

# Antenna

## **YB0010AA** Data Sheet

### **Antenna Services**

Version: 1.2

Date: 2020-12-11

Status: Released



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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-06-28	Kenny YIN	Initial
1.1	2020-11-19	Kenny YIN	Added the mounting method in Chapter 3.
1.2	2020-12-11	Kenny YIN	Updated the antenna image 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

- Cellular LTE
- Excellent performance
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range (MHz)	698–960 MHz; 1710–2690 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 3.0$
Gain	2.94 dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	$\Phi 84$ mm $\times$ 81.5 mm $\times$ 16 mm
Casing	PC + ABS
Connect Type	SMA Male
Working Temperature (°C)	-20 °C to +80 °C
Radome Color	Black
Waterproof Grade	IP66
Mounting Method	Magnetic mount

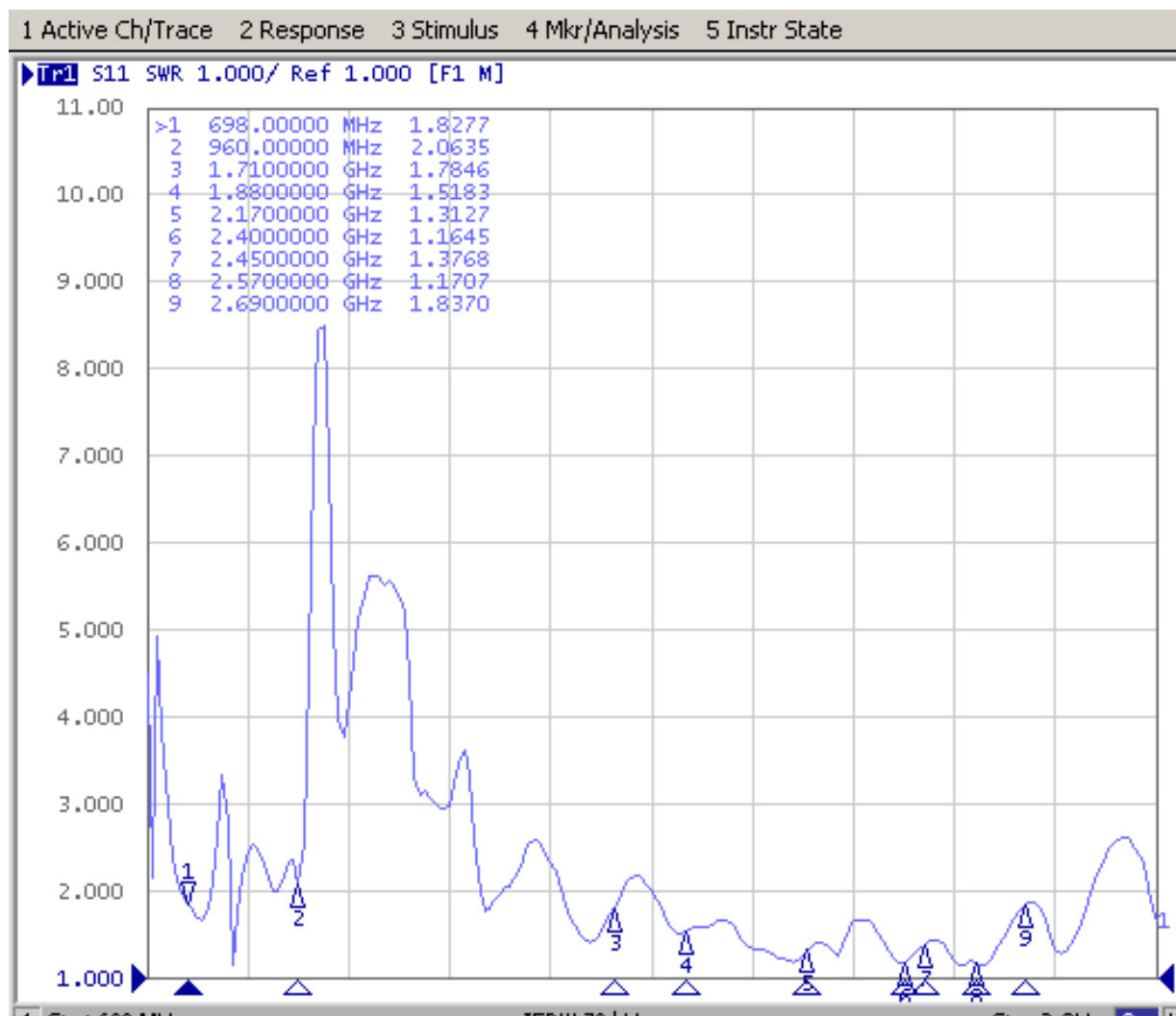
## 4 Overall Performance

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



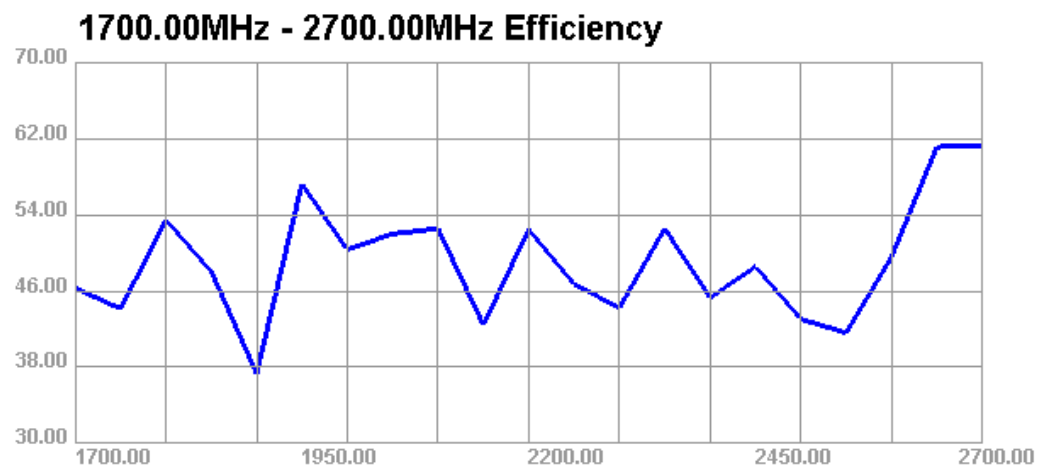
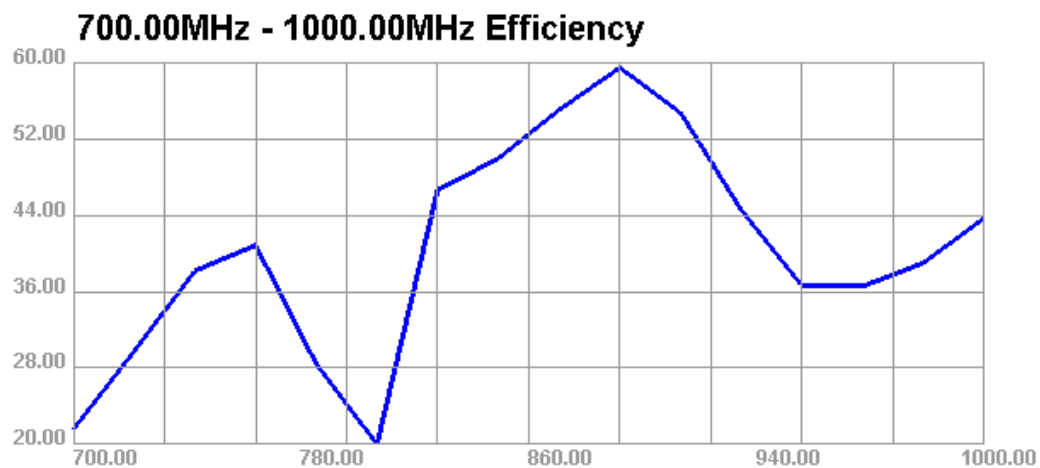


