

Antenna

YEW001AA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2021-06-21	Aria CHU	Creation of the document
1.0	2021-06-21	Aria CHU	First official release
1.1	2021-11-30	Aria CHU	Updated the product description in Chapter 1.

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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.

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

- Cellular 2.4G
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz
Input Impedance	50 Ω
VSWR	≤ 2.0
Gain	≤ 1.5 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	Φ 30 mm \times 77.4 mm RG174 Cable Length = 1500 mm
Casing	ABS
Connector Type	SMA Male (Center Pin)
Working Temperature	-20 °C to +90 °C
Radome Color	Black
Mounting Type	Magnet

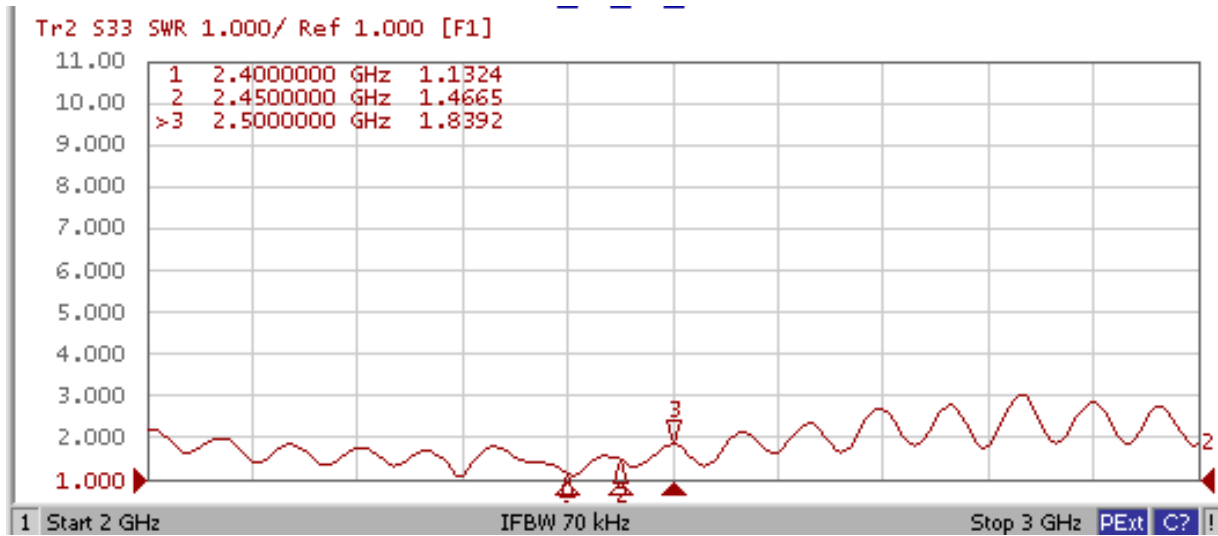
4 Overall Performance

4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz

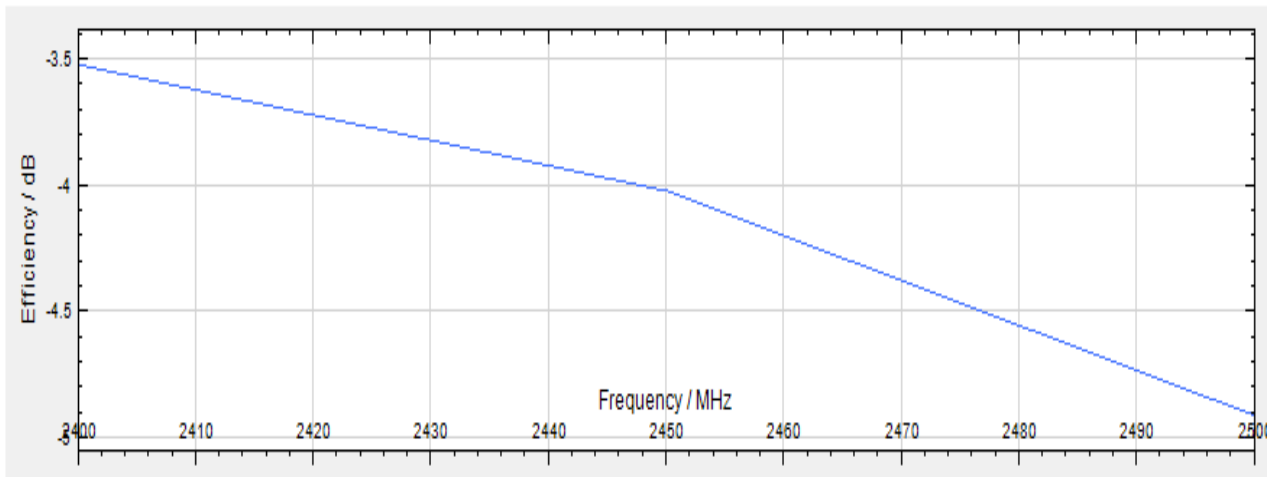


4.2. VSWR



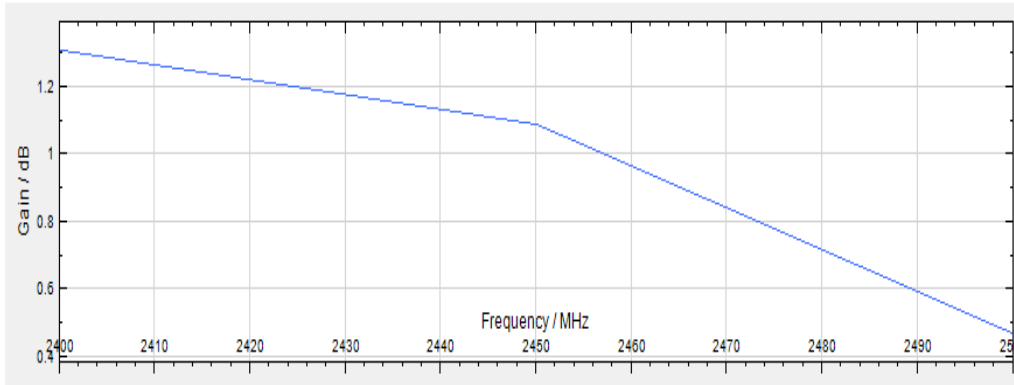
Frequency (MHz)	2400	2450	2500
VSWR	1.13	1.46	1.83

4.3. Efficiency



Frequency (MHz)	2400	2450	2500
Efficiency (%)	44.46	39.63	32.28

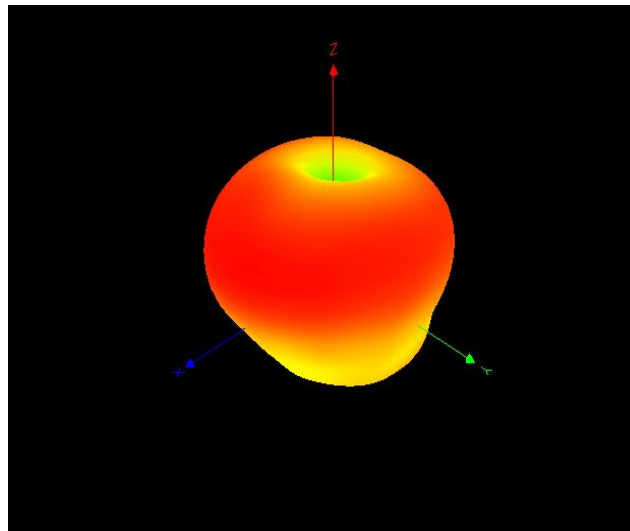
4.4. Gain



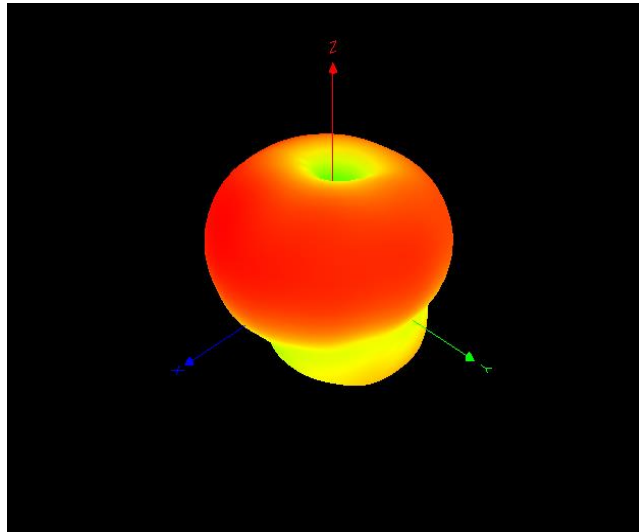
Frequency (MHz)	2400	2450	2500
Gain (dBi)	1.31	1.09	0.47

