

# Antenna

# YRM00A2AA Datasheet

**Antenna Services**

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Status: Preliminary



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# About the Document

## Revision History

Version	Date	Author	Note
-	2022-04-11	Qinming Peng/ Jason Long	Creation of the document
1.0	2022-04-11	Qinming Peng/ Jason Long	First official release

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## 1 Product Description

This Quectel embedded 4G FPC antenna covers main 4G LTE bands and is compatible with 3G/2G/LPWA bands. Featuring high efficiency and gain, it is an ideal antenna for a smooth and stable connection with high-efficiency data transmission even under the influence of the device's internal structure. Ground plane independent, it's designed to be mounted directly to the underside of either a plastic or non-metallic enclosure. Ease of integration with a cable and connector which can be customized to meet your product design and RF module.

## 2 Product Features

- Cellular 4G
- High efficiency
- Excellent performance

### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	700MHz-900MHz; 1710MHz-2200 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 8.0$
Gain	$\leq 2$ dBi
Polarization Type	Linear

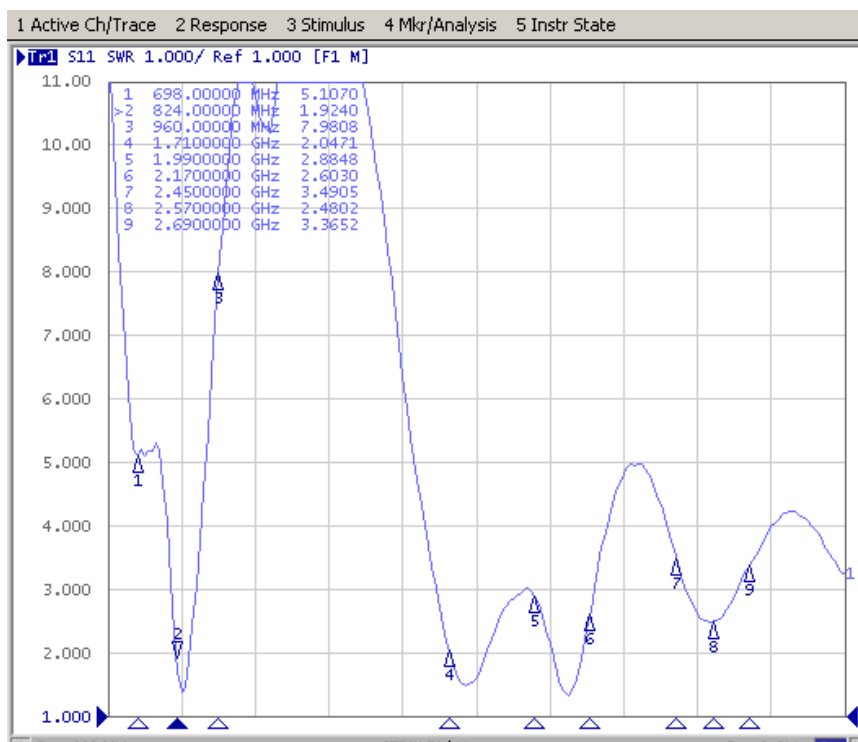
#### Detailed Passive Electrical Specifications

Frequency Range (MHz)	700-900	1710–2200
VSWR (Max.)	7.98	3.0
Average Efficiency (%)	36.01	45.54
Max. Peak Gain (dBi)	0.37	1.72

