

Antenna

YE0006AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-06-16	Kenny YIN	Initial
1.1	2020-12-11	Kenny YIN	Updated the antenna image in Chapter 2.
1.2	2021-01-12	Kenny YIN	Updated the efficiency data in Chapter 4.
1.3	2021-01-27	Kenny YIN	Added IP rating description and installation method.

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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 LTE
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	700–2700 MHz
Input Impedence	50 Ω
VSWR	≤ 2.0
Gain	≤ 3 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	318 mm \times Φ 30 mm, RG174 Length = 1500 mm
Casing	ABS
Connector Type	SMA Male (center pin)
Working Temperature	-20 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	Black
IP rating	IP65
Installation method	Magnet

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.

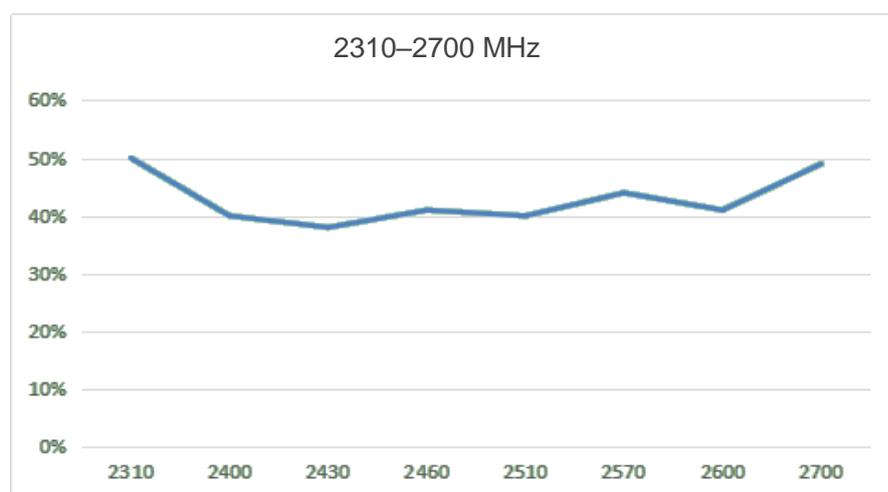
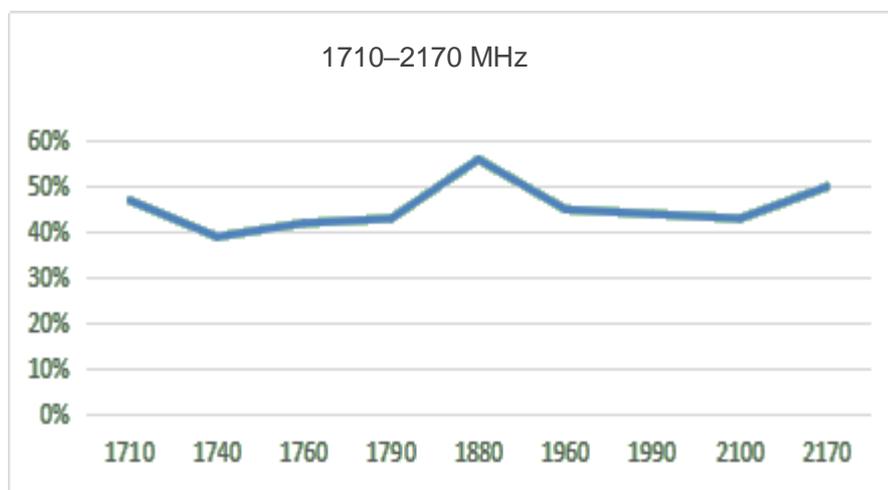
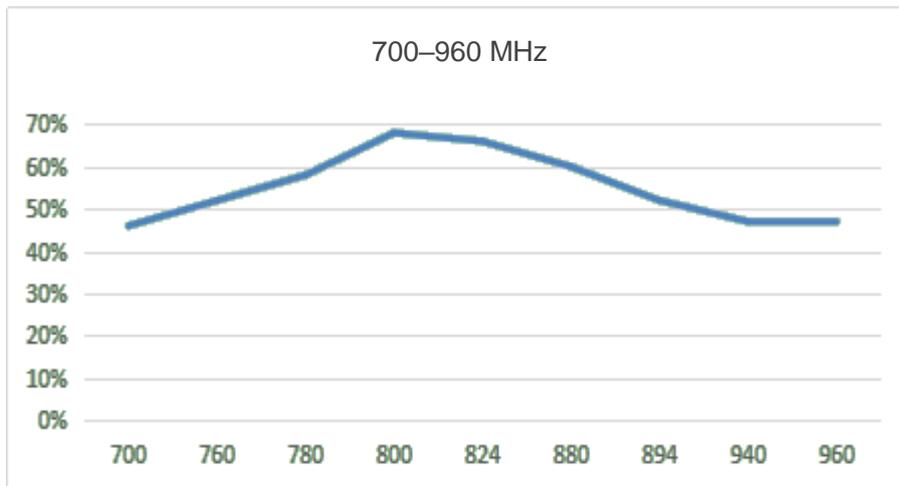


