

Antenna

YE0025AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-09-22	Kenny YIN	Initial
1.1	2020-12-21	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

- 5G
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	698–960 MHz, 1710–5000 MHz
Input Impedance	50 Ω
VSWR	≤ 3.0
Gain	≤ 4.7 dBi
Polarization Type	Linear

Mechanical Specifications

Antenna Size	199 mm \times Φ 22mm
Casing	PC + ABS
Connector Type	SMA Male (center pin)
Working Temperature	-40 °C to +80 °C
Radome Color	Black
IP rating	IP55

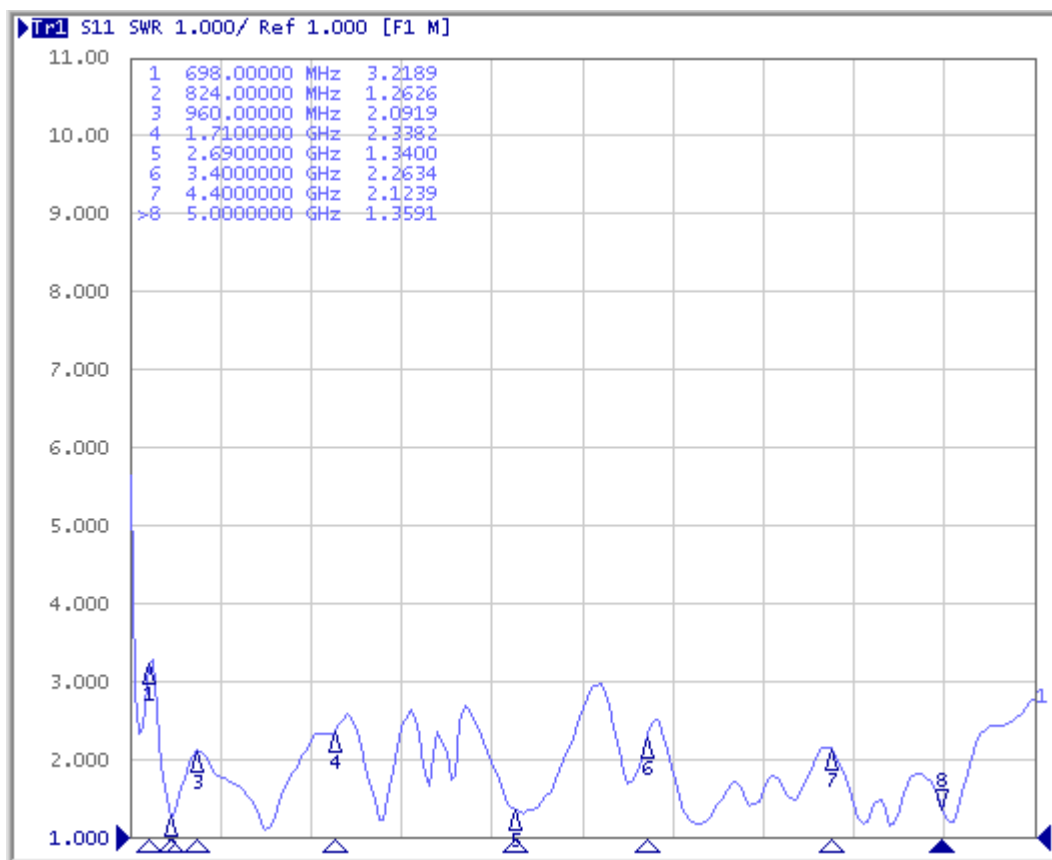
4 Overall Performance

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.



