

Antenna

ANT-LTE5G-025 Datasheet



www.advantech.com

1 Product Description

5G NR / 4G LTE / 3G / 2G Terminal Antenna.

The antenna is designed for superior performance, and can be widely used for wireless applications.

2 Product Features

- 5G
- High efficiency
- Excellent performance

3 Product Specifications

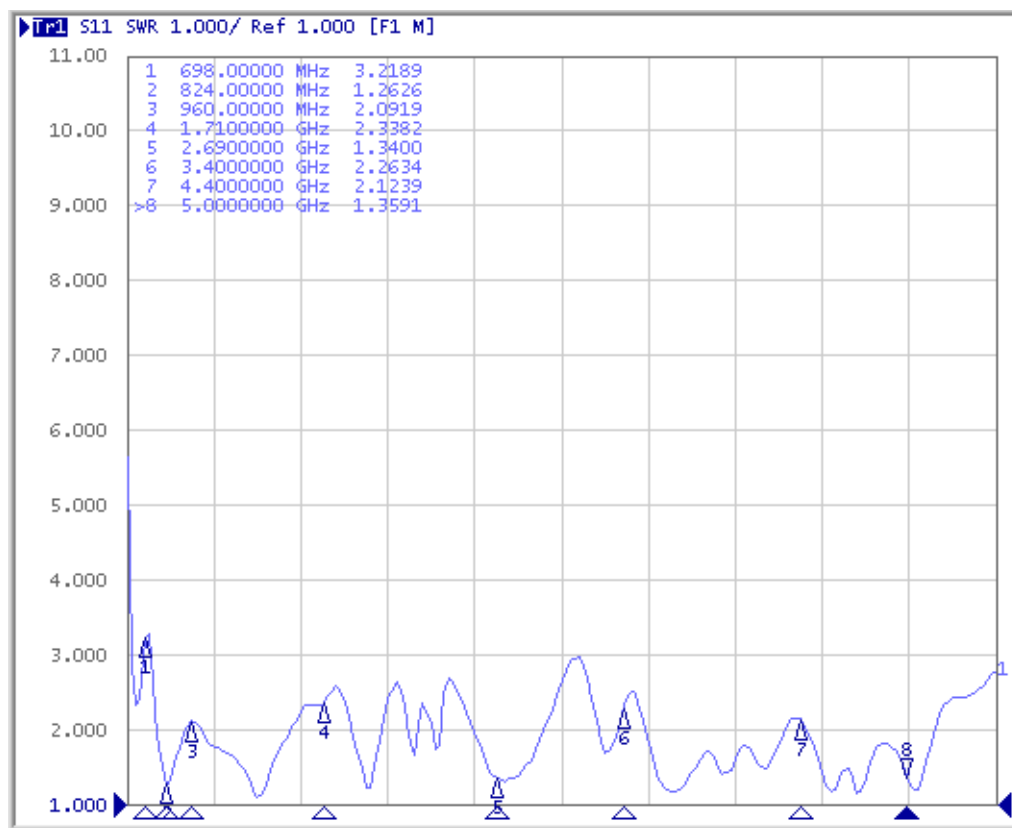
Passive Electrical Specifications	
Frequency Range	698–960 MHz, 1710–5000 MHz
Input Impedence	50 Ω
VSWR	≤ 3.0
Gain	≤ 4.7 dBi
Polarization Type	Linear
Mechanical Specifications	
Antenna Size	199 mm $\times$ Φ 22mm
Casing	PC + ABS
Connector Type	SMA Male (center pin)
Working Temperature	-40 $^{\circ}\text{C}$ to +80 $^{\circ}\text{C}$
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.

