

Antenna

YE0028AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
-	2020-10-15	Kenny YIN	Creation of the document
1.0	2020-10-15	Kenny YIN	First official release
1.1	2020-12-16	Kenny YIN	Updated picture of product.
1.2	2021-01-27	Kenny YIN	Added IP rating description.

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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 5G & LTE
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	700–2700 MHz, 3300–5000 MHz
Input Impedance	50 Ω
VSWR	≤ 3.0
Gain	≤ 3.5 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	234 mm \times Φ 60 mm, 1.5DS, Length = 1500 mm
Casing	ABS
Connector Type	SMA Male (center pin)
Working Temperature	-20 $^{\circ}$ C to +70 $^{\circ}$ C
Radome Color	Black
Fixed mode	Magnet
IP rating	IP55

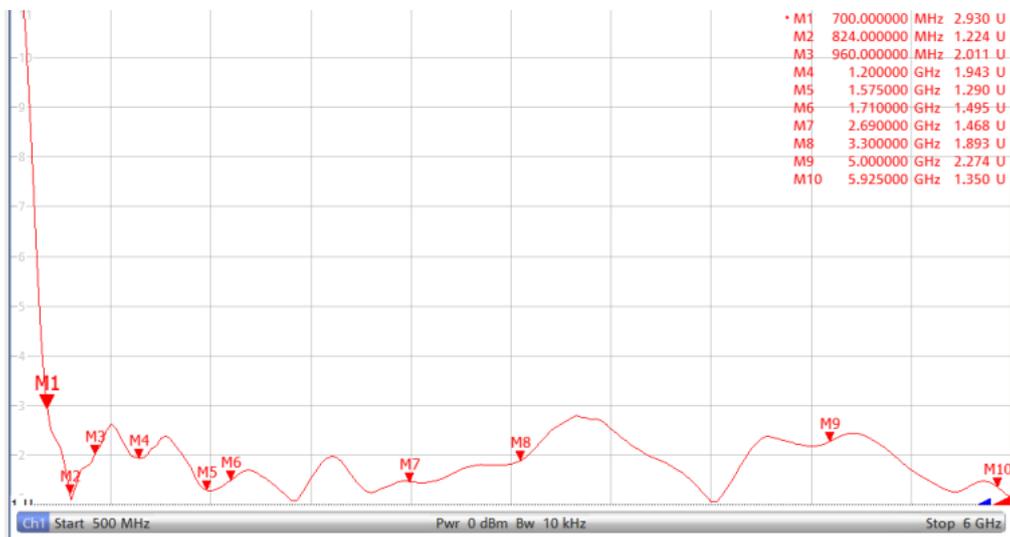
4 Overall Performance

4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz.
- RayZone®2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