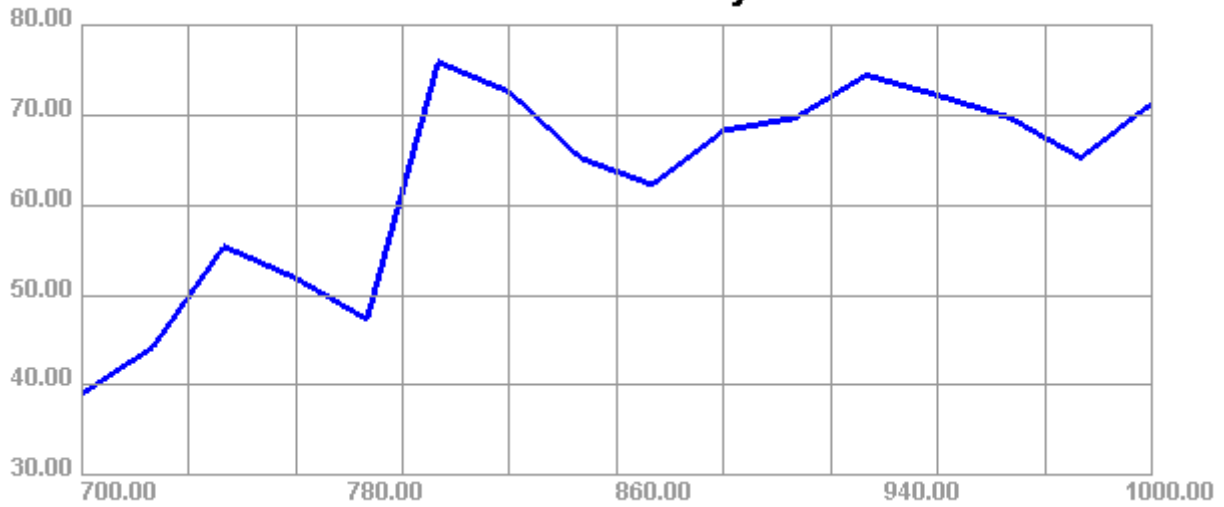
4.2. VSWR



Frequency (MHz)	698	824	960	1710	2690	3400	4400	5000
VSWR	3.22	1.26	2.09	2.34	1.34	2.26	2.12	1.35

