Antenna

YWD00A2AA Datasheet

Antenna Services

Version: 1.0

Date: 2022-07-05

Status: Preliminary

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About the Document

Revision History

Version	Date	Author	Note
-	2022-7-5	Tony Dai Jason LONG	Creation of the document
1.0	2022-7-5	Tony Dai Jason LONG	First official release

Contents

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	698-960MHz,1710-2690MHz
Input Impendence	50 Ω
VSWR	≤6.0
Gain	≤4dBi
Polarization Type	Linear

Detailed Passive Electrical Specifications				
Frequency Range (MHz)	698-960	1710-2170	2170-2450	2450-2700
VSWR (Max.)	5.09	4.2	3.47	2.6
Average Efficiency (%)	28.14	49.64	44.97	45.37
Max. Peak Gain (dBi)	-1.63	3.83	1.36	0.61

Mechanical Specifications	
Antenna Size(mm)	39.3×24.4
Material	FPC
Working Temperature	-20 °C to +85 °C
Weight	Typical 0.2g
Color	Black
Mounting Type	Adhesive

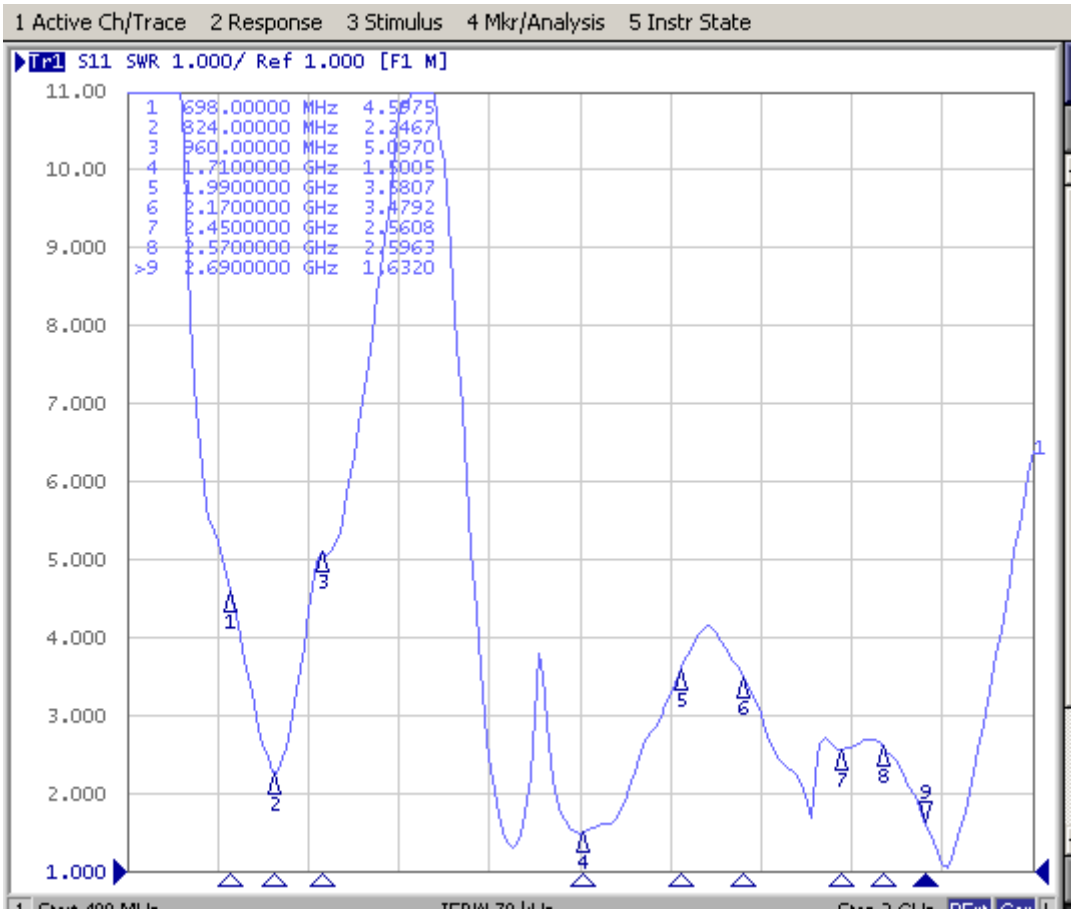
4 Overall Performance

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

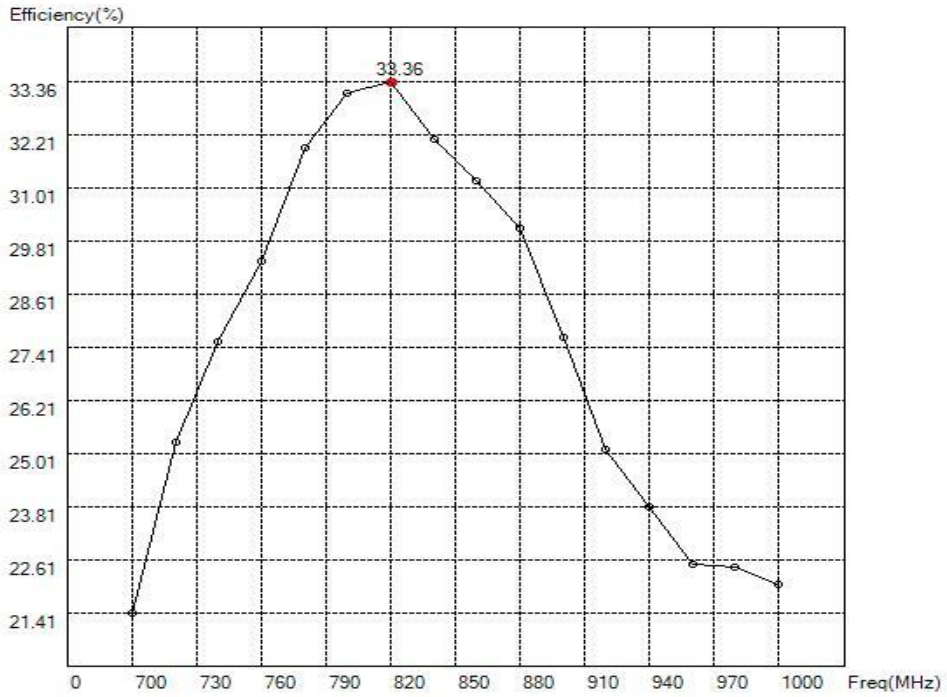
Other description:

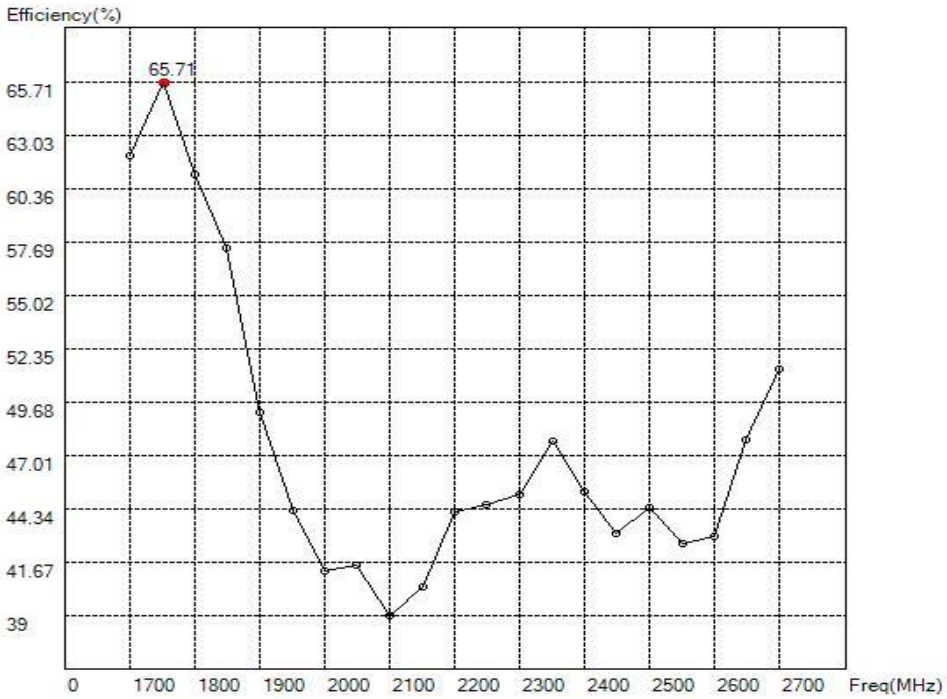
4.2. VSWR



Frequency (MHz)	698	824	960	1710	1990	2170	2450	2570	2690
VSWR	4.59	2.24	5.09	1.5	3.58	3.47	2.56	2.59	1.63