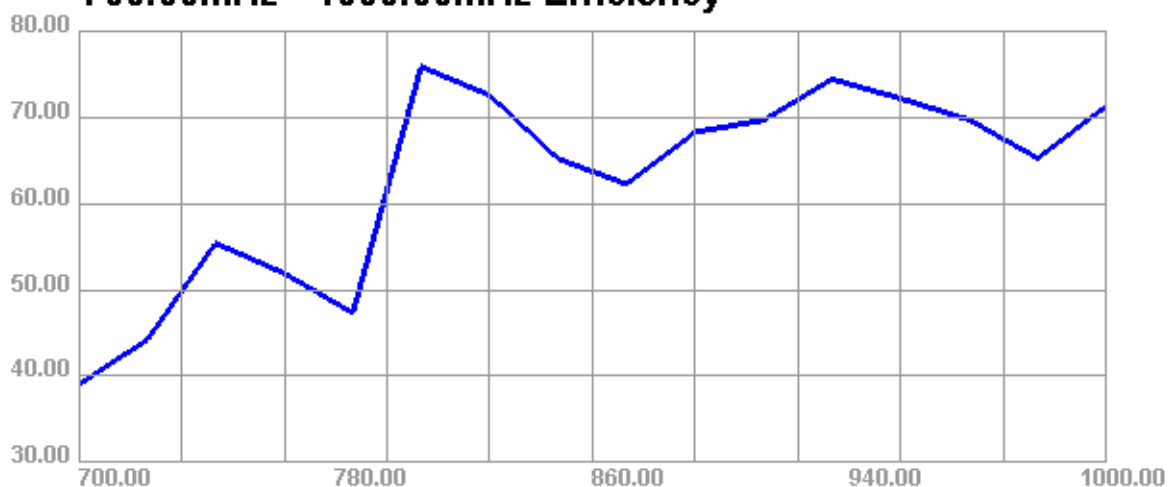
4.2. VSWR



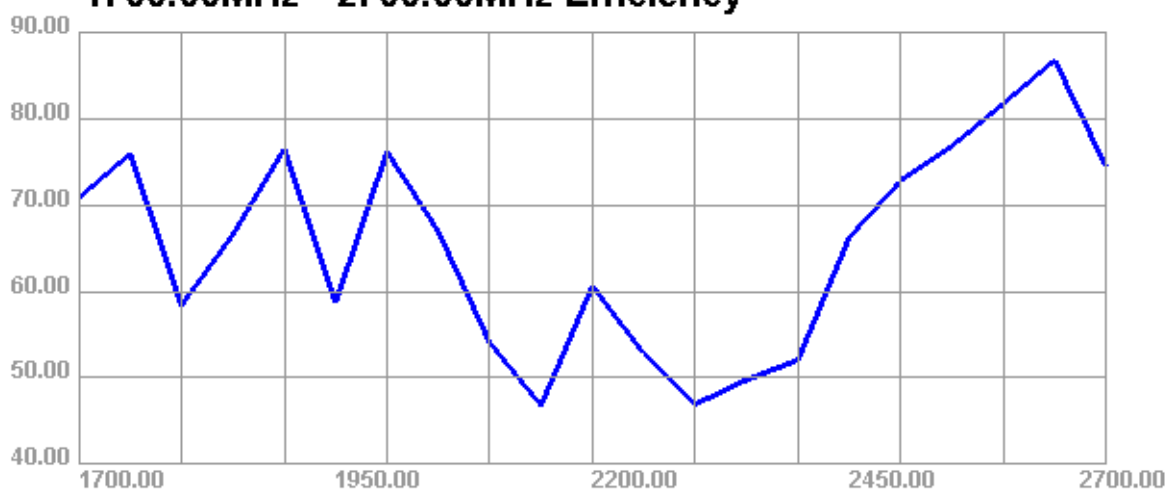
Frequency (MHz)	698	824	960	1710	2690	3400	4400	5000
VSWR	3.22	1.26	2.09	2.34	1.34	2.26	2.12	1.35

