

# Antenna

# **YF0011PA** Datasheet

**Antenna Services**

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# About the Document

## Revision History

Version	Date	Author	Note
-	2022-12-09	Raoul RAO Blake XIANG	Creation of the document
1.0	2022-12-09	Raoul RAO Blake XIANG	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

- 2.4 & 5.8 GHz Wi-Fi dual-band
- High efficiency
- Excellent performance

### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	2400–2500 MHz, 5150–5850 MHz
Input Impedance	50 $\Omega$
VSWR	$\leq 2$
Gain	$\leq 2.48$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size(mm)	38.9 × 9
Material	FPC
Cable Type & Length	Φ1.13 Black &150 mm
Connector	RF 1
Color	Black
Weight	Typ: 0.7g
Mounting Type	Adhesive
Working Temperature	-40 °C to +85 °C

## 4 Overall Performance

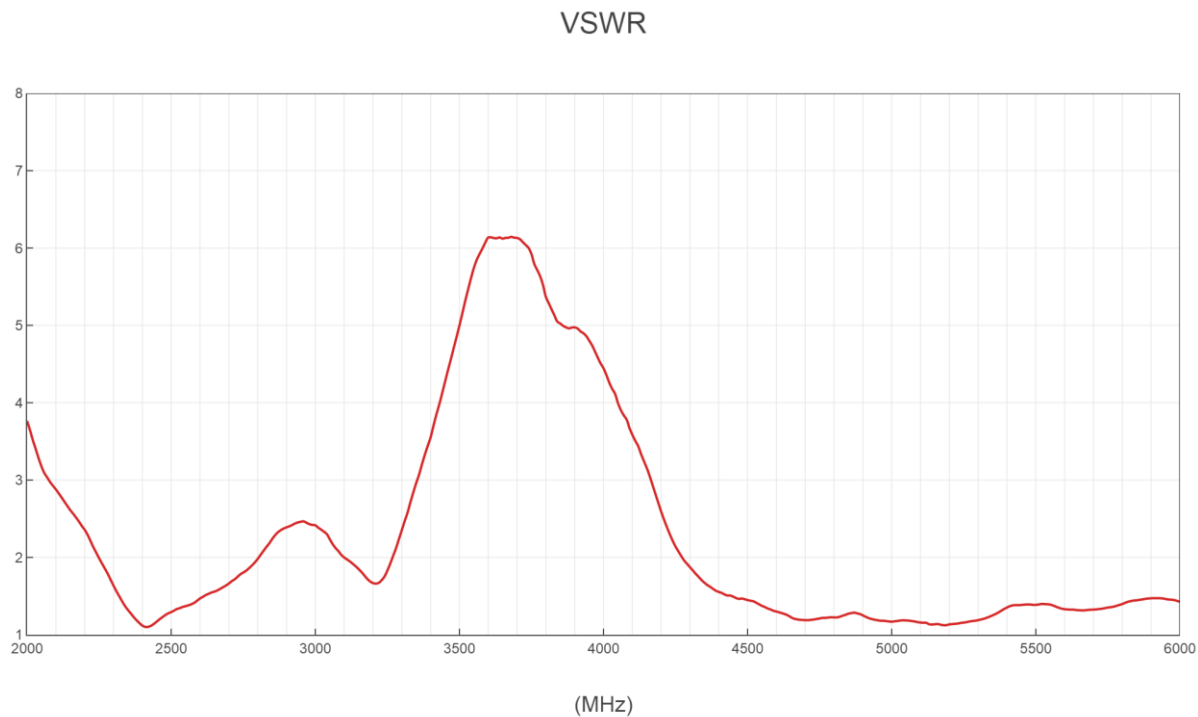
### 4.1. Test Environment

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



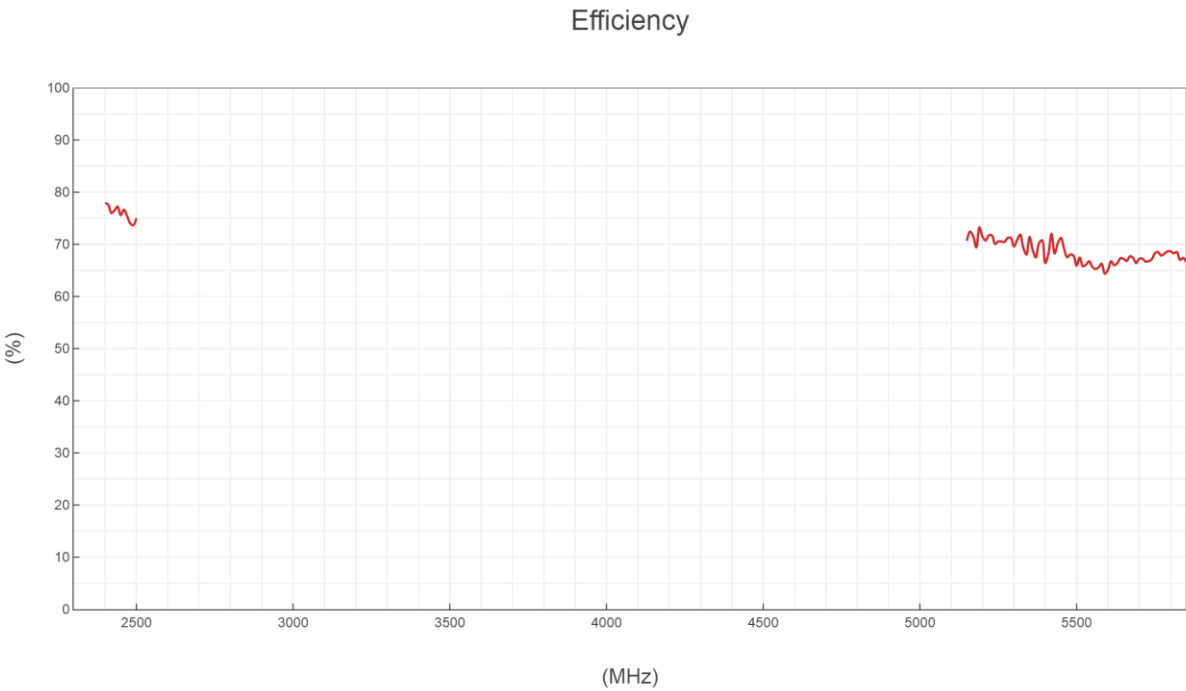


## 4.2. VSWR



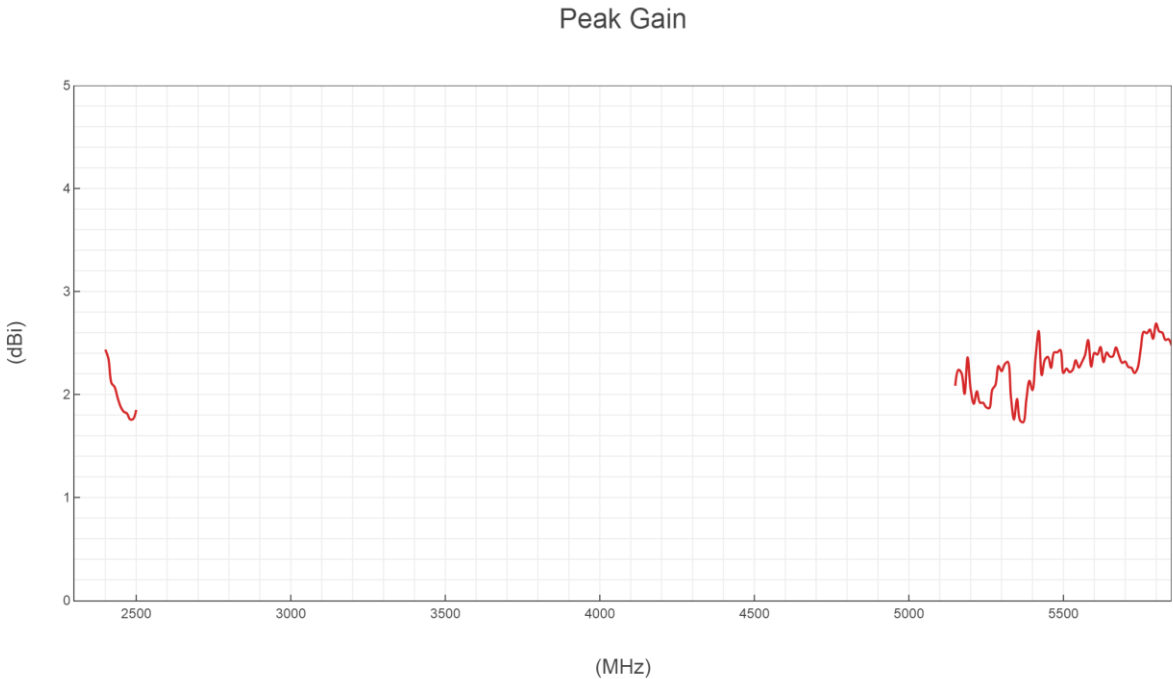
Frequency (MHz)	2400	2500	5150	5850
VSWR	1.11	1.23	1.09	1.31

