

# Antenna

# **YE0031AA** Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-12-21	Kenny YIN	Initial
1.1	2021-01-15	Kenny YIN	Updated the 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	2.4–2.5 GHz 5.15–5.85 GHz
Input Impedence	50 $\Omega$
VSWR	2.4 GHz: $\leq 2.5$ 5.8 GHz: $\leq 3.0$
Gain	$\leq 3.85$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size	52 mm $\times$ $\varnothing$ 10 mm
Casing	ABS
Connector Type	SMA (Male pin with internal thread)
Working Temperature	-20 °C to +85 °C
Radome Color	Black

## 4 Overall Performance

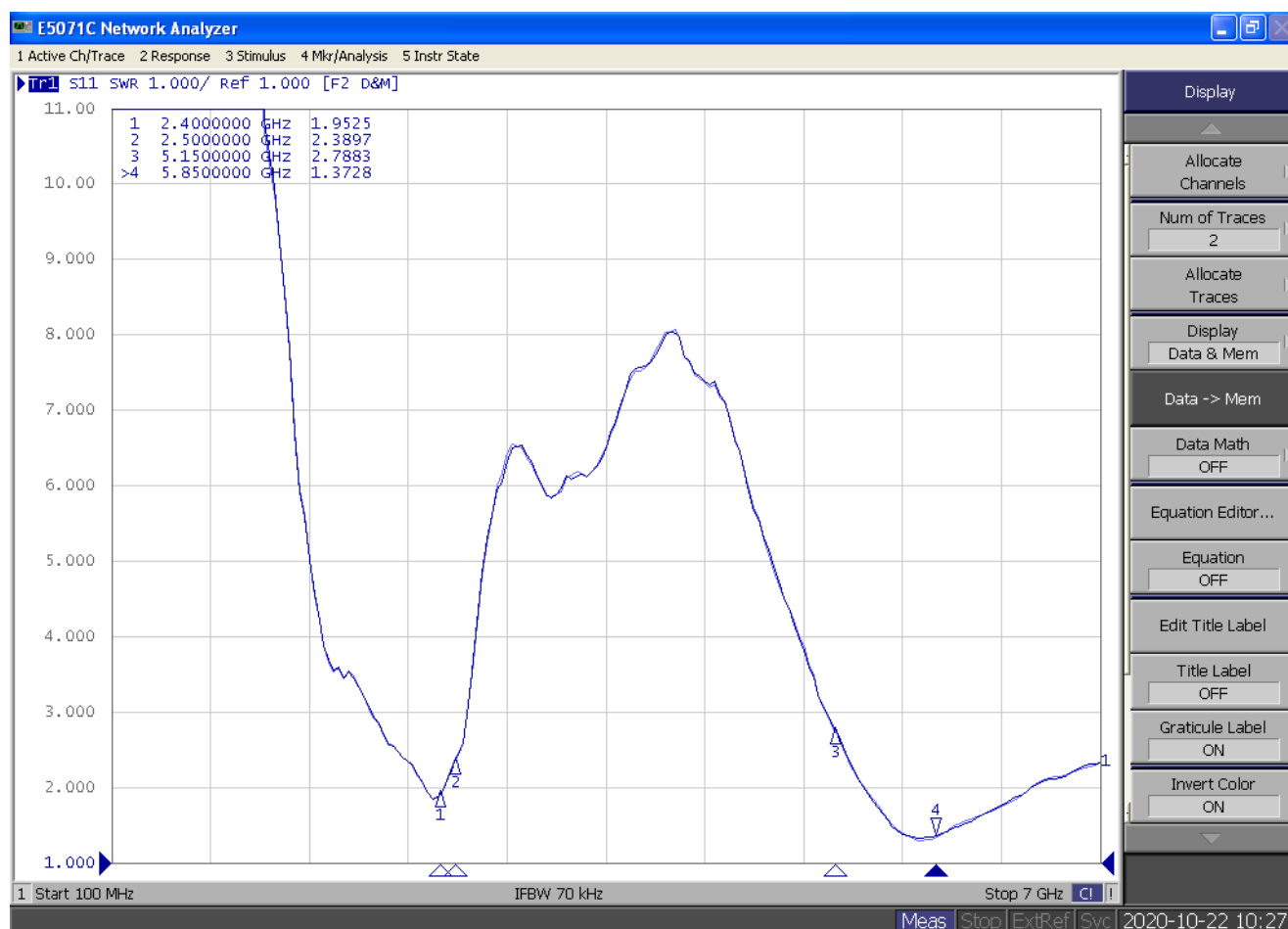