4.2. VSWR



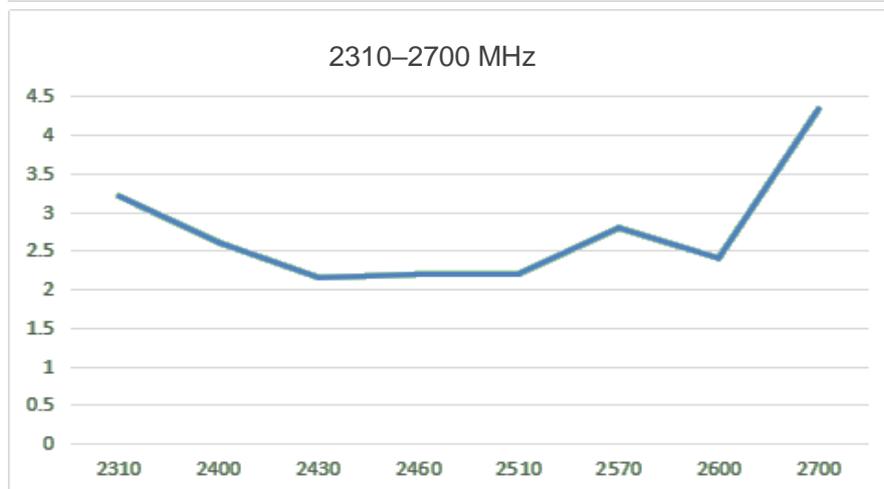
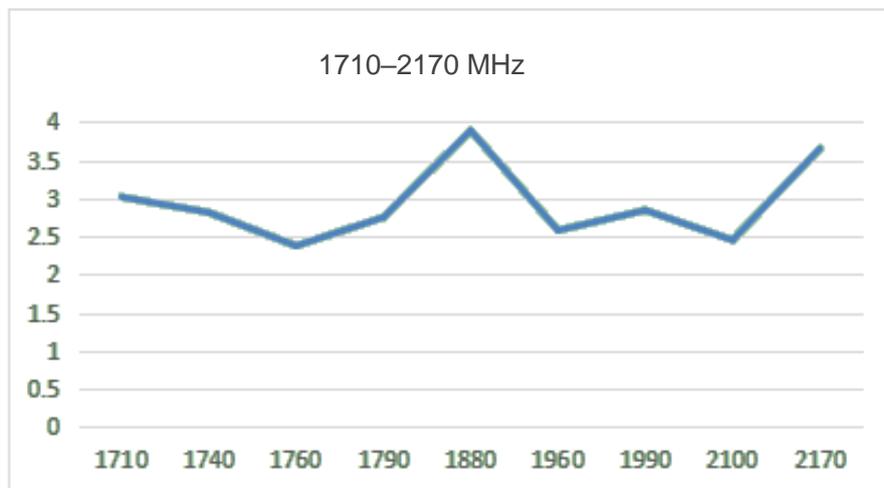
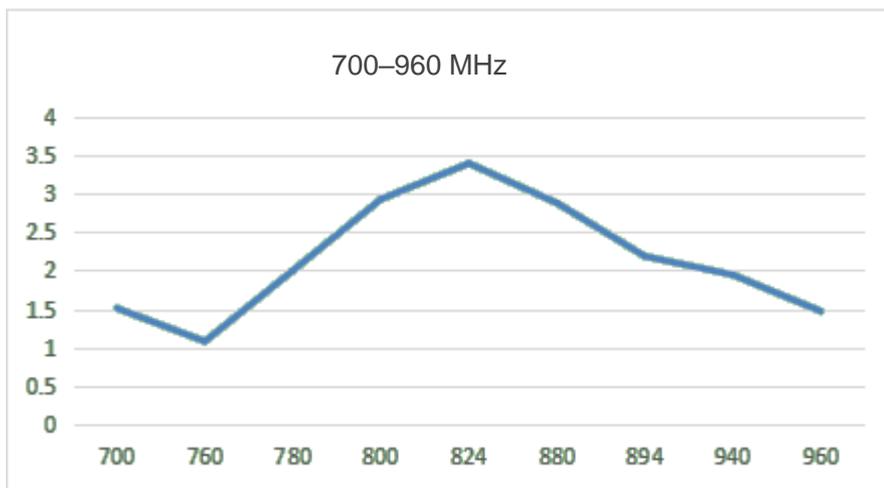
Frequency (MHz)	700	824	960	1710	1990	2170	2300	2500	2690
VSWR	2.4	1.2	2.5	1.9	1.8	1.7	1.6	1.8	1.5

