\leq 1.5$
Gain	$\leq 4.1$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size(mm)	35.5 × 30.5
Material	PCB
Cable Type& Length	$\Phi$ 1.13 Black & 205 mm
Connect Type	RF1
Color	Black
Mounting Type	Adhesive
Working Temperature	-40 °C to +85 °C

## 4 Overall Performance

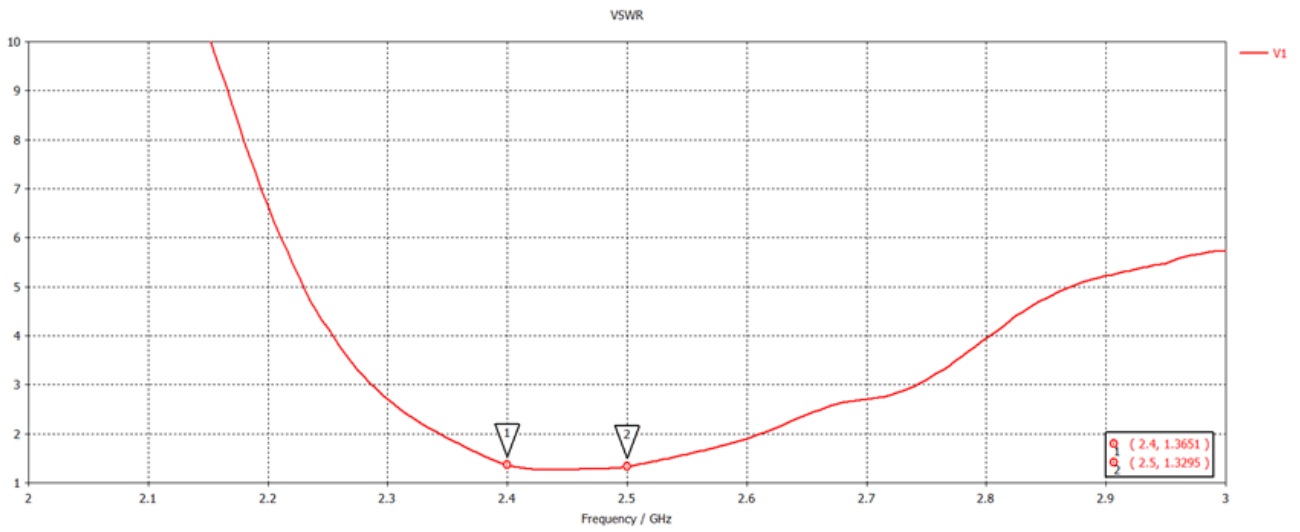
### 4.1. Test Environment

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



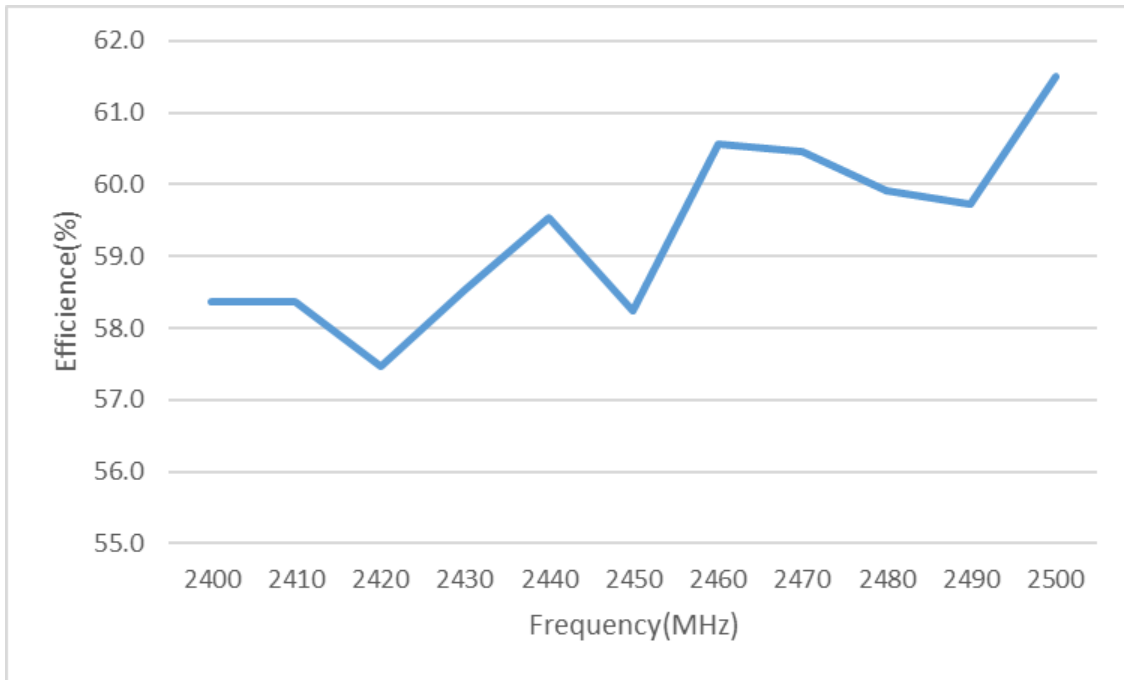


## 4.2. VSWR



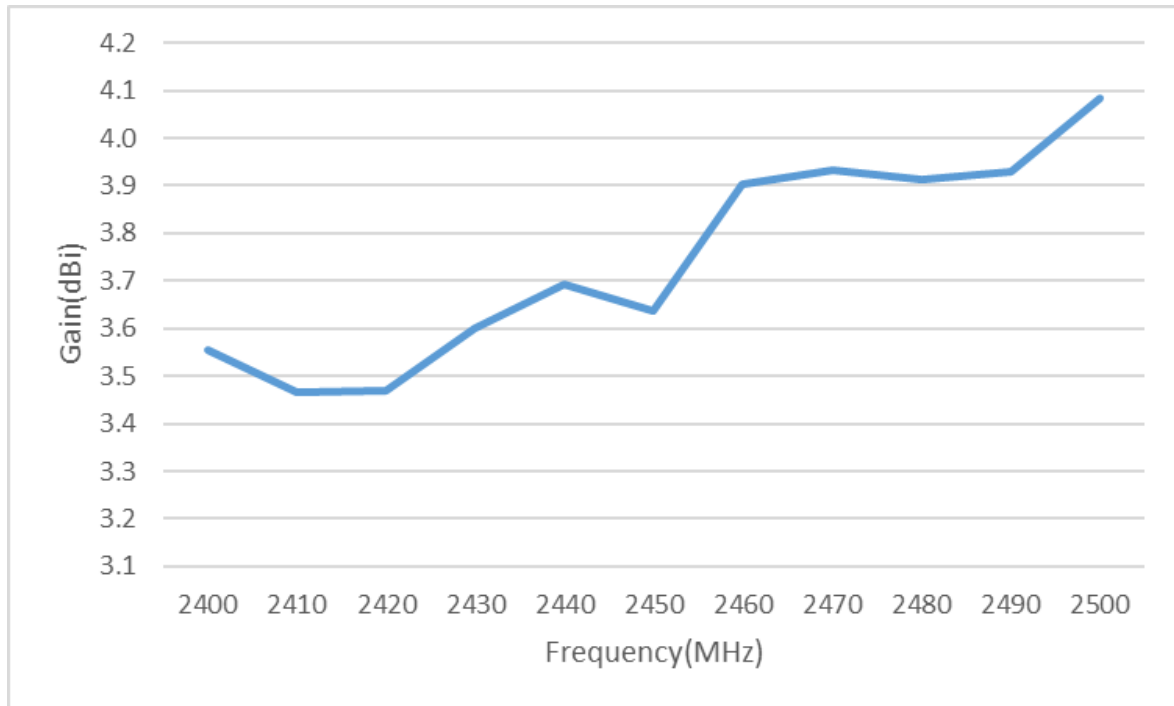
Frequency (MHz)	2400	2500
