# Antenna

# YE0002AA Datasheet

**Antenna Services**

Version: 1.1

Date: 2020-12-11

Status: Released

**Our aim is to provide customers with timely and comprehensive service. For any assistance, please contact our company headquarters:**

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# About the Document

## Revision History

| Version | Date | Author | Note |
|---|---|---|---|
| 1.0 | 2020-06-10 | Kenny YIN | Initial |
| 1.1 | 2020-12-11 | Kenny YIN | Updated the antenna image in Chapter 2. |

# Contents

# 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

- Cellular LTE
- High efficiency
- Excellent performance

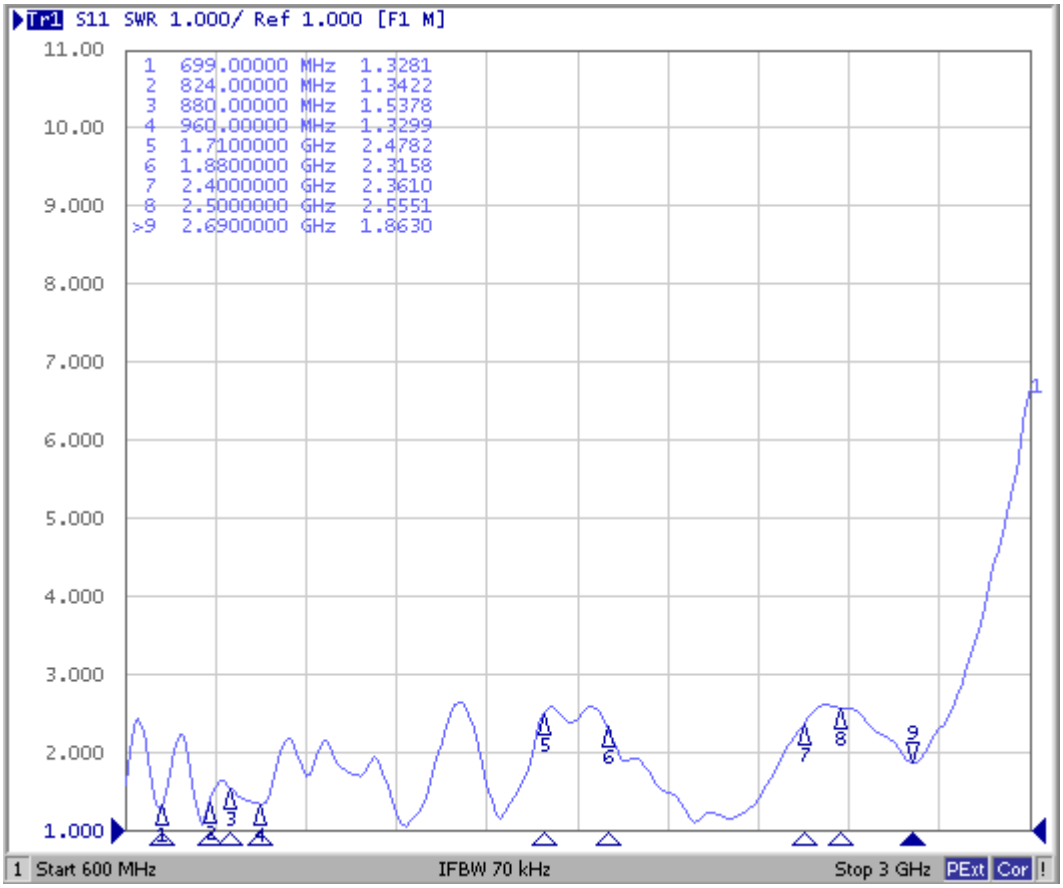
# 3 Product Specifications

| Passive Electrical Specifications | |
|---|---|
| Frequency Range | 699–2700 MHz |
| Input Impendence | 50 Ω |
| VSWR | ≤ 3.0 |
| Gain | ≤ 3 dBi |
| Polarization Type | Linear |
| **Mechanical Specifications** | |
| Antenna Size | 174.6 mm × 19.2 mm |
| Casing | ABS + PC |
| Radiator | Cuprum |
| Connect Type | SMA (Female internal thread pin) |
| Working Temperature | -20°C to +80 °C |
| Radome Color | White |

