

**ADVANTECH**

**Antenna**

**OPT1-ANT-WFT-06**

**Datasheet**



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## 1 Product Description

Advantech Wi-Fi antenna covers 2.4 GHz, 5 GHz, and up to 7 GHz bands, fully satisfying customers' requirements for Wi-Fi 5, Wi-Fi 6, and Wi-Fi 6E. The antenna performance meets the customers' demands for efficiency, gain, and radiation and ensures the superior experience of the customers' products in use.

## 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 Impedence	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

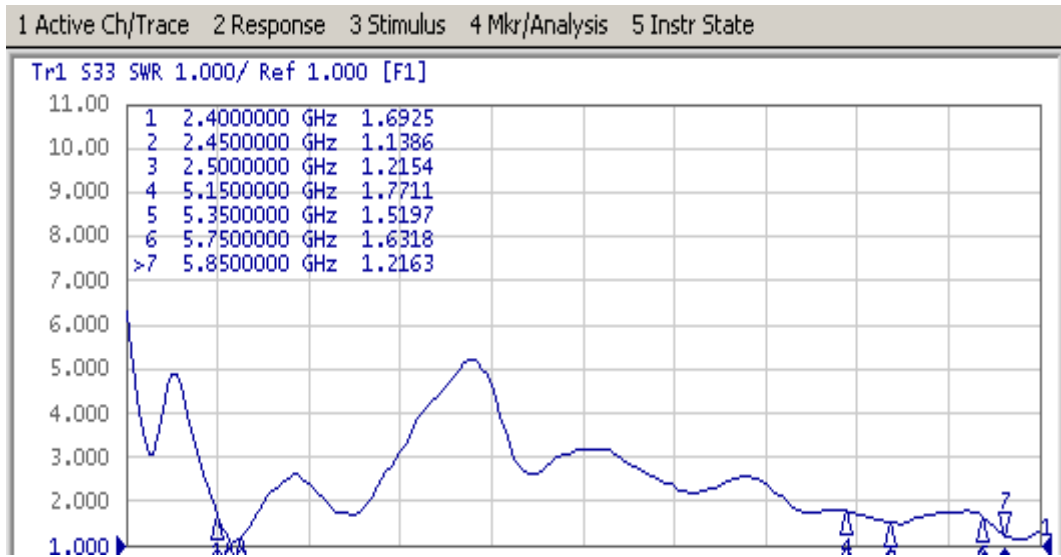
## 4 Overall Performance

### 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

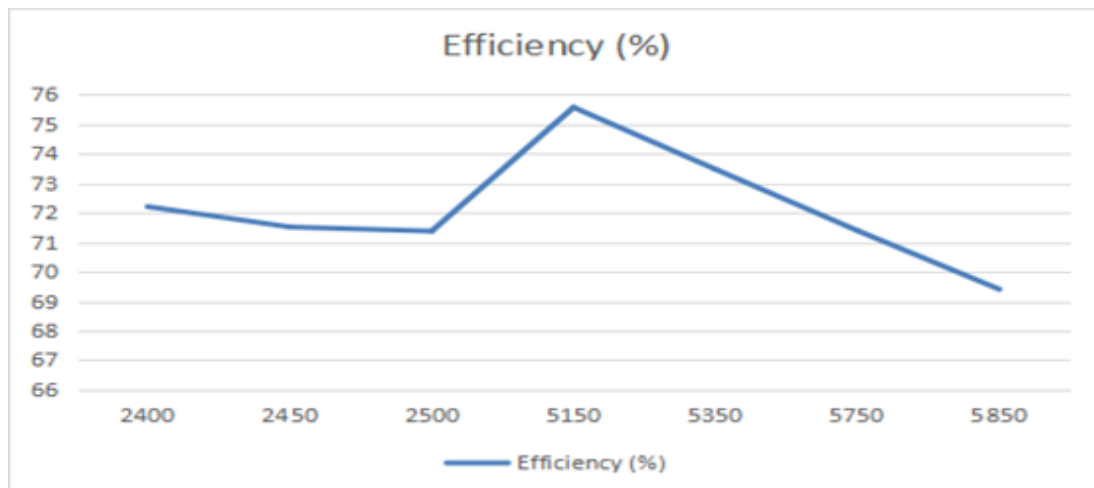


## 4.2. VSWR



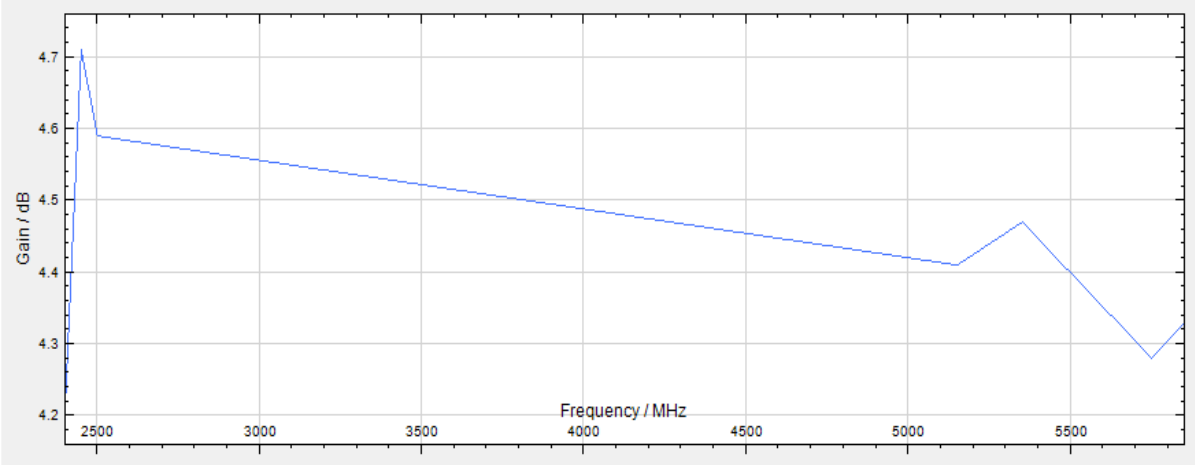
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
VSWR	1.69	1.13	1.21	1.77	1.51	1.63	1.21

## 4.3. Efficiency



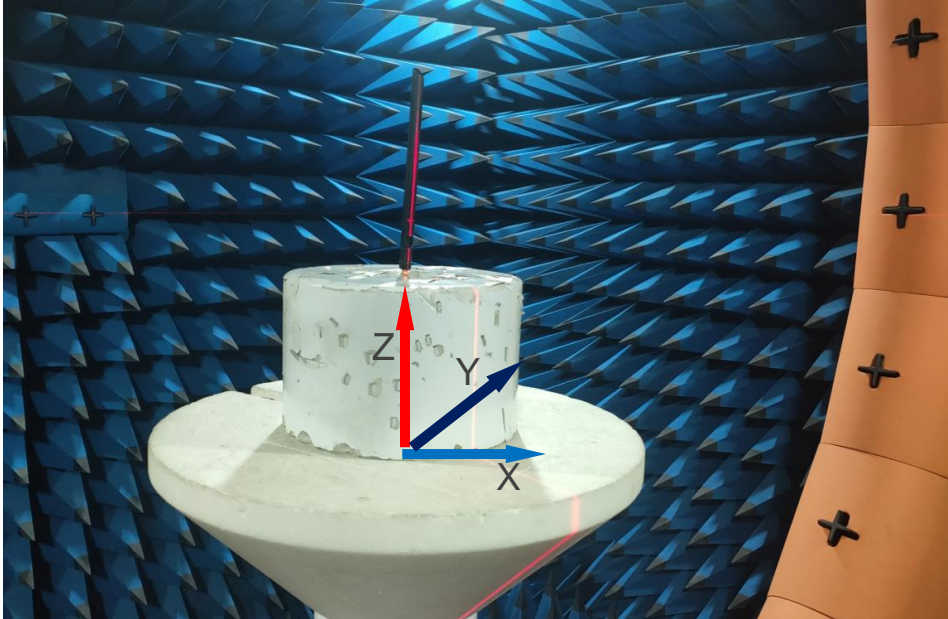
Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
Efficiency (%)	72.21	71.52	71.38	75.58	73.48	71.4	69.41

