

Antenna YF0007AA Datasheet

Antenna Services

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About the Document

Revision History

| Version | Date | Author | Note | | | | | |
|---------|------------|-----------|-------------------------------------------------------------------|--|--|--|--|--|
| 1.0 | 2020-06-08 | Kenny YIN | Initial | | | | | |
| 1.1 | 2020-11-19 | Kenny YIN | Updated the antenna picture with the new silkscreen in Chapter 1. | | | | | |
| 1.2 | 2020-12-11 | Kenny YIN | Updated the antenna picture 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

- LTE Full-Band Antenna
- High efficiency
- Excellent performance



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3 Product Specifications

| Passive Electrical Specifications | |
|-----------------------------------|-----------------------------------------------------------------|
| Frequency Range | 600–960 MHz, 1427.9–1495.9 MHz, 1710–2170 MHz, 2300–2700 MHz |
| Input Impendence | 50 Ω |
| VSWR | ≤ 5.0 |
| Gain | ≤ 4.7 dBi |
| Polarization Type | Linear |
| Mechanical Specifications | |
| Antenna Size | 50 mm × 25 mm × 0.85 mm |
| Casing | FR4 |
| Connector Type | U.FL |
| | |
| Working Temperature | -20 °C to +80 °C |

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4 Overall Performance

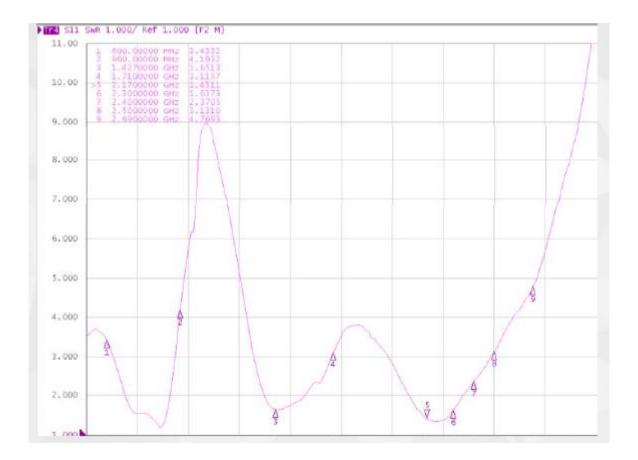
- Test Environment
 - KEYSIGHT VNA Network Analyzer E5063A 100 kHz 6.5 GHz.
 - RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz 6.0 GHz.



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VSWR

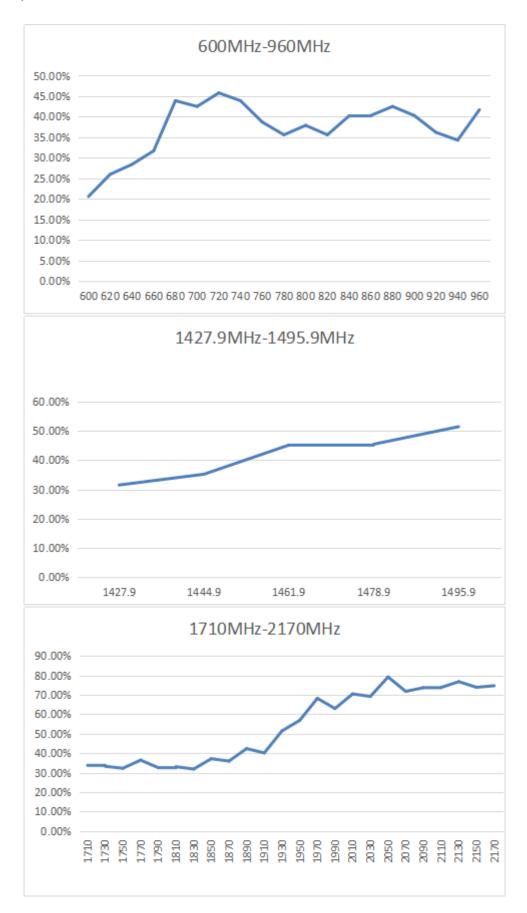


| Frequency(MHz) | 600 | 960 | 1427 | 1710 | 2170 | 2300 | 2400 | 2500 | 2690 |
|----------------|------|------|------|------|------|------|------|------|------|
| VSWR | 3.44 | 4.19 | 1.65 | 3.11 | 1.43 | 1.64 | 2.37 | 3.14 | 4.77 |