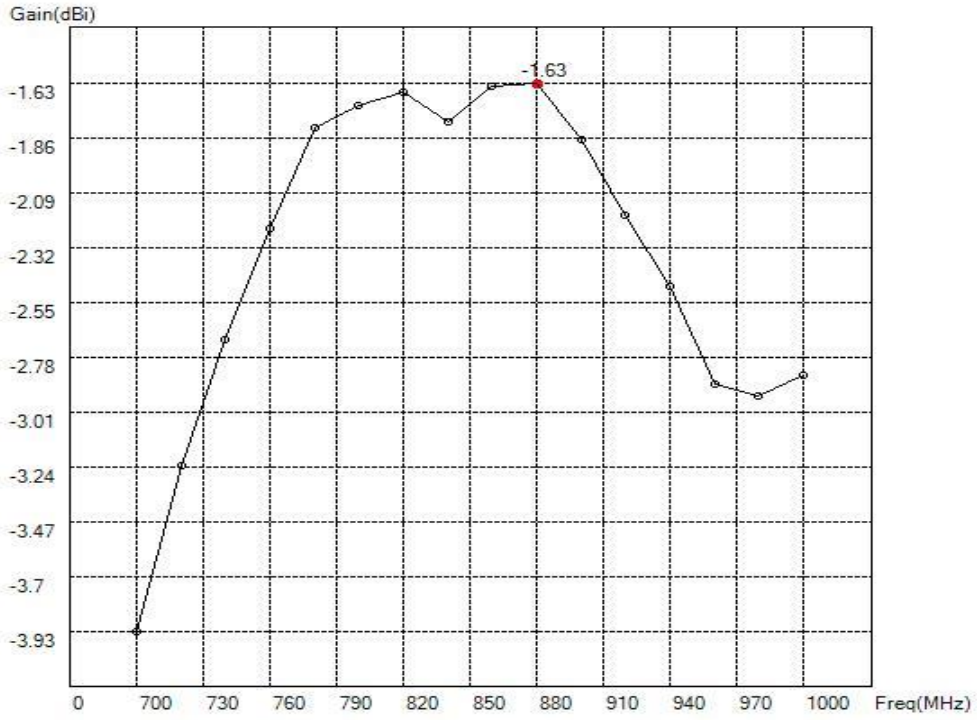
4.3. Efficiency

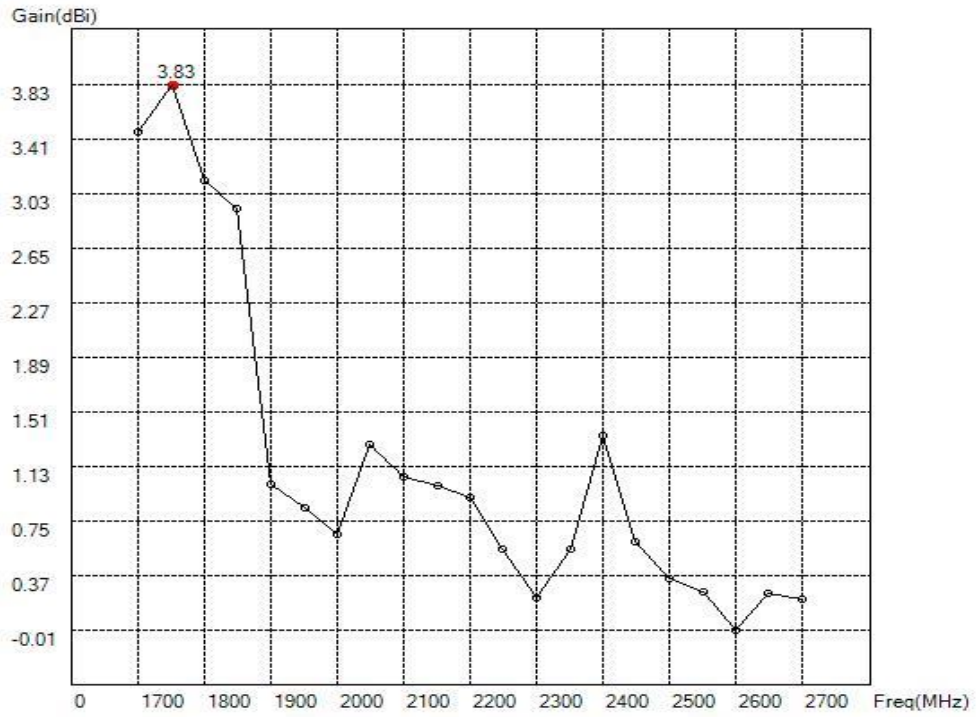




Frequency (MHz)	700	840	960	1700	1950	2150	2450	2700
Efficiency (%)	21.41	32.06	22.51	62.01	44.30	40.46	43.14	51.35

