

# Antenna

# **YE0027AA** Datasheet

## Antenna Services

Version: 1.1

Date: 2020-12-15

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
-	2020-10-14	Kenny YIN	Creation of the document
1.0	2020-10-14	Kenny YIN	First official release
1.1	2020-12-15	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 5G
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	699–5000 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 5.0$
Gain	$\leq 2$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	221× Ø 61mm, RG58L=3000 mm
Casing	ABS
Connect Type	SMA (Male pin with internal thread)
Working Temperature	-20 °C to +85 °C
Radome Color	Black

## 4 Overall Performance

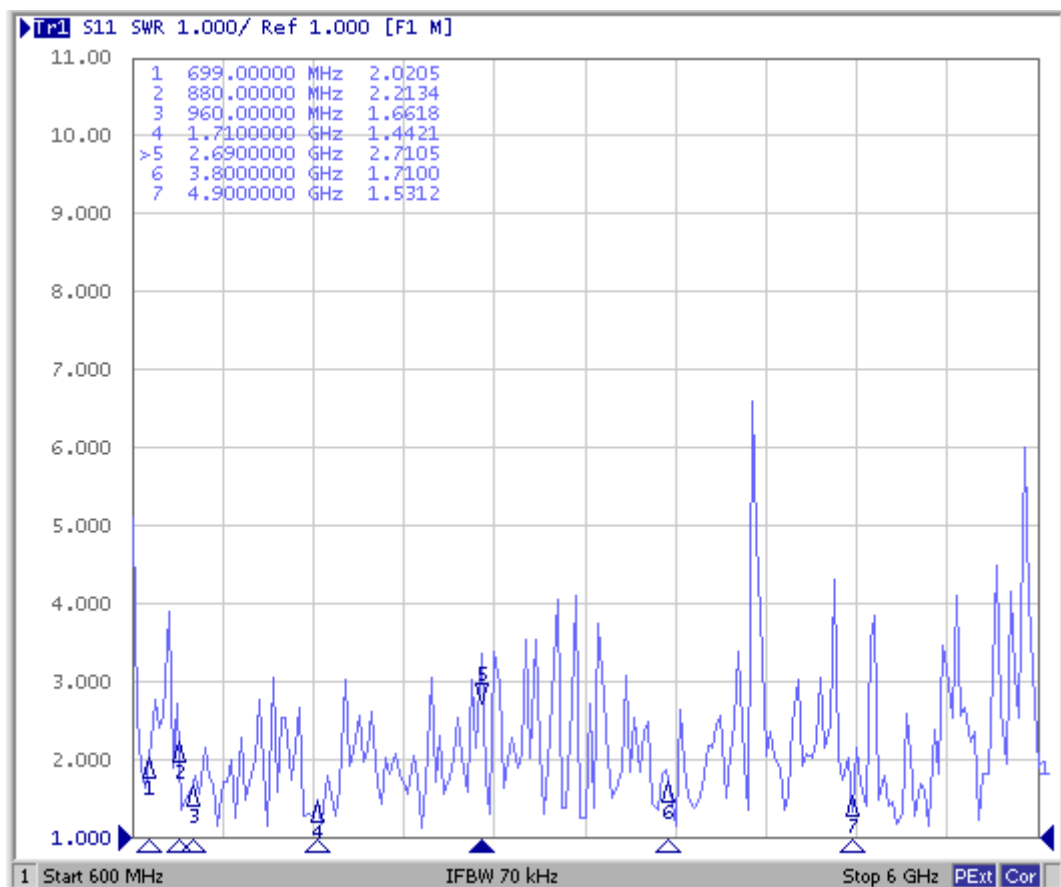
### 4.1. Test Environment

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



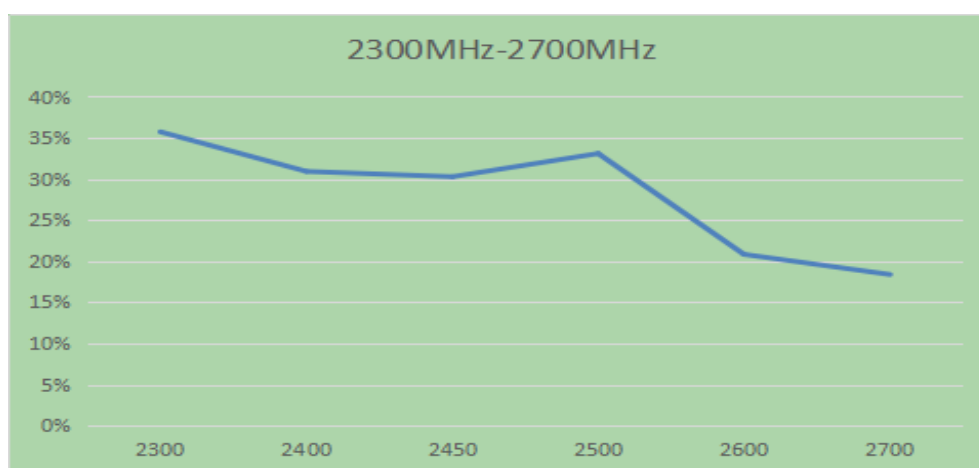
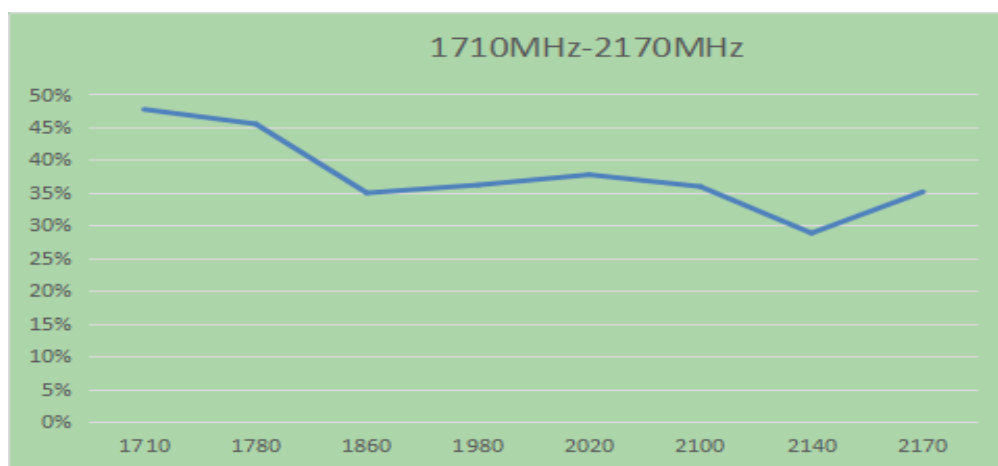
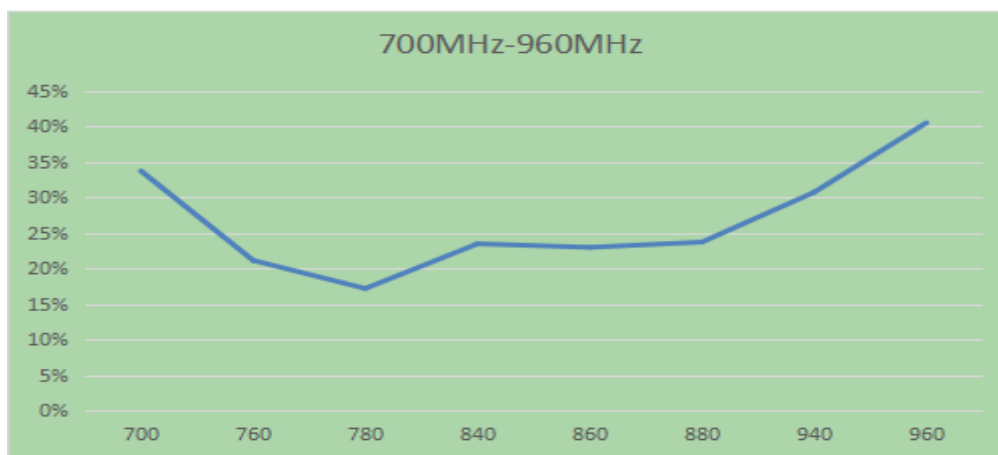


