

Antenna

YEWT004AA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2021-05-18	Kenny YIN/ Aria CHU	Creation of the document
1.0	2021-05-18	Kenny YIN/ Aria CHU	First official release
1.1	2021-07-25	Kenny YIN/ Aria CHU	Updated working temperature (Chapter 3).
1.2	2021-11-30	Kenny YIN/ Aria CHU	Updated the product description in Chapter 1.
2.0	2022-09-03	Aria CHU	Updated all test datasheet in this datasheet.

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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

- Wi-Fi 6 2.4–2.5 GHz & 5.1–7.125 GHz
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz, 5100–7150 MHz
Input Impedance	50 Ω
VSWR	≤ 3.0
Gain	≤ 3.0 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	109 mm × Φ 10 mm
Casing	ABS
Connector Type	SMA Male (Center Pin)
Working Temperature	-40 °C to +85 °C
Radome Color	Black
IP Rating	IP55

4 Overall Performance

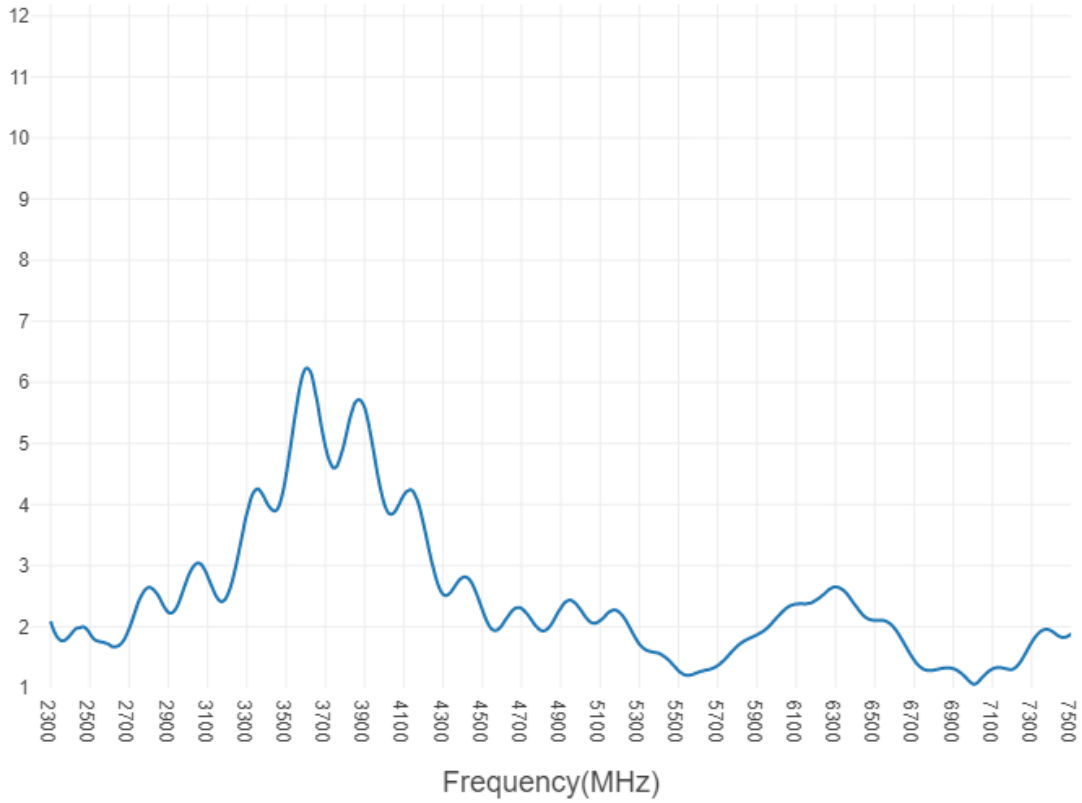
4.1. Test Environment

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



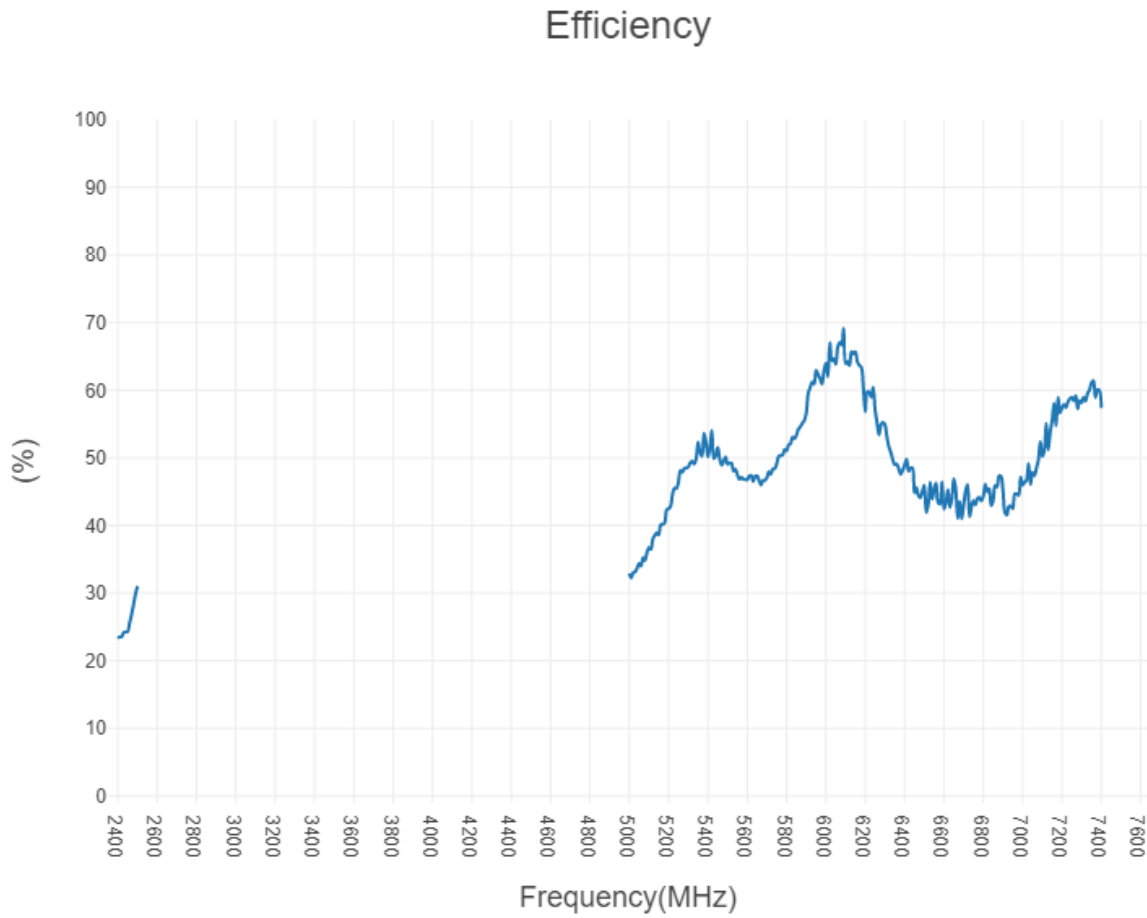
4.2. VSWR

VSWR



Frequency (MHz)	2400	2450	2500	5150	5850	7150
VSWR	1.86	1.98	1.88	2.24	1.79	1.32

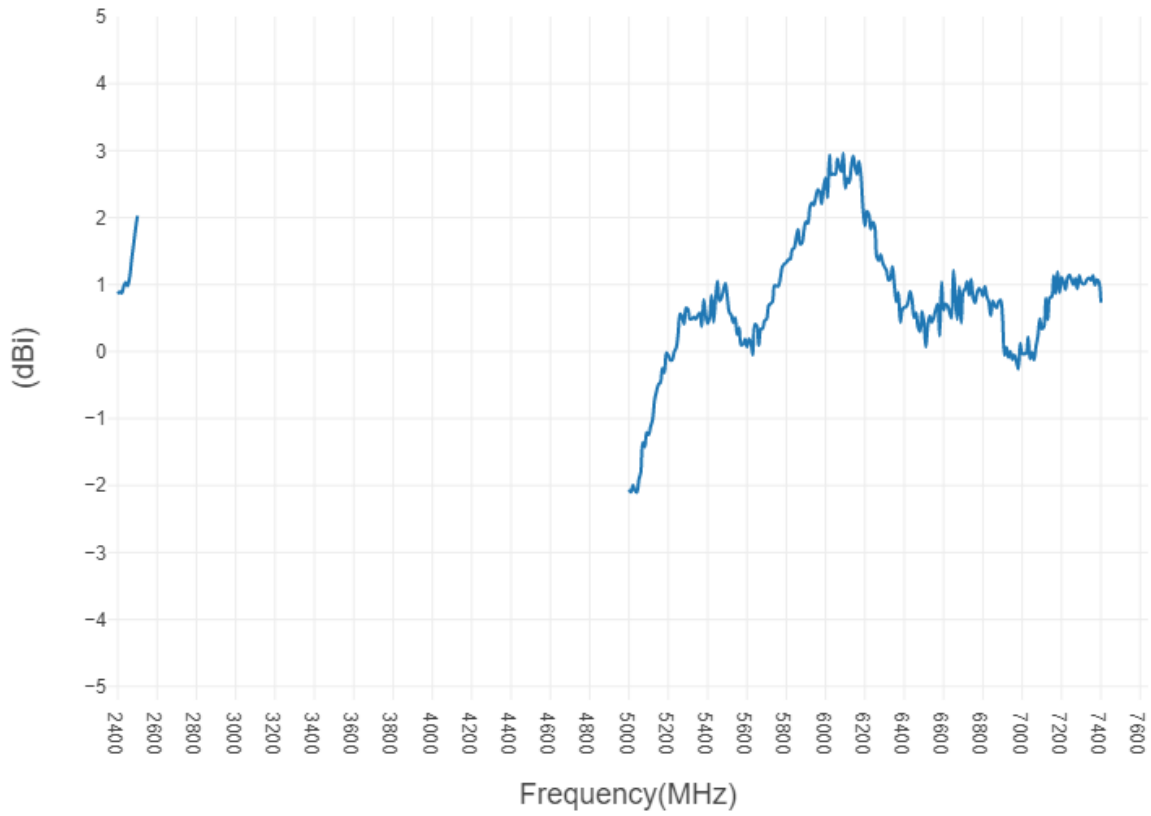
4.3. Efficiency



Frequency (MHz)	2400	2450	2500	5150	5850	7150
Efficiency (%)	23.31	24.32	31.05	38.61	52.34	55.51