4.3. Efficiency



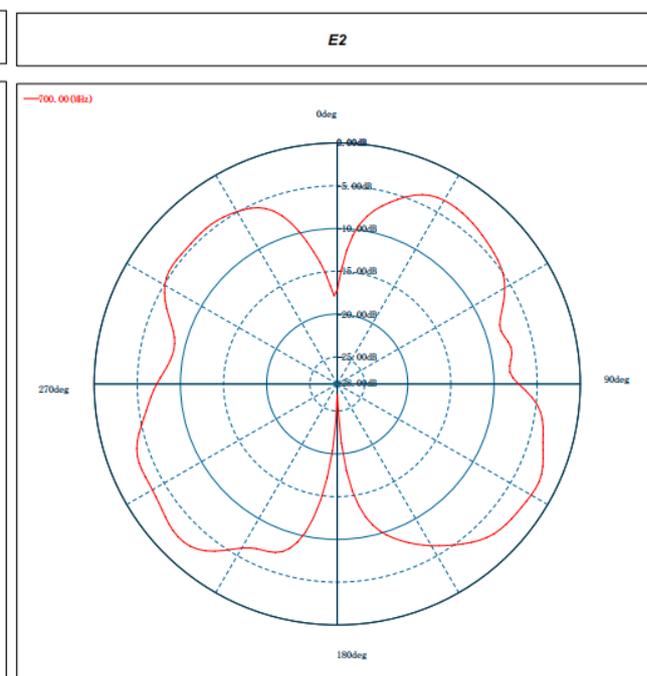
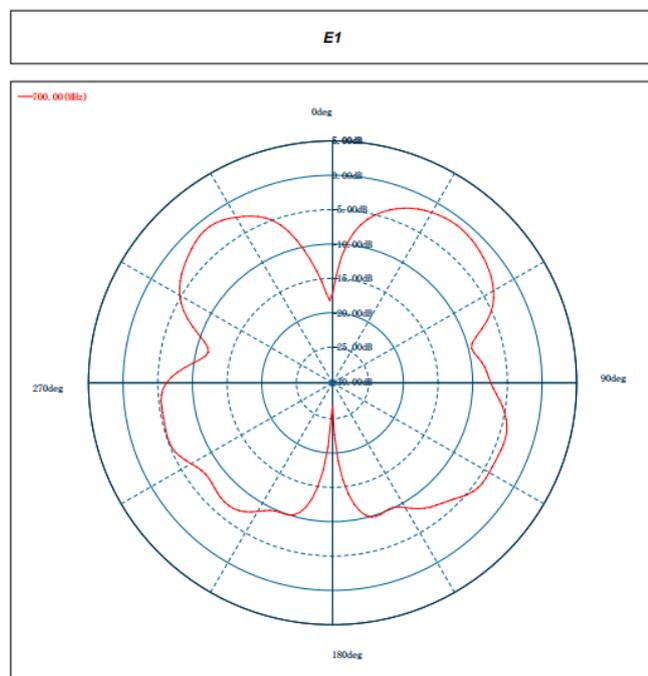
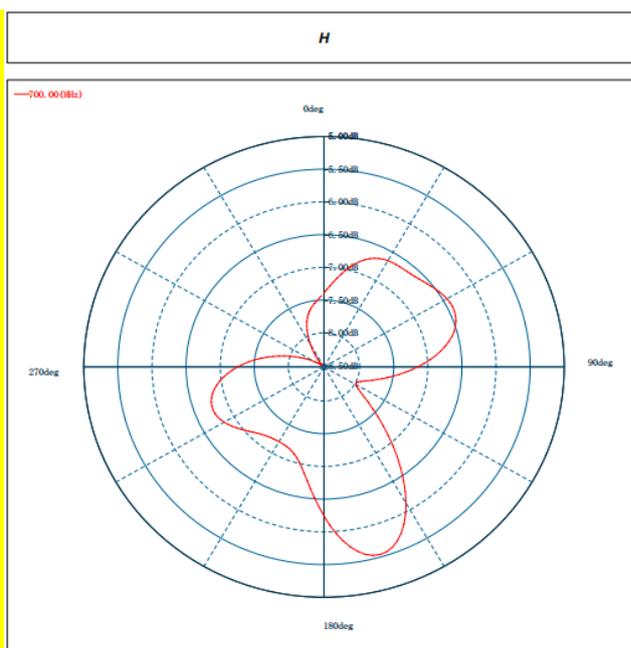
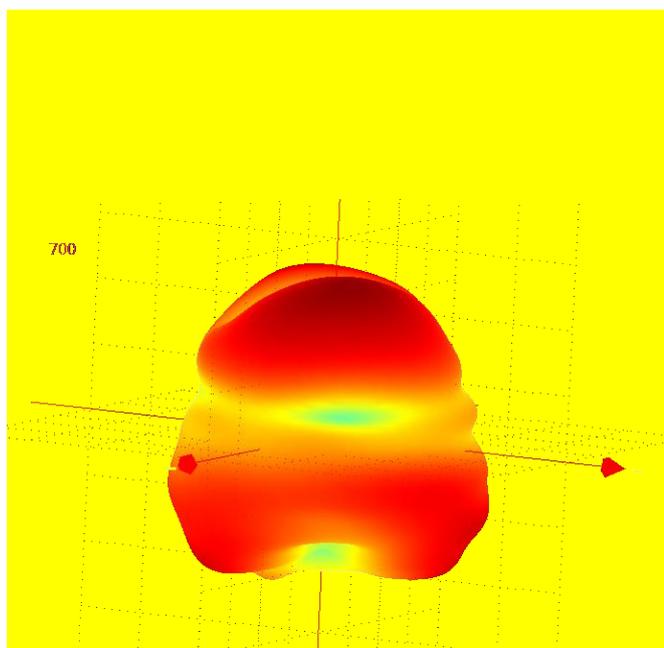
Frequency (MHz)	700	880	960	1710	1880	2170	2300	2500	2700
Efficiency (%)	46	60	47	47	56	50	50	40	49