VSWR	1.4	1.3

### 4.3. Efficiency



<b>Frequency (MHz)</b>	2400	2500
<b>Efficiency (%)</b>	58.4	61.5

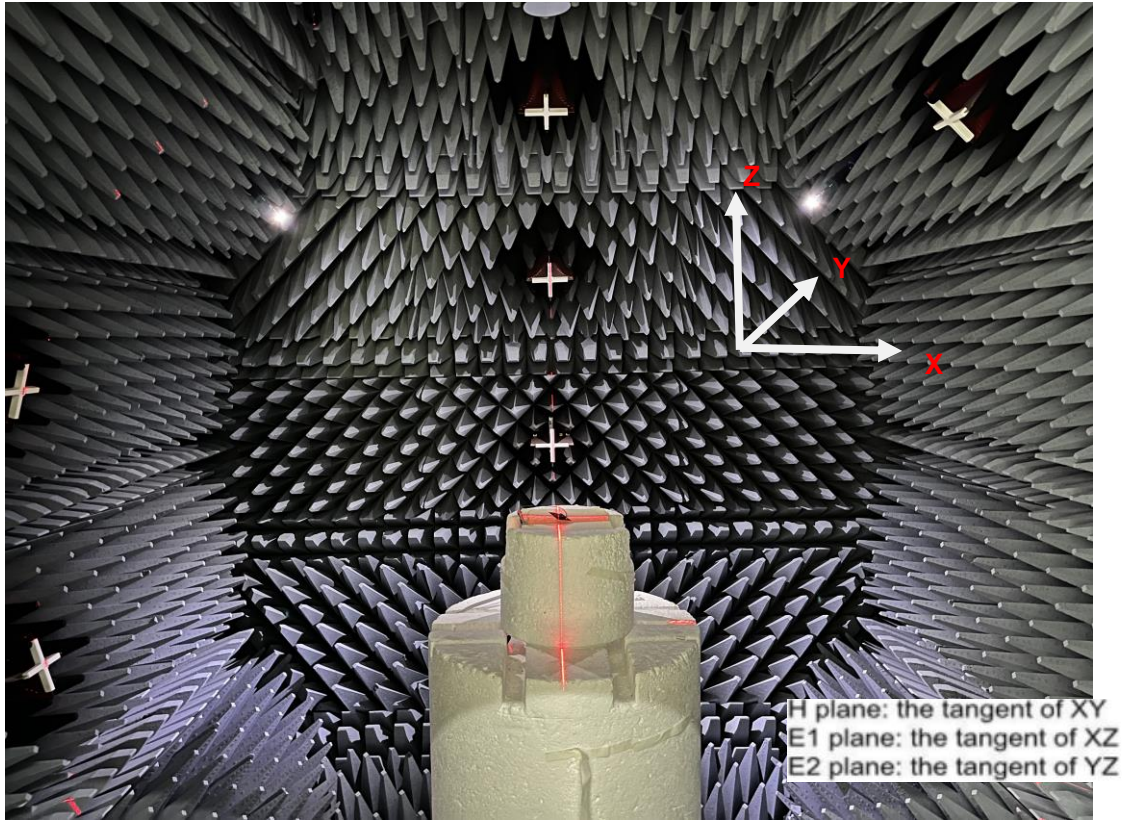
#### 4.4. Gain



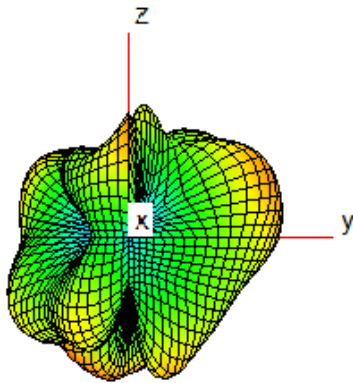
<b>Frequency (MHz)</b>	2400	2500
<b>Gain (dBi)</b>	3.6	4.1