#### Mechanical Specifications

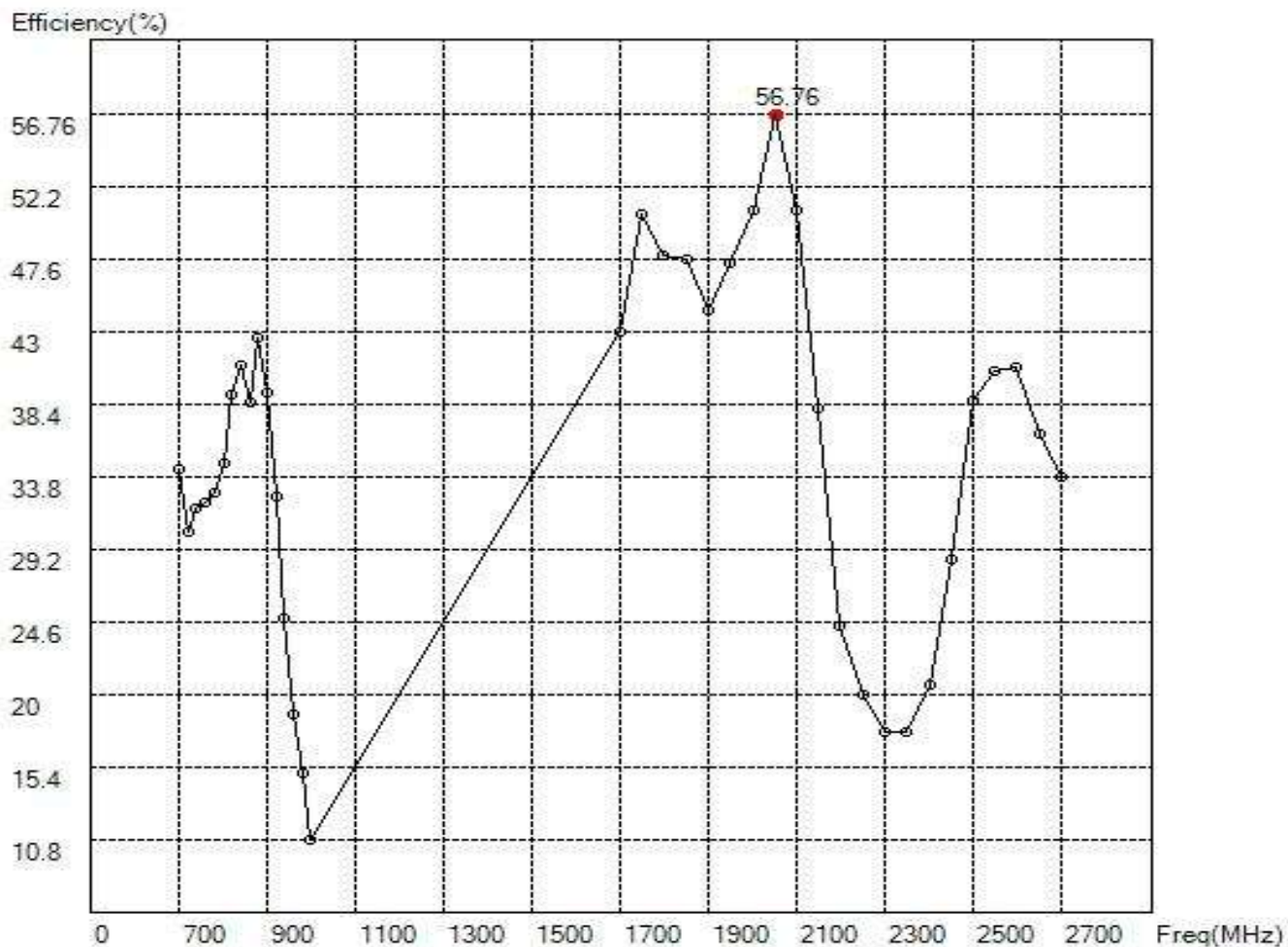
Antenna Size	55.49mm × 28.97 mm
Casing	FPC
Working Temperature	-40 °C to +85 °C
Weight	g
Radome Color	Black
Mounting Type	Adhesive

