

# Antenna

# YCN001AA Datasheet

Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
-	2020-05-26	Kenny YIN	Creation of the document
1.0	2020-05-26	Kenny YIN	First official release
1.1	2020-12-15	Kenny YIN	Updated the antenna image in Chapter 2.

## Contents

About the Document .....	3
Contents .....	4
1 Product Description.....	5
2 Product Features .....	5
3 Product Specifications .....	6
4 Overall Performance.....	7
5 Product Size .....	12

## 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	700–2700 MHz
Input Impedence	50 Ω
VSWR	≤ 3.5
Gain	≤2.5 dBi
Polarization Type	Linear

#### Mechanical Specifications

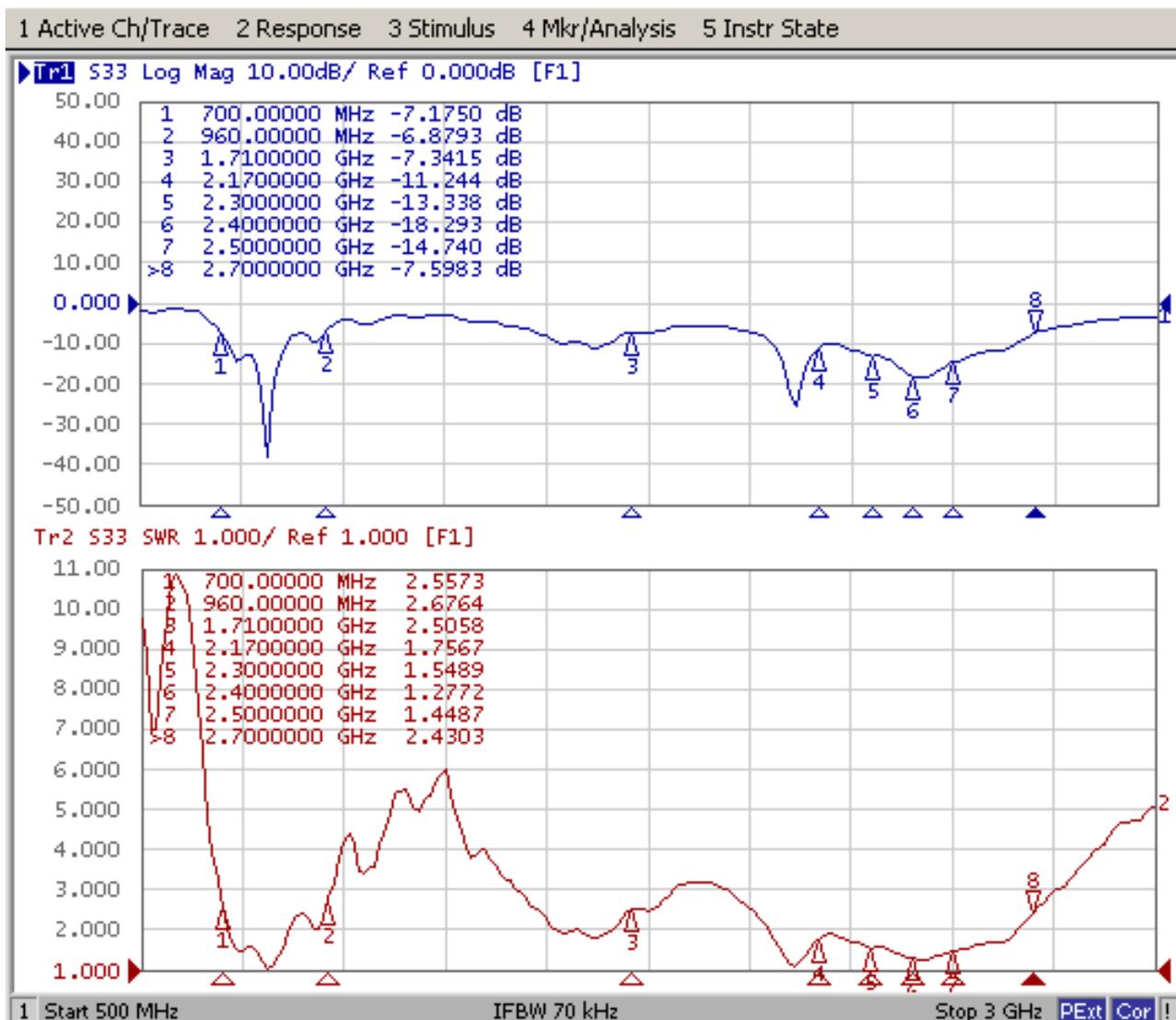
Antenna Size (mm)	144 x Ø 13
Casing	TPEE
Radiator	Cuprum
Connect Type	SMA (Male pin with internal thread)
Working Temperature	-20 °C to +70 °C
Radome Color	Black
Water proof grade	IP67