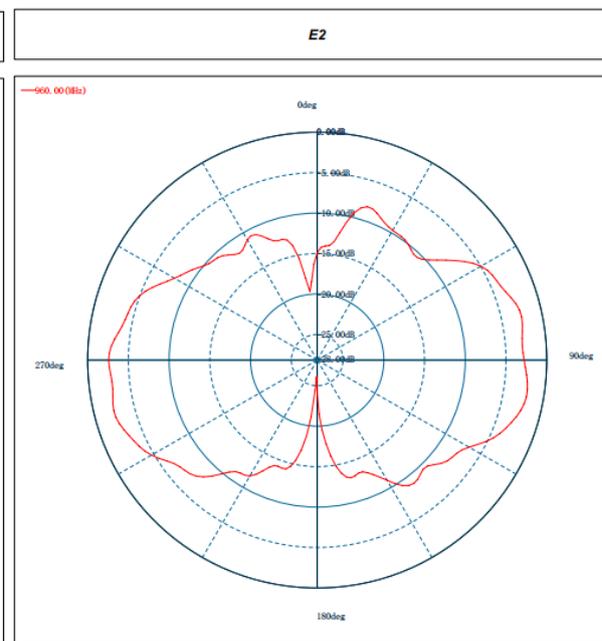
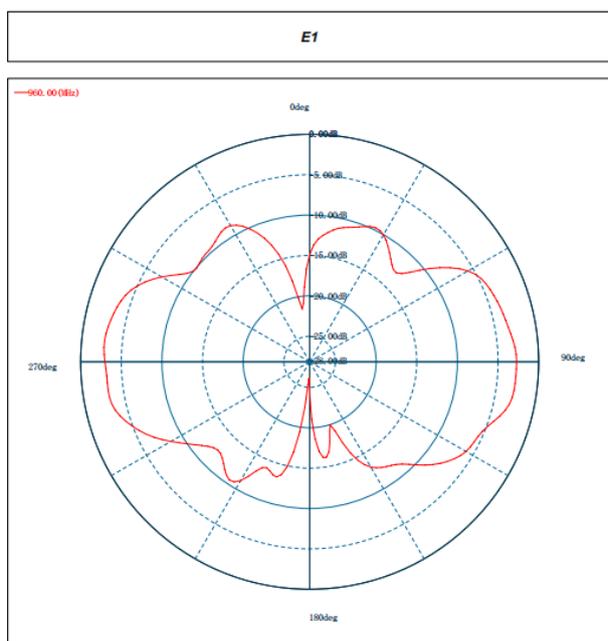
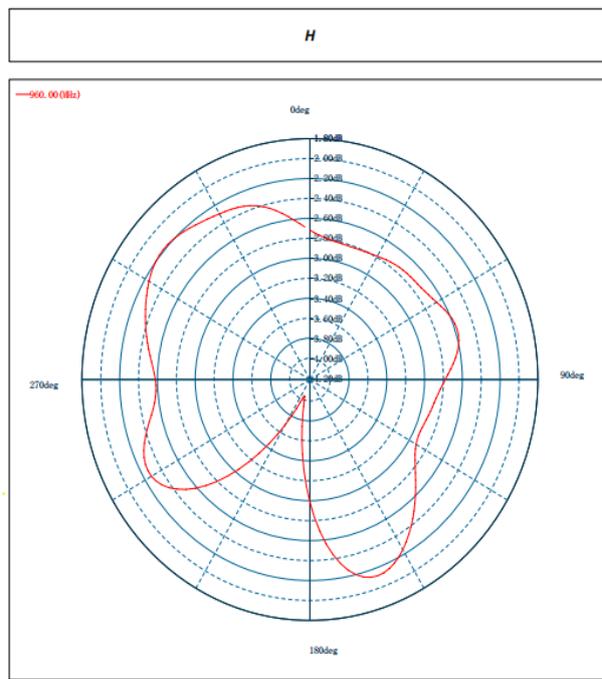
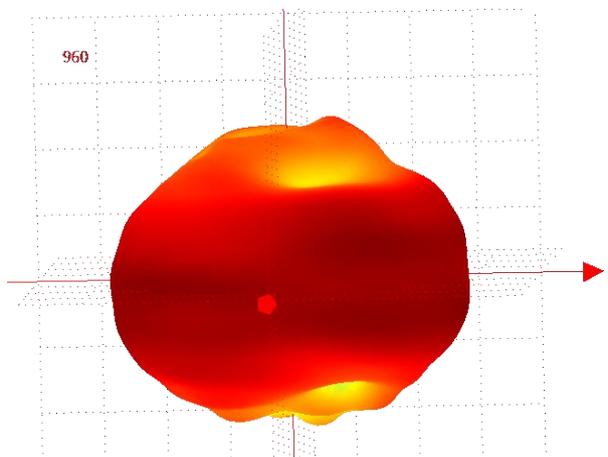
4.4. Gain