## 4.2. VSWR



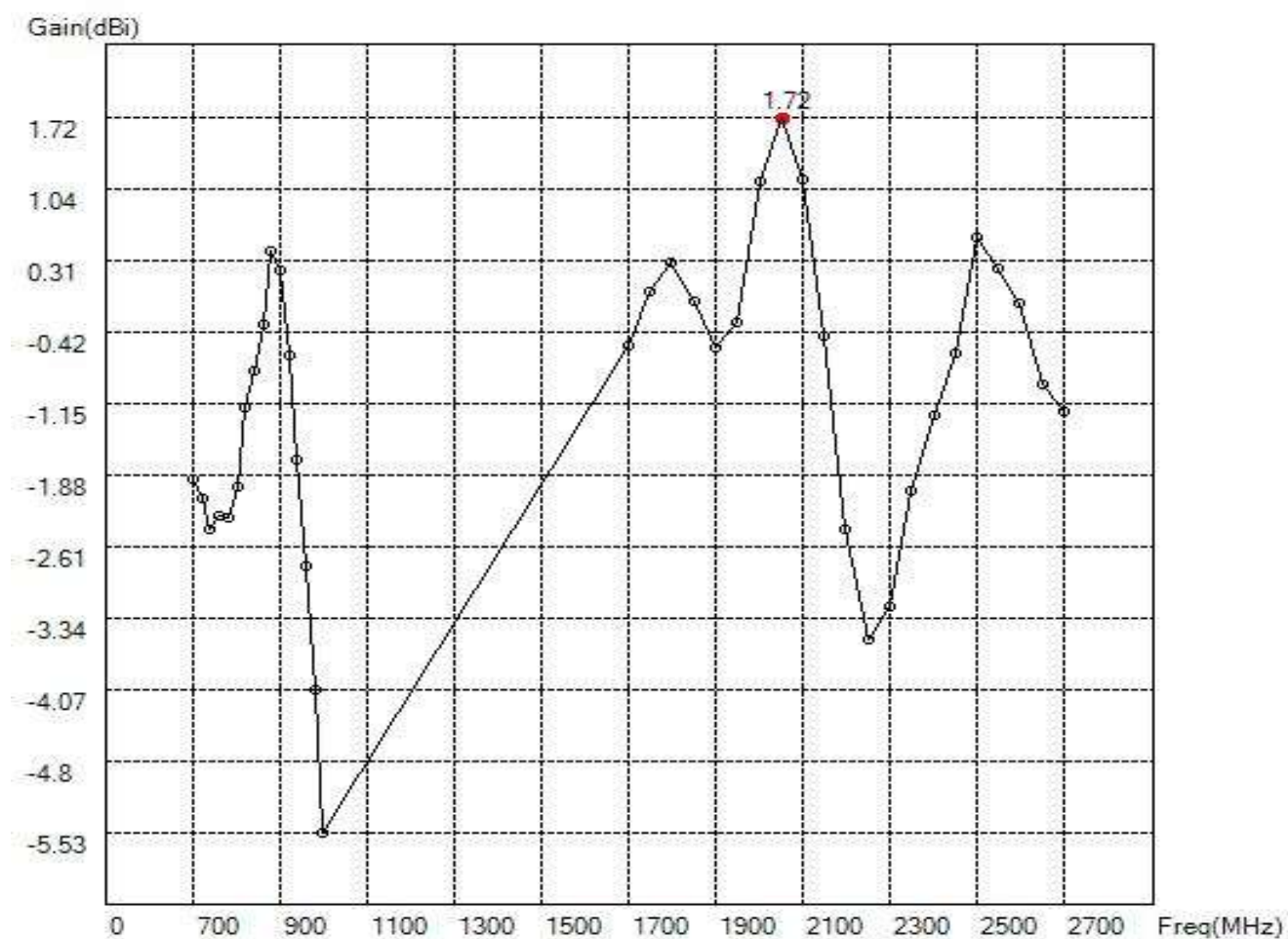
Frequency (MHz)	698	824	960	1710	1990	2170	2450	2570	2690
VSWR	5.1	1.92	7.98	2.04	2.88	2.6	3.49	2.48	3.36