4.5. Radiation Pattern

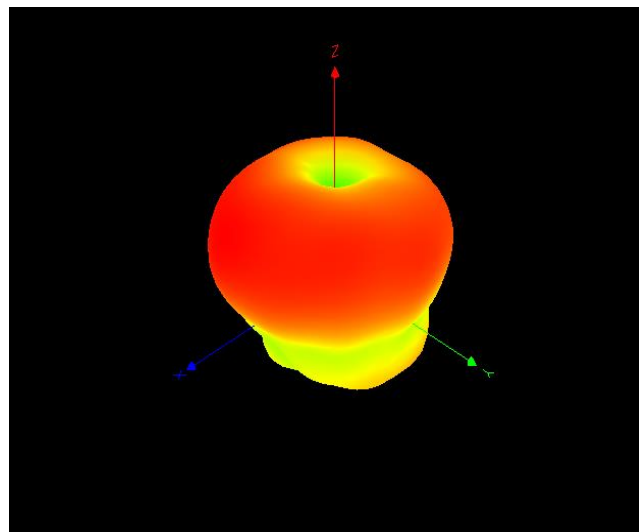
4.5.1. 2400 MHz



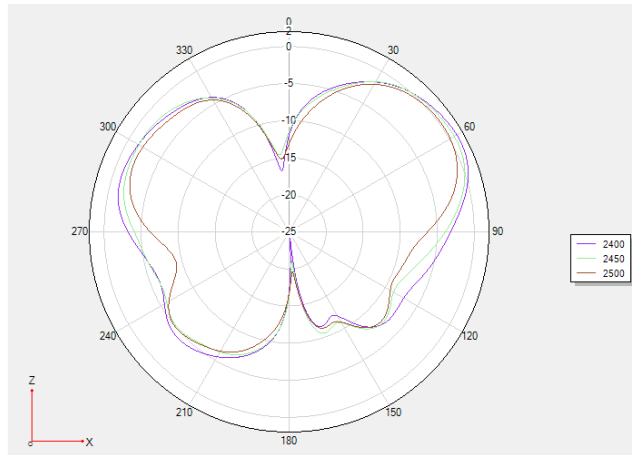
4.5.2. 2450 MHz



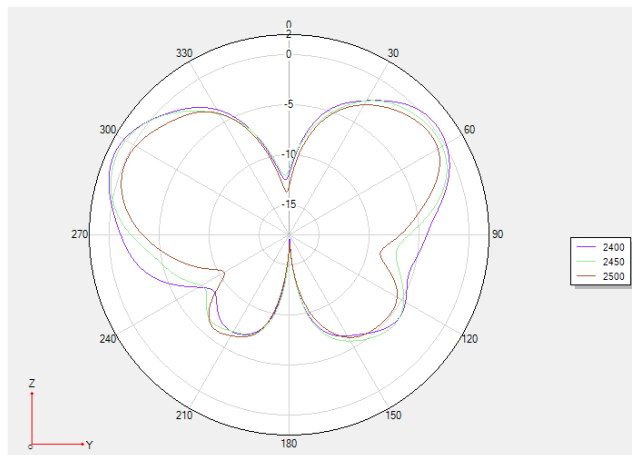
4.5.3. 2500 MHz