# 4 Overall Performance

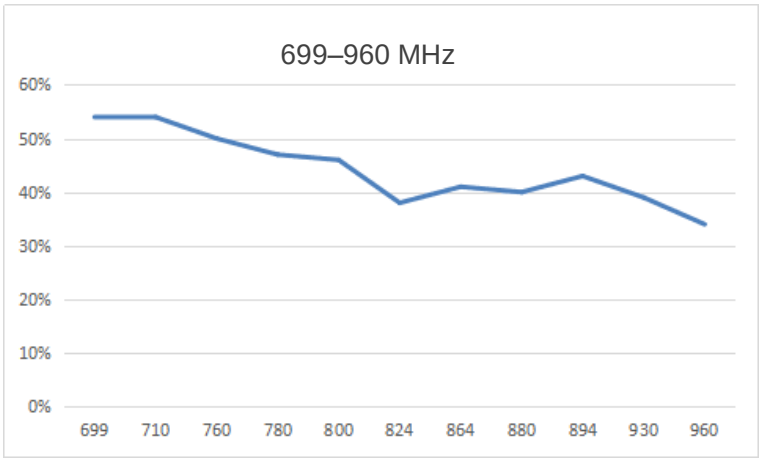
- Test Environment
  - KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz.
  - RayZone® 2800 Chamber 5G(FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

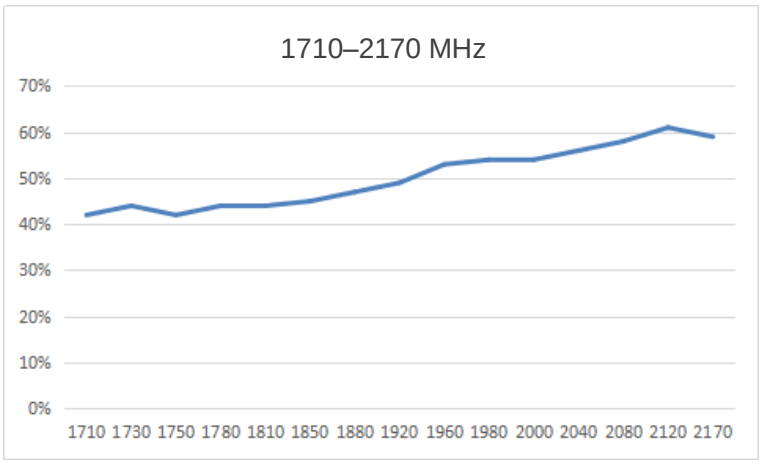
- VSWR

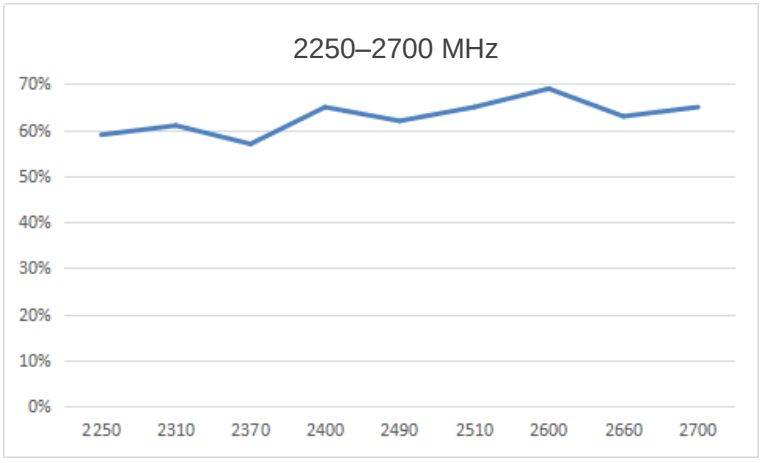



| Frequency (MHz) | 699 | 824 | 880 | 960 | 1710 | 1880 | 2400 | 2500 | 2690 |
|---|---|---|---|---|---|---|---|---|---|
| VSWR | 1.3 | 1.3 | 1.5 | 1.3 | 2.4 | 2.3 | 2.3 | 2.5 | 1.8 |