## 4 Overall Performance

- Test Environment
  - Agilent Technologies Network Analyzer E5071B 300 kHz – 8.5 GHz
  - SATEM24 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

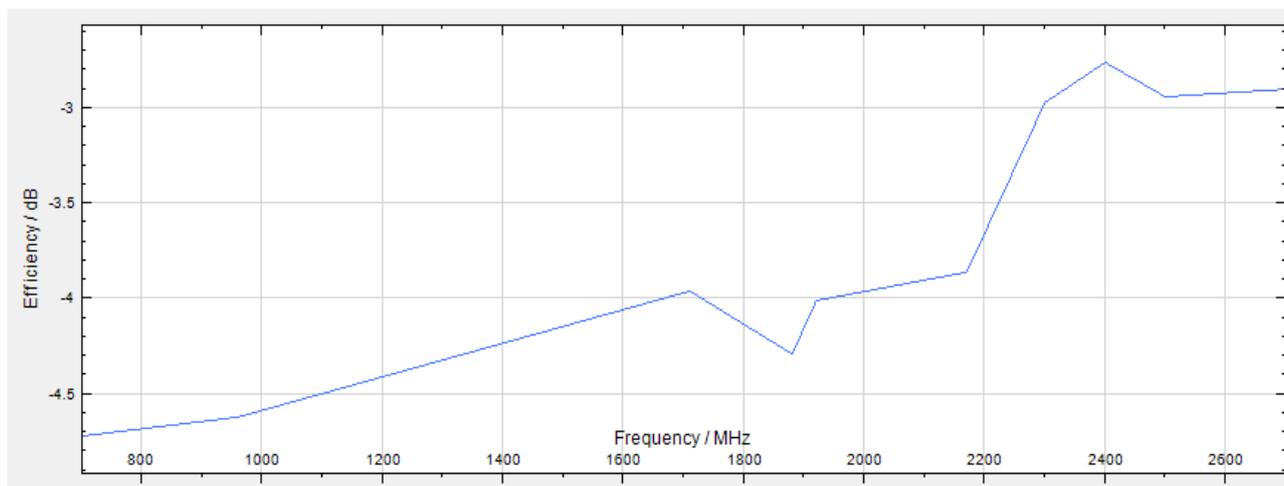


● VSWR



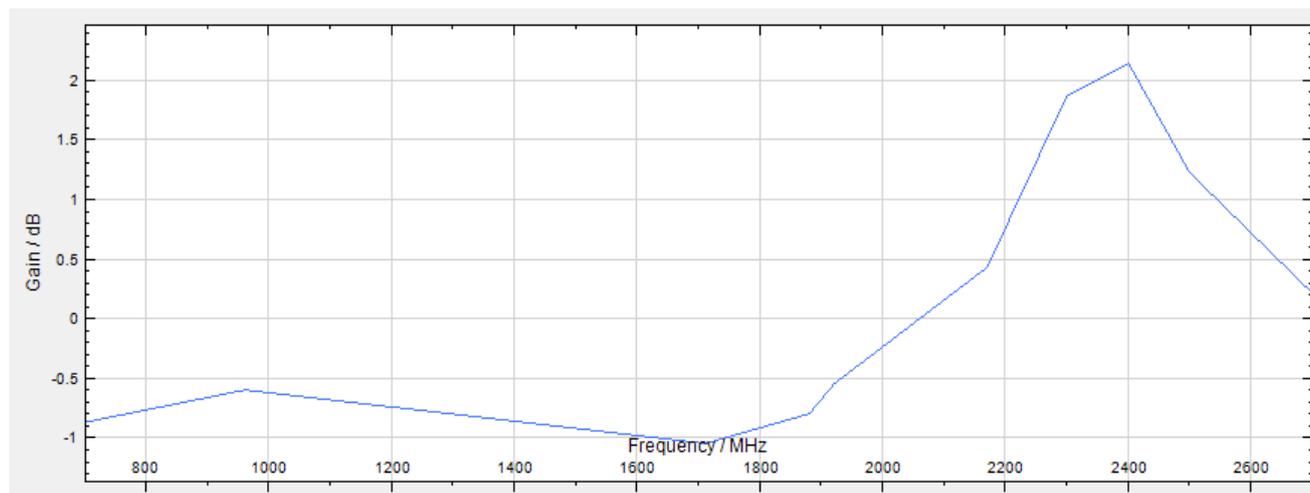
Frequency (MHz)	700	960	1710	2170	2300	2400	2500	2700
VSWR	2.55	2.67	2.50	1.75	1.54	1.27	1.44	2.43

