

# Antenna

# YE0012AA Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-06-30	Kenny YIN	Initial
2.0	2020-07-03	Kenny YIN	Updated the specifications.
2.1	2020-12-16	Kenny YIN	Updated the antenna image in Chapter 2.
2.2	2021-01-27	Kenny YIN	Added IP rating description and installation method.

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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

- Cellular LTE
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	824–960 MHz, 1710–2690 MHz
Input Impedance	50 $\Omega$
VSWR	$\leq 2.0$
Gain	$\leq 4$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size	116.5 mm x 21.7 mm x 5.6 mm
Casing	ABS + PC
Connector Type	SMA Male (center pin)
Working Temperature	-20 °C to +80 °C
Radome Color	Black
Installation method	Adhesive
IP rating	IP53

## 4 Overall Performance

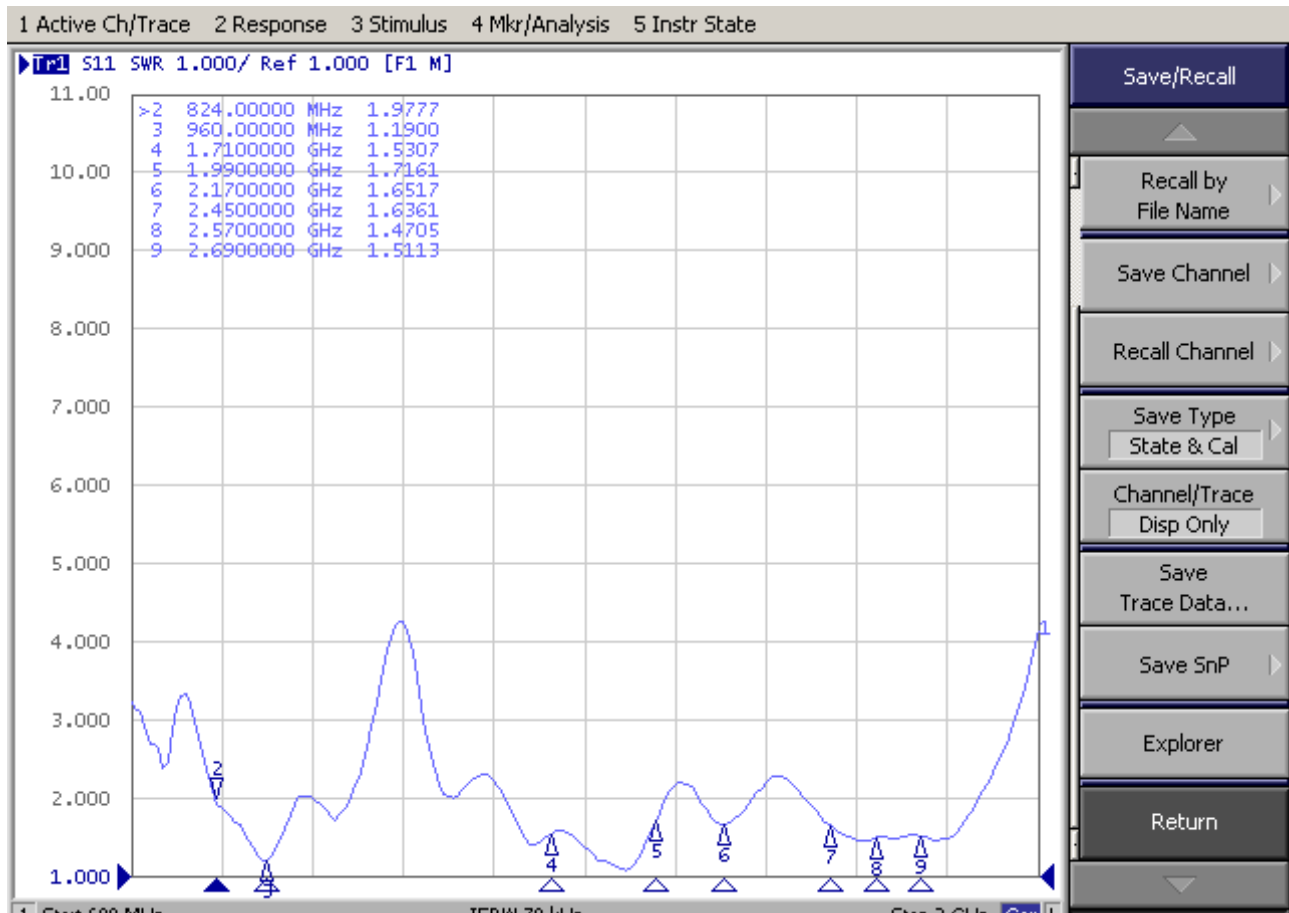
### 4.1. Test Environment

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



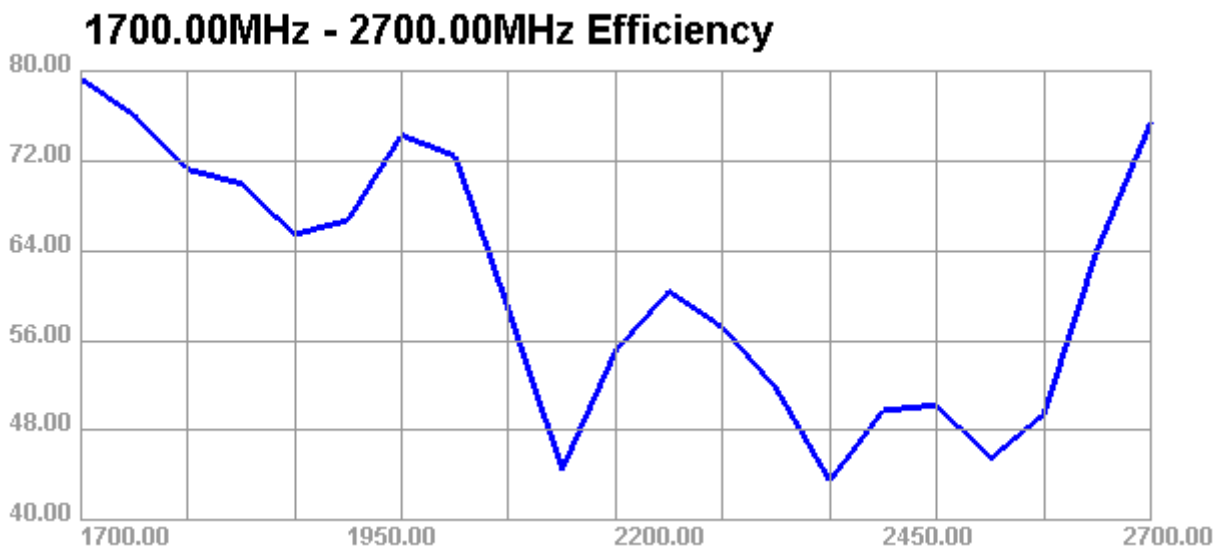
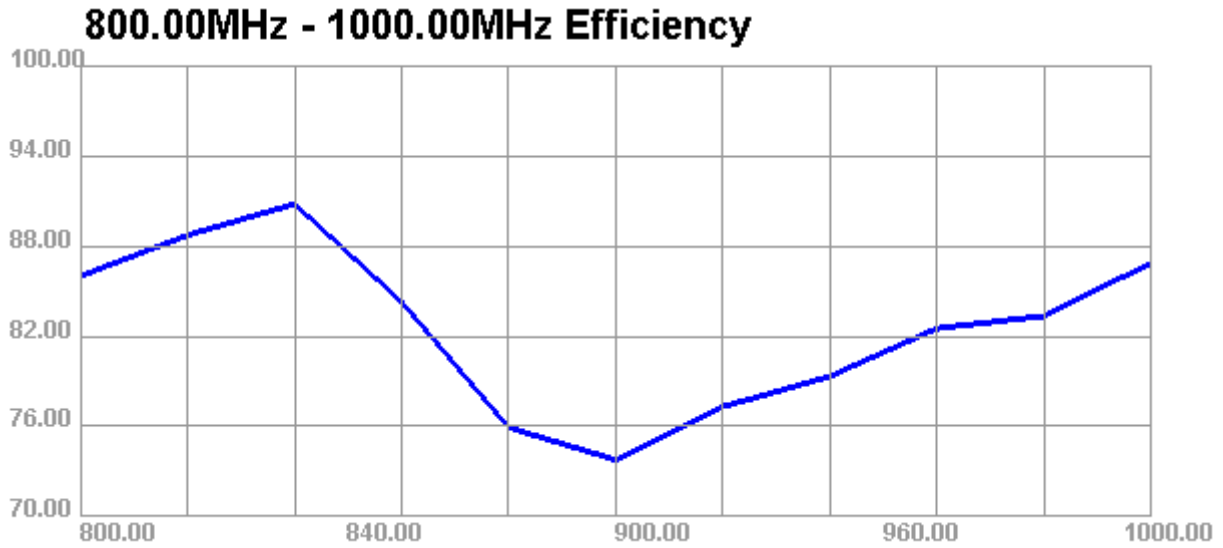


