

# Antenna

# YE0037AA Datasheet

## Antenna Services

Version: 1.1

Date: 2020-12-16

Status: Released



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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-11-05	Kenny YIN	Initial
1.1	2020-12-16	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	700-5000 MHz
Input Impedence	50
VSWR	≤ 2.5
Gain	≤ 2
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	88*Ø 30 mm, LMR100 L=1000 mm
Casing	ABS
Connect Type	SMA (Male pin with internal thread)
Working Temperature	-40 °C to +80 °C
Radome Color	Black
Ingress Protection Rating	IP67

## 4 Overall Performance

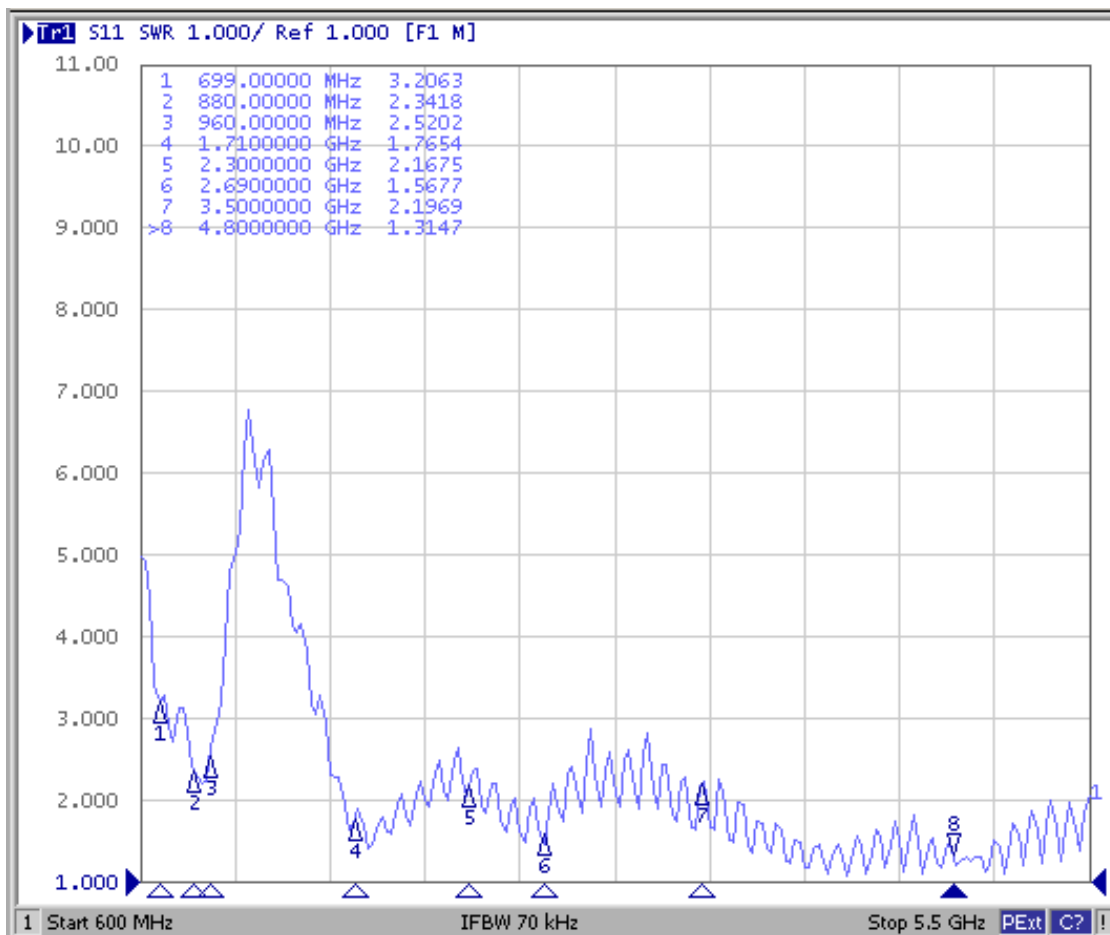
### 4.1. Test Environment

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



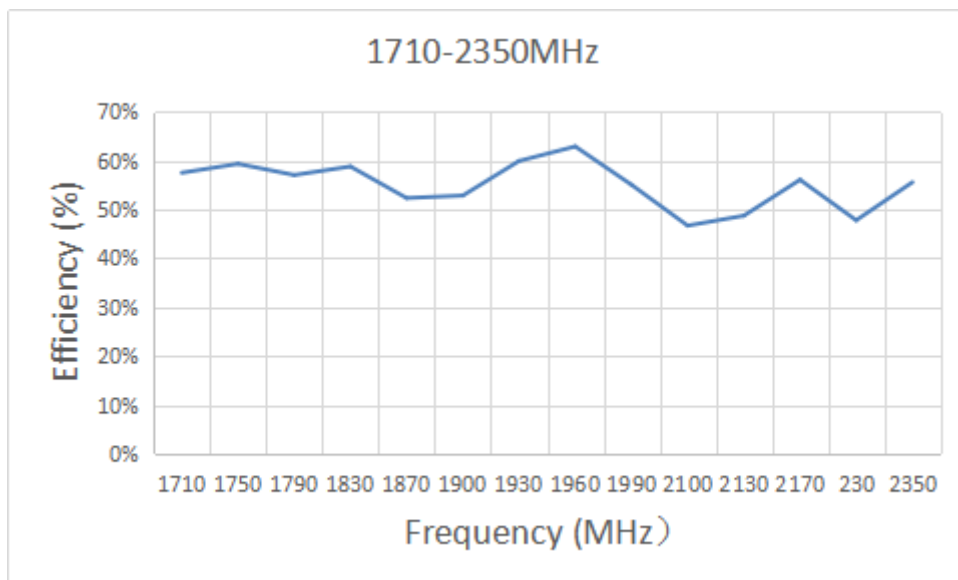
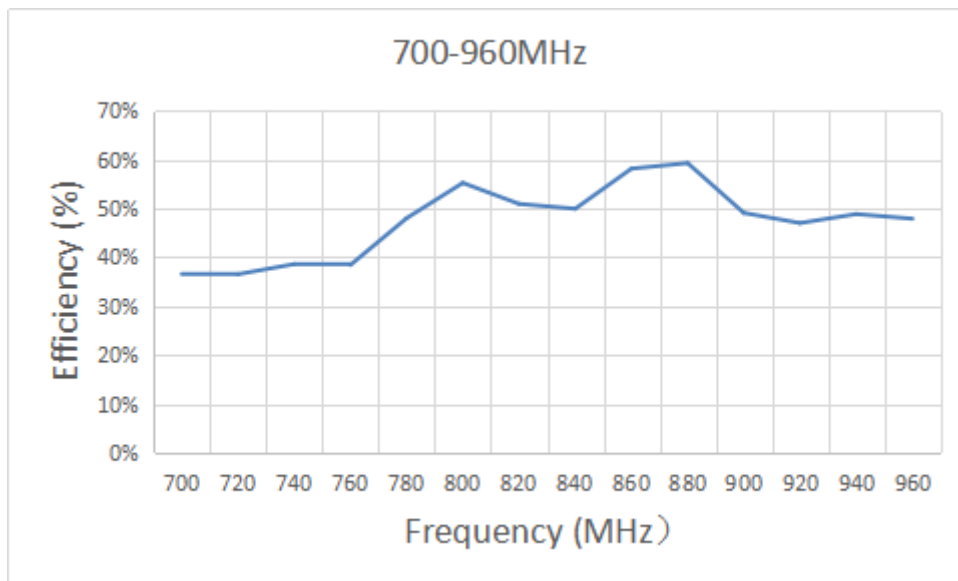


