

PDQ24499

4-Port MIMO Directional Antenna
2400-2500 MHz/4900-5950 MHz

The Laird Connectivity's patent-pending PDQ24499 antenna is a four-port dual-band, dual polarized directional panel antenna for use in 802.11n MIMO indoor and outdoor applications. The antenna is an excellent choice for high density Wi-Fi applications where adjacent interference is of concern. The dual-band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2400-2500 MHz and 4900-5950 MHz bands.
In addition, the uniform and symmetrical radiation patterns provide a high-level signal density into engineered coverage areas.

FEATURES AND BENEFITS

- Ultra-thin, compact ASA UV stable white housing
- Four radiating elements optimized for indoor and outdoor 802.11n or 802.11ac MIMO applications
- Articulating arm mount can be anchored directly to a vertical surface or mast mounted and oriented for optimal signal radiation

APPLICATIONS

- High density Wi-Fi
- Outdoor stadiums, arenas, and convention centers
- Hotels and casinos
- Airport, but, and train terminals
- Retail stores and indoor pedestrian malls
- Libraries and museums

ELECTRICAL SPECIFICATION		
Model Name	PDQ24499	
Number of Ports	4	
Operating Frequency (MHz)	2400-2500	4900-5950
VSWR – Avg	<1.6:1	<1.8:1
VSWR – Max	<2.0:1	<2.0:1
Peak Gain – Avg. (dBi)	8.2	8.3
Peak Gain – Max. (dBi)	8.6	9.4
Max. Gain ± 30° above Horizon (dBi)	N/A	7.4
Port-to-Port Isolation – Avg. (dB)	>34	>34
Port-to-Port Isolation – Max. (dB)	>30	>30
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	10	
Polarization	Vertical (2 ports), Horizontal (2 ports)	
Vertical Plane 3 dB Beamwidth – V-pol	62°	50°
Vertical Plane 3 dB Beamwidth – H-pol	73°	65°
Azimuth Plane 3 dB Beamwidth – V-pol	75°	62°
Azimuth Plane 3 dB Beamwidth – H-pol	62°	57°
Front-to-Back Ratio (dB)	>15	

MECHANICAL SPECIFICATION	
Dimensions – mm (inches)	254 x 254 x 41 (10 x 10 x 1.6)
Weight – kg (lbs.)	1.14 (2.50)
Mounting	Articulating mount, mast or flush
Cable Type	Low temperature plenum-rated cable
Radome/Baseplate Material	Polycarbonate, UL94-V0, UV stable white

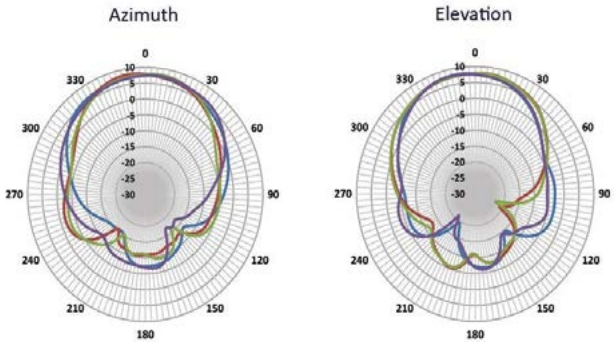
ENVIRONMENTAL SPECIFICATION	
Operating Environment (Indoor or Outdoor)	Indoor and outdoor
Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Wind Survival – km/hr (mph)	200 (125)
Wind Gust Survival – km/hr (mph)	266 (165)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

CONFIGURATION

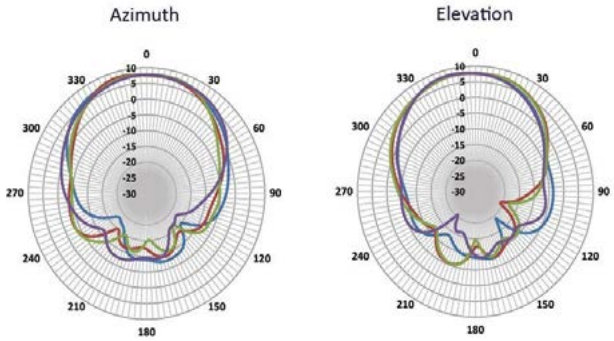