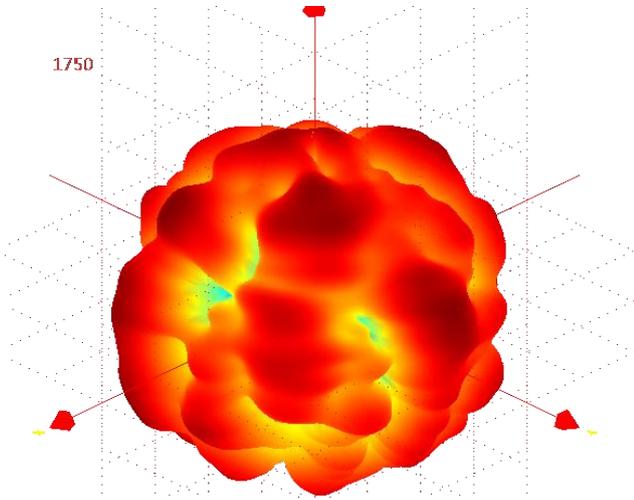


Frequency (MHz)	700	880	960	1710	1880	2170	2300	2500	2700
Gain	1.5	2.8	1.4	3.0	3.8	3.6	3.2	2.2	4.3

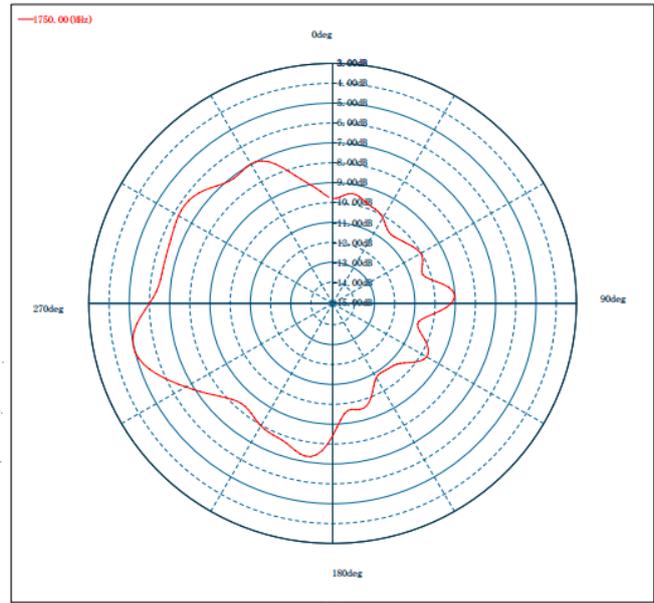
