

Super Wideband (150-6000MHz) Omni In-Building Antenna



The UACM-V™ is Fractal Antenna System's flagship wideband antenna for ceiling mounted in-building Public Safety & DAS applications that require VHF coverage. Using our proprietary and patented FRACTAL technologies, the UACM-V™ is built with "future-proof" ultra-wide bandwidth and excellent RF performance in the smallest & lightest form factor available

Applications & Markets

- Public safety indoor DAS
- Cellular indoor DAS
- Neutral host provider systems
- Small cell systems

The Fractal Advantage™

- Ultra-wide bandwidth for essentially all frequency applications in single antenna
- "Future proof" design ready for LTE, FirstNet, indoor 5G, CBRS, and other spectrum rollouts
- Excellent RF performance and super wide bandwidth that covers VHF
- Smallest form factor for given performance on the market
- Made in USA of US and imported parts

Specifications

(for commonly used frequencies)

Frequency (MHz)	150-174*	450-512	617-806	806-960	1350-1435	1670-2200	2200-3500	3500-4200	4200-6000
Max Gain (dBi)	-13.6	2.2	1.4	3.4	7.5	9.2	9.2	10	8.4
Avg Gain (dBi)	-16	1.2	1	2.5	4.5	5.5	5.5	5.5	6
Avg VSWR	<2:1	<2.5:1	<3:1	<2.5:1	<2:1	<2:1	<2:1	<2:1	<2:1
Impedance	50 Ω								
Polarization	Vertical								
Beamwidth	Omni (360°)								
Max Power	20 Watts								
Connector	Single input, single output - Type N-Connector								

*VHF passband tunable to any 7MHz frequency range between 150-174 MHz; wider passband possible with VSWR <3:1

Mechanical Specifications

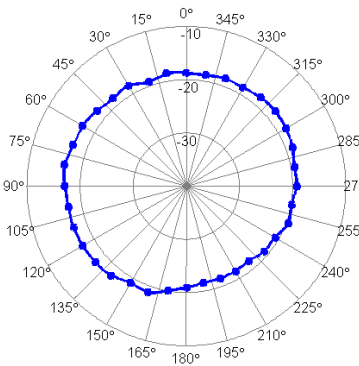
Unit Number	UCV00 (w/ type N connector); UCV01 (w/ 18" pigtail type N connector)
Antenna Weight	1.22 lbs (.55 kg)
Antenna Height	4.75 inches
Antenna Diameter	11.6 inches
Operating Temp.	-40°F to 130°F
Radome Material	Kydex, UL94 V-0 rating, White color

FOR INQUIRIES EMAIL US: SALES@FRACTENNA.COM

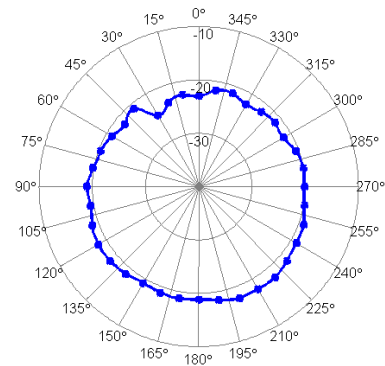
Antenna Power Patterns For Common Frequencies

155MHz

Azimuth Plane 90° EL (dBi)

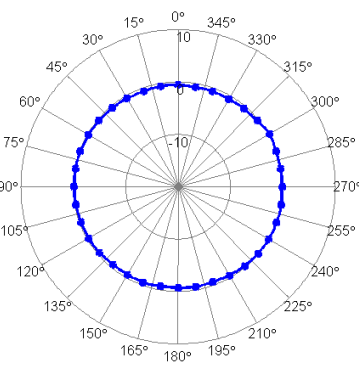


Elevation Plane (dBi)