**4.4. Gain**

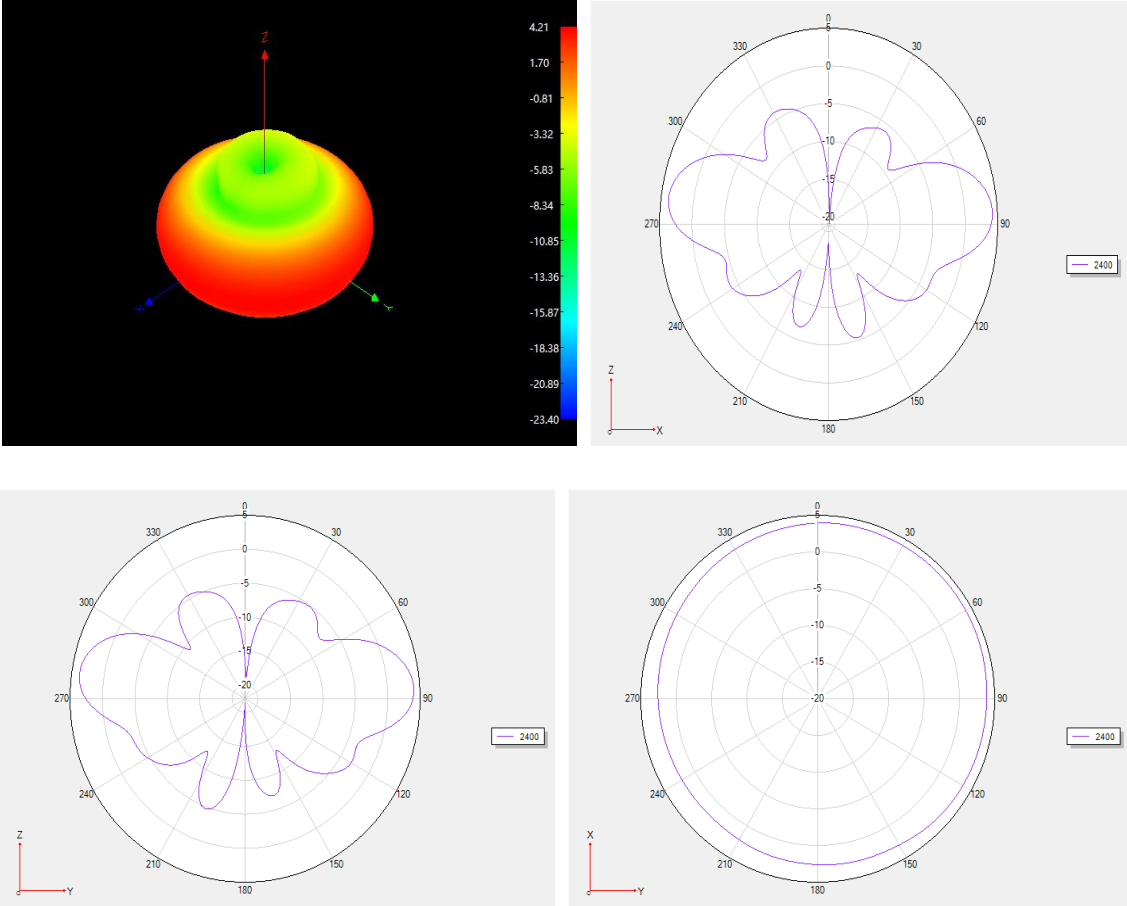


Frequency (MHz)	2400	2450	2500	5150	5350	5750	5850
Gain (dBi)	4.21	4.71	4.59	4.41	4.47	4.28	4.33