4.5. Radiation Patterns



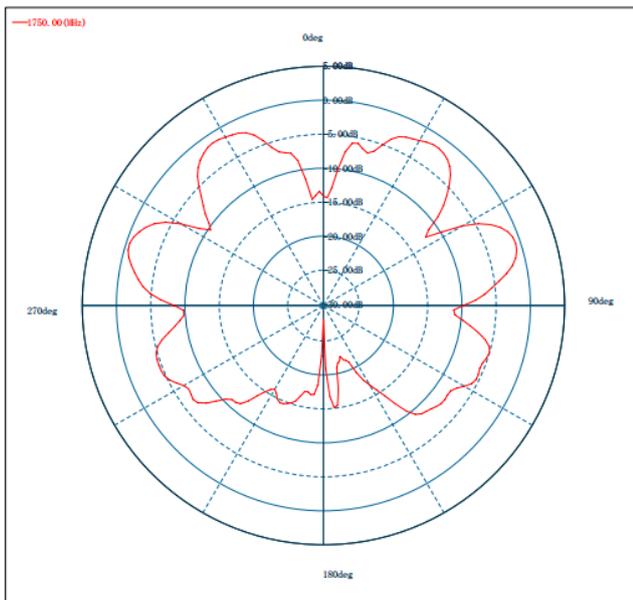




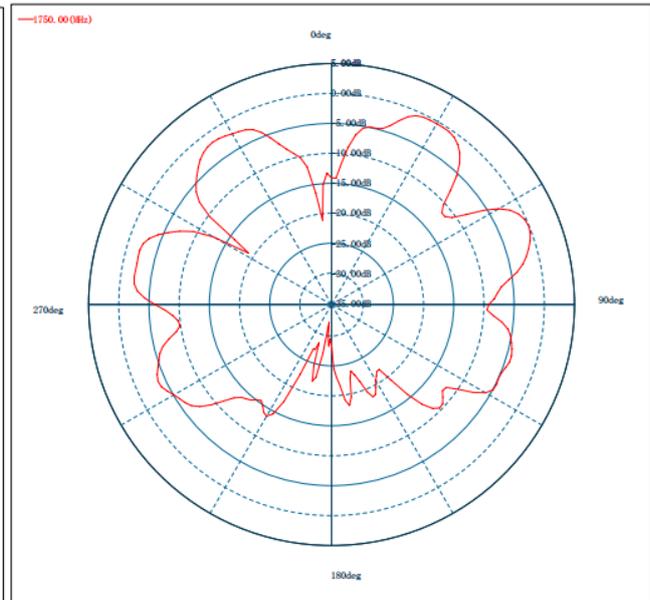
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