

Antenna

YE0039BA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2020-12-28	Kenny YIN	Creation of the document
1.0	2020-12-28	Kenny YIN	First official release

Contents

About the Document	3
Contents.....	4
1 Product Description.....	5
2 Product Features.....	5
3 Product Specifications	6
4 Overall Performance	7
4.1. Test Environment.....	7
4.2. VSWR.....	8
4.3. Efficiency	9
4.4. Gain.....	10
4.5. Radiation Patterns.....	11
5 Product Size	14

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

- 430–470 MHz & 790–960 MHz
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	430–470 MHz; 790–960 MHz
Input Impedance	50 Ω
VSWR	≤ 3.0
Gain	≤ 4 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	117 mm \times 21.81 mm \times 5.47 mm; RG178 Length = 75 mm
Casing	ABS
Connector Type	SMA Male (center pin)
Working Temperature	-20°C to +85°C
Protection Grade	IP66
Radome Color	Black
Installation Method	Adhesive

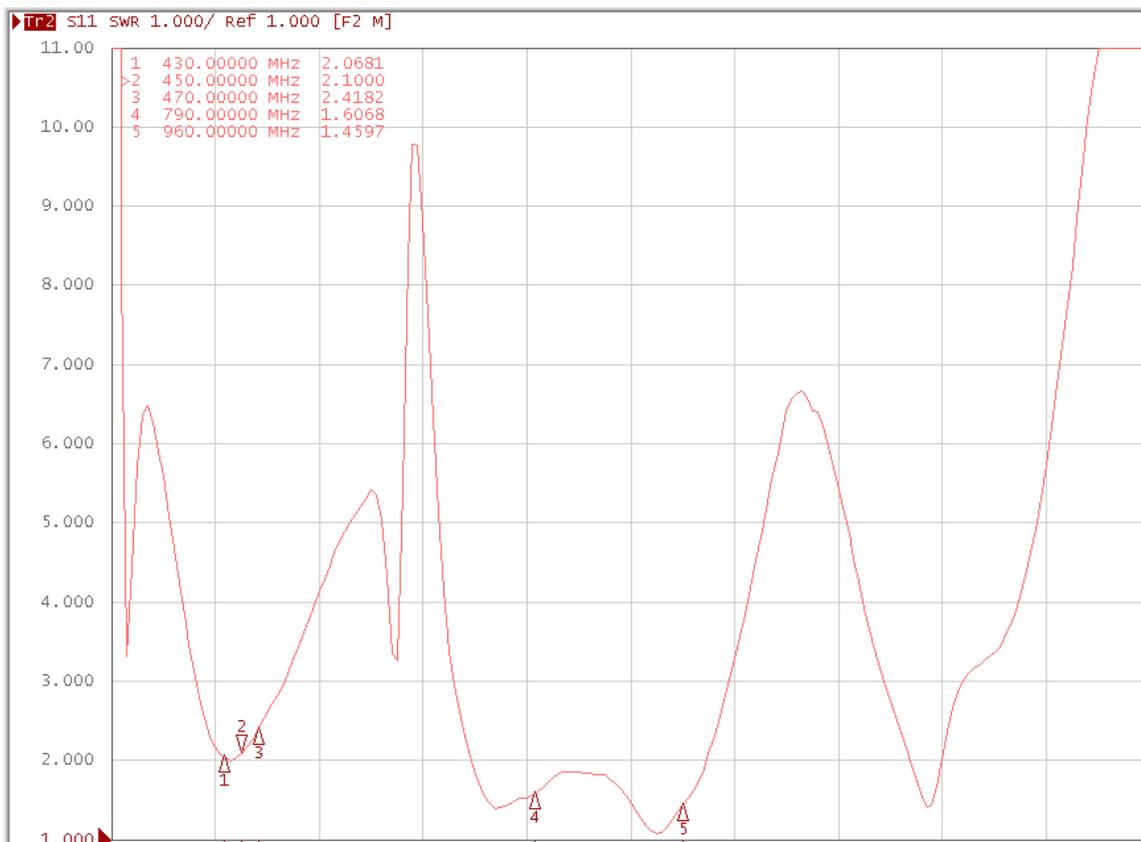
4 Overall Performance

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

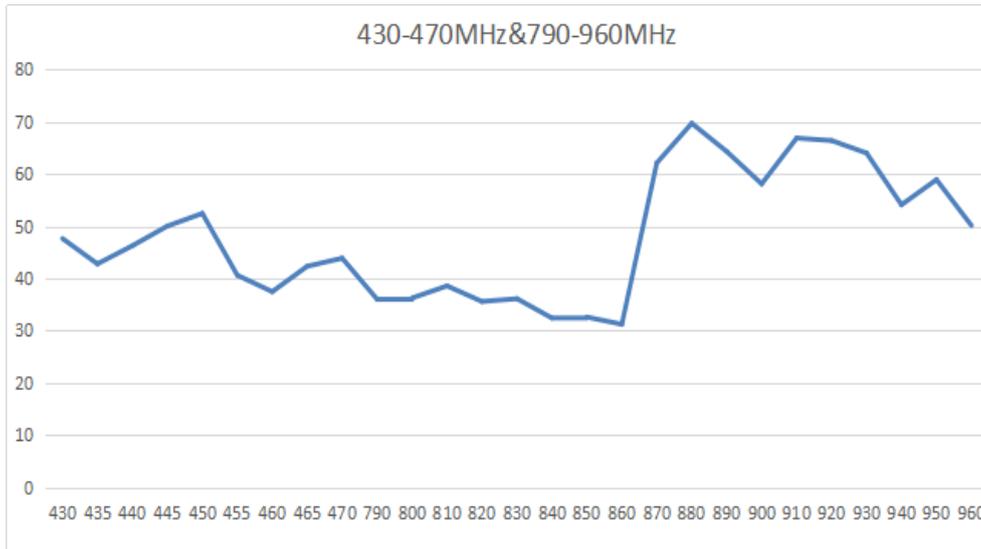


4.2. VSWR



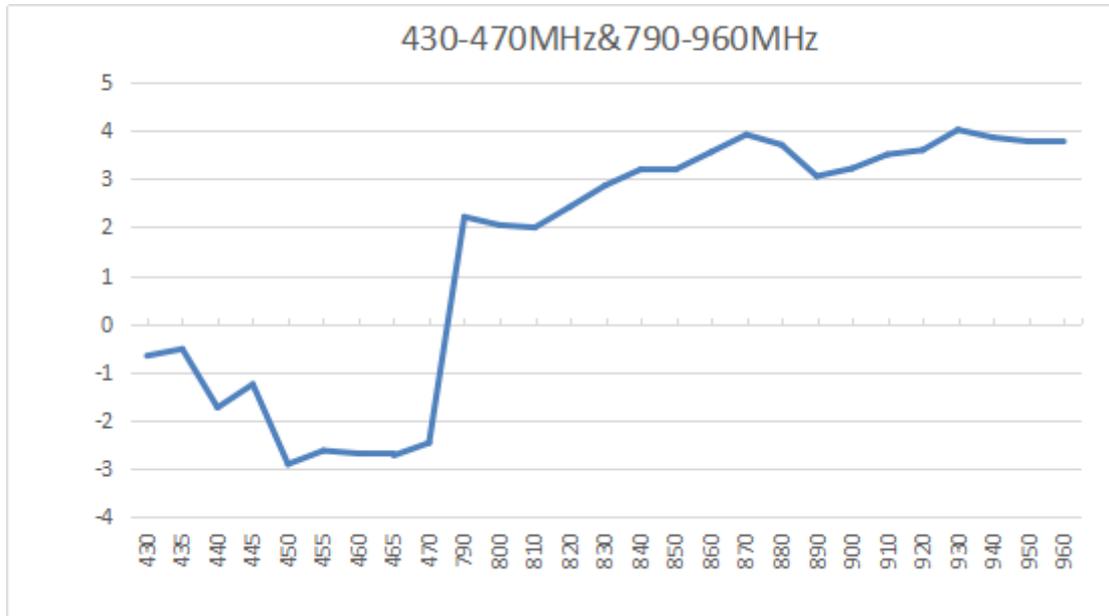
Frequency (MHz)	430	450	470	790	960
VSWR	2.07	2.10	2.42	1.61	1.46

