

Antenna

YE0029AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
-	2020-12-15	Kenny YIN	Creation of the document
1.0	2020-12-15	Kenny YIN	First official release
1.1	2020-12-16	Kenny YIN	Updated pictures of the product.
1.2	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	≤ 2
Polarization Type	Linear

Mechanical Specifications

Antenna Size	88 mm \times Φ 30 mm, LMR100, Length = 3000 mm
Casing	ABS
Connector Type	SMA Male (center pin)
Working Temperature	-40 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	Black
Installation method	Magnet
IP rating	IP65

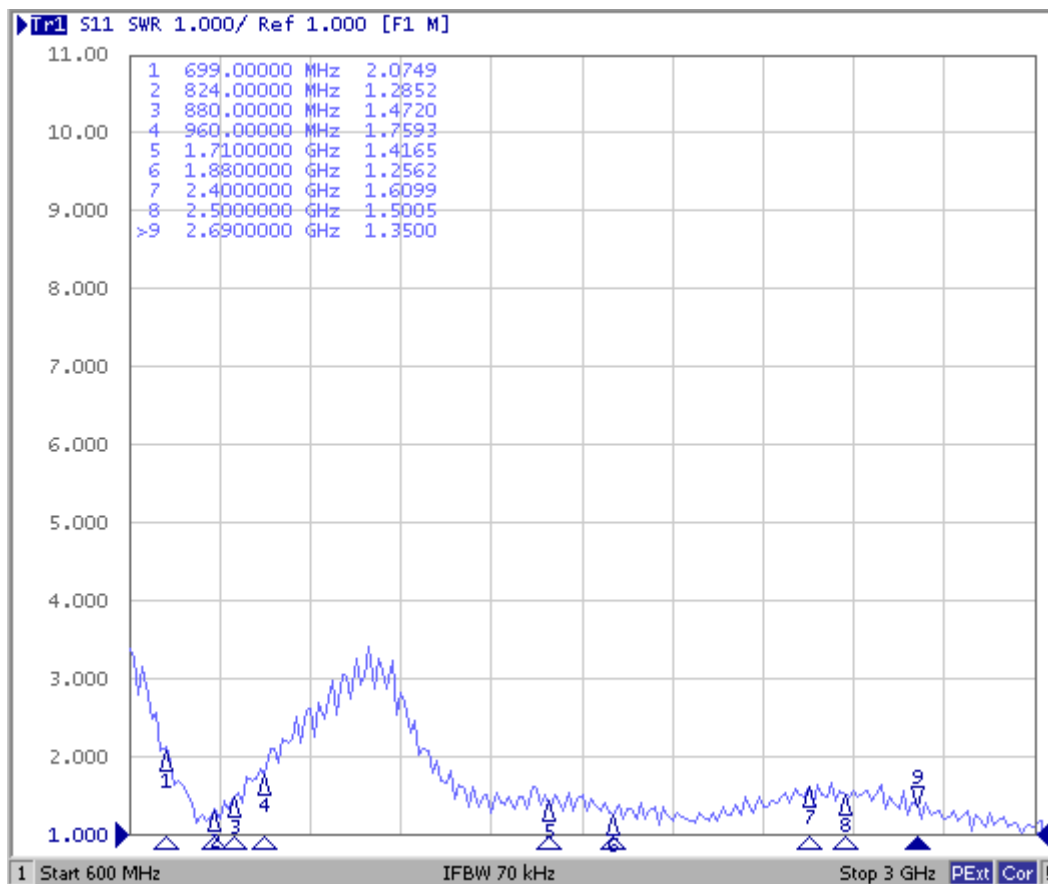
4 Overall Performance

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.

