

# Antenna

# YE0006AA Datasheet

## Antenna Services

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Status: Released



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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-06-16	Kenny YIN	Initial
1.1	2020-12-11	Kenny YIN	Updated the antenna image in Chapter 2.
1.2	2021-01-12	Kenny YIN	Updated the efficiency data in Chapter 4.

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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 (MHz)	700–2700
Input Impedance ( $\Omega$ )	50
VSWR	$\leq 2.0$
Gain (dBi)	$\leq 3$
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	318 × $\varnothing$ 30, RG174 L = 1500
Casing	ABS
Radiator	Cuprum
Connector Type	SMA (Male pin with internal thread)
Working Temperature ( $^{\circ}\text{C}$ )	-20 to +80
Radome Color	Black

## 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.

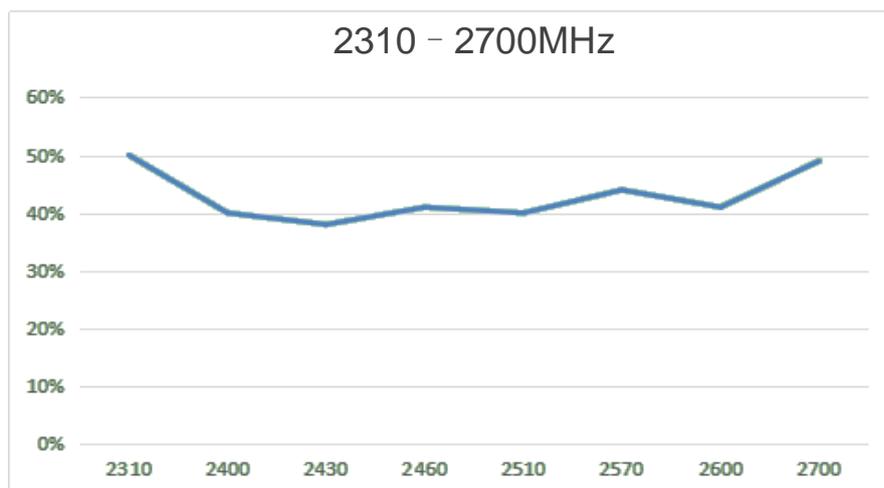
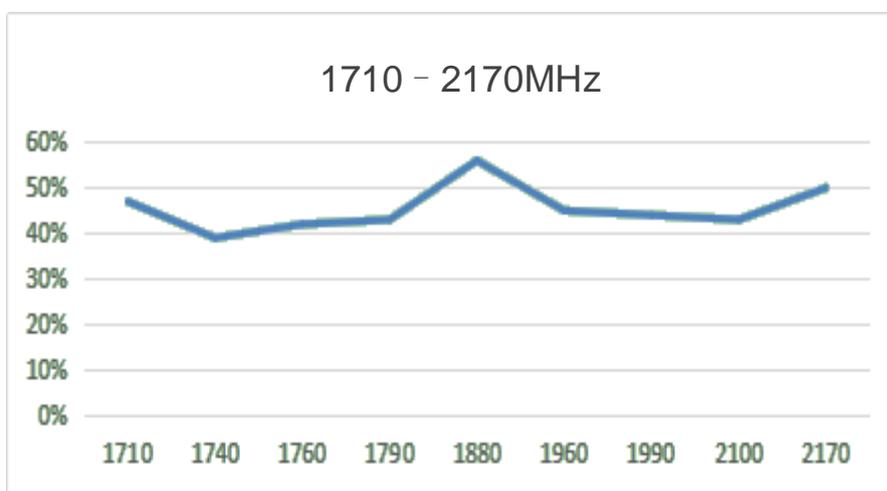
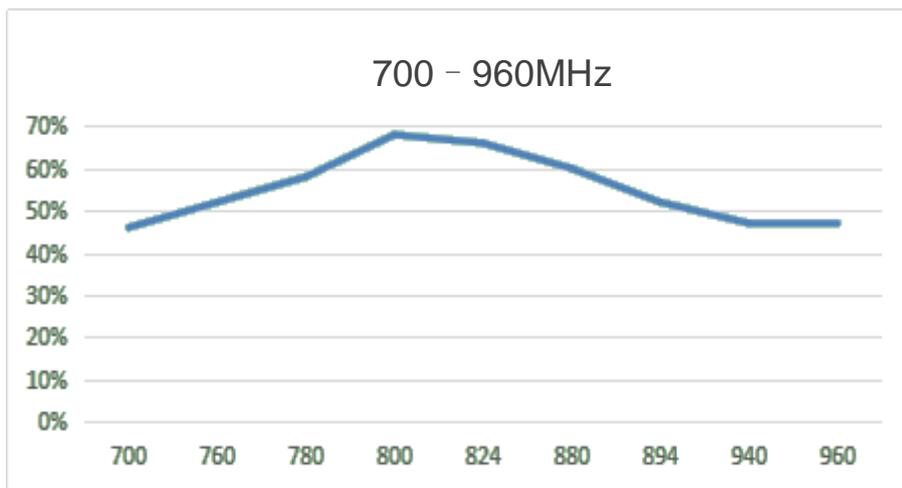