**4.3. Efficiency**



Frequency (MHz)	2400	2500	5150	5850
Efficiency (%)	77.91	75.02	70.67	66.54

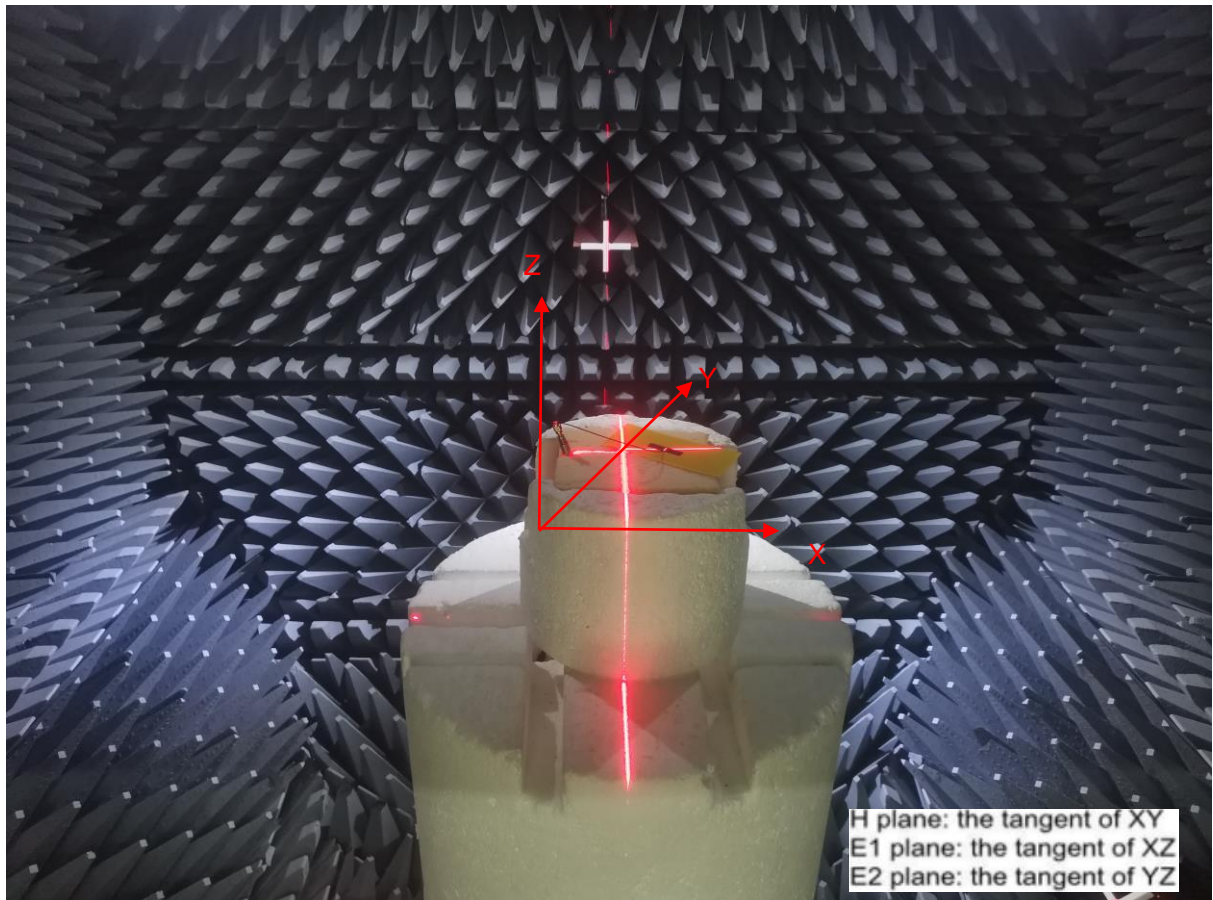
**4.4. Peak Gain**

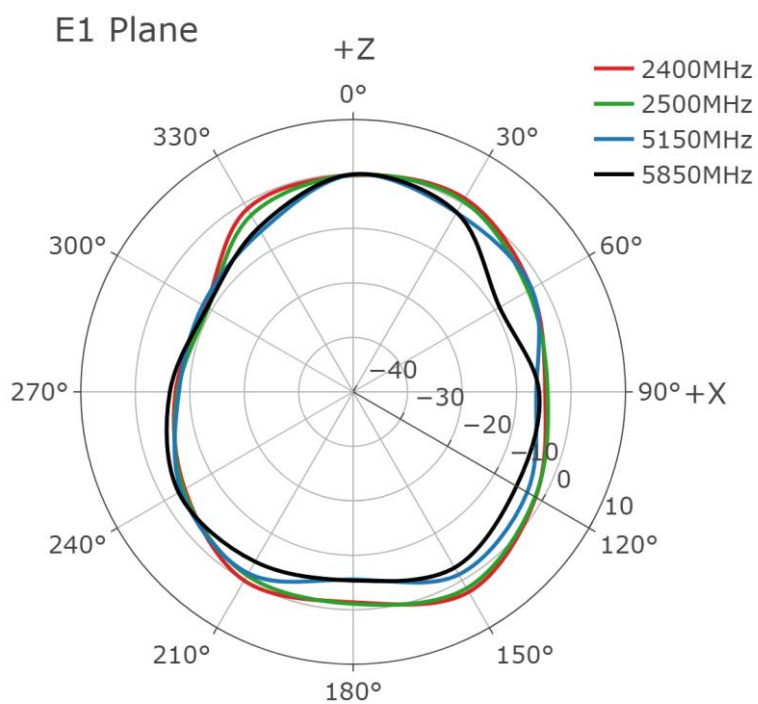
