

# Antenna

# YF0011AA Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-08-03	Kenny YIN	Initial
1.0	2021-01-15	Kenny YIN	Updated the antenna image in Chapter 2.

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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

- 2.4 GHz & 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 Impedence	50 $\Omega$
VSWR	$\leq 2.0$
Gain	$\leq 4.13$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size	38.9 mm $\times$ 9 mm $\times$ 0.12 mm
Casing	FPC
Radiator	Cuprum
Connector Type	IPEX (UFL Generation 1)
Working Temperature	-30 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	Black

## 4 Overall Performance

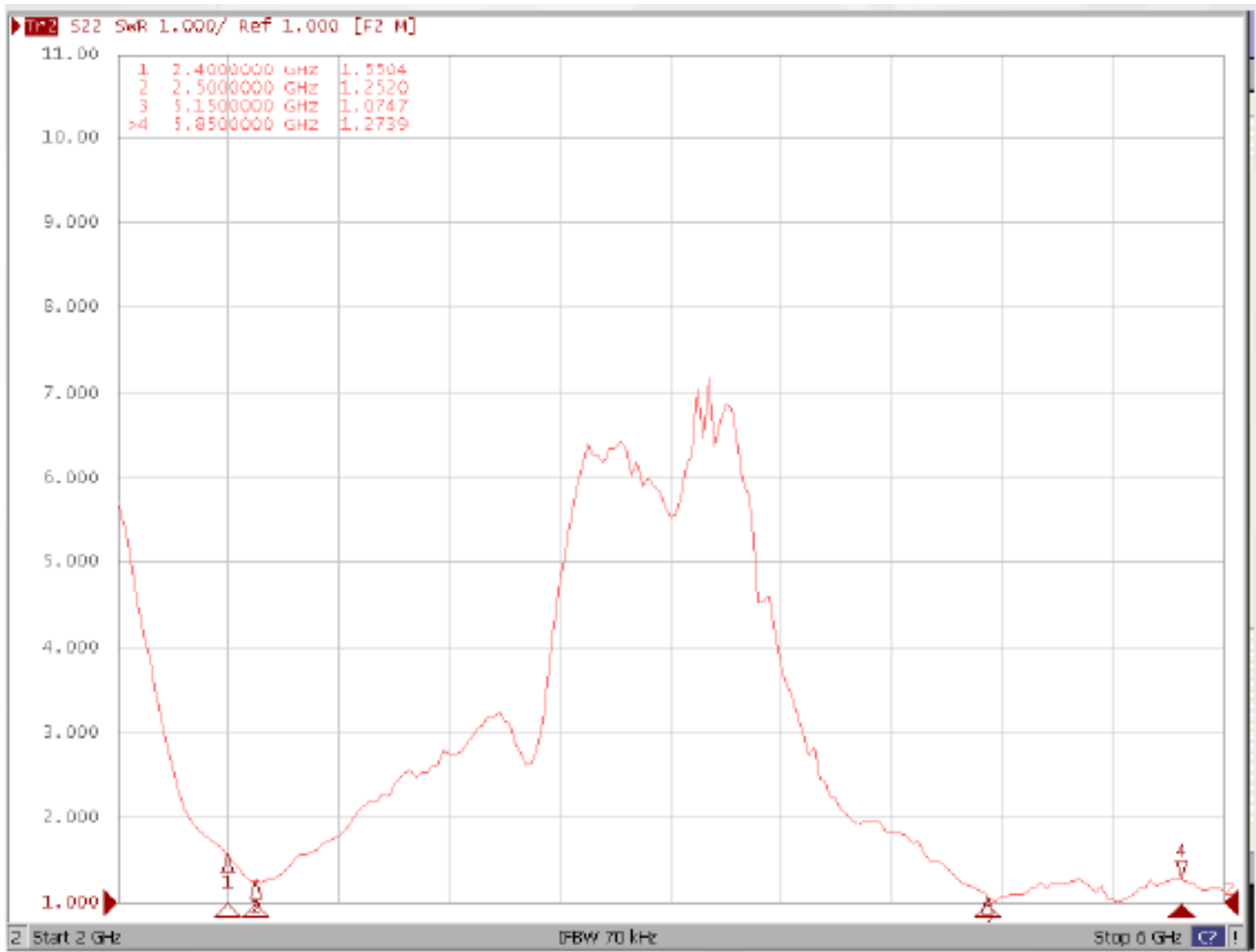
### 4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz