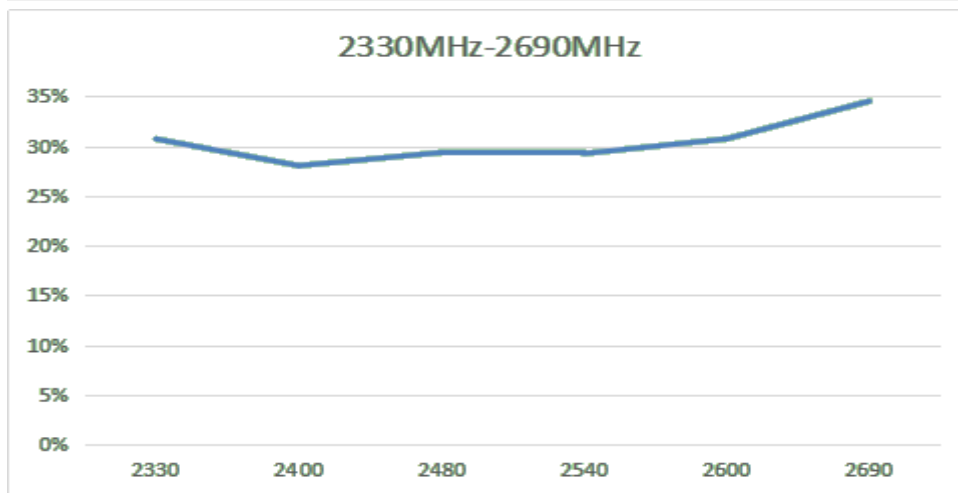
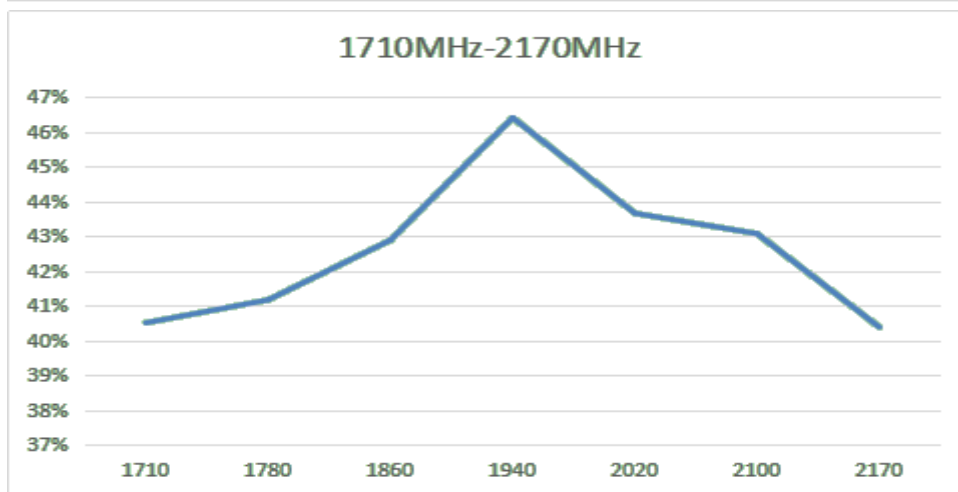
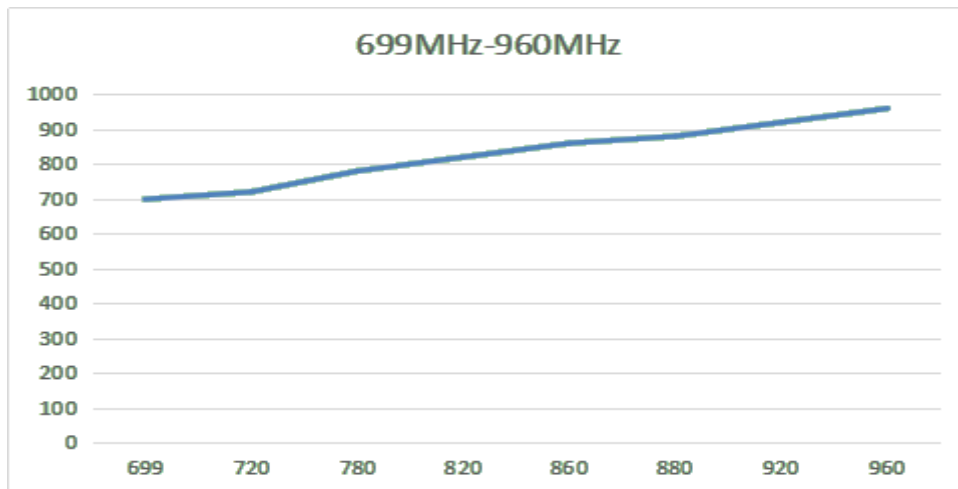


