

Antenna

YE0002AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-06-10	Kenny YIN	Initial
1.1	2020-12-11	Kenny YIN	Updated the antenna image in Chapter 2.
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 LTE
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	699–2700 MHz
Input Impedence	50 Ω
VSWR	≤ 3.0
Gain	≤ 3 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	174.6 mm \times 19.2 mm
Casing	ABS + PC
Connector Type	RP-SMA Male (center receptacle)
Working Temperature	-20 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	White
IP rating	IP65

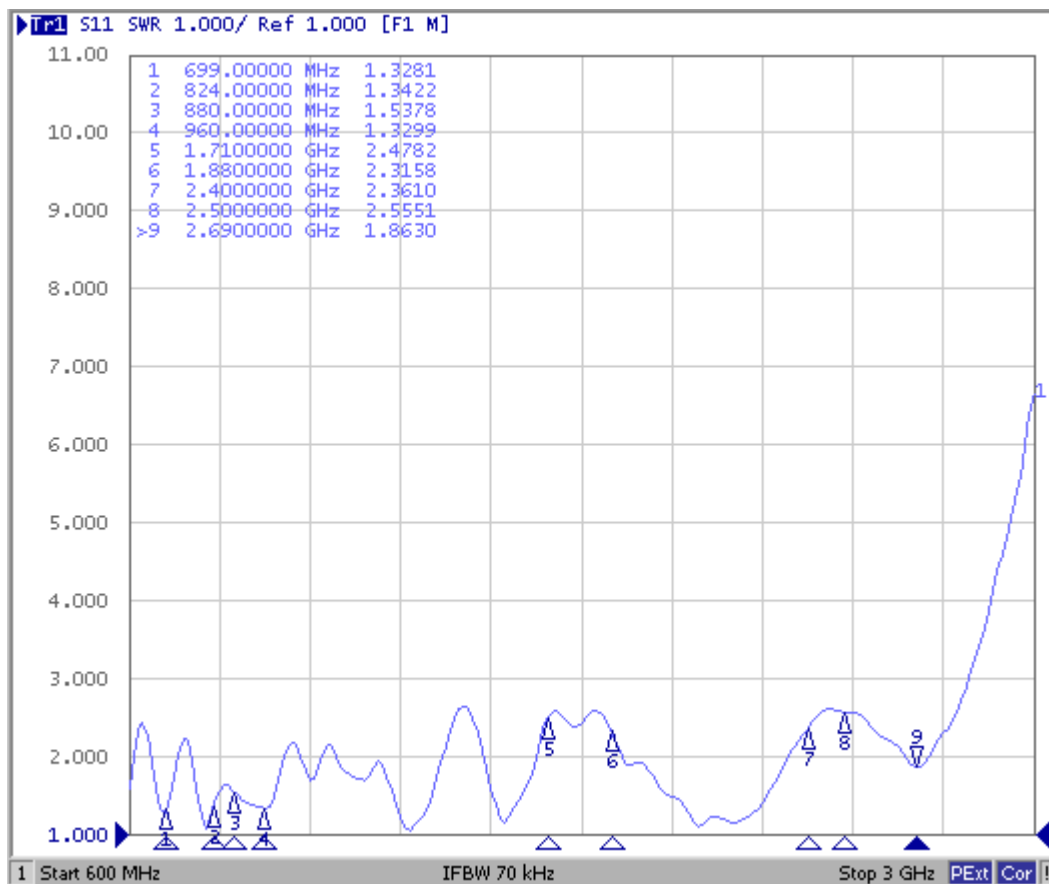
4 Overall Performance

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.