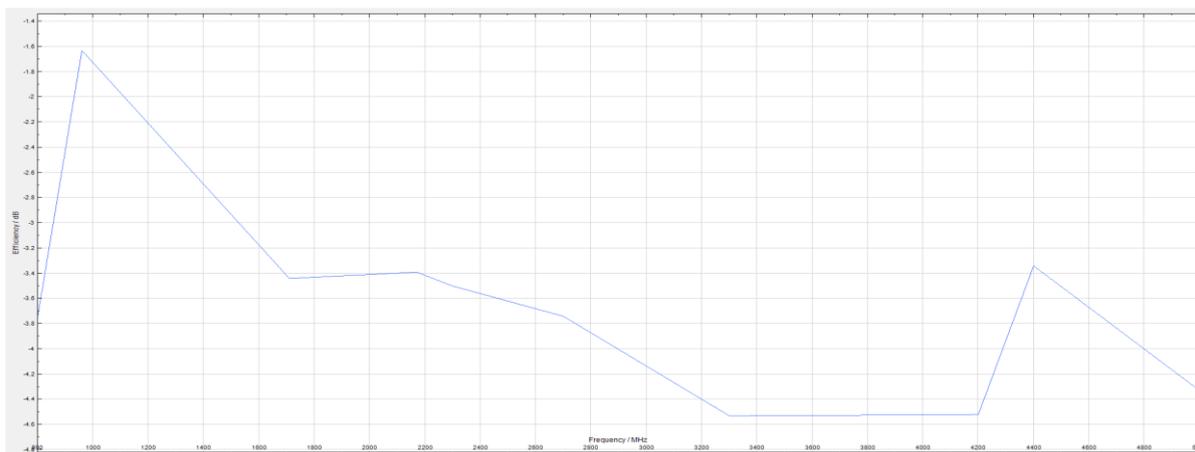


4.2. VSWR



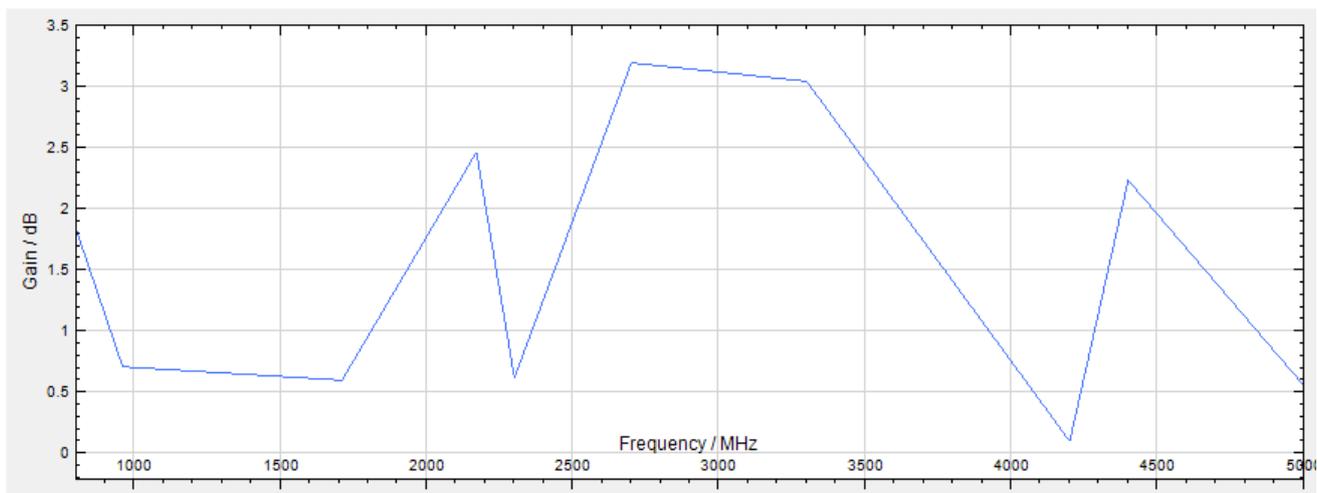
Frequency (MHz)	700	960	1710	2170	2300	2700	3300	5000
VSWR	2.9	2.0	1.495	1.30	1.27	1.47	1.893	2.74

4.3. Efficiency



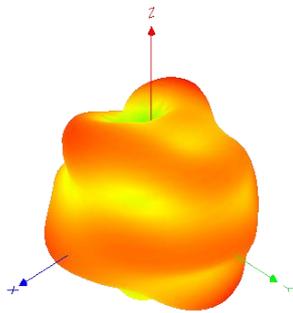
Frequency (MHz)	700	960	1710	2170	2300	2700	3300	4200	4400	5000
Efficiency (%)	42.17	68.71	45.29	45.81	44.67	42.27	35.24	35.32	46.34	36.9

4.4. Gain

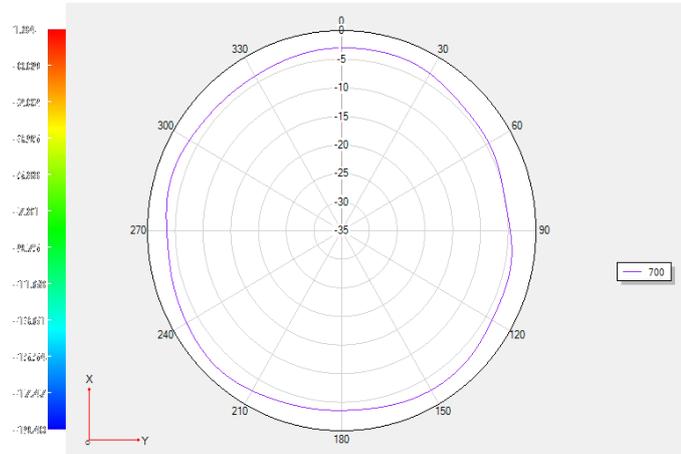


Frequency (MHz)	700	960	1710	2170	2300	2700	3300	4200	4400	5000
Gain (dBi)	1.84	0.71	0.6	2.47	0.62	3.2	3.05	0.1	2.24	0.56

