



# Antenna

# YZJ002DA Datasheet

**Antenna Services**

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Status: Preliminary



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# About the Document

## Revision History

Version	Date	Author	Note
-	2021-12-10	Qinming Peng/ Jason Long	Creation of the document
1.0	2021-12-10	Qinming Peng/ Jason Long	First official release

## Contents

<b>About the Document .....</b>	<b>3</b>
<b>Contents .....</b>	<b>4</b>
<b>1 Product Description.....</b>	<b>5</b>
<b>2 Product Features .....</b>	<b>5</b>
<b>3 Product Specifications.....</b>	<b>6</b>
<b>4 Overall Performance.....</b>	<b>7</b>
4.1. Test Environment .....	7
4.2. VSWR.....	8
4.3. Efficiency .....	9
4.4. Gain .....	10
4.5. Radiation Pattern .....	11
<b>5 Product Size .....</b>	<b>15</b>

## 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 WIFI
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	2400-2500MHz, 5150-5850MHz
Input Impedance	50 Ω
VSWR	≤ 3.0
Gain	≤ 3dBi
Polarization Type	Linear

#### Detailed Passive Electrical Specifications

Frequency Range (MHz)	2400-2500	5150-5850
VSWR (Max.)	2.5	2.0
Average Efficiency (%)	37	48.31
Max. Peak Gain (dBi)	0.58	2.66

#### Mechanical Specifications

Antenna Size (mm)	17.7× 7.4
Working Temperature	-20 °C to +85 °C
Radome Color	Black
Mounting Type	Adhesive