### 4.1. Test Environment

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



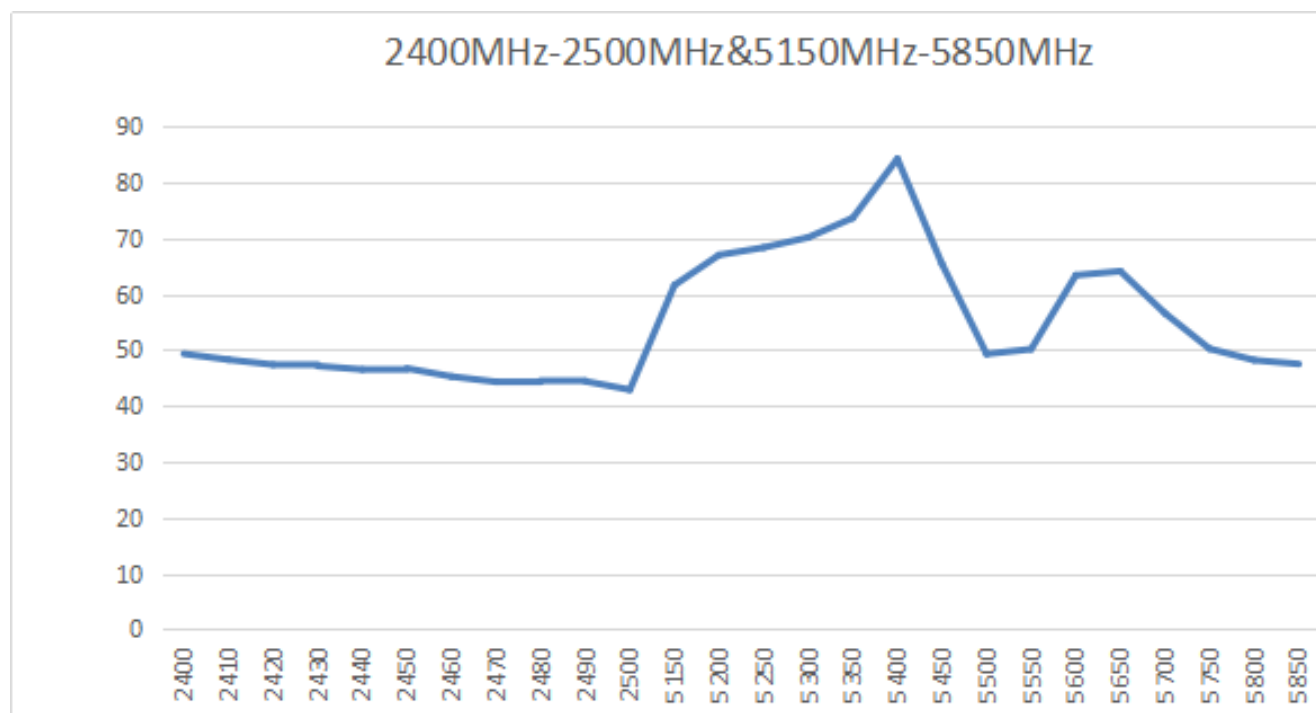


## 4.2. VSWR



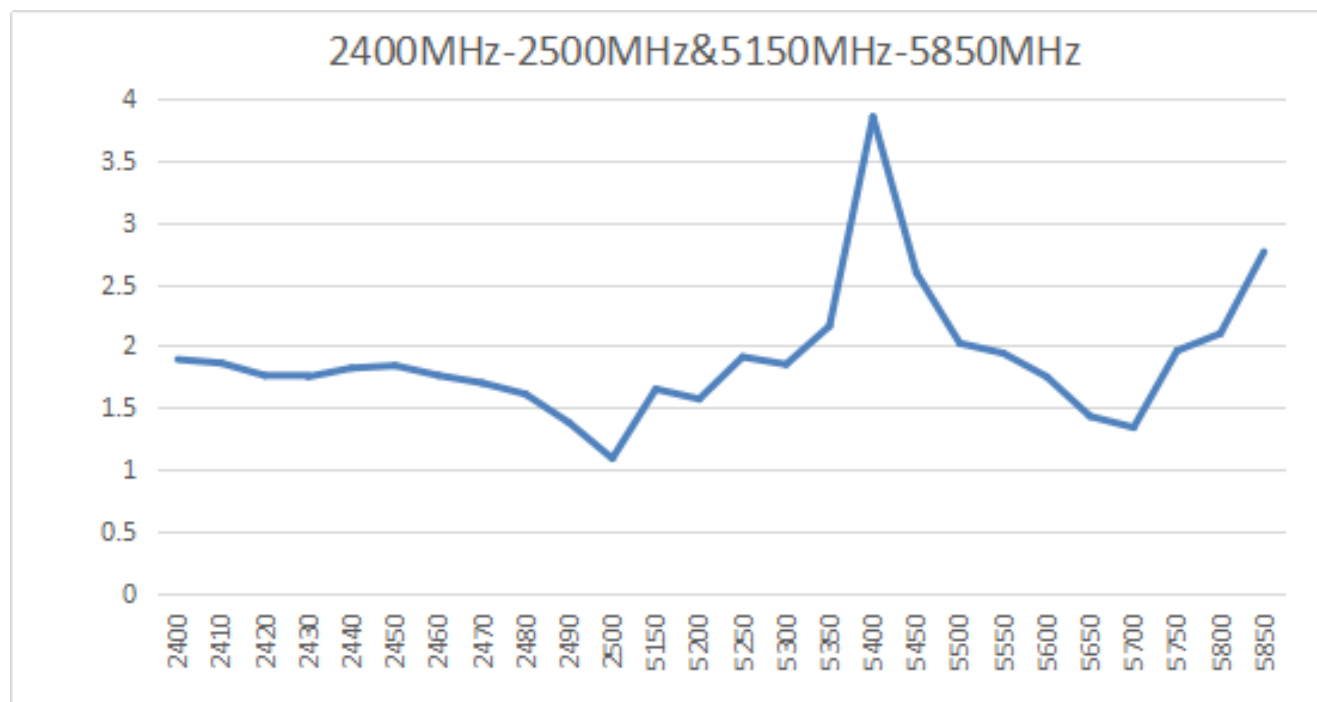
Frequency (MHz)	2400	2500	5150	5850
VSWR	1.95	2.39	2.79	1.37