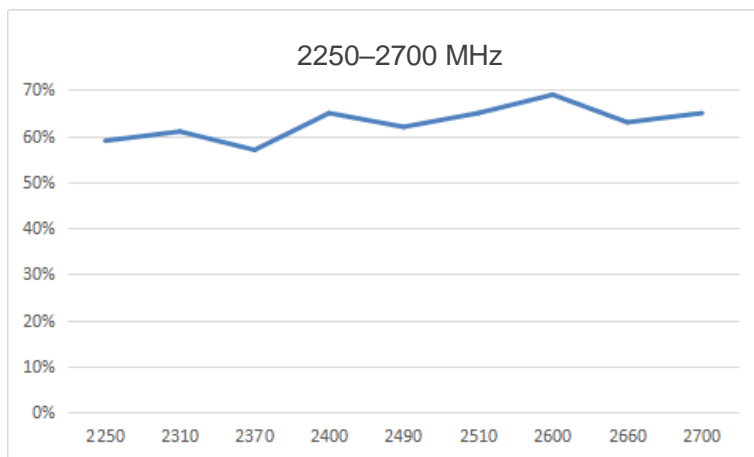
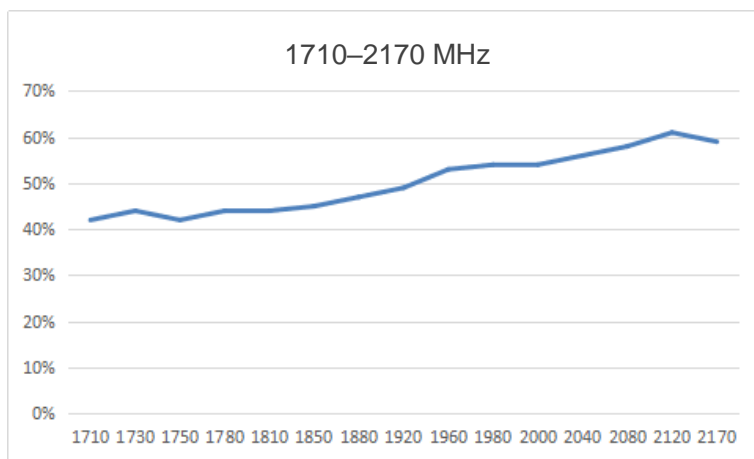
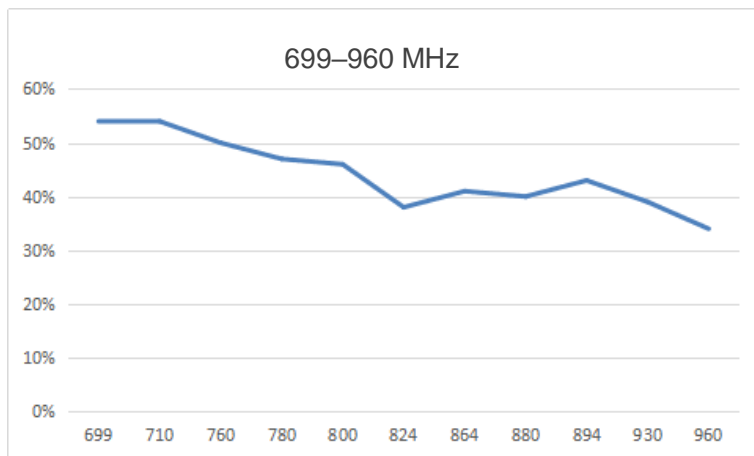


4.2 VSWR



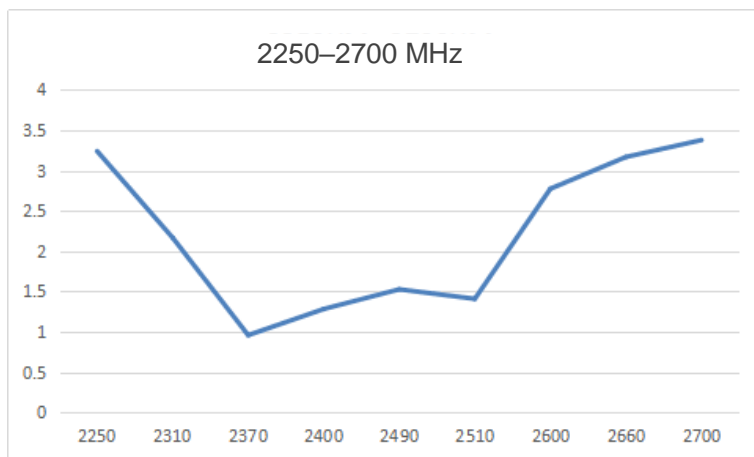
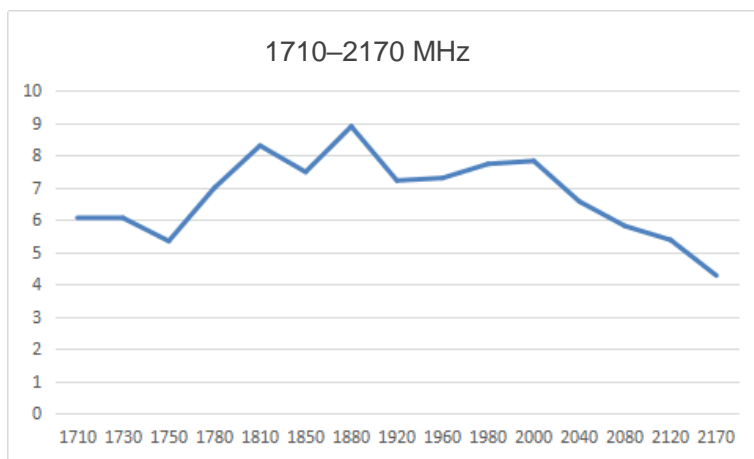
