

Antenna

YCGO006AA 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 |

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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

- GPS L1 & BD B1
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

| | |
|-------------------|----------------|
| Frequency | 1559–1577 MHz |
| Input Impedance | 50 Ω |
| VSWR | ≤ 2 |
| Gain | ≤ 2.0 dBi |
| Polarization Type | RHCP |

Mechanical Specifications

| | |
|---------------------|--------------------------------------|
| Antenna Size | 18 mm \times 18 mm \times 6.3 mm |
| Casing | Ceramics |
| Connector Type | IPEX MHF 1 |
| Working Temperature | -40 $^{\circ}$ C to +85 $^{\circ}$ C |
| Radome Color | - |

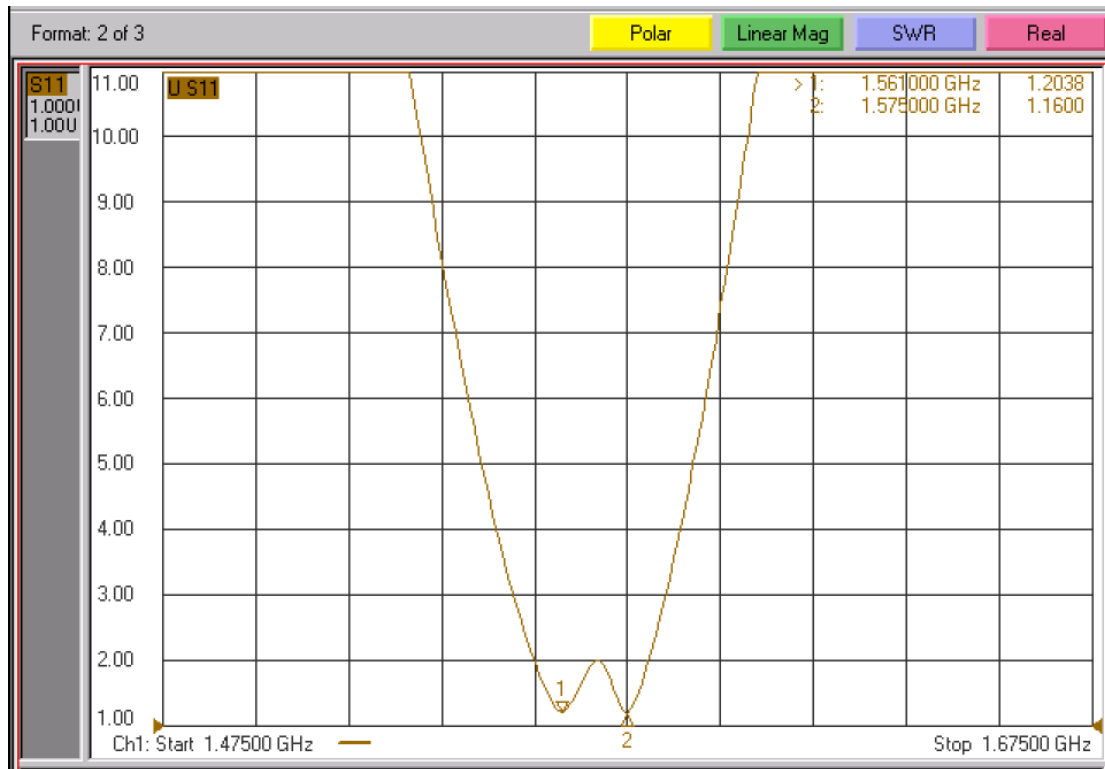
4 Overall Performance

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

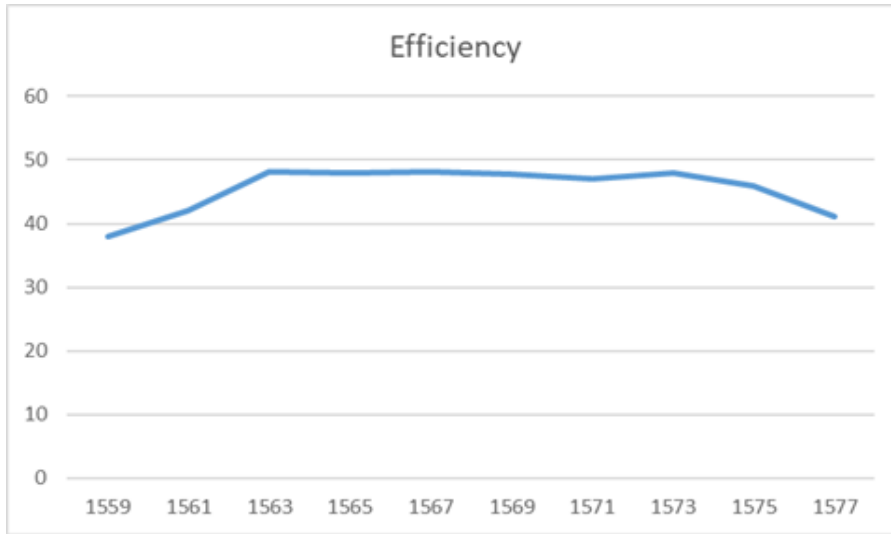


4.2. VSWR



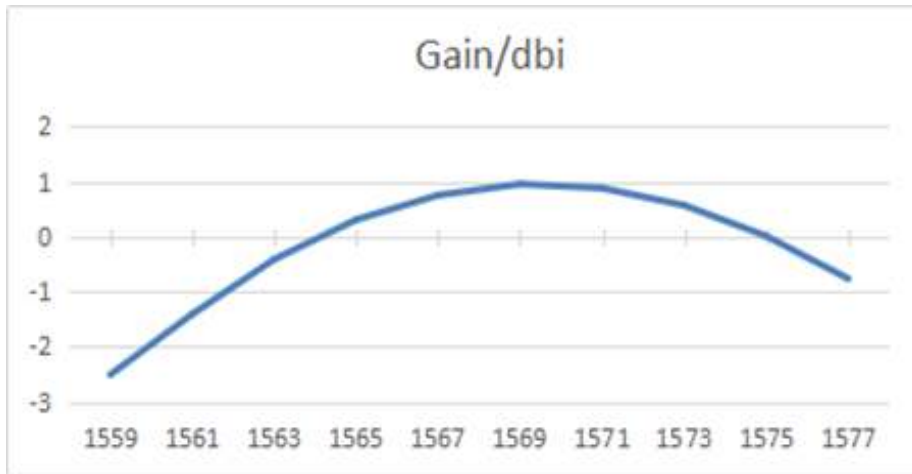
| | | |
|-----------------|------|------|
| Frequency (MHz) | 1561 | 1575 |
| VSWR | 1.2 | 1.16 |

4.3. Efficiency



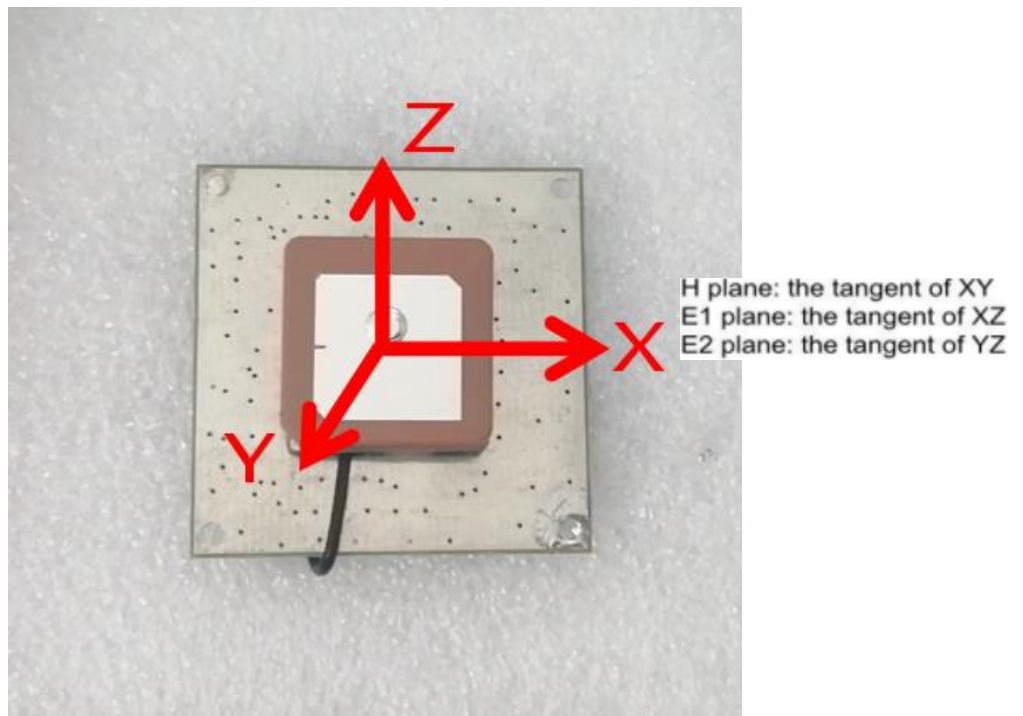
| | | |
|-----------------|------|------|
| Frequency (MHz) | 1561 | 1575 |
| Efficiency (%) | 42 | 46 |