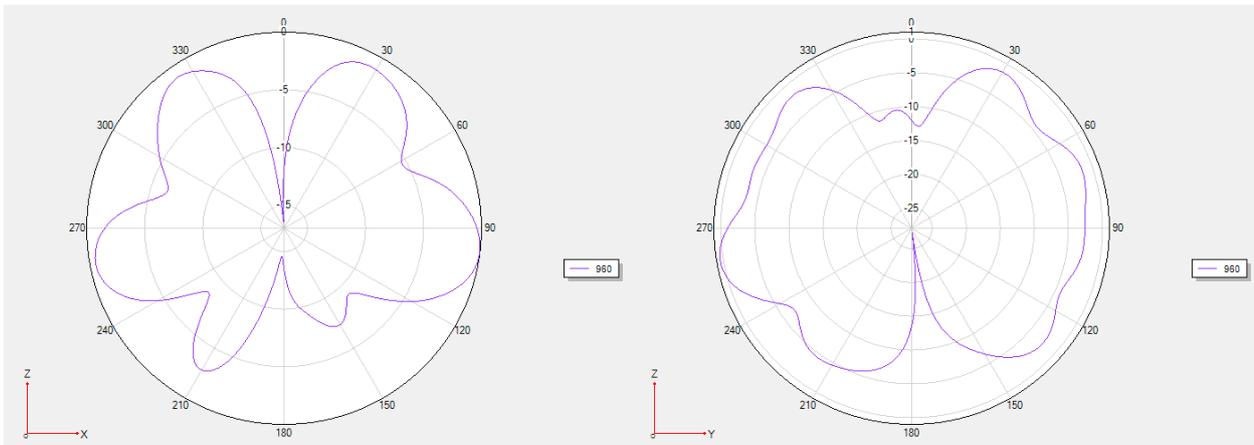
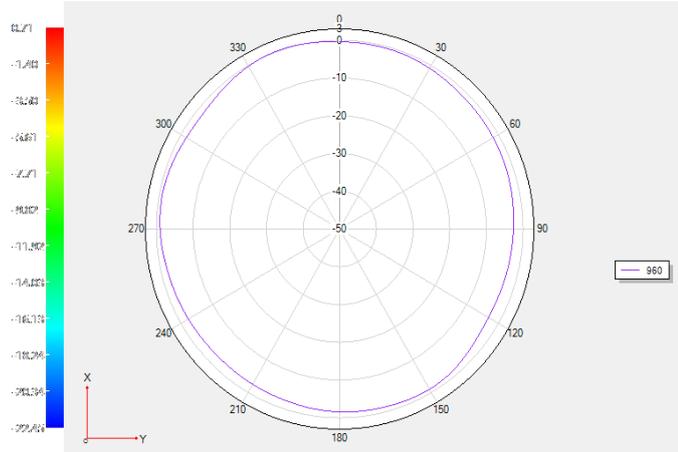
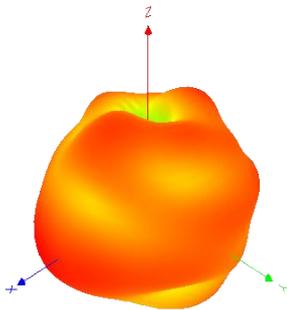
4.5. Radiation Patterns



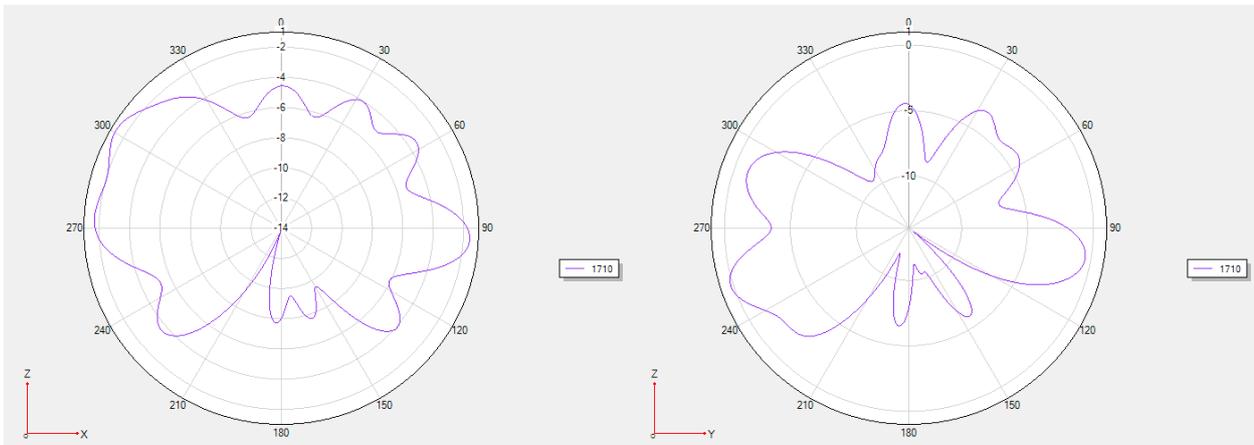
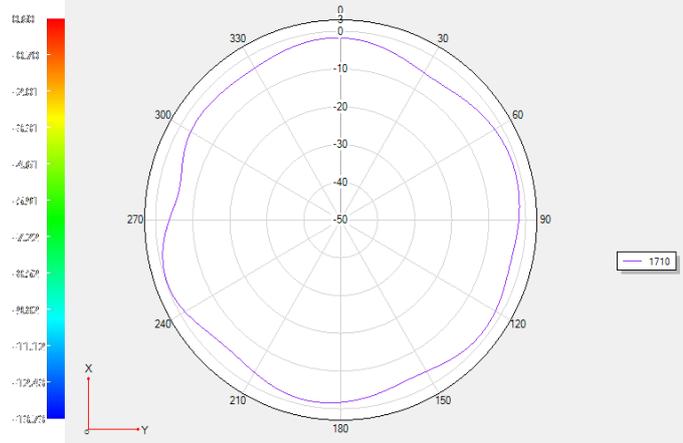
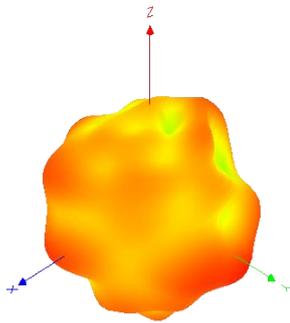
700 MHz