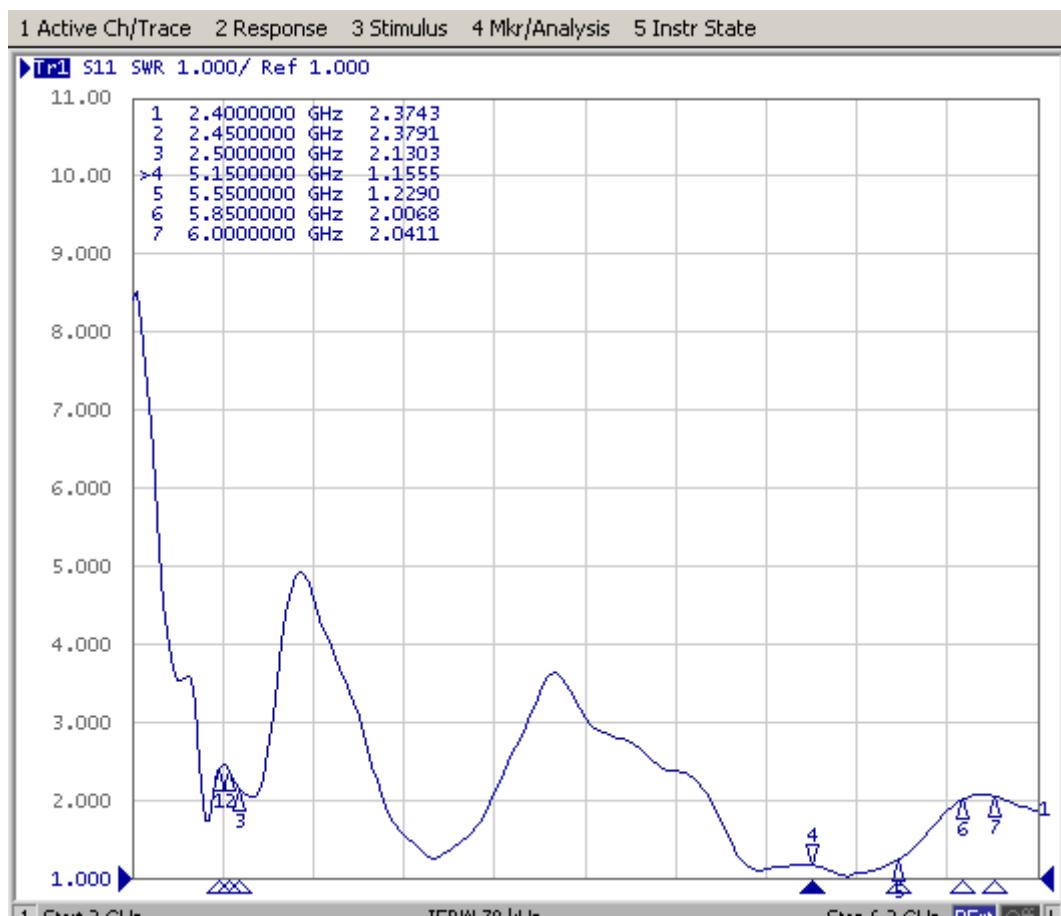
## 4 Overall Performance

### 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

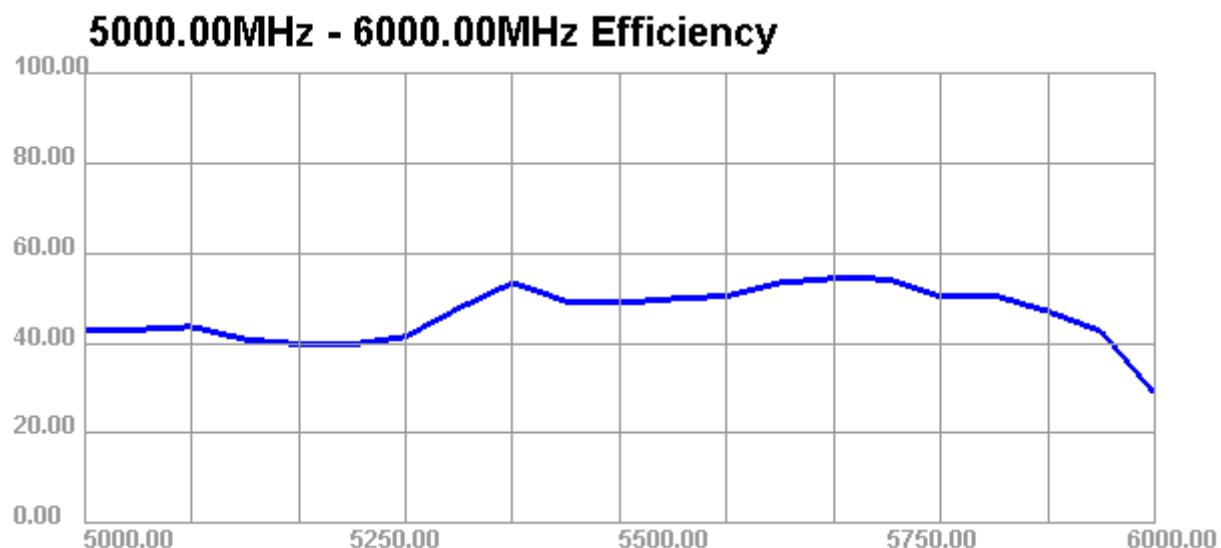
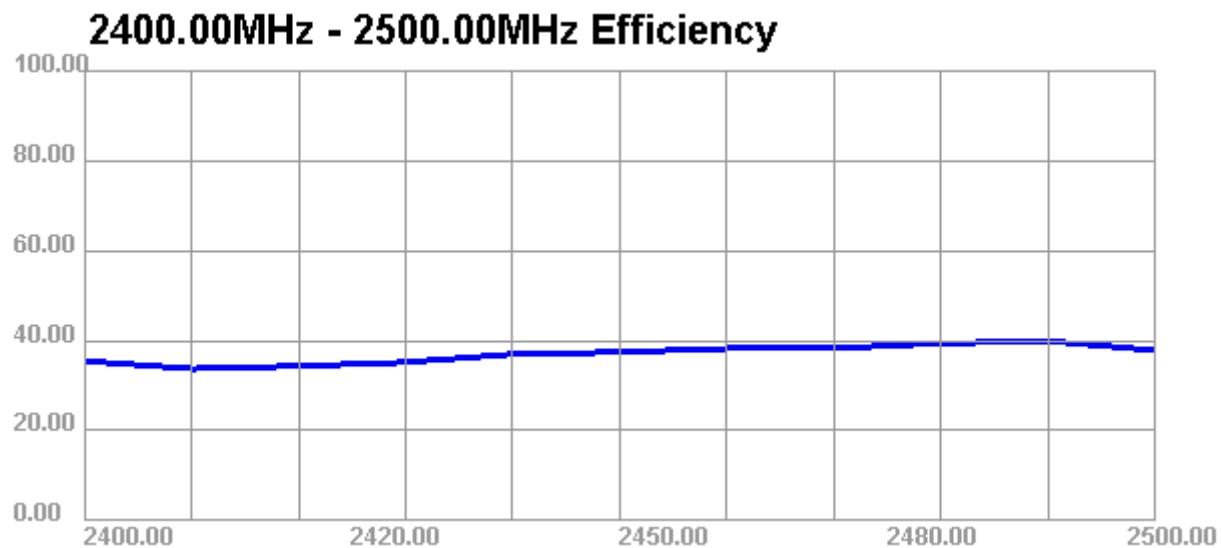