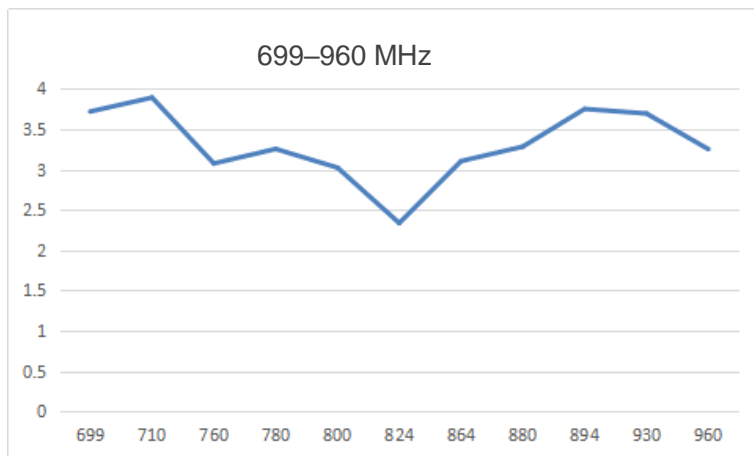
Frequency (MHz)	699	824	880	960	1710	1880	2400	2500	2690
VSWR	1.3	1.3	1.5	1.3	2.4	2.3	2.3	2.5	1.8

4.3 Efficiency



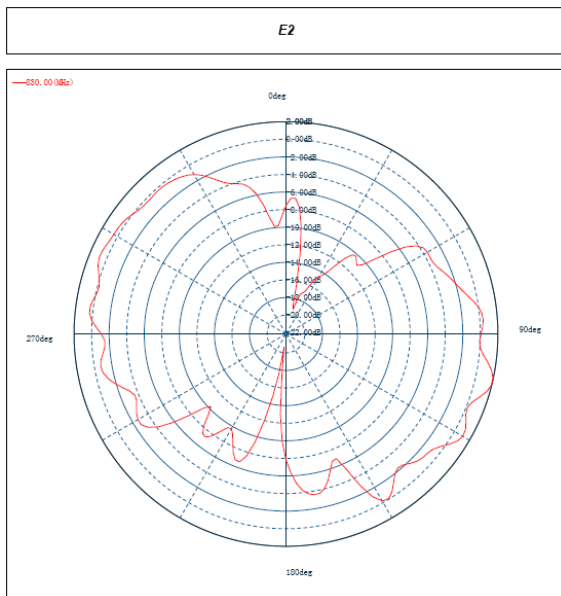
