Antenna

YE0032AA Datasheet

Antenna Services

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Status: Released

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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-10-22	Kenny YIN	Initial
1.1	2021-01-15	Kenny YIN	Updated the antenna image in Chapter 2.
1.2	2021-01-27	Kenny YIN	Added IP rating description.
1.3	2021-07-25	Kenny YIN	Updated the working temperature (Chapter 3).

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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 Impendence	50 Ω
VSWR	2.4 GHz: ≤ 2.0, 5.8 GHz: ≤ 3.0
Gain	≤ 1.9 dBi
Polarization Type	Linear
Mechanical Specifications	
Antenna Size	50 mm × Φ 10 mm
Casing	ABS
Connector Type	SMA Male (center pin)
Working Temperature	-40 °C to +85 °C
Radome Color	Black
IP rating	IP65

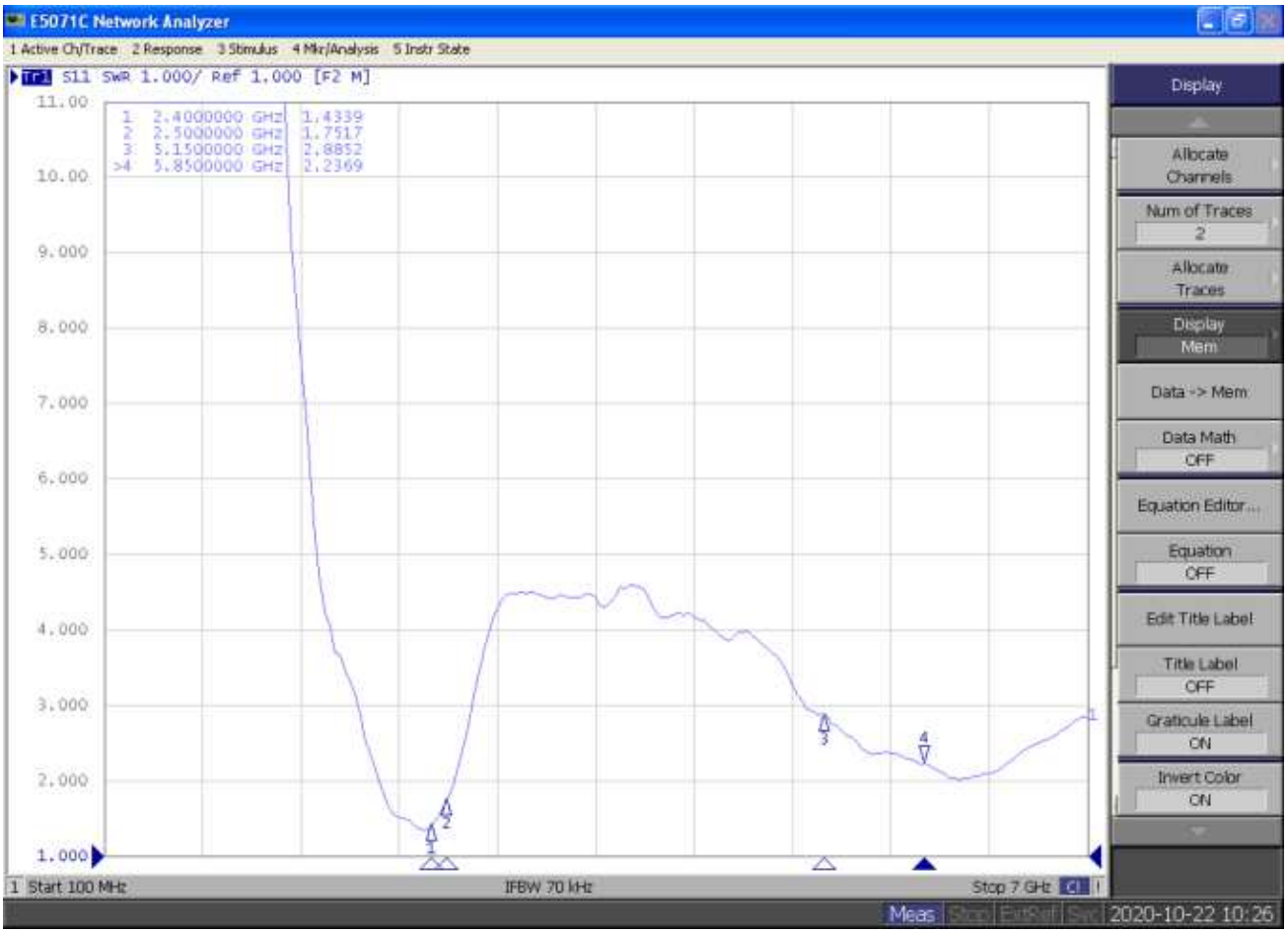
4 Overall Performance

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

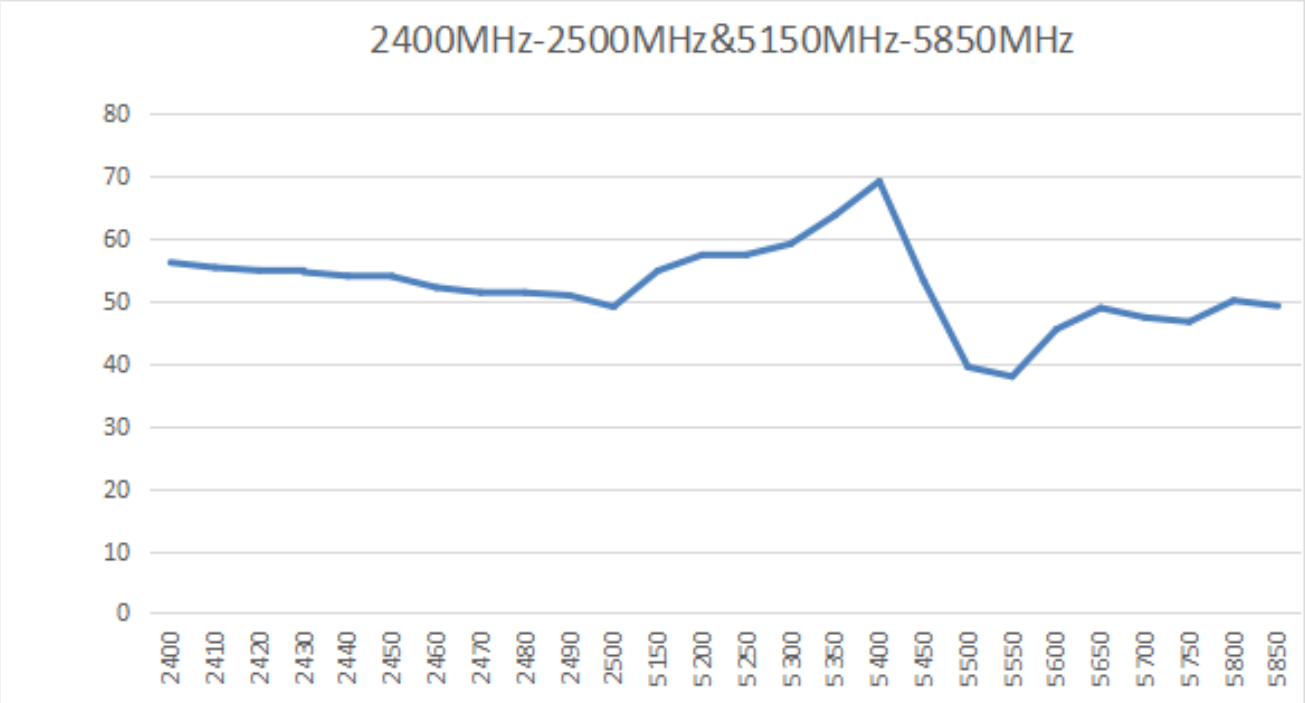


4.2. VSWR



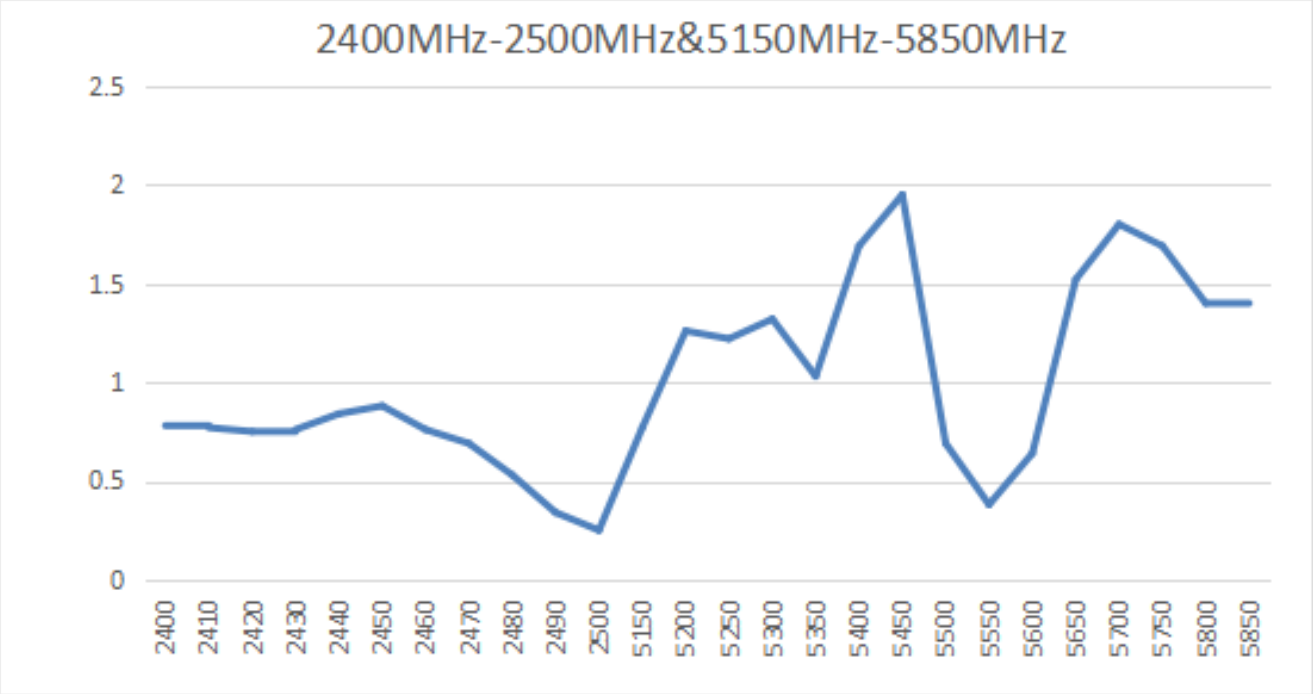
Frequency (MHz)	2400	2500	5150	5850
VSWR	1.43	1.75	2.88	2.24

4.3. Efficiency



Frequency (MHz)	2400	2450	2500	5150	5550	5850
Eff. (%)	56.14	53.9	49.06	54.83	37.89	49.19