## 4.2. VSWR



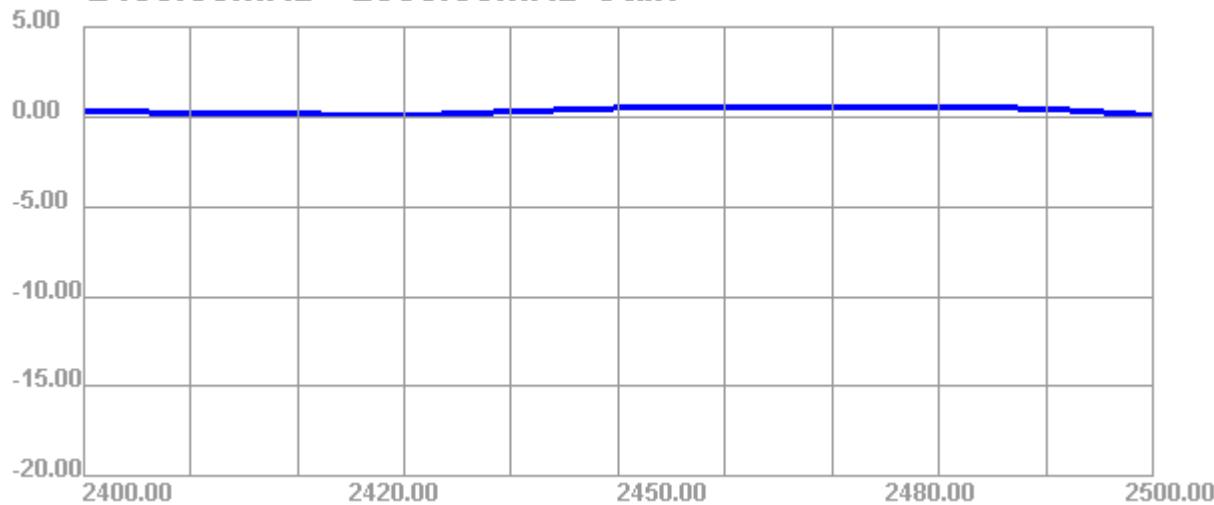
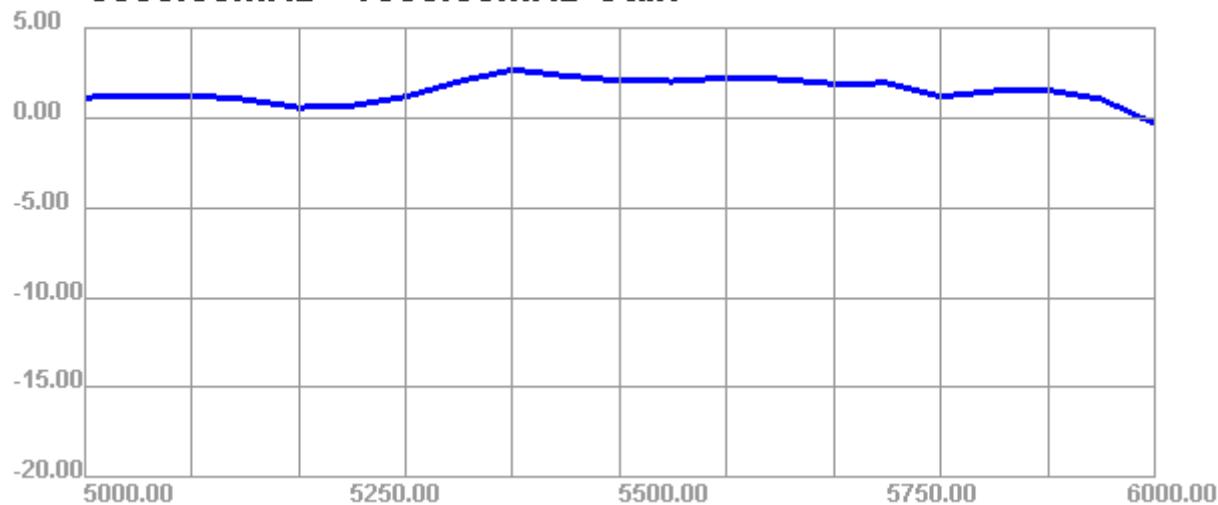
Frequency (MHz)	2400	2450	2500	5150	5550	5850	6000
VSWR	2.37	2.38	2.13	1.16	1.22	2.01	2.04