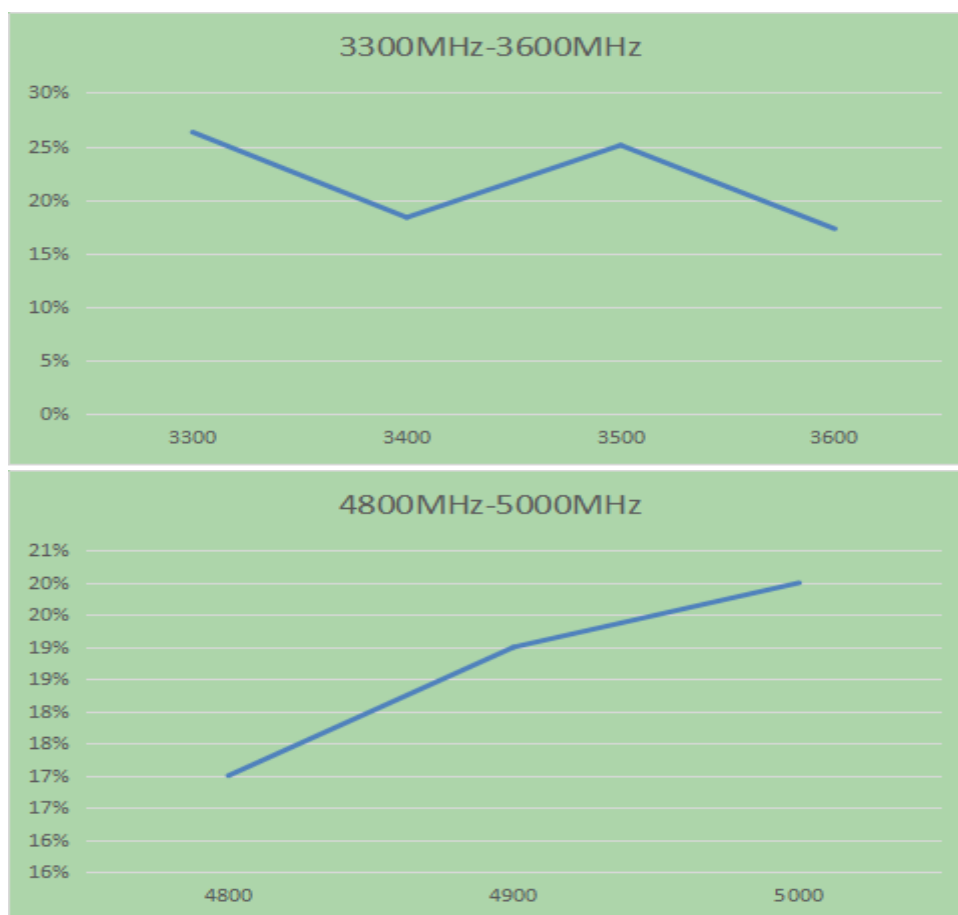
## 4.2. VSWR



Frequency (MHz)	699	880	960	1710	2690	3800	4900
VSWR	2.0	2.2	1.6	1.4	2.7	1.7	1.5

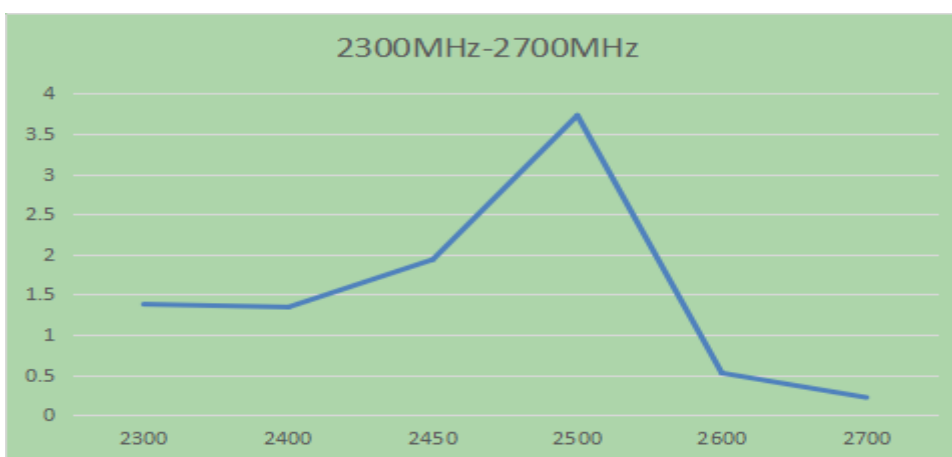
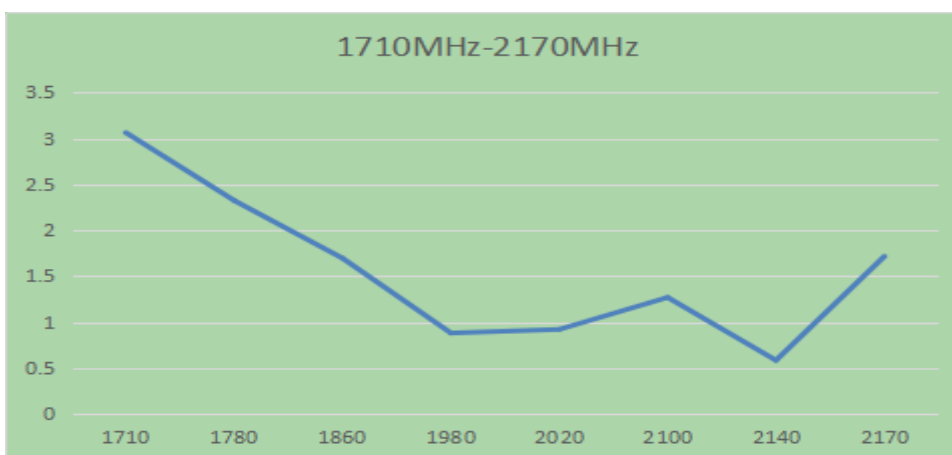
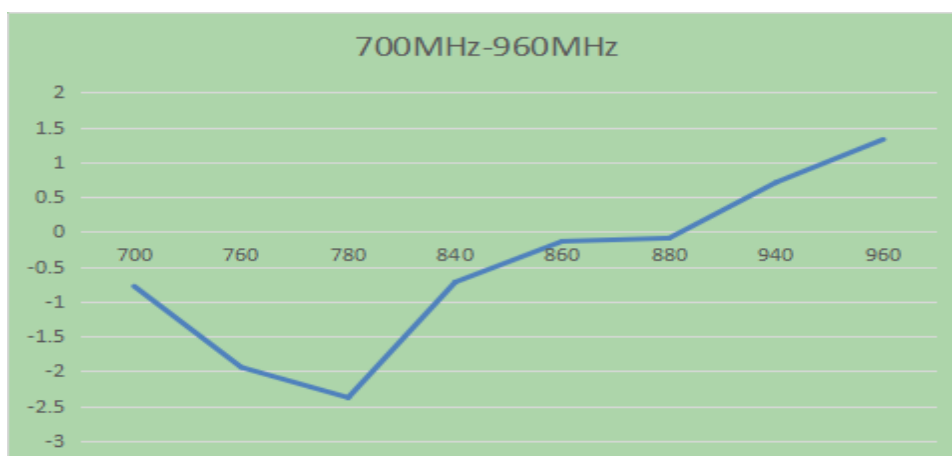
### 4.3. Efficiency





Frequency (MHz)	700	824	960	1710	2690	3300	4800	5000
Efficiency (%)	34%	23%	40%	48%	18%	26%	17%	20%

