

Antenna

YE0031BA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2022-06-22	Ezail TAN/ Jason LONG	Creation of the document
1.0	2022-06-22	Ezail TAN/ Jason LONG	First official release

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1 Product Description

Quectel 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. There are various antenna types, including built-in FPC antenna, ceramic patch antenna, and other external antennas of different shapes or sizes. 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

- Cellular 2.4/5.8G
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400–2500 MHz; 5000–5800 MHz
Input Impedence	50 Ω
VSWR	≤ 2.0
Gain	≤ 3 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size (mm)	$\Phi 10.5 \times 52$
Casing	ABS + PC
Cable Type & Length	-
Connector Type	SMA Male (internal screw internal pin)
Working Temperature	-40 °C to +85 °C
Weight	Typ. 4.3 g
Radome Color	Black
Mounting Type	Screwing
IP Rating	IP65

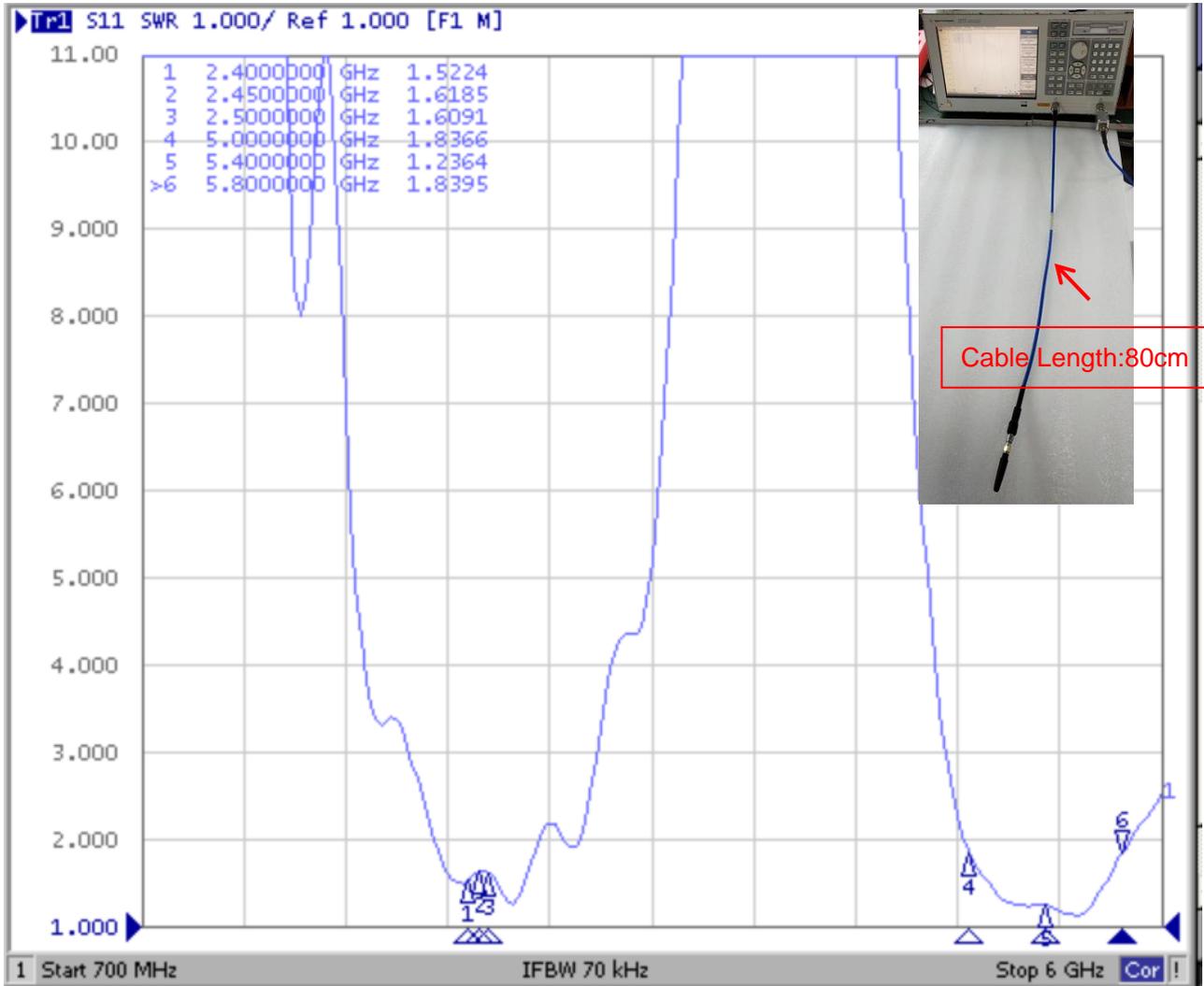
4 Overall Performance

4.1. Test Environment

- KEYSIGHT ENA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 600 MHz – 8.5 GHz