4.2. VSWR



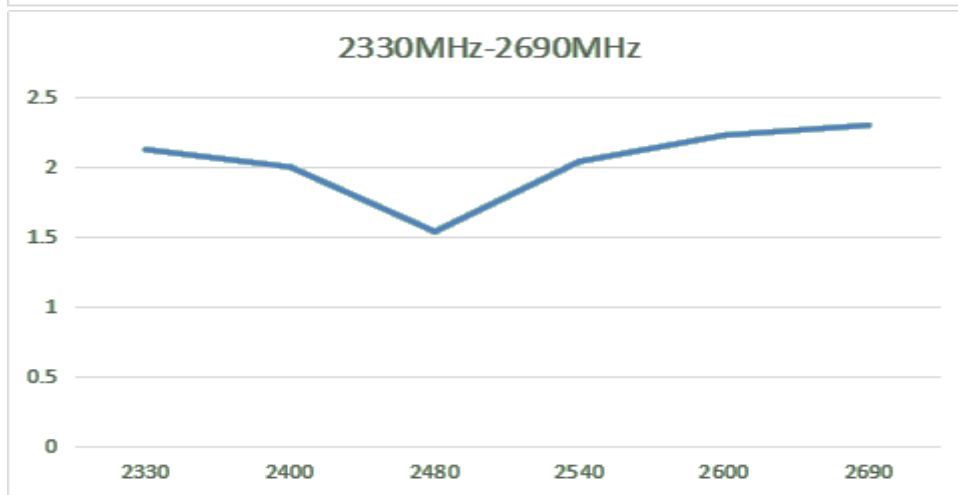
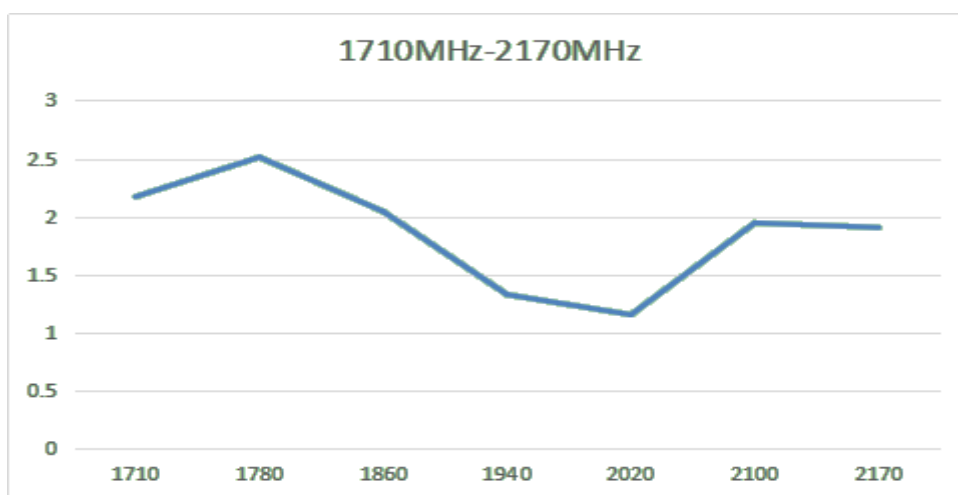
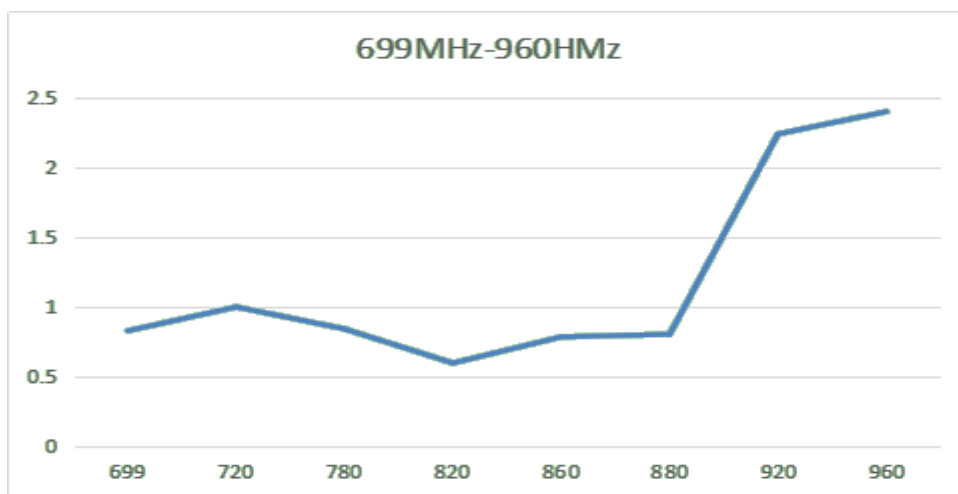
Frequency (MHz)	699	824	880	960	1710	1880	2500	2690
VSWR	2.0	1.2	1.4	1.7	1.4	1.2	1.5	1.3

