

# Antenna

# YFCA002AA Datasheet

## Antenna Services

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Status: Released



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# About the Document

## Revision History

Version	Date	Author	Note
-	2021-03-22	Kenny YIN	Creation of the document
1.0	2021-03-22	Kenny YIN	First official release
1.1	2021-05-27	Kenny YIN	Updated working temperature.

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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	700–2690 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 4.0$
Gain	$\leq 4.47$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size	30 mm $\times$ 20 mm
Casing	FPC
Connector Type	RF I Generation
Working Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Radome Color	Black

## 4 Overall Performance

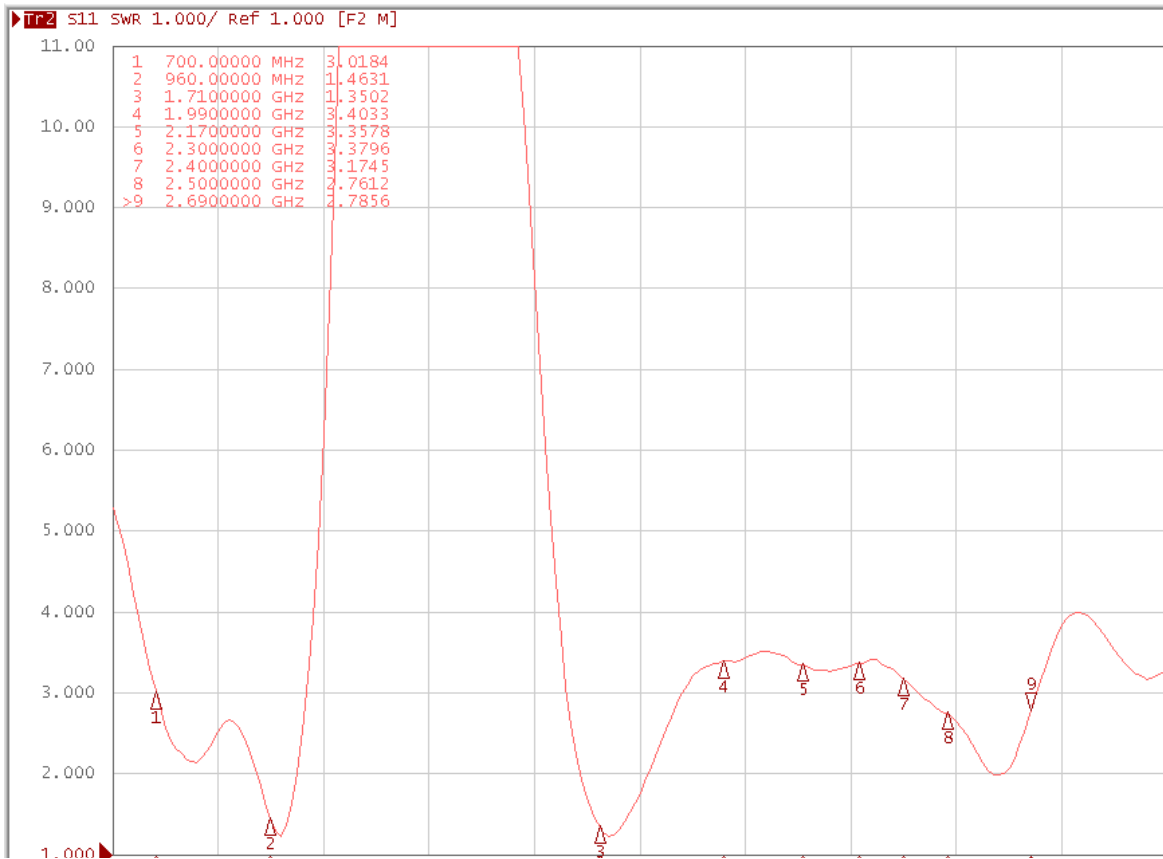
### 4.1. Test Environment

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



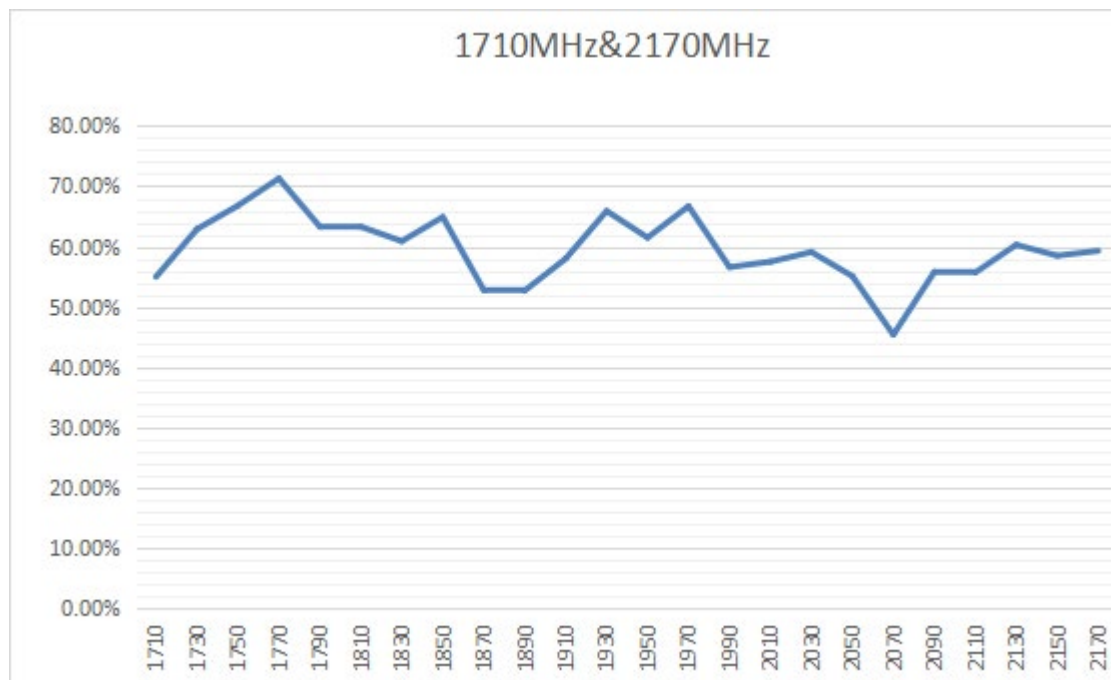
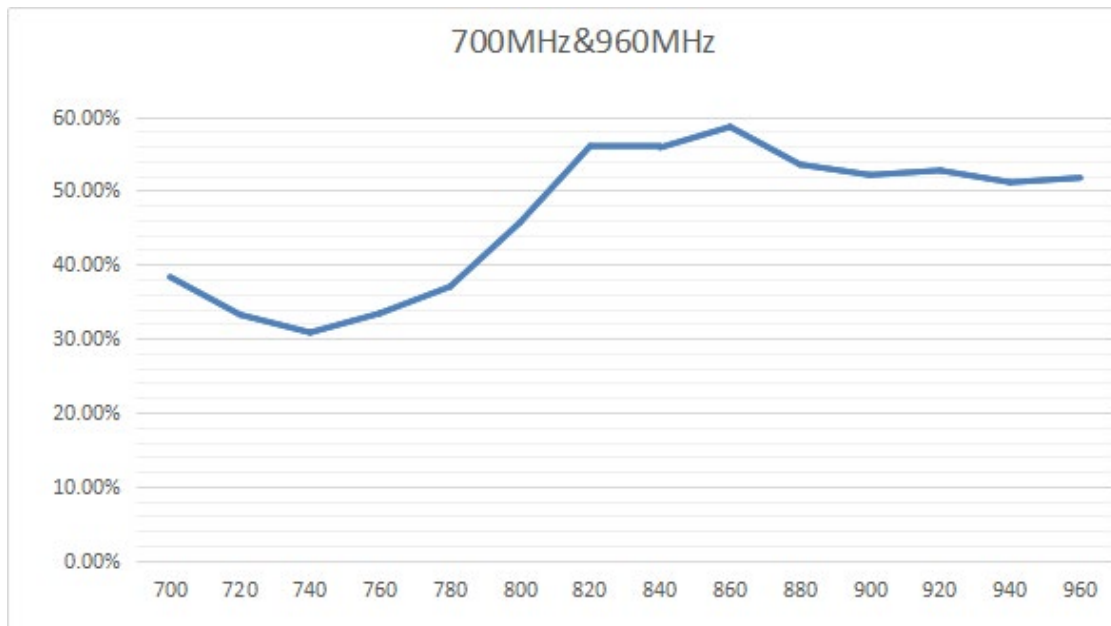