### 4.3. Efficiency



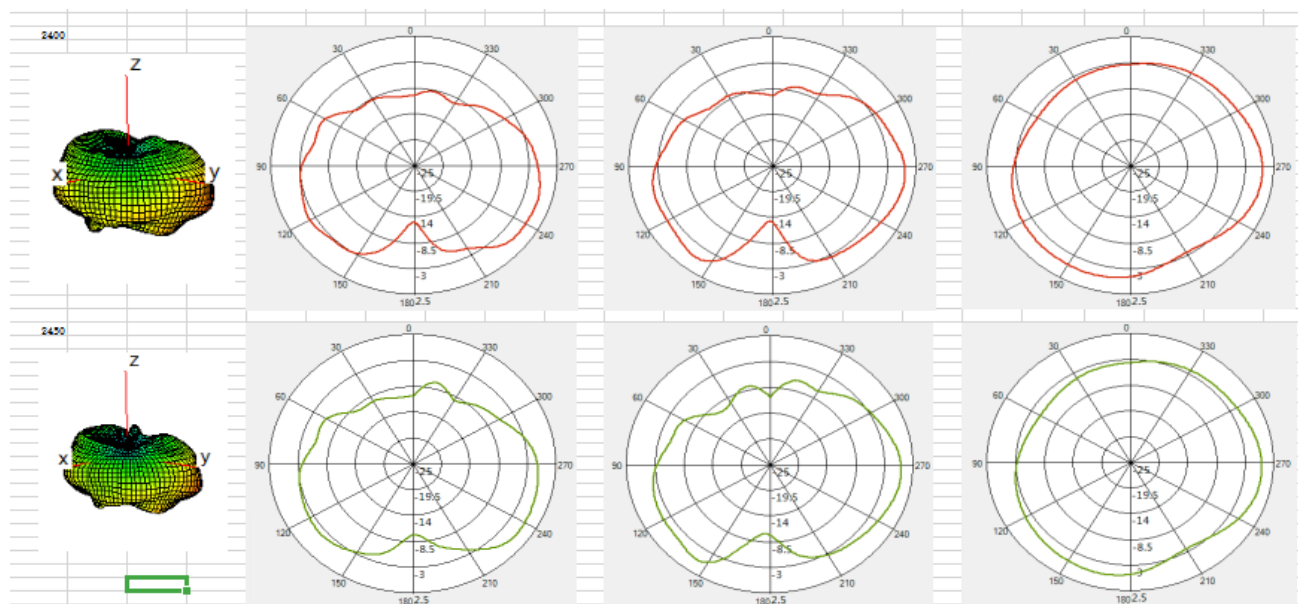
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	49.3	46.71	42.89	61.59	50.15	47.49