- Efficiency

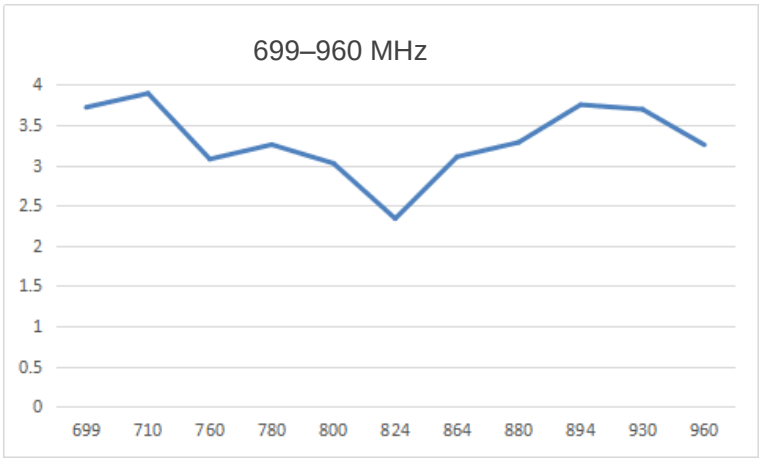


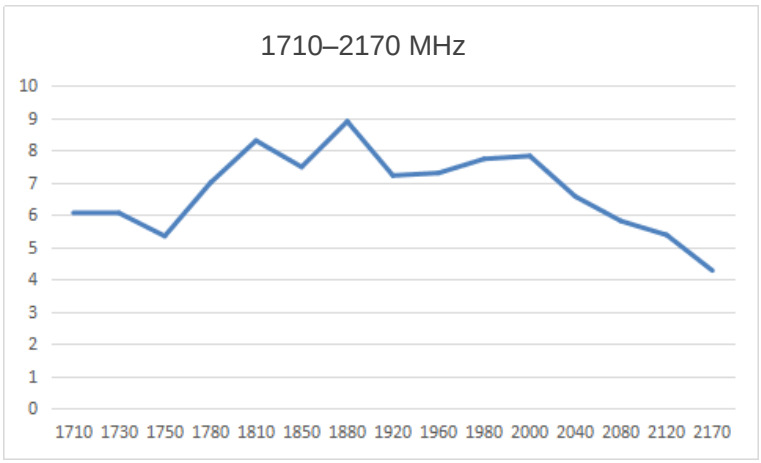



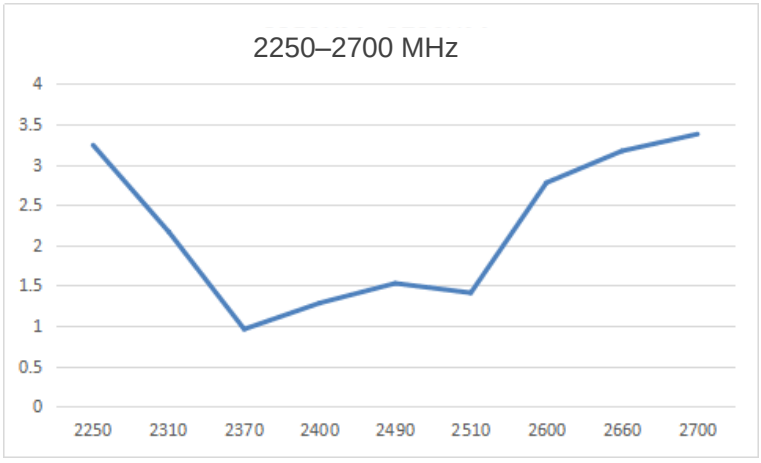




| Frequency (MHz) | 699 | 824 | 880 | 960 | 1710 | 1990 | 2170 | 2500 | 2690 |
|---|---|---|---|---|---|---|---|---|---|
| Efficiency (%) | 54 | 38 | 40 | 33 | 42 | 53 | 59 | 65 | 66 |

