

# Antenna

# YEWN001AA Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
-	2021-05-11	Kenny YIN/ Aria CHU	Creation of the document
1.0	2021-05-11	Kenny YIN/ Aria CHU	First official release
1.1	2021-07-25	Kenny YIN/ Aria CHU	Updated working temperature (Chapter 3).

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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

- Wi-Fi 6 2.4/5.8 GHz
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	2400–2500 MHz, 5150–5850 MHz
Input Impedance	50 Ω
VSWR	≤ 2.0
Gain	≤ 5.0 dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size	Φ 13 mm x 200 mm
Casing	TPEE
Connector Type	RP-SMA Male (Center Receptacle)
Working Temperature	-40 °C to +85 °C
Radome Color	Black
IP Rating	IP55

## 4 Overall Performance

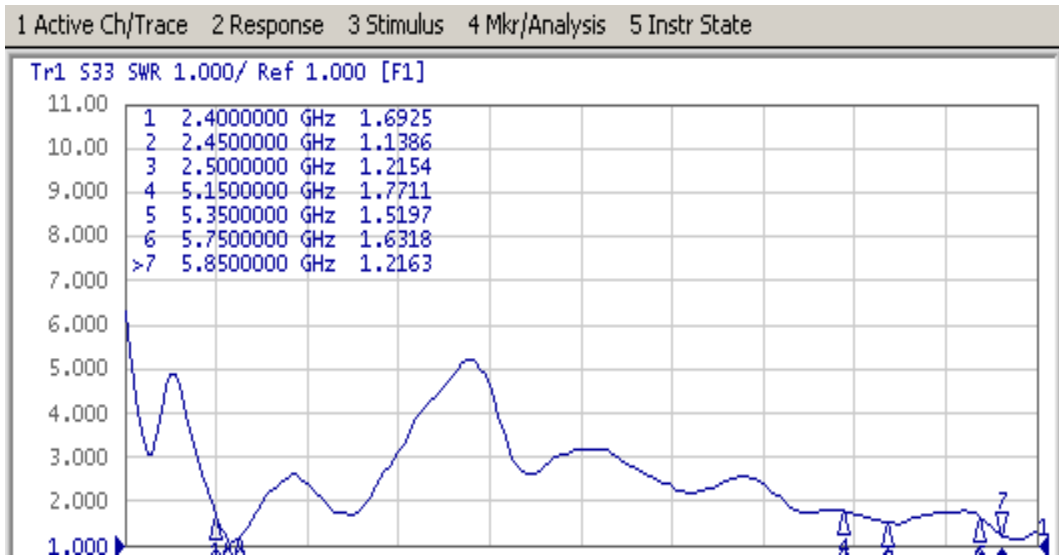
### 4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz



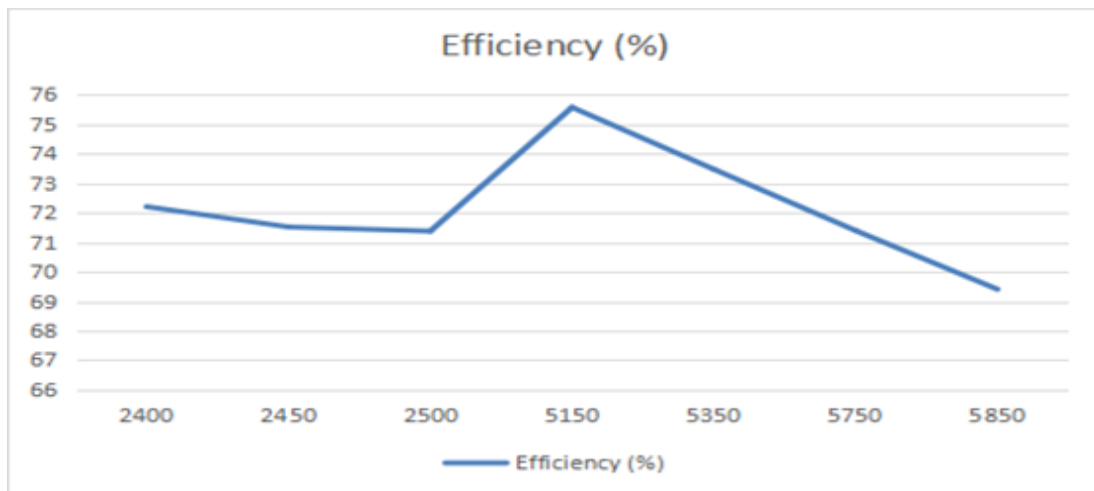


### 4.2. VSWR



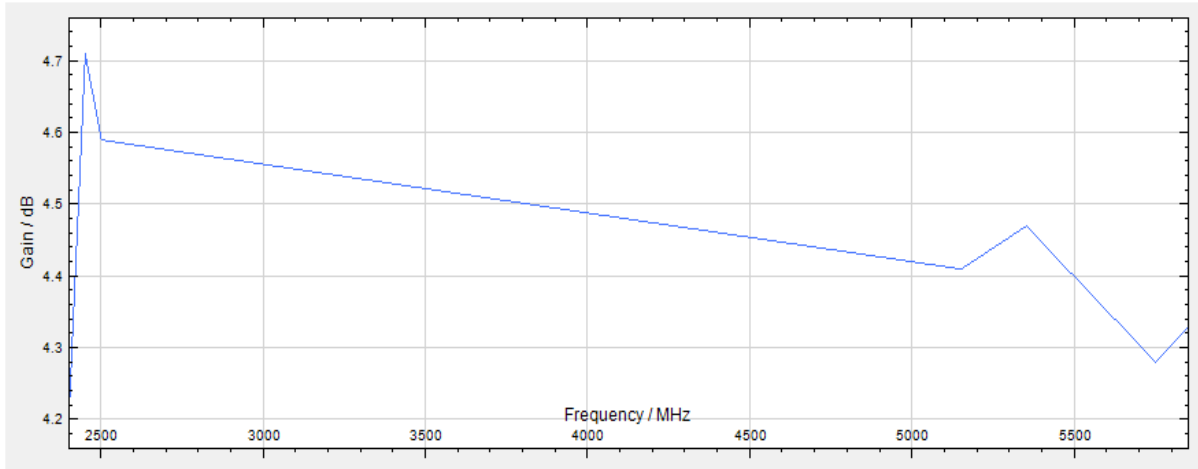
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
VSWR	1.69	1.13	1.21	1.77	1.51	1.63	1.21

### 4.3. Efficiency



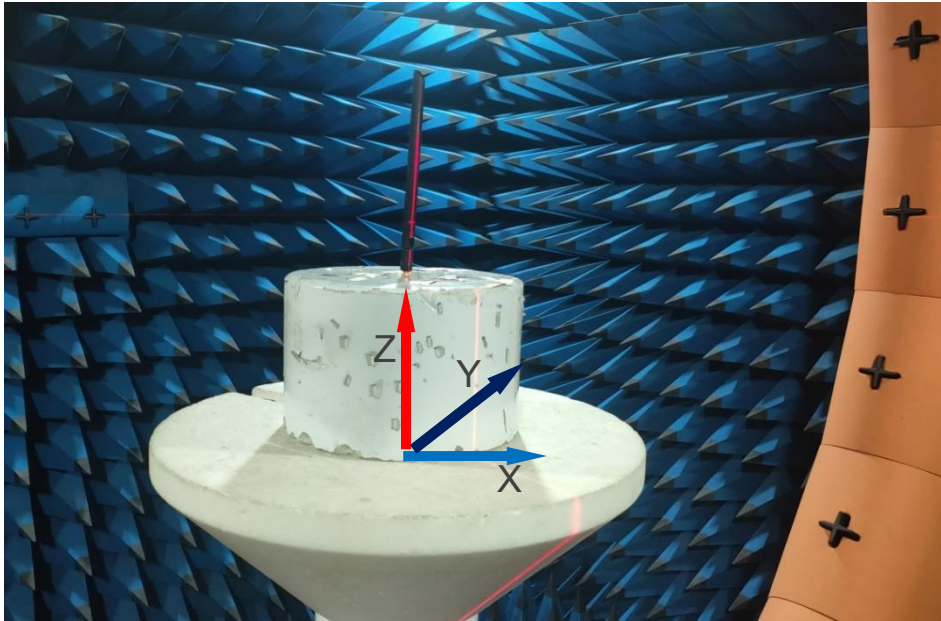
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
Efficiency (%)	72.21	71.52	71.38	75.58	73.48	71.4	69.41