4.3. Efficiency



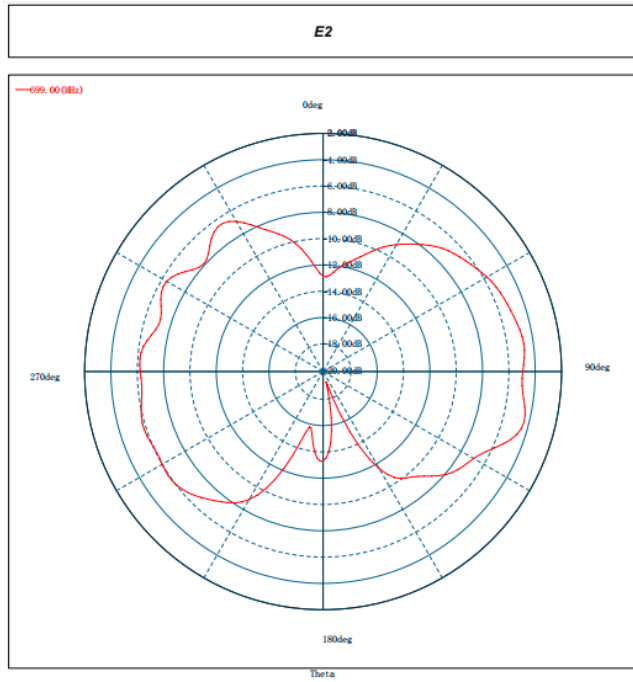
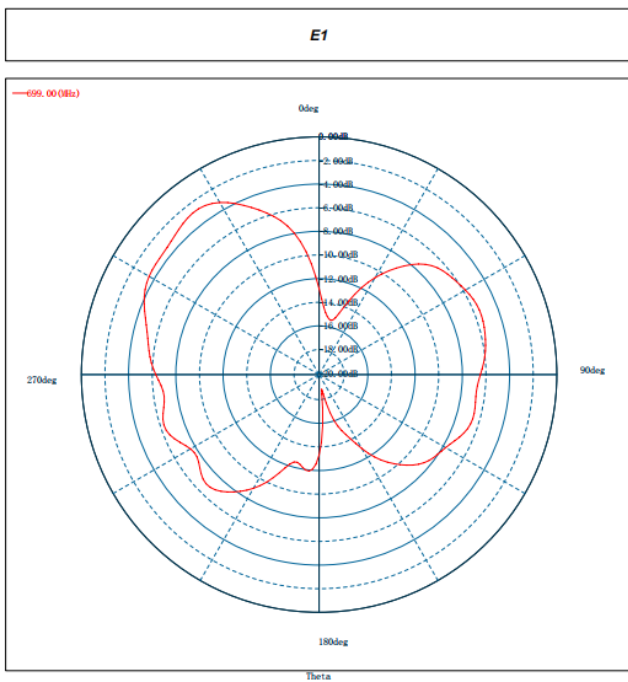
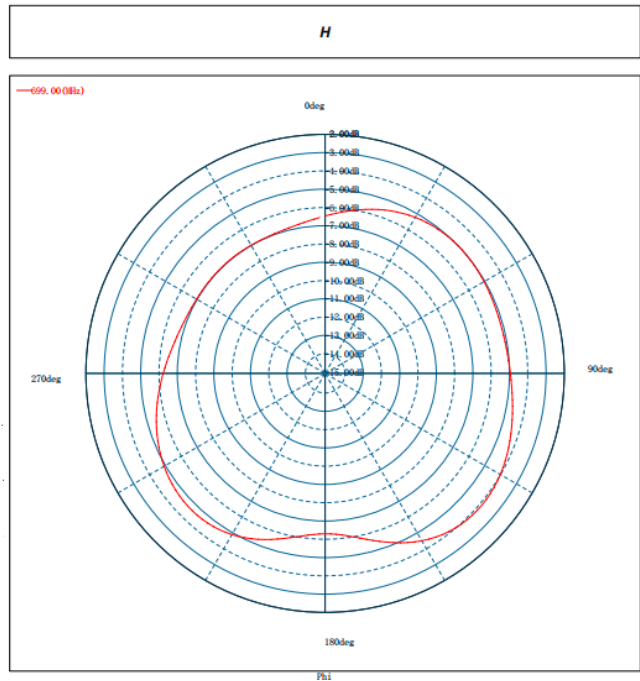