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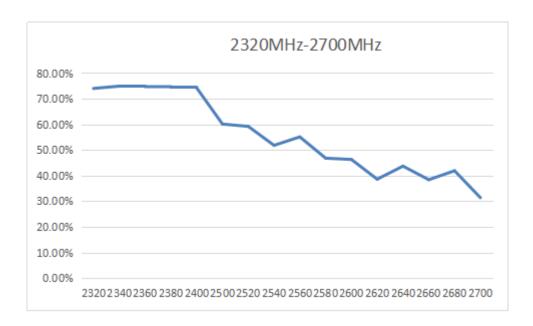


Efficiency



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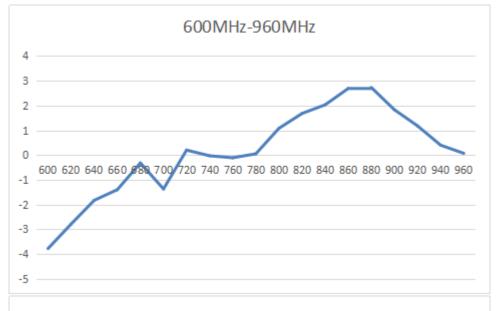


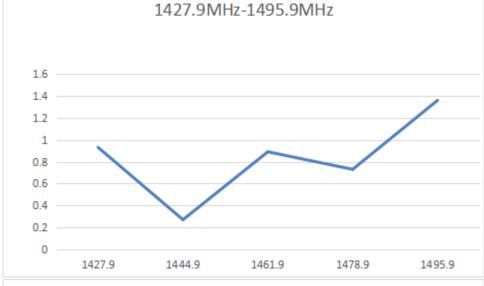
| Frequency(MHz) | 600 | 820 | 960 | 1710 | 1990 | 2170 | 2320 | 2580 | 2680 |
|----------------|------|------|------|------|------|------|------|------|------|
| Efficiency(%) | 43.9 | 35.6 | 41.7 | 33.8 | 63 | 74.7 | 74 | 46.8 | 41.9 |

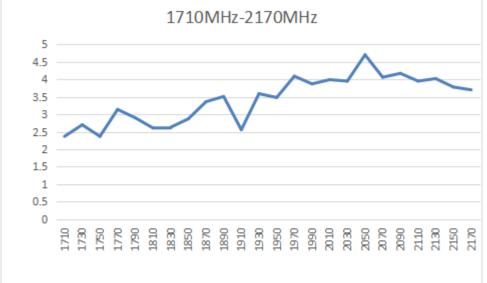
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Gain