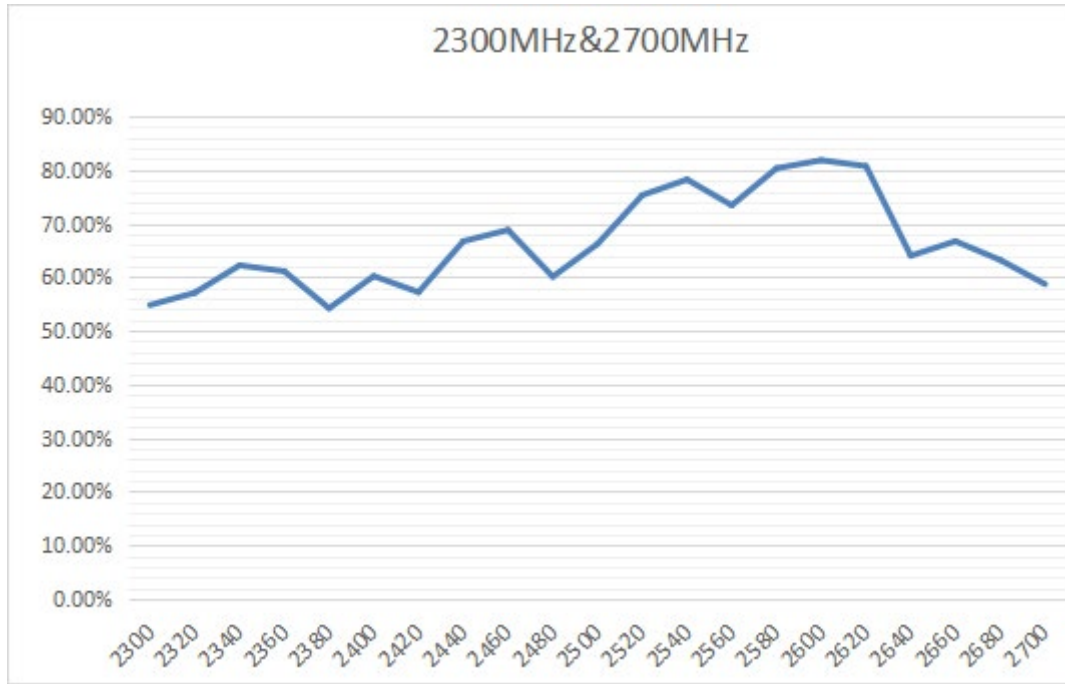
### 4.2. VSWR



Frequency (MHz)	700	960	1710	1990	2170	2300	2400	2500	2690
VSWR	3.02	1.46	1.35	3.40	3.36	3.38	3.17	2.76	2.78

