ADVANTECH

Antenna

ANT-LTE5G-025 Datasheet

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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

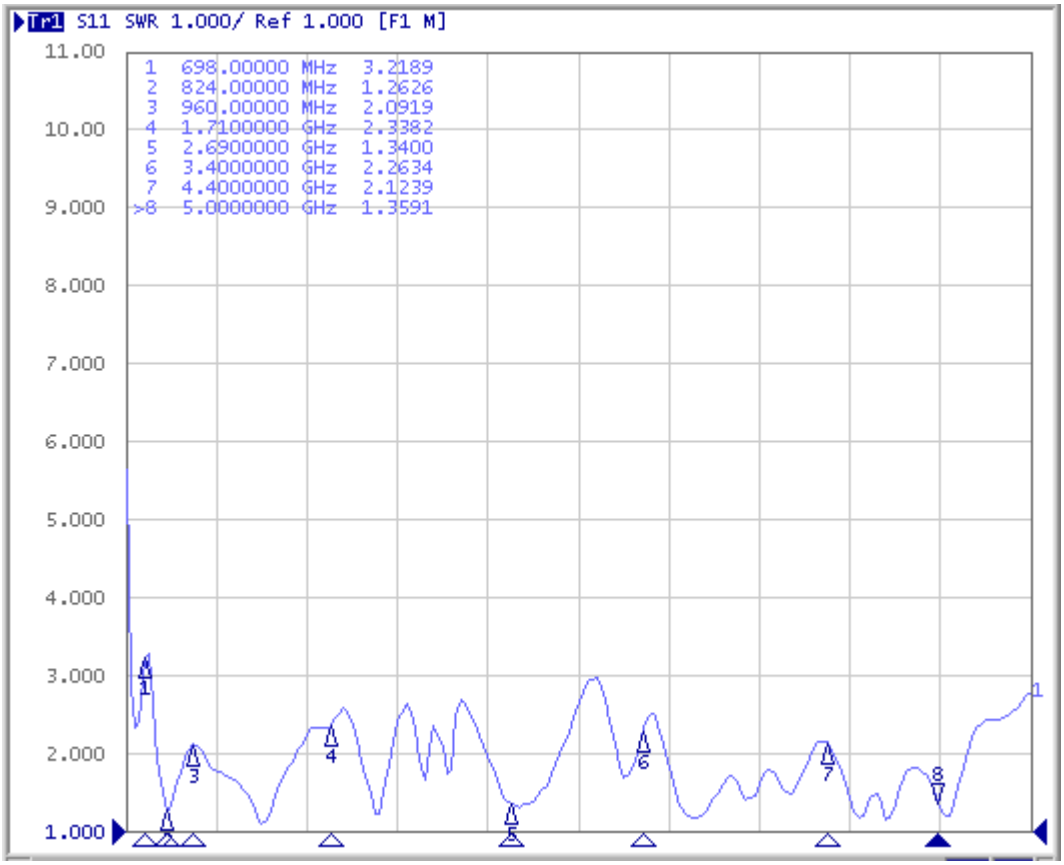
Passive Electrical Specifications	
Frequency Range	698–960 MHz, 1710–5000 MHz
Input Impendence	50 Ω
VSWR	≤ 3.0
Gain	≤ 4.7 dBi
Polarization Type	Linear
Mechanical Specifications	
Antenna Size	199 mm × Φ 22mm
Casing	PC + ABS
Connector Type	SMA Male (center pin)
Working Temperature	-40 ℃ to +80 ℃
Radome Color	Black
IP rating	IP55

4 Overall Performance

4.1. Test Environment

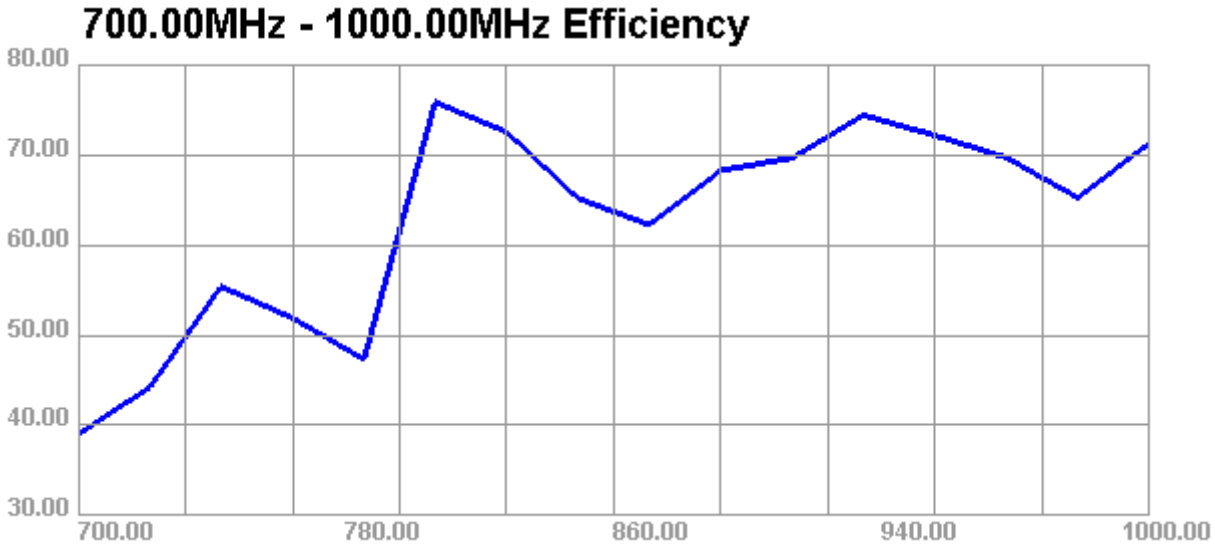
- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz.
- RayZone®2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