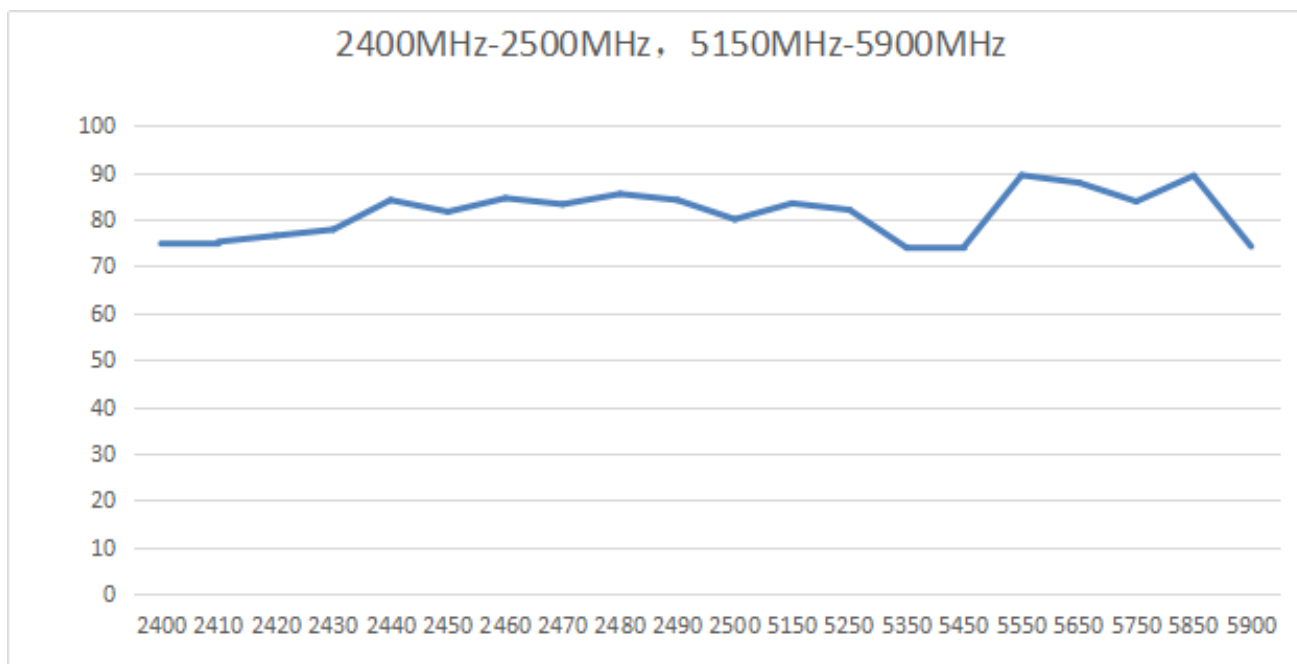


## 4.2. VSWR



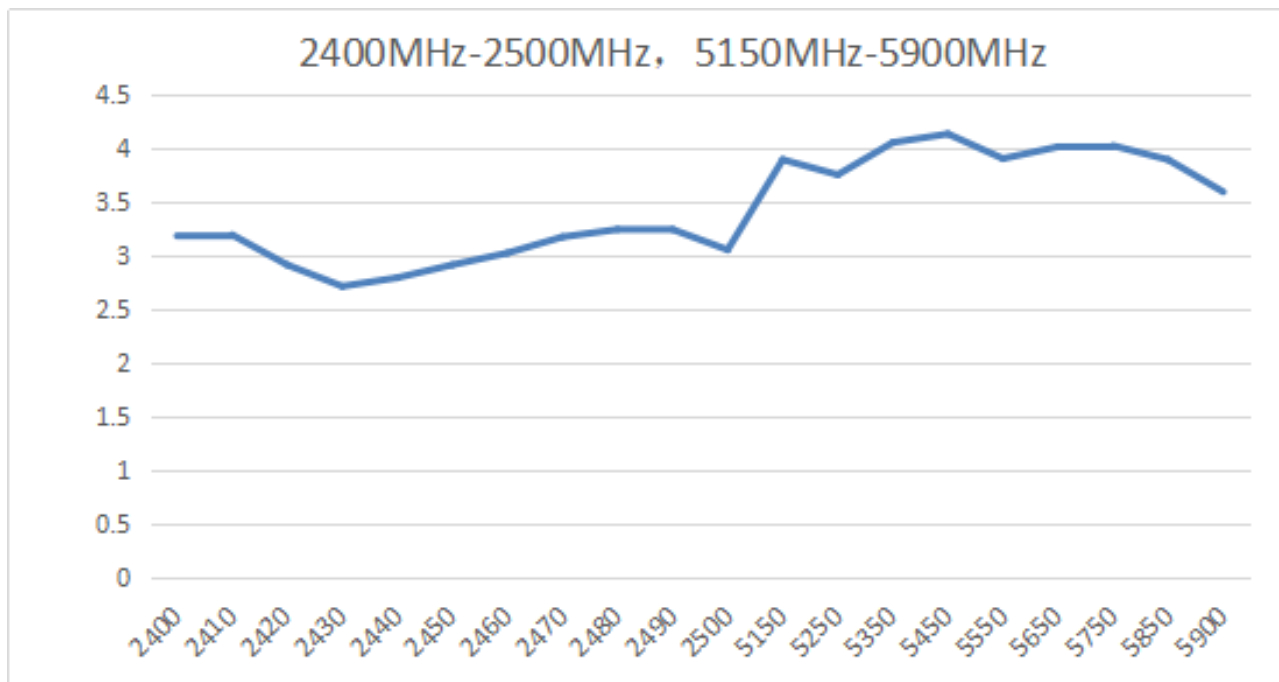
Frequency (MHz)	2400	2500	5150	5850
VSWR	1.55	1.25	1.07	1.27