## 4.5. Radiation Pattern

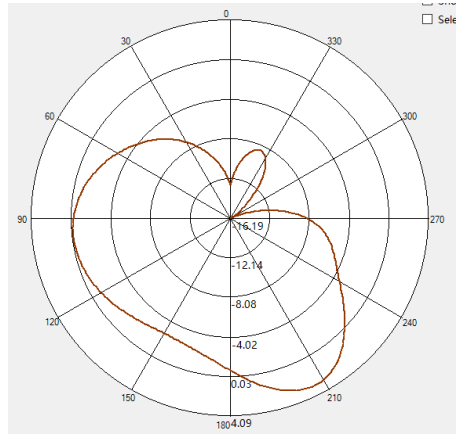
- Test condition: free space



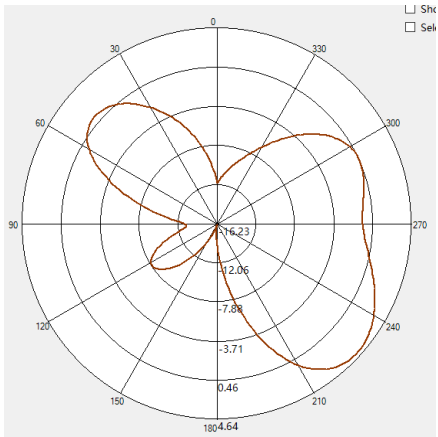
**2400MHz**



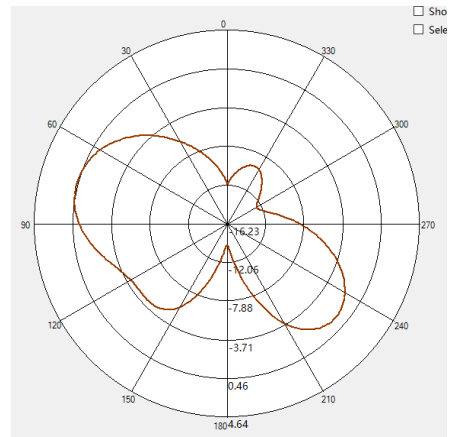
**2400MHz H**



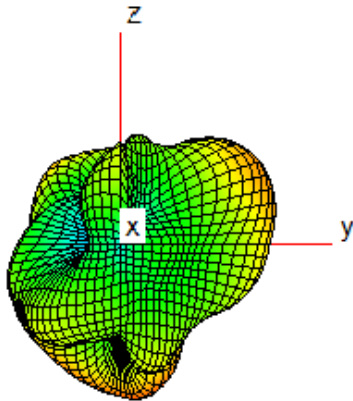
**2400MHz E1**



**2400MHz E2**



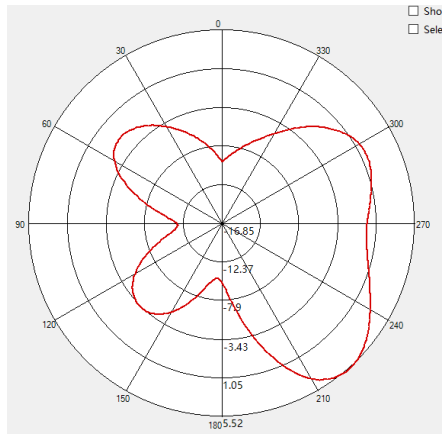
**2500MHz**



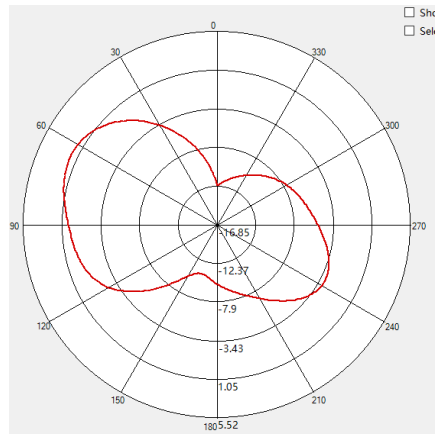
**2500MHz H**



**2500MHz E1**



**2500MHz E2**



## 5 Product Size