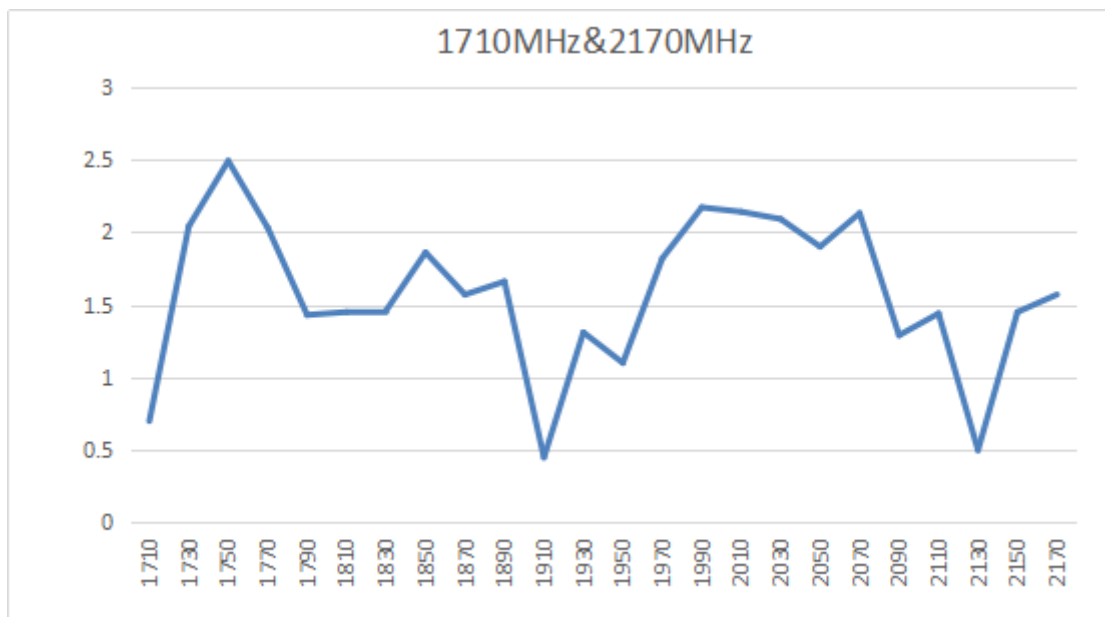
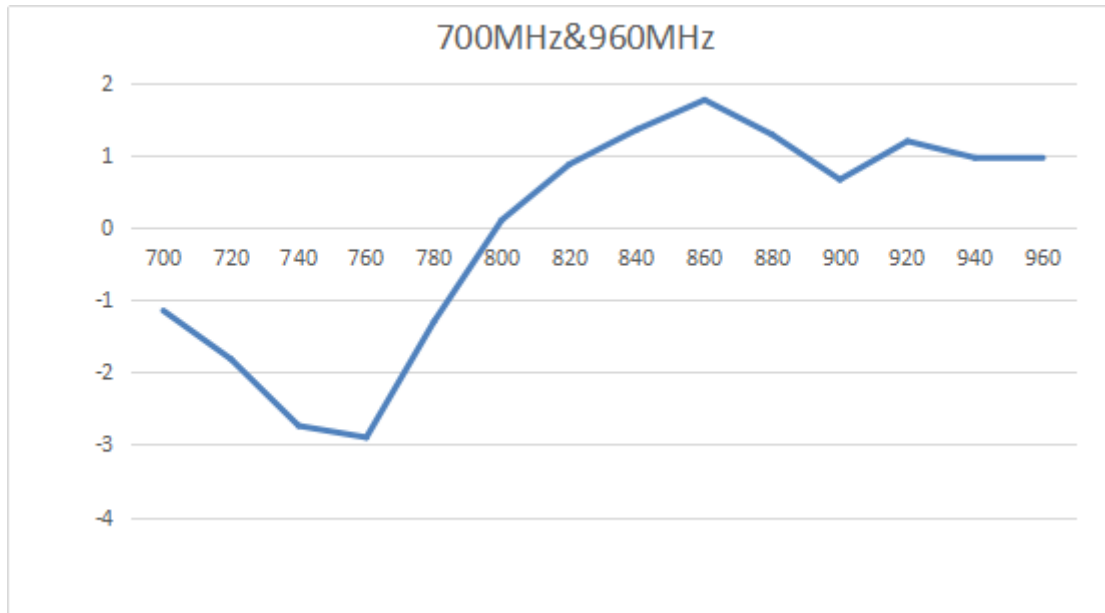