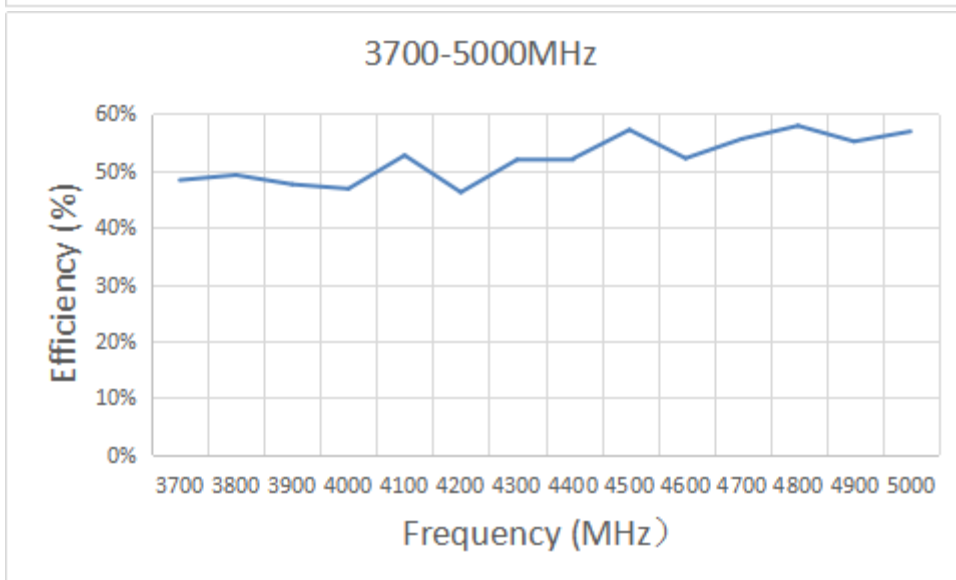
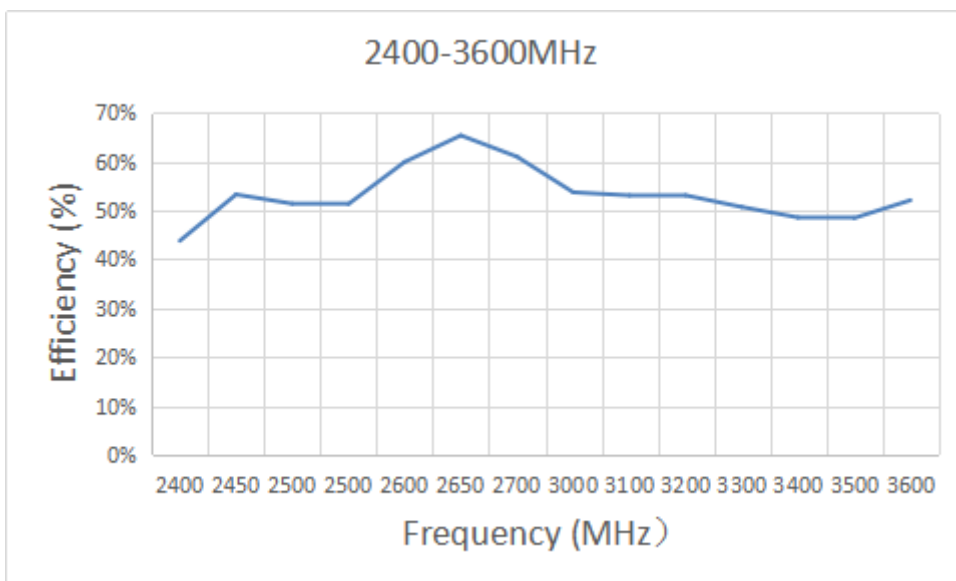
## 4.2. VSWR



Frequency (MHz)	699	880	960	1710	2300	2690	3500	4800
VSWR	3.2	2.3	2.5	1.7	2.1	1.5	2.1	1.3