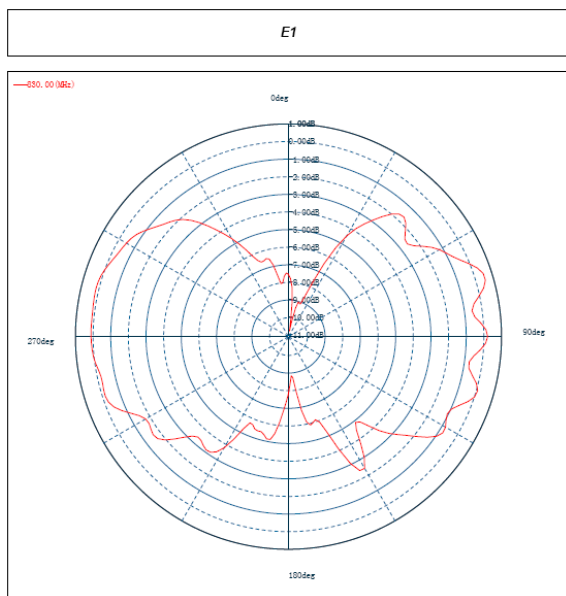
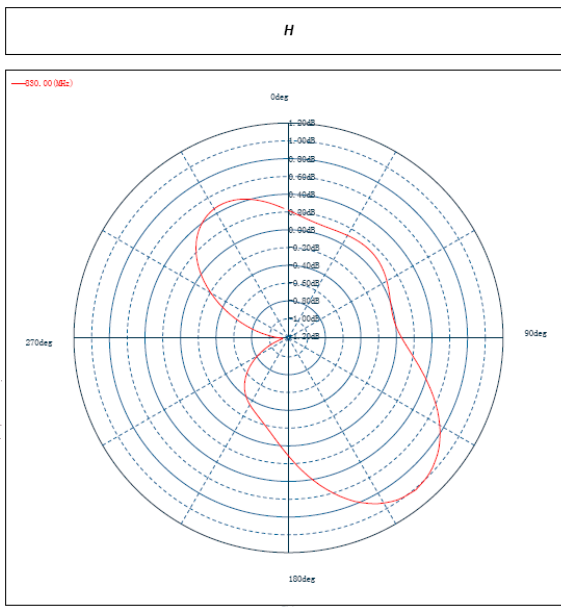
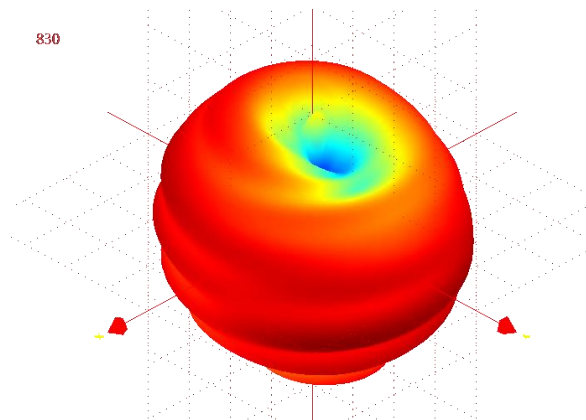
Frequency (MHz)	699	824	880	960	1710	1990	2170	2500	2690
Efficiency (%)	54	38	40	33	42	53	59	65	66