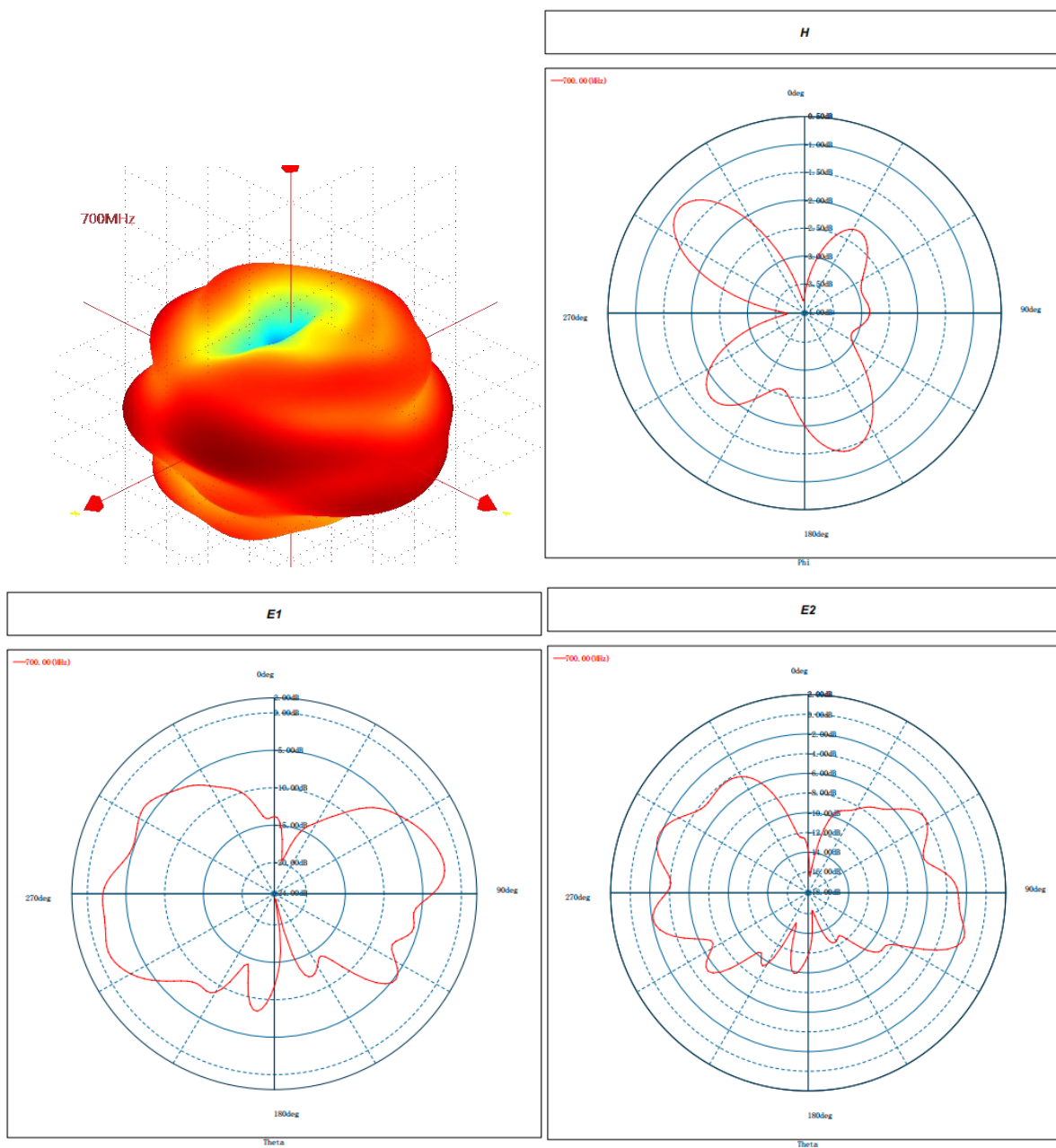
## 4.4. Gain

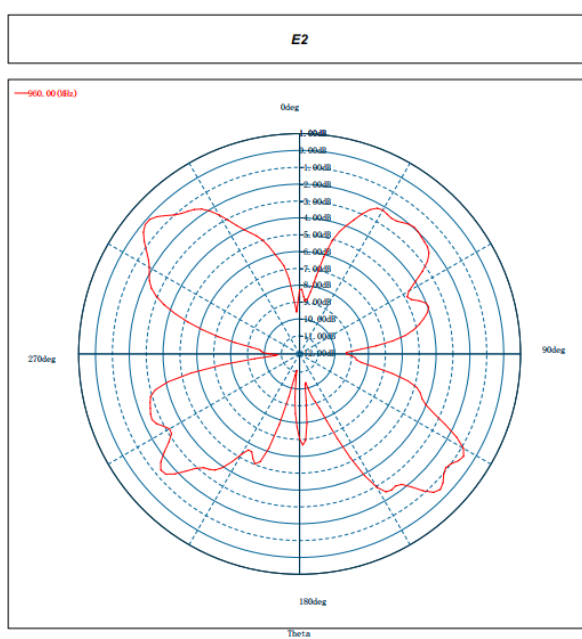
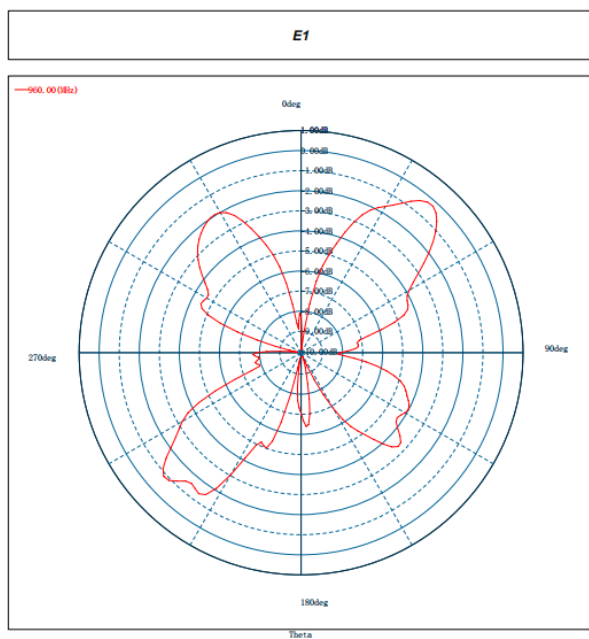