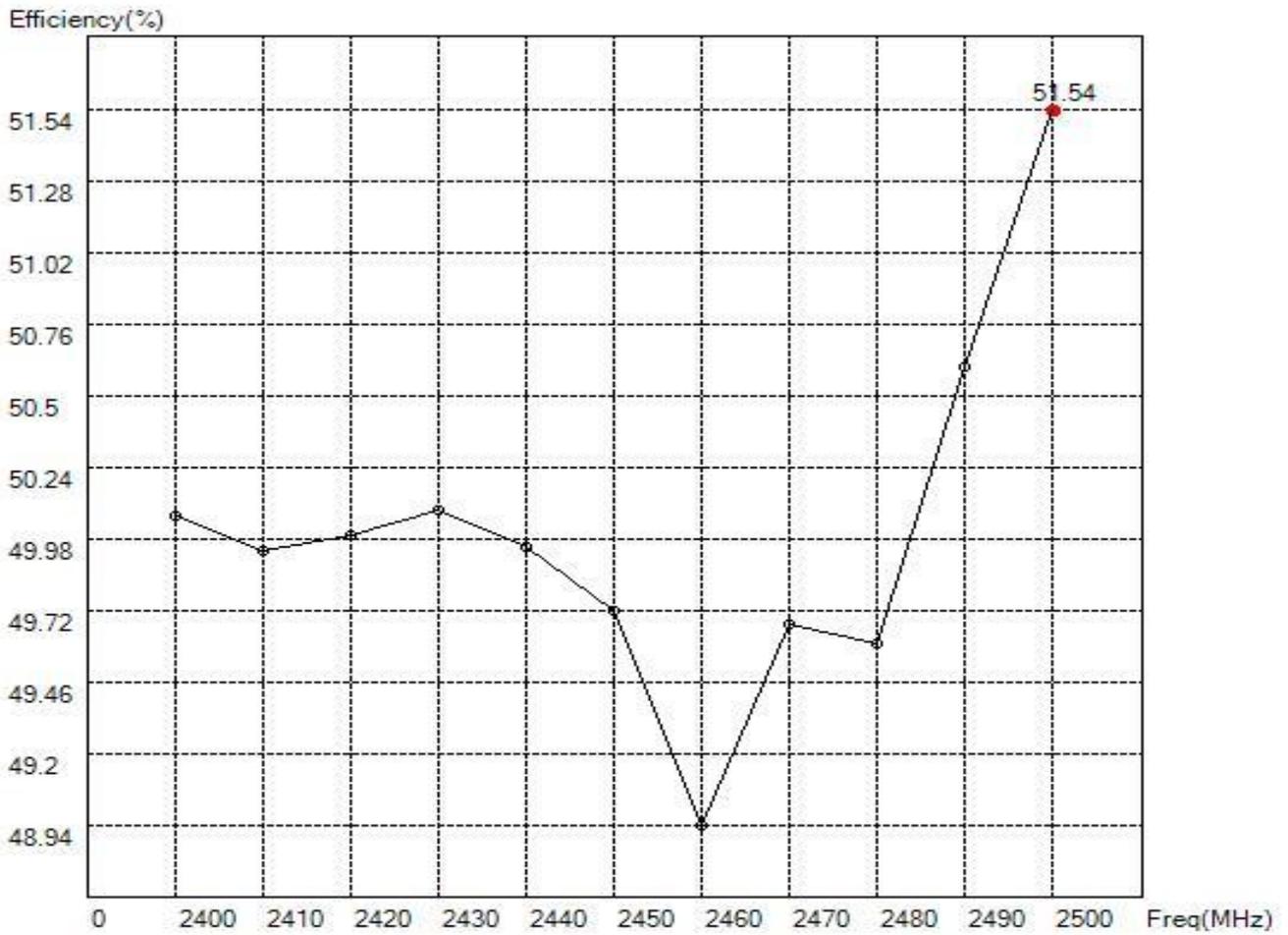


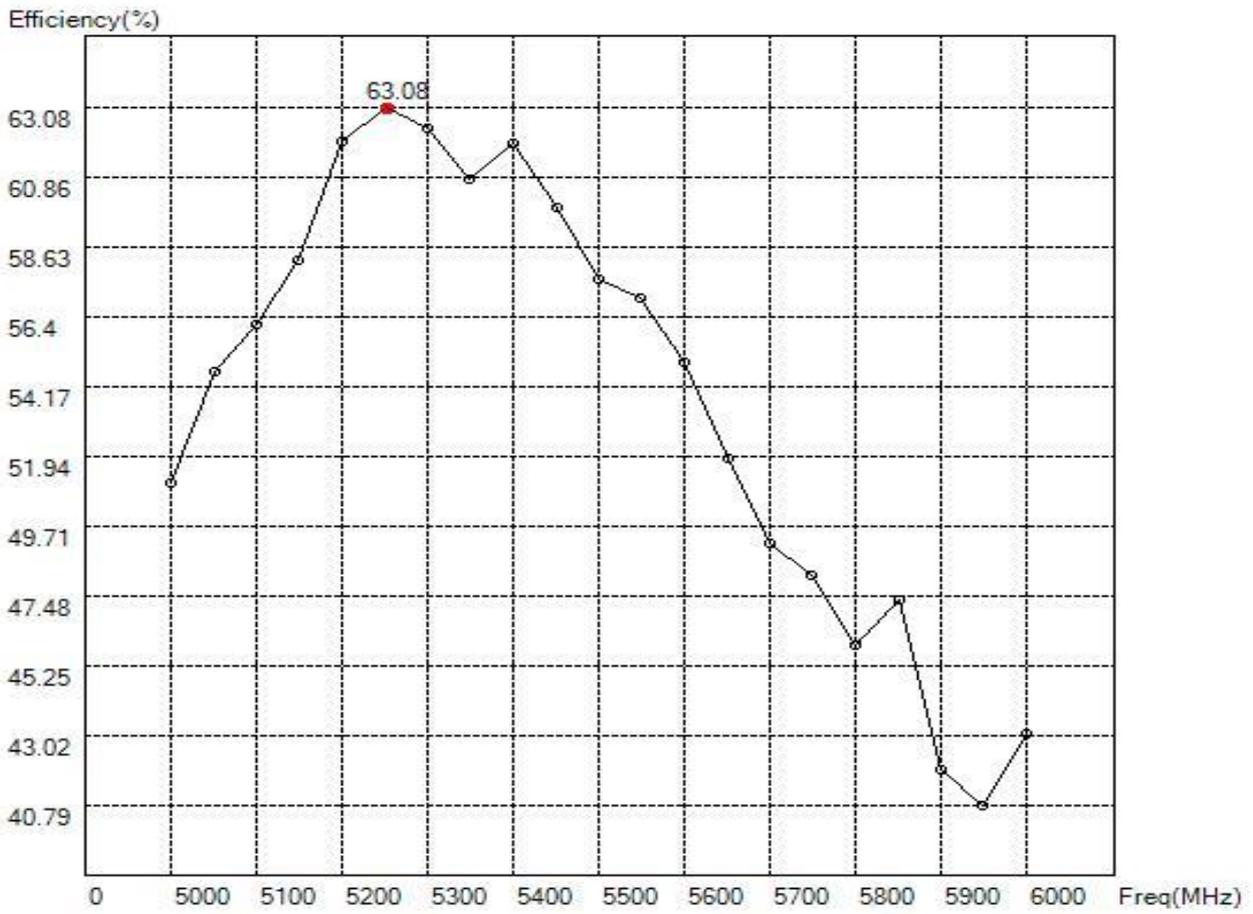
4.2. VSWR



Frequency (MHz)	2400	2450	2500	5000	5400	5800