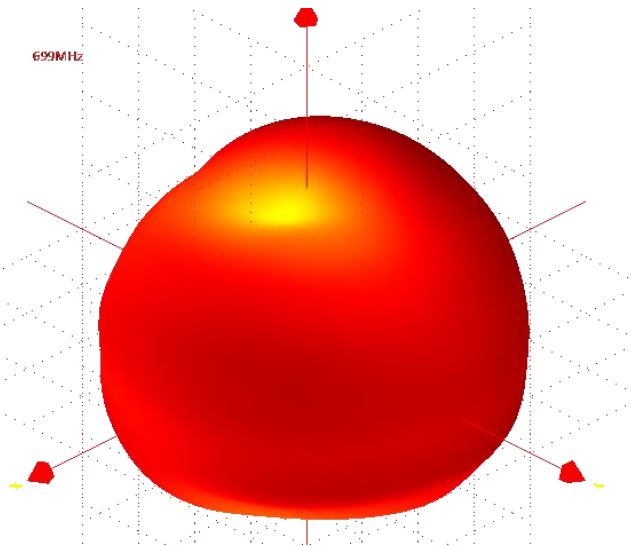
Frequency (MHz)	699	824	880	960	1710	1880	2500	2690
Efficiency (%)	24%	47%	47%	36%	41%	43%	29%	35%