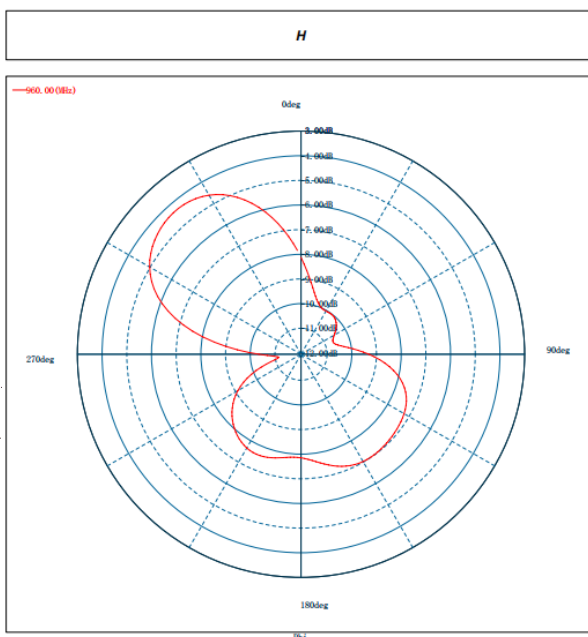
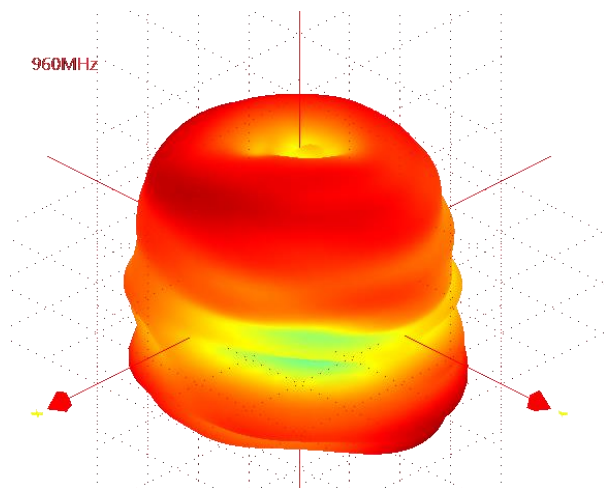


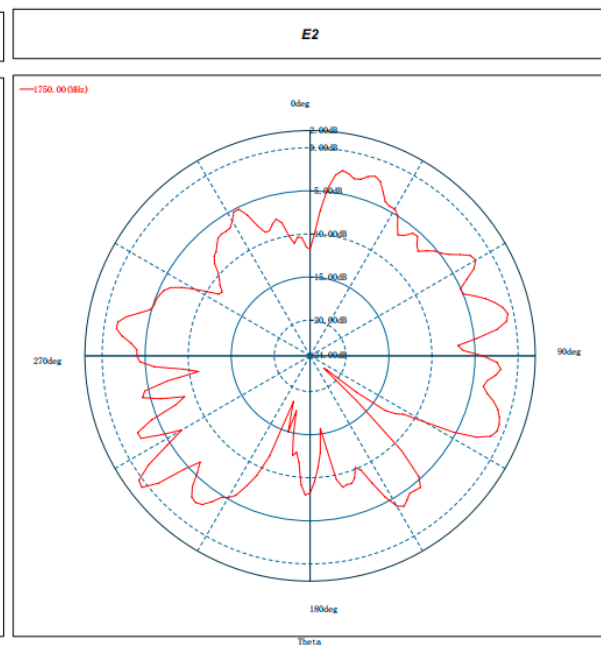
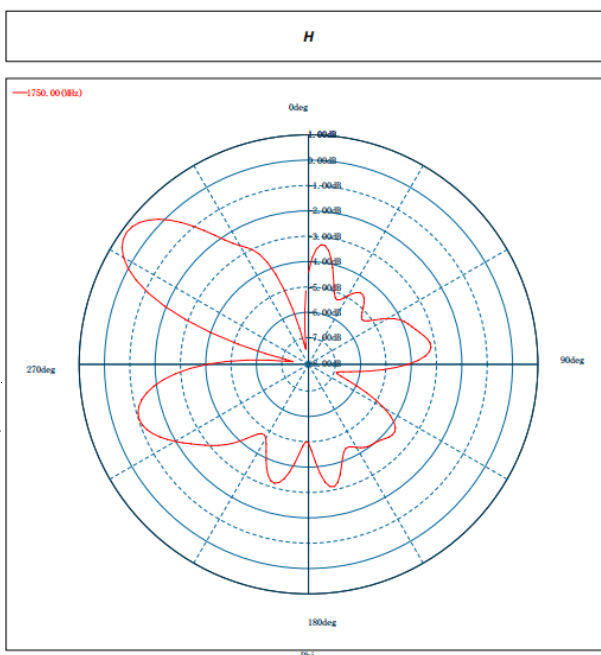