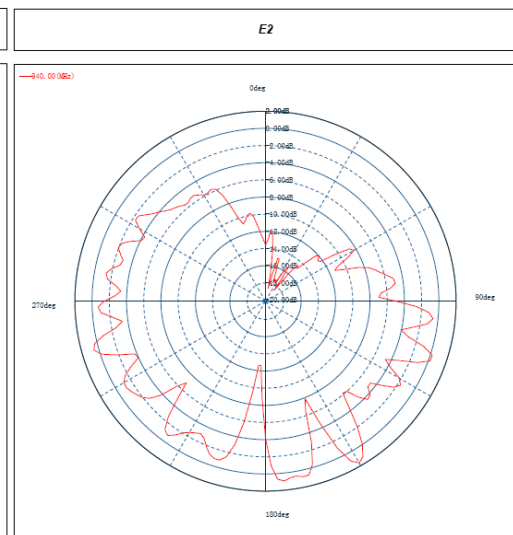
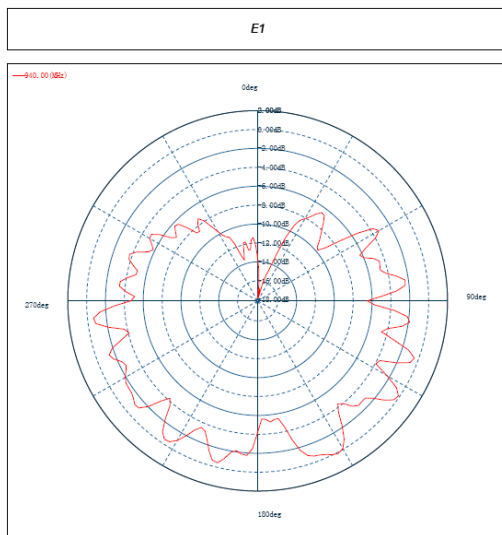
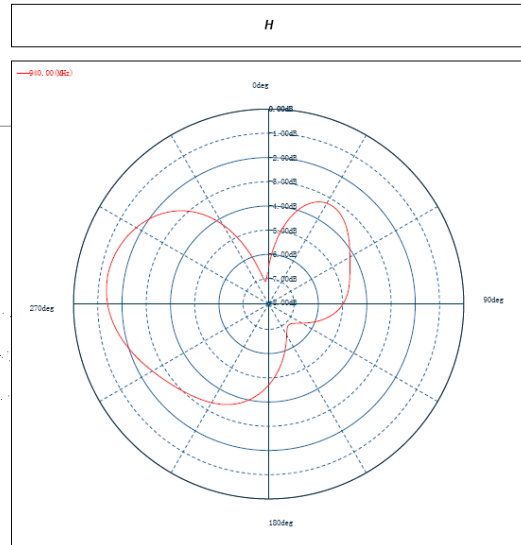
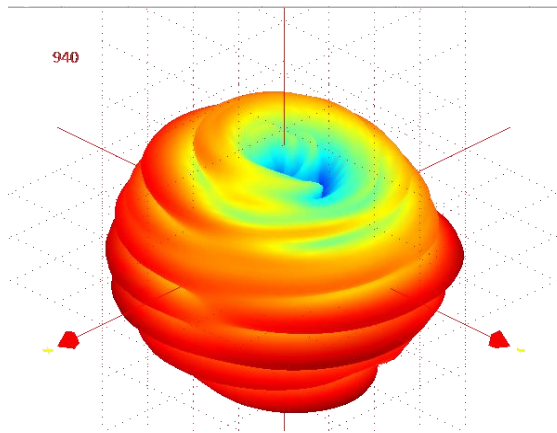
4.4 Gain