VSWR	1.52	1.61	1.60	1.83	1.23	1.83

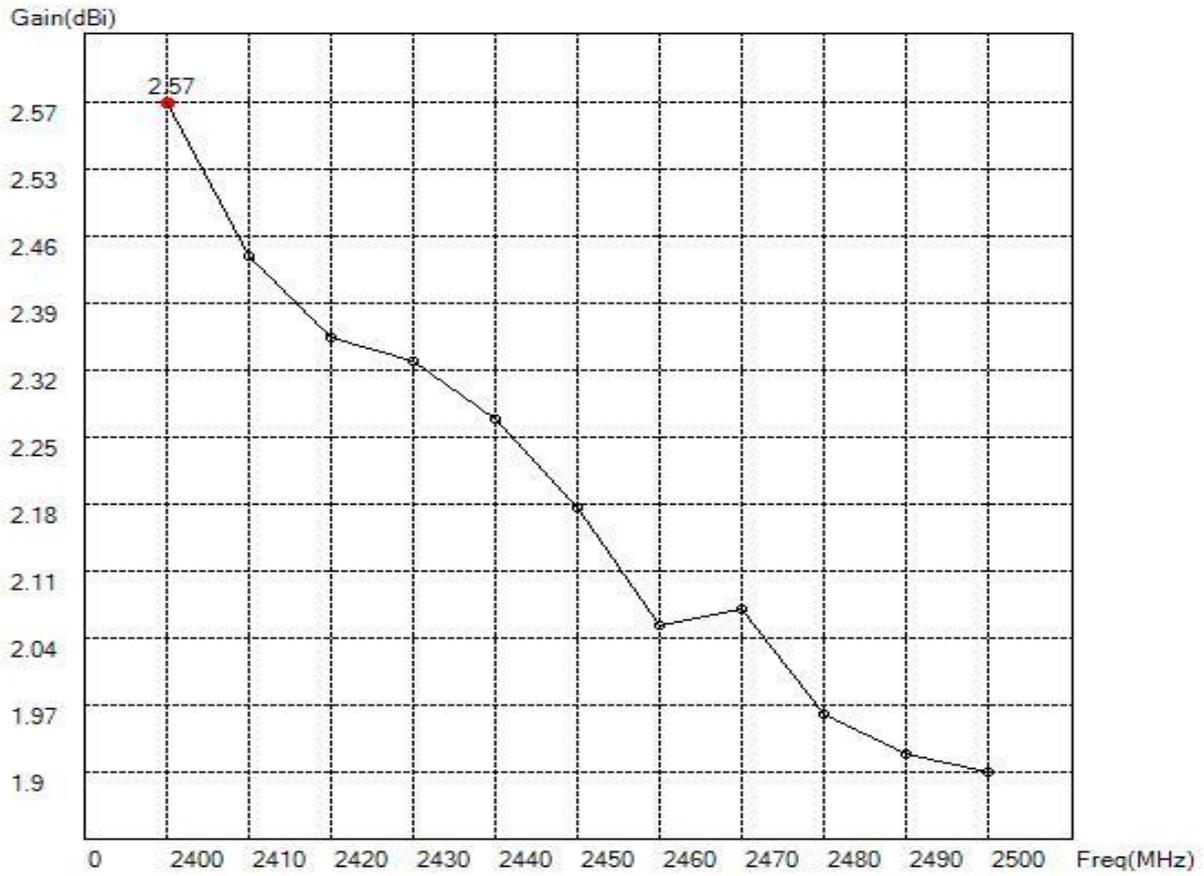
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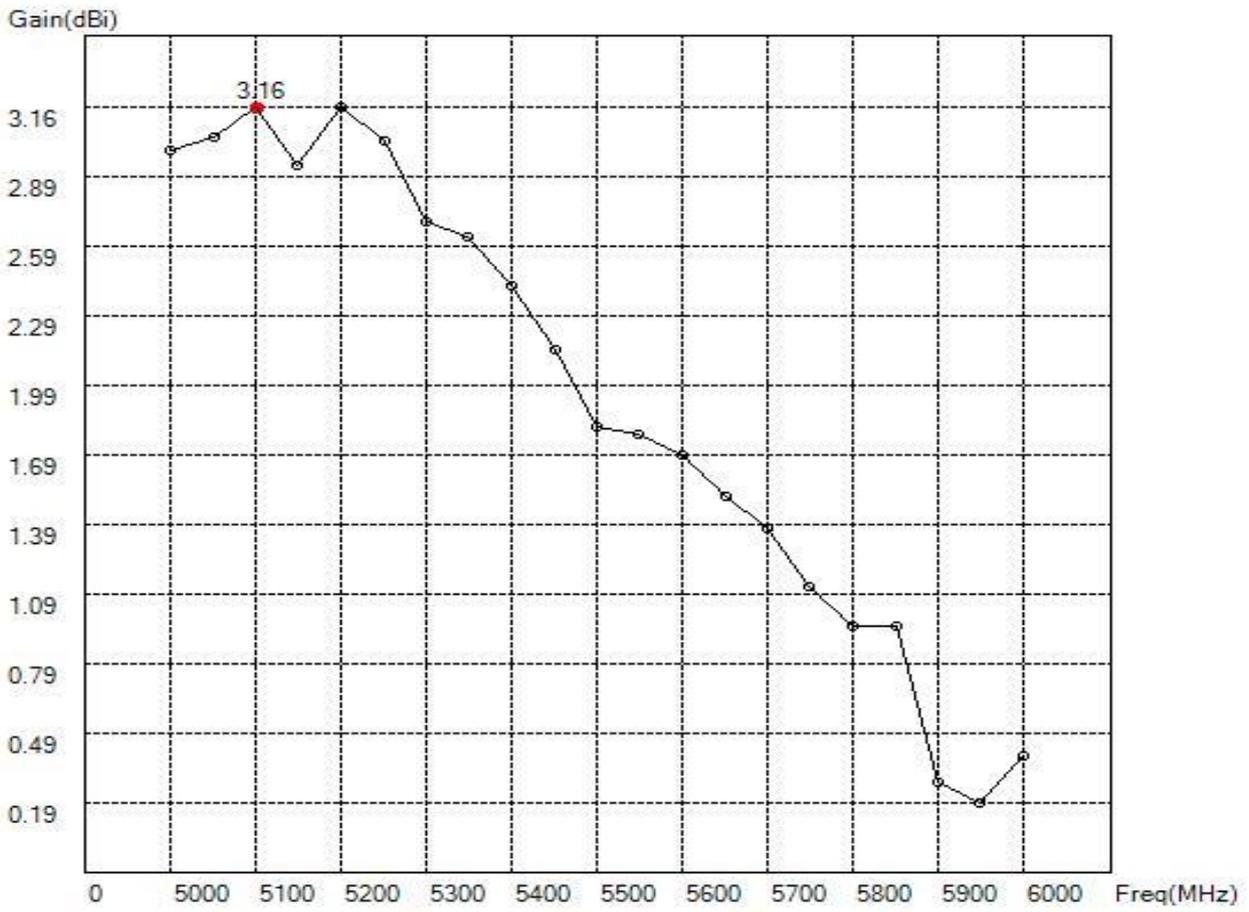