4.4. Gain

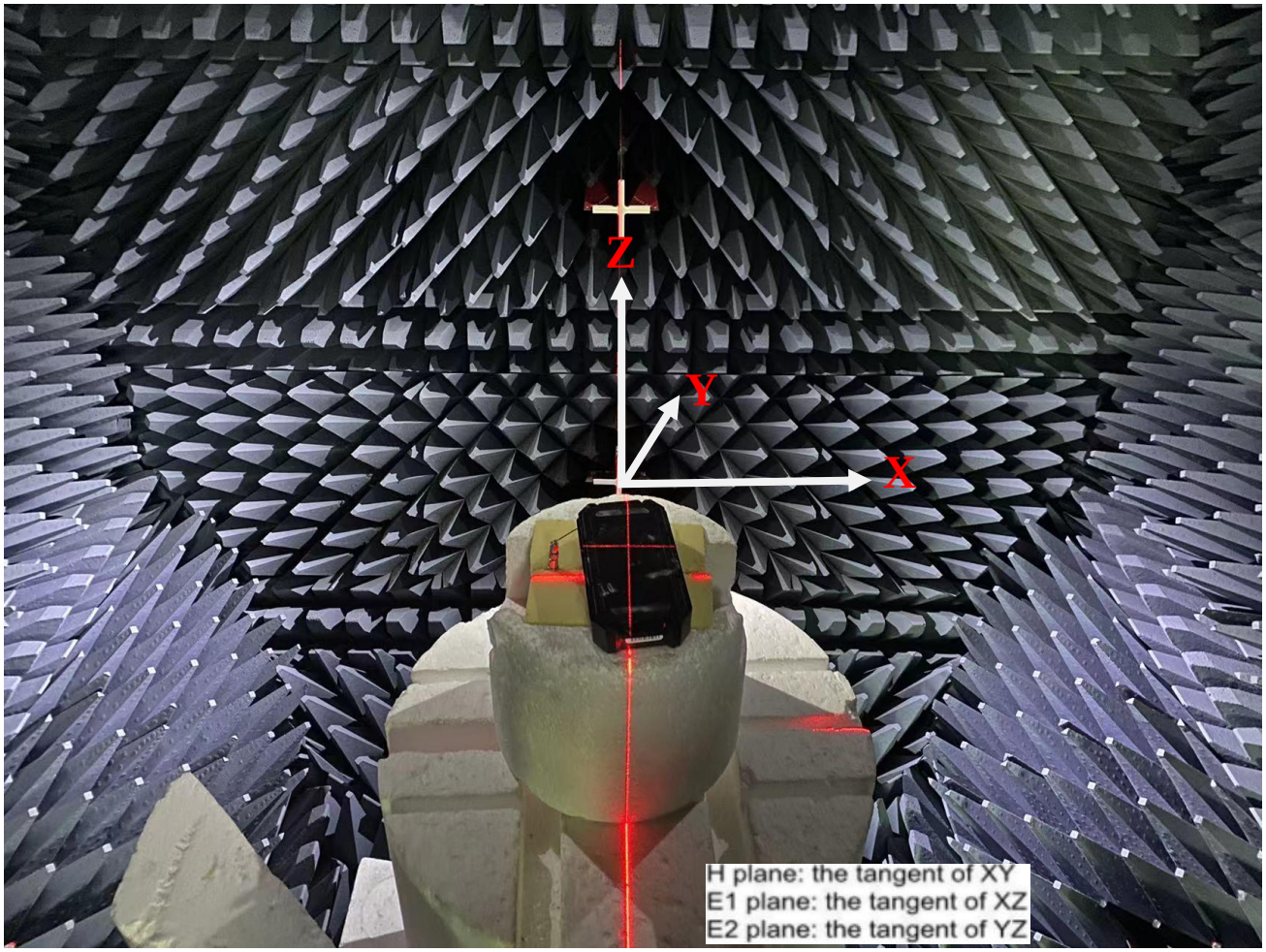


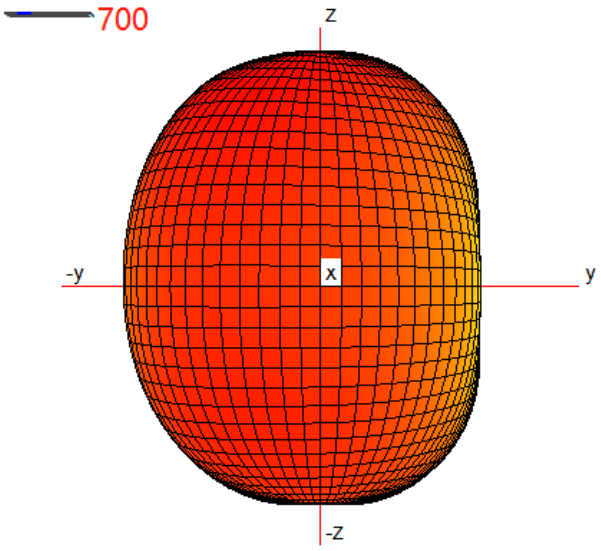


Frequency (MHz)	700	840	960	1700	1950	2150	2450	2700
Gain (dBi)	-3.93	-1.79	-2.89	3.49	0.86	1.01	0.61	0.21