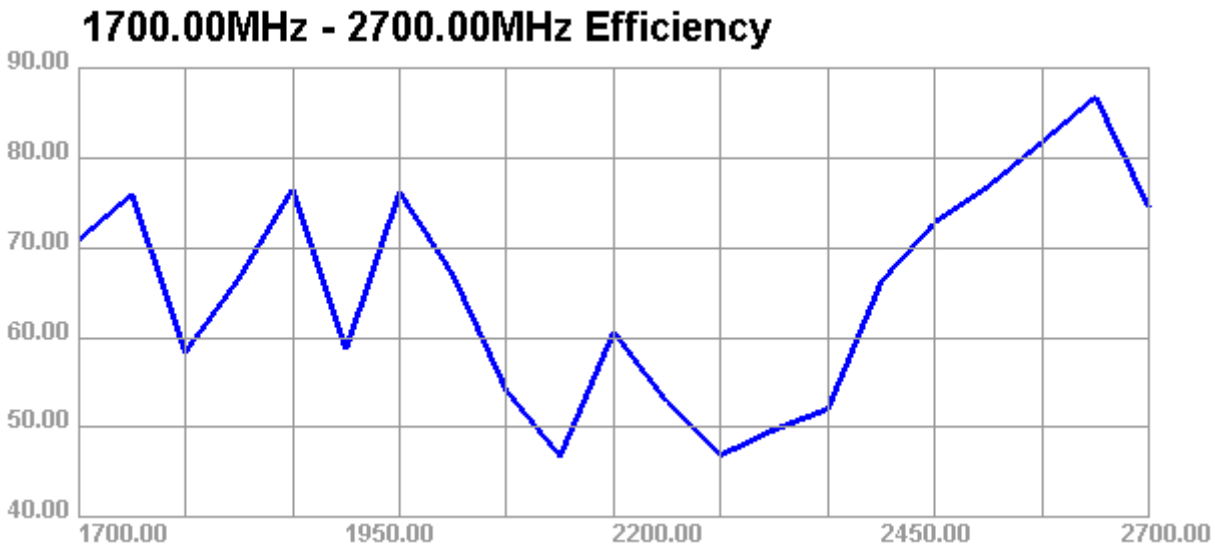
4.2. VSWR

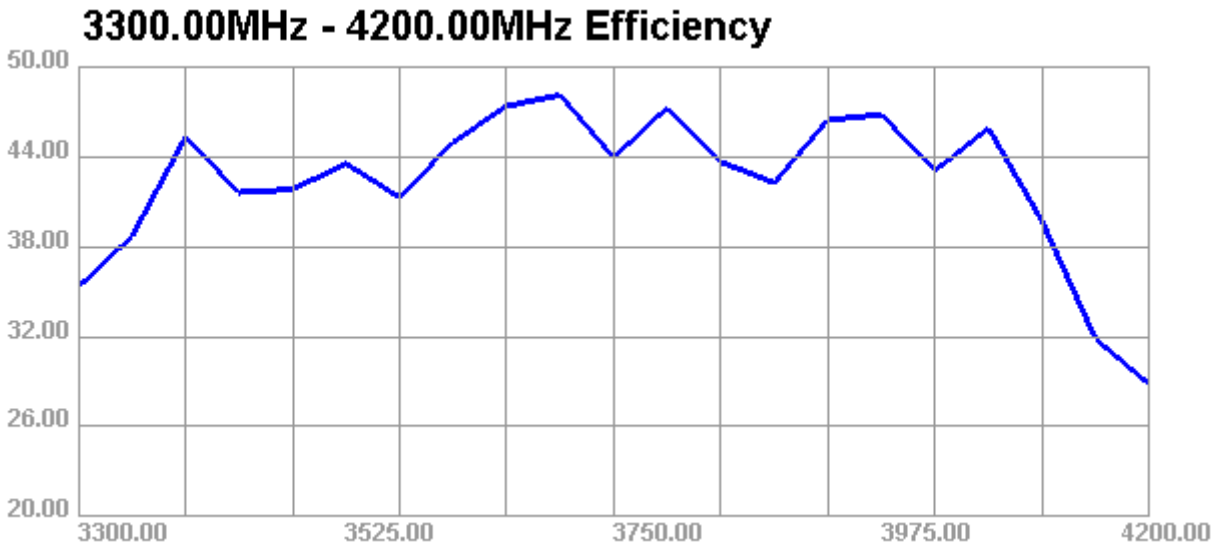


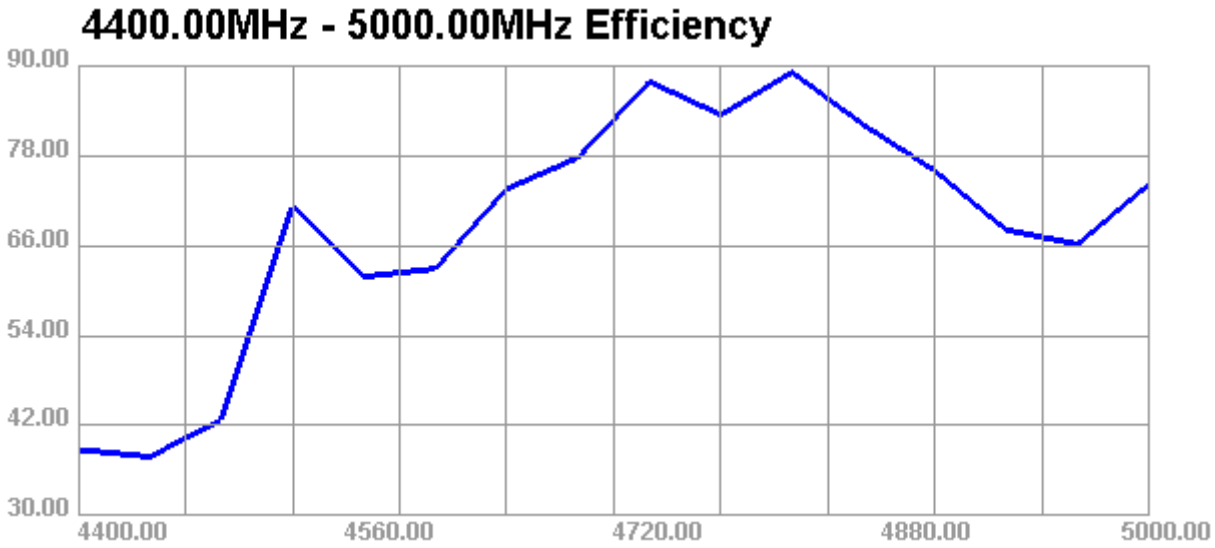
Frequency (MHz)	698	824	960	1710	2690	3400	4400	5000
VSWR	3.22	1.26	2.09	2.34	1.34	2.26	2.12	1.35