4.3. Efficiency

700.00MHz - 1000.00MHz Efficiency

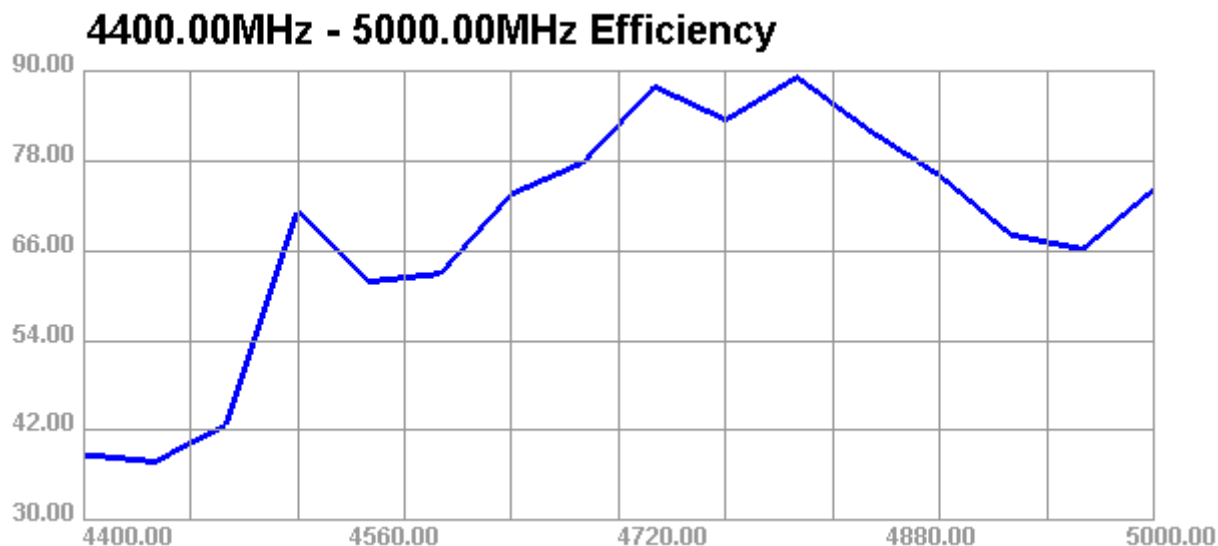


1700.00MHz - 2700.00MHz Efficiency



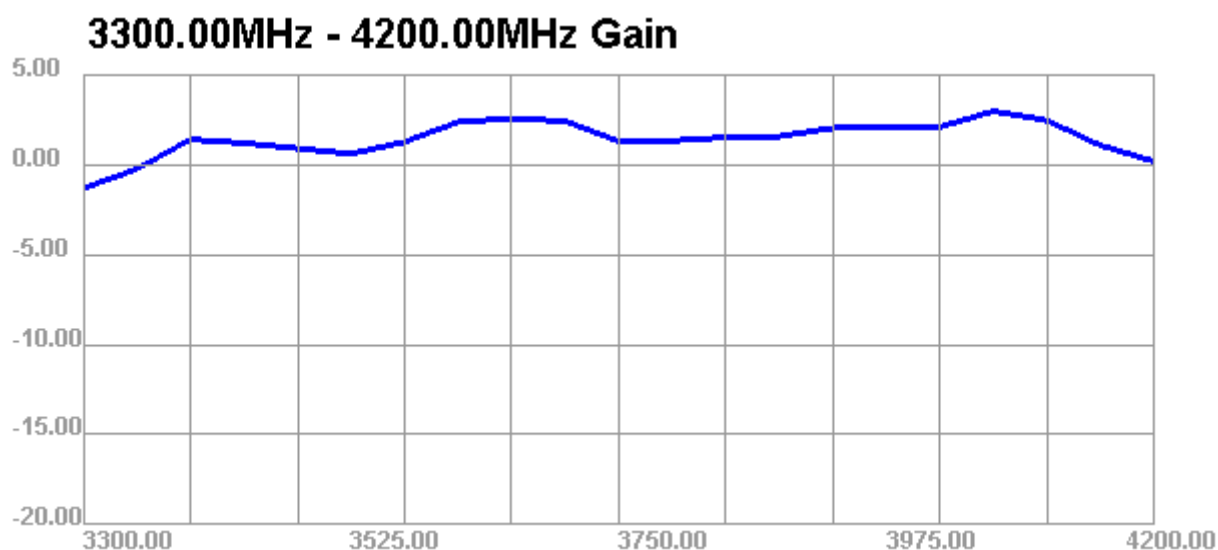
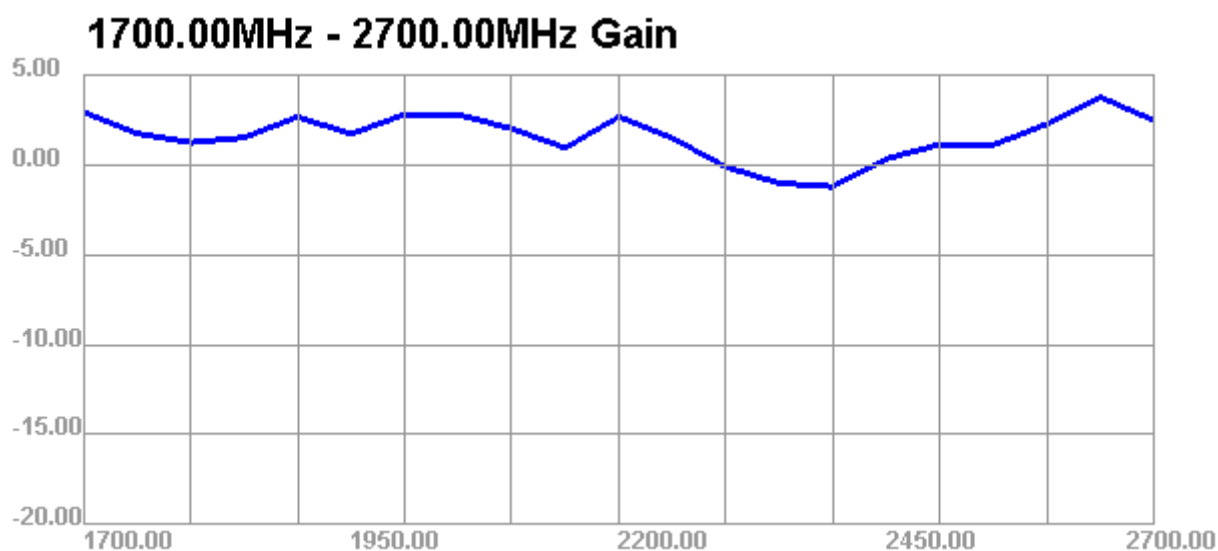
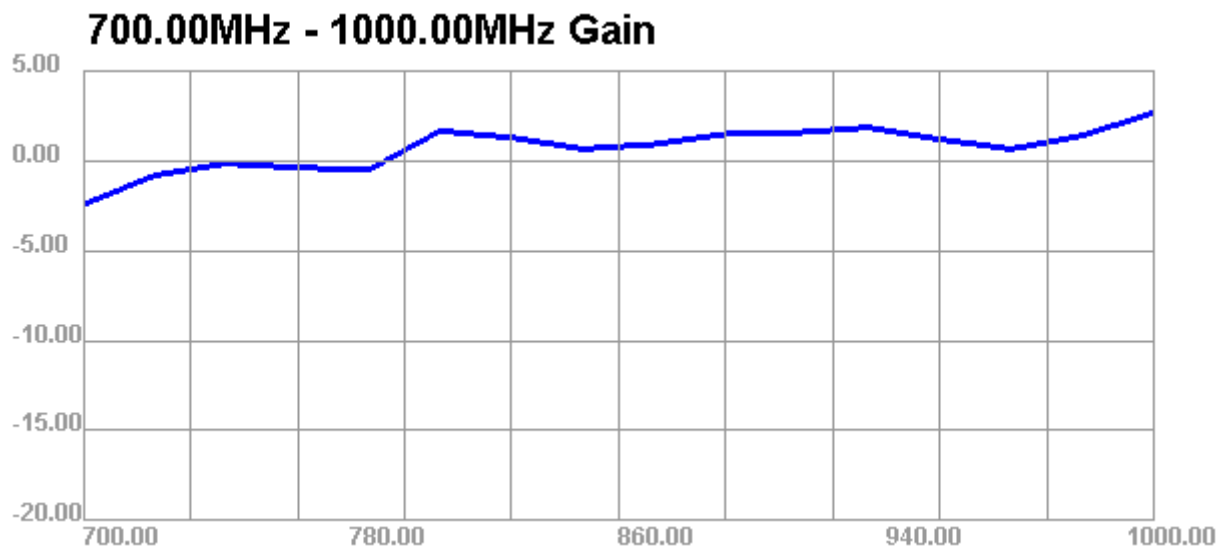
3300.00MHz - 4200.00MHz Efficiency