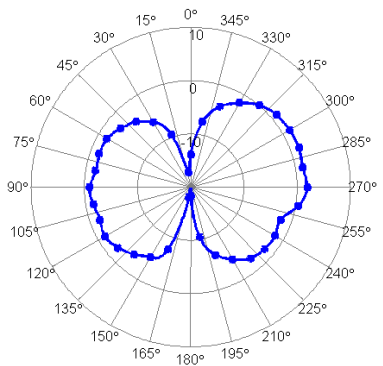


400MHz

Azimuth Plane 90° EL (dBi)

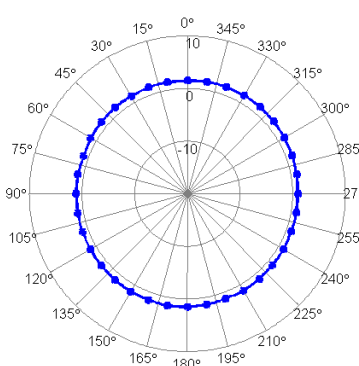


Elevation Plane (dBi)

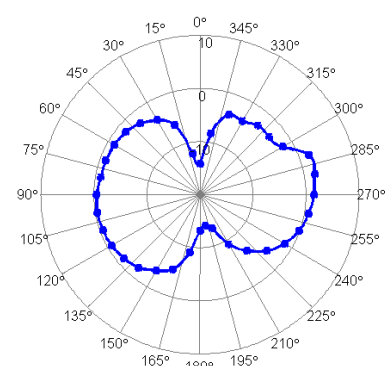


512MHz

Azimuth Plane 90° EL (dBi)

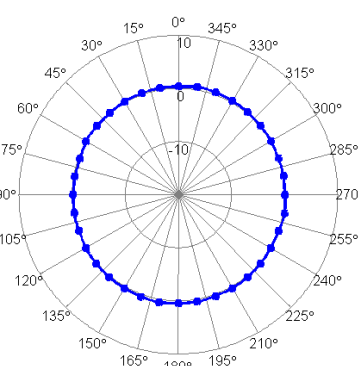


Elevation Plane (dBi)

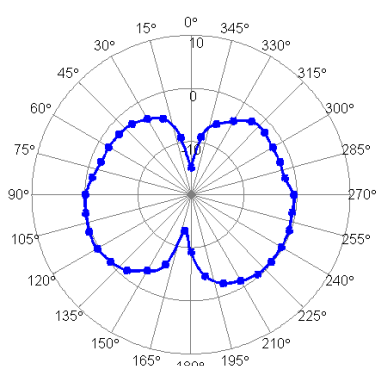


698MHz

Azimuth Plane 90° EL (dBi)

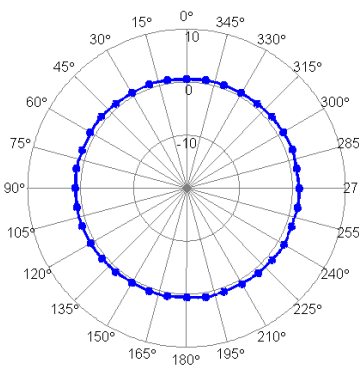


Elevation Plane (dBi)

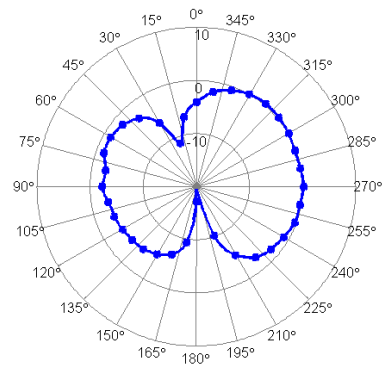


750MHz

Azimuth Plane 90° EL (dBi)

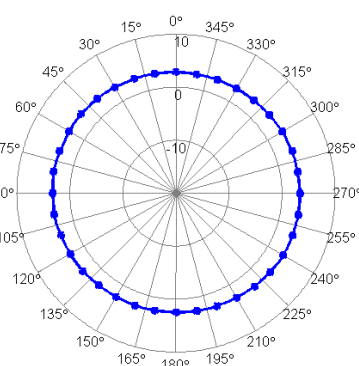


Elevation Plane (dBi)