- Gain

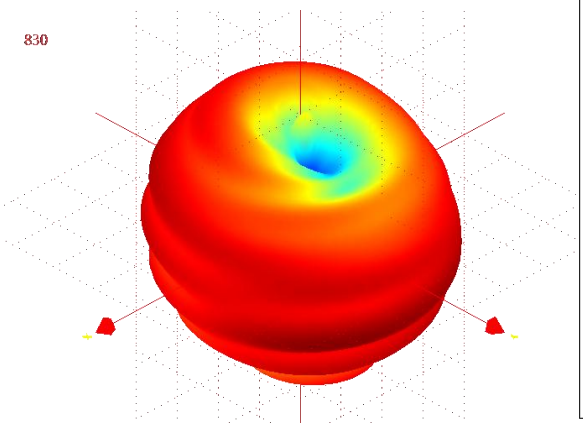


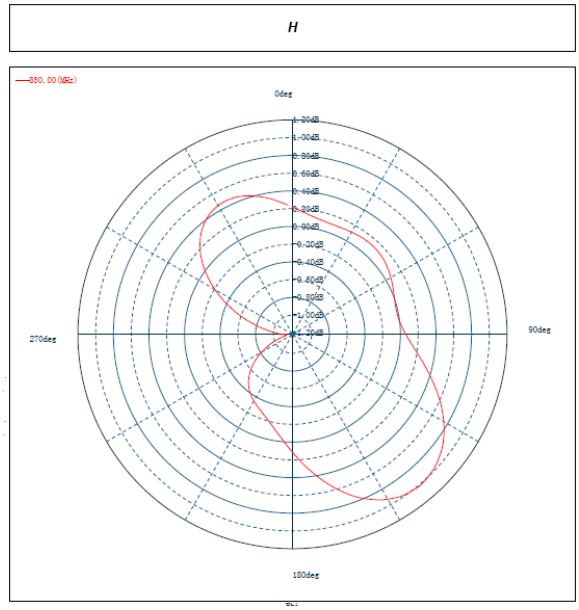



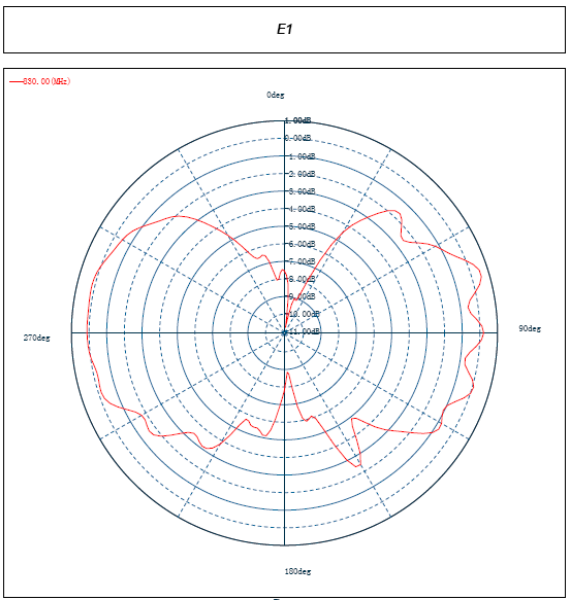



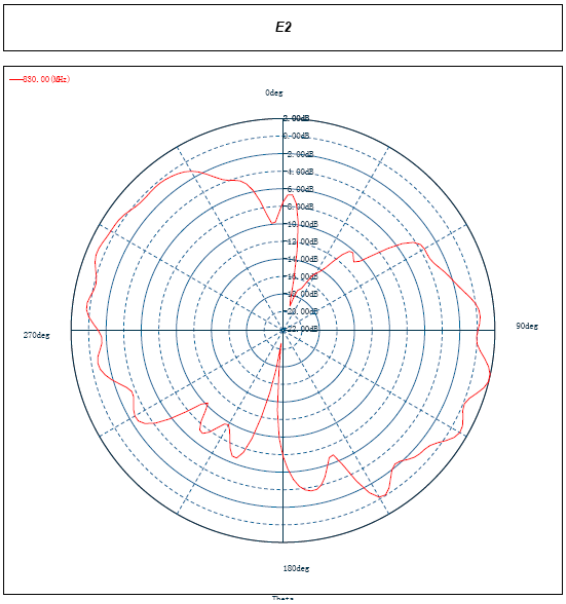

| Frequency (MHz) | 699 | 824 | 880 | 960 | 1710 | 1990 | 2170 | 2500 | 2690 |
|---|---|---|---|---|---|---|---|---|---|
| Gain | 3.7 | 2.3 | 3.2 | 3.1 | 6.0 | 7.8 | 4.2 | 1.4 | 3.1 |