4.4. Gain



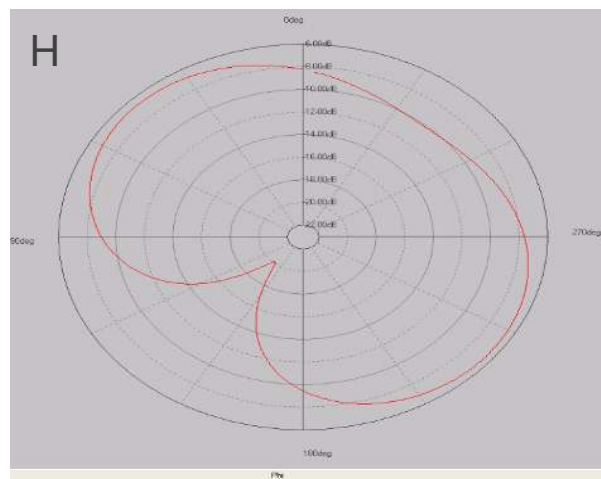
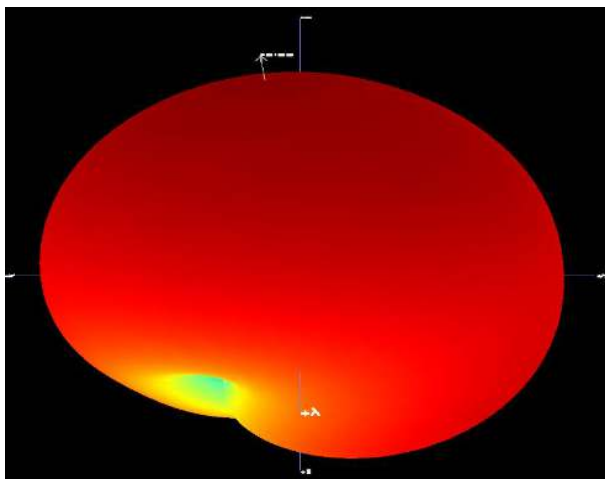
| | | |
|-----------------|------|------|
| Frequency (MHz) | 1561 | 1575 |
| Gain (dBi) | -1.4 | 0.1 |

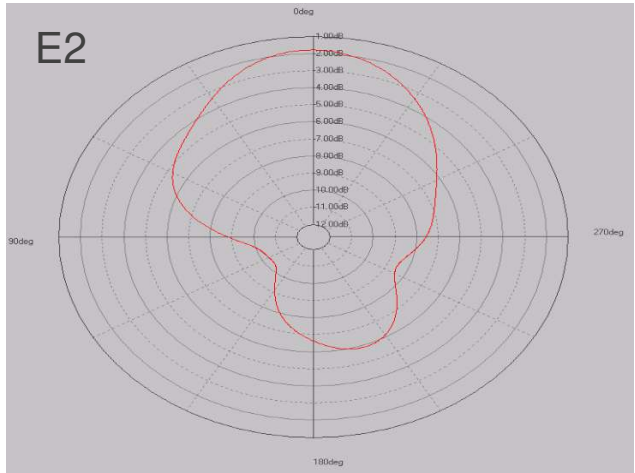
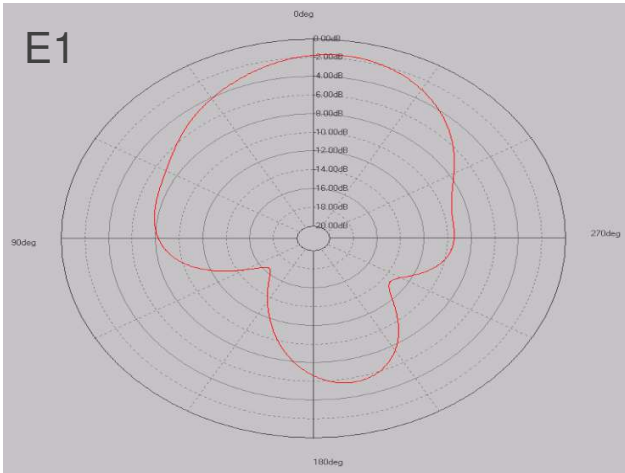
4.5. Radiation Patterns