### 4.5. Radiation Pattern

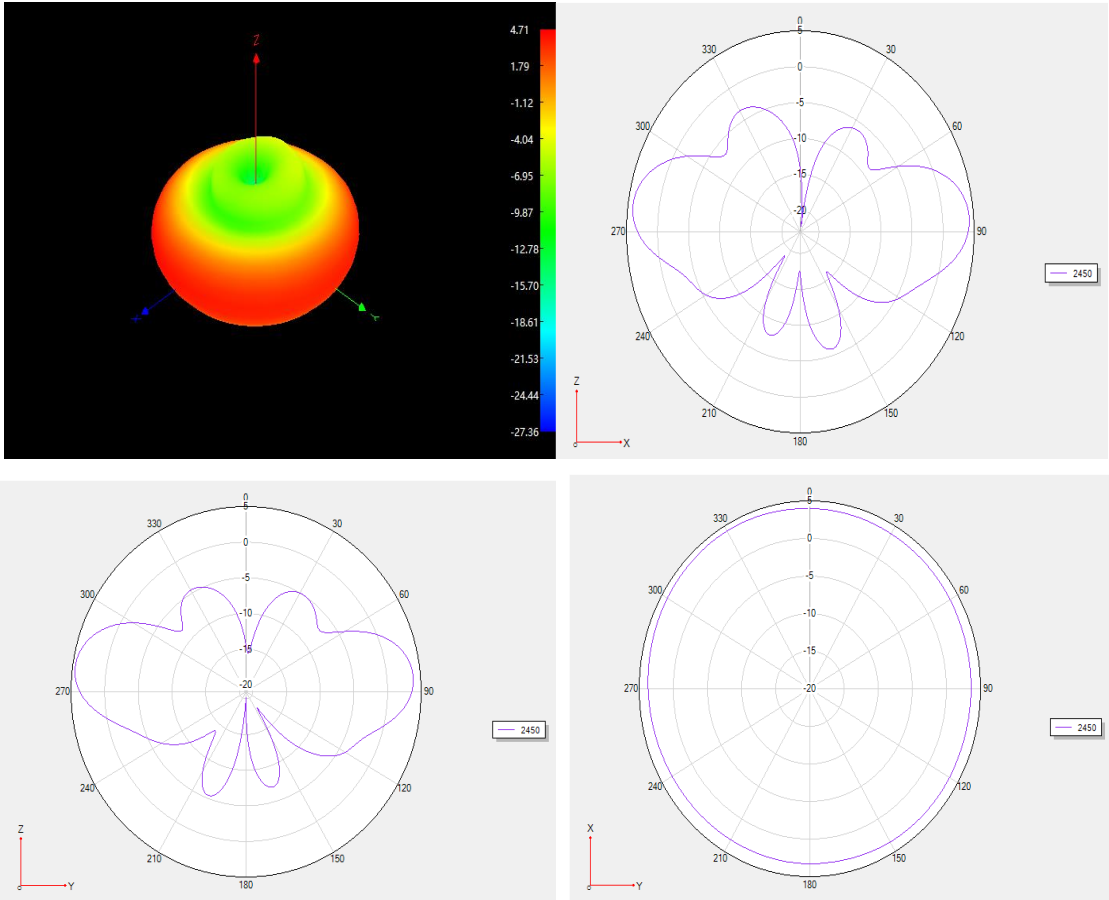


#### 4.5.1. 2400 MHz

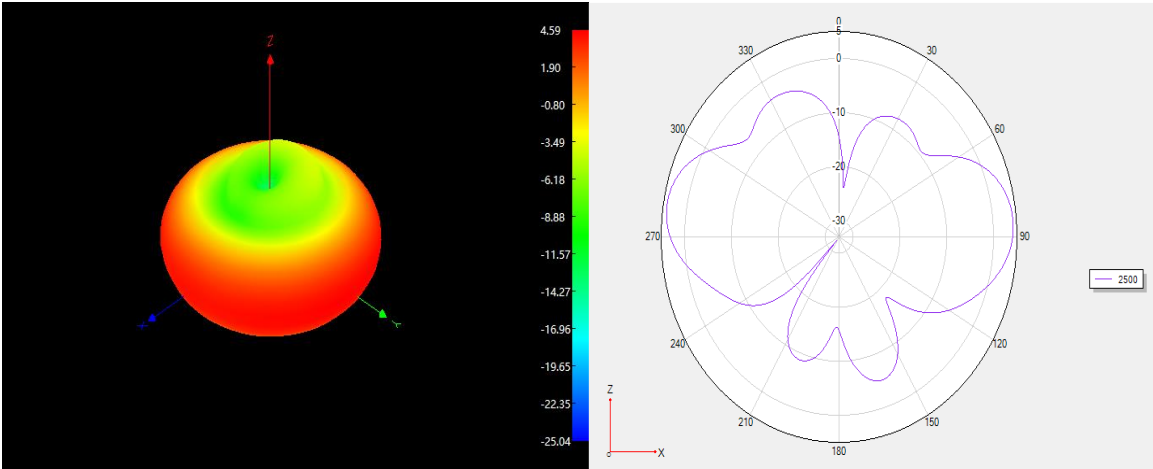