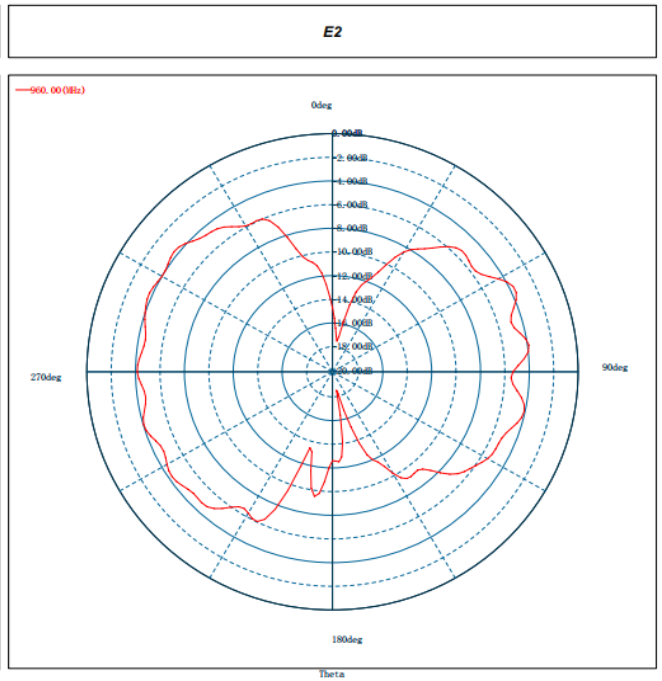
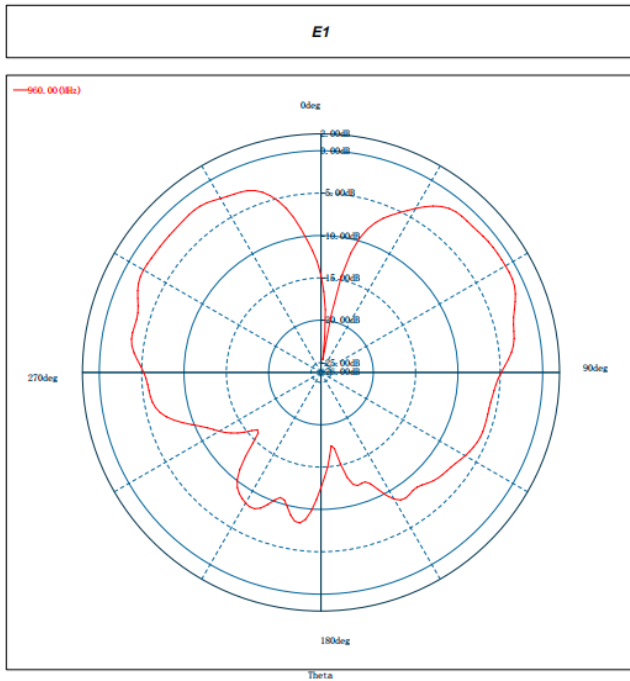
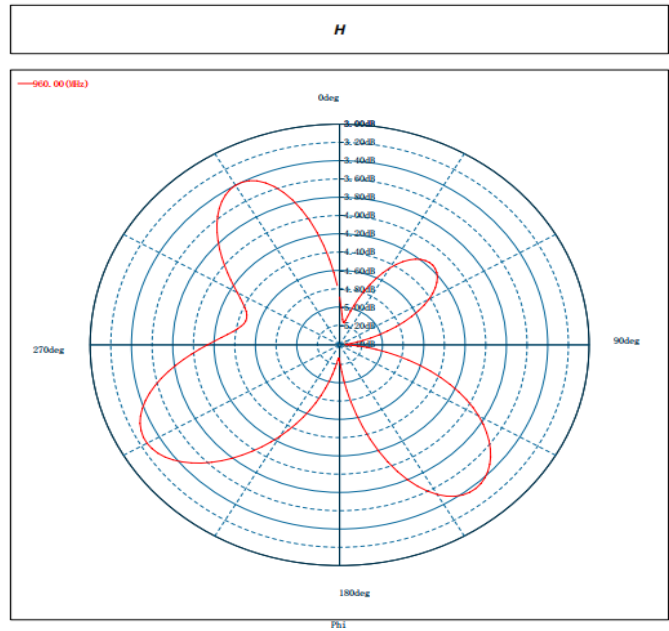
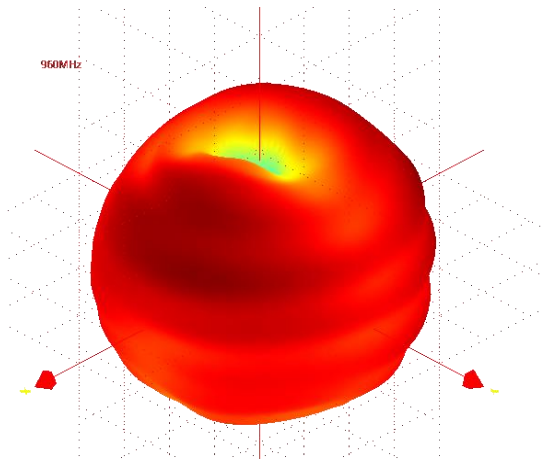
4.4. Gain