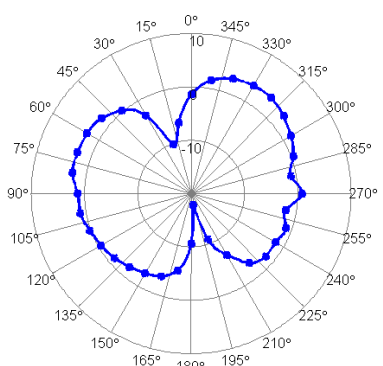


850MHz

Azimuth Plane 90° EL (dBi)



Elevation Plane (dBi)



Antenna Power Patterns For Common Frequencies

1395MHz

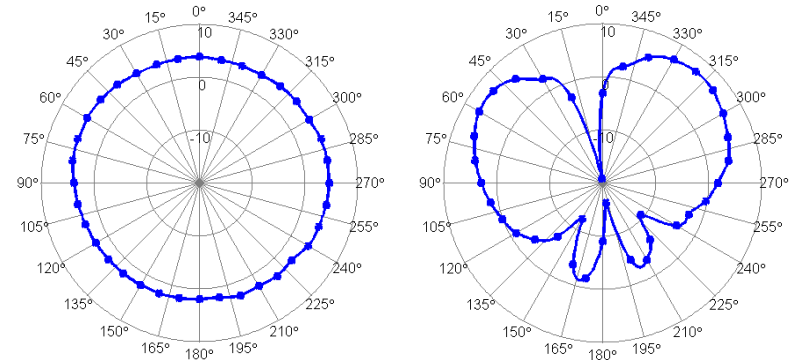
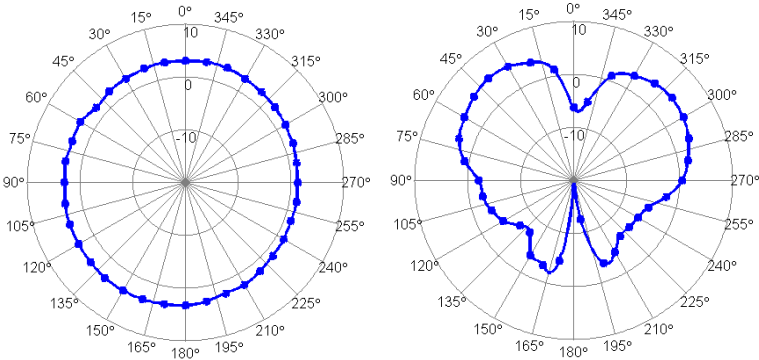
1750MHz

Azimuth Plane 90° EL (dBi)

Elevation Plane (dBi)

Azimuth Plane 90° EL (dBi)

Elevation Plane (dBi)