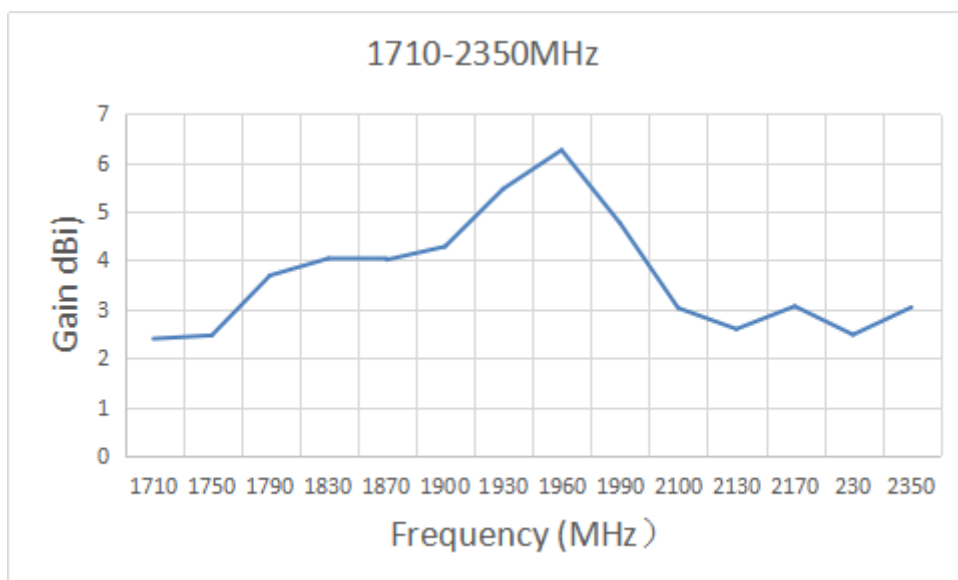
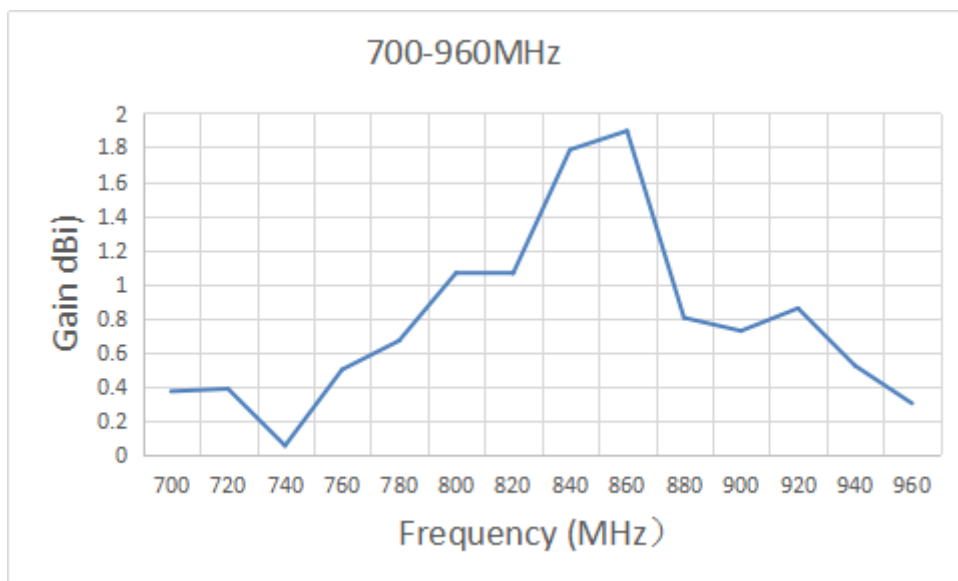
### 4.3. Efficiency

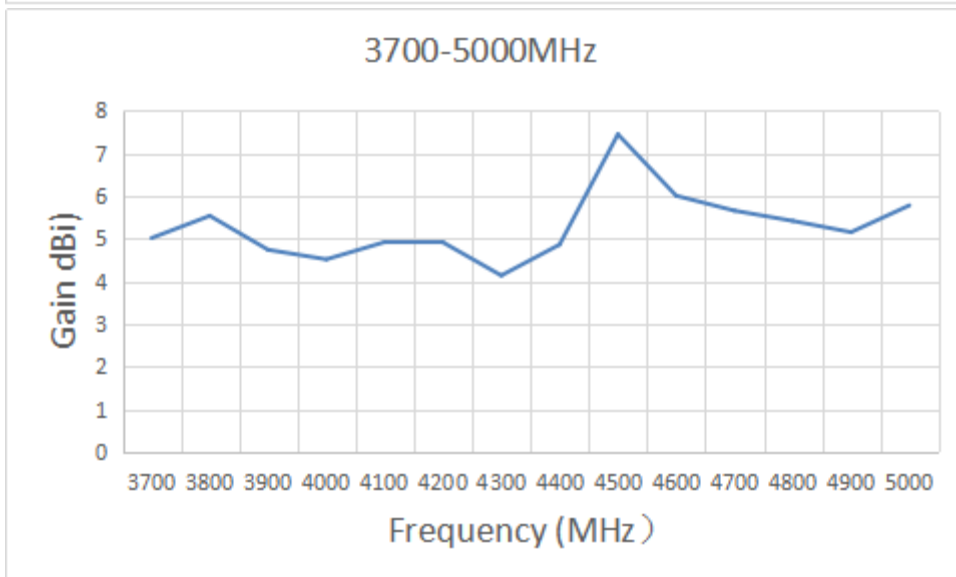
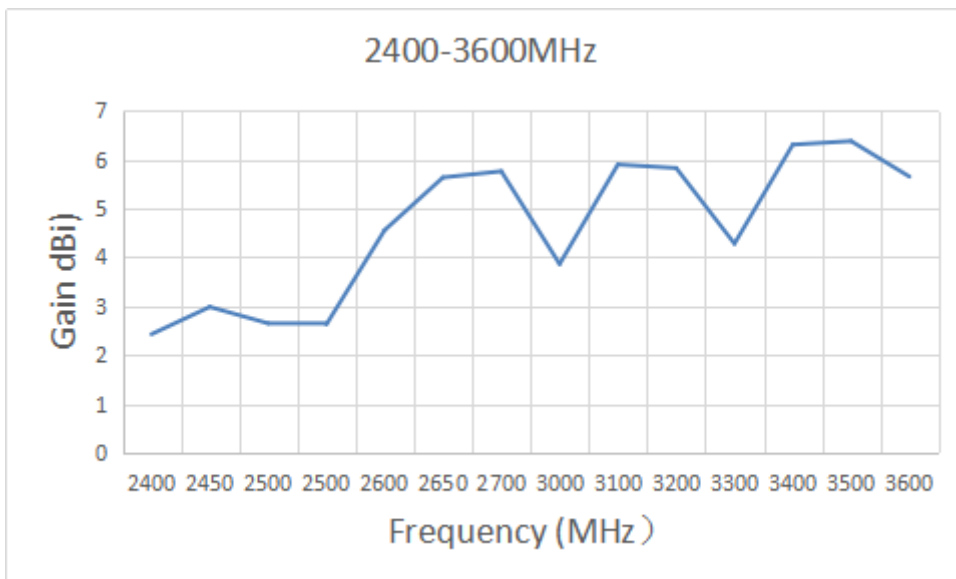




<b>Frequency (MHz)</b>	700	880	960	1710	2650	3300	4800
<b>Efficiency (%)</b>	37%	59%	48%	58%	65%	51%	58%