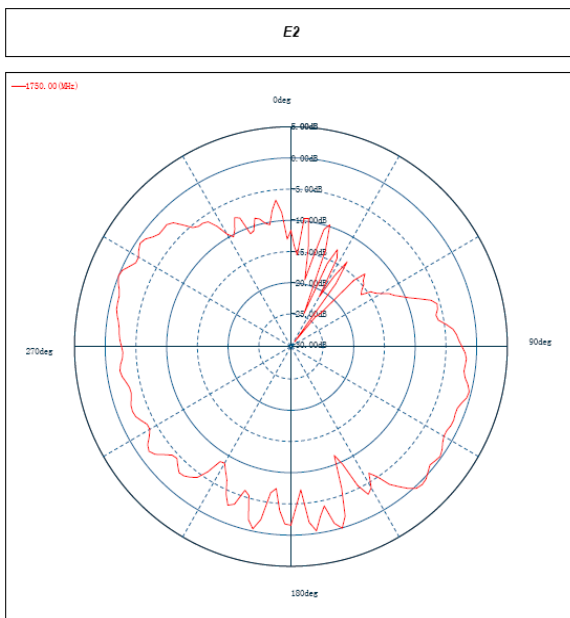
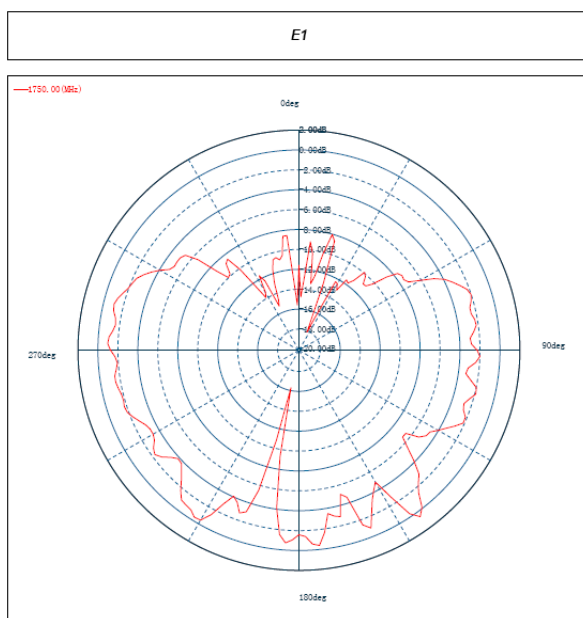
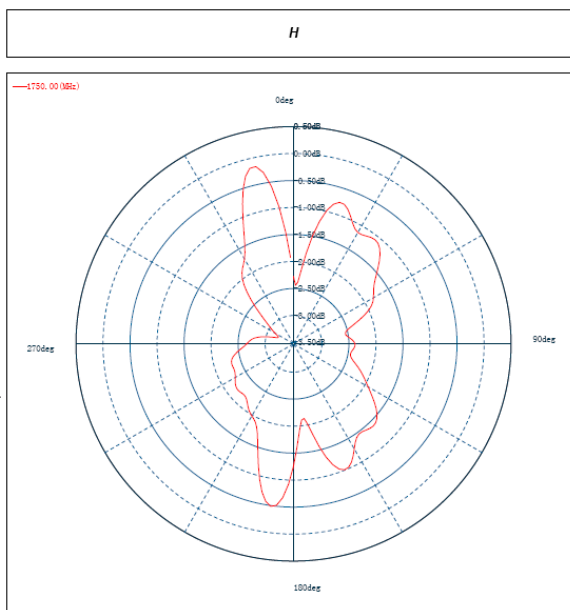
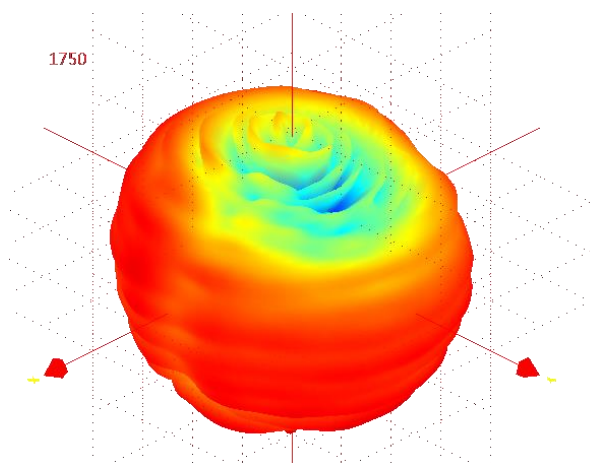


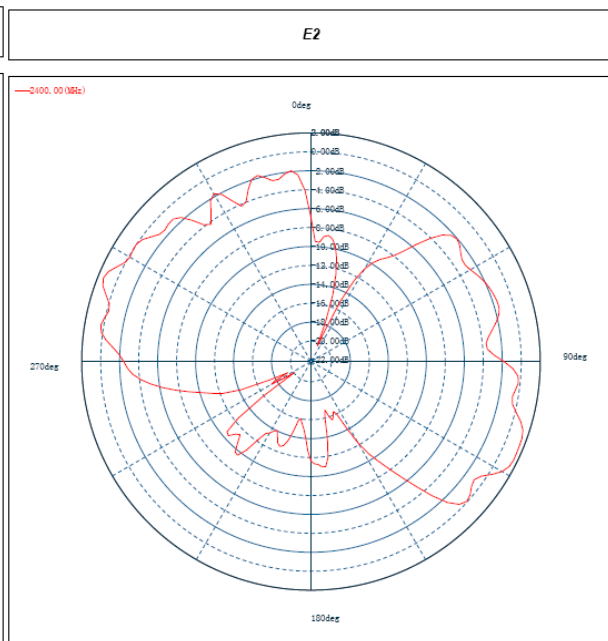