### 4.3. Efficiency



Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	35.46	37.47	37.84	40.88	49.87	50.59

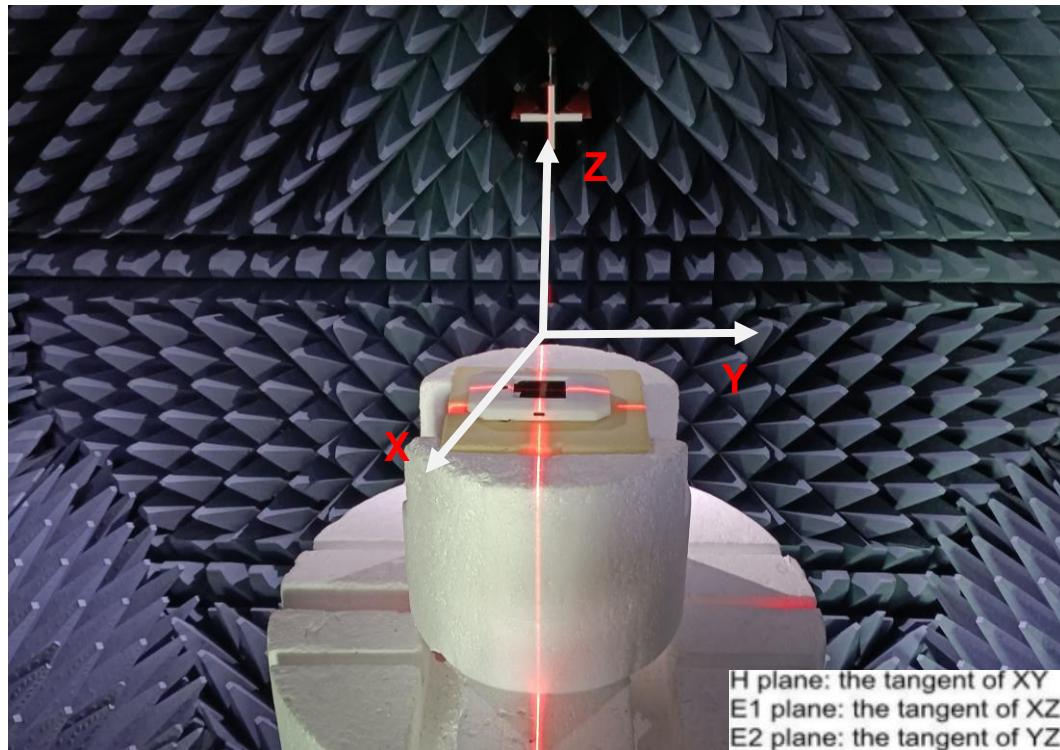
#### 4.4. Gain

**2400.00MHz - 2500.00MHz Gain****5000.00MHz - 6000.00MHz Gain**

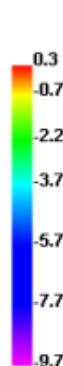
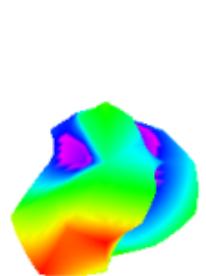
<b>Frequency (MHz)</b>	2400	2450	2500	5150	5550	5850
<b>Gain (dBi)</b>	0.34	0.48	0.08	1.02	2.03	1.48

## 4.5. Radiation Pattern

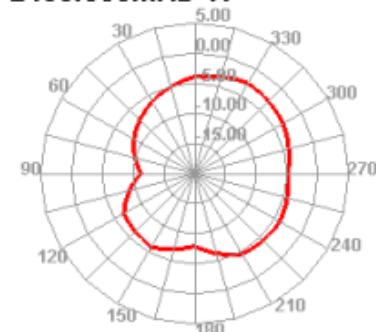