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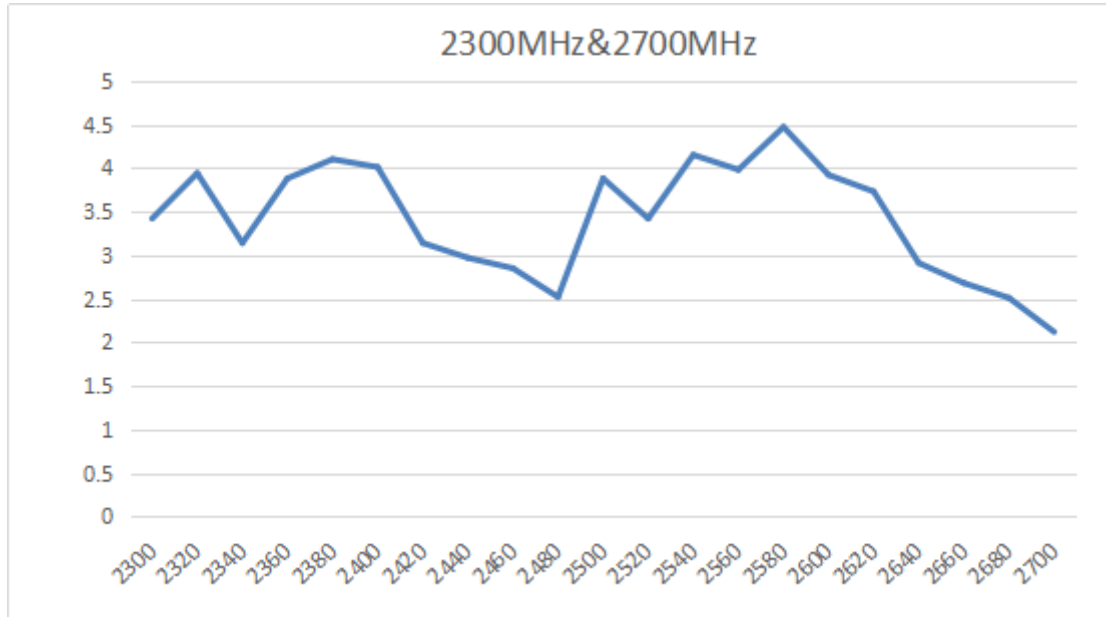