● VSWR



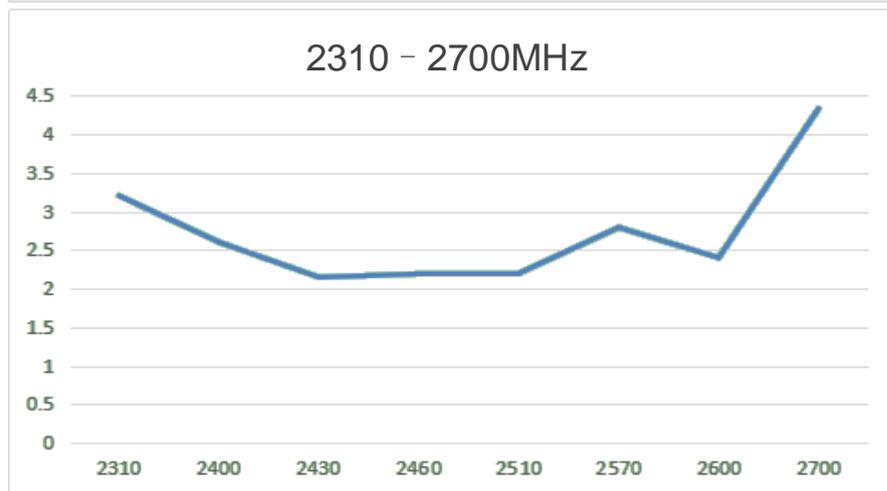
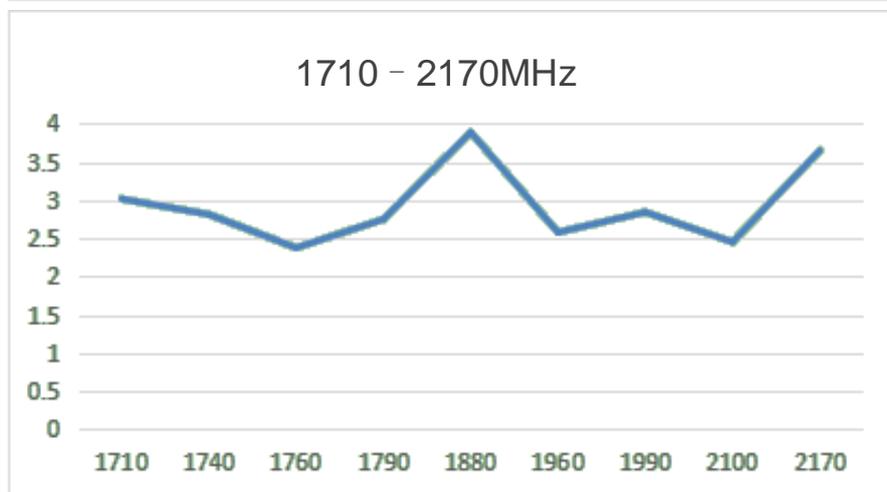
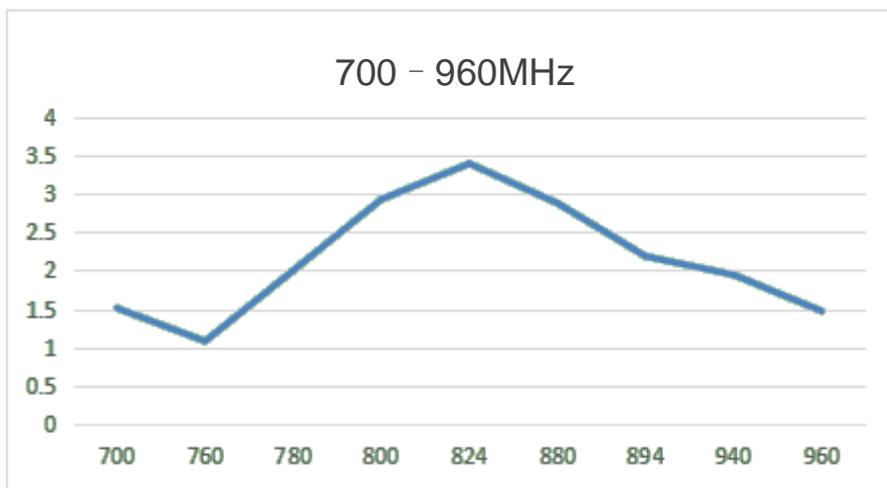
Frequency (MHz)	700	824	960	1710	1990	2170	2300	2500	2690
VSWR	2.4	1.2	2.5	1.9	1.8	1.7	1.6	1.8	1.5