4.3. Efficiency



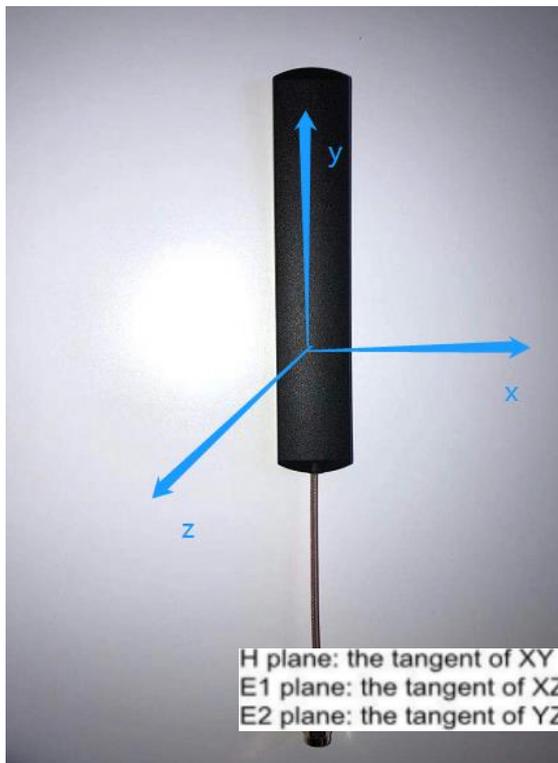
Frequency (MHz)	430	450	470	790	960
Efficiency (%)	44.5	33.6	40.8	62	55.7

4.4. Gain

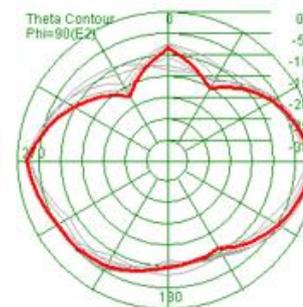
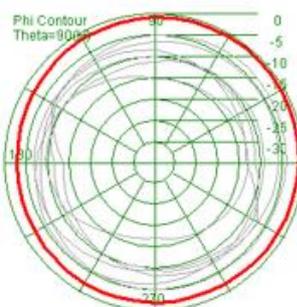
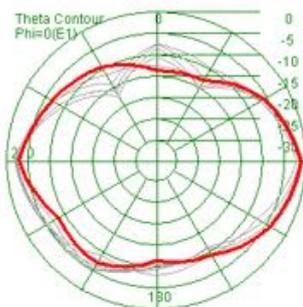
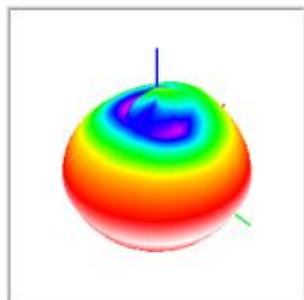


Frequency (MHz)	430	450	470	790	960
Gain (dBi)	-0.66	-2.90	-2.46	2.21	3.78

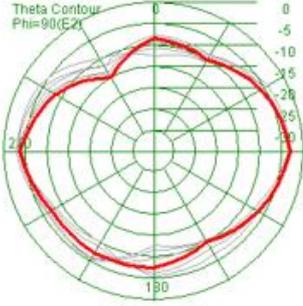
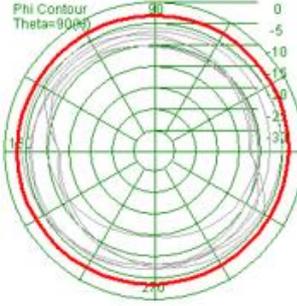
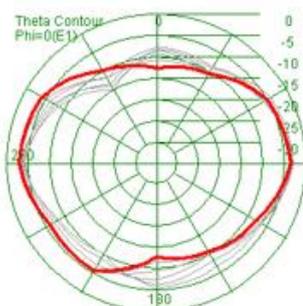
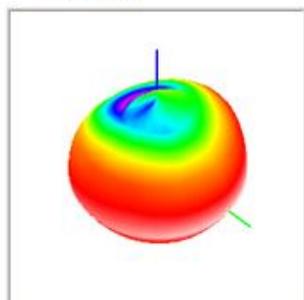
4.5. Radiation Patterns