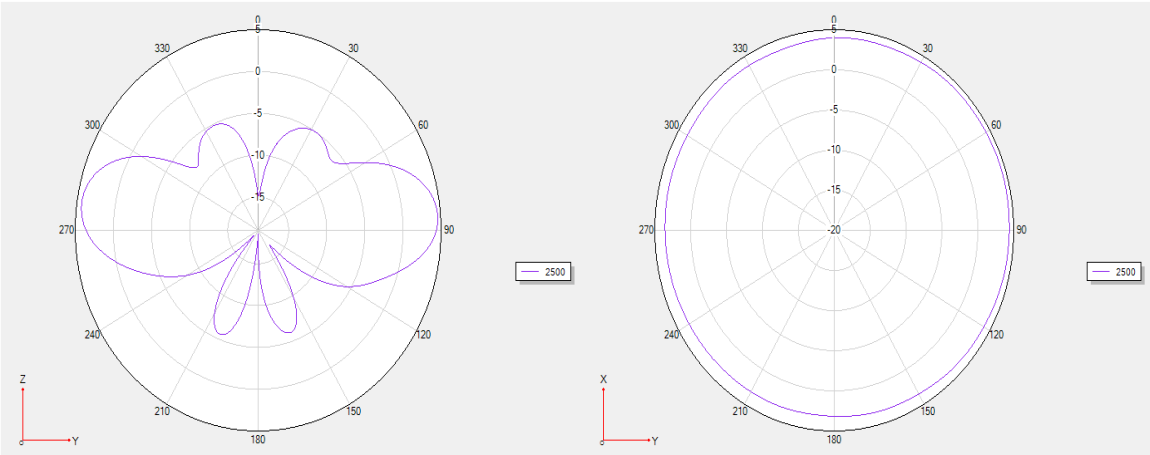


**4.5.2. 2450 MHz**

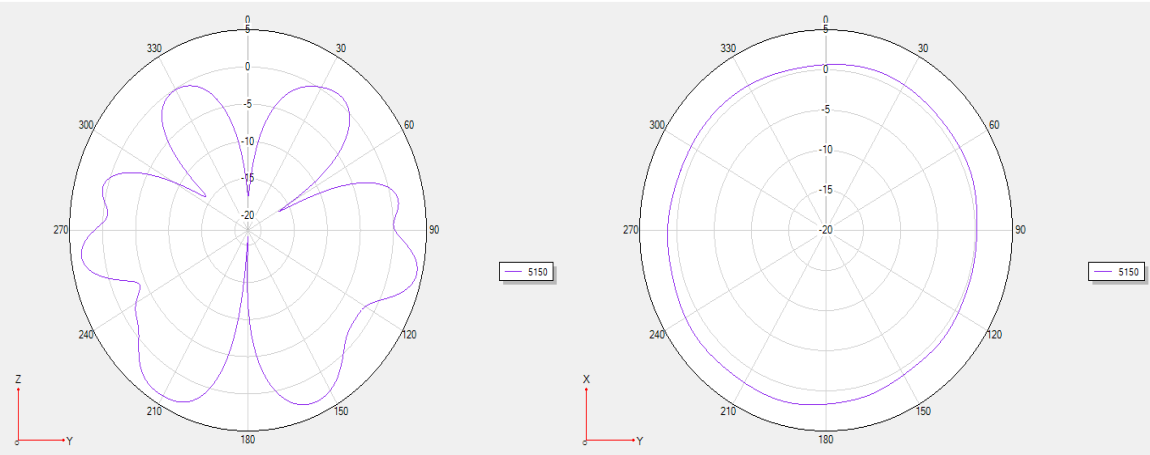
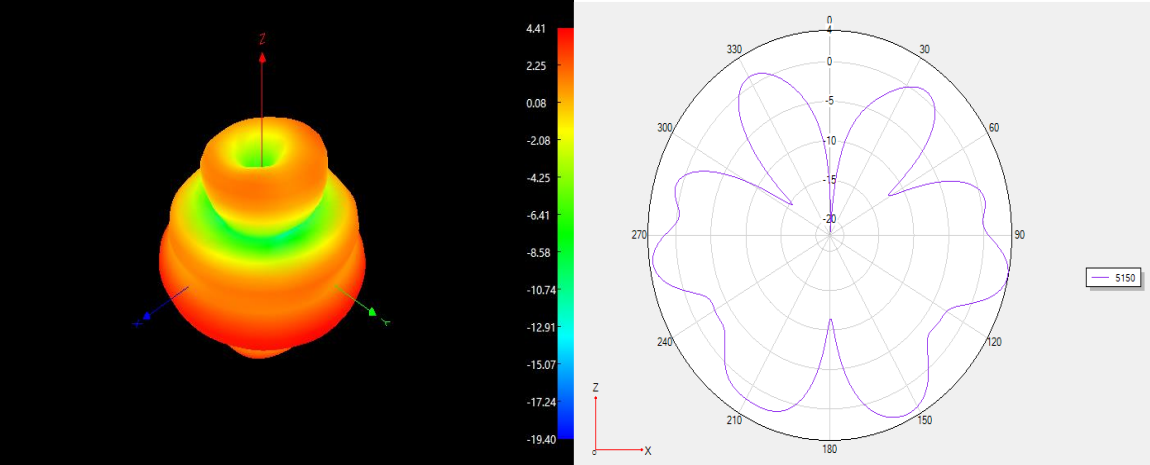