● VSWR



Frequency(MHz)	698	960	1710	1880	2170	2400	2450	2570	2690
VSWR	1.82	2.06	1.78	1.51	1.31	1.16	1.37	1.17	1.84

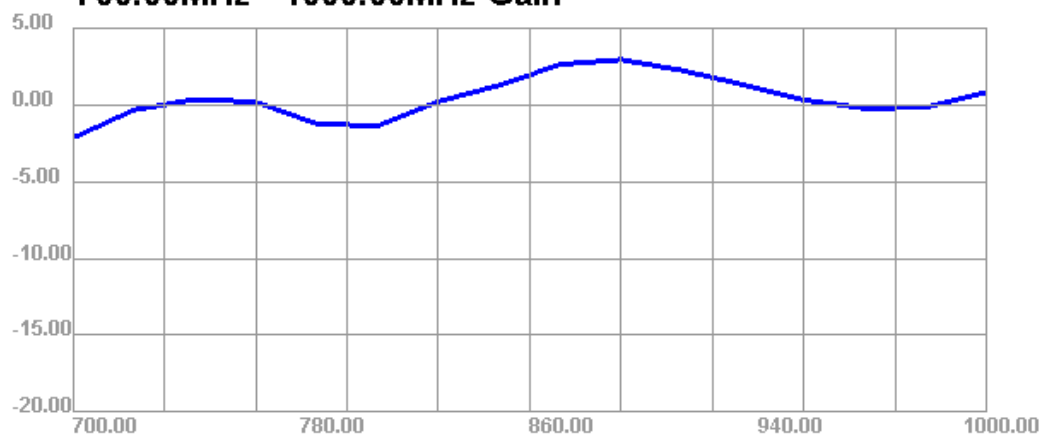
● Efficiency



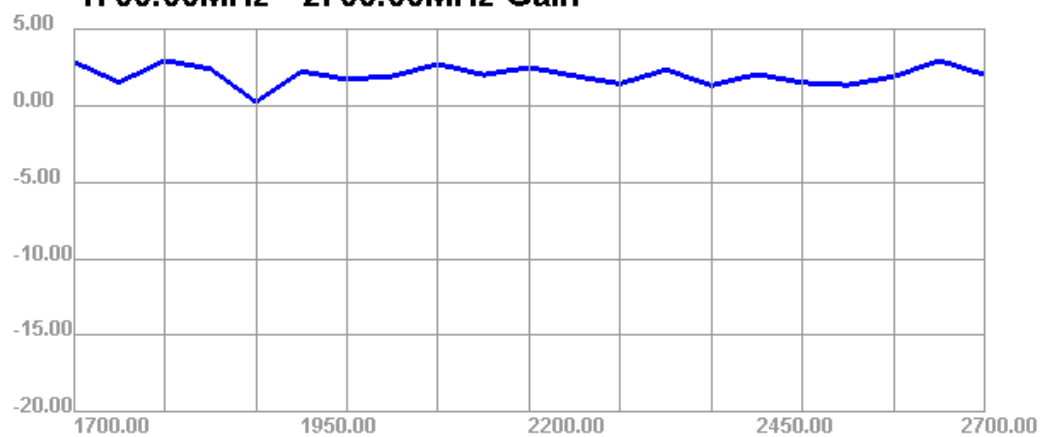
Frequency(MHz)	698	880	960	1710	1880	2170	2400	2450	2570	2690
Efficiency(%)	21.6	59.47	36.53	46.33	48.06	42.44	45.3	48.58	41.62	61.14