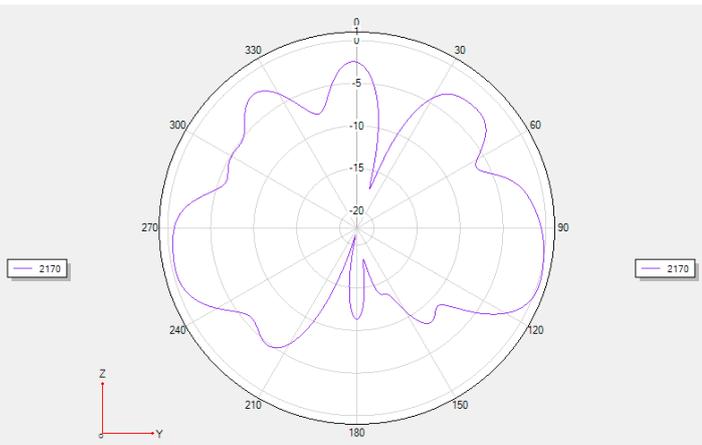
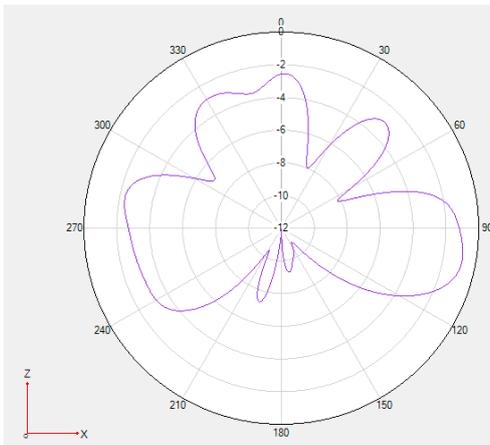
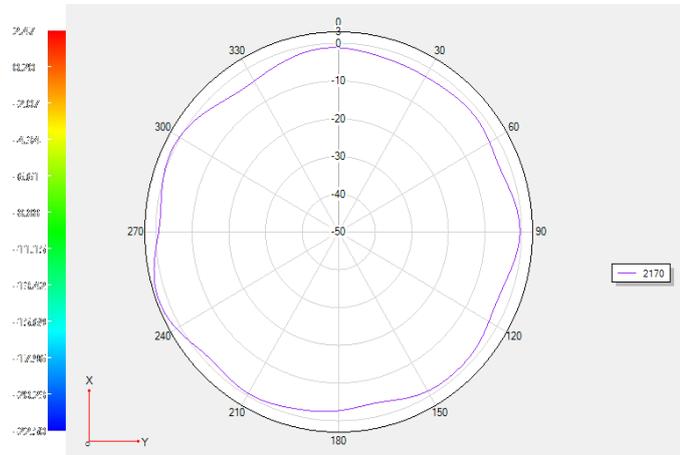
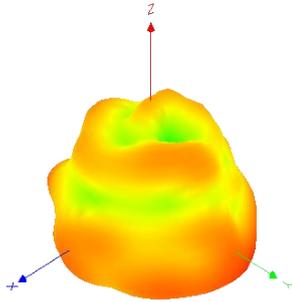
960MHz