4.3. Efficiency



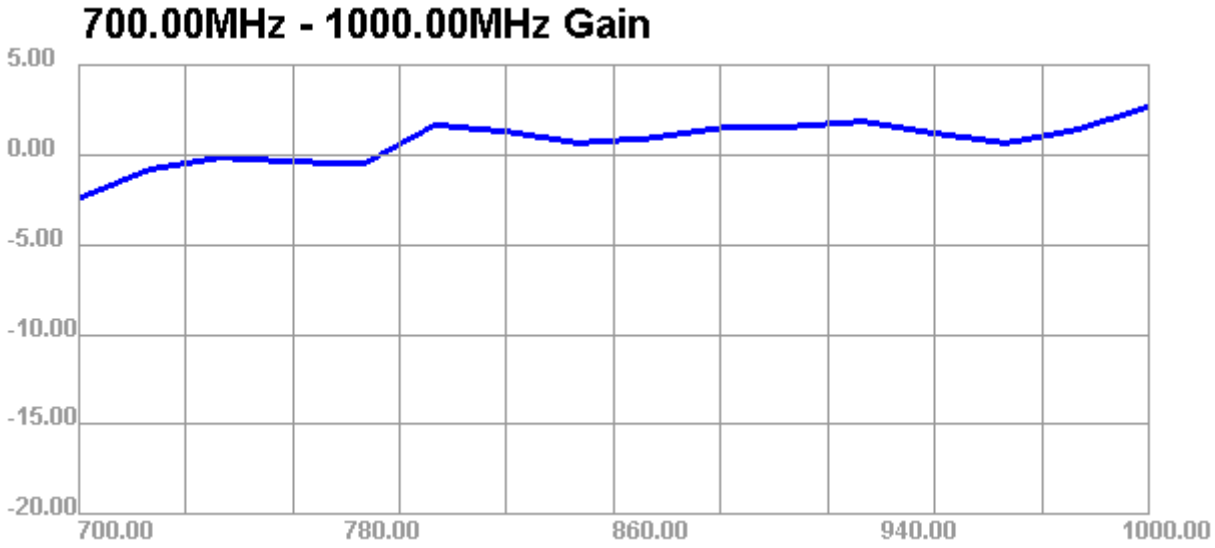


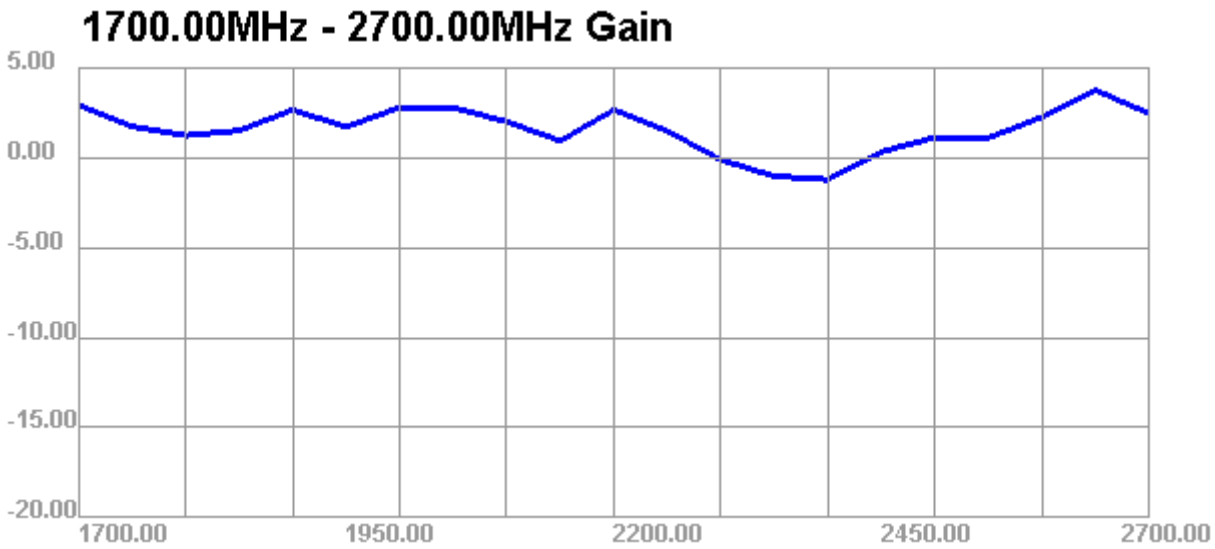


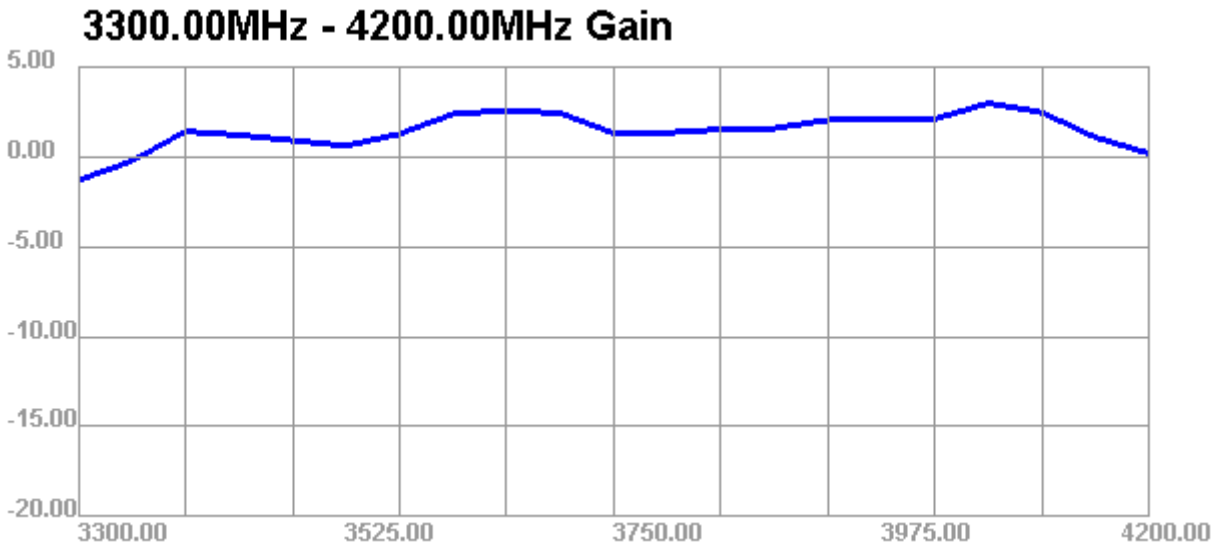


Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Efficiency (%)	39.05	47.34	65.18	69.71	71.27	70.81	58.72	60.62	66.25	74.38
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Efficiency (%)	35.32	43.54	43.95	46.81	28.84	38.82	61.86	87.88	75.98	74.22

4.4. Gain


700.00MHz - 1000.00MHz Gain
5.00
0.00
-5.00
-10.00
-15.00
-20.00
700.00
780.00
860.00
940.00
1000.00


1700.00MHz - 2700.00MHz Gain
5.00
0.00
-5.00
-10.00
-15.00
-20.00
1700.00
1950.00
2200.00
2450.00
2700.00