Frequency (MHz)	2400	2450	2500	5000	5400	5800
Efficiency (%)	50.06	49.72	51.54	51.09	61.95	45.94

4.4. Gain

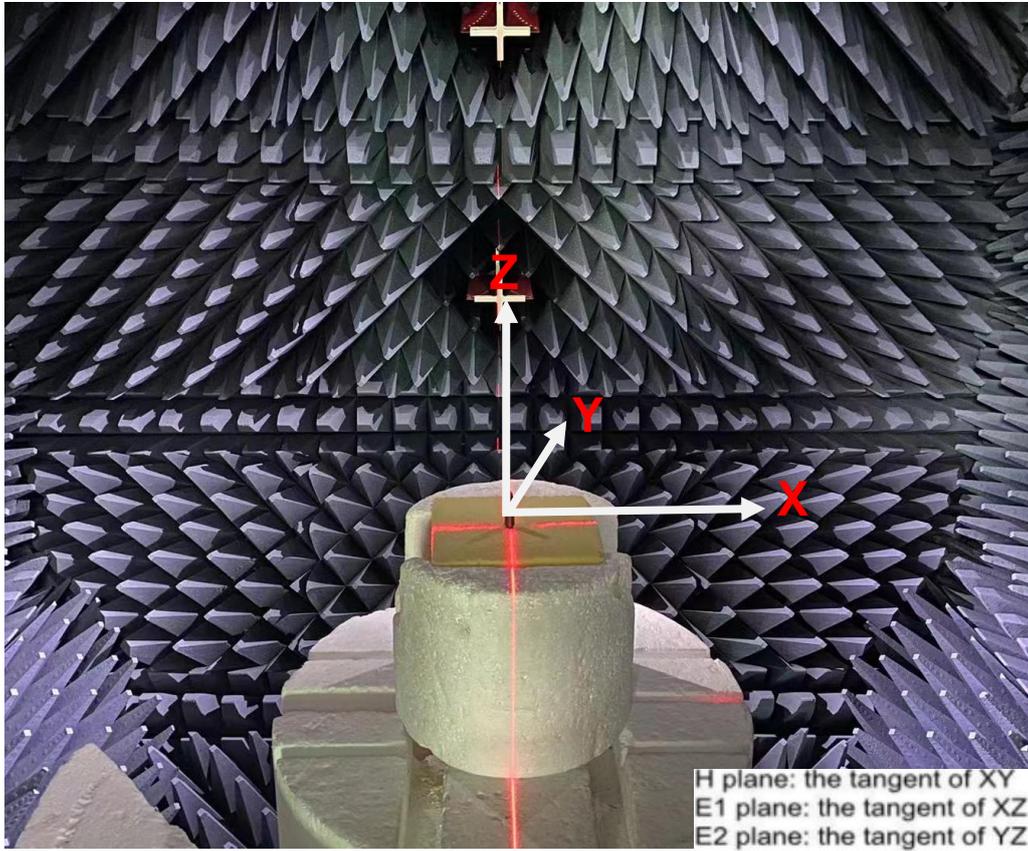


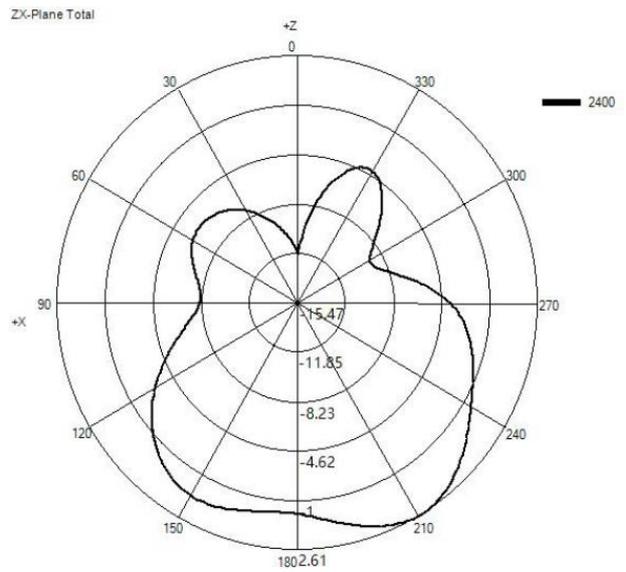
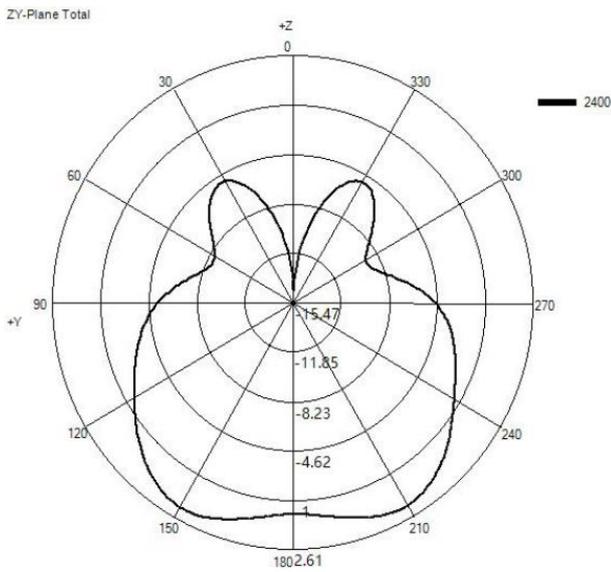
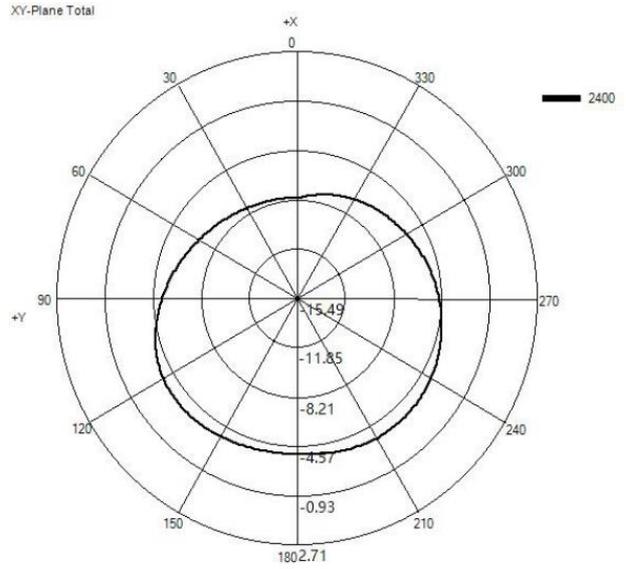
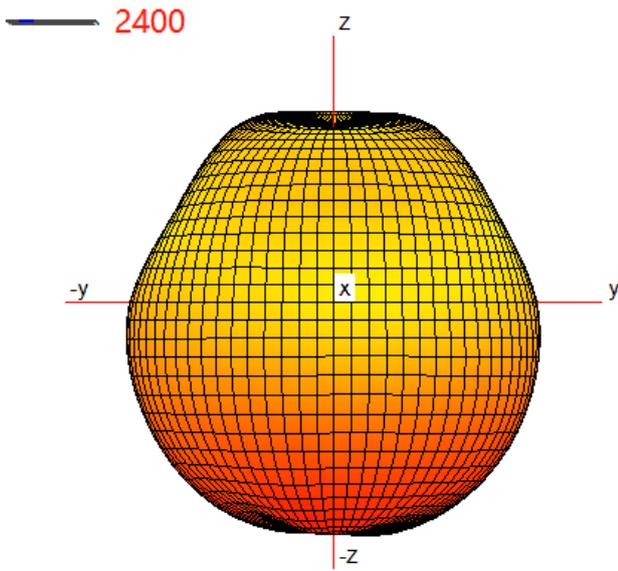