#### 4.4. Gain

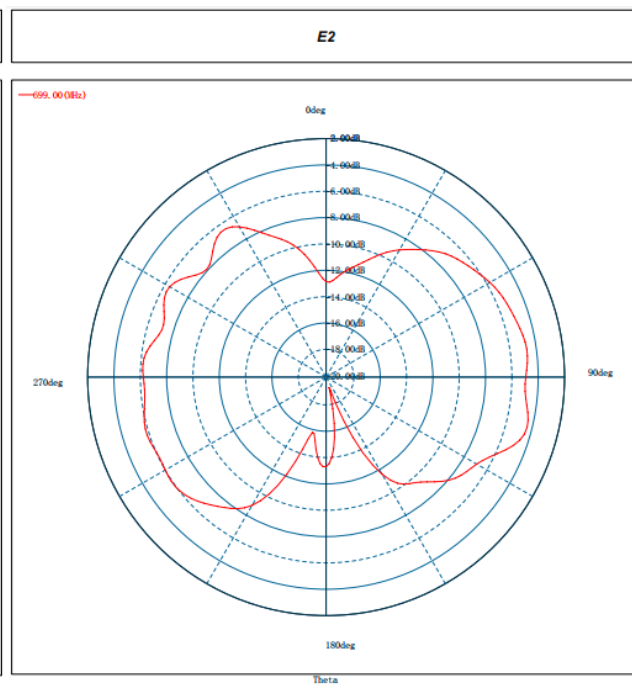
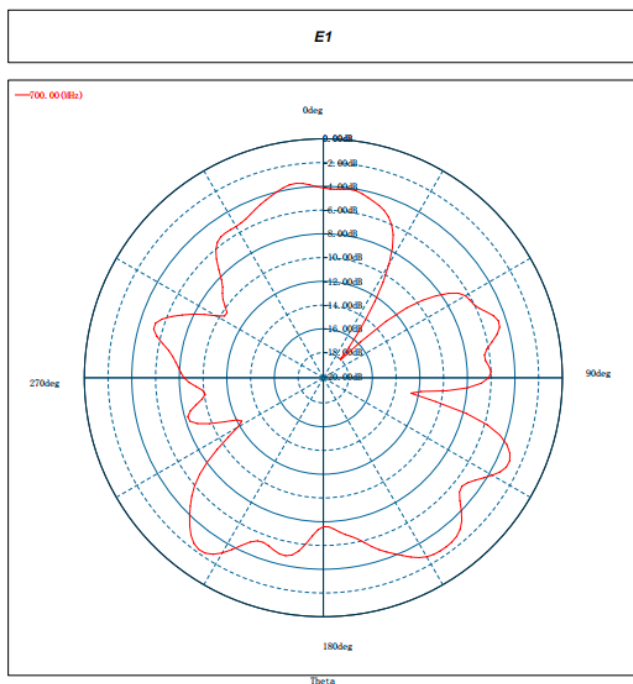
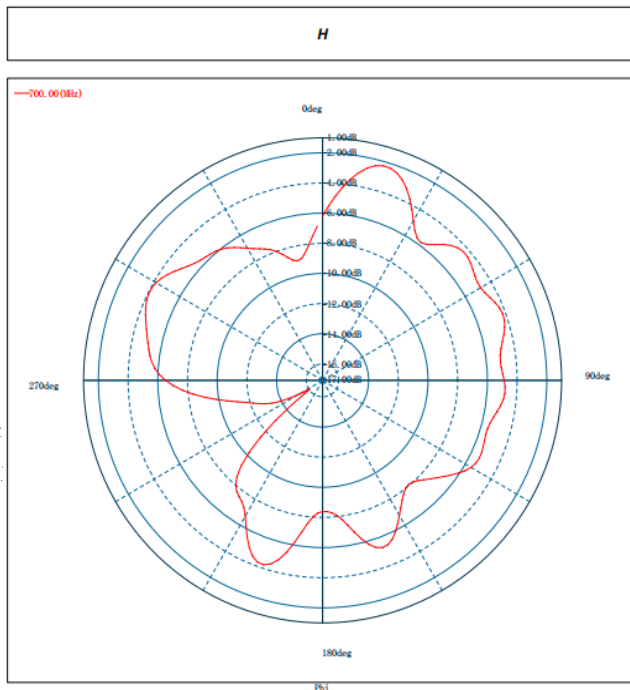
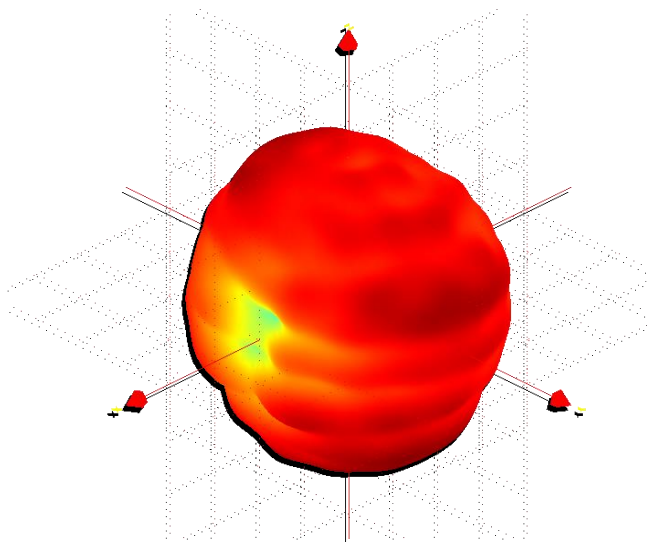