### 4.3. Efficiency

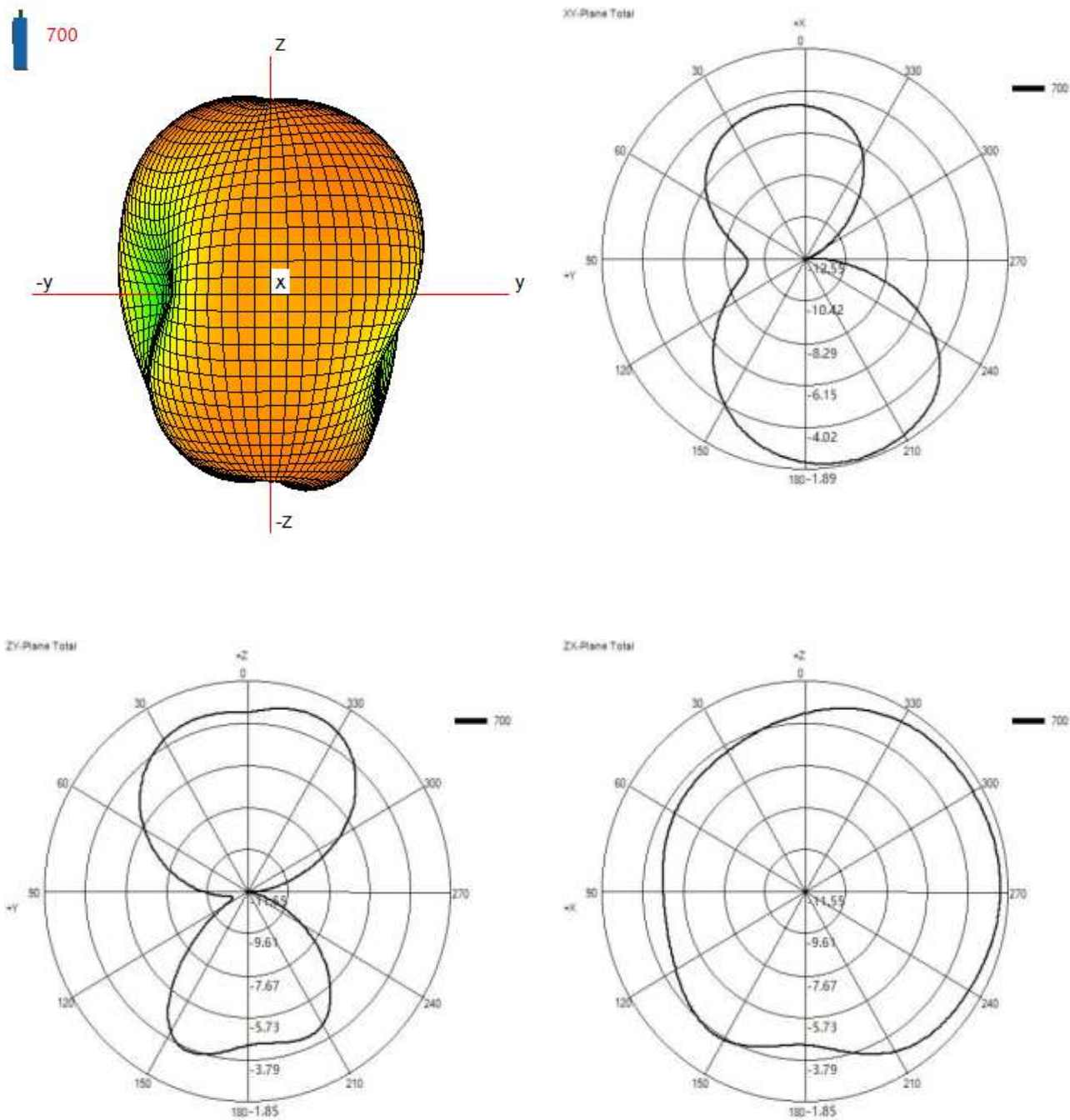


Frequency (MHz)	700	840	960	1700	1950	2150	2200
Efficiency (%)	34.31	40.86	18.76	43.03	47.27	38.11	24.34