**4.5.3. 2500 MHz**

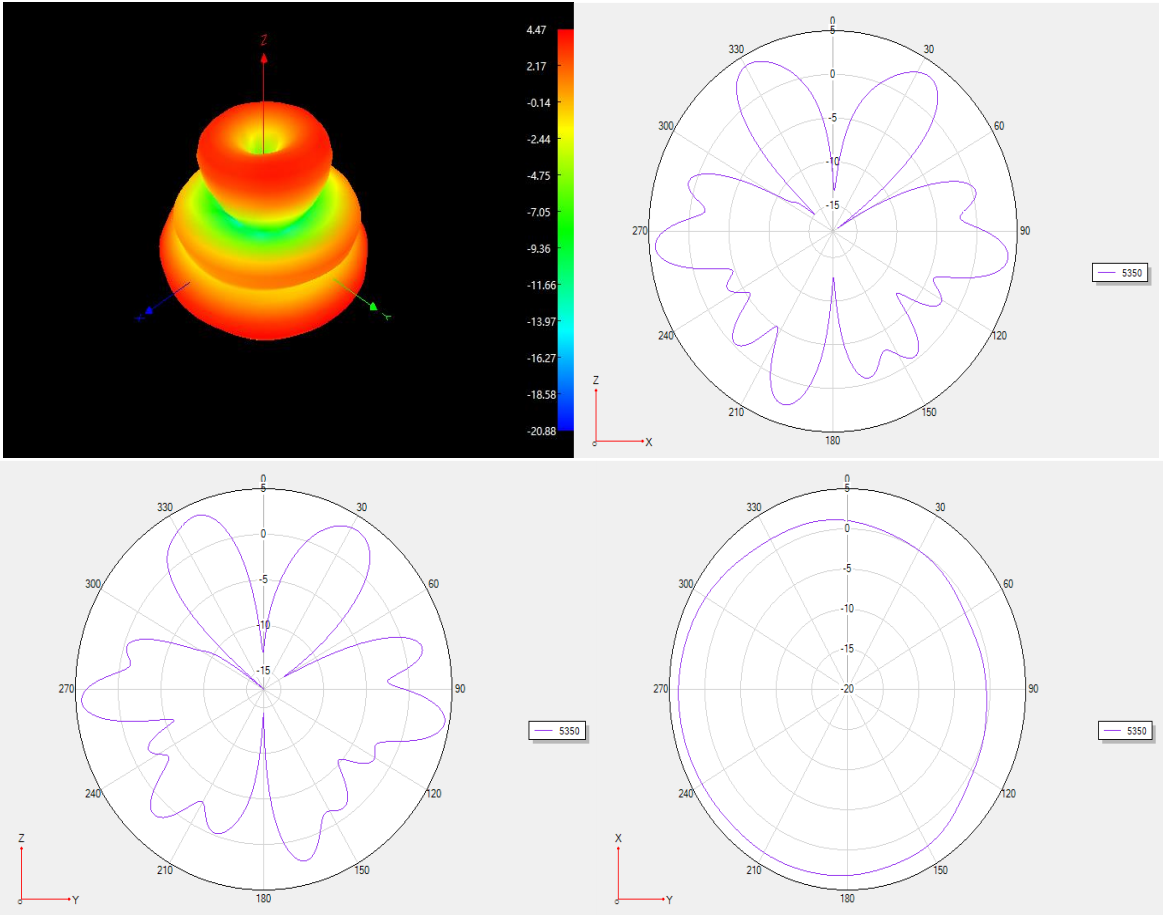




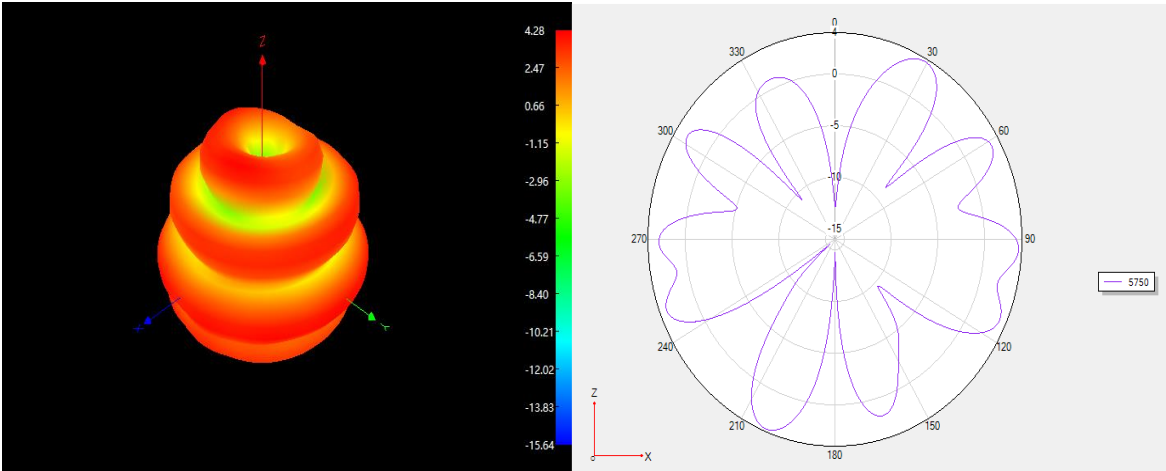