### 4.4. Gain

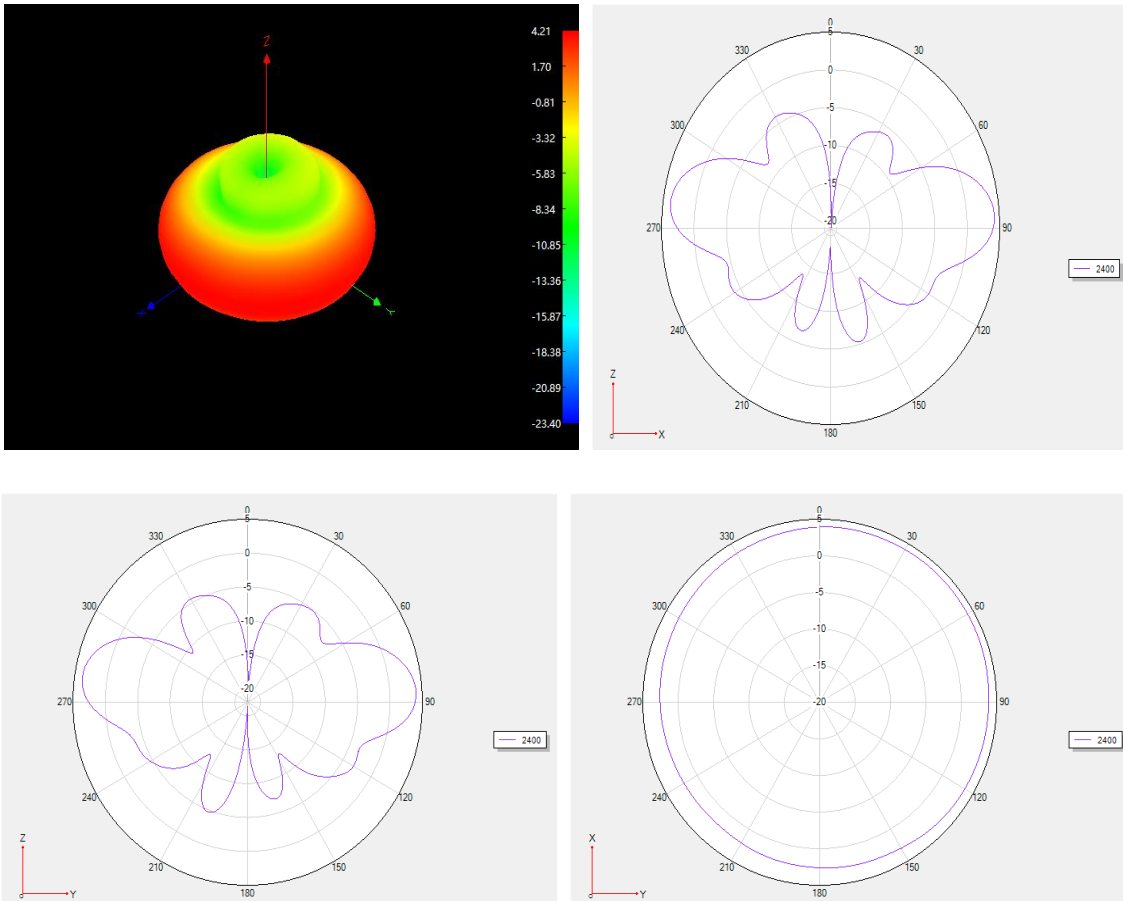


Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
Gain (dBi)	4.21	4.71	4.59	4.41	4.47	4.28	4.33