## 4.4. Gain

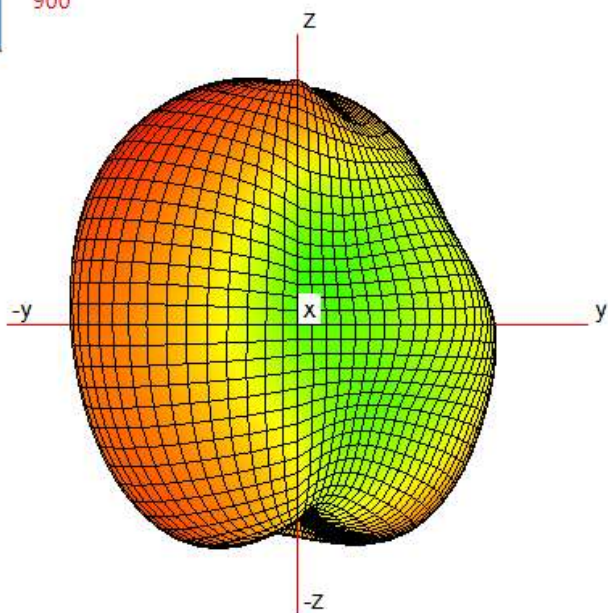


Frequency (MHz)	700	840	960	1700	1950	2150	2200
Gain (dBi)	-1.94	-0.84	-2.83	-0.59	-0.35	-0.50	-2.46