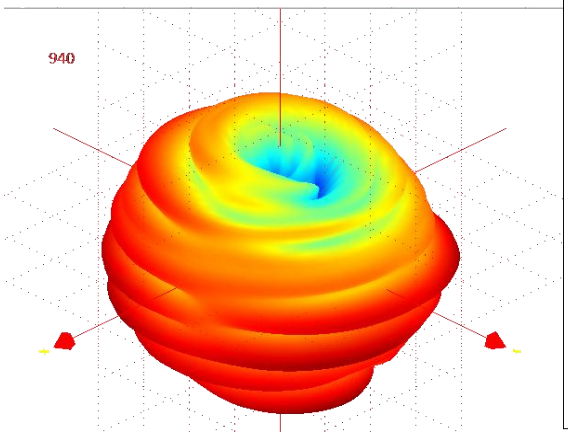
- Radiation Patterns

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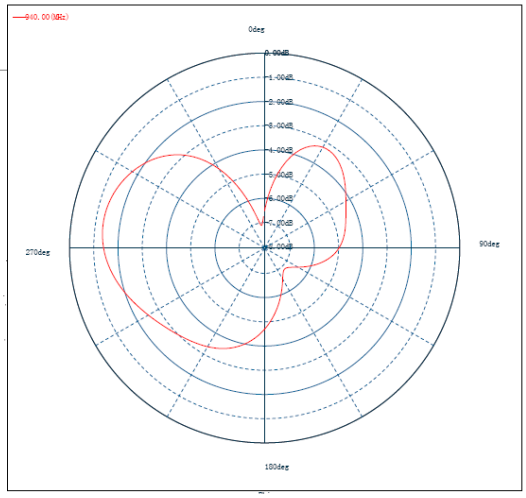
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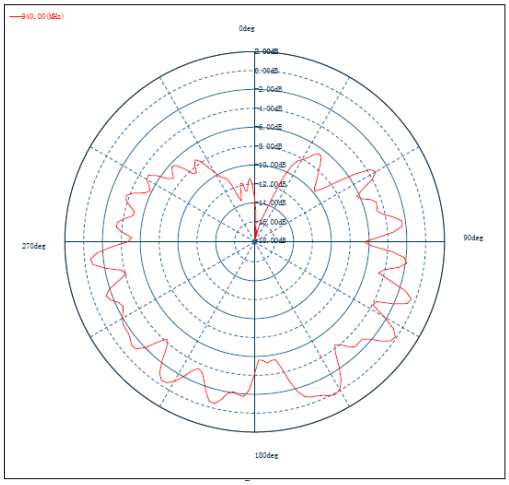
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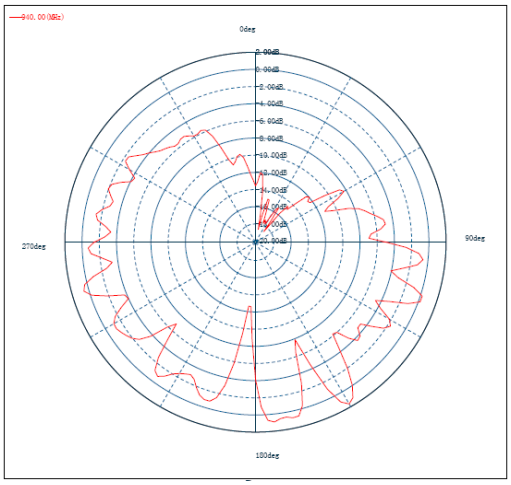