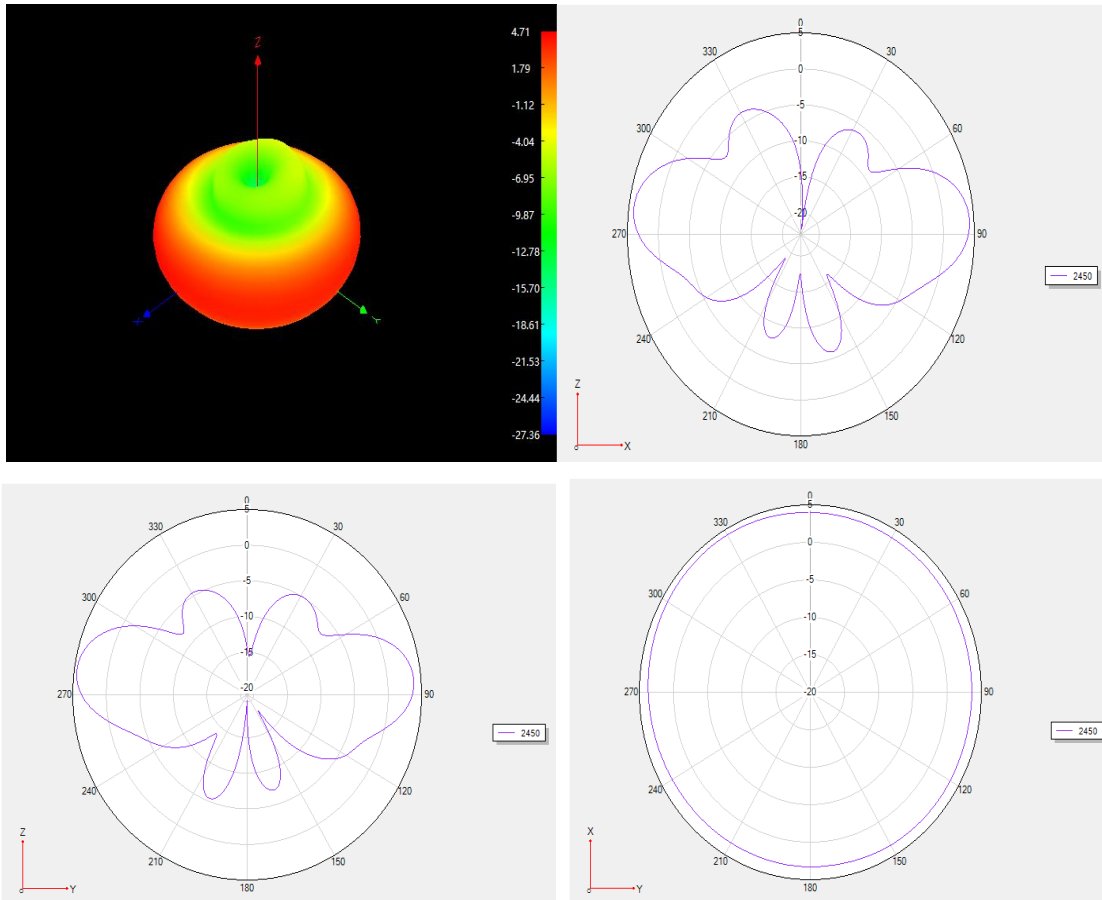
### 4.5. Radiation Pattern



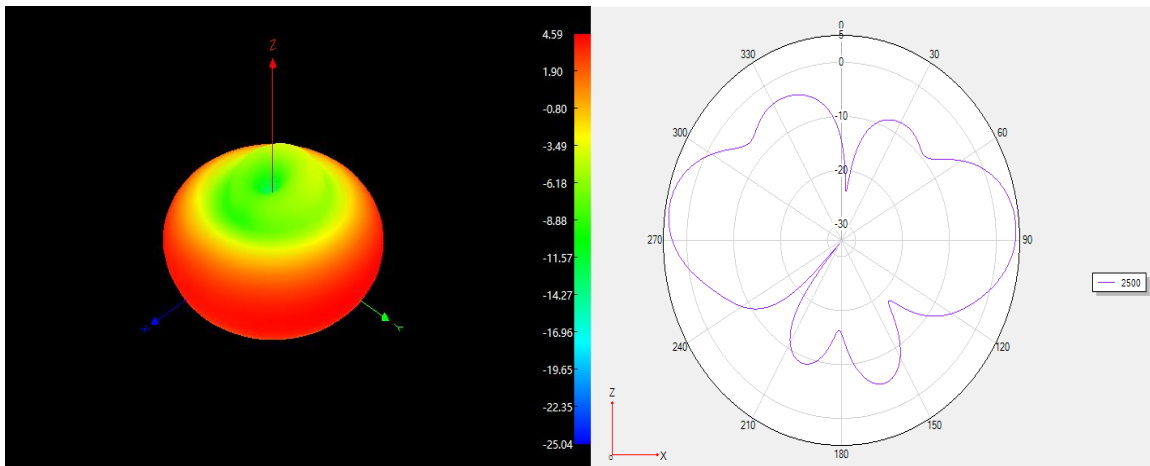
#### 4.5.1. 