4.3. Efficiency

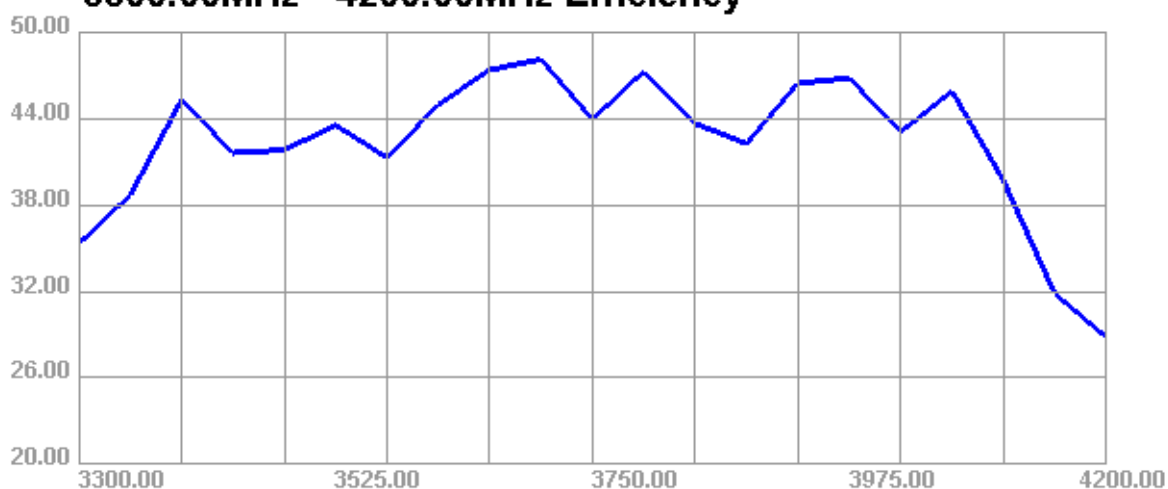
700.00MHz - 1000.00MHz Efficiency



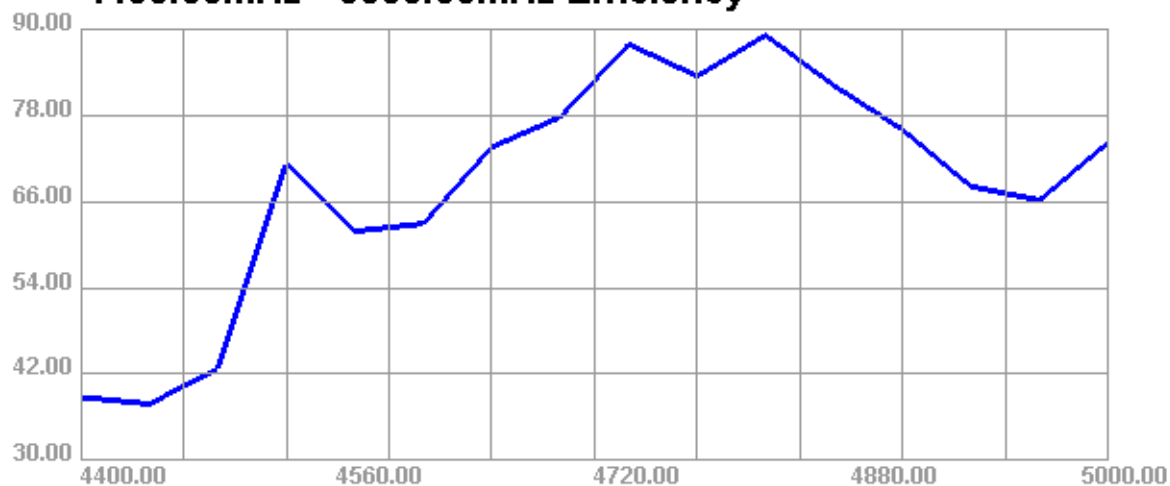
1700.00MHz - 2700.00MHz Efficiency



3300.00MHz - 4200.00MHz Efficiency



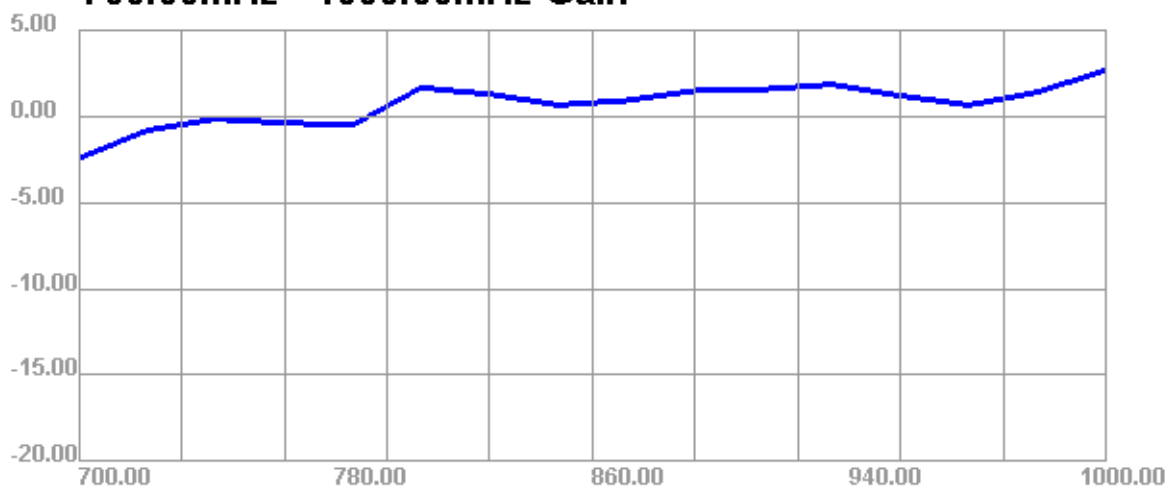
4400.00MHz - 5000.00MHz Efficiency