<b>Frequency (MHz)</b>	700	960	1710	1990	2170	2300	2400	2500	2680
<b>Efficiency (%)</b>	38.3	51.7	55	56.6	59.3	54.8	60.2	66.2	63.2

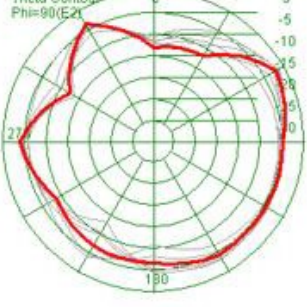
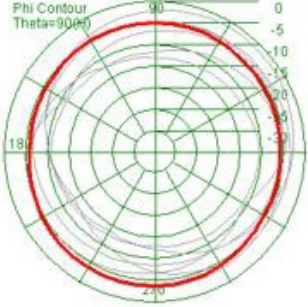
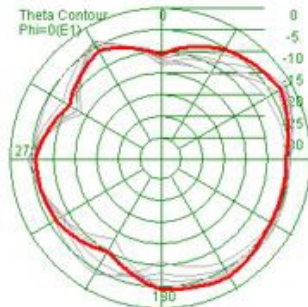
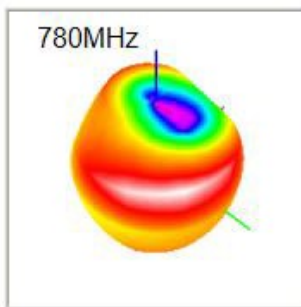
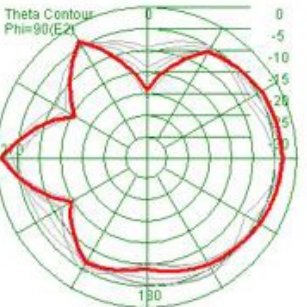
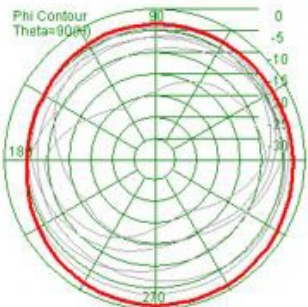
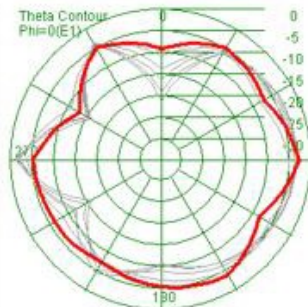
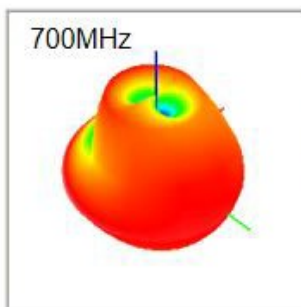
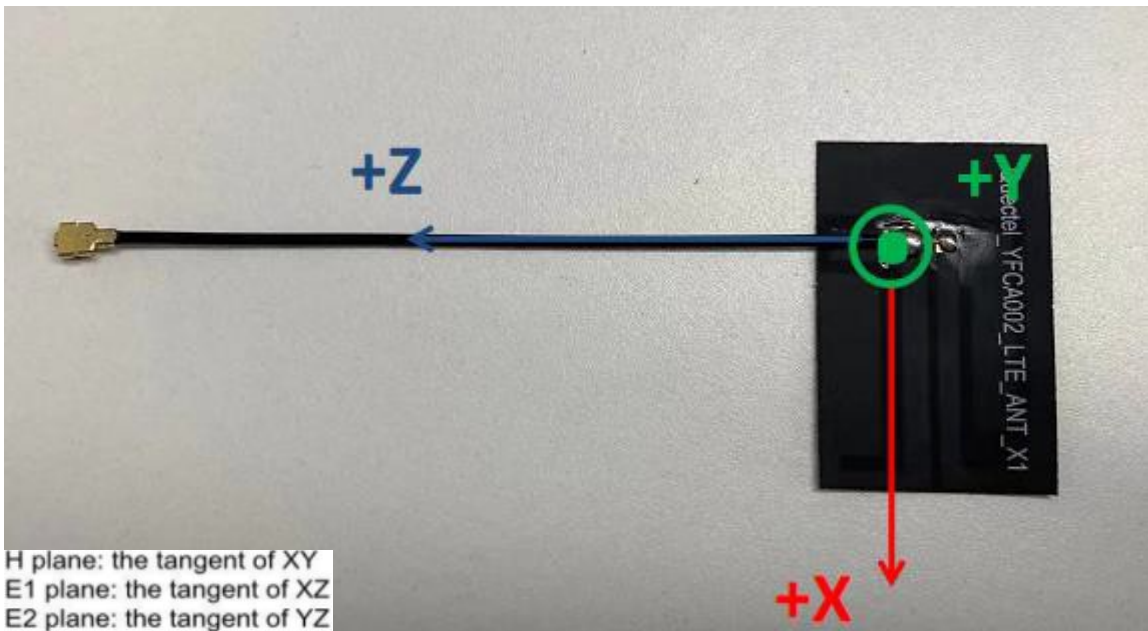
### 4.4. Gain