4.4. Gain

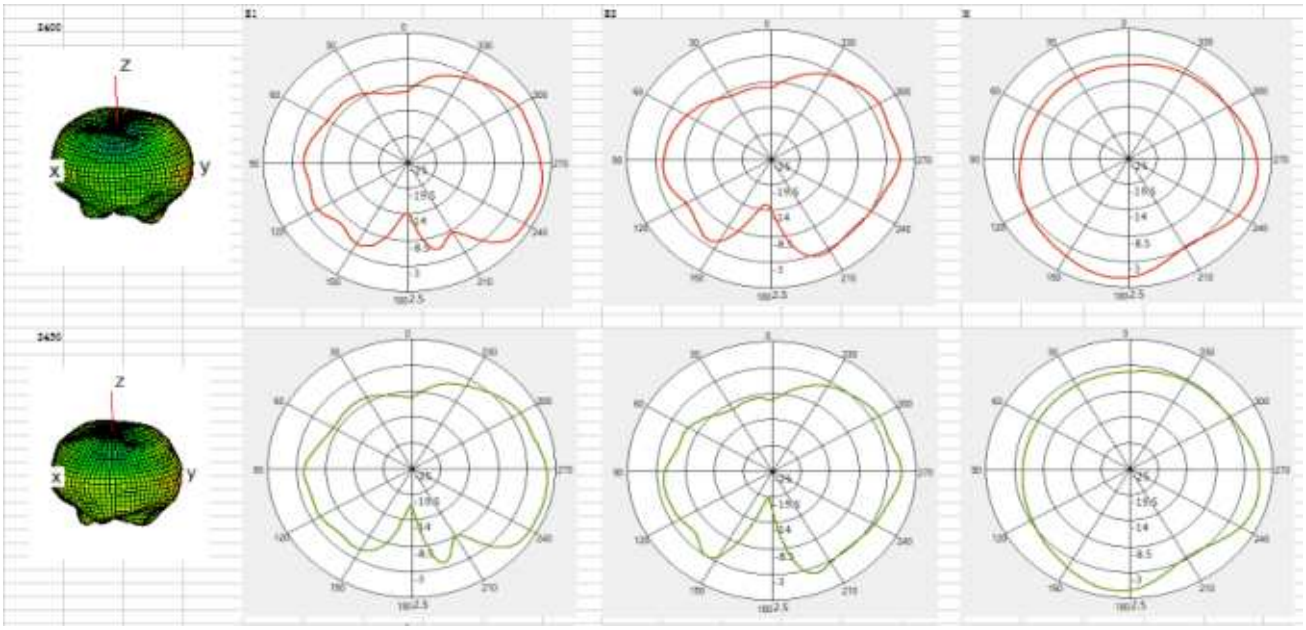


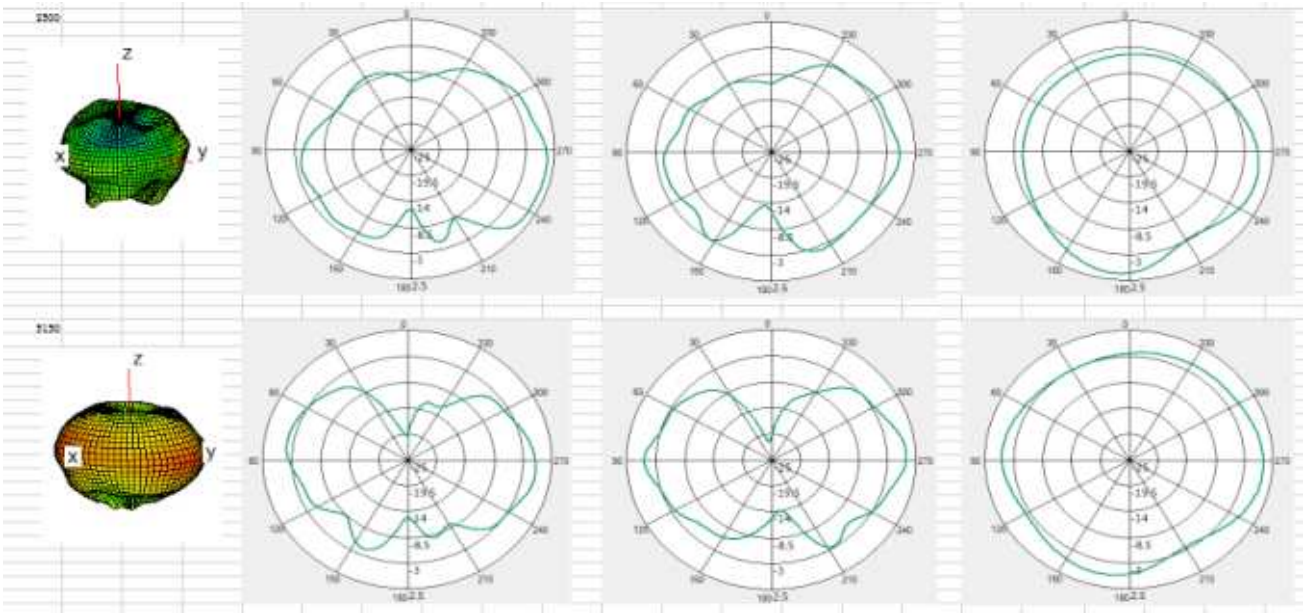
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Gain (dBi)	0.78	0.88	0.25	0.77	0.38	1.4