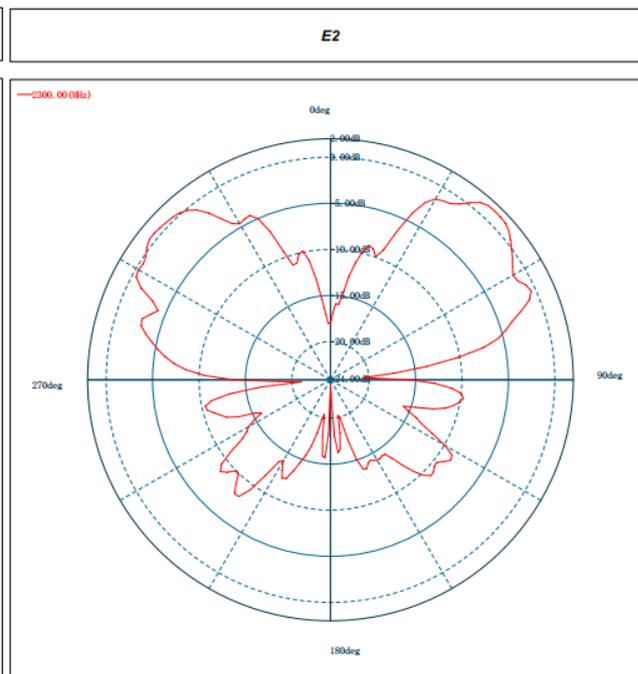
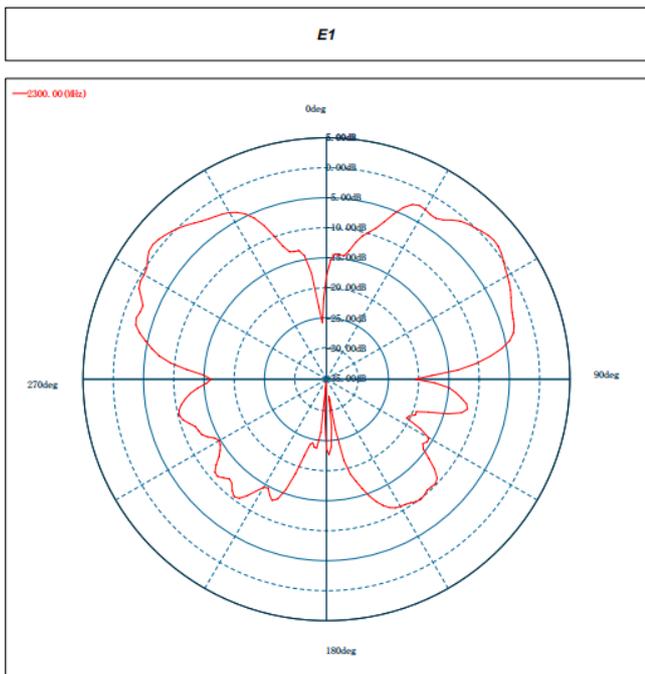
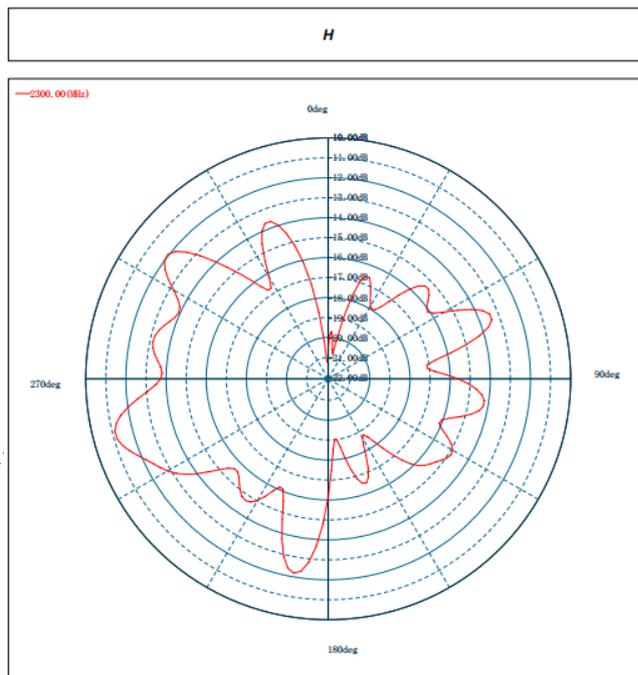
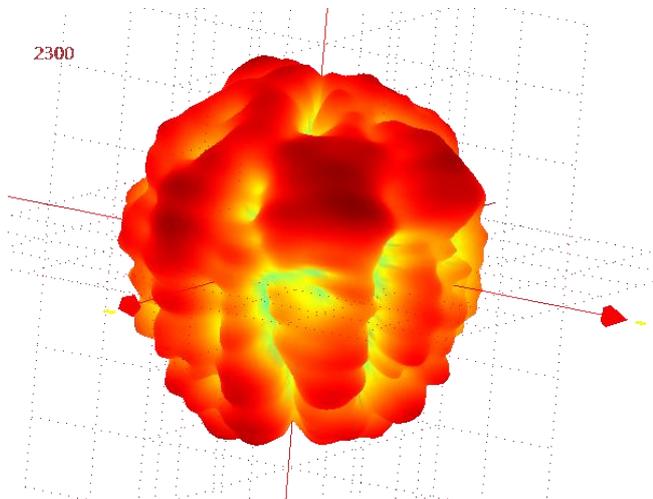