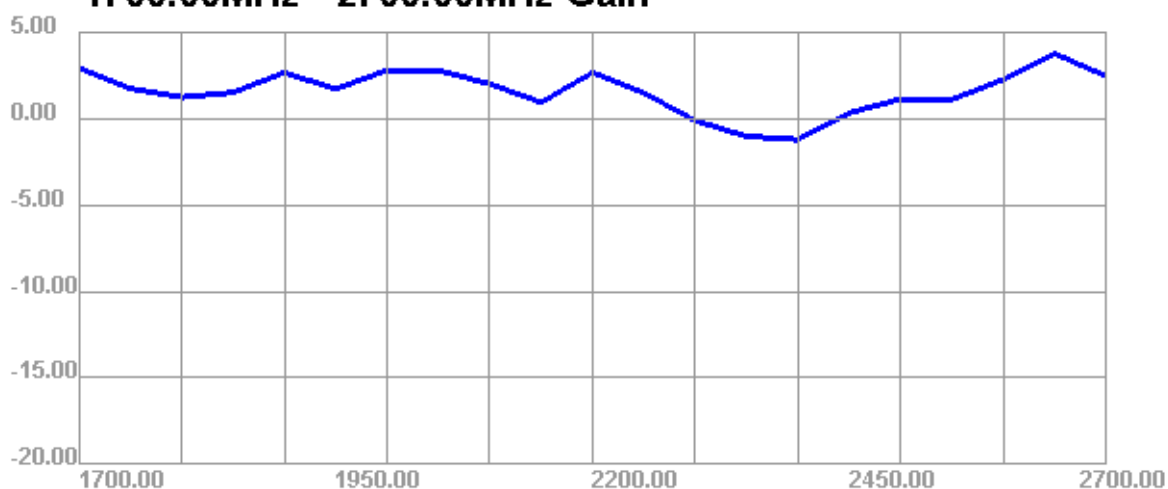
Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Efficiency (%)	39.05	47.34	65.18	69.71	71.27	70.81	58.72	60.62	66.25	74.38
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Efficiency (%)	35.32	43.54	43.95	46.81	28.84	38.82	61.86	87.88	75.98	74.22