Frequency (MHz)	700	824	960	1710	2690	3300	4800	5000
Gain (dBi)	-0.7	-0.07	1.3	3.0	-0.2	1.1	-0.4	-0.5

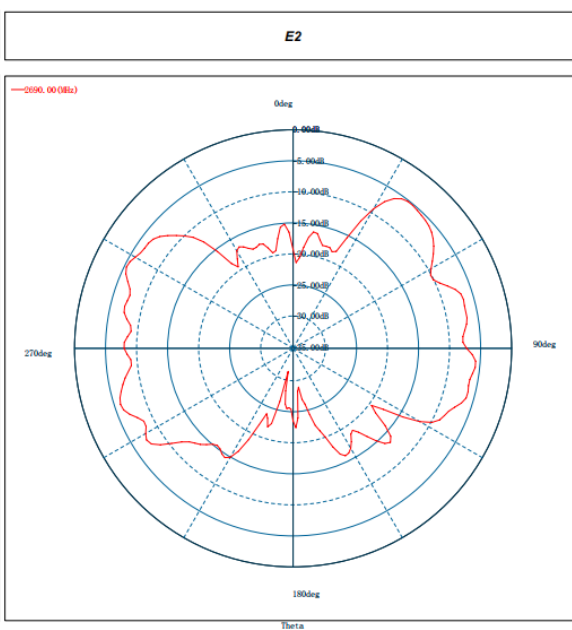
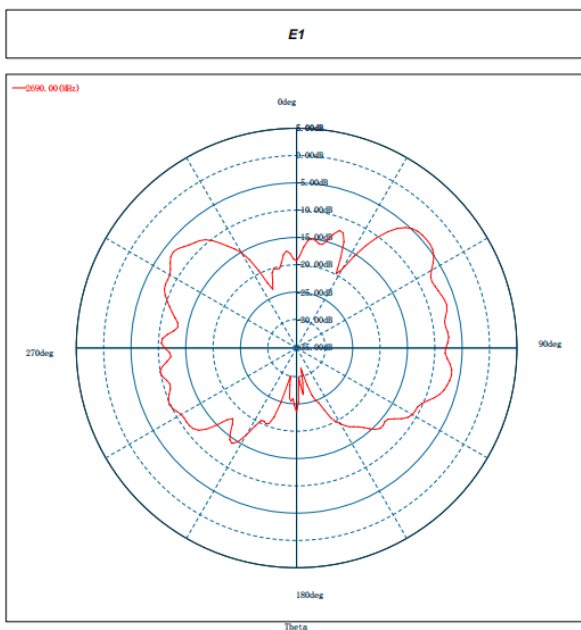
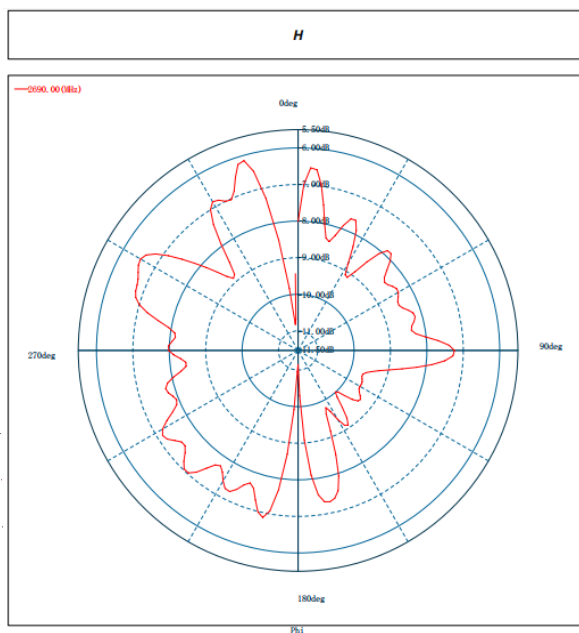
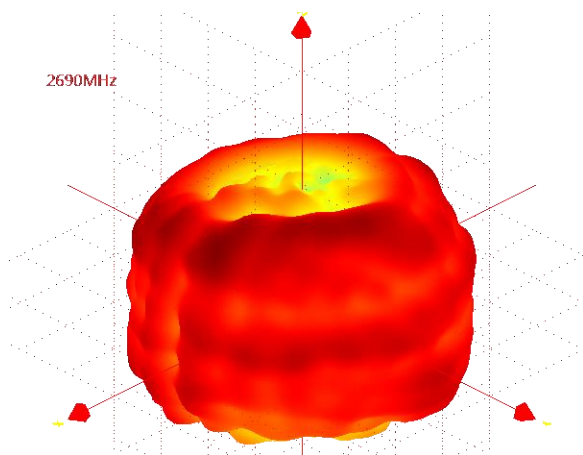
## 4.5. Radiation Patterns