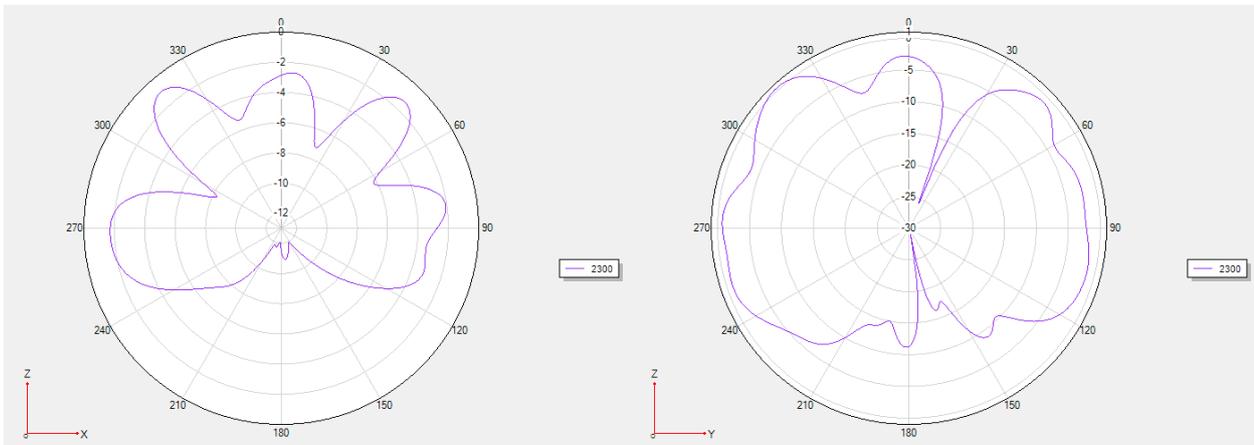
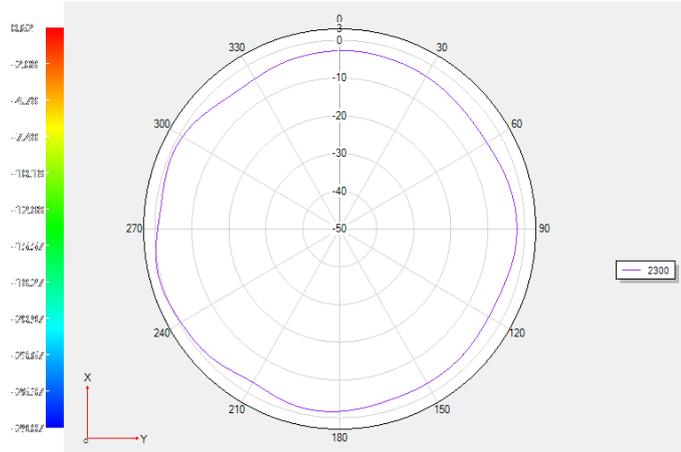
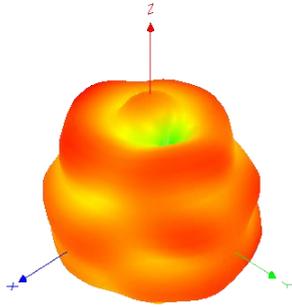
1710 MHz