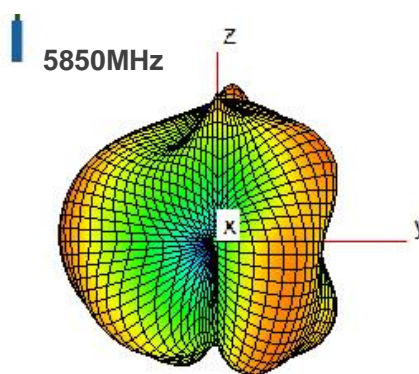
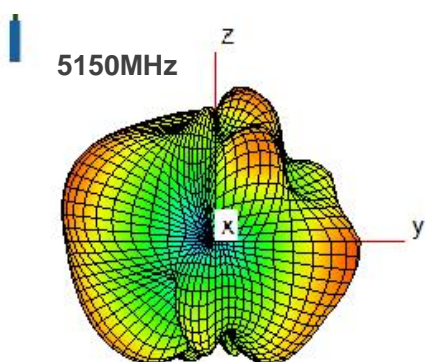
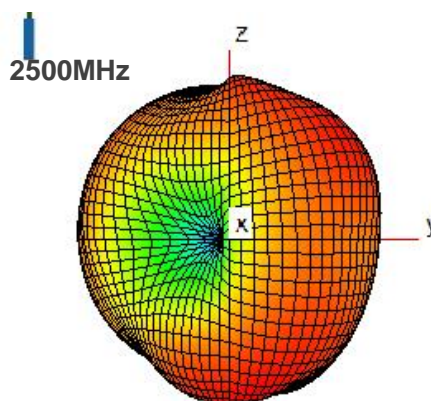
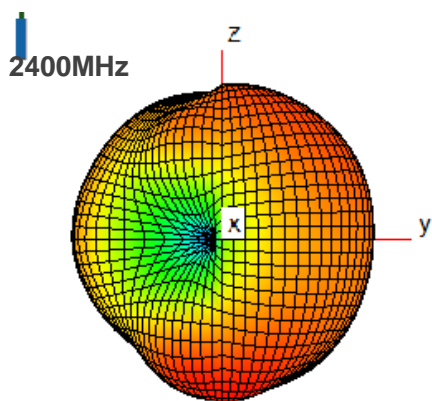