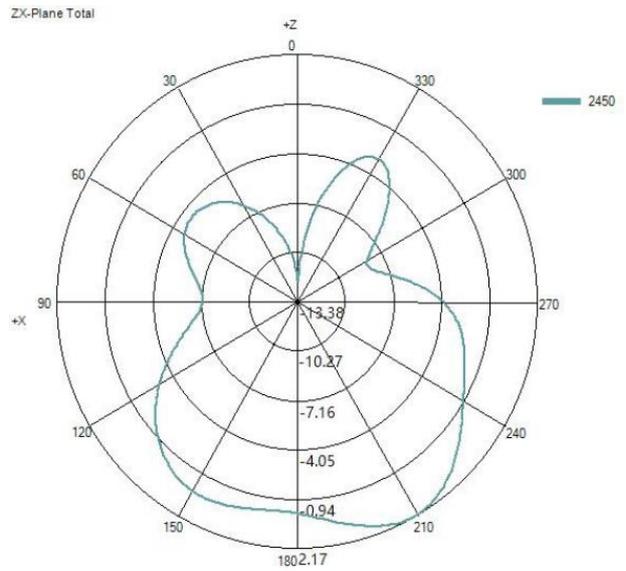
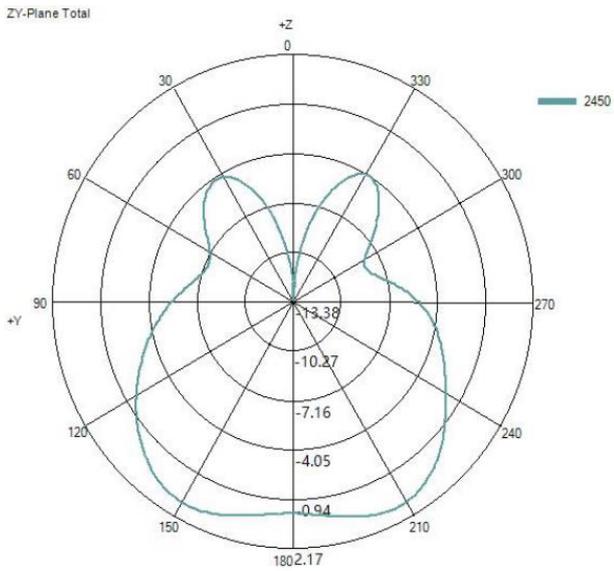
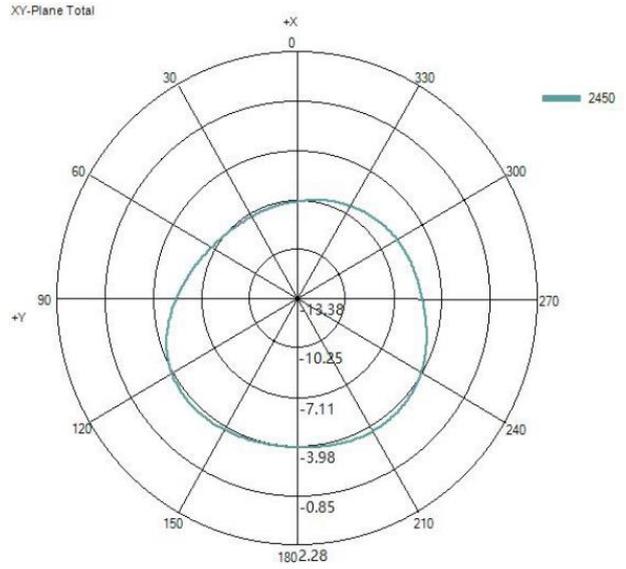
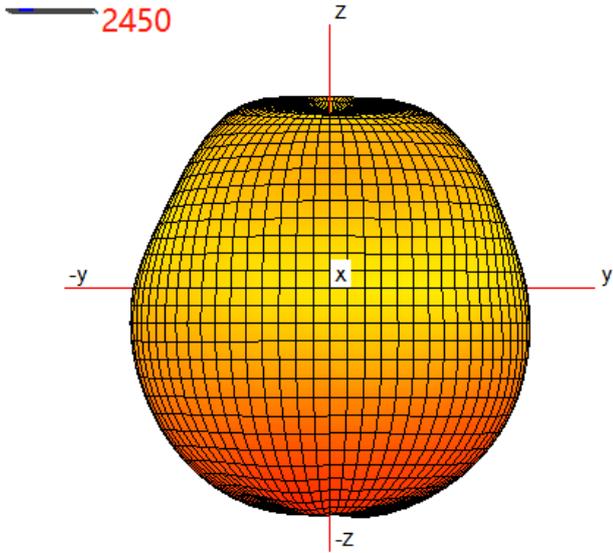
Frequency (MHz)	2400	2450	2500	5000	5400	5800
Gain (dBi)	2.57	2.16	1.90	2.98	2.40	0.95