3300.00MHz - 4200.00MHz Gain
5.00
0.00
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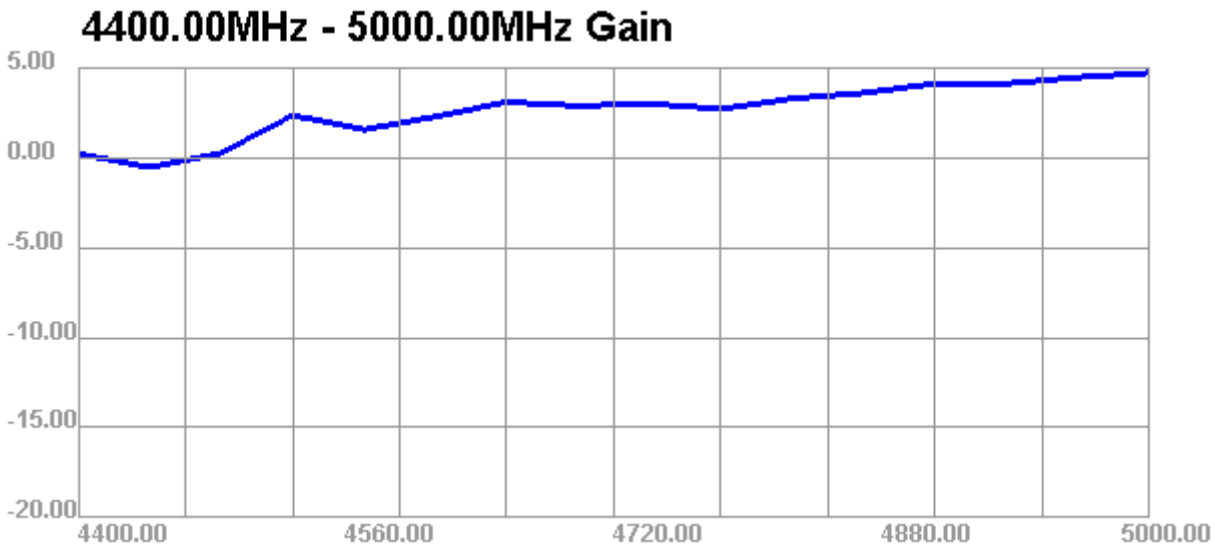
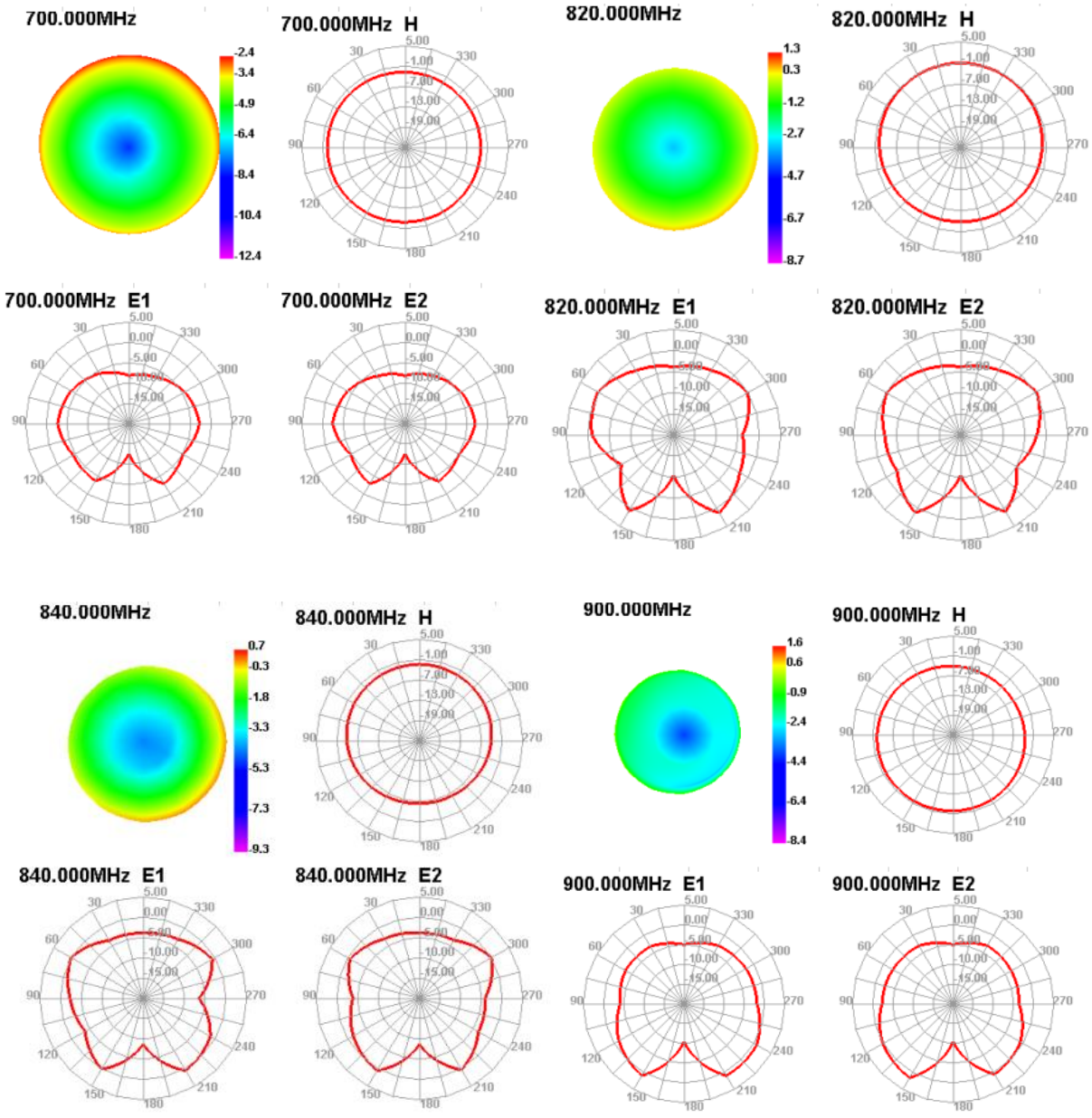
-10.00
-15.00
-20.00
3300.00
3525.00
3750.00
3975.00
4200.00