4.5. Radiation Pattern

- Test condition: free space

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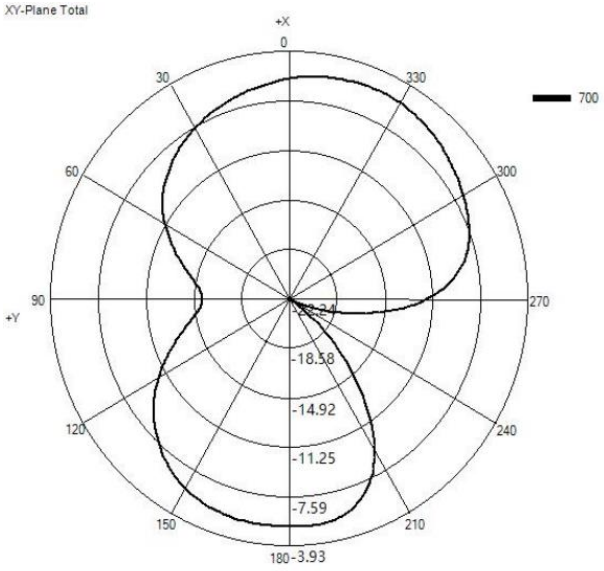
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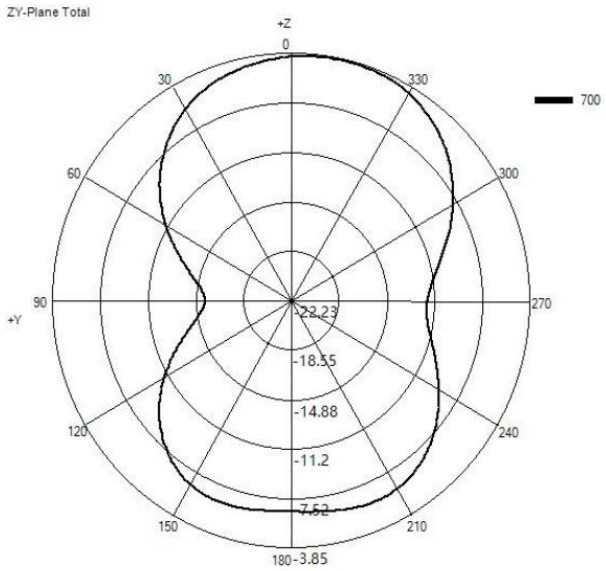
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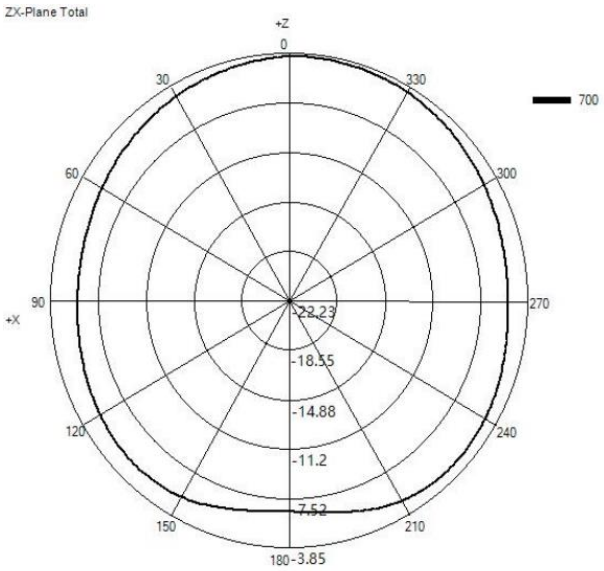
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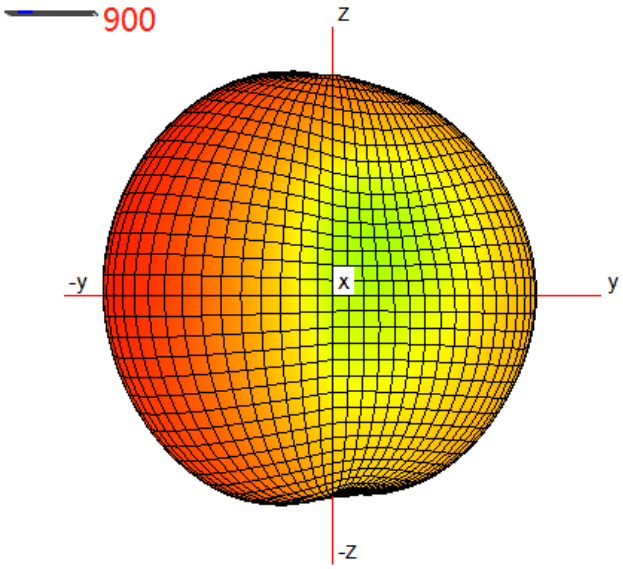