- Efficiency



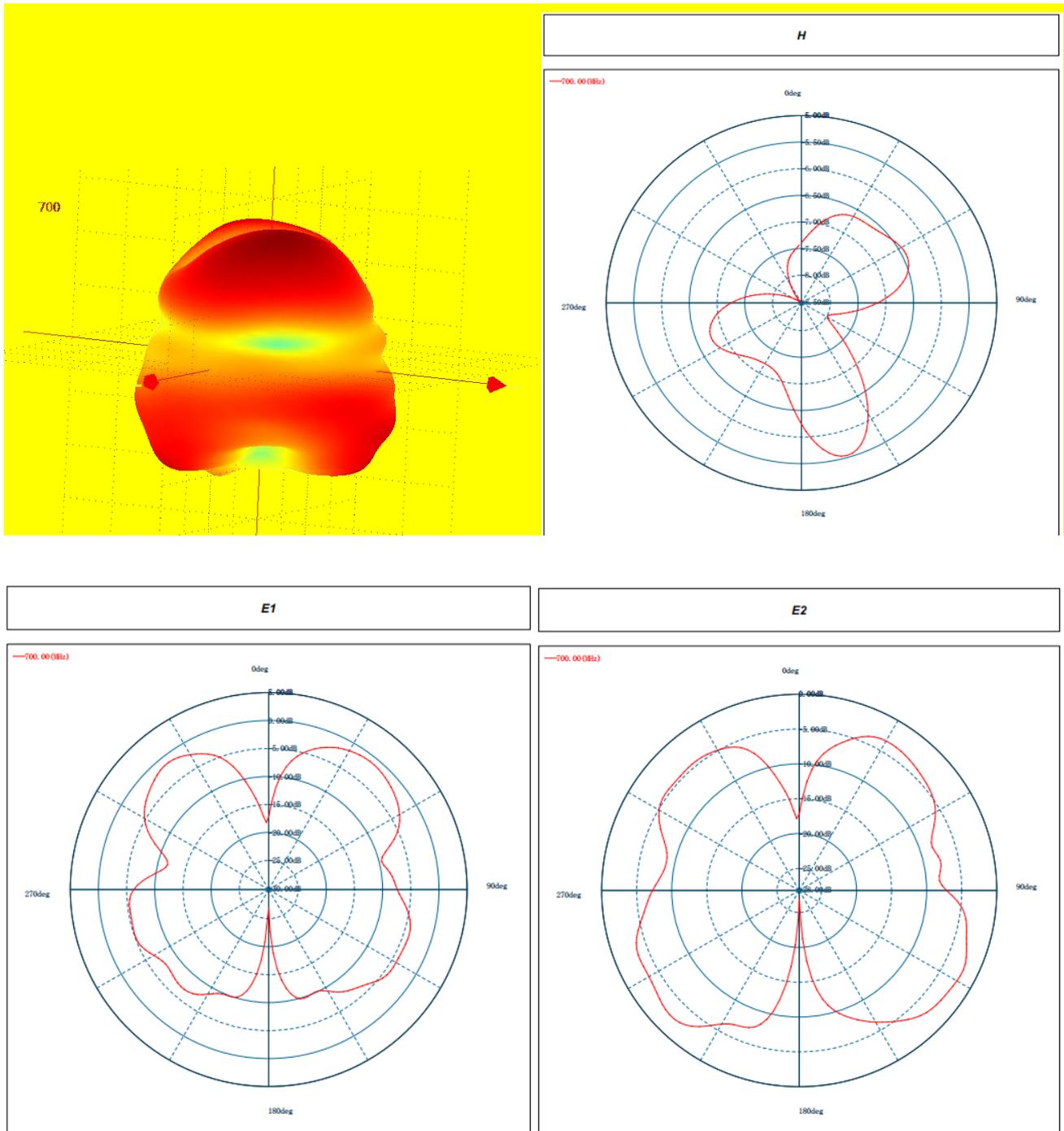
<b>Frequency (MHz)</b>	700	880	960	1710	1880	2170	2300	2500	2700
<b>Efficiency (%)</b>	46	60	47	47	56	50	50	40	49