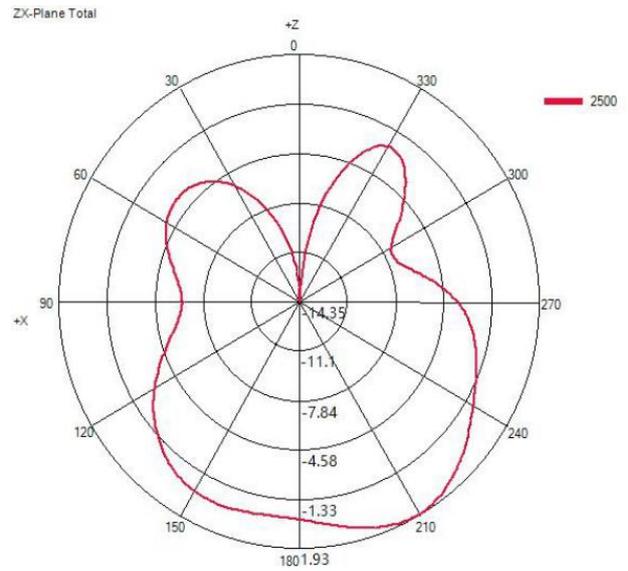
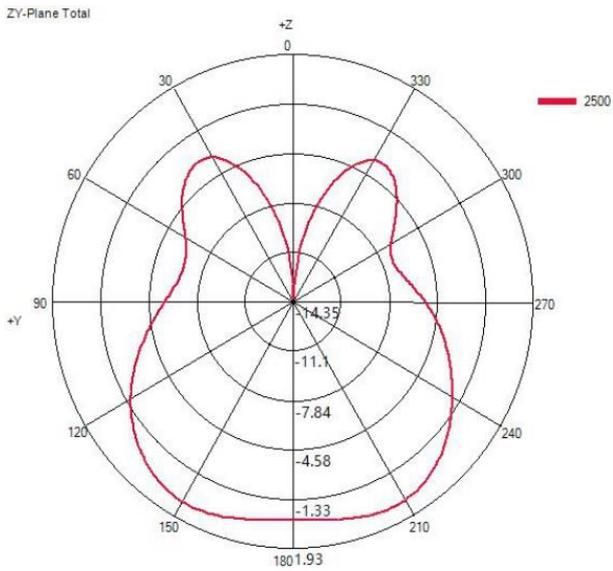
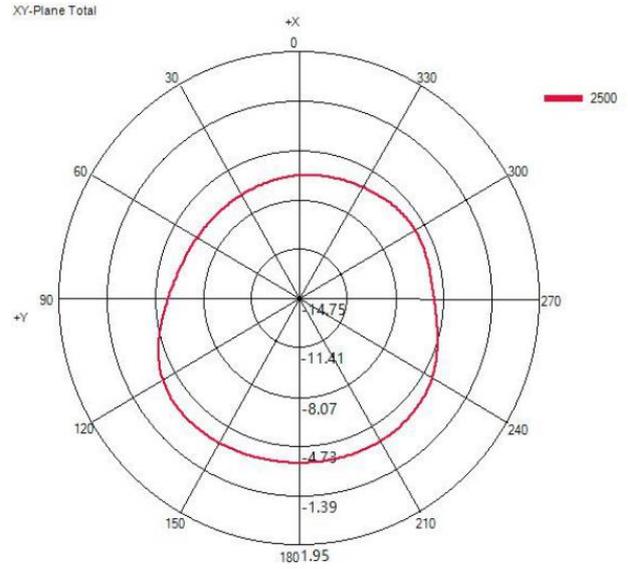
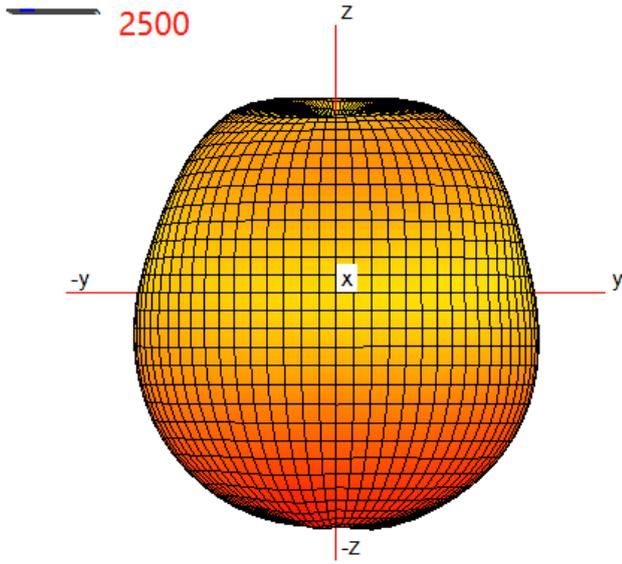
4.5. Radiation Pattern