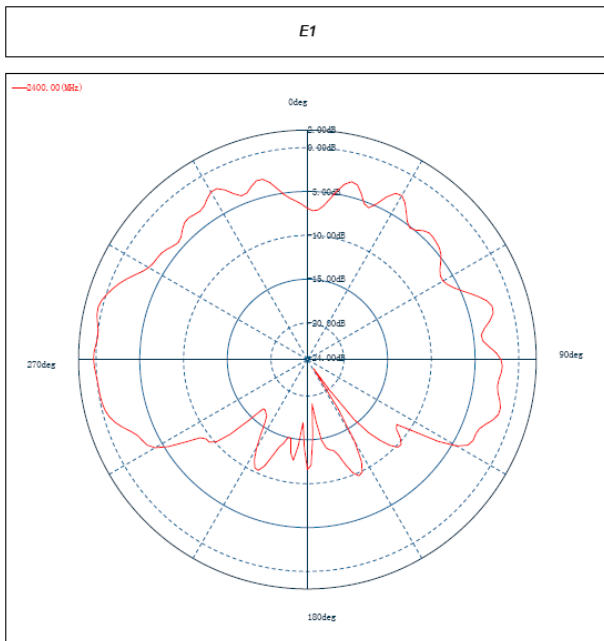
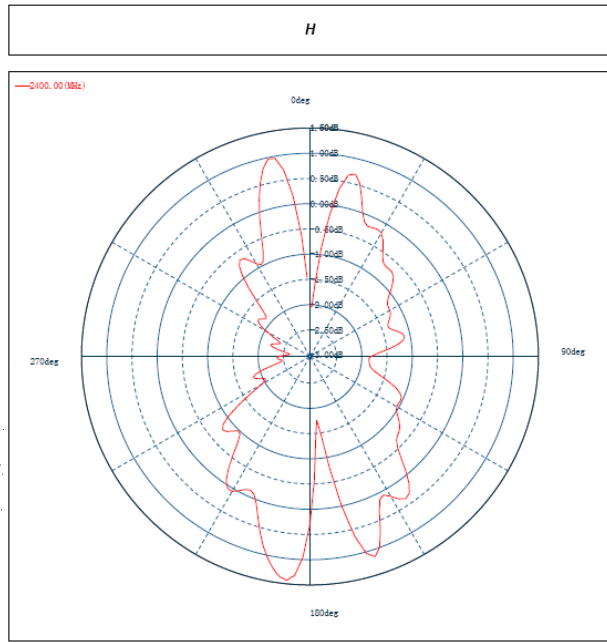
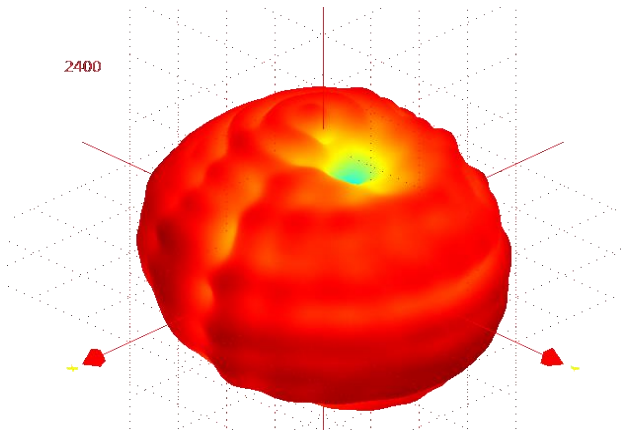
Frequency (MHz)	699	824	880	960	1710	1990	2170	2500	2690
Gain	3.7	2.3	3.2	3.1	6.0	7.8	4.2	1.4	3.1