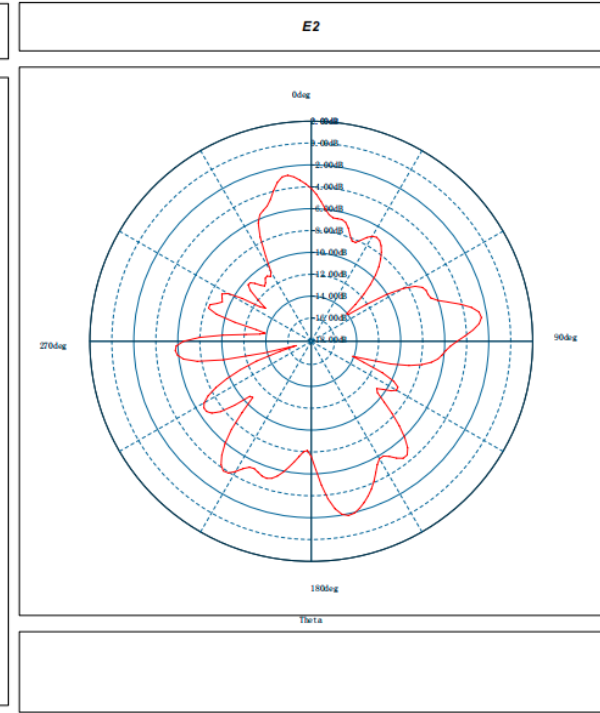
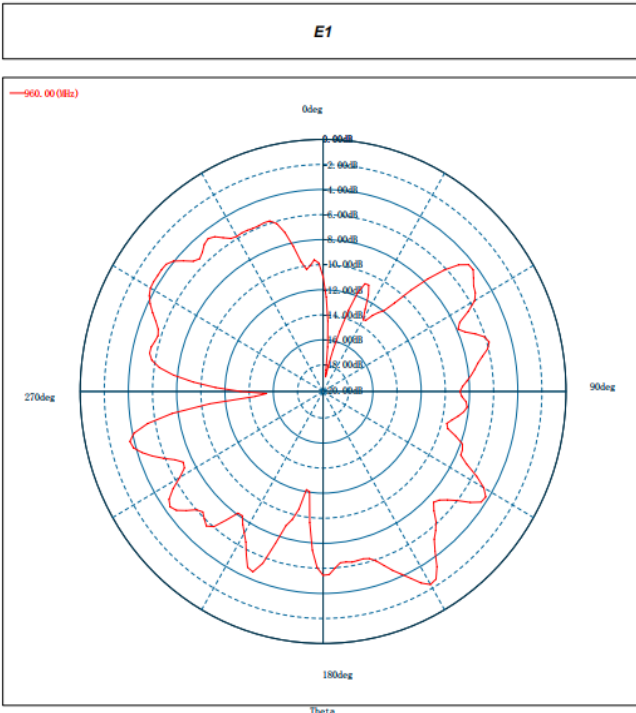
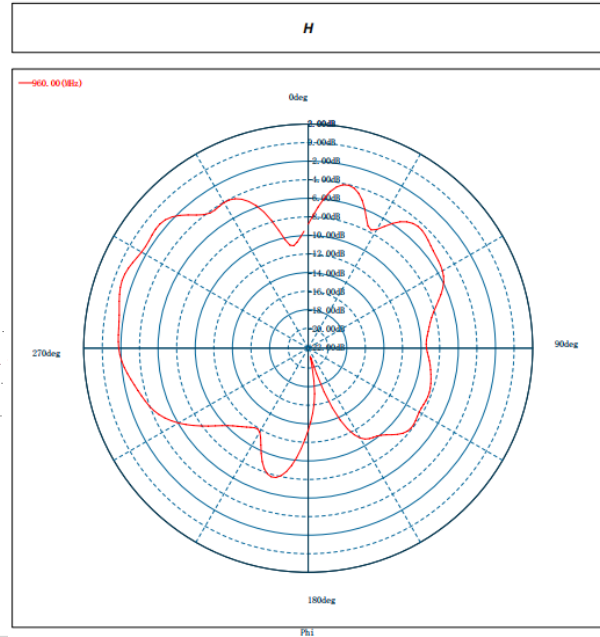
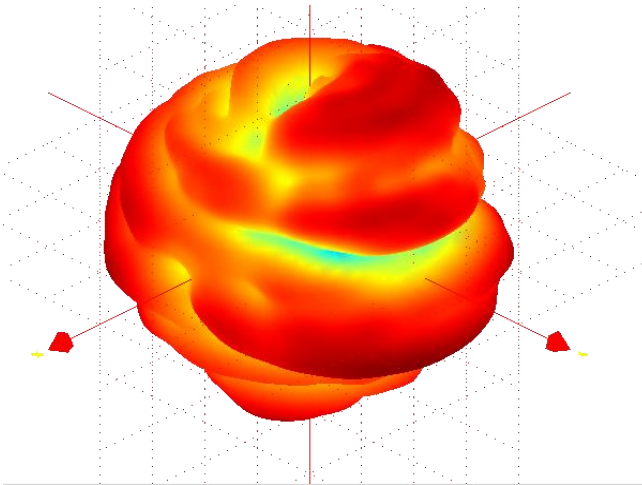
<b>Frequency (MHz)</b>	700	880	960	1710	2650	3300	4800
<b>Gain (dBi)</b>	0.37	0.8	0.8	2.3	5.6	4.2	5.4