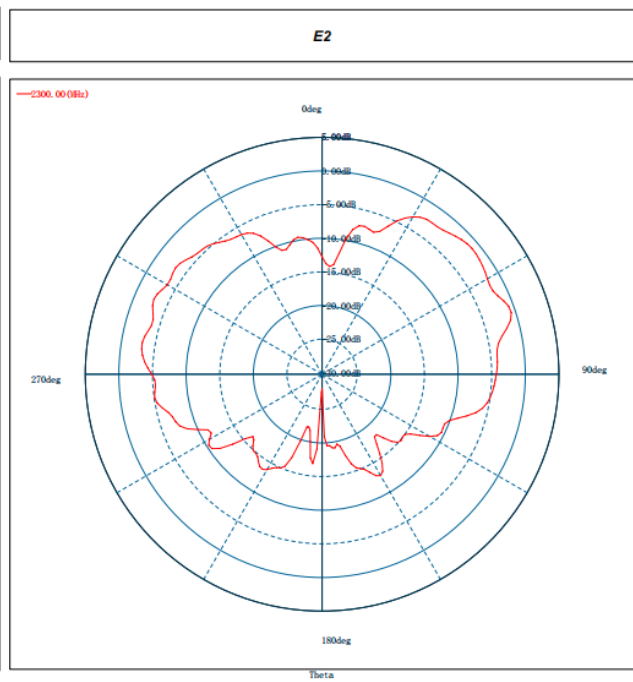
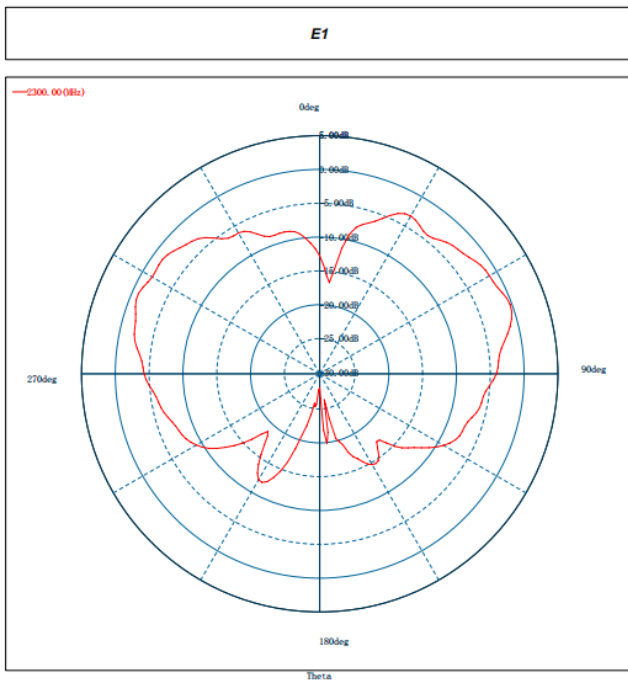
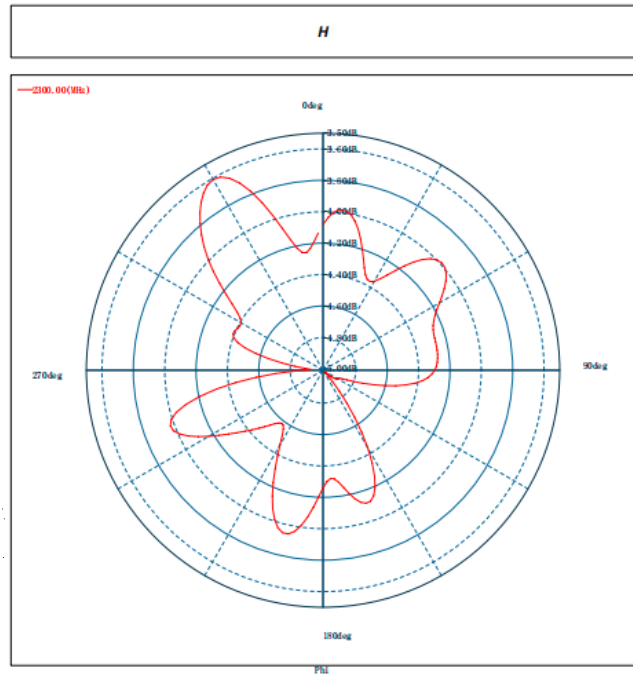
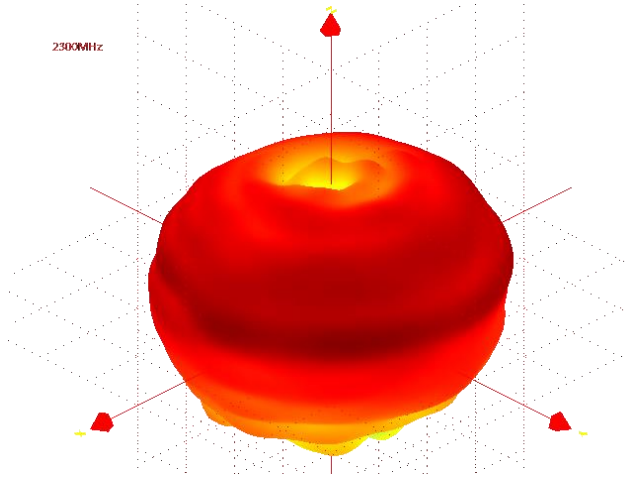


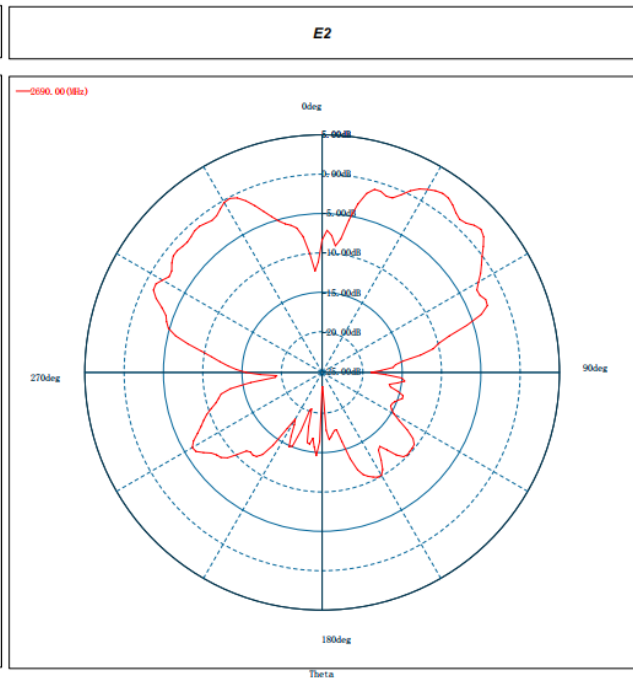
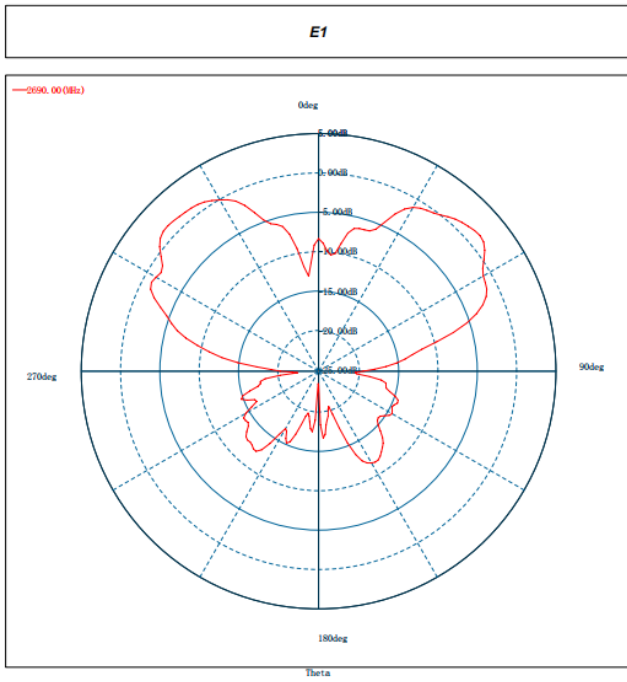
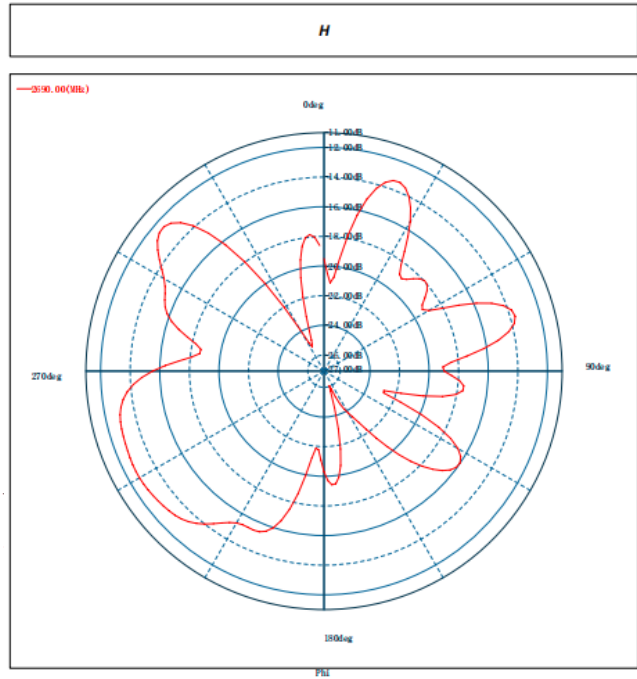
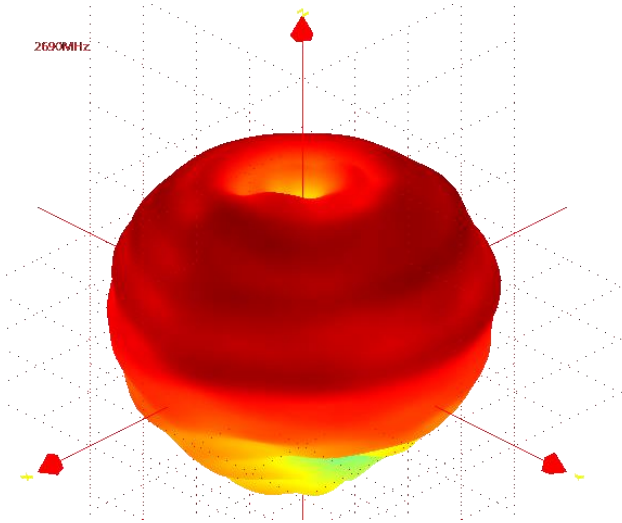
Frequency (MHz)	699	824	880	960	1710	1880	2500	2690
Gain (dBi)	0.8	0.5	0.8	2.4	2.1	2.0	1.5	2.3

4.5. Radiation Patterns









5 Product Size