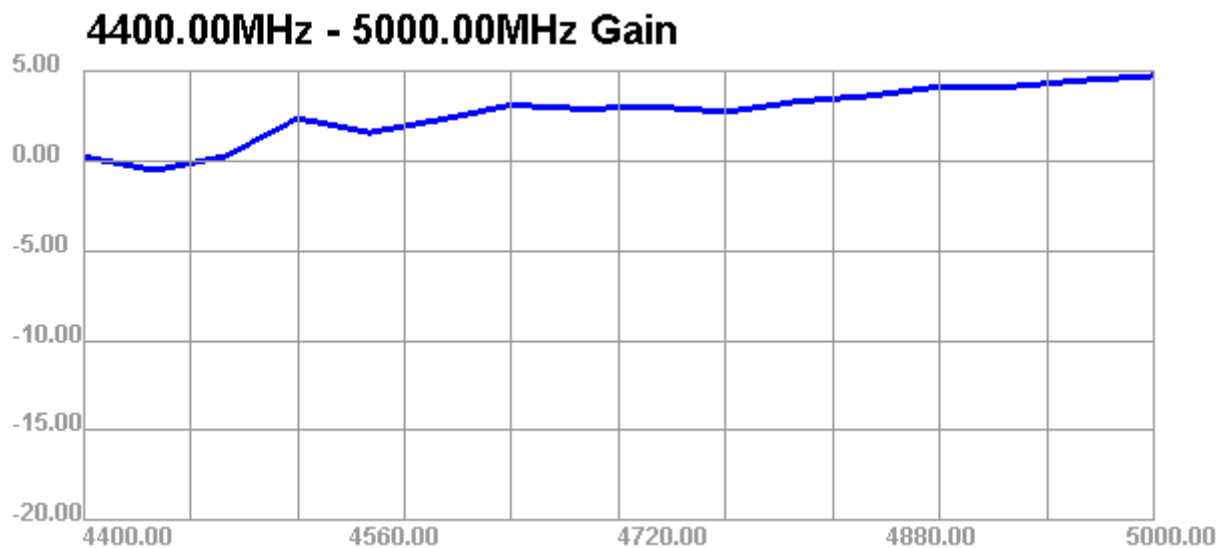




Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Efficiency (%)	39.05	47.34	65.18	69.71	71.27	70.81	58.72	60.62	66.25	74.38
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Efficiency (%)	35.32	43.54	43.95	46.81	28.84	38.82	61.86	87.88	75.98	74.22