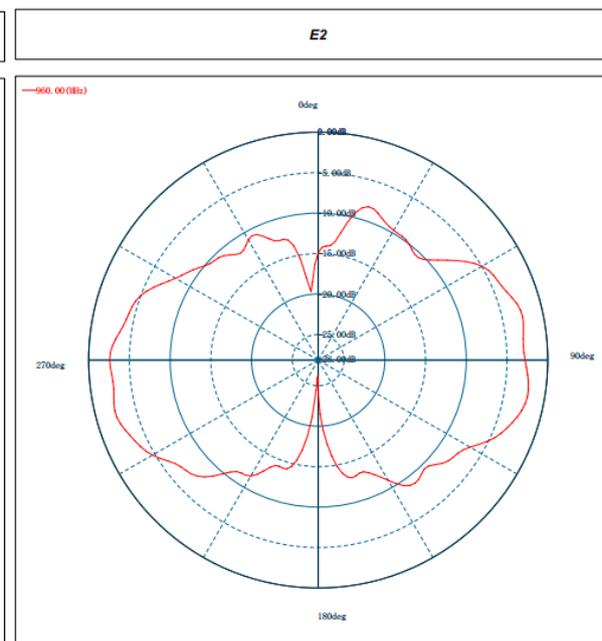
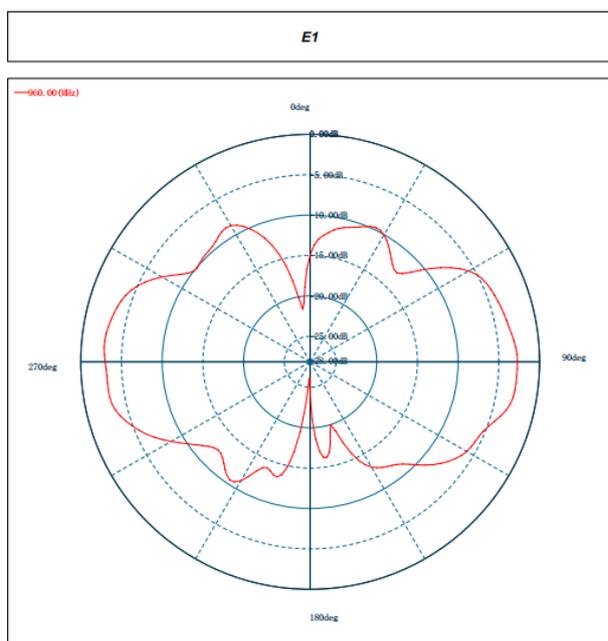
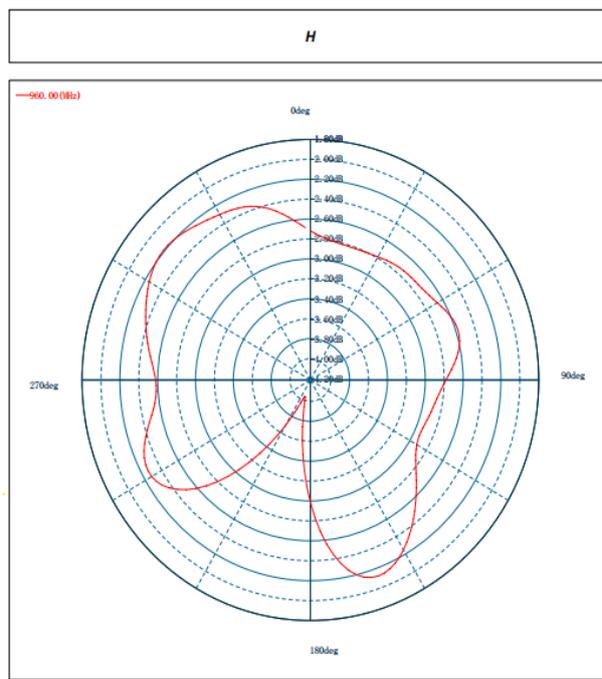
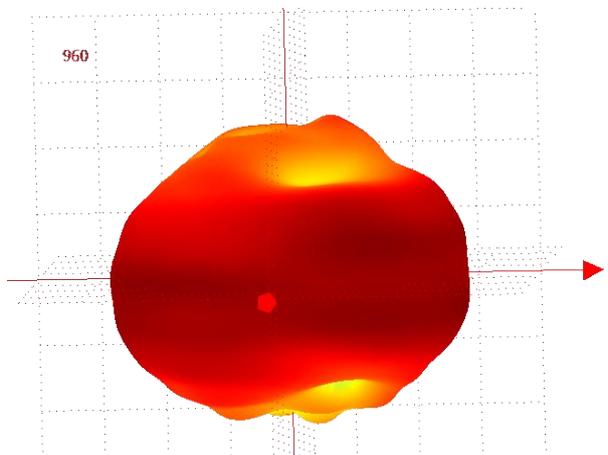
- Gain