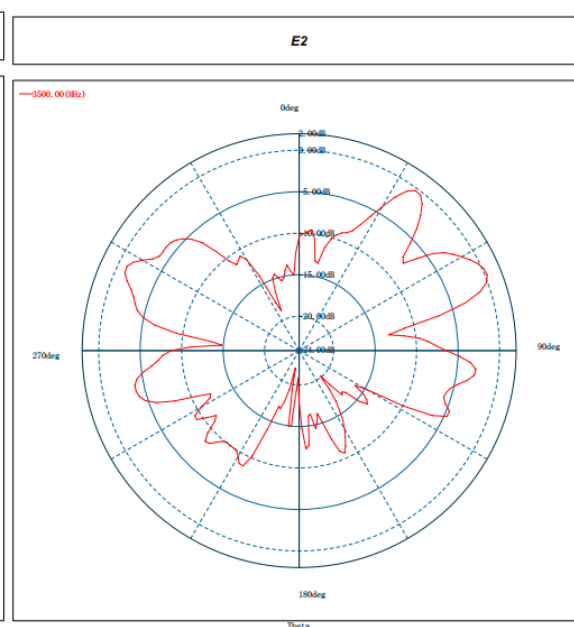
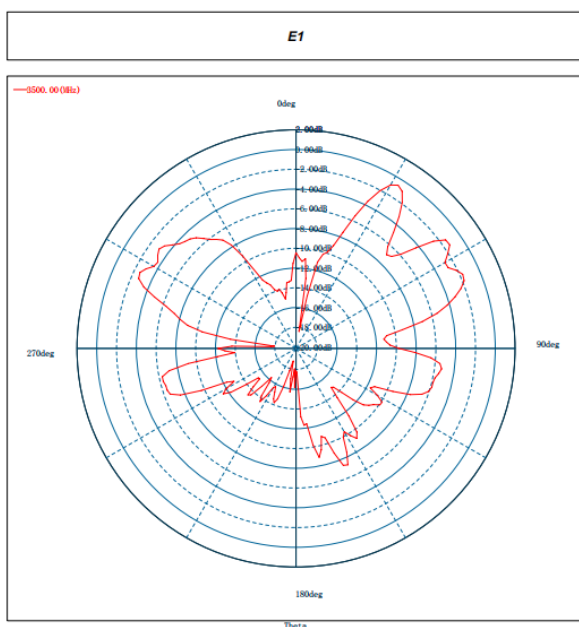
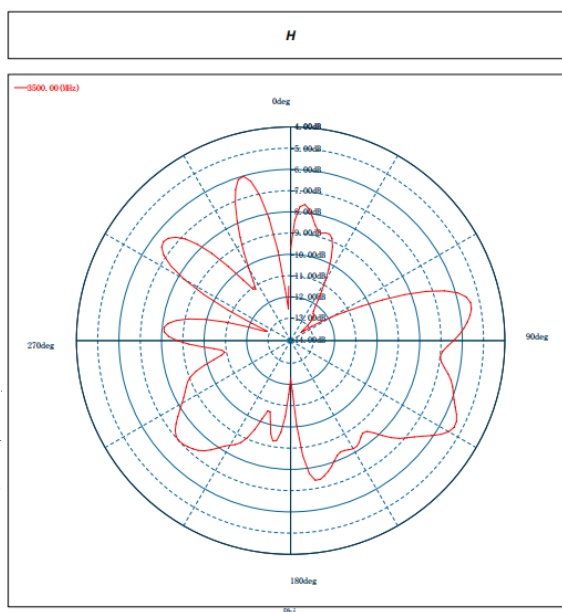
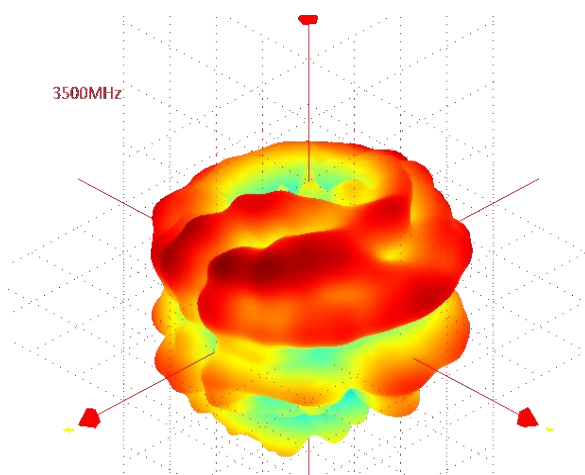