### 4.5. Radiation Patterns

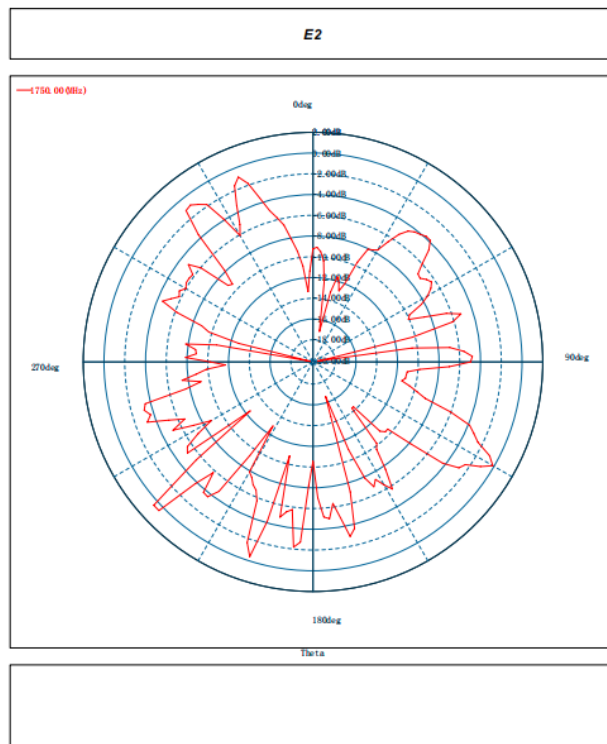
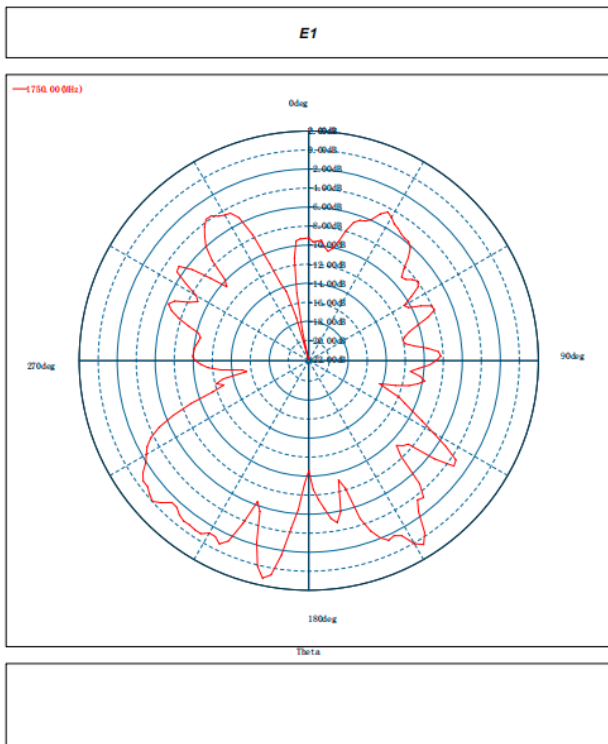
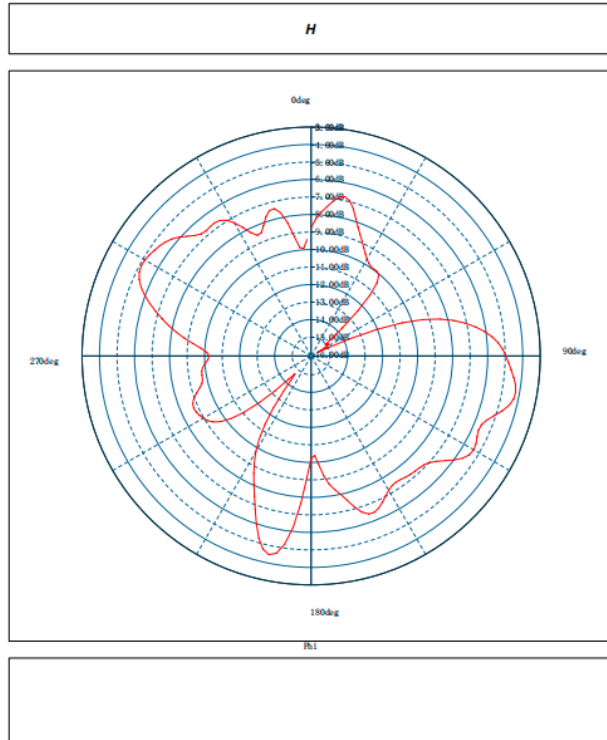
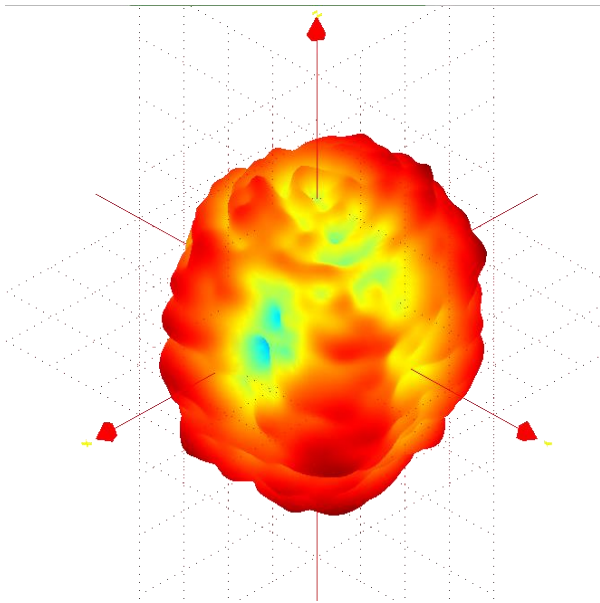
700MHz