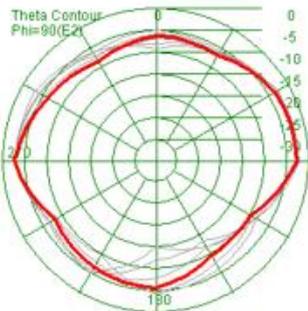
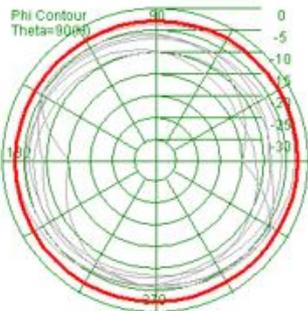
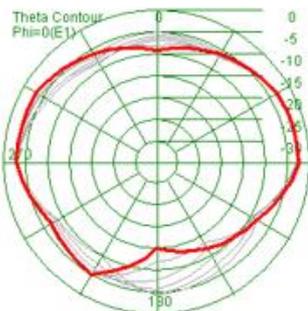
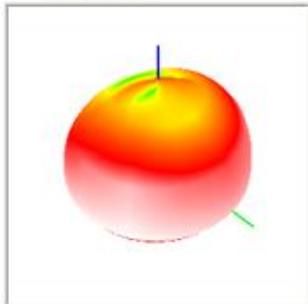
430MHz



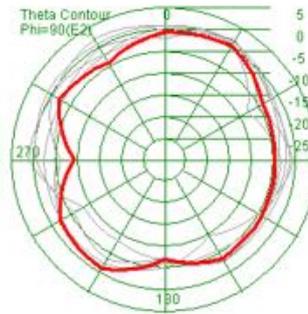
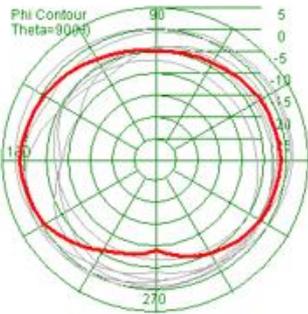
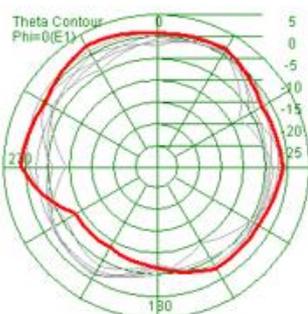
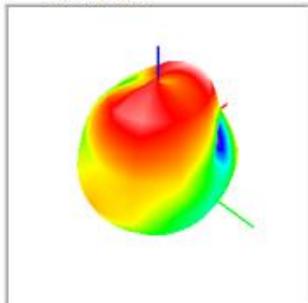
450MHz



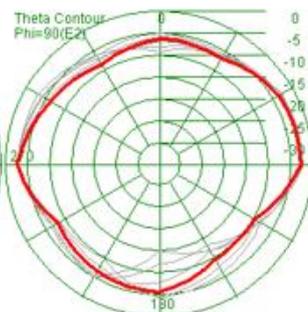
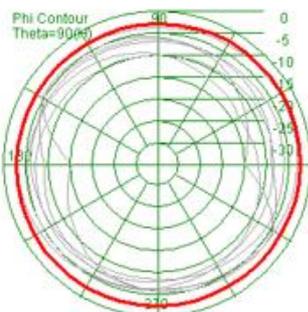
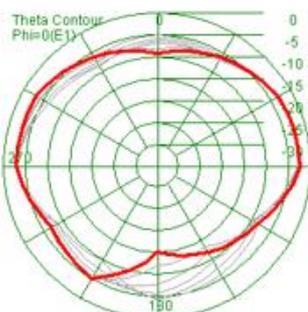
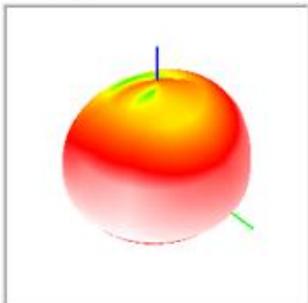
470MHz