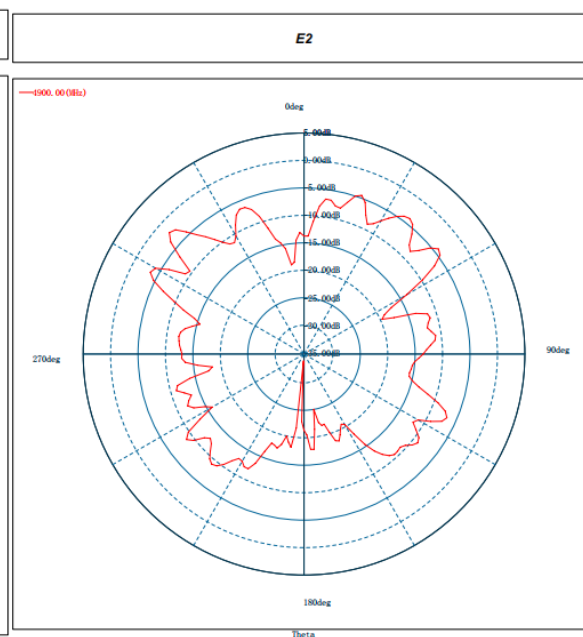
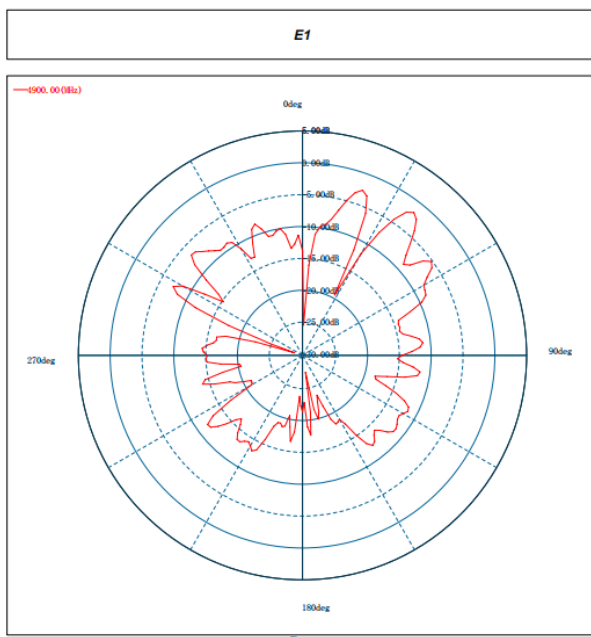
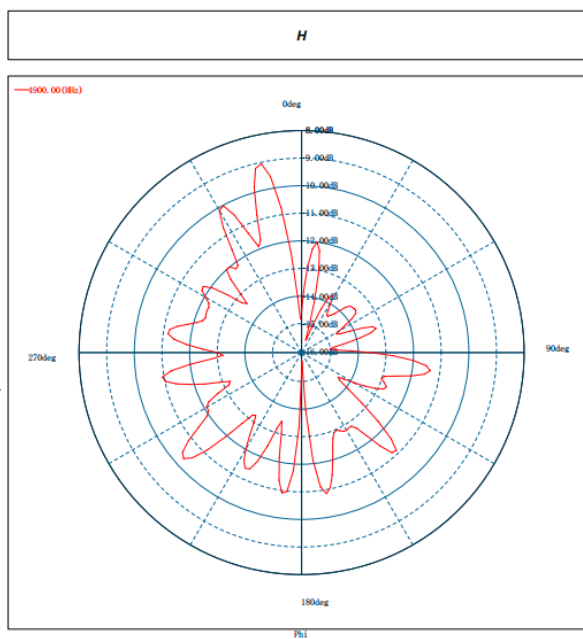
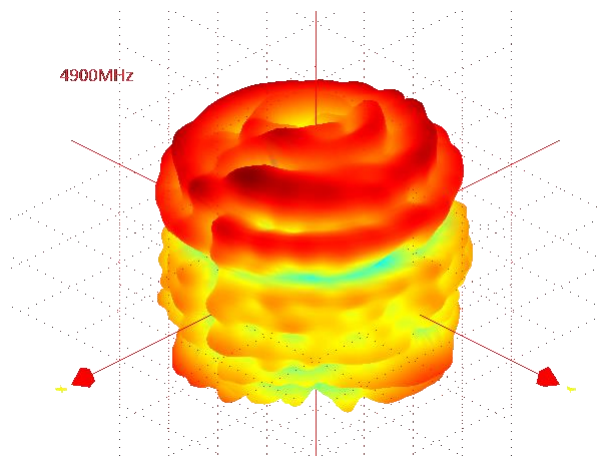




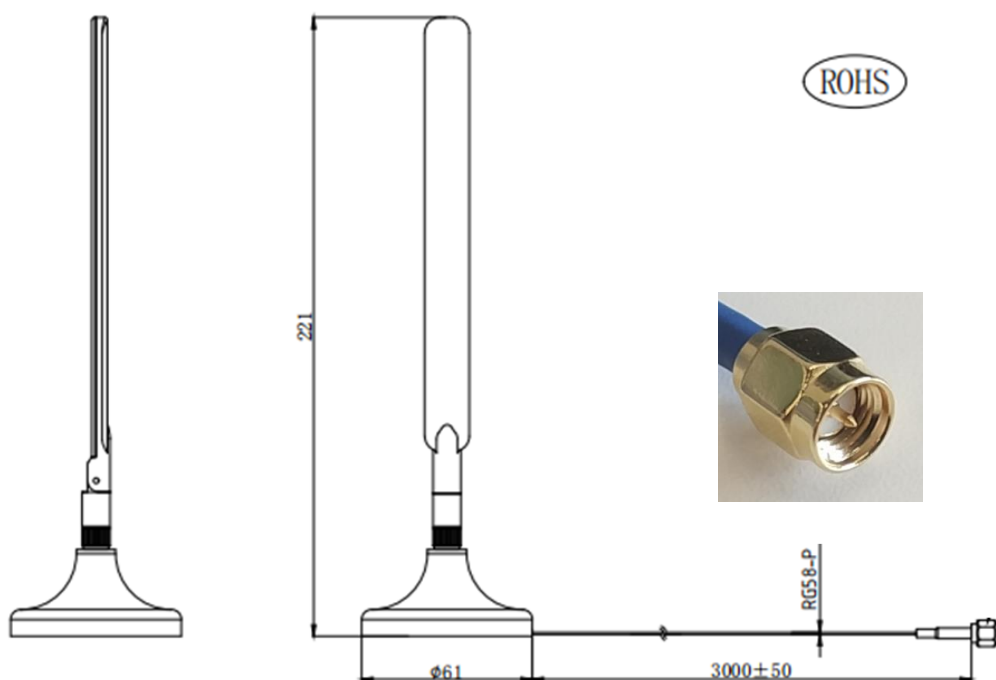








## 5 Product Size



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