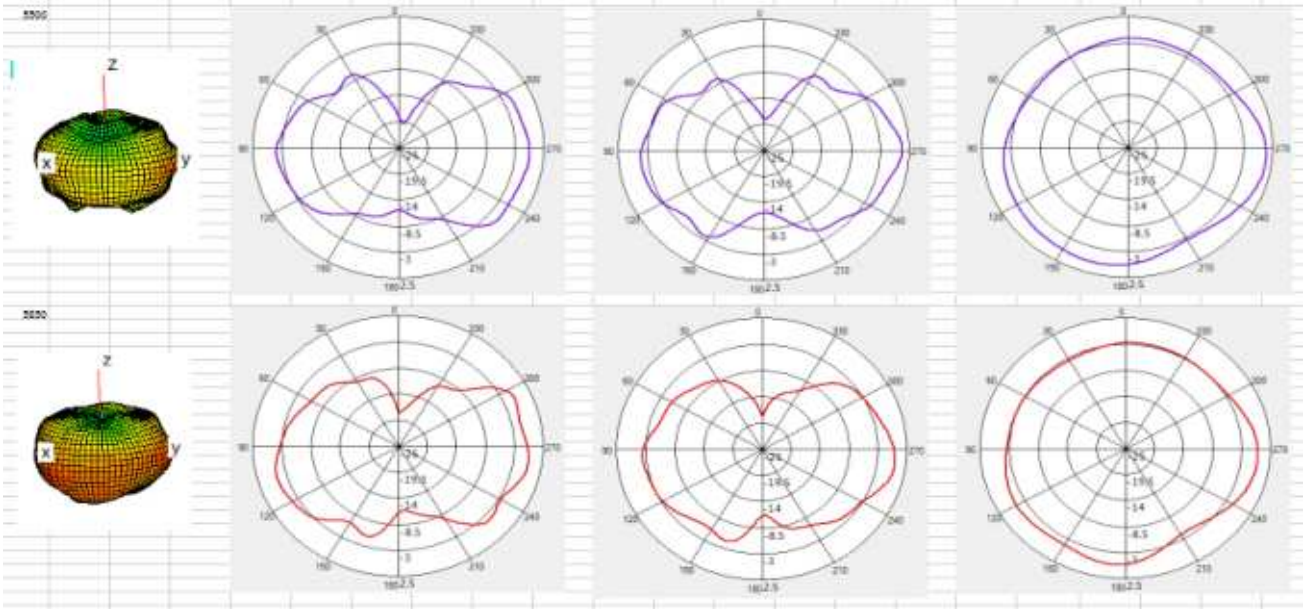
4.5. Radiation Pattern



H plane: the tangent of XY
E1 plane: the tangent of XZ
E2 plane: the tangent of YZ




2500
3150
Z
X
Y


3500
3650
Z
X
Y

5 Product Size