### 4.5.4. 5150 MHz

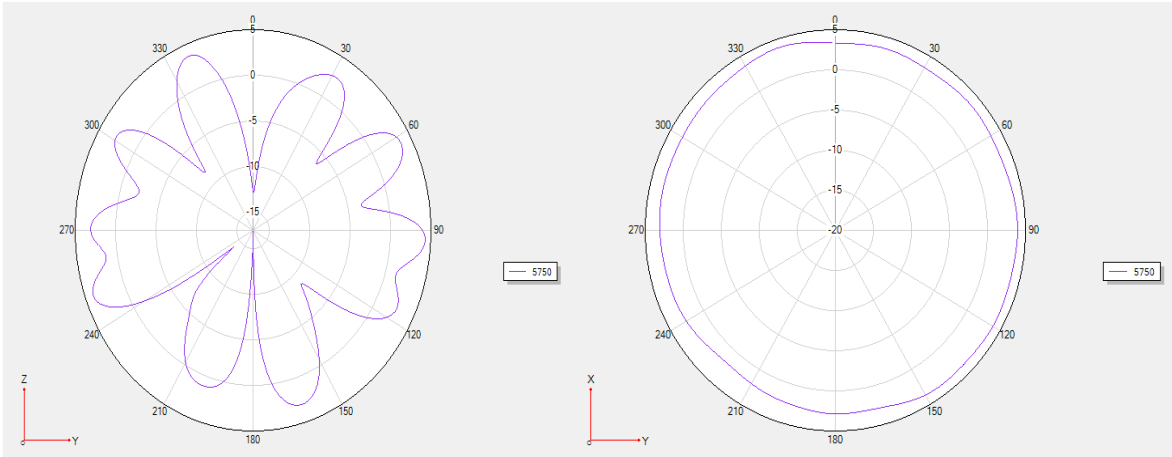


### 4.5.5. 5350 MHz