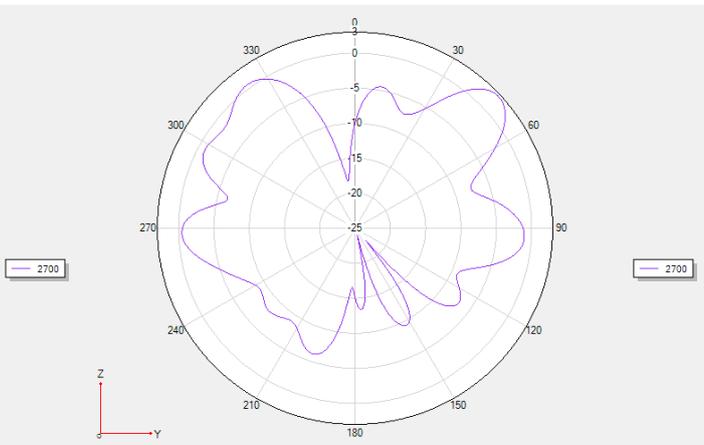
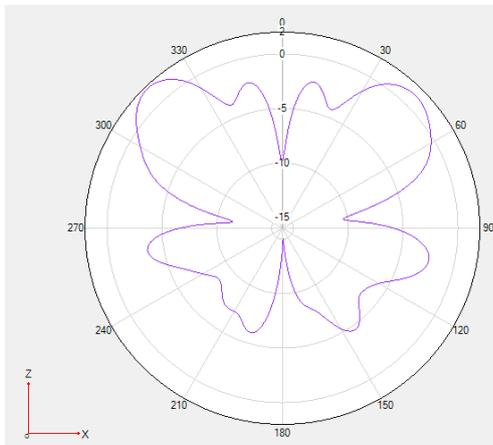
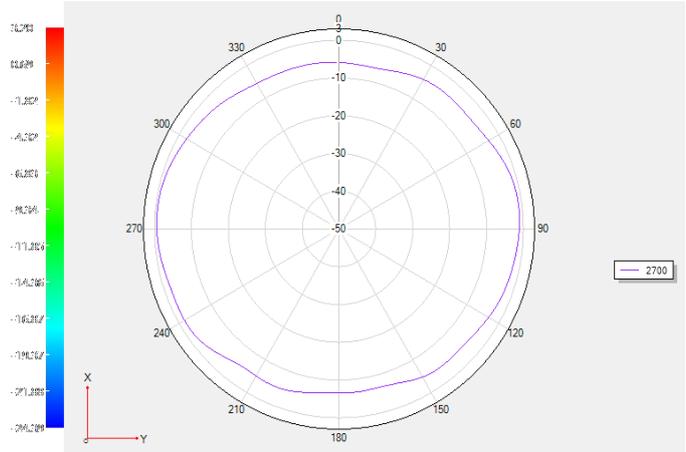
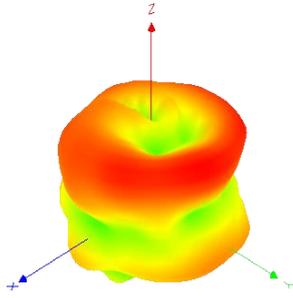
2170 MHz



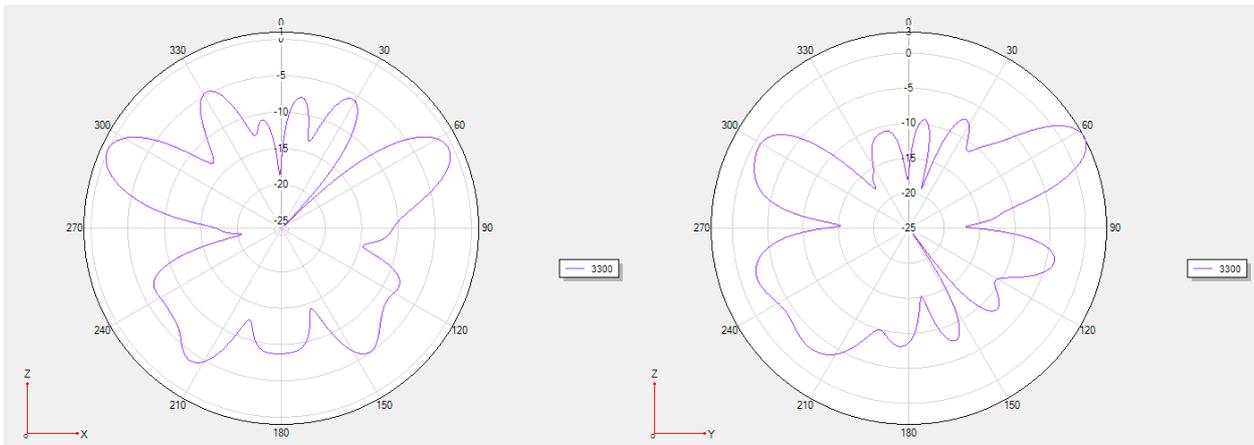
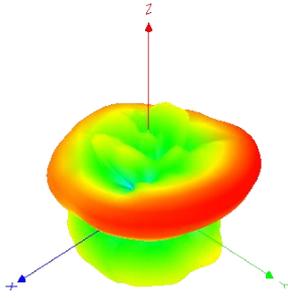
2300 MHz