### 4.3. Efficiency



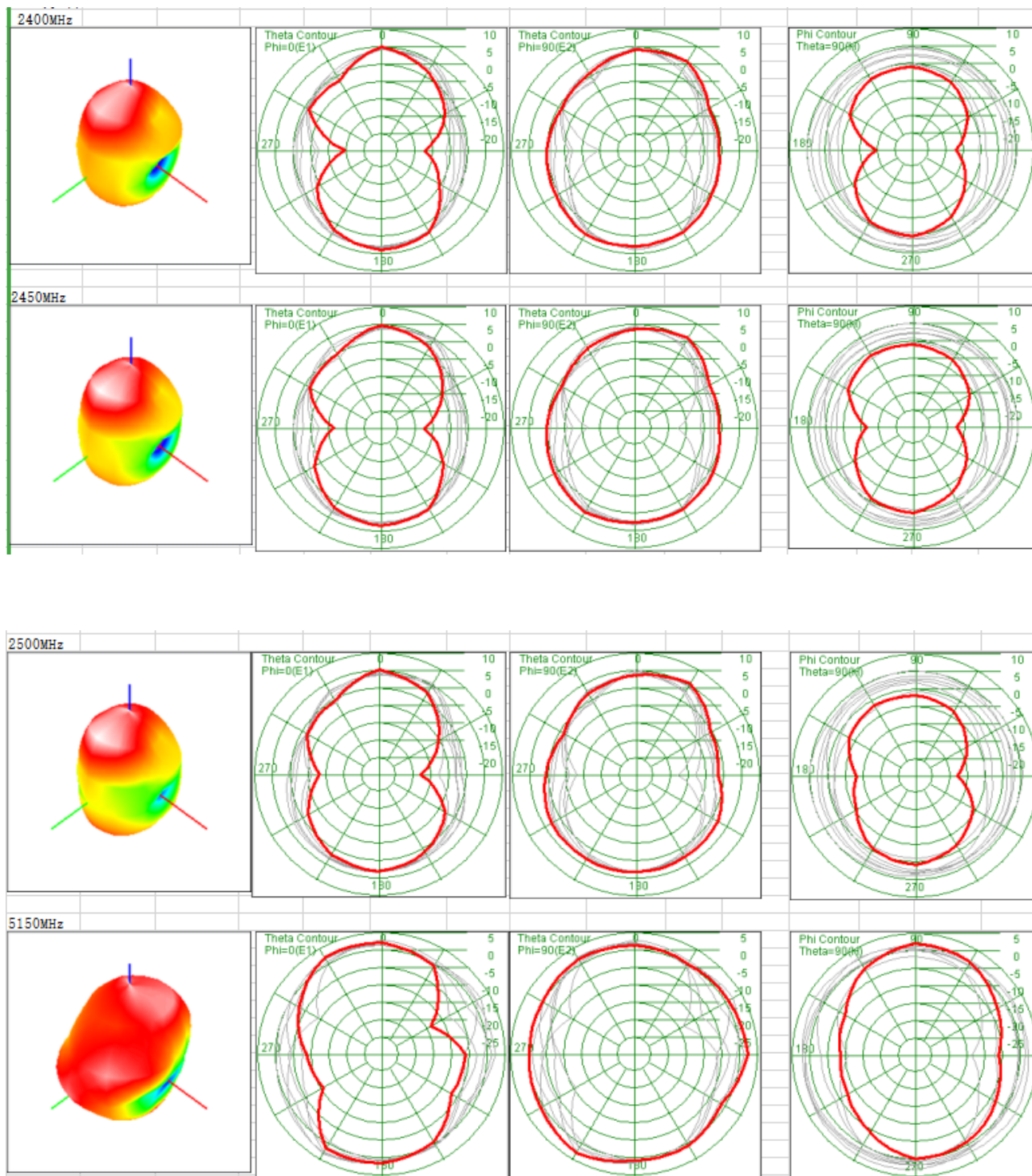
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	74.8	81.6	80	83.4	89.4	89.3