2400 MHz

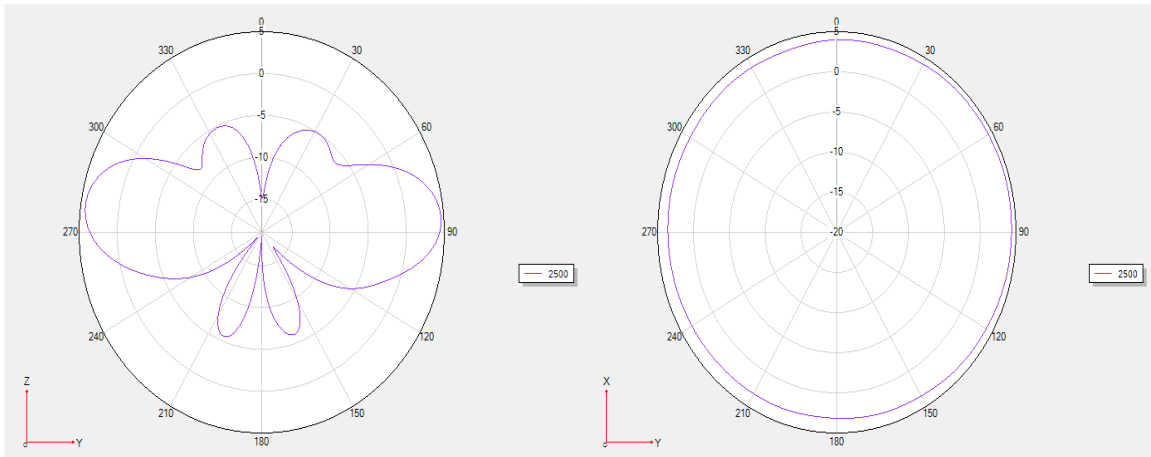


**4.5.2. 2450 MHz**

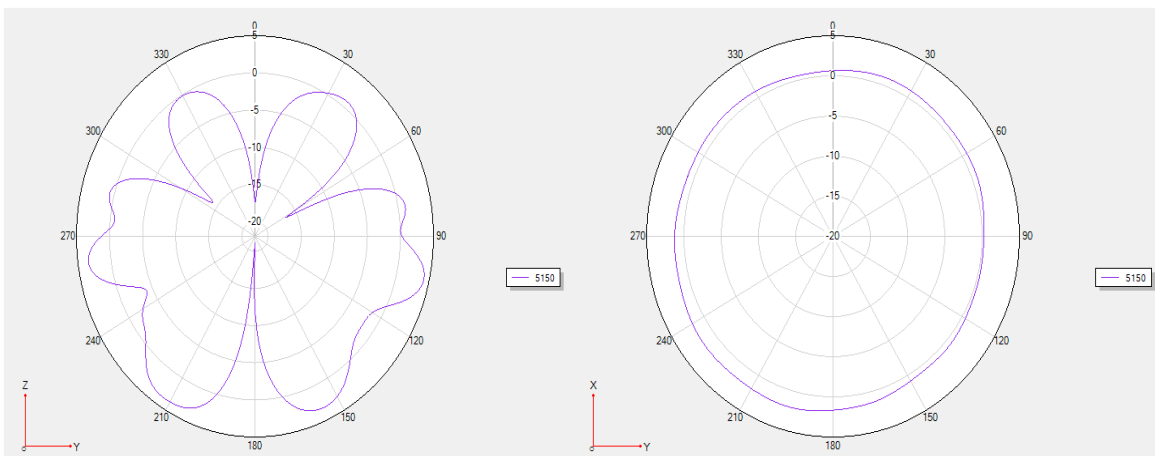
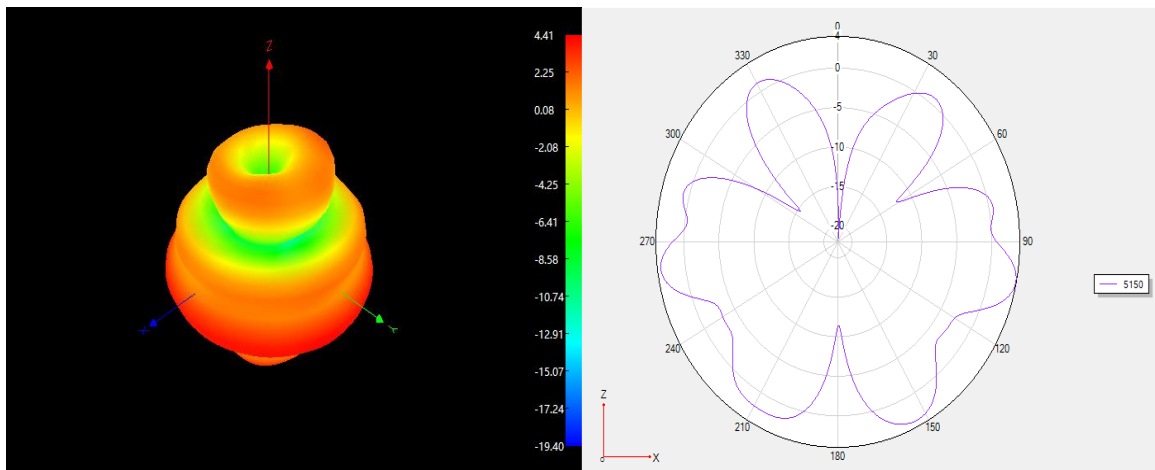