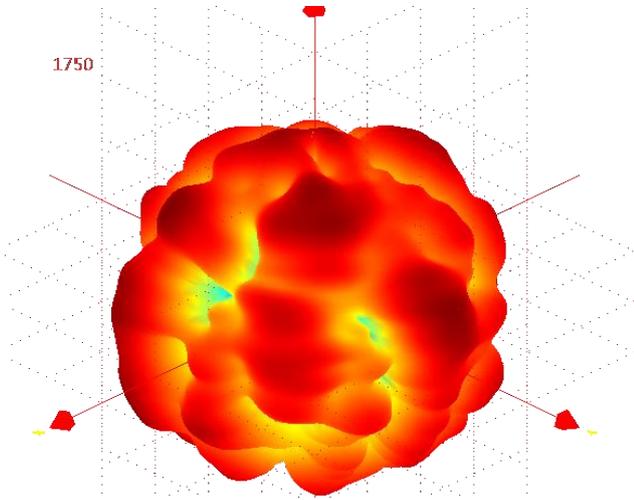


Frequency (MHz)	700	880	960	1710	1880	2170	2300	2500	2700
Gain	1.5	2.8	1.4	3.0	3.8	3.6	3.2	2.2	4.3

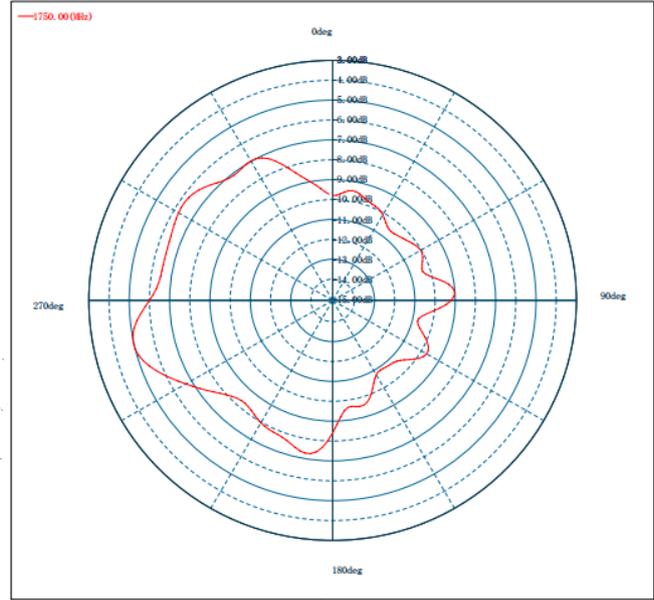
● Radiation Patterns



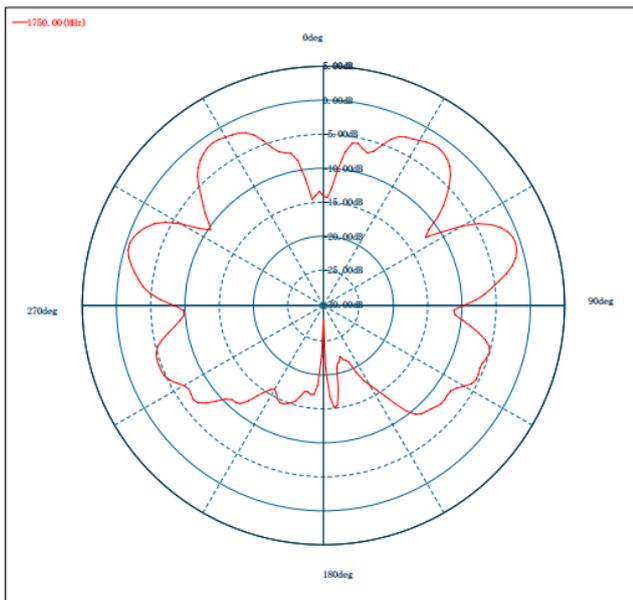