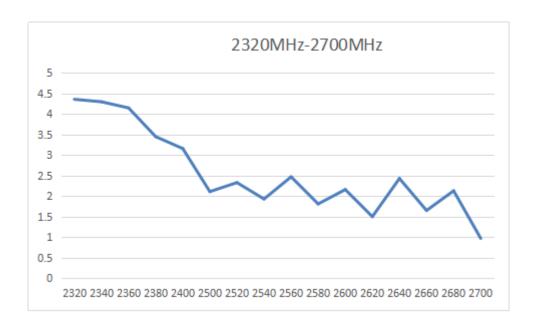






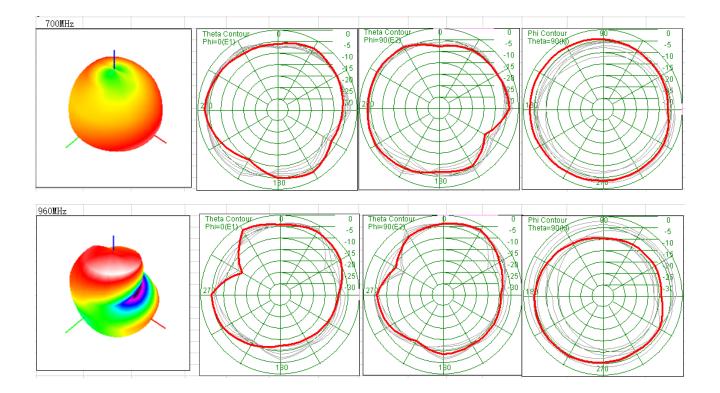
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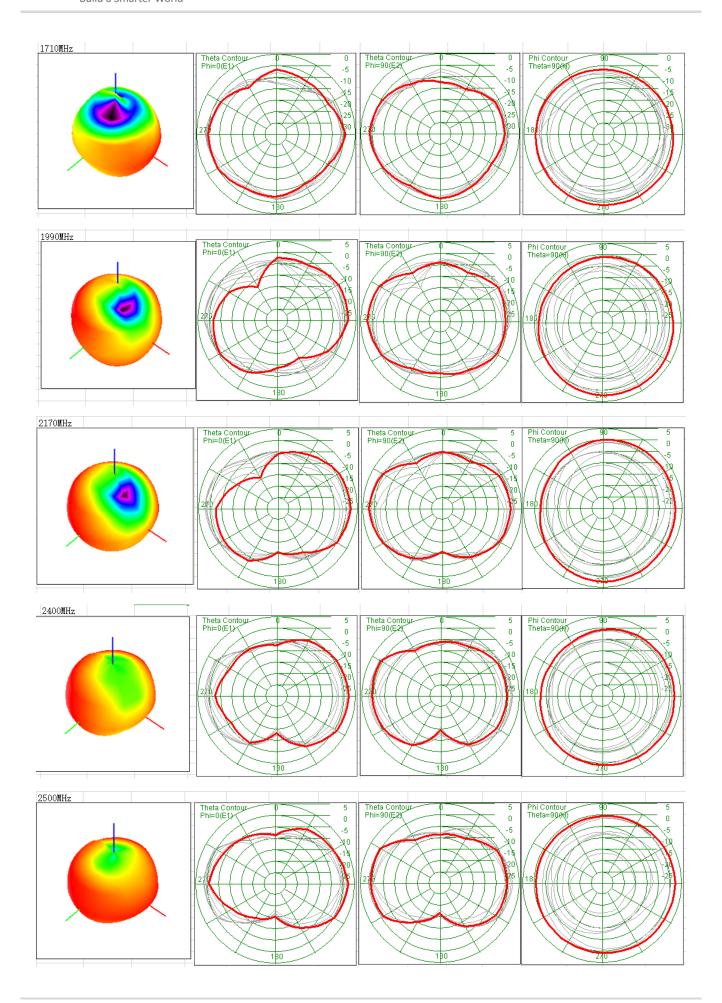
| Frequency(MHz) | 600 | 960 | 1427 | 1710 | 2170 | 2320 | 2400 | 2500 | 2680 |
|----------------|-------|------|------|------|------|------|------|------|------|
| Gain(dBi) | -3.78 | 0.07 | 0.93 | 2.37 | 3.7 | 4.36 | 3.16 | 2.11 | 2.13 |

Radiation Patterns



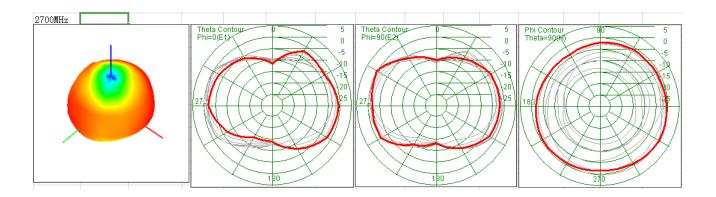
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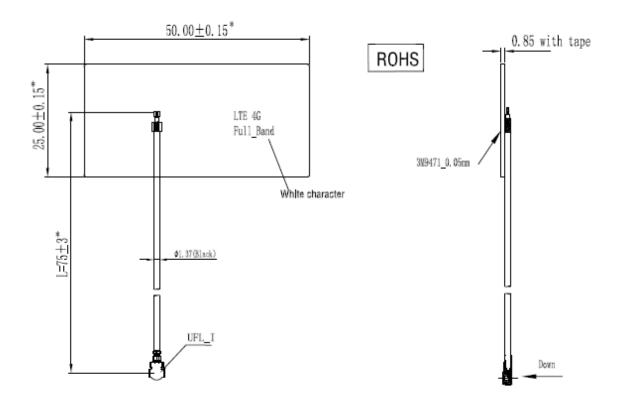


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5 Product Size



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