**4.5.3. 2500 MHz**

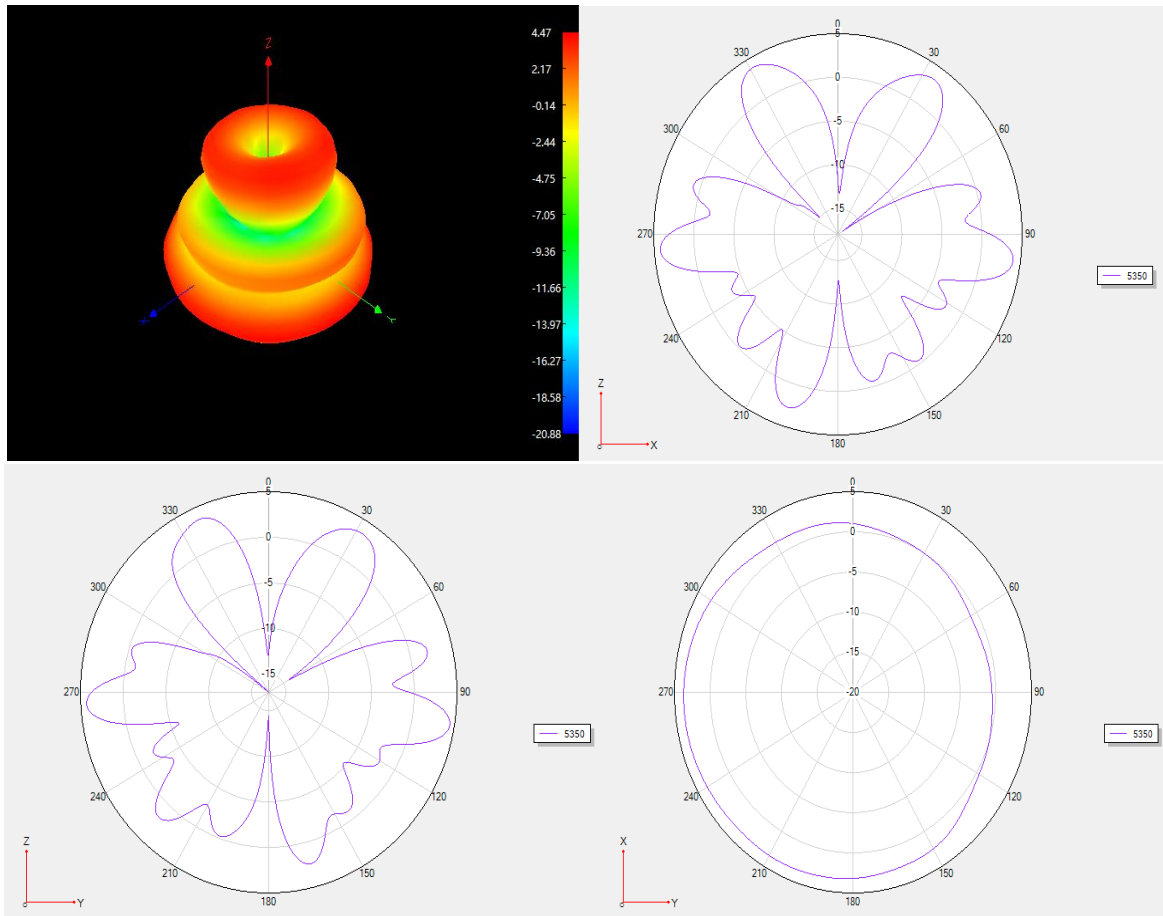




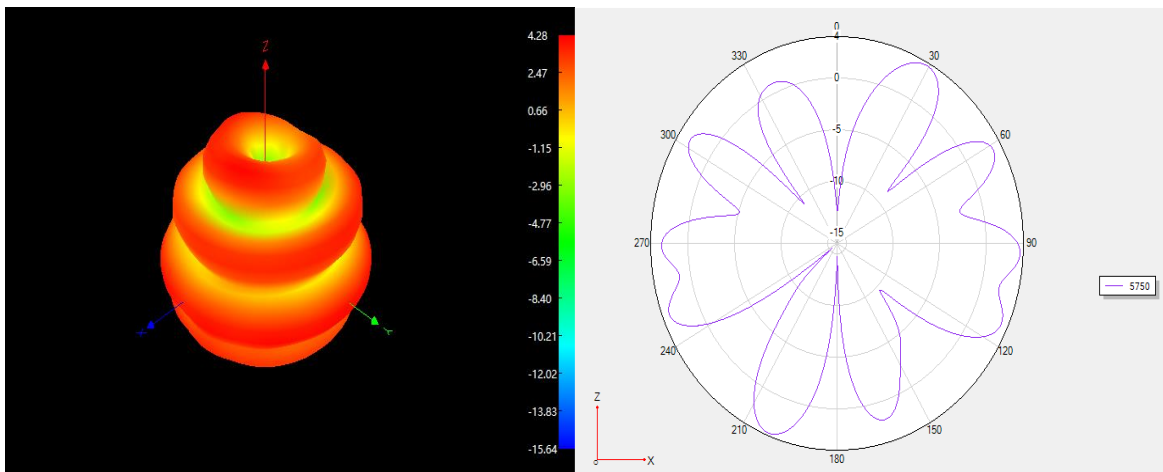