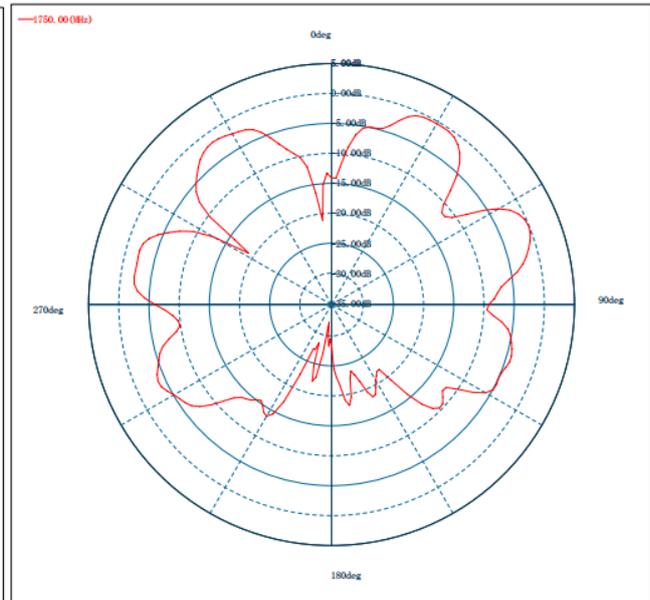
**H**

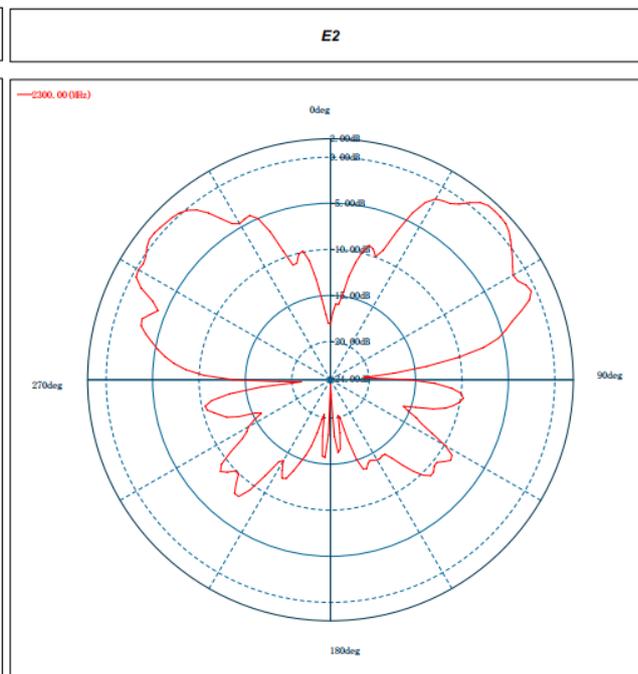
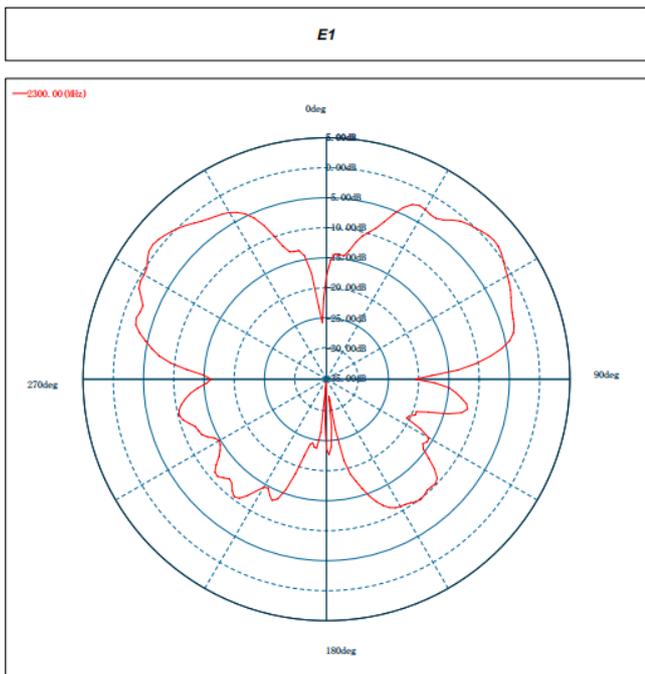
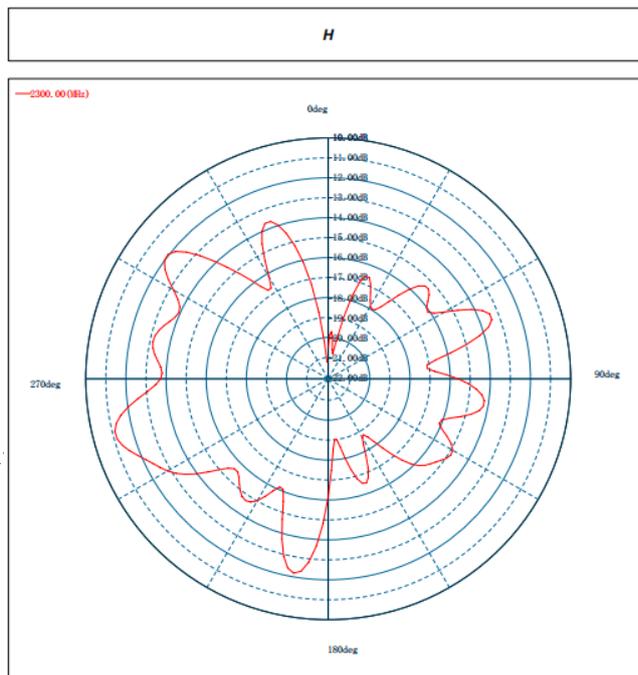
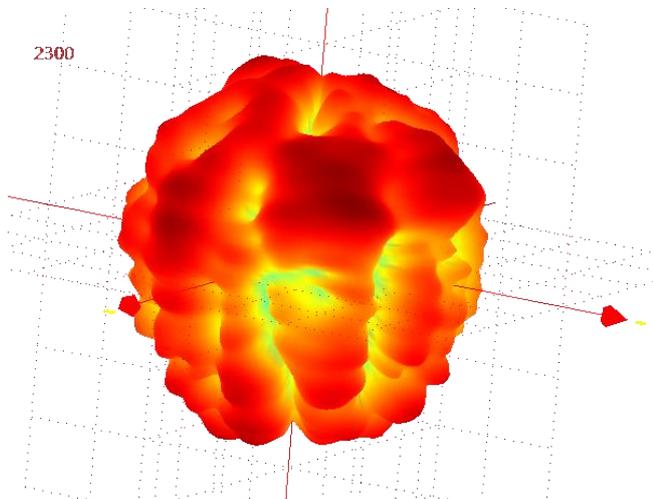