4.4. Gain

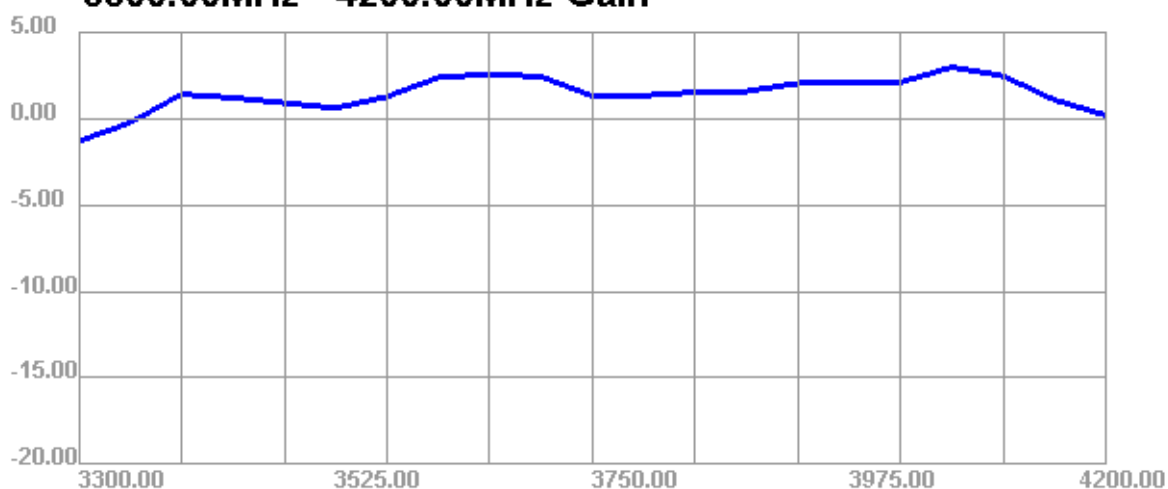
700.00MHz - 1000.00MHz Gain



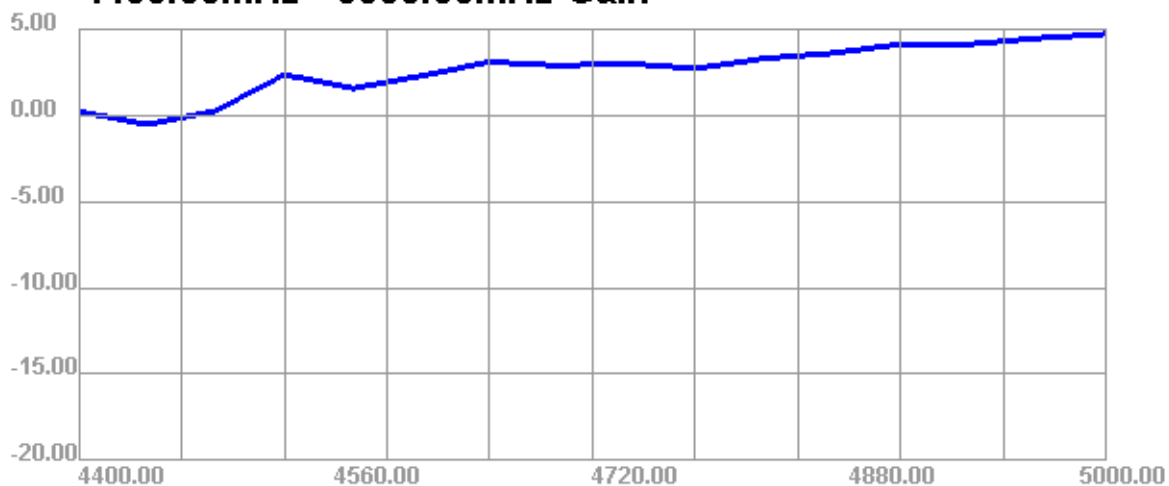
1700.00MHz - 2700.00MHz Gain



3300.00MHz - 4200.00MHz Gain

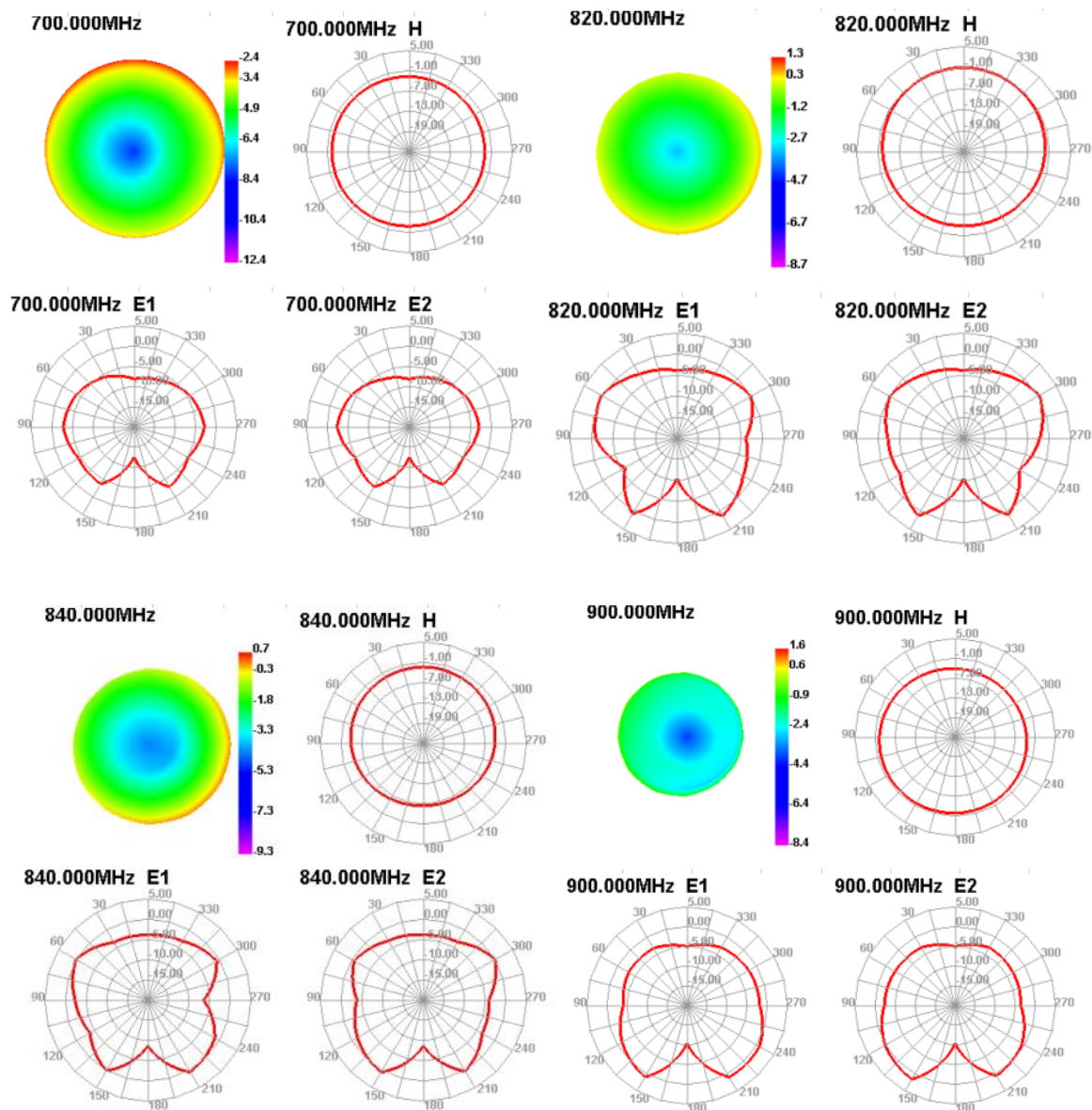


4400.00MHz - 5000.00MHz Gain

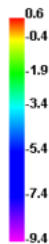
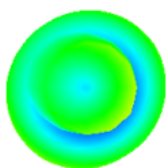


Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Gain (dBi)	-2.44	-0.5	0.66	0.65	2.68	2.93	1.71	2.66	0.33	2.46
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Gain (dBi)	-1.31	0.6	1.3	2.08	0.18	0.22	1.57	3	4.12	4.71

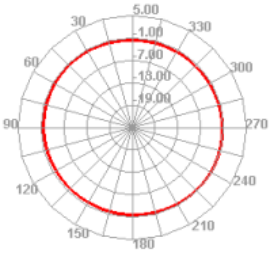
4.5. Radiation Patterns



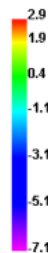
960.000MHz



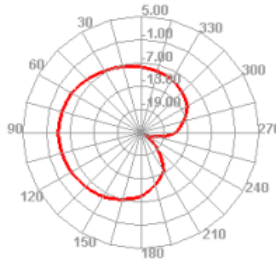