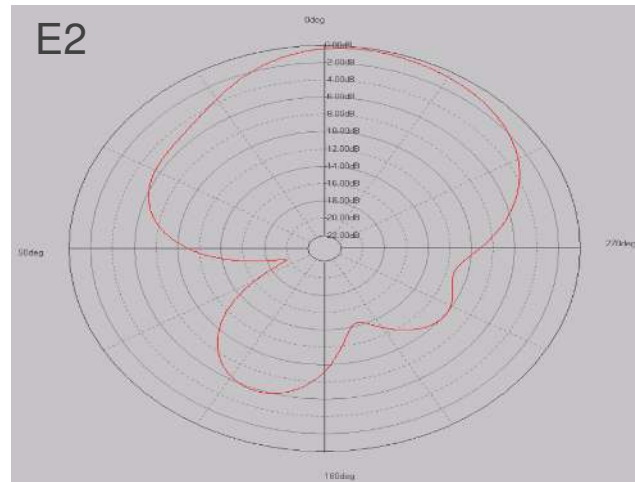
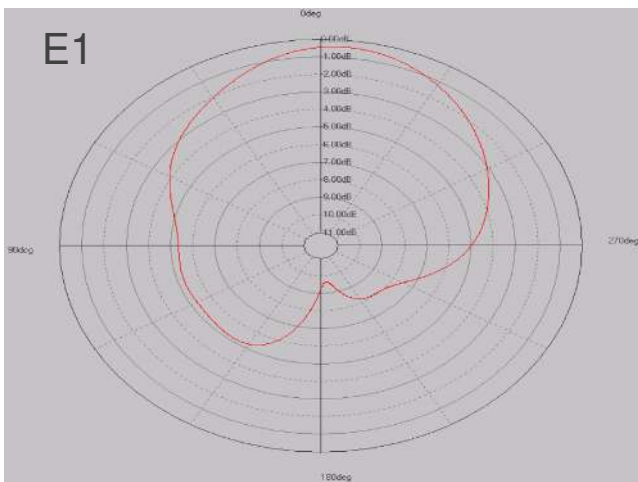
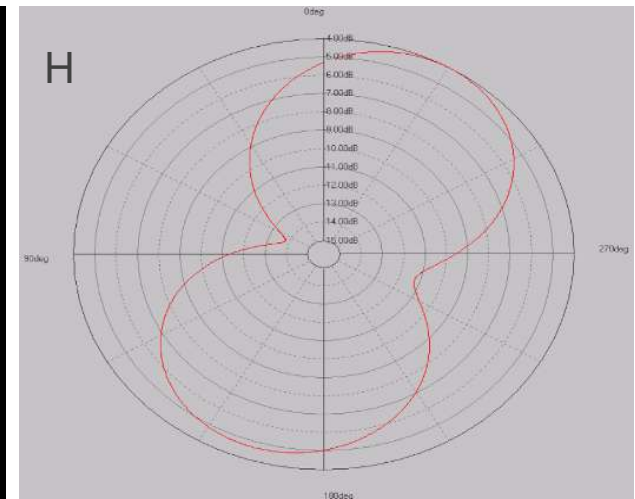
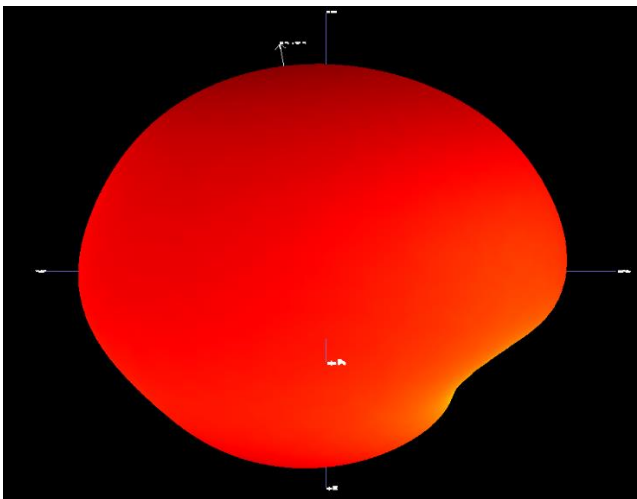
- Note: By 40 mm square ground plane.

4.5.1. 1561 MHz





4.5.2. 1575 MHz



5 Product Size