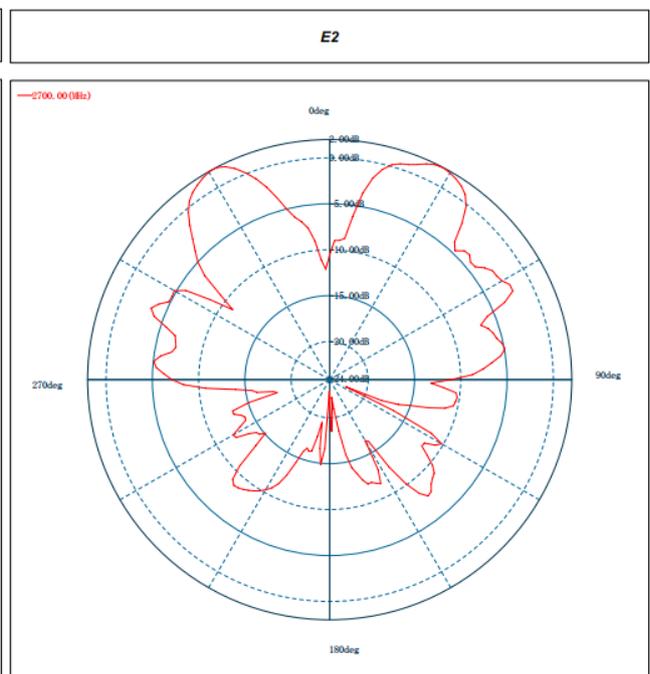
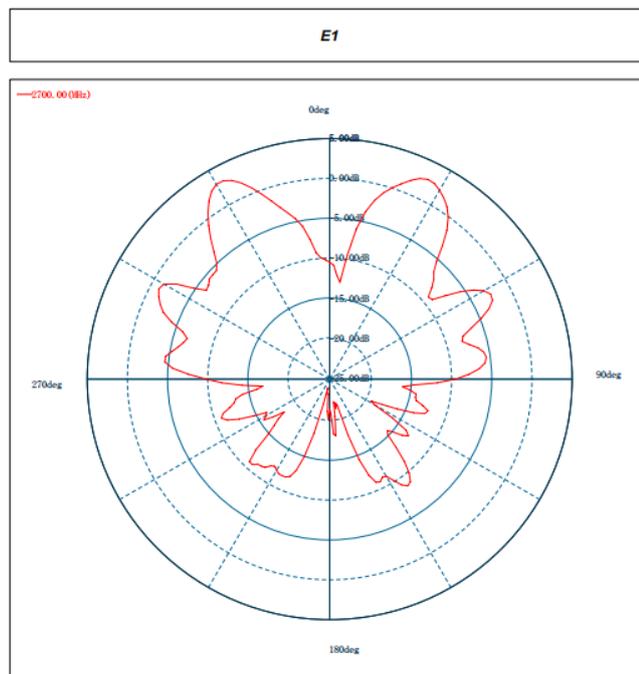
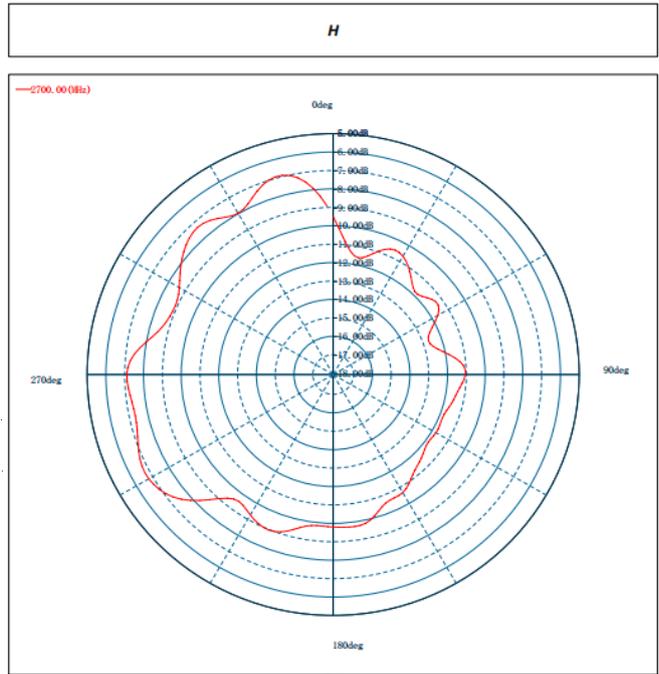
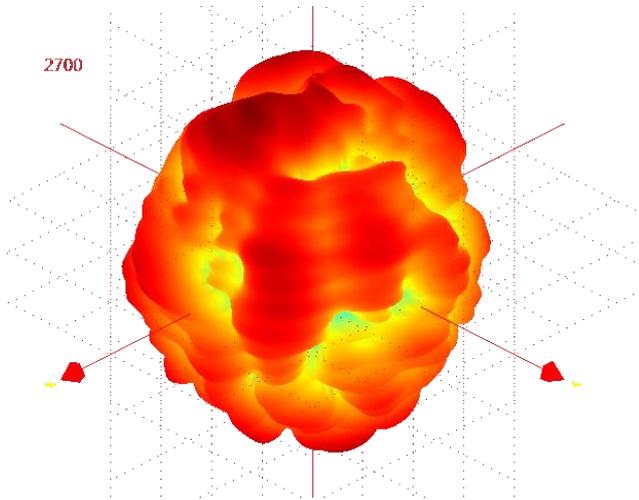