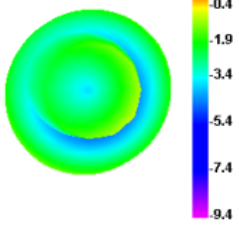


Frequency (MHz)	700	780	840	960	1000	1700	1950	2200	2450	2700
Gain (dBi)	-2.44	-0.5	0.66	0.65	2.68	2.93	1.71	2.66	0.33	2.46
Frequency (MHz)	3300	3525	3750	3975	4200	4400	4560	4720	4880	5000
Gain (dBi)	-1.31	0.6	1.3	2.08	0.18	0.22	1.57	3	4.12	4.71

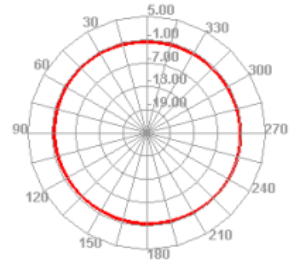
4.5. Radiation Patterns



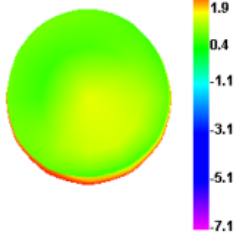
960.000MHz



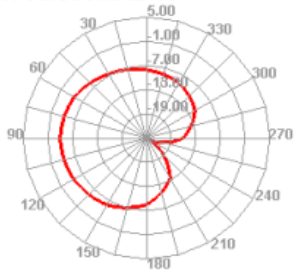
960.000MHz H



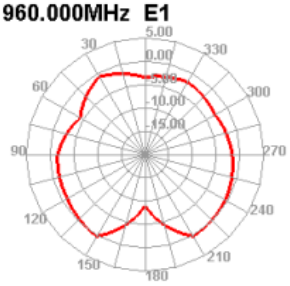
1700.000MHz



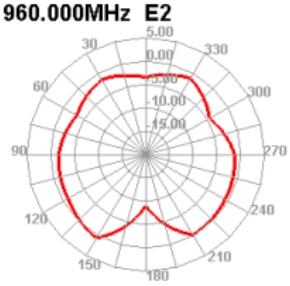
1700.000MHz H



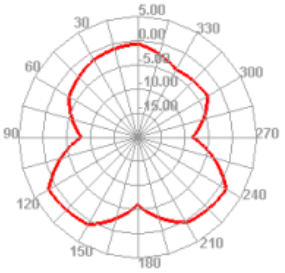
960.000MHz E1



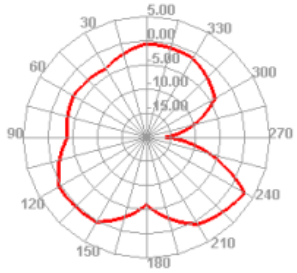
960.000MHz E2



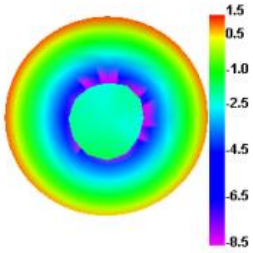
1700.000MHz E1



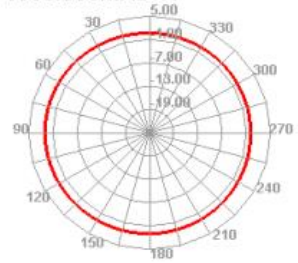
1700.000MHz E2



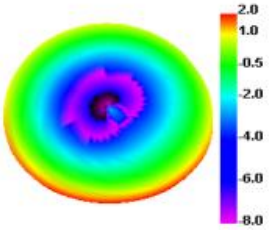
1850.000MHz



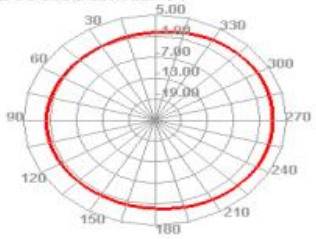
1850.000MHz H



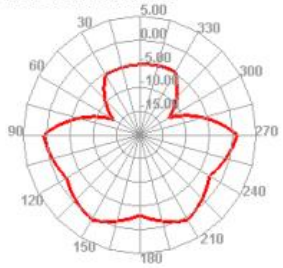
2100.000MHz



2100.000MHz H



1850.000MHz E1



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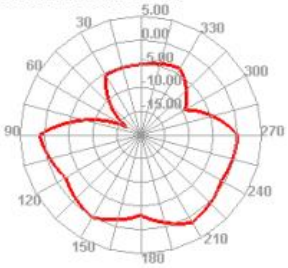
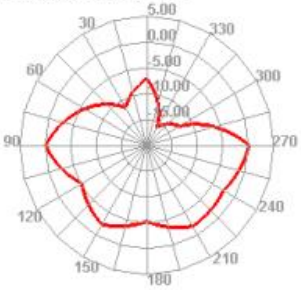