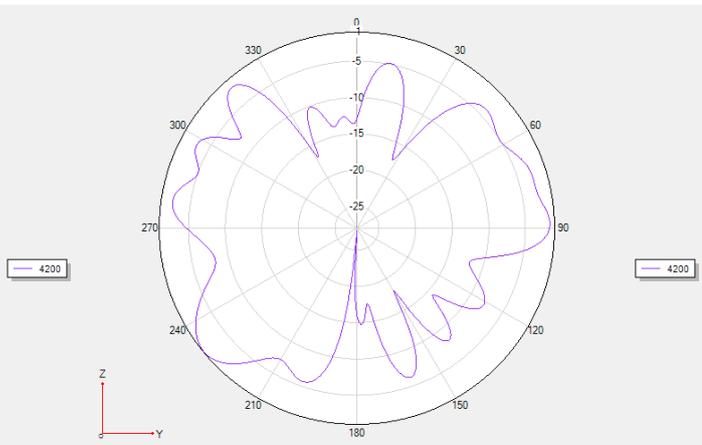
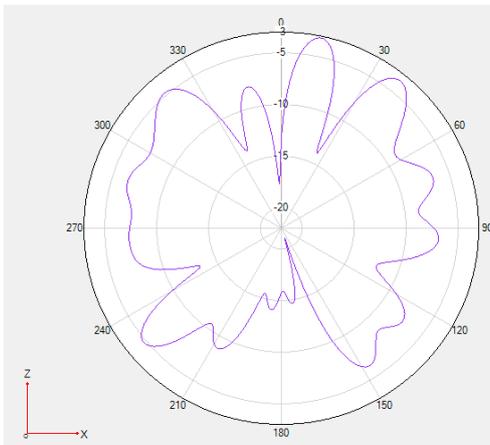
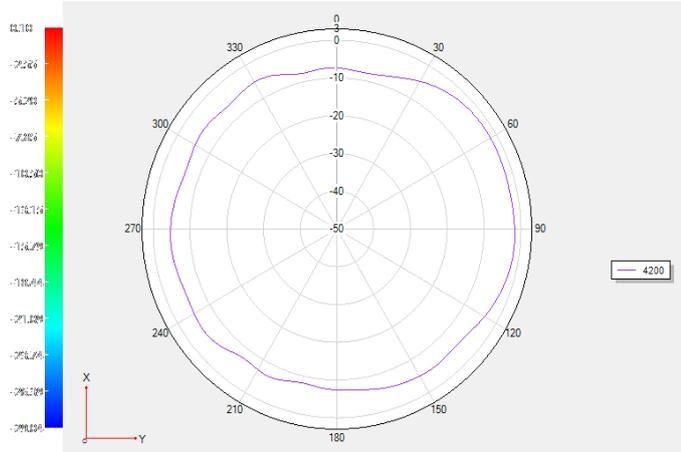
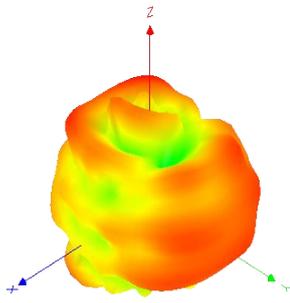
2700 MHz



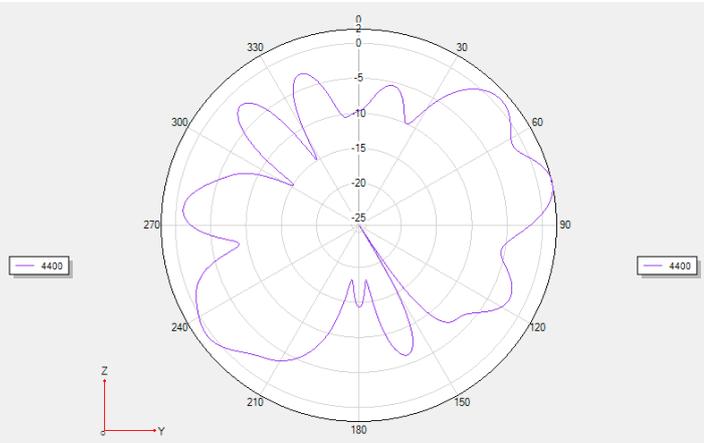
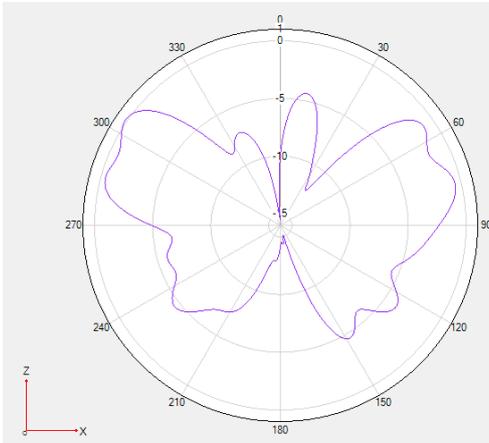
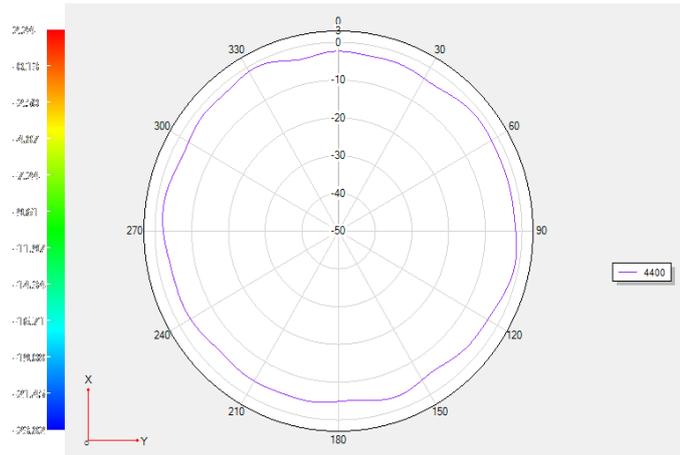
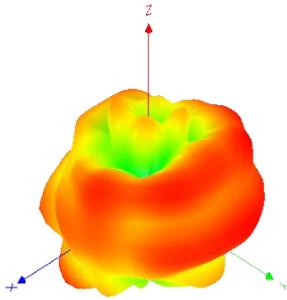
3300 MHz