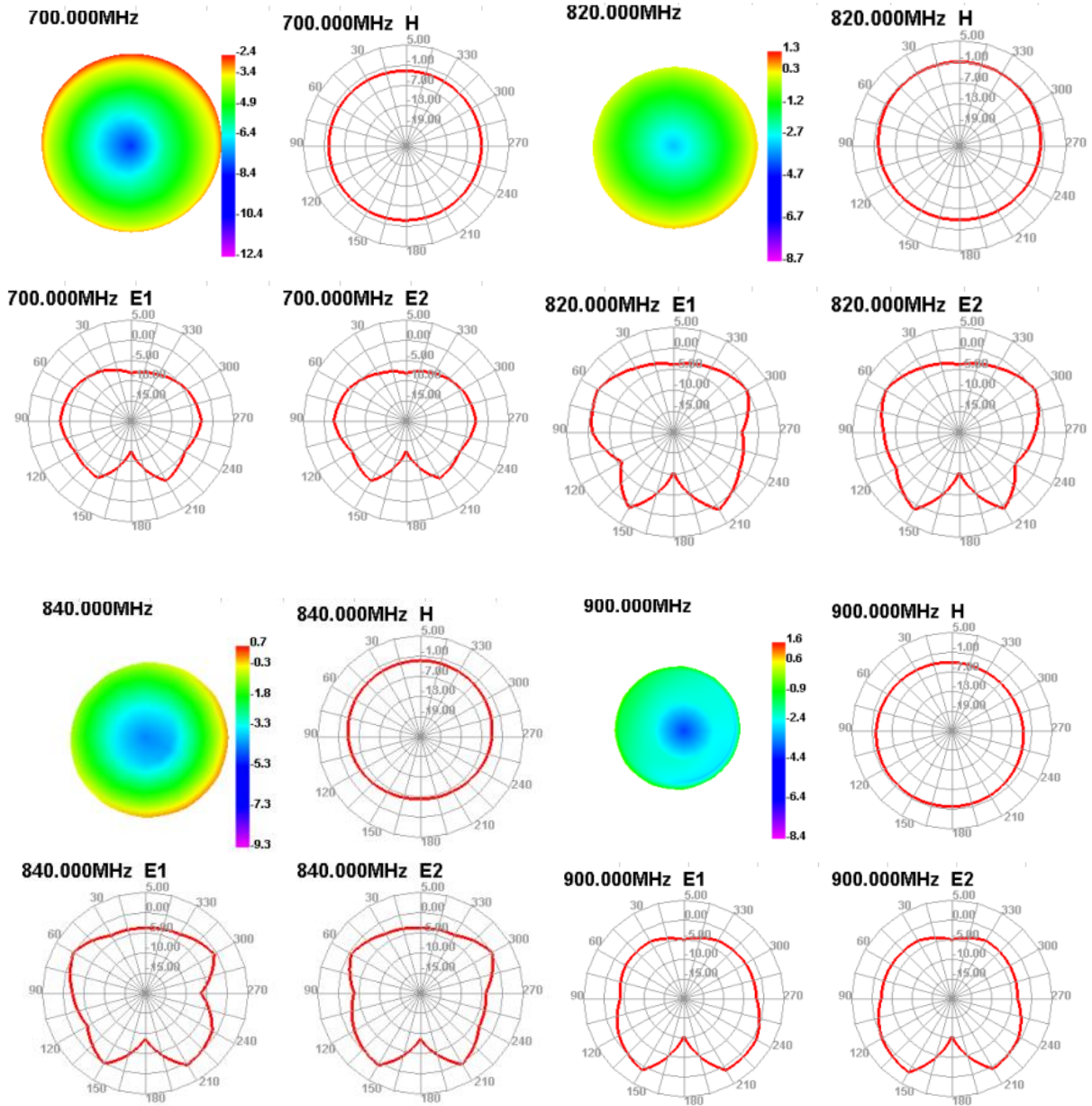
4.4. Gain



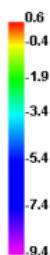
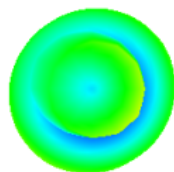


Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Gain (dBi)	-2.44	-0.5	0.66	0.65	2.68	2.93	1.71	2.66	0.33	2.46
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Gain (dBi)	-1.31	0.6	1.3	2.08	0.18	0.22	1.57	3	4.12	4.71

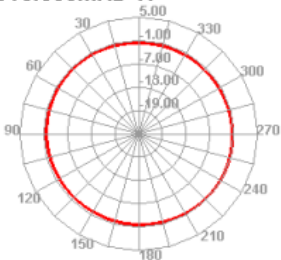
4.5. Radiation Patterns



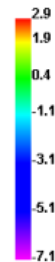
960.000MHz



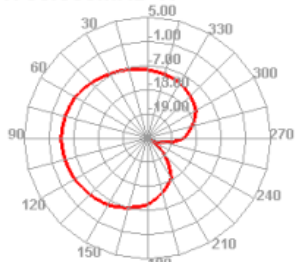
960.000MHz H



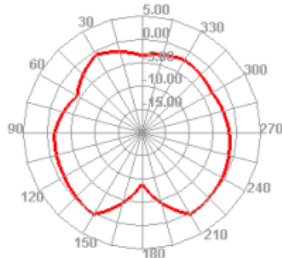
1700.000MHz



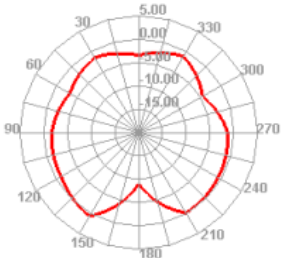
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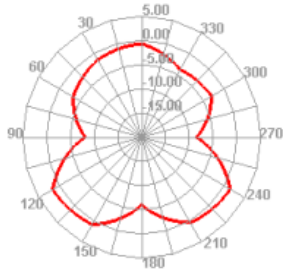
960.000MHz E1



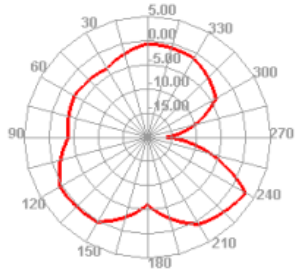
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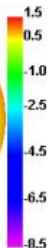
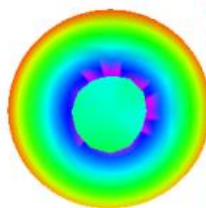
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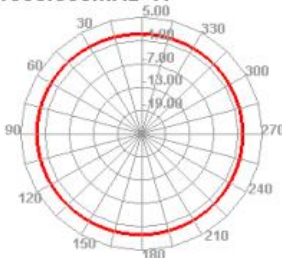
1700.000MHz E2



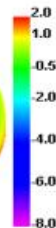
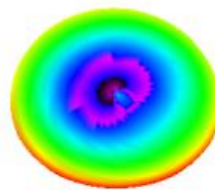
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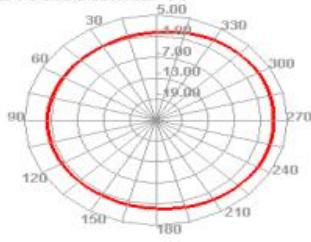
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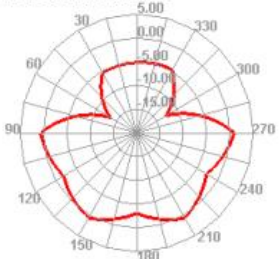
2100.000MHz



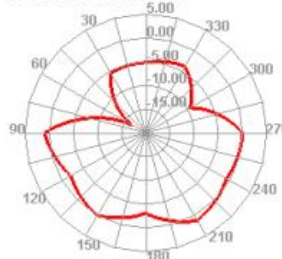
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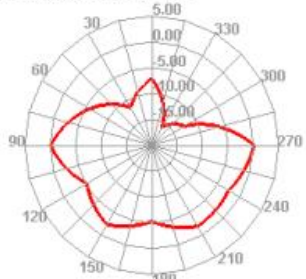
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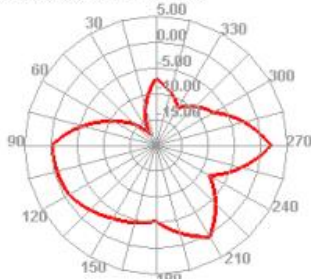
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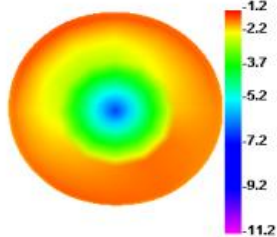
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2100.000MHz E2