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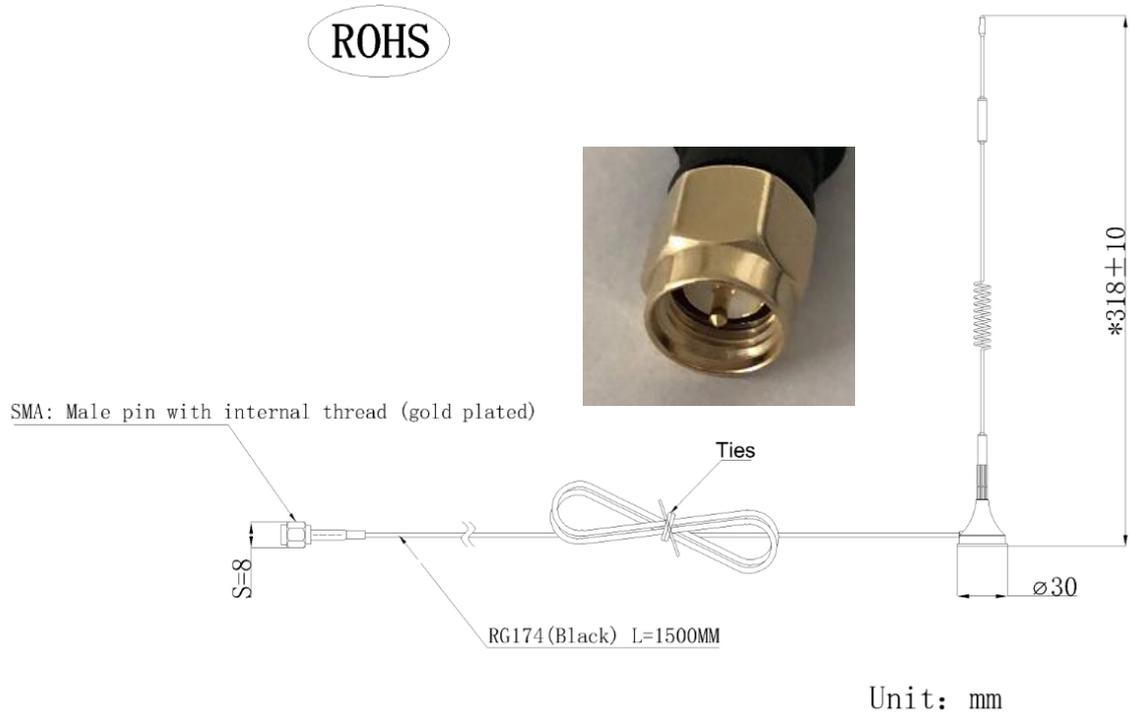
**E2**







## 5 Product Size



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