## 4.2. VSWR



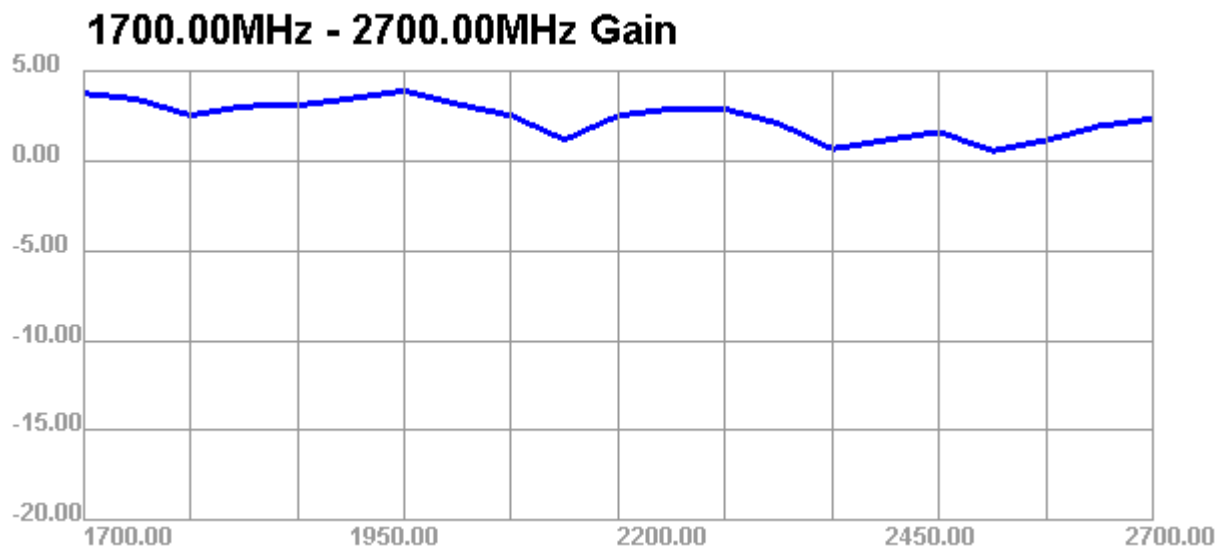
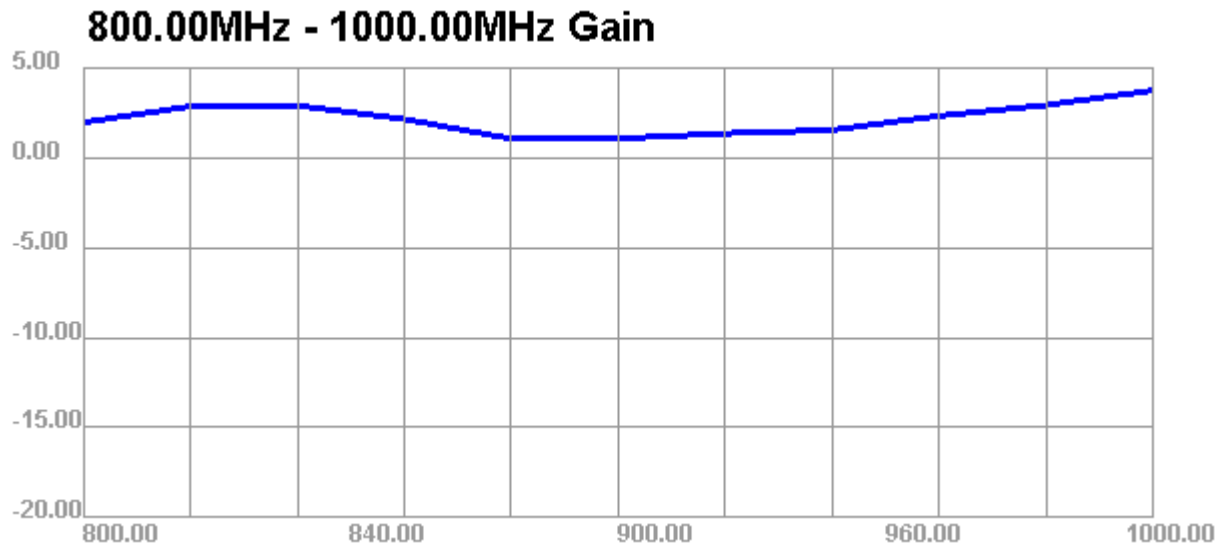
Frequency (MHz)	824	960	1710	1990	2170	2450	2570	2690
VSWR	1.98	1.19	1.53	1.72	1.65	1.64	1.47	1.51