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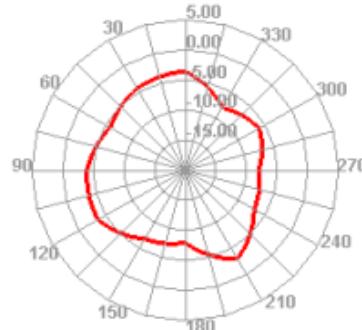
2400.000MHz



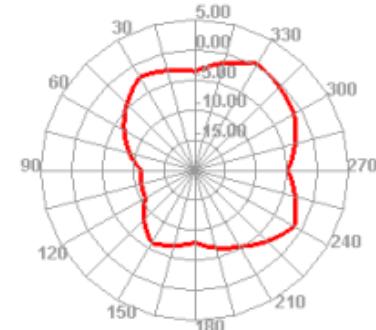
2400.000MHz H

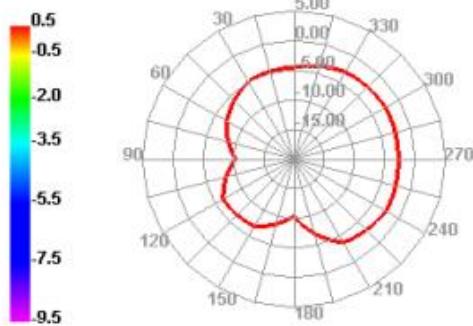
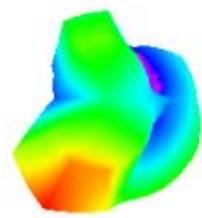
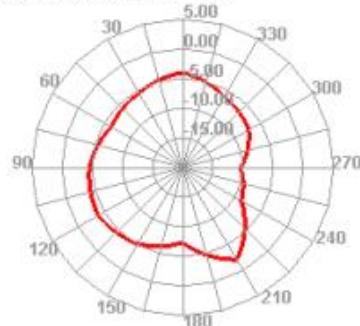
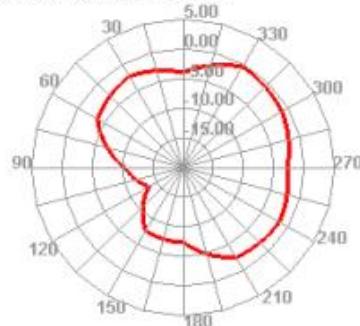
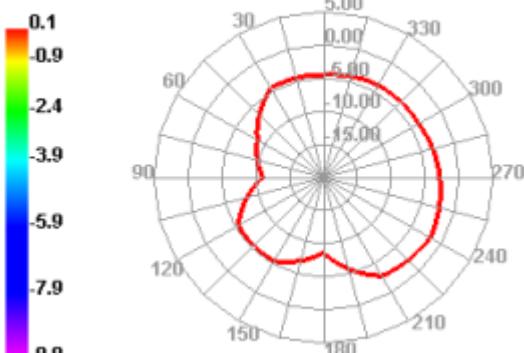
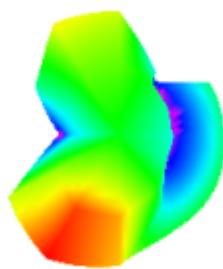
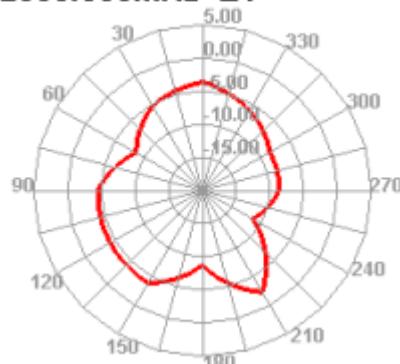
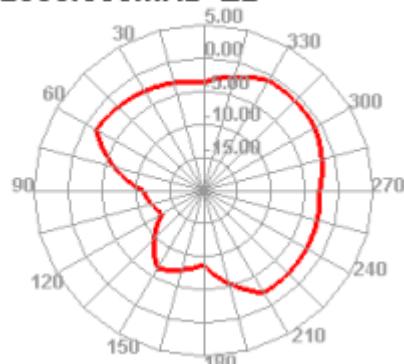