2100.000MHz E1



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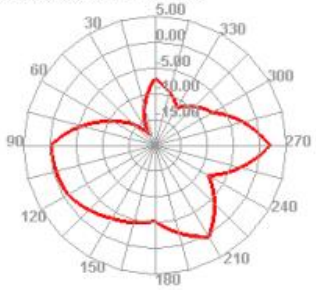
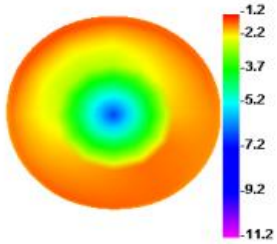
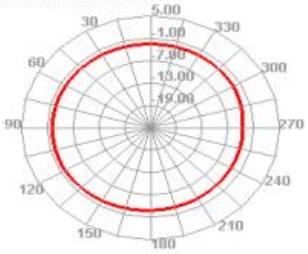


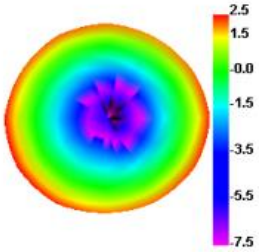
2400.000MHz



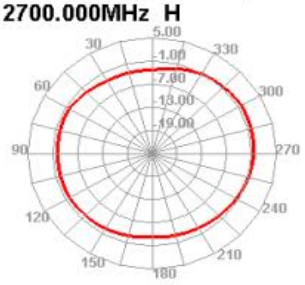
2400.000MHz H



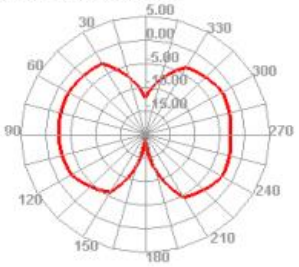
2700.000MHz



2700.000MHz H



2400.000MHz E1



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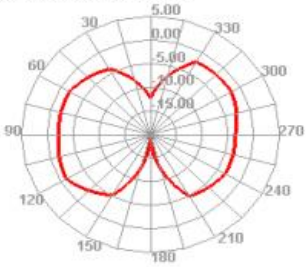

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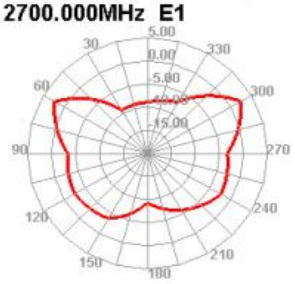

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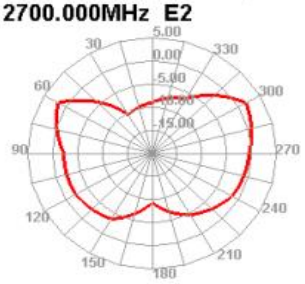
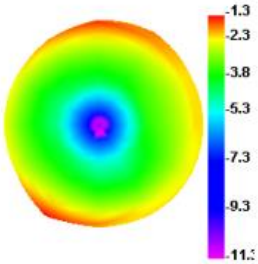


3300.000MHz



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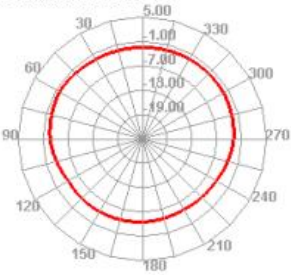
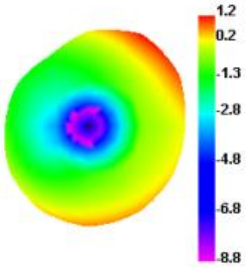


3435.000MHz



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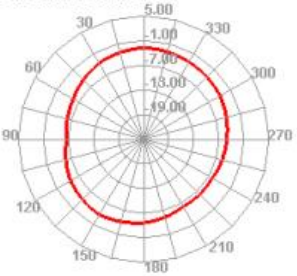
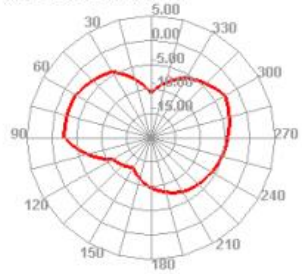


3300.000MHz E1



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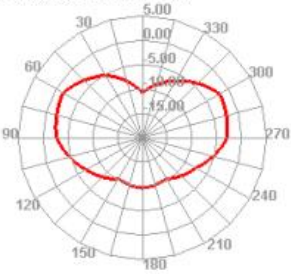
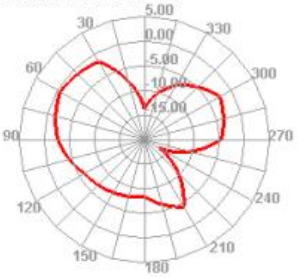