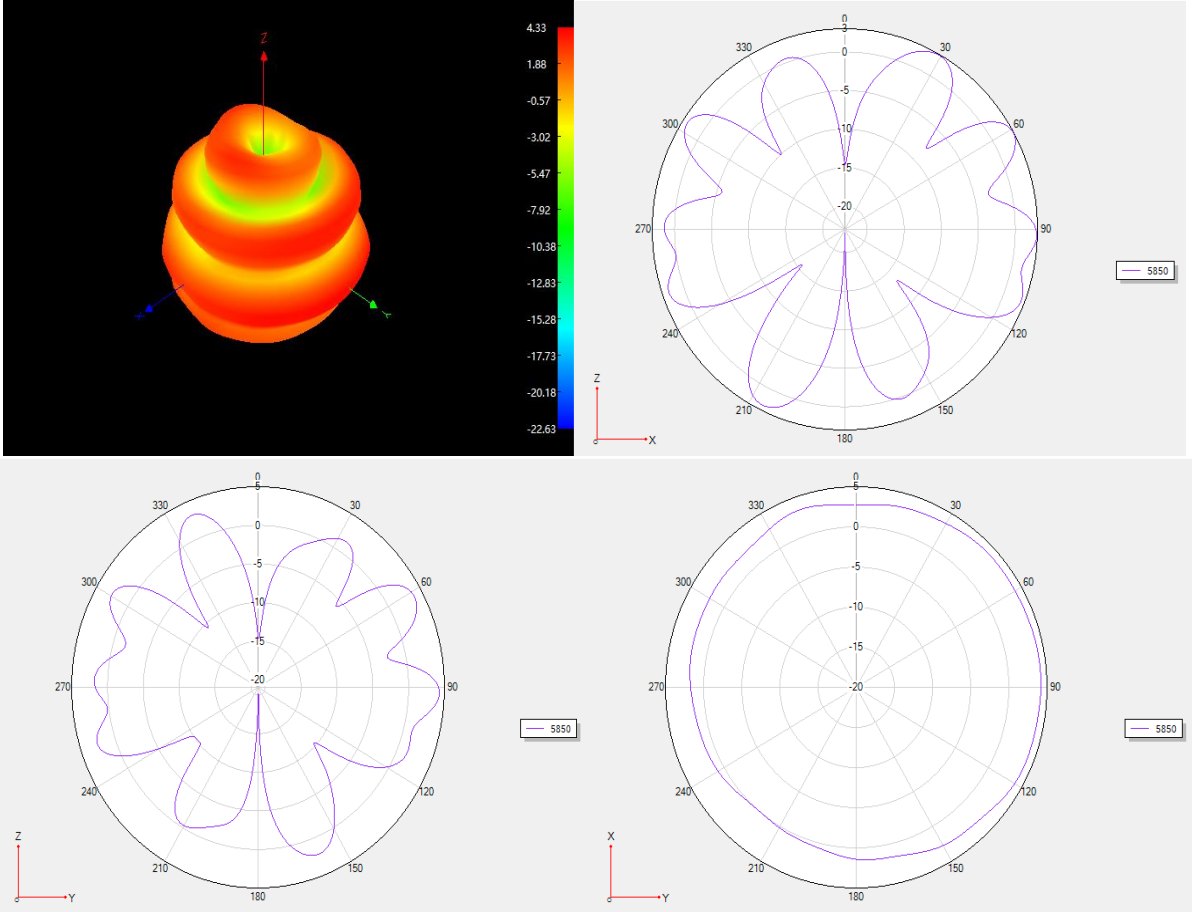


### 4.5.6. 5750 MHz





### 4.5.7. 5850 MHz



### 5 Product Size

RoHS