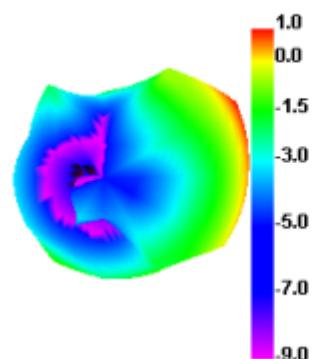
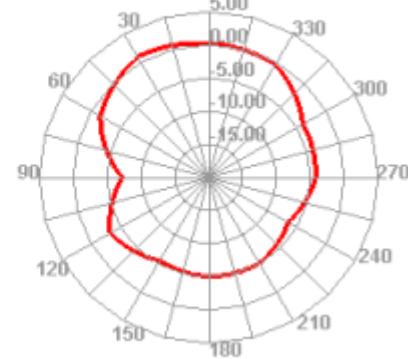
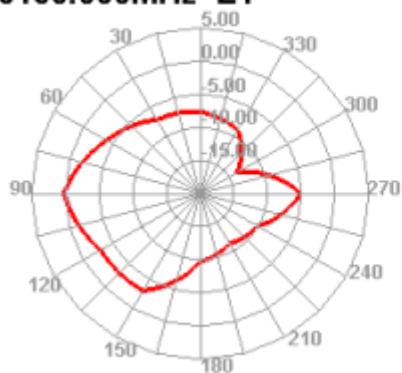
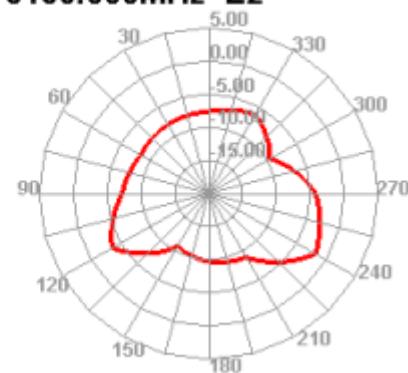
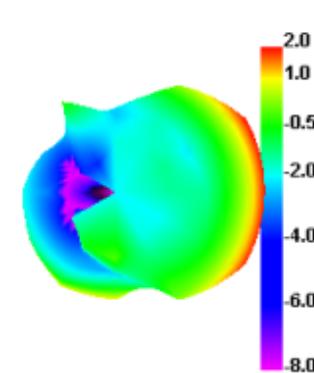
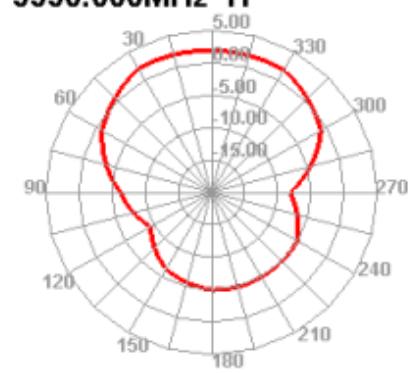
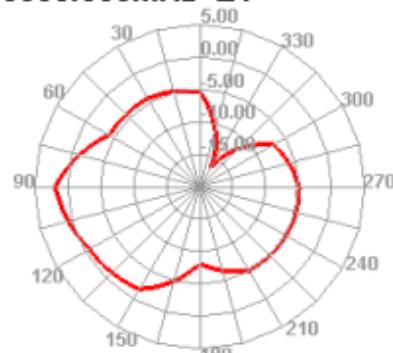
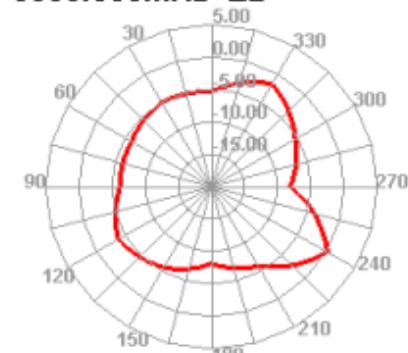
2400.000MHz E1