3435.000MHz E1



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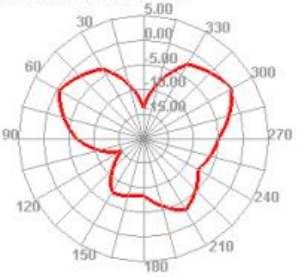
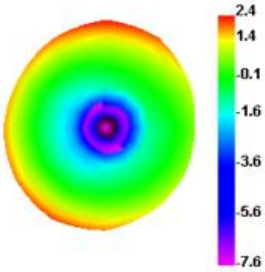
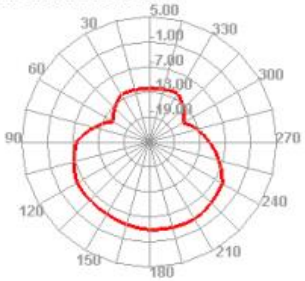


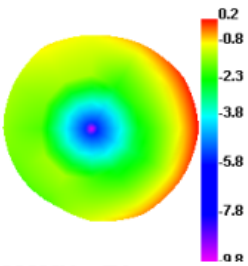
3705.000MHz



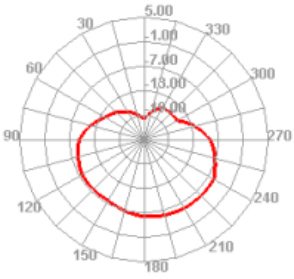
3705.000MHz H



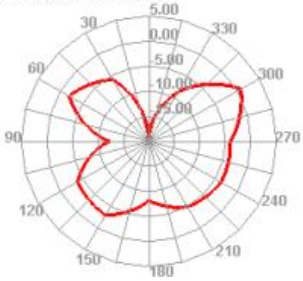
4200.000MHz



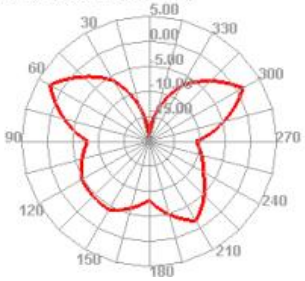
4200.000MHz H



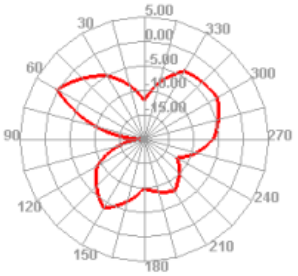
3705.000MHz E1



3705.000MHz E2



4200.000MHz E1



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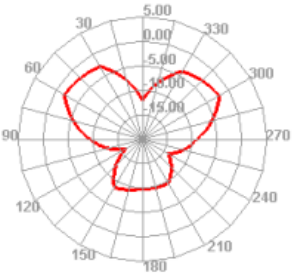
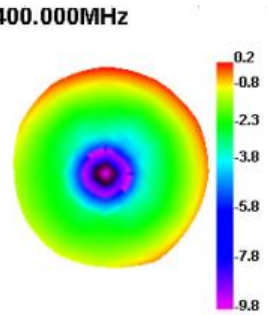
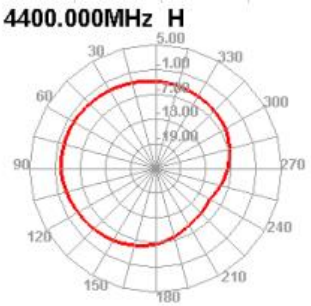


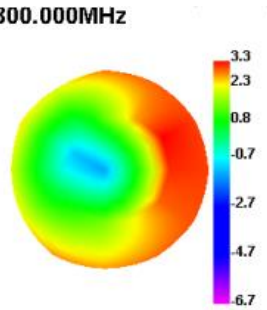
4400.000MHz



4400.000MHz H



4800.000MHz



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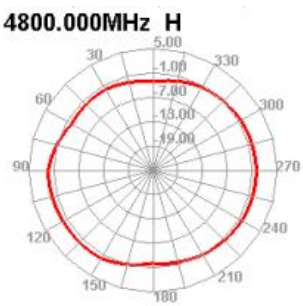

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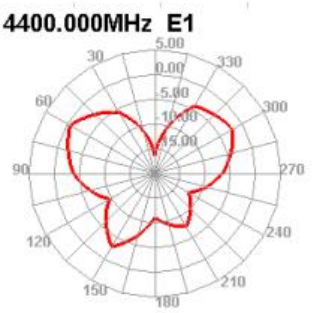
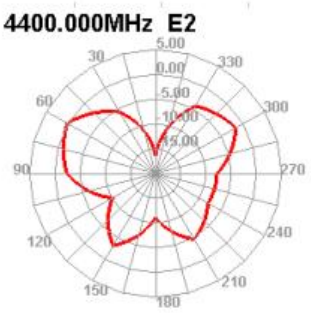


4400.000MHz E2



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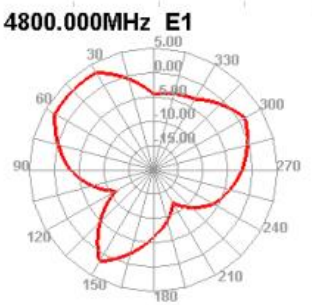

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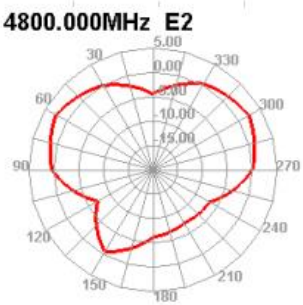

5 Product Size