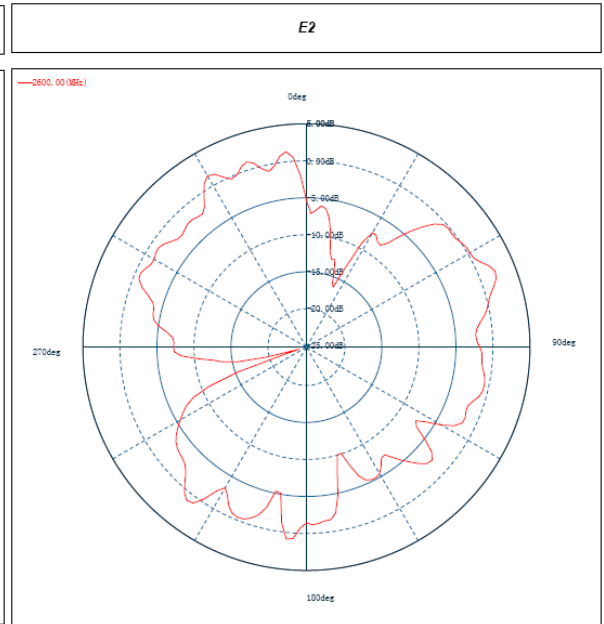
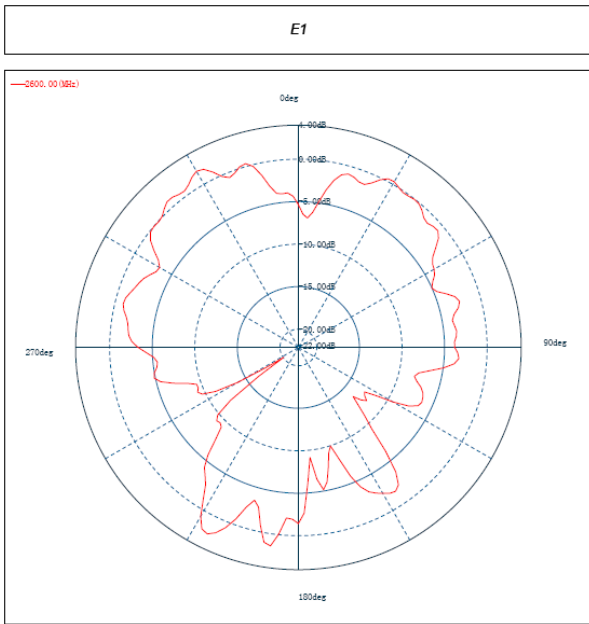
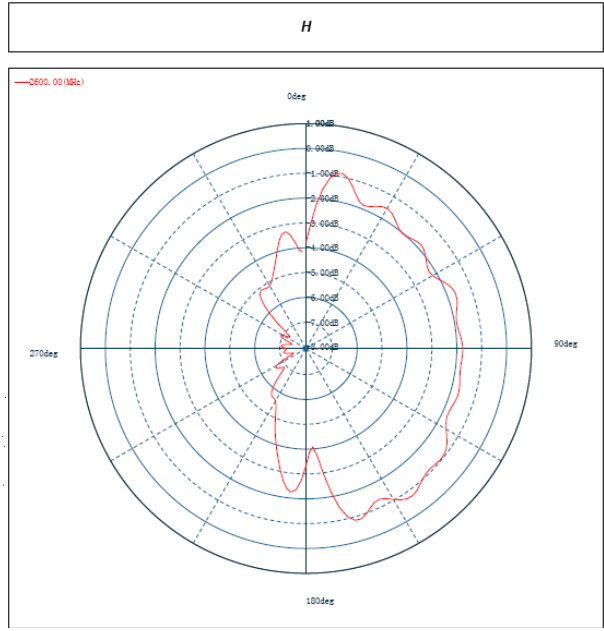
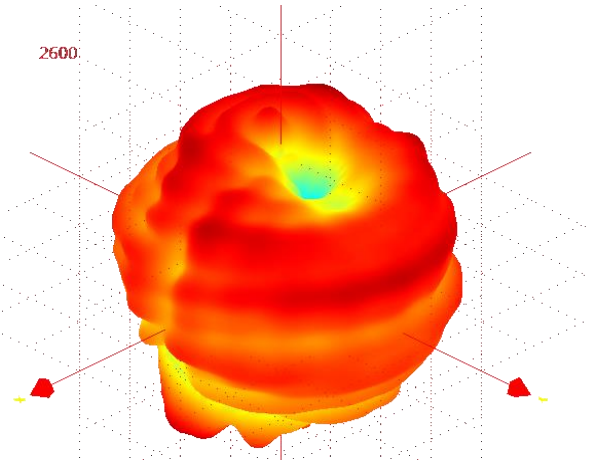
4.5 Radiation Patterns











5 Product Size