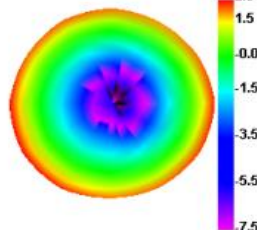
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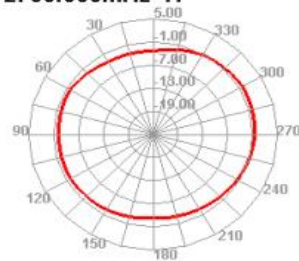
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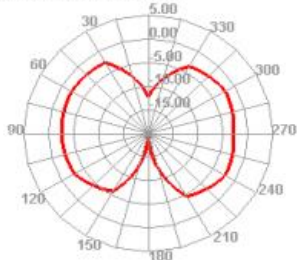
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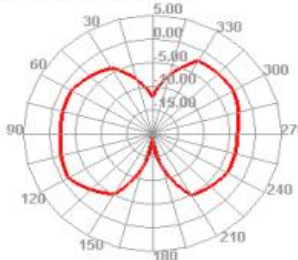
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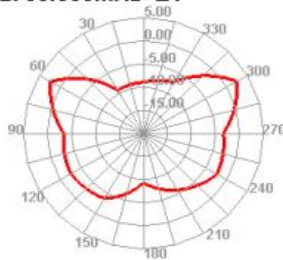
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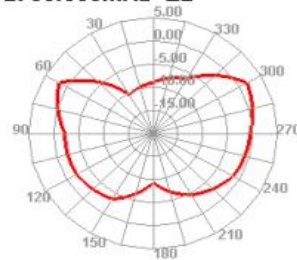
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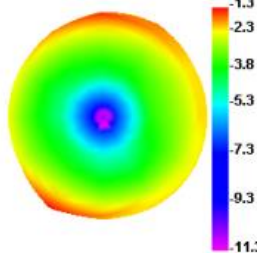
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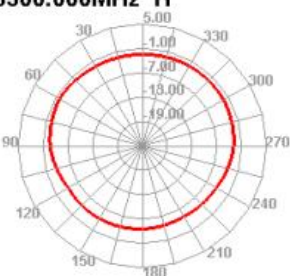
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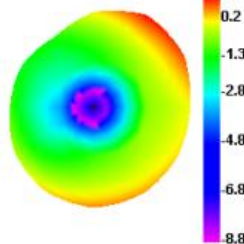
3300.000MHz



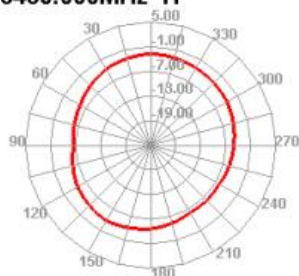
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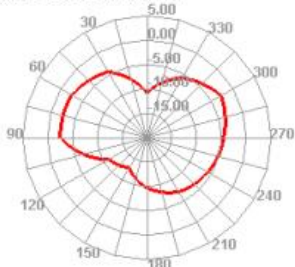
3435.000MHz



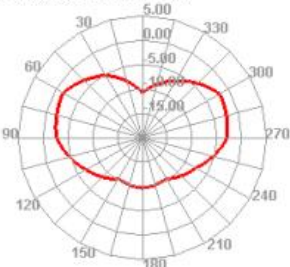
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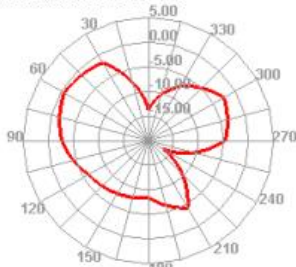
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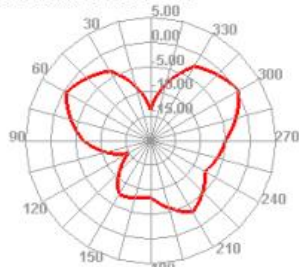
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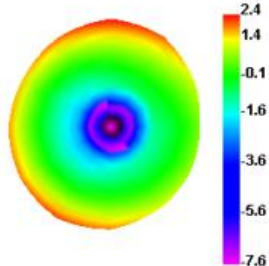
3435.000MHz E1