● Efficiency



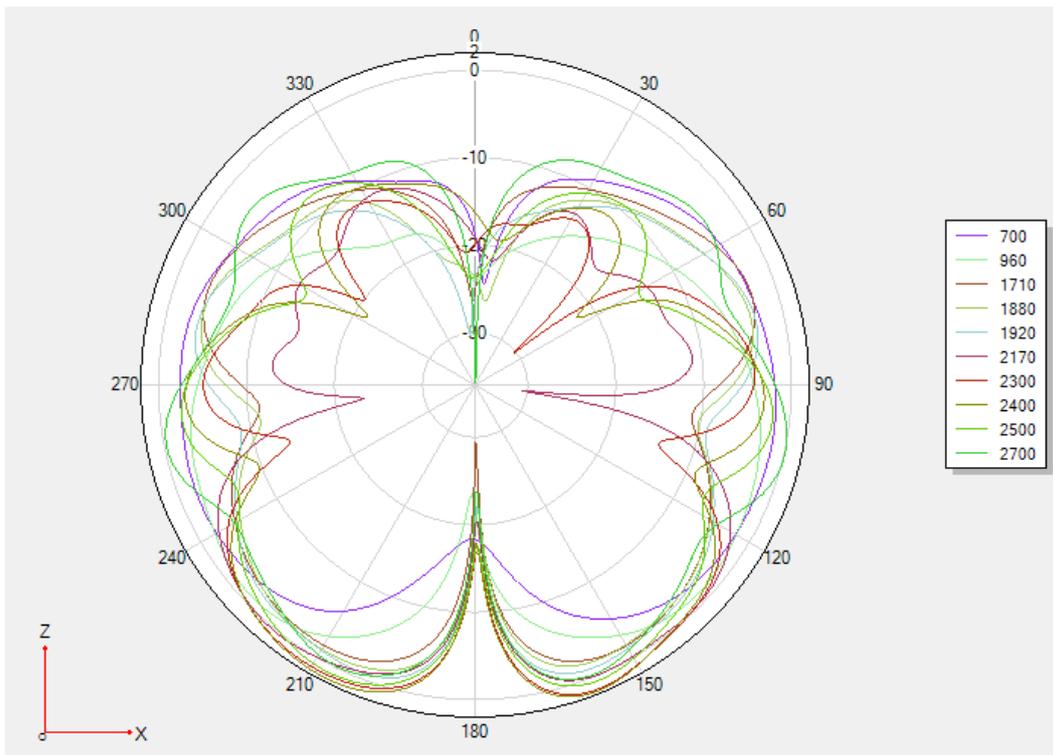
Frequency (MHz)	700	960	1710	1880	1920	2170	2300	2400	2500	2700
Efficiency (%)	33.3	34.5	40.1	37.2	39.7	41.1	50.4	52.9	50.8	51.2