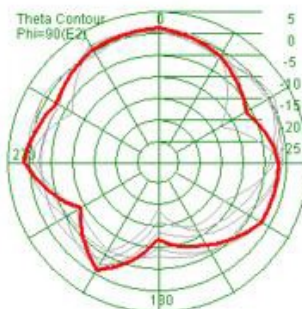
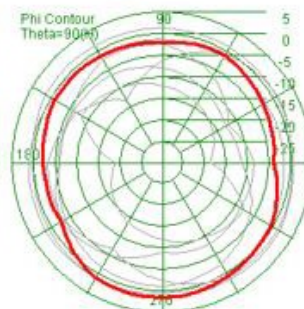
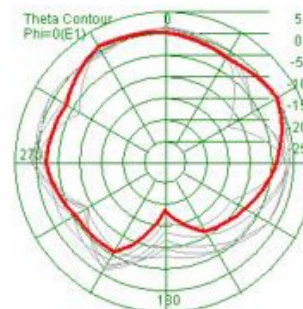
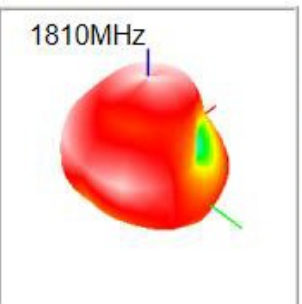
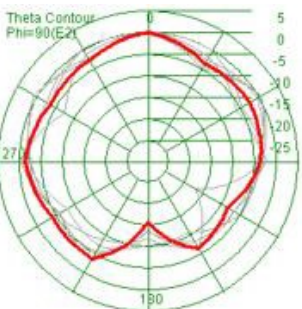
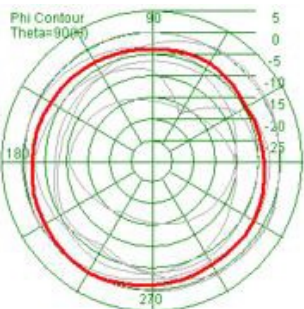
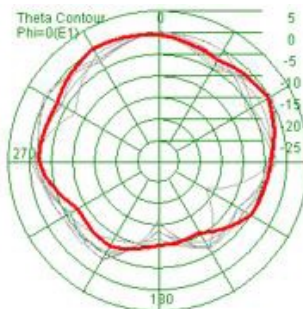
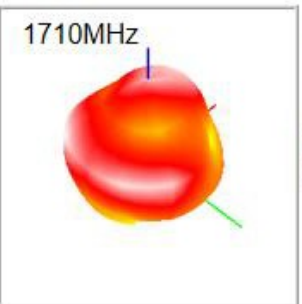
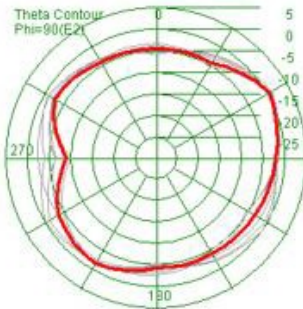
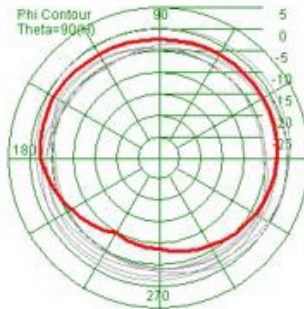
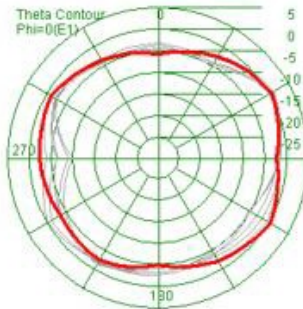
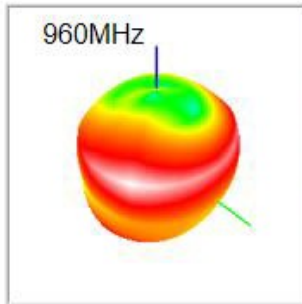
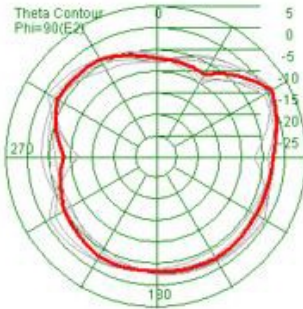
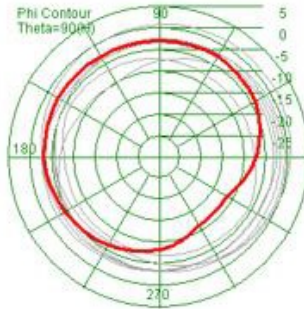
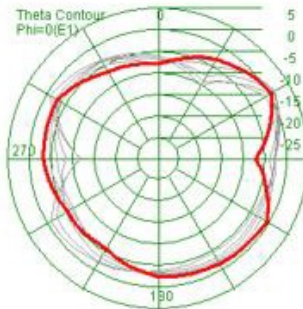
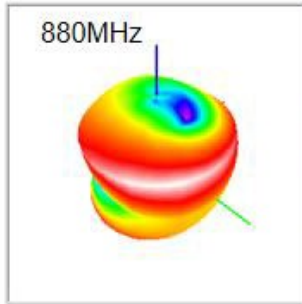