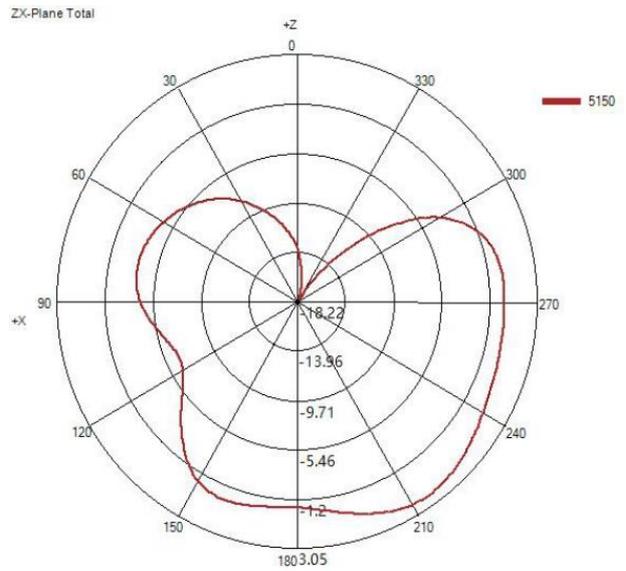
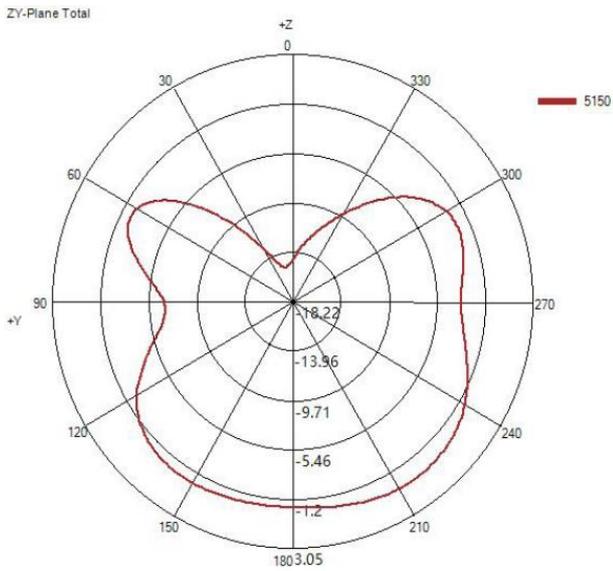
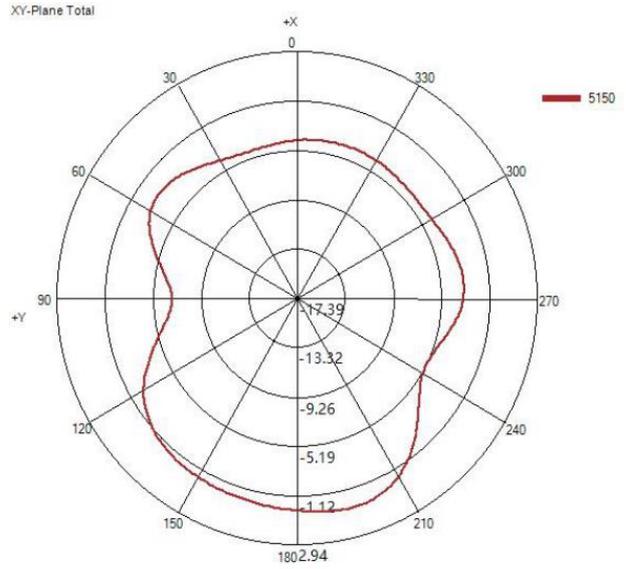
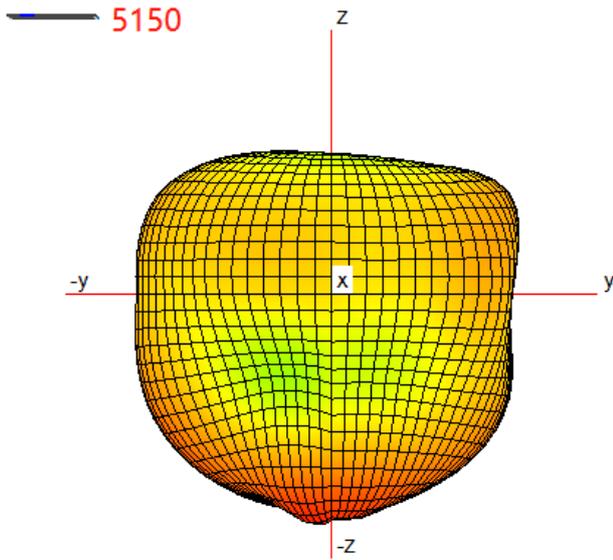
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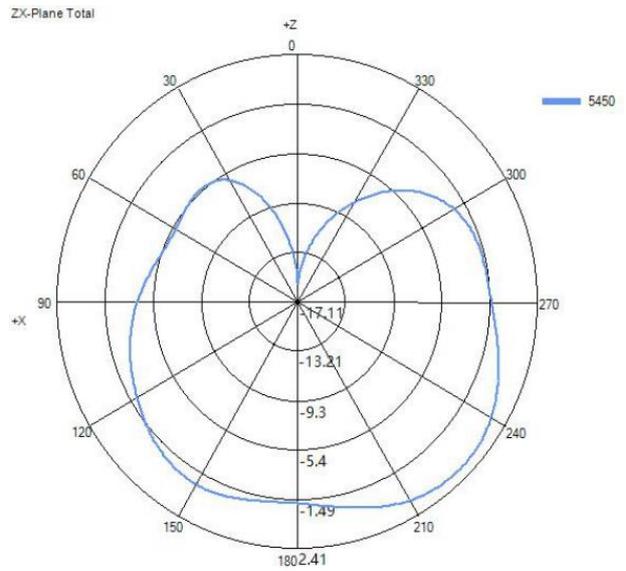
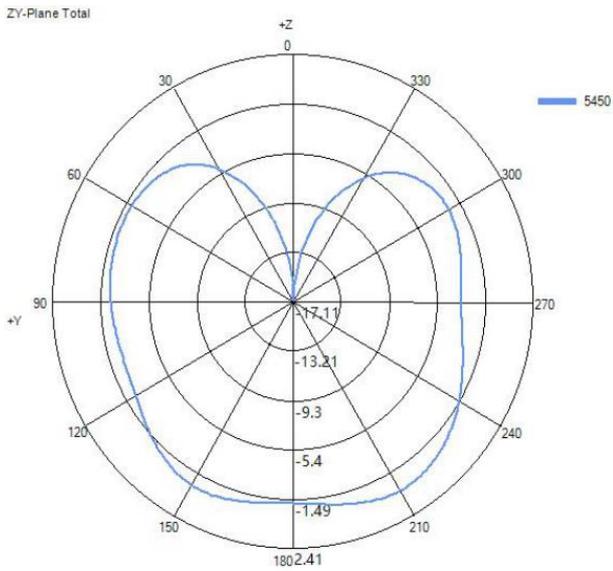
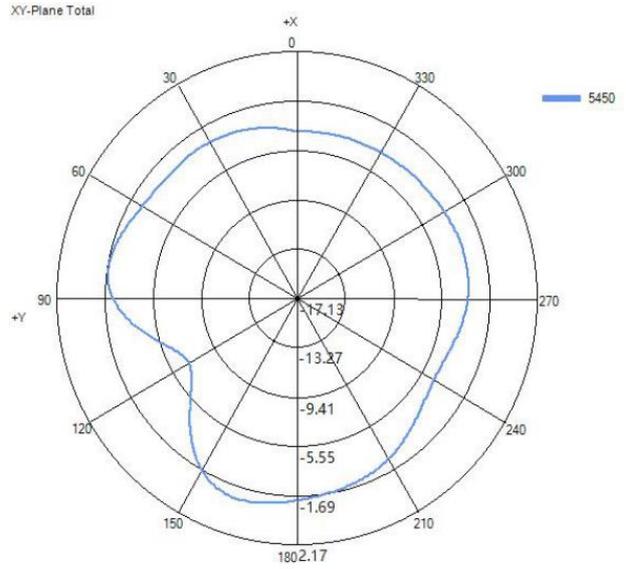
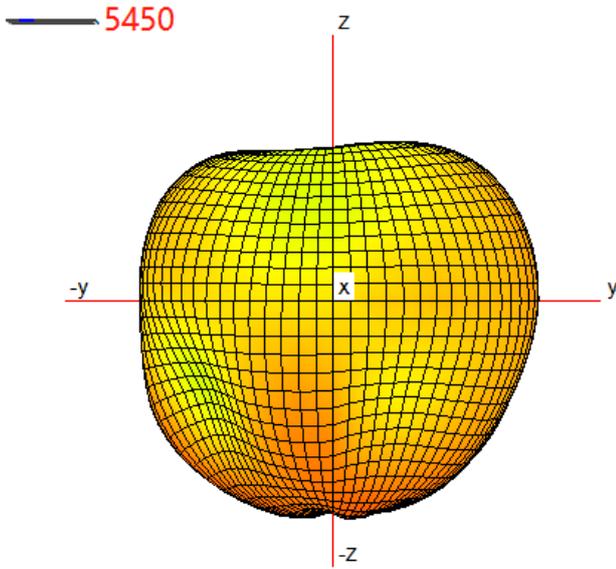