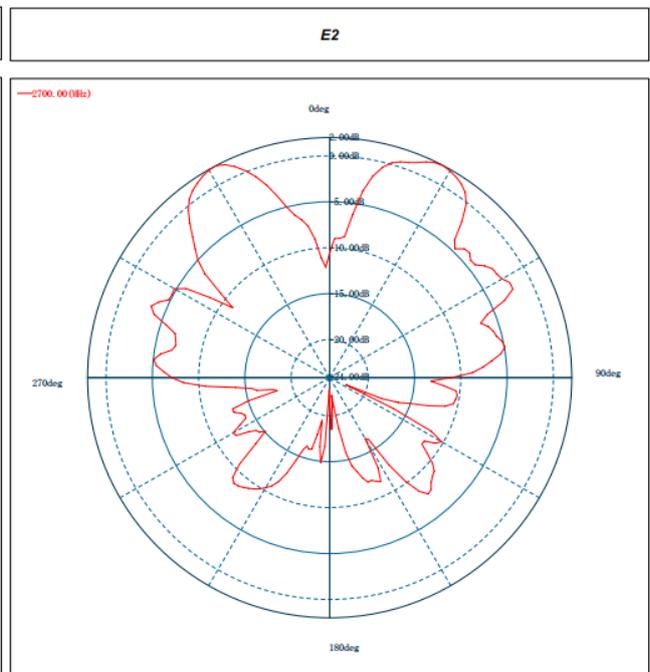
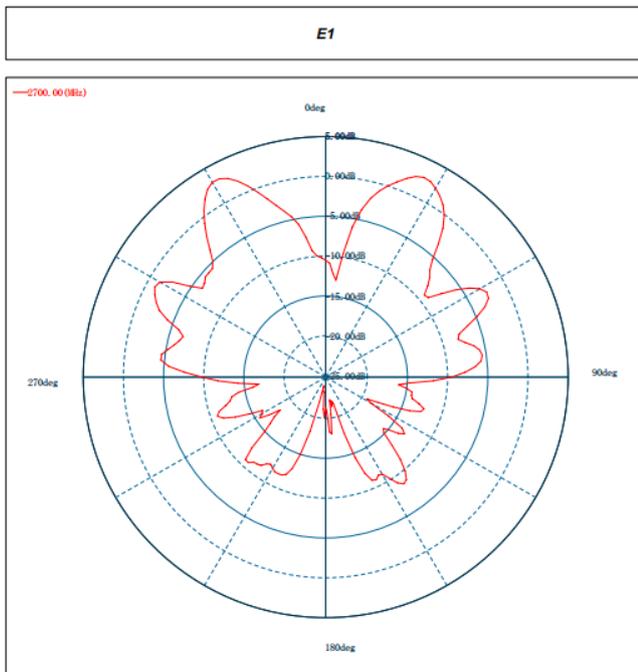
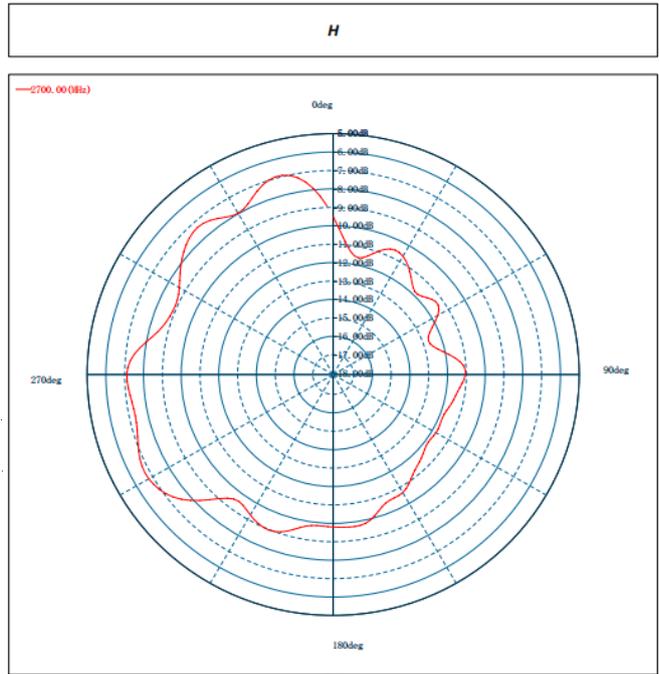
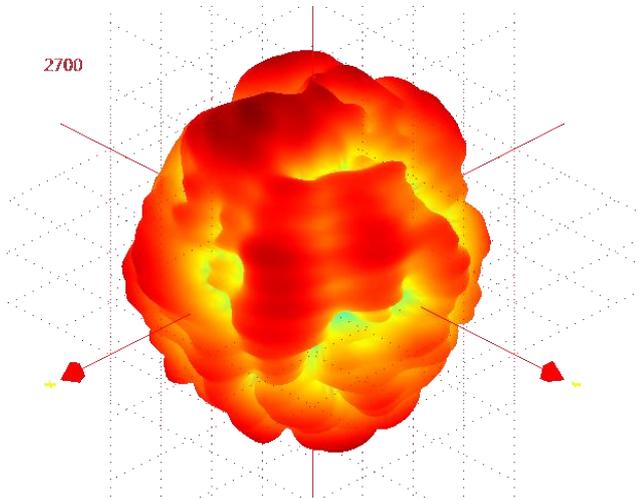
E1



E2







5 Product Size