### 4.3. Efficiency



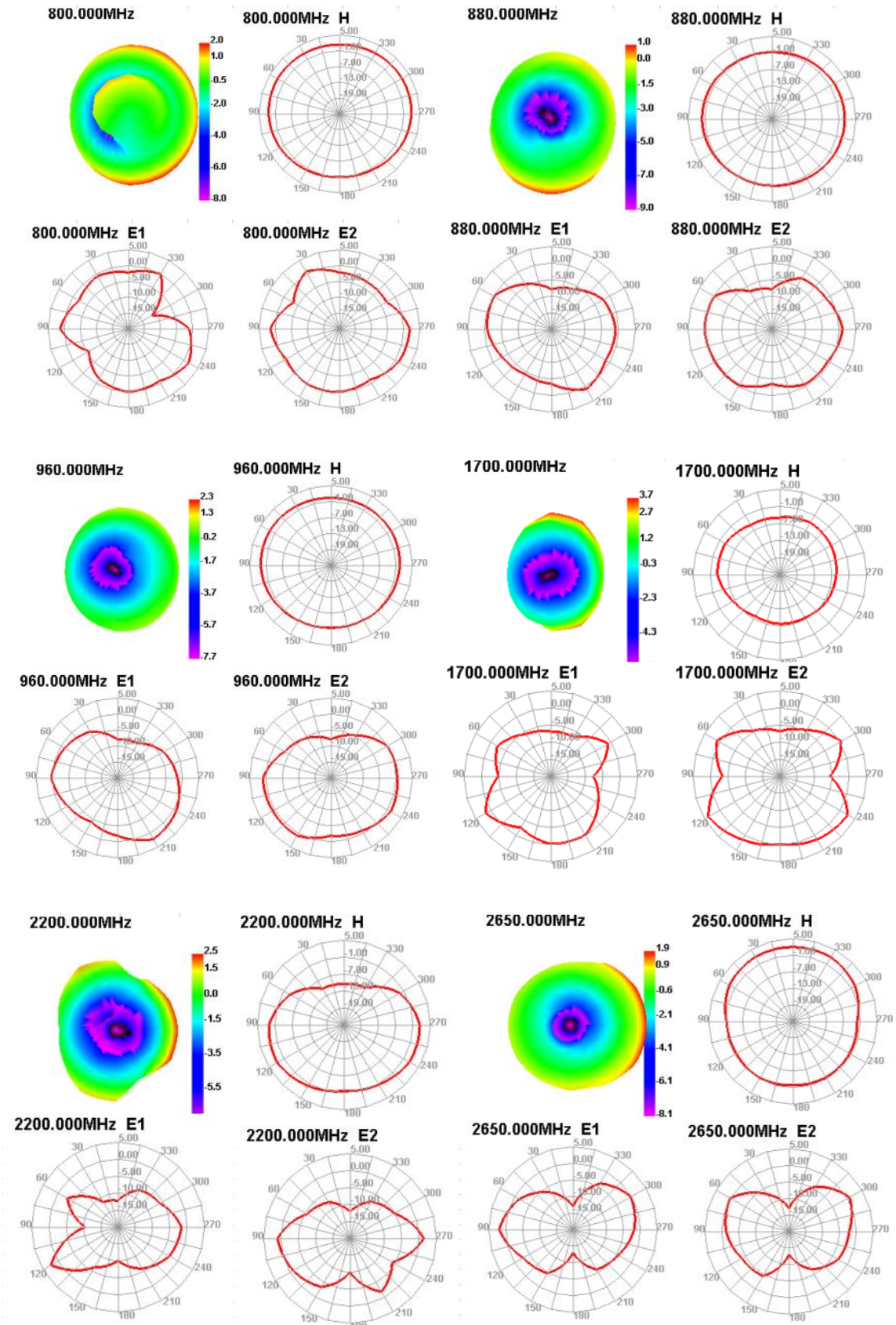
Frequency (MHz)	820	960	1000	1700	1950	2200	2450	2700
Efficiency (%)	88.73	82.53	86.88	79.29	66.73	55.11	49.81	75.43

#### 4.4. Gain



Frequency (MHz)	820	960	1000	1700	1950	2200	2450	2700
Gain	2.85	2.33	3.74	3.74	3.45	2.51	1.14	2.33

### 4.5. Radiation Patterns



## 5 Product Size