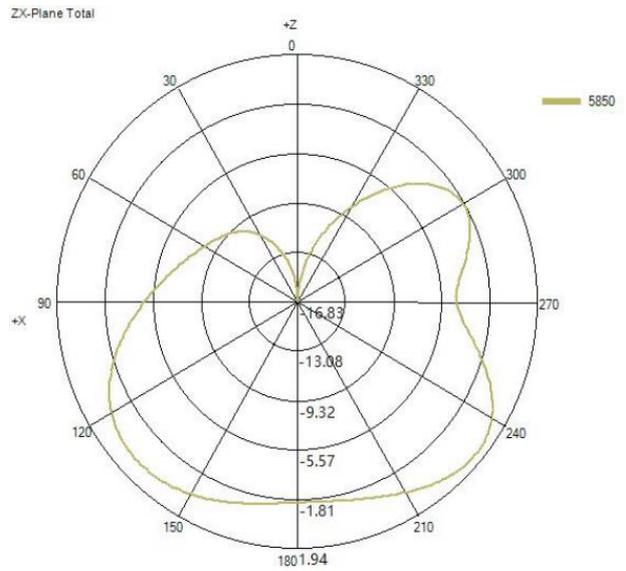
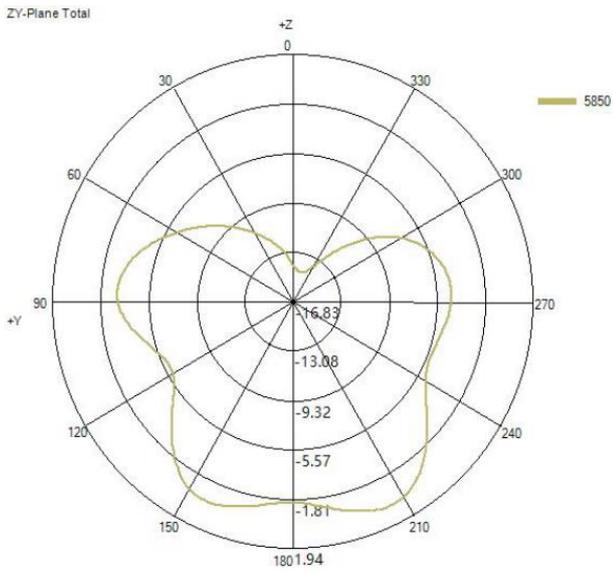
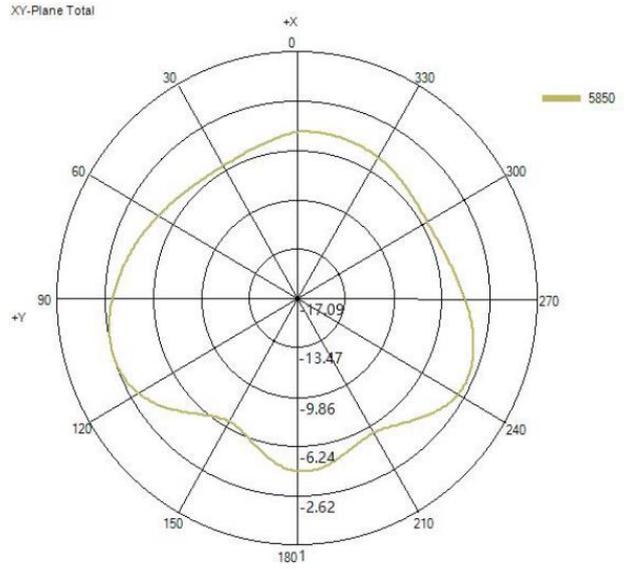
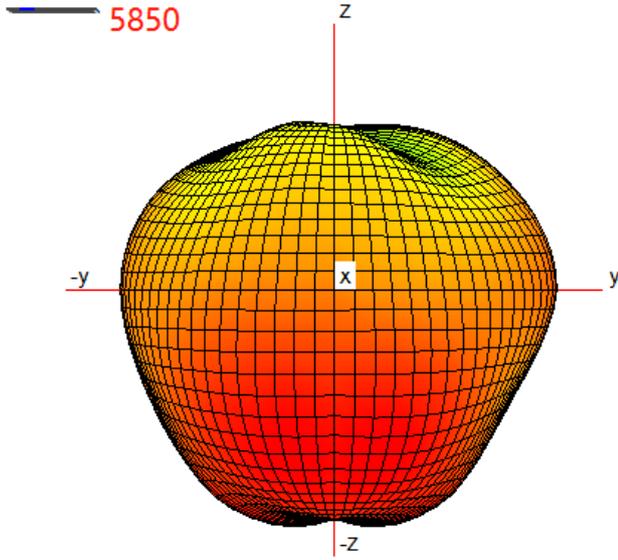












5 Product Size