960MHz

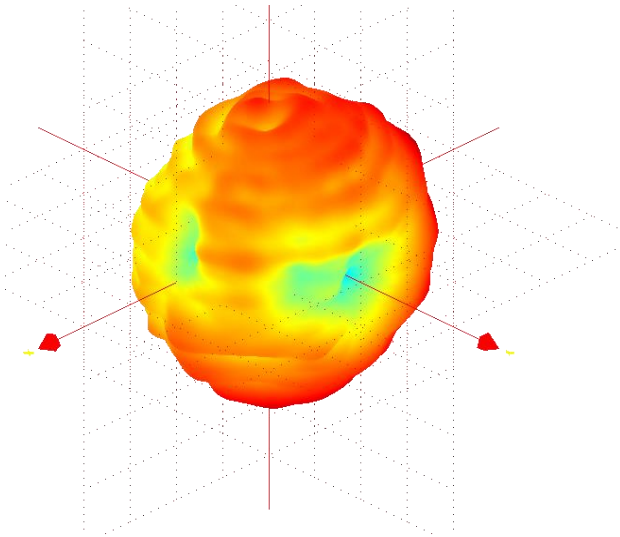


1750MHz

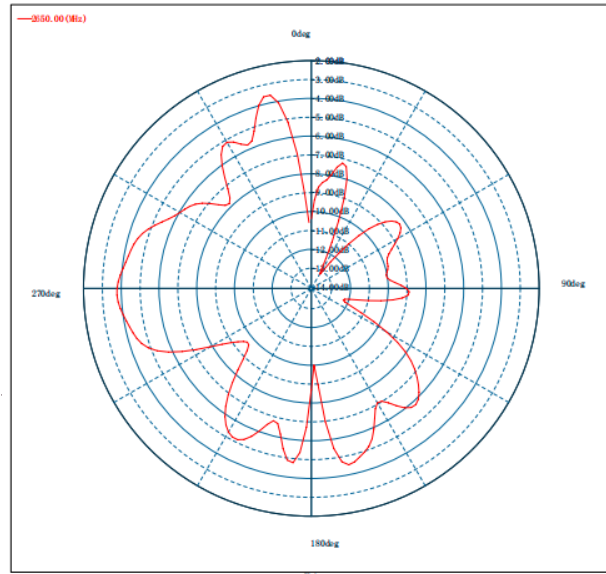




2690MHz

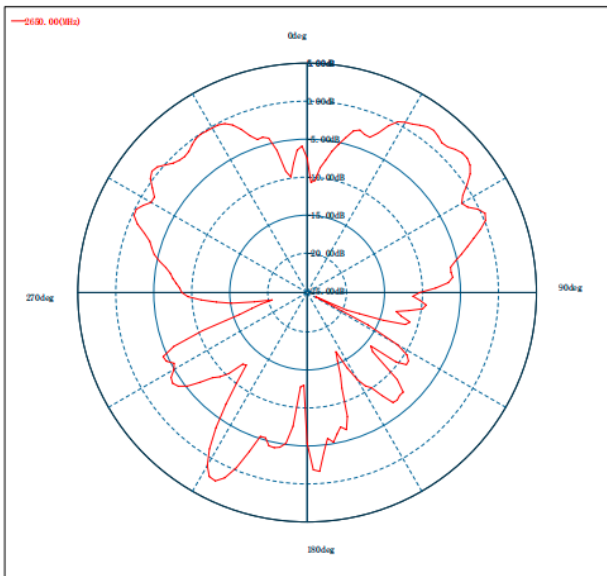


**H**



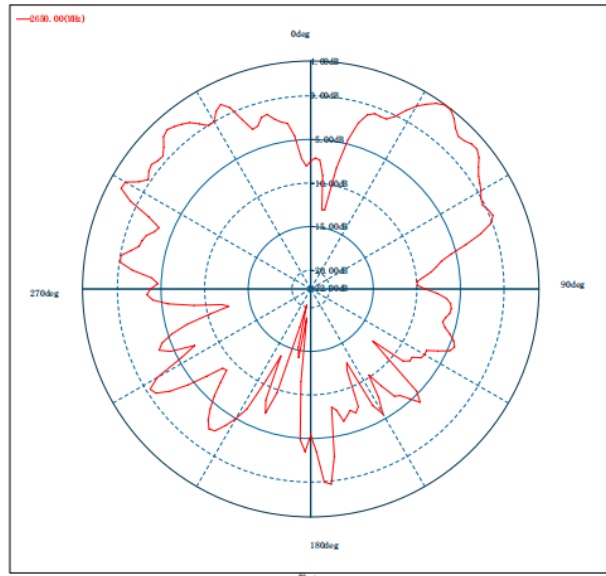
**H1**

**E1**



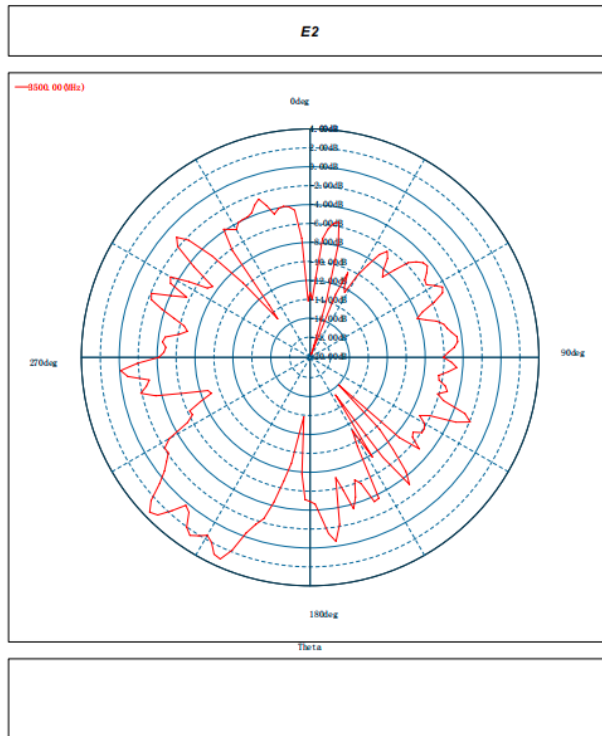
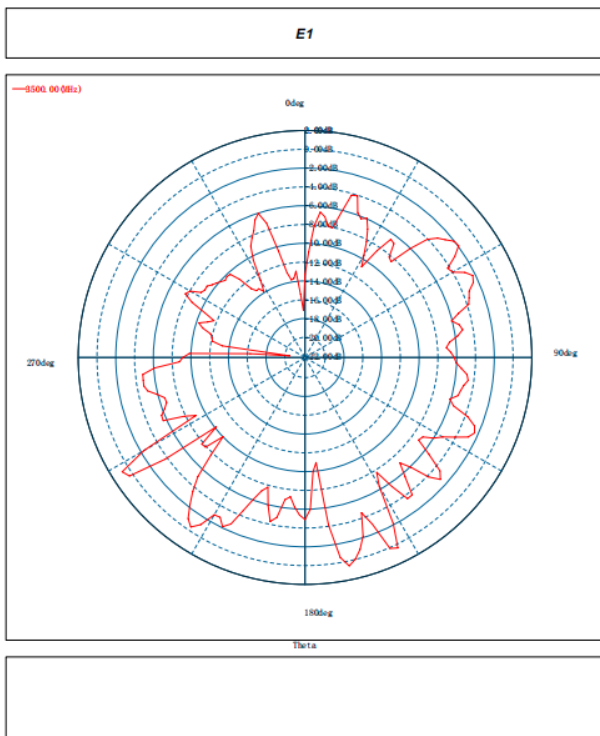
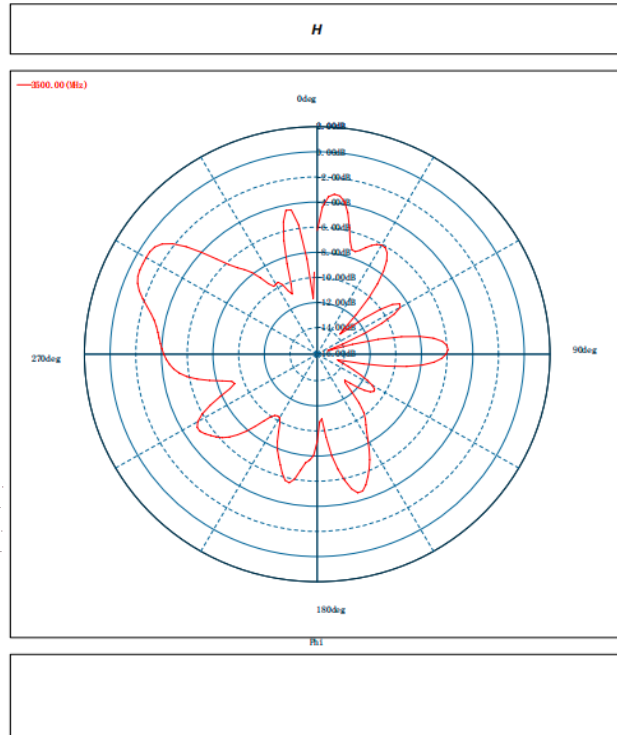
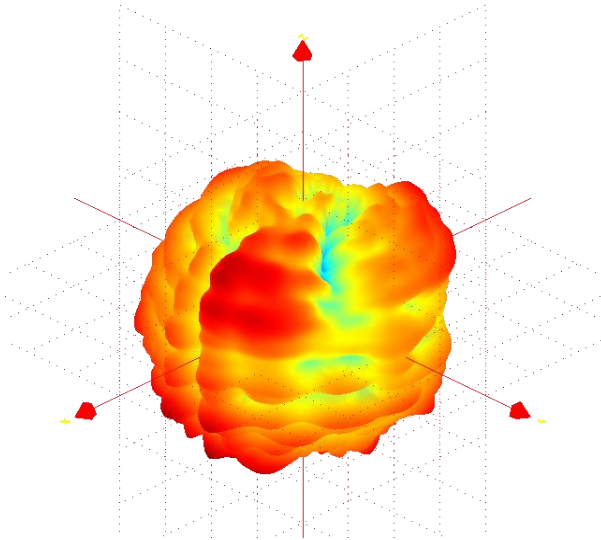
**Theta**