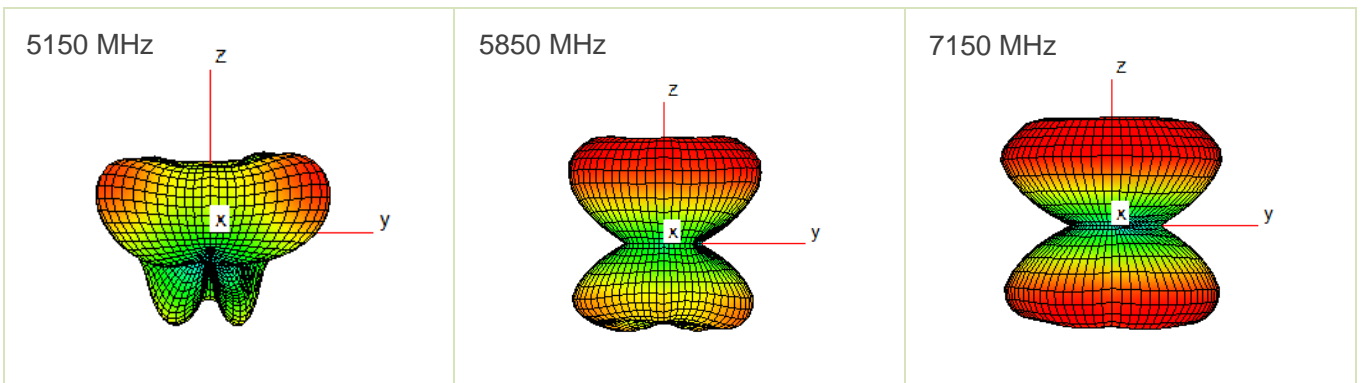
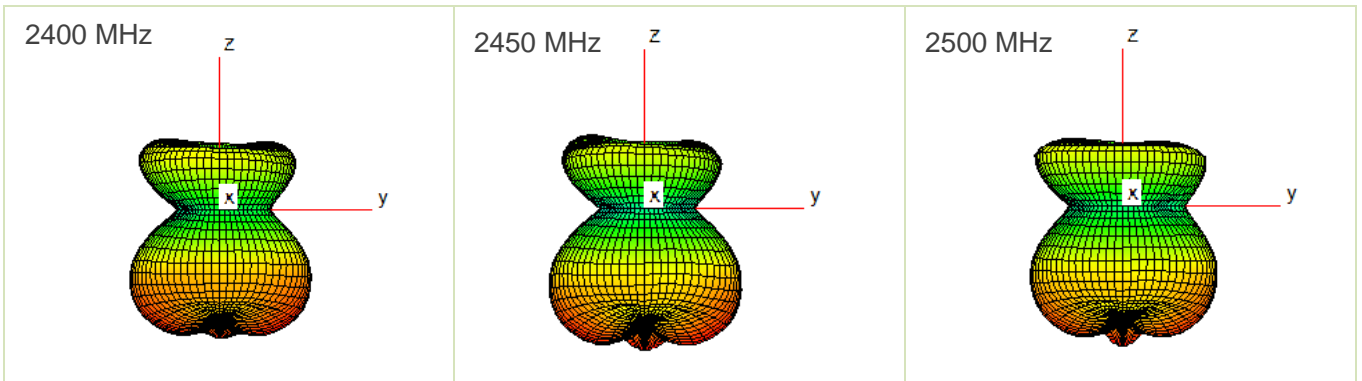
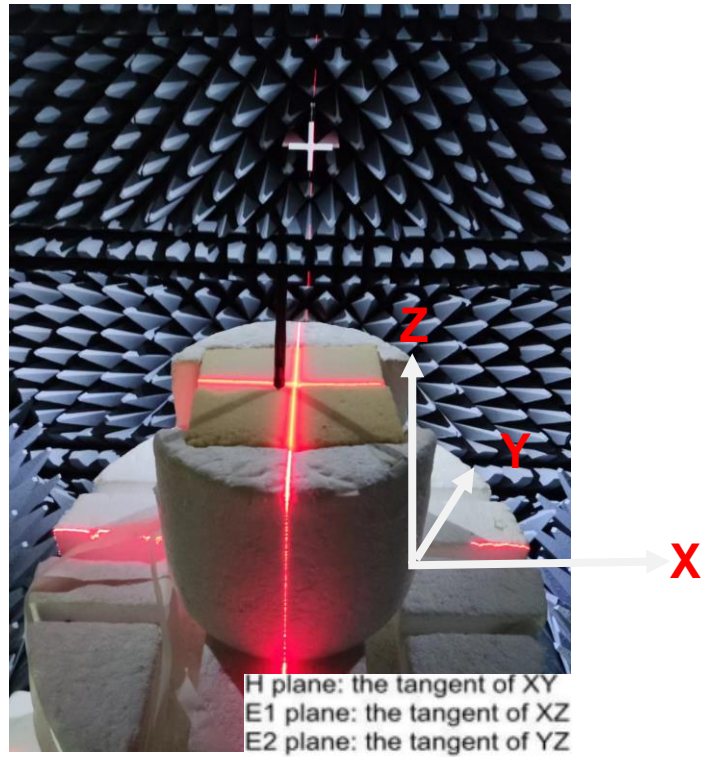
4.4. Gain