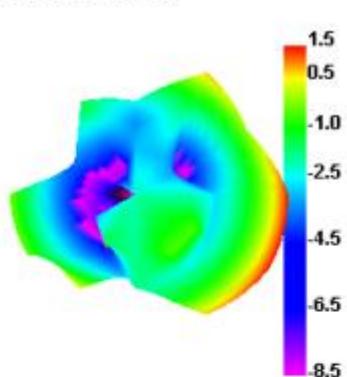
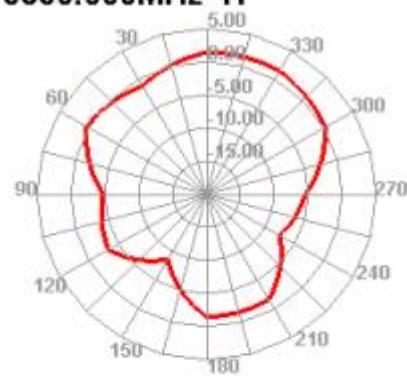
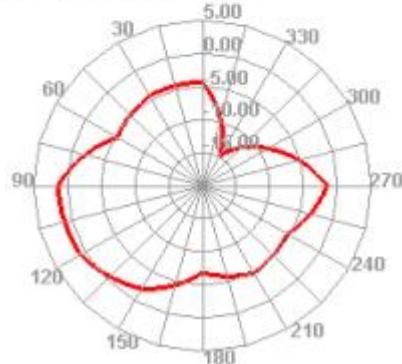
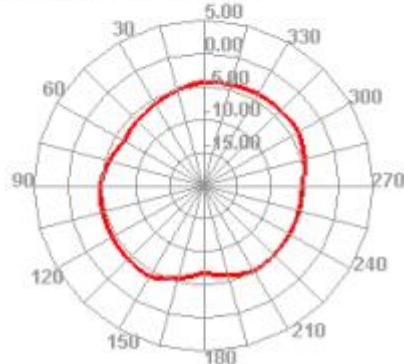


2400.000MHz E2



**2450.000MHz****2450.000MHz E1****2450.000MHz E2****2500.000MHz****2500.000MHz E1****2500.000MHz E2**

**5150.000MHz****5150.000MHz H****5150.000MHz E1****5150.000MHz E2****5550.000MHz****5550.000MHz H****5550.000MHz E1****5550.000MHz E2**

**5850.000MHz****5850.000MHz H****5850.000MHz E1****5850.000MHz E2**

## 5 Product Size

Unit: mm