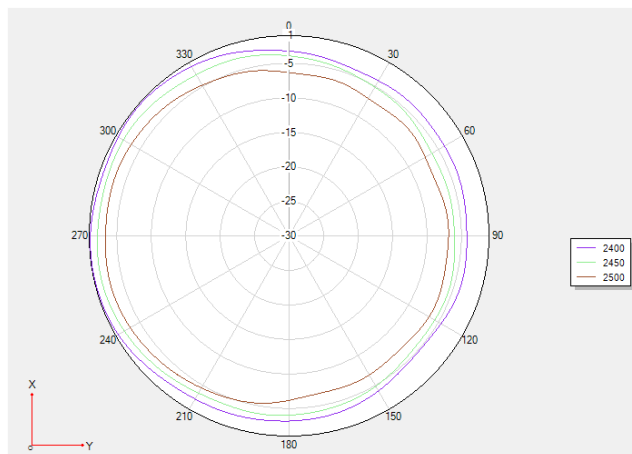
4.5.4. Phi 0 2D



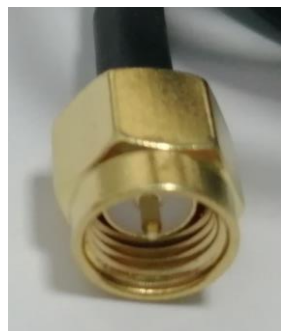
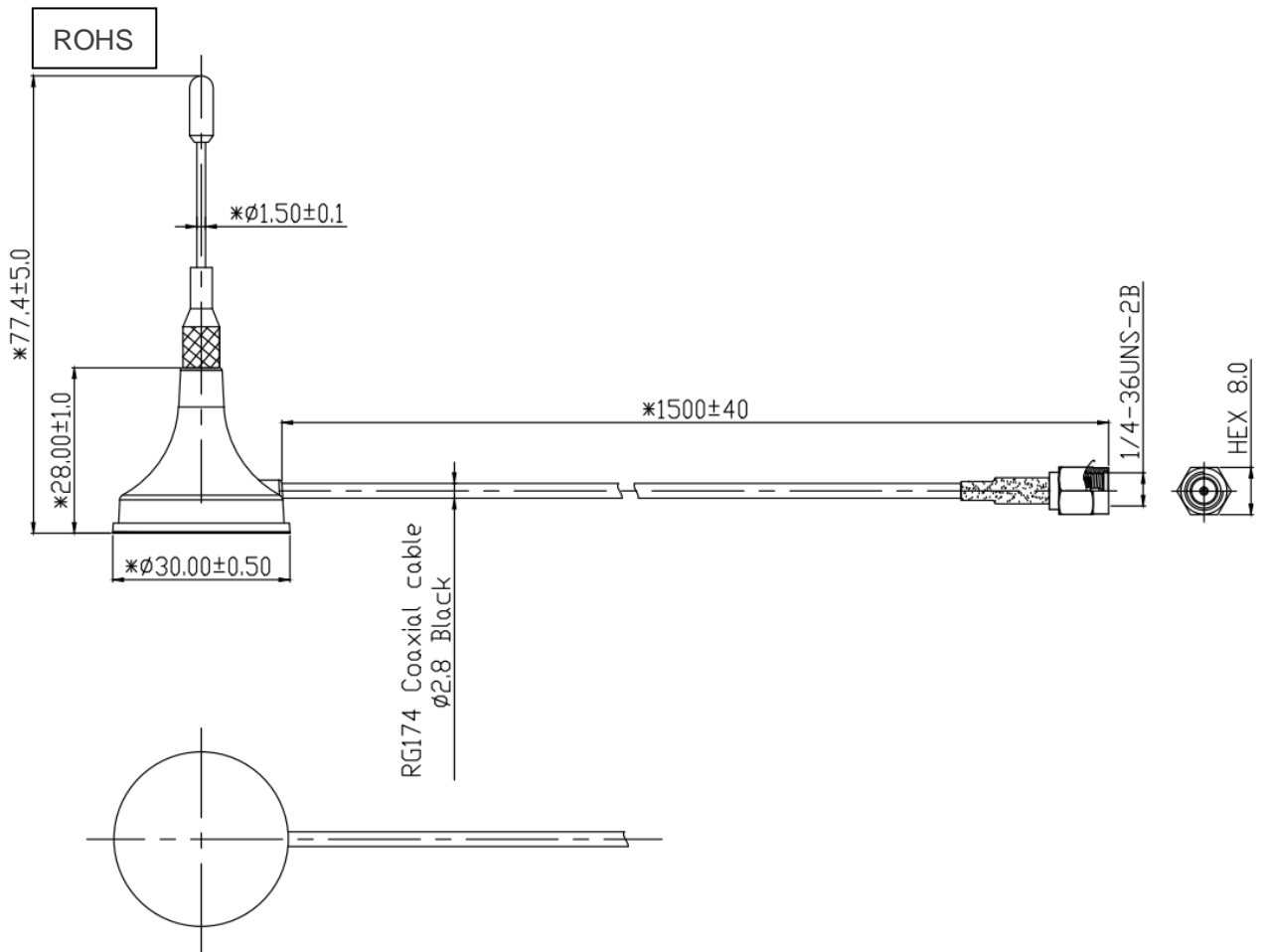
4.5.5. Phi 90 2D



4.5.6. Theta 90



5 Product Size



SMA Male (center pin)