960.000MHz H



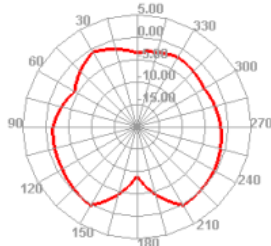
1700.000MHz



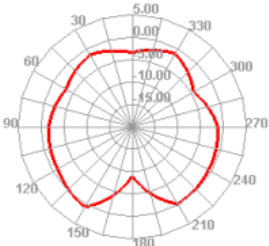
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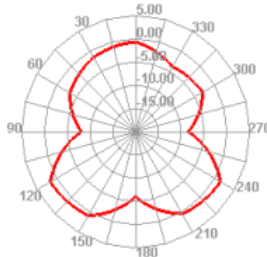
960.000MHz E1



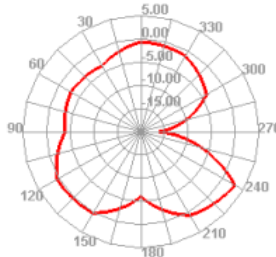
960.000MHz E2



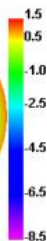
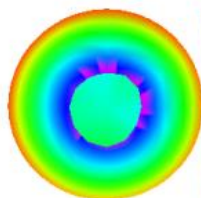
1700.000MHz E1



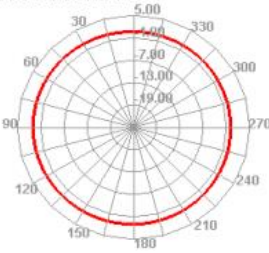
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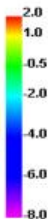
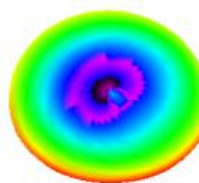
1850.000MHz



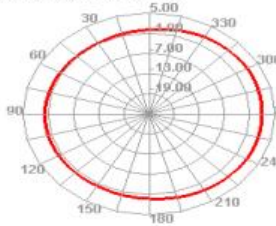
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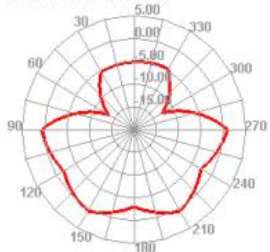
2100.000MHz