**4.5.4. 5150 MHz**

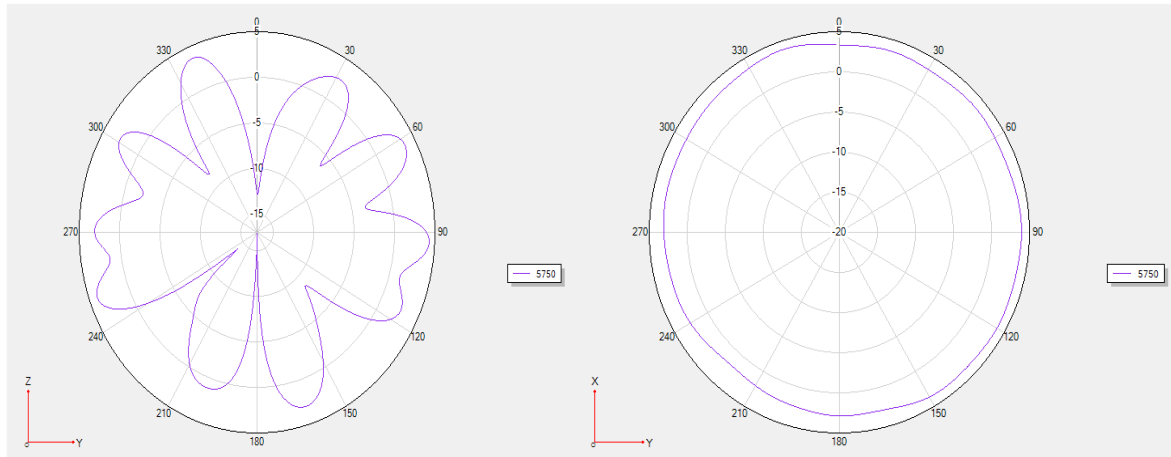


**4.5.5. 5350 MHz**