● Gain

**700.00MHz - 1000.00MHz Gain**

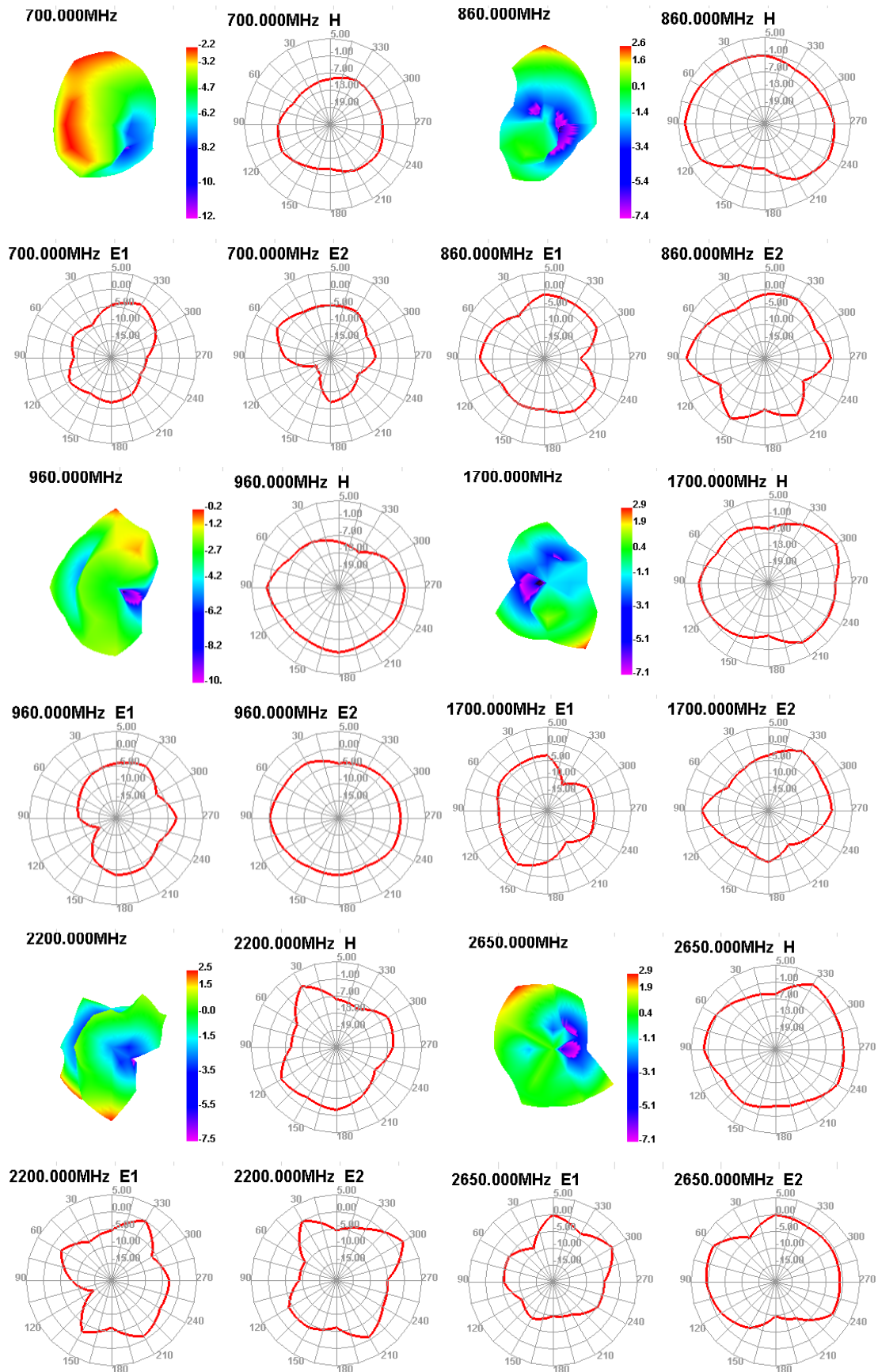


**1700.00MHz - 2700.00MHz Gain**

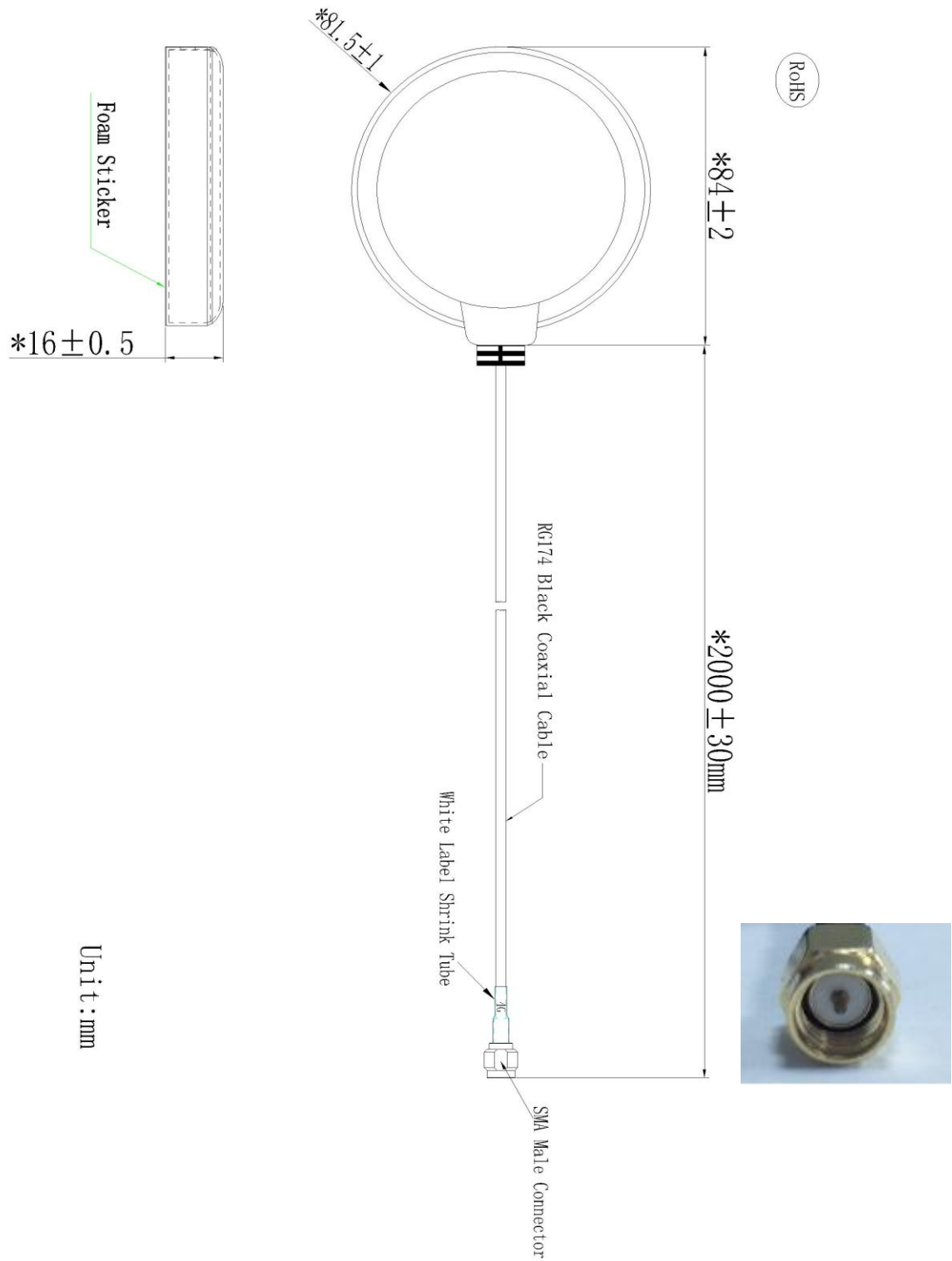


Frequency(MHz)	698	960	1710	1880	2170	2400	2450	2570	2690
Gain	-2.16	-0.23	2.85	2.4	2.48	1.31	2.04	1.34	2.93

● Radiation Patterns



## 5 Product Size



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