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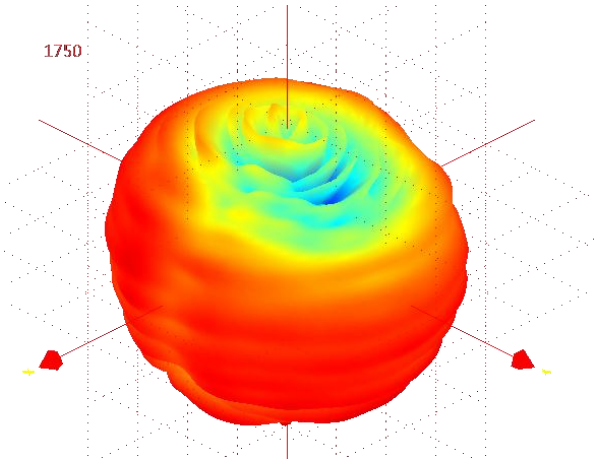
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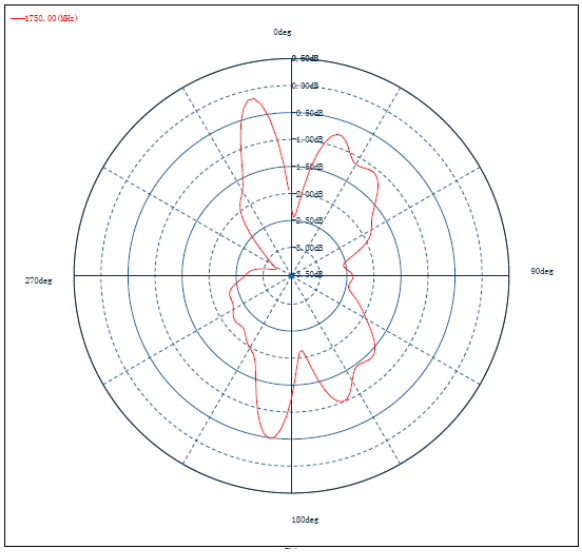
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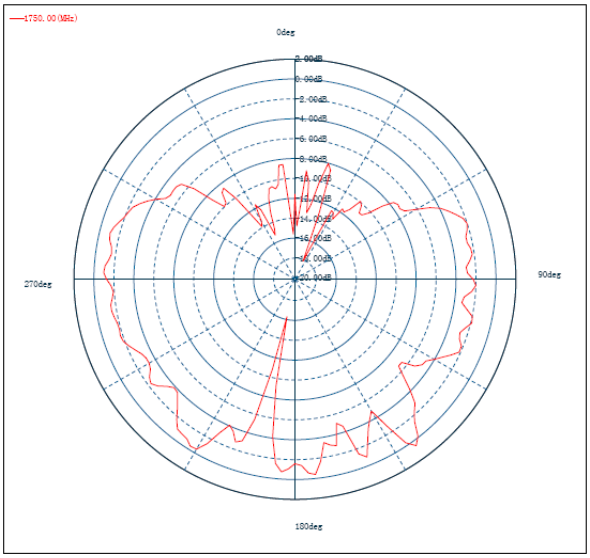
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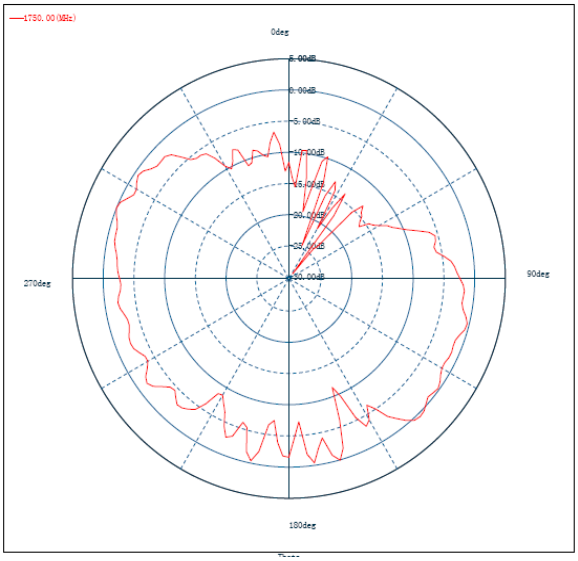
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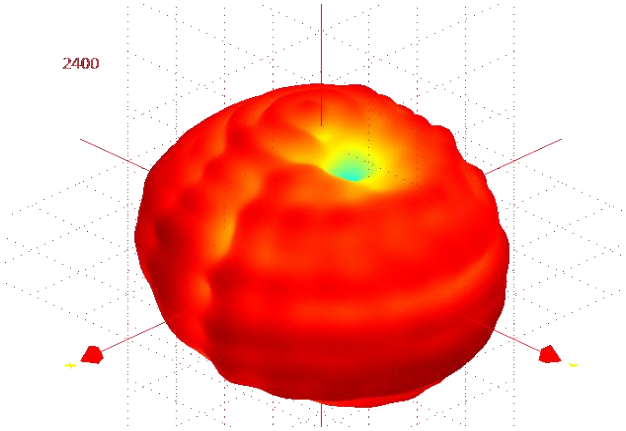