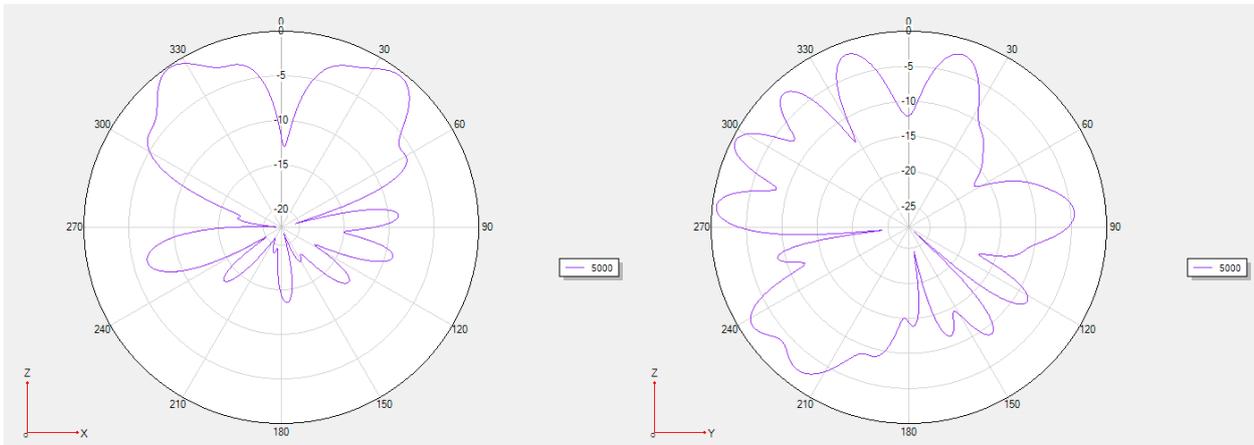
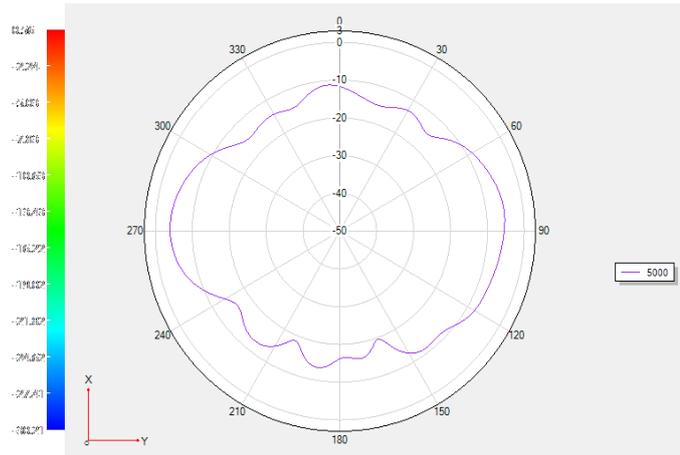
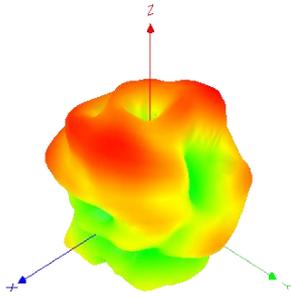
4200MHz



4400 MHz



5000 MHz



5 Product Size