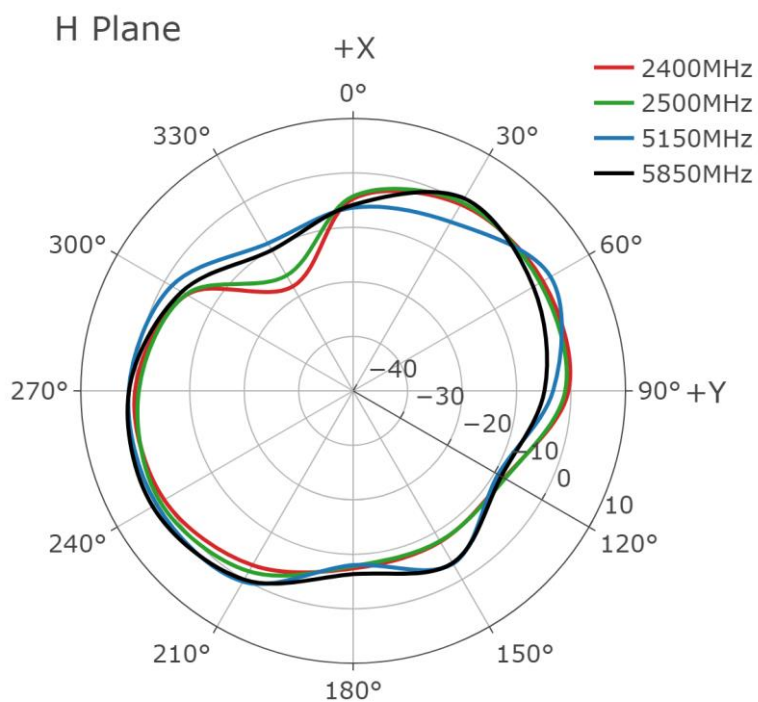
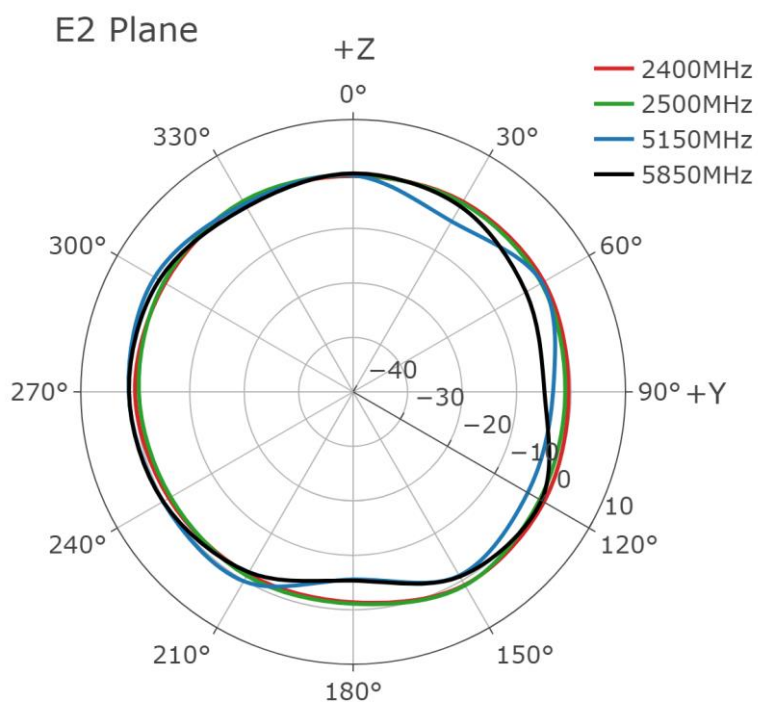
Frequency (MHz)	2400	2500	5150	5850
Peak Gain (dBi)	2.44	1.85	2.08	2.48

## 4.5. Radiation Patterns

- Test condition: stick on 1mm FR4 Board







## 5 Product Size

ROHS