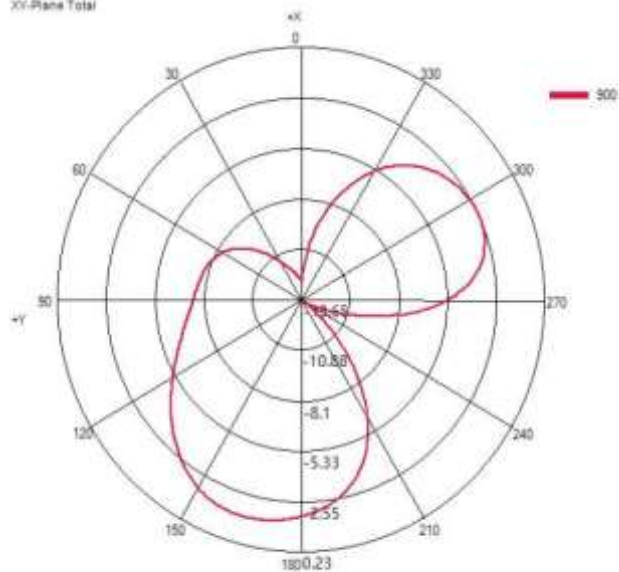




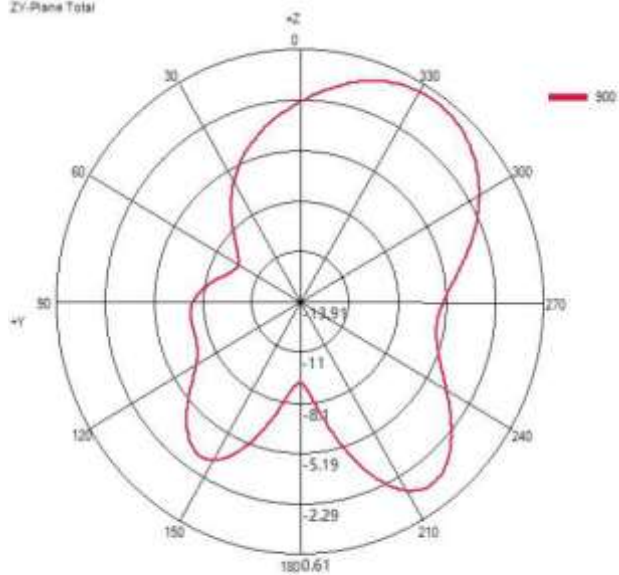
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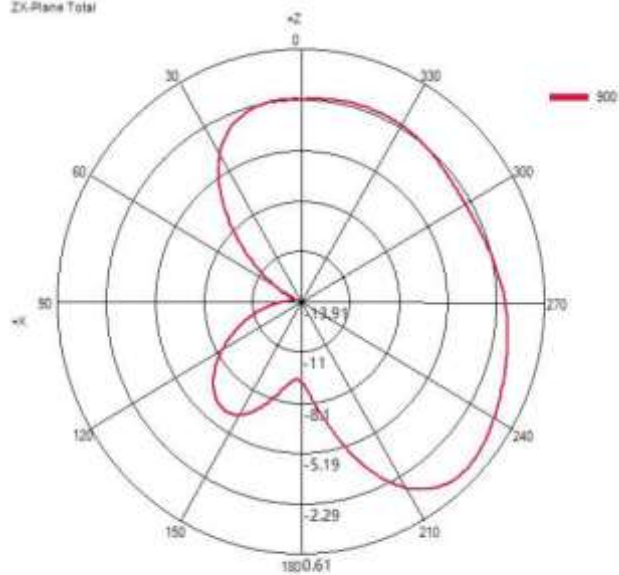
XY-Plane Total