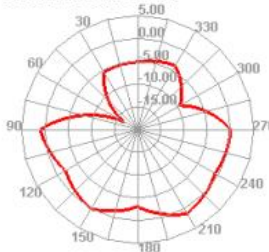
2100.000MHz H



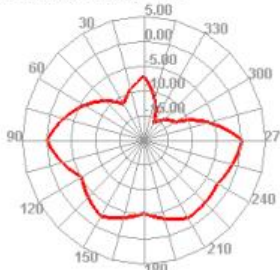
1850.000MHz E1



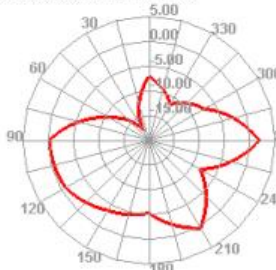
1850.000MHz E2



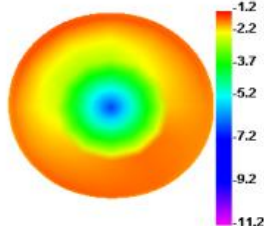
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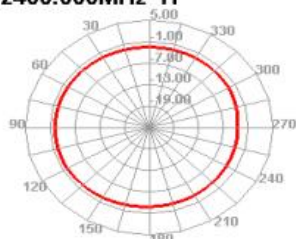
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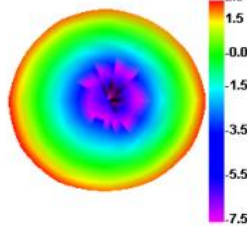
2400.000MHz



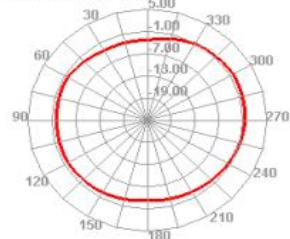
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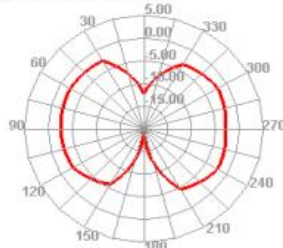
2700.000MHz



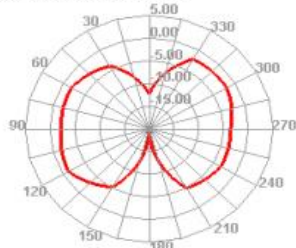
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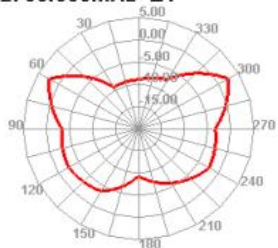
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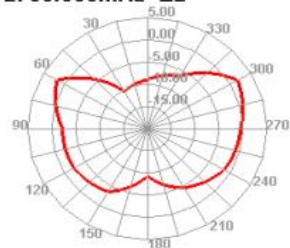
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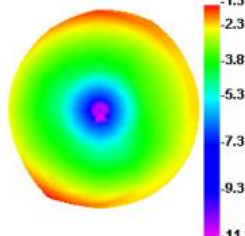
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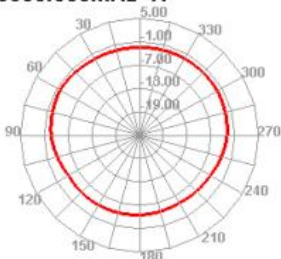
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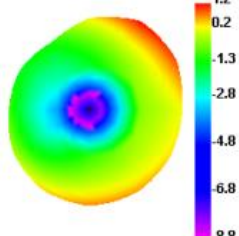
3300.000MHz



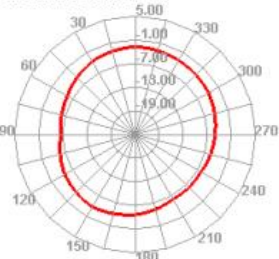
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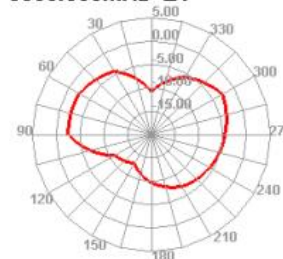
3435.000MHz