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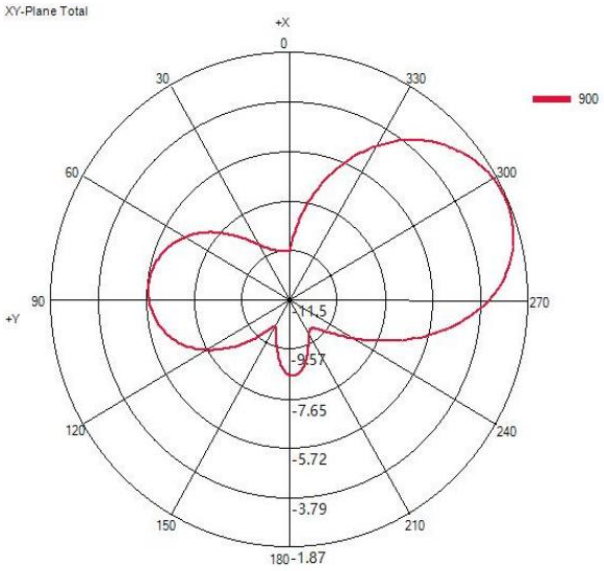
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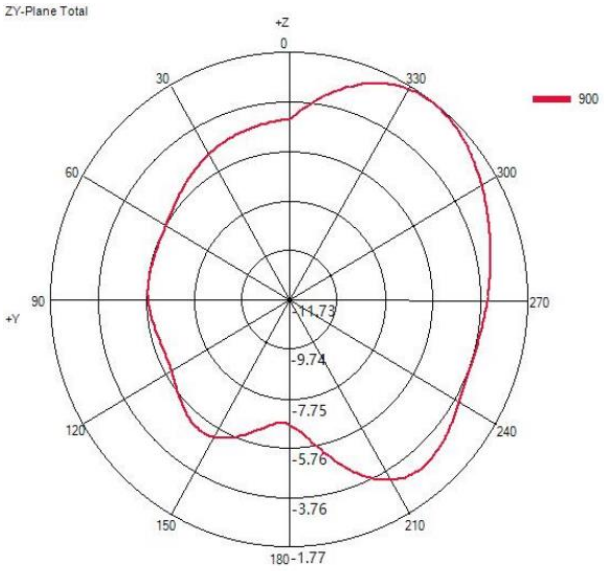
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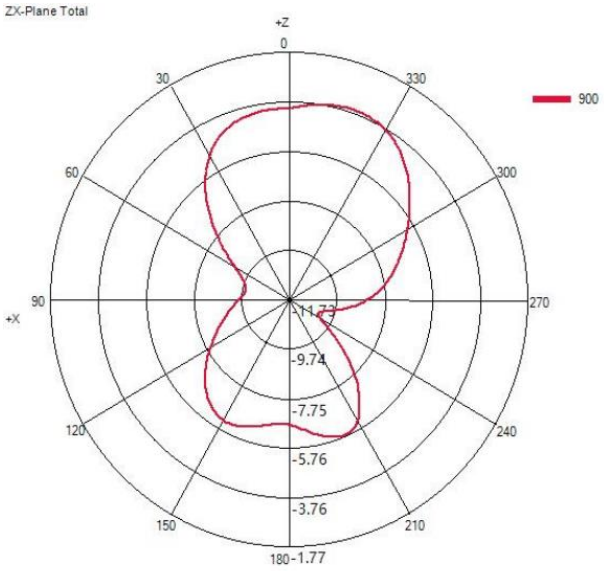
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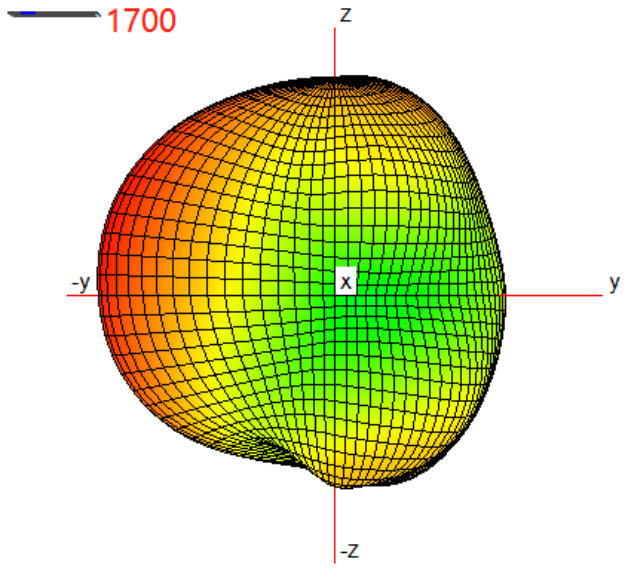
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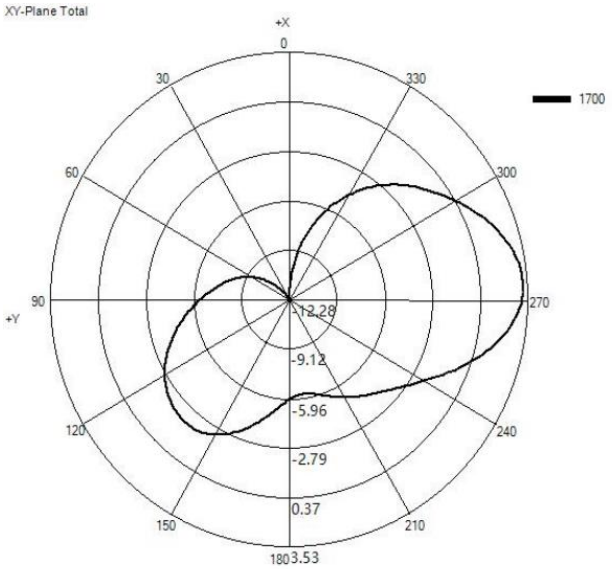
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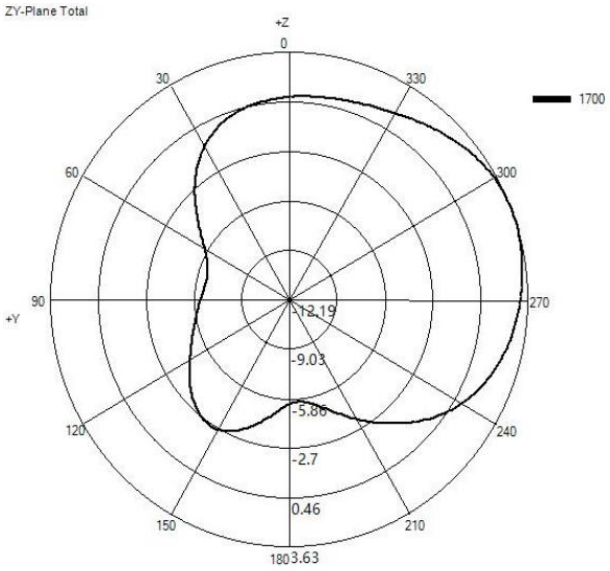