ZY-Plane Total

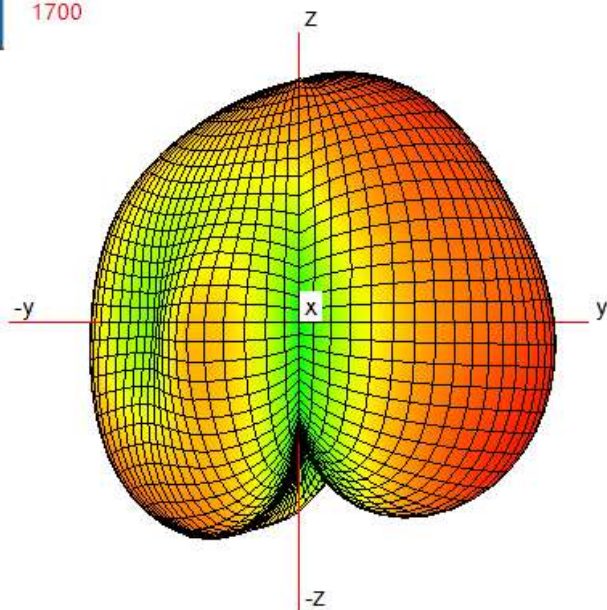


ZX-Plane Total

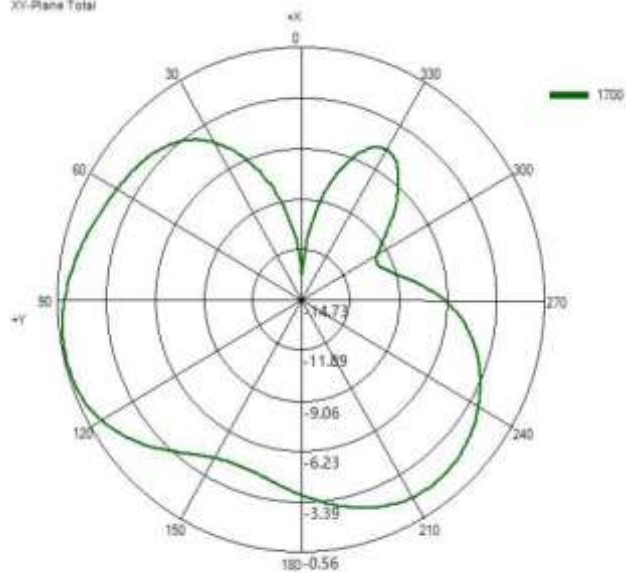




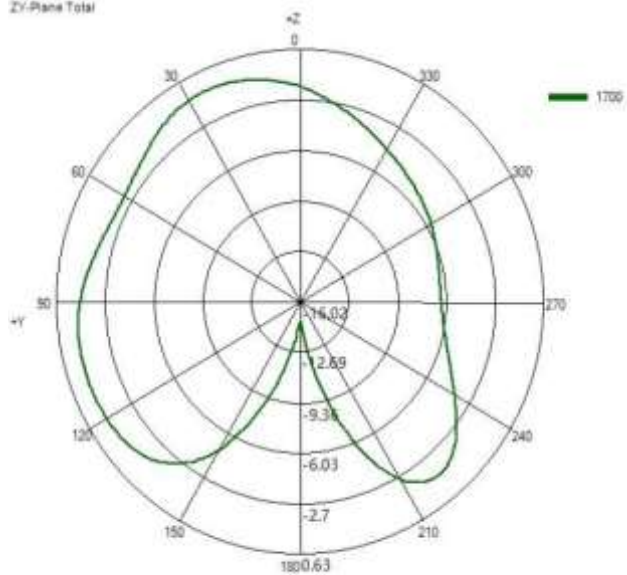
1700



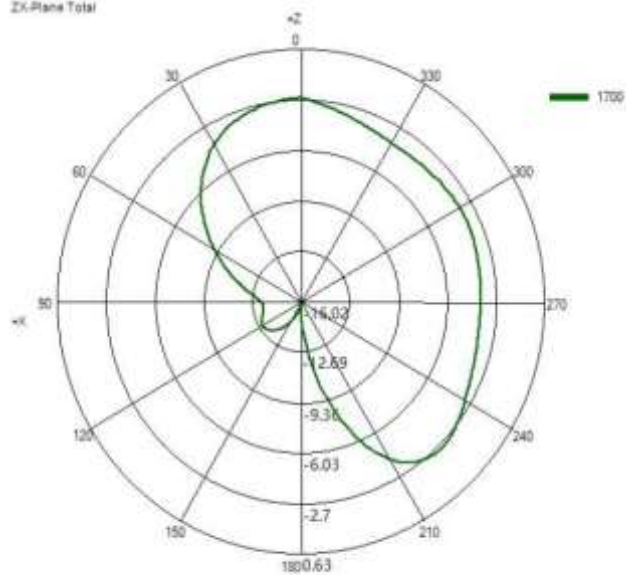
XY-Plane Total