● Gain

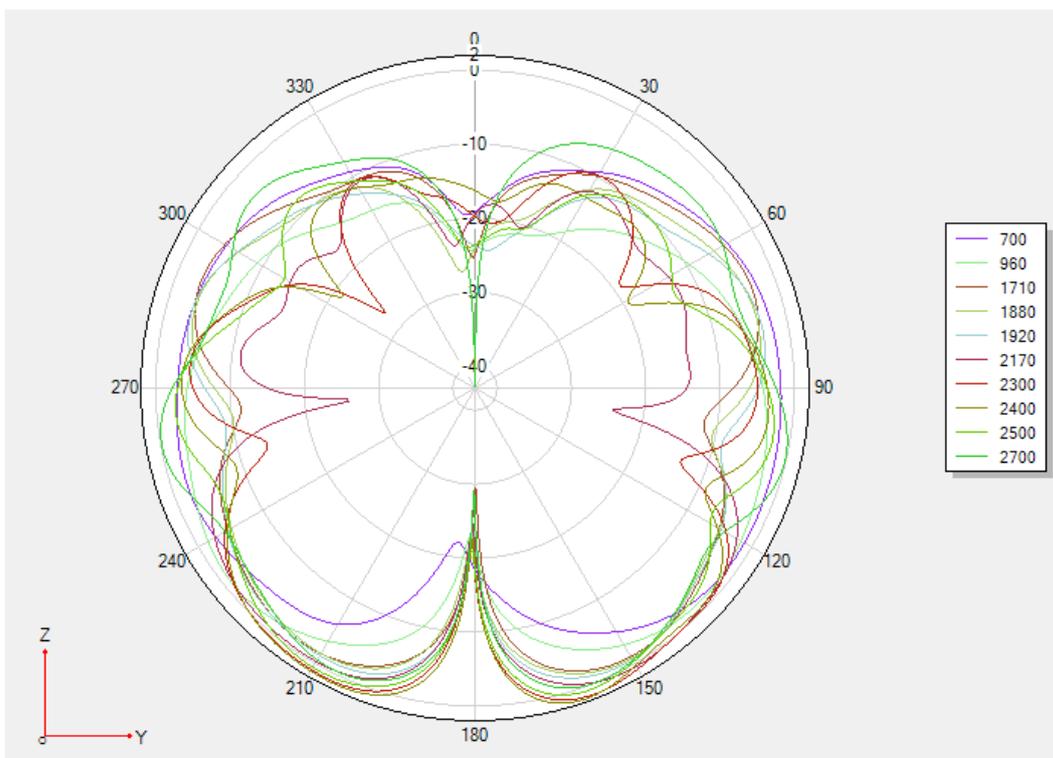


Frequency (MHz)	700	960	1710	1880	1920	2170	2300	2400	2500	2700
Gain	-0.86	-0.59	-1.04	-0.79	-0.54	0.44	1.88	2.15	1.23	0.22

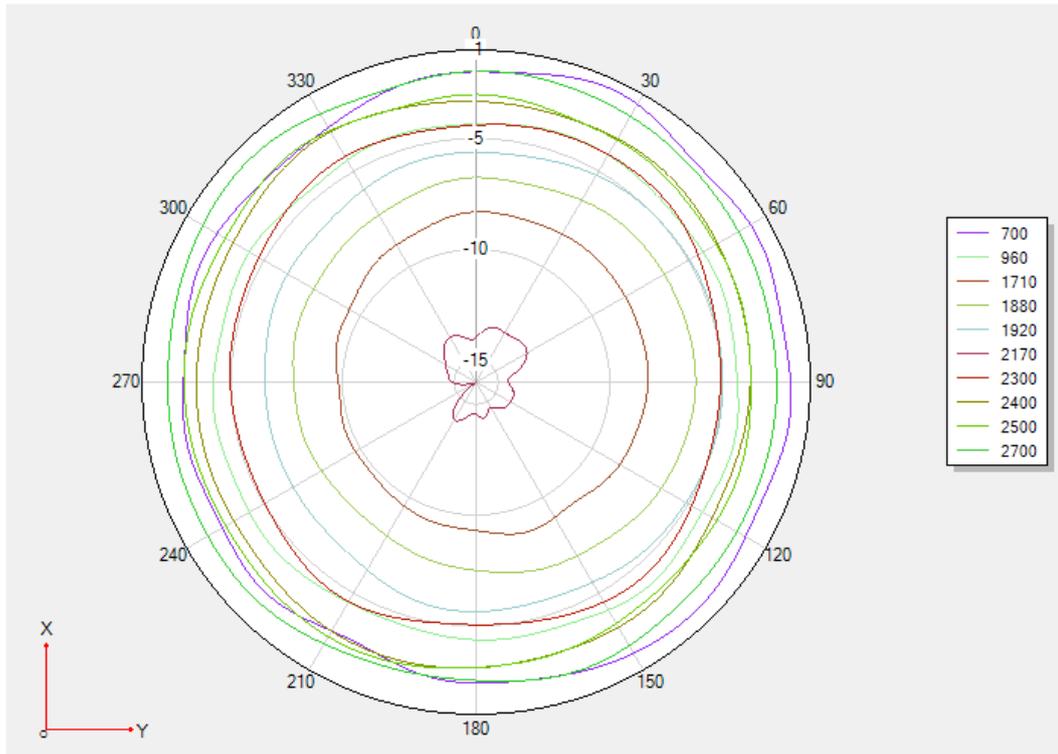
● Radiation Patterns



Phi 0 2D



Phi 90 2D



Theta 90 2D

## 5 Product Size



ROHS