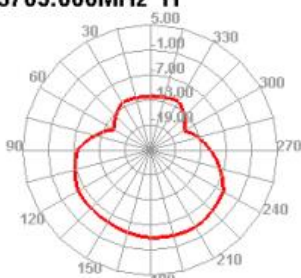
3435.000MHz E2



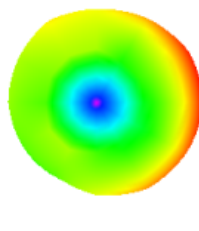
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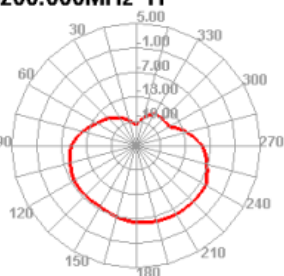
3705.000MHz H



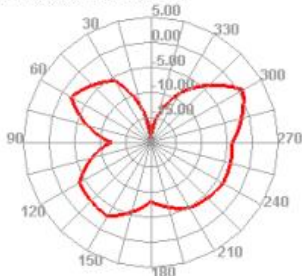
4200.000MHz



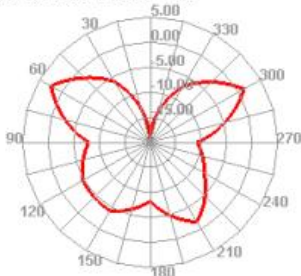
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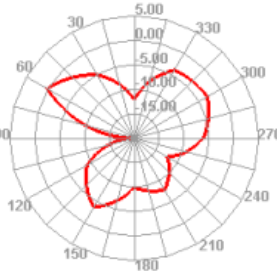
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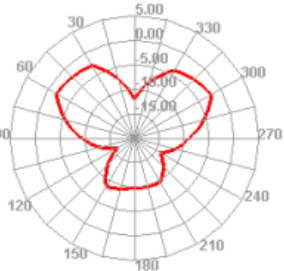
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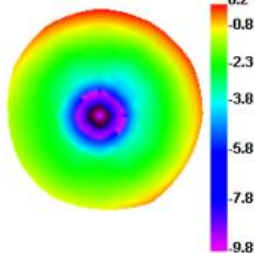
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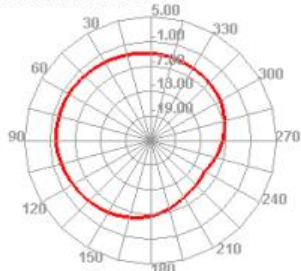
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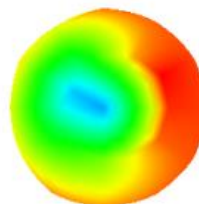
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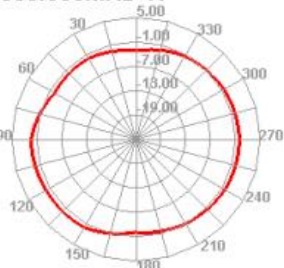
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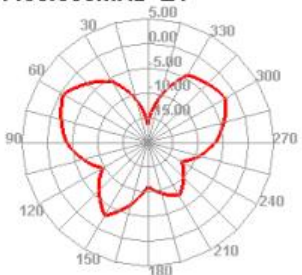
4800.000MHz



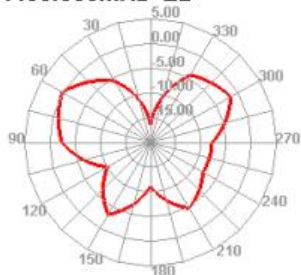
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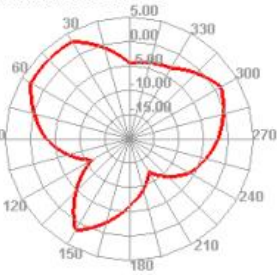
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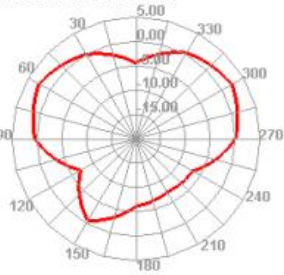
4400.000MHz E2



4800.000MHz E1



4800.000MHz E2



5 Product Size