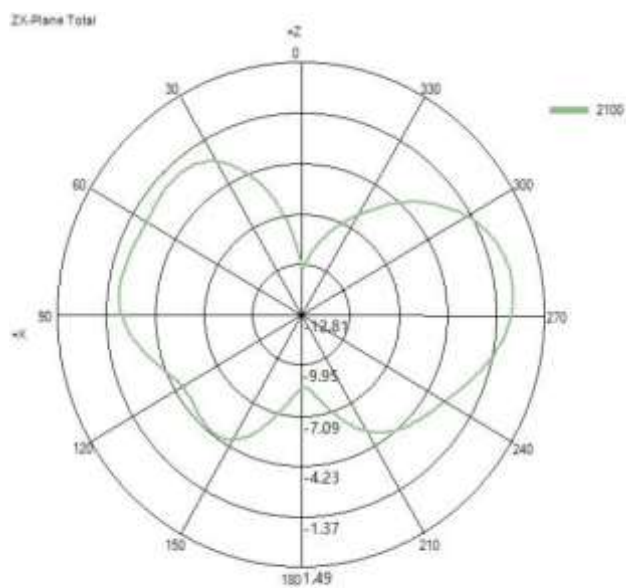
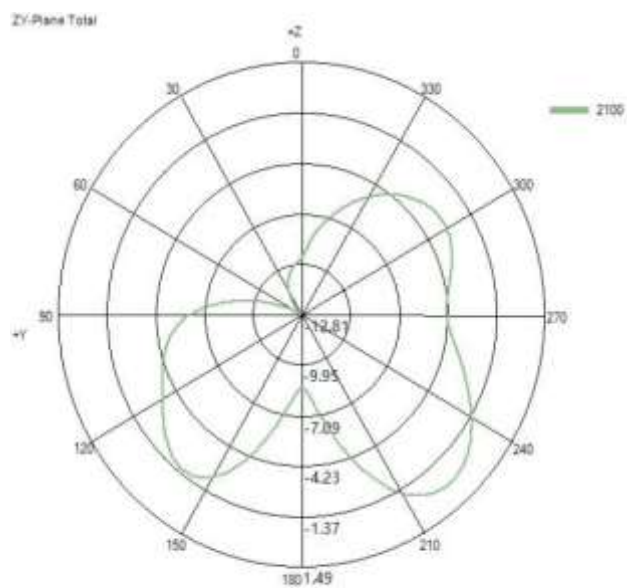
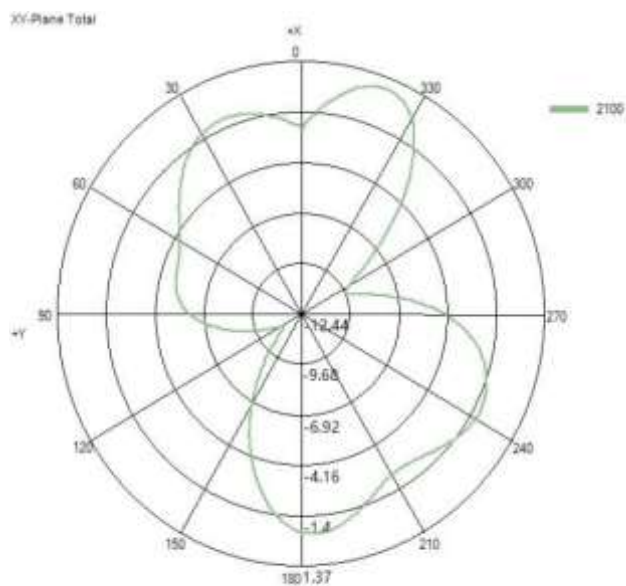
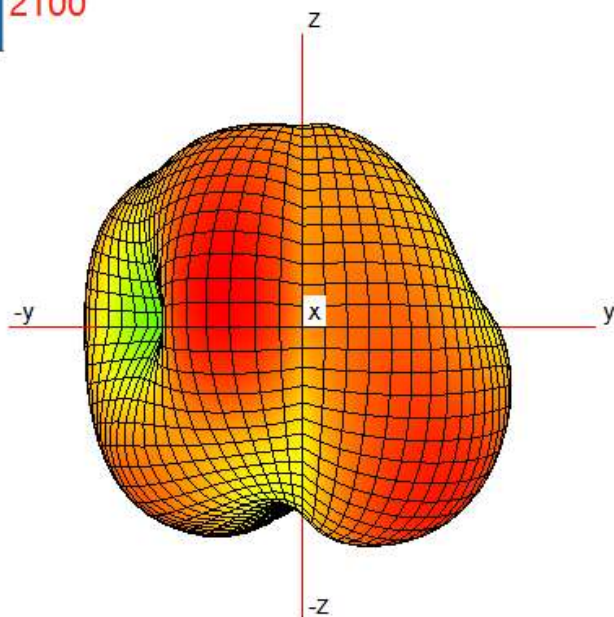
ZY-Plane Total



ZX-Plane Total



**2100**



## 5 Product Size