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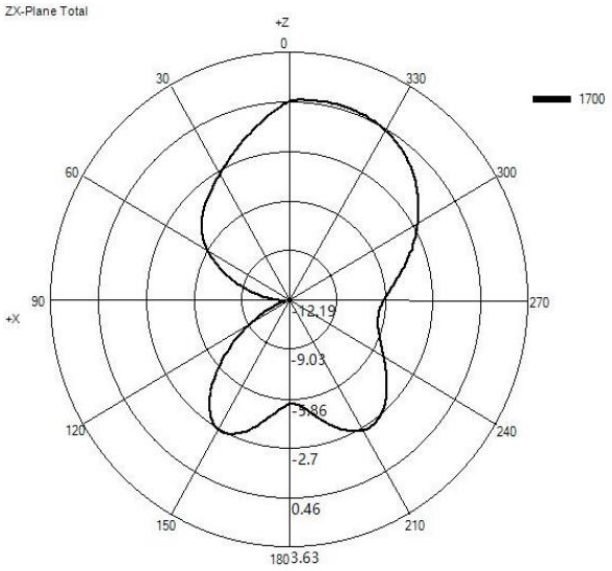
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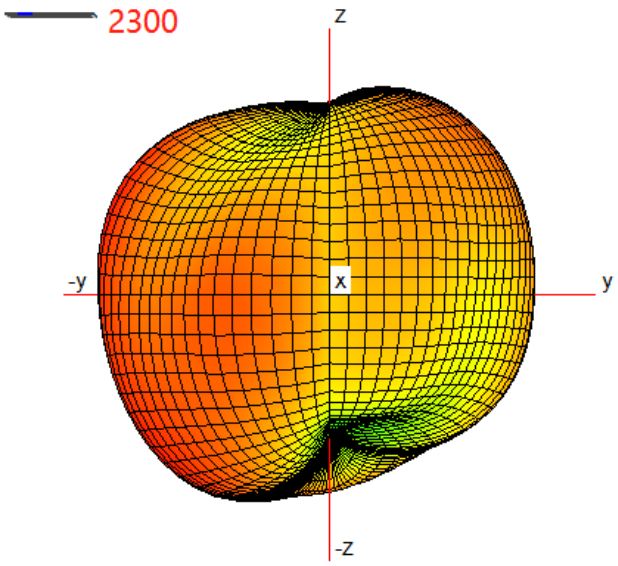
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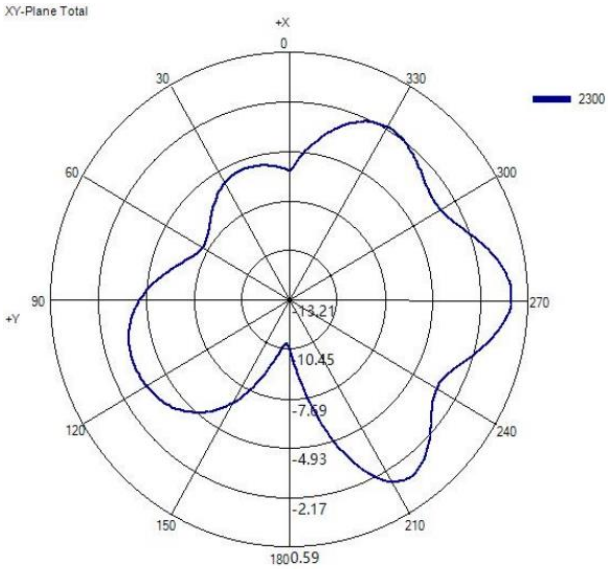
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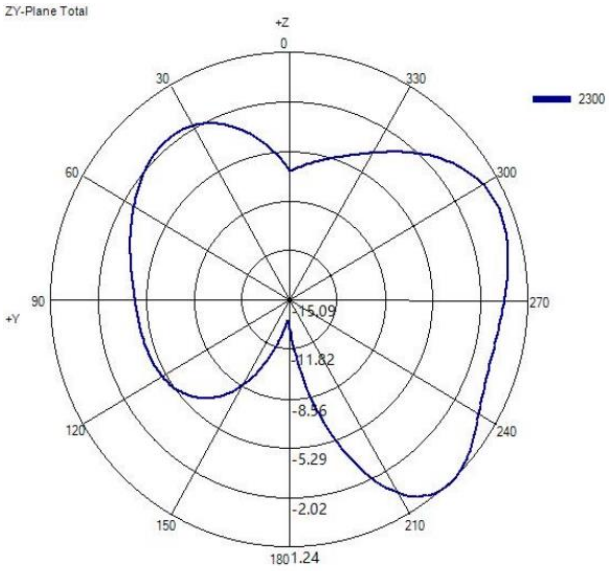
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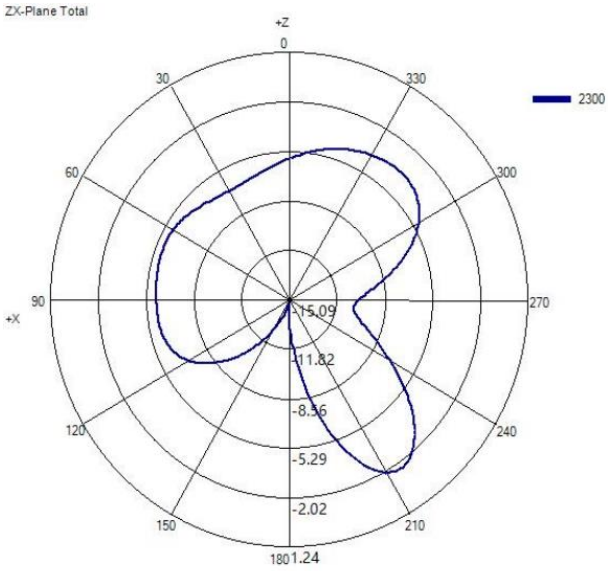