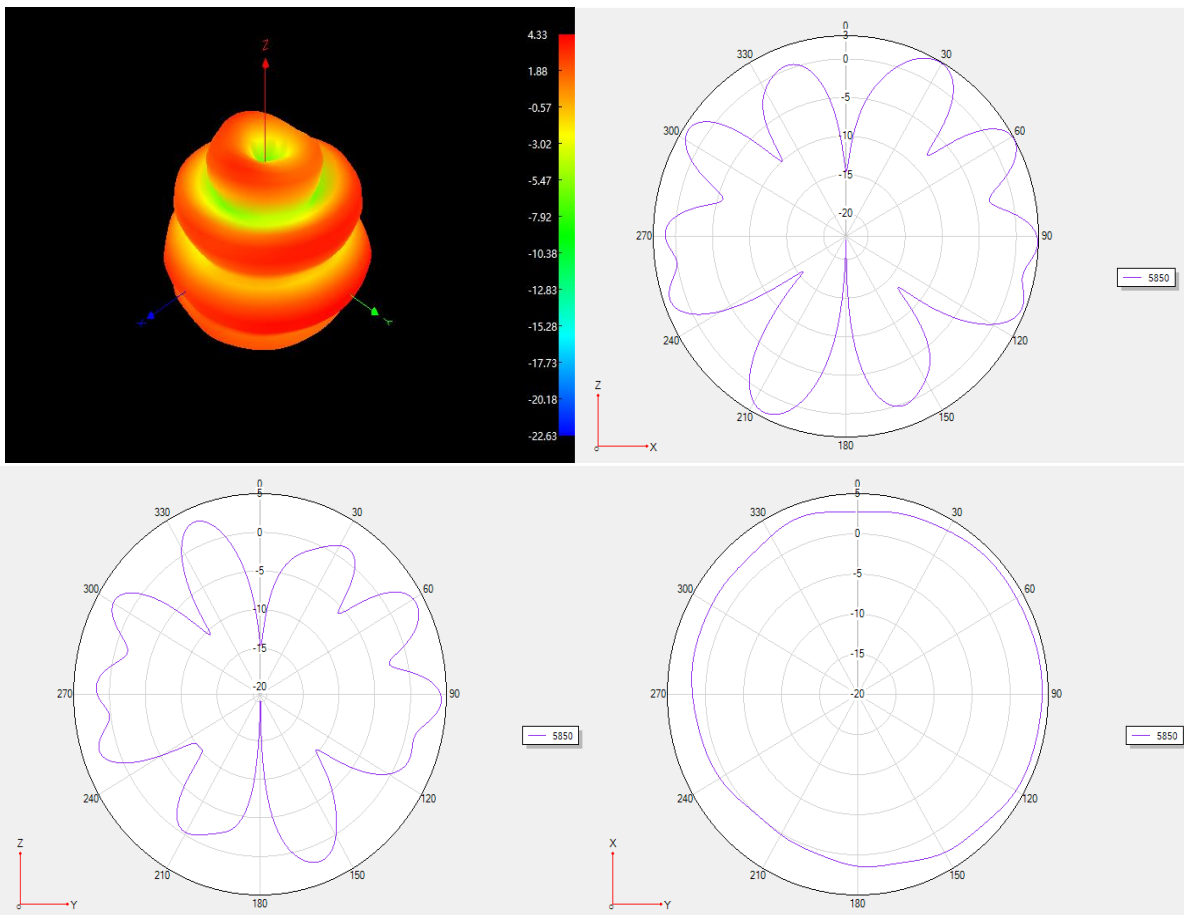


**4.5.6. 5750 MHz**





**4.5.7. 5850 MHz**



## 5 Product Size