**E2**

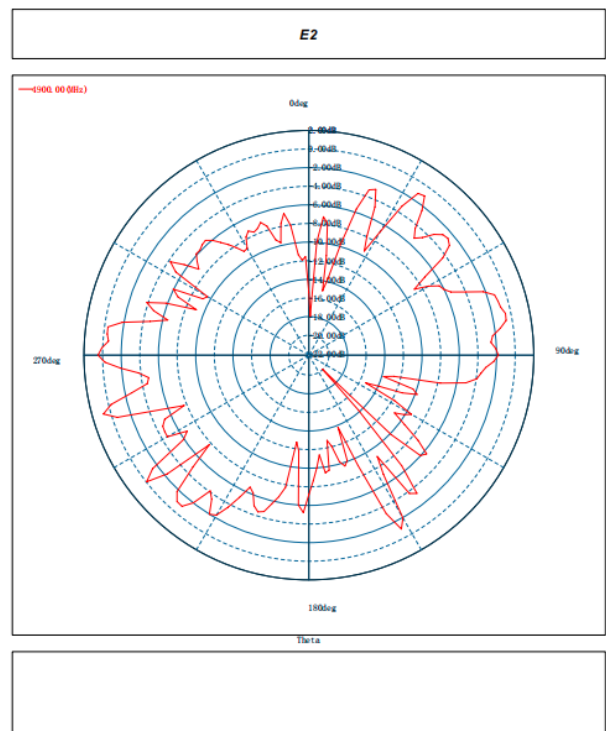
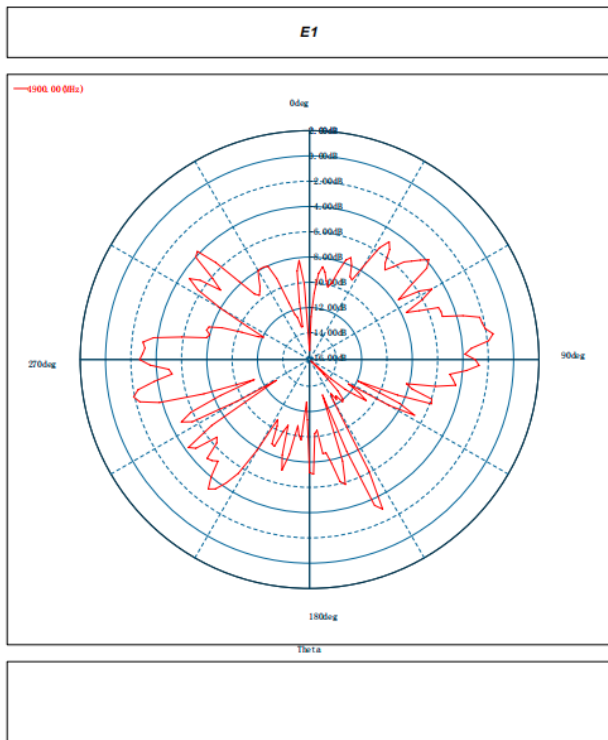
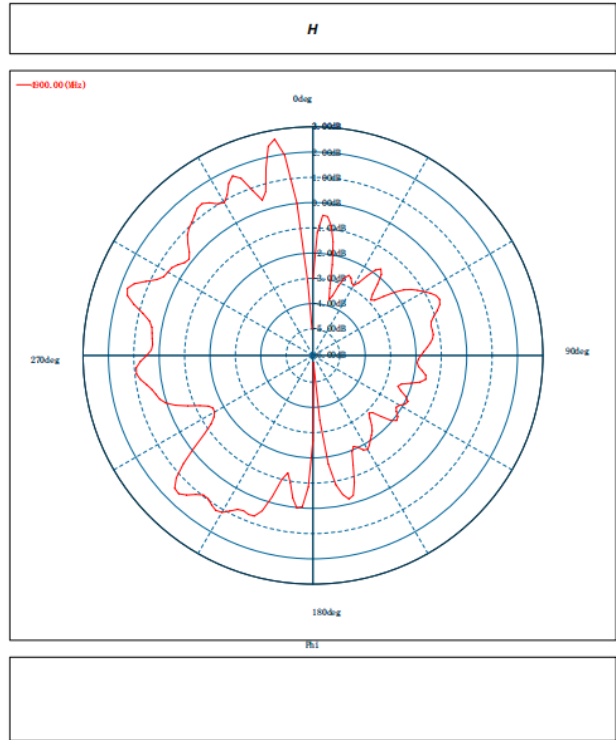
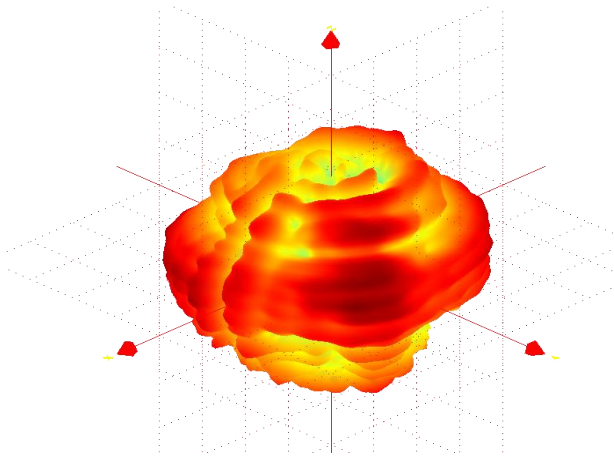


**Theta**

3500MHz



4900MHz



## 5 Product Size