#### 4.4. Gain

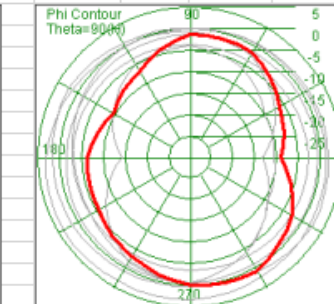
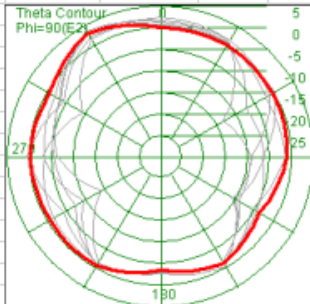
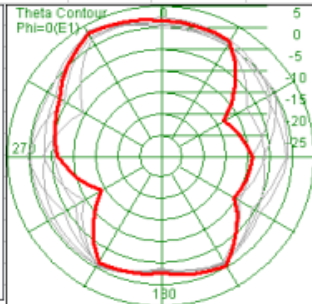
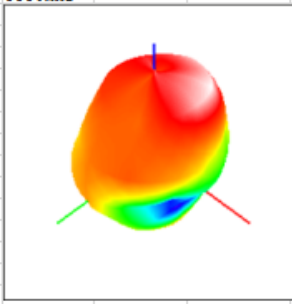


Frequency (MHz)	2400	2450	2500	5150	5550	5850
Gain (dBi)	3.18	2.91	3.05	3.89	3.9	3.89

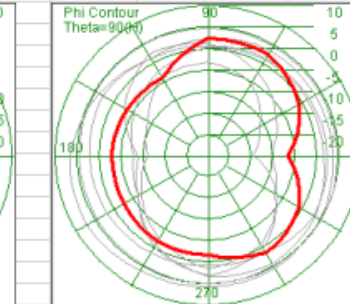
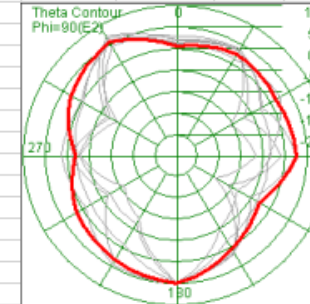
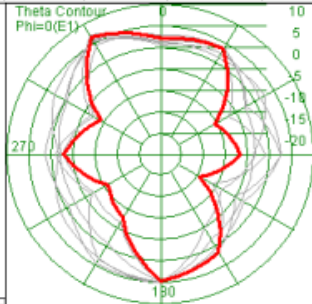
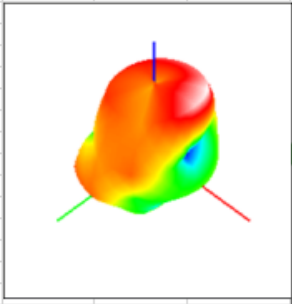
### 4.5. Radiation Patterns



5550MHz



5850MHz



## 5 Product Size