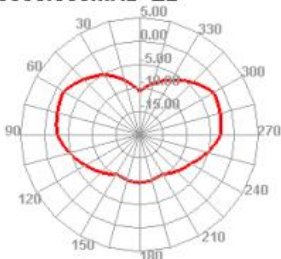
3435.000MHz H



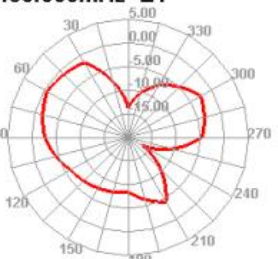
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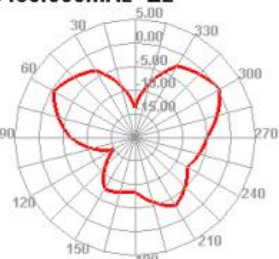
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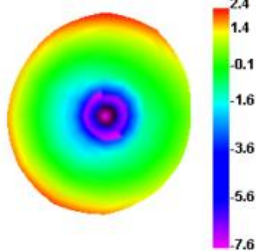
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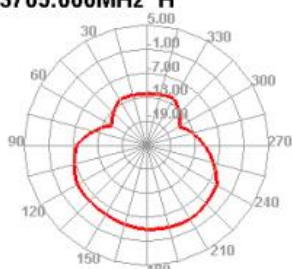
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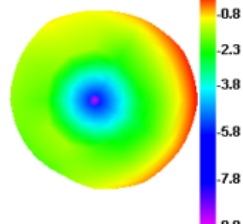
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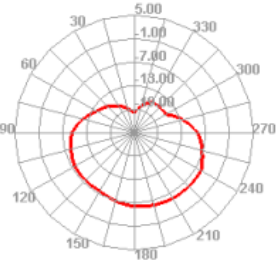
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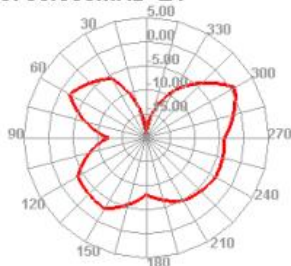
4200.000MHz



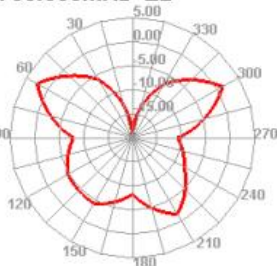
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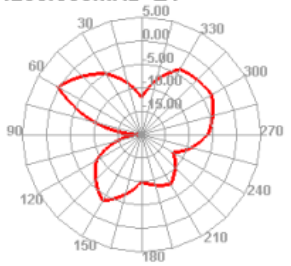
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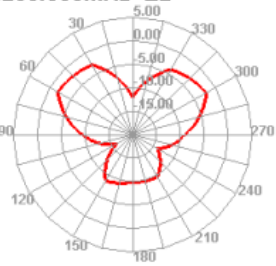
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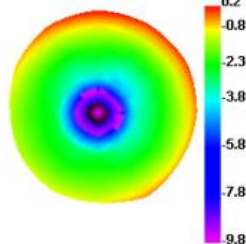
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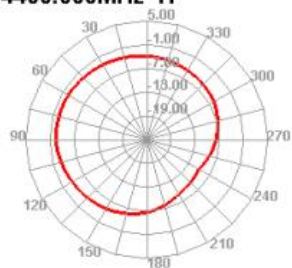
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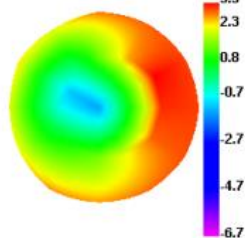
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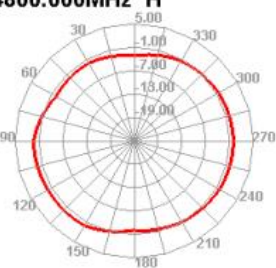
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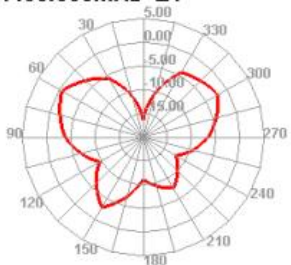
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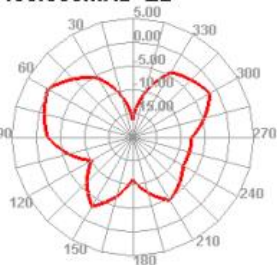
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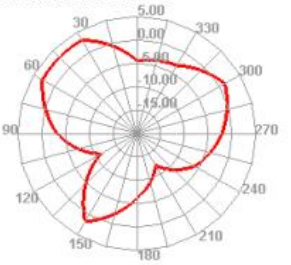
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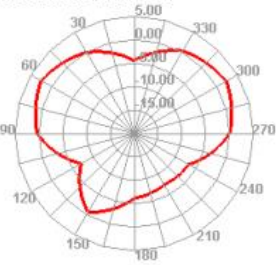
4400.000MHz E2



4800.000MHz E1



4800.000MHz E2



5 Product Size