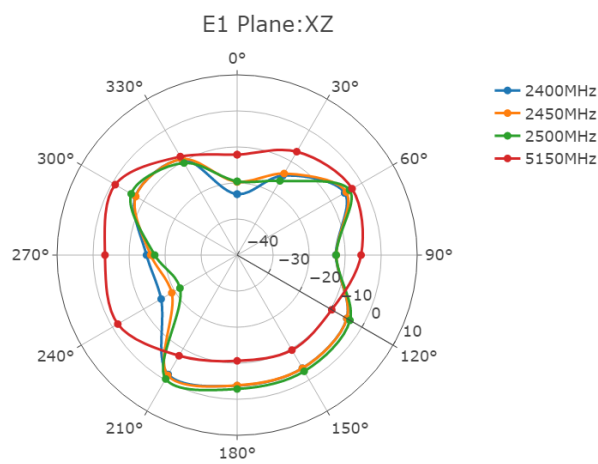
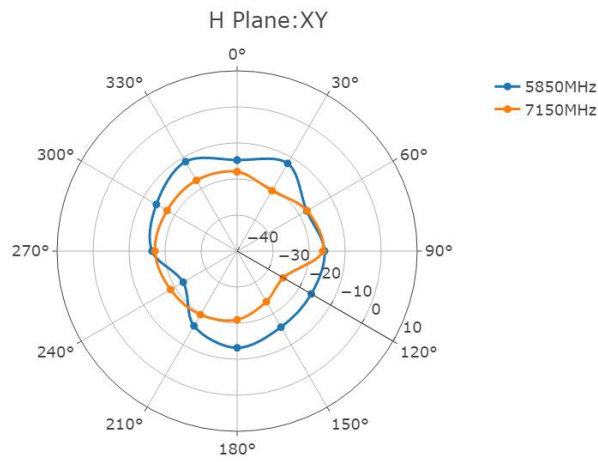
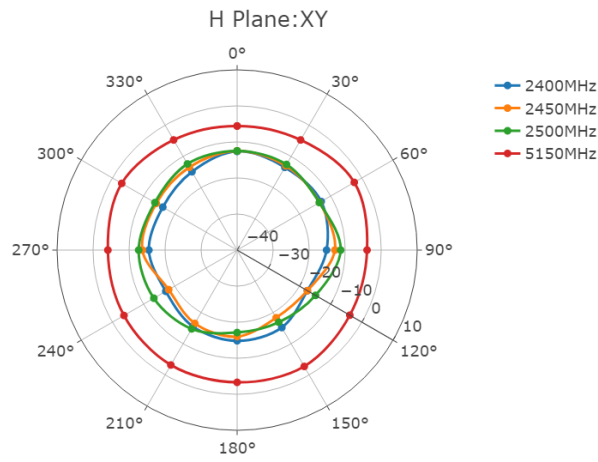
Peak Gain