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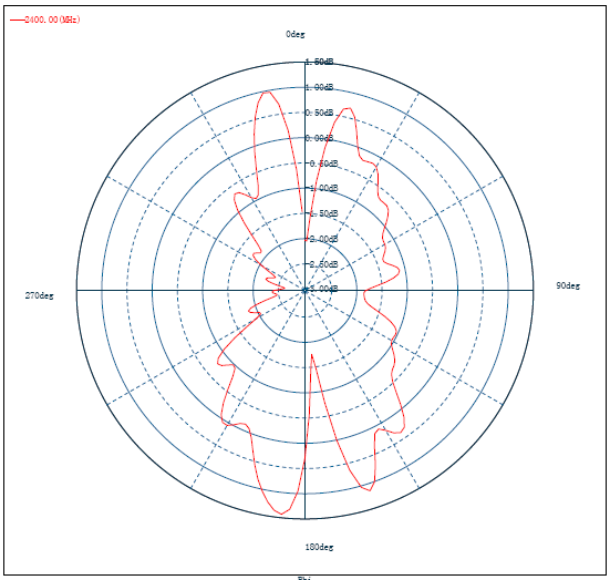
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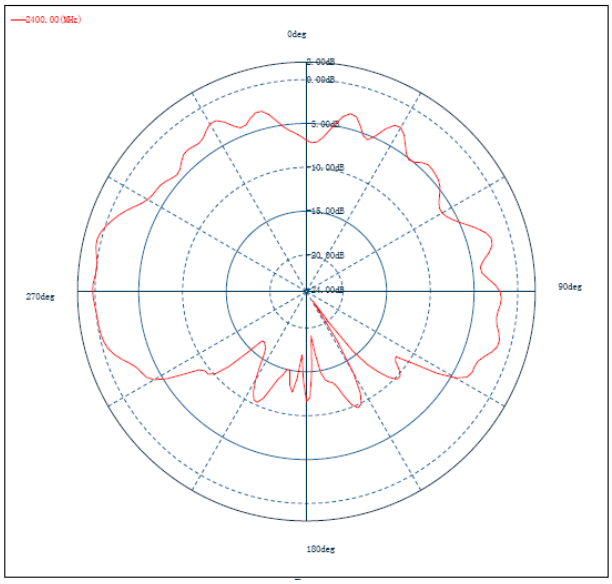
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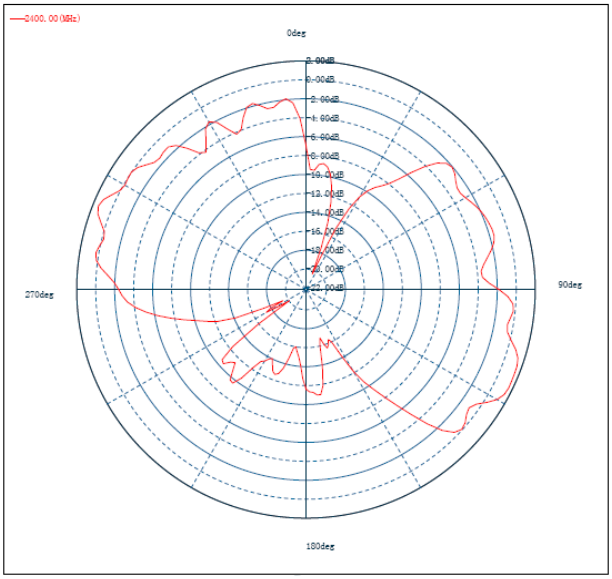
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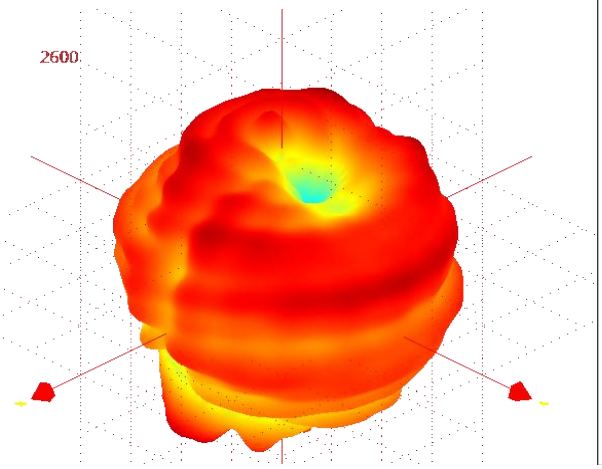