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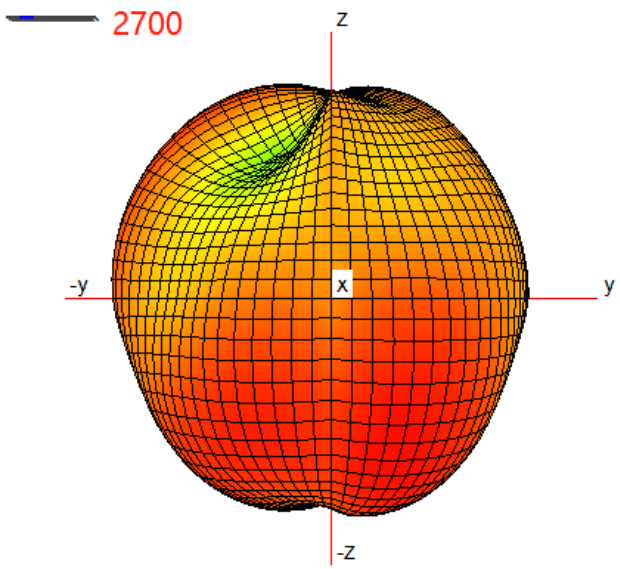
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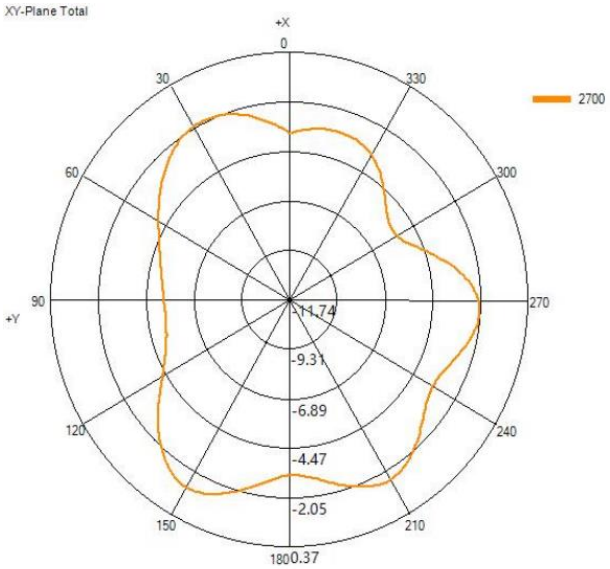
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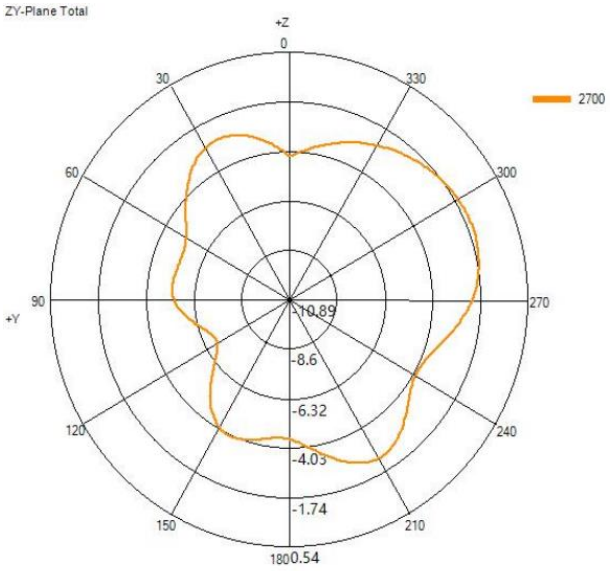
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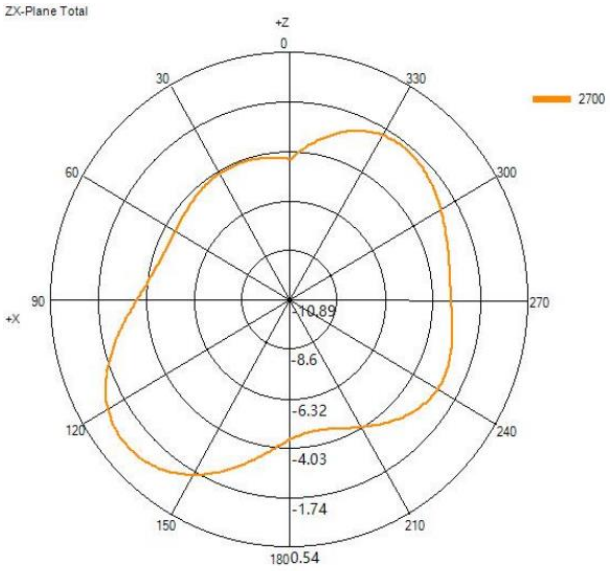
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5 Product Size