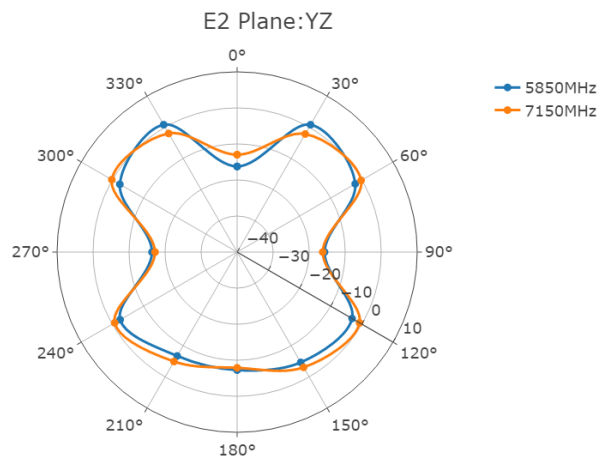
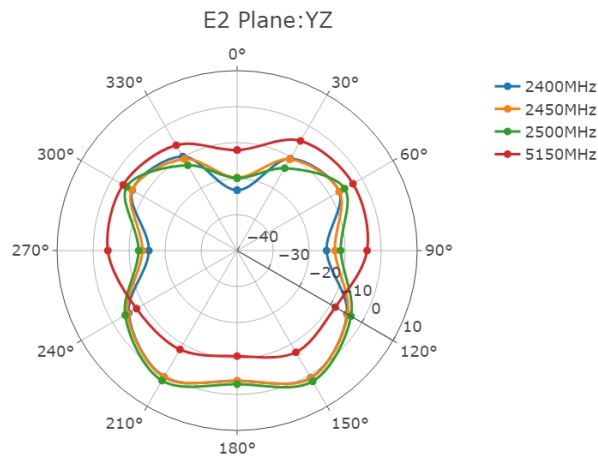
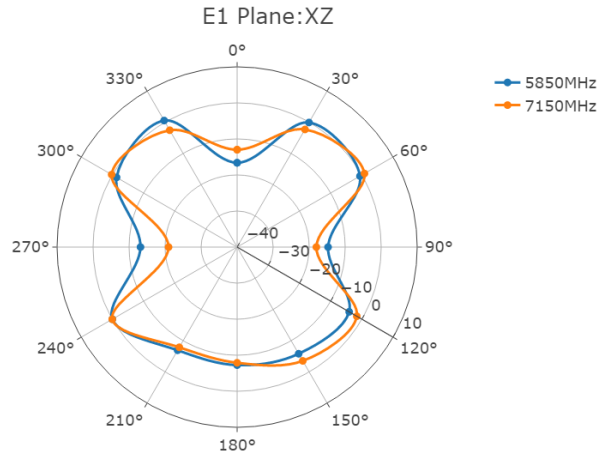


Frequency (MHz)	2400	2450	2500	5150	5850	7150
Gain (dBi)	0.86	0.98	2.02	-0.49	1.69	0.81

4.5. Radiation Pattern







5 Product Size