<b>Frequency (MHz)</b>	700	960	1710	1990	2170	2300	2400	2500	2680
<b>Gain (dBi)</b>	-1.15	0.97	0.7	2.17	1.57	3.42	4.01	3.88	2.51

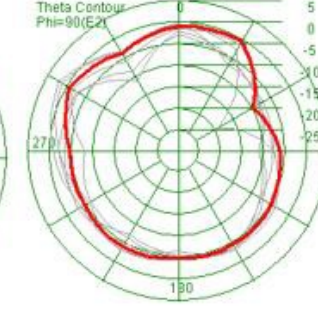
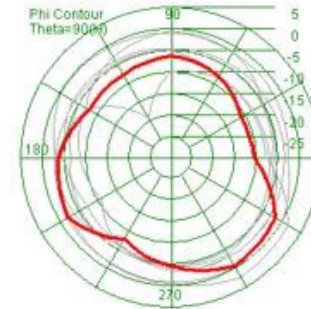
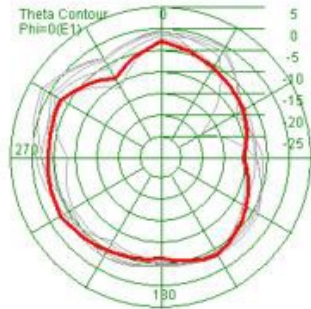
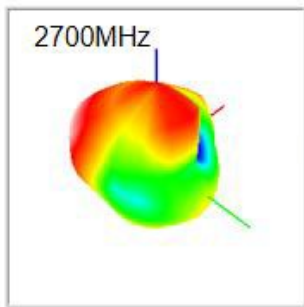
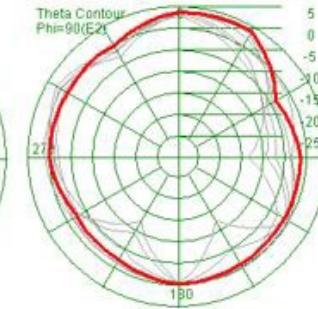
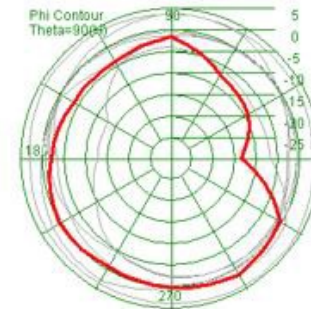
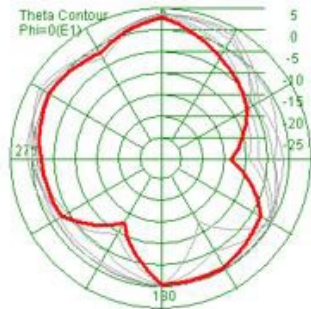
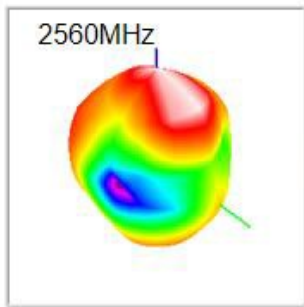
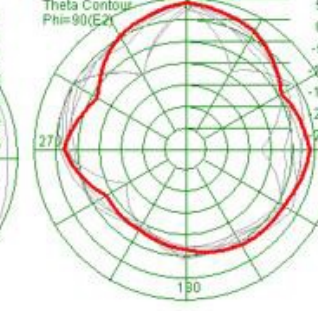
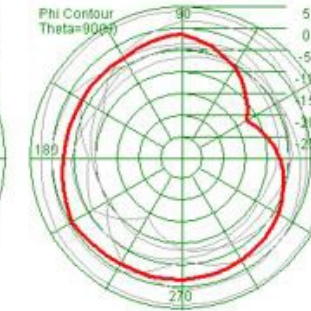
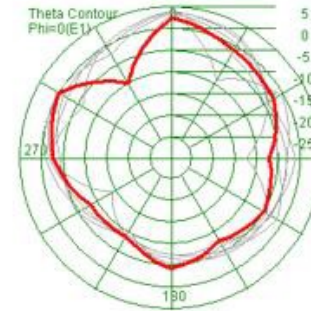
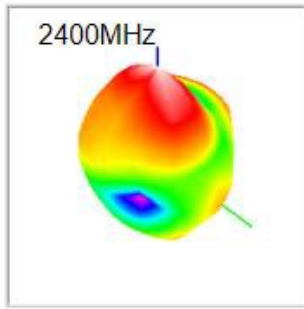
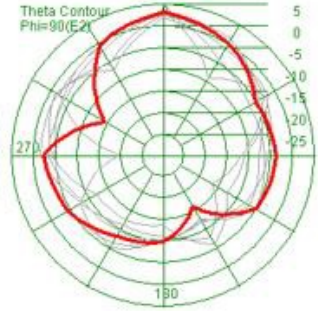
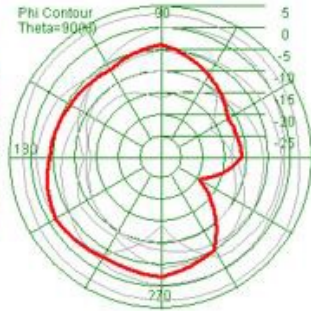
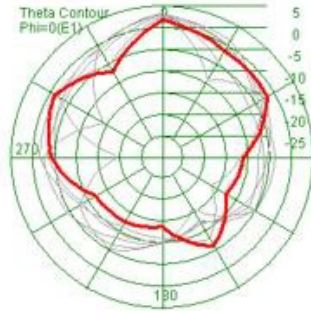
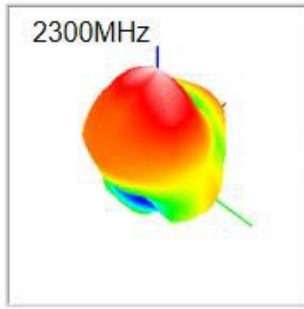
### 4.5. Radiation Patterns













### 5 Product Size

ROHS