2200MHz

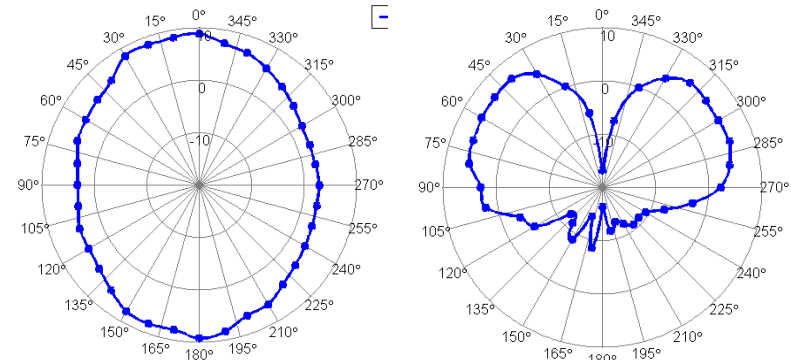
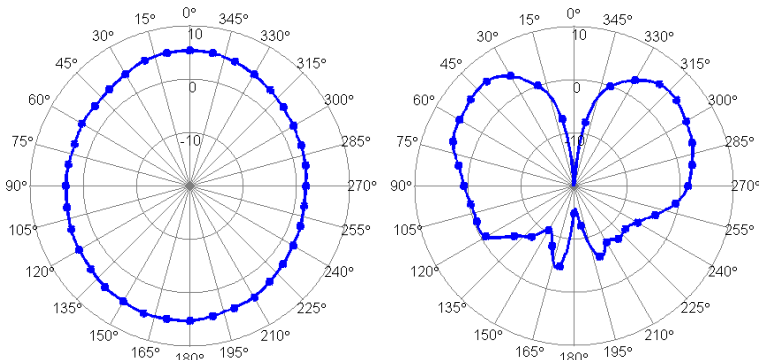
2700MHz

Azimuth Plane 90° EL (dBi)

Elevation Plane (dBi)

Azimuth Plane 90° EL (dBi)

Elevation Plane (dBi)



3600MHz

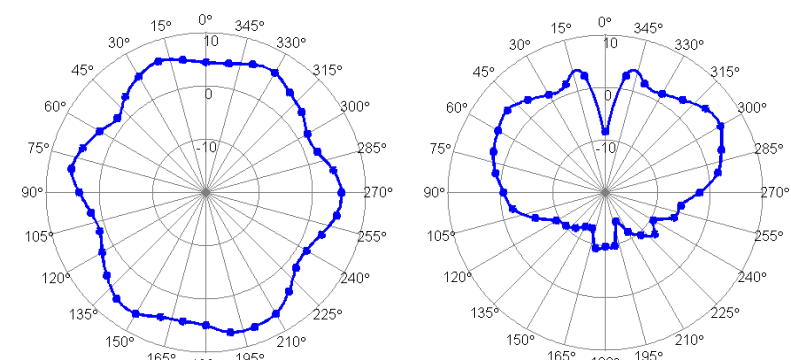
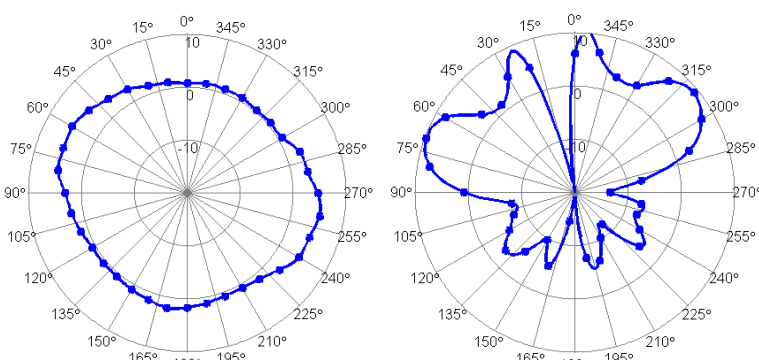
5200MHz

Azimuth Plane 90° EL (dBi)

Elevation Plane (dBi)

Azimuth Plane 90° EL (dBi)

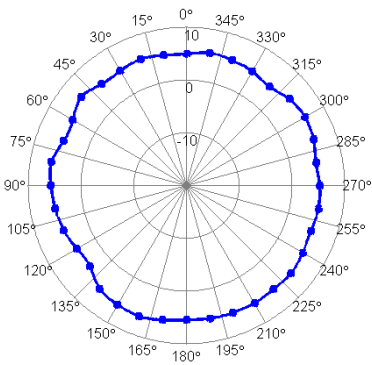
Elevation Plane (dBi)



Antenna Power Patterns For Common Frequencies

5900MHz

Azimuth Plane 90° EL (dBi)



Elevation Plane (dBi)