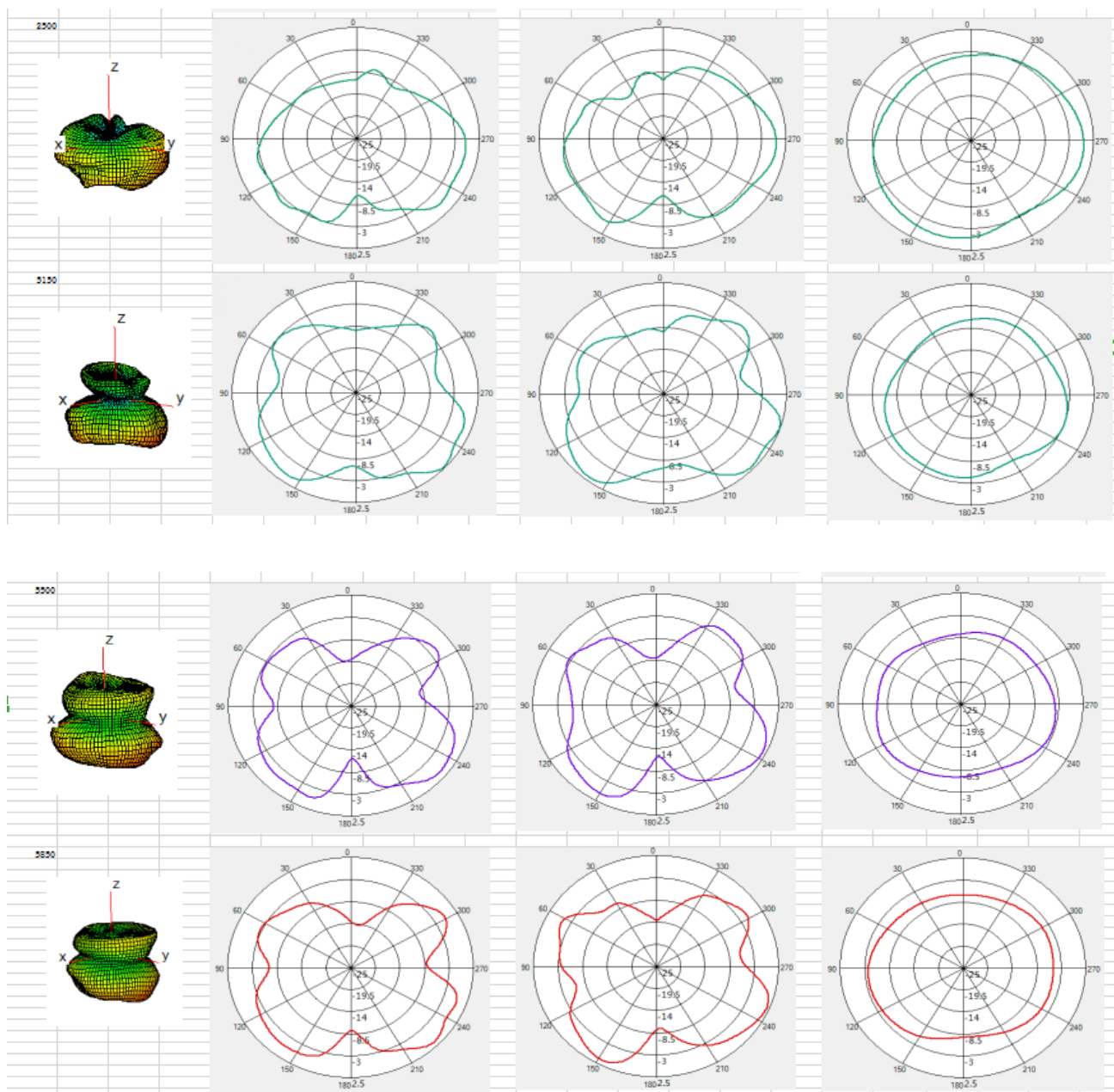
## 4.4. Gain



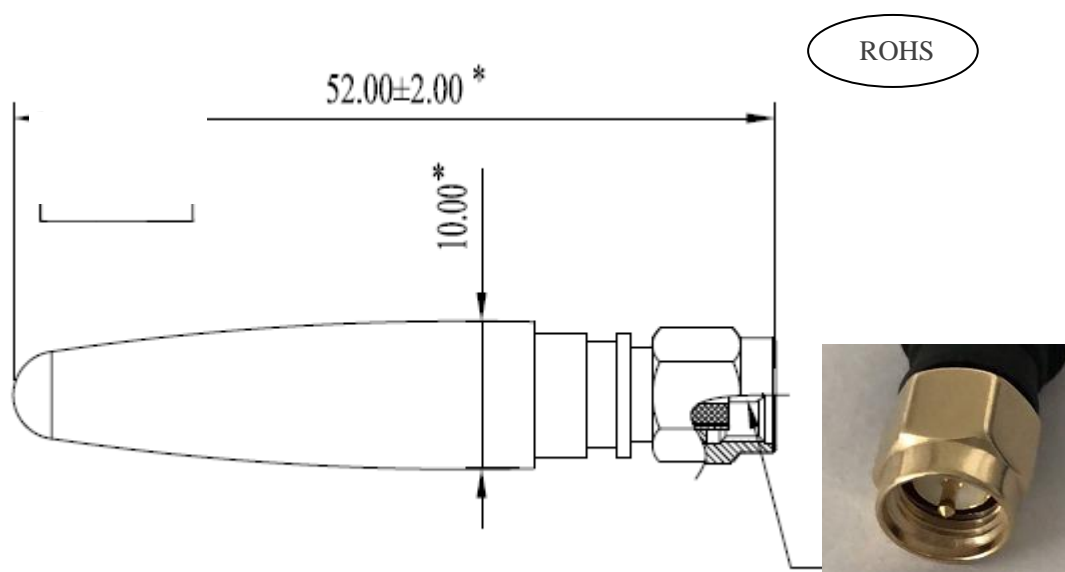
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Gain (dBi)	1.89	1.84	1.09	1.65	1.94	2.76

## 4.5. Radiation Patterns





## 5 Product Size



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