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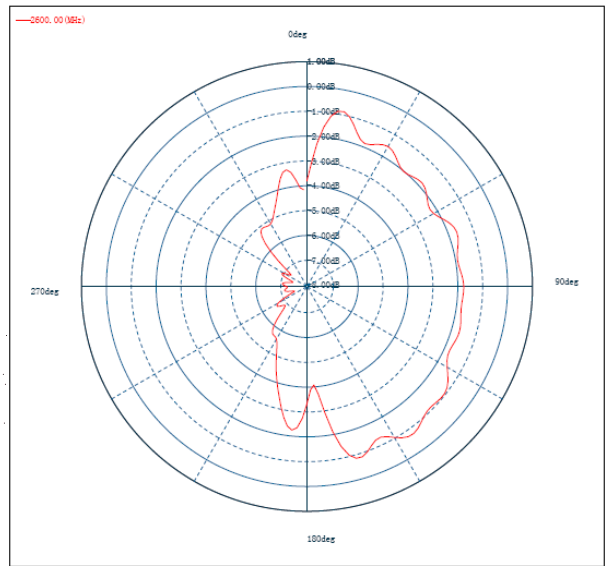
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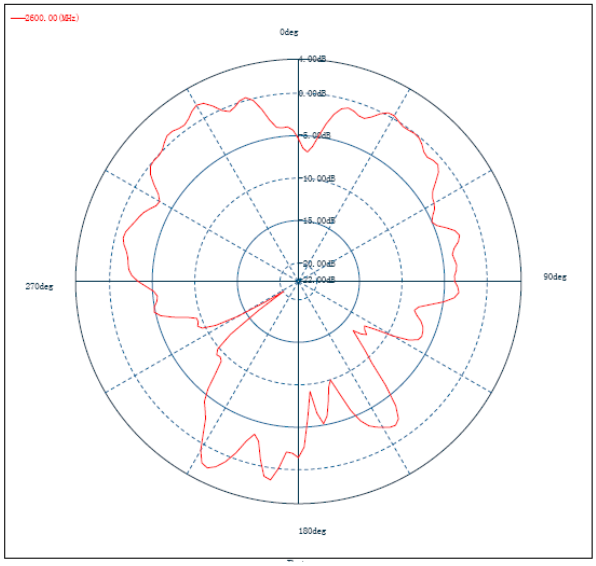
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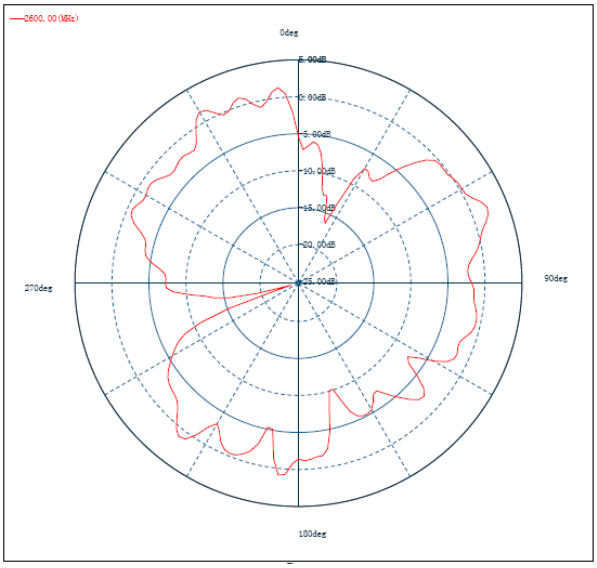
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# 5 Product Size