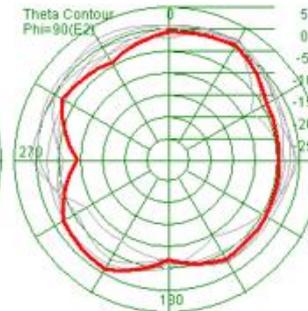
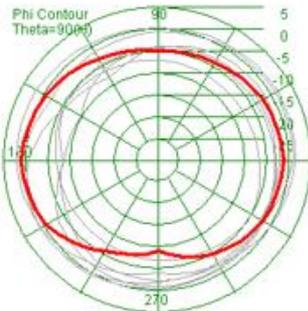
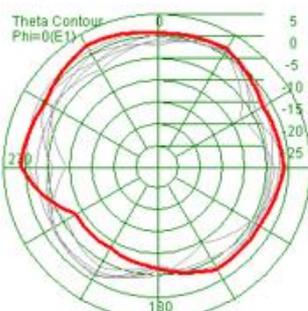
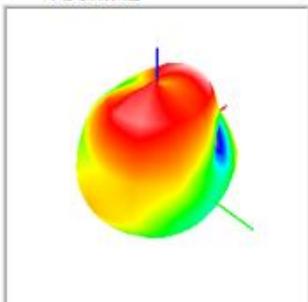
790MHz



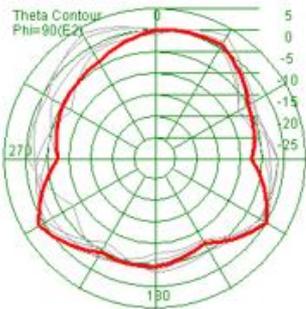
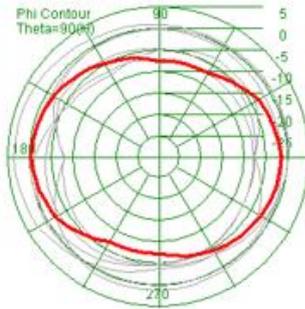
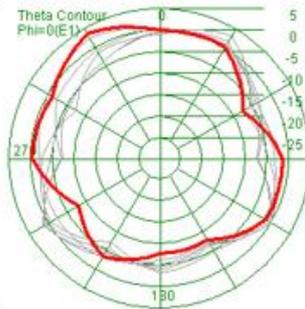
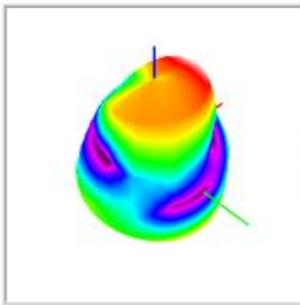
470MHz



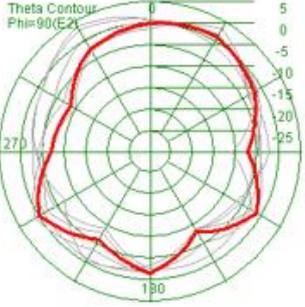
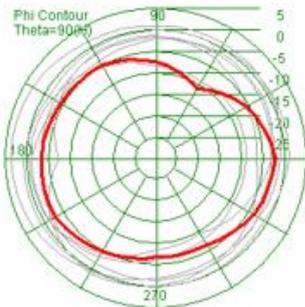
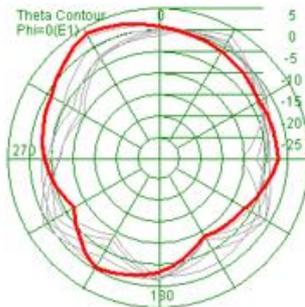
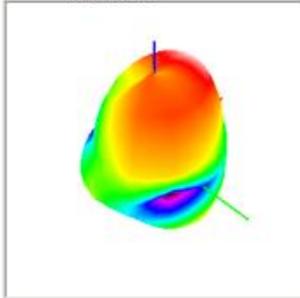
790MHz



880MHz



960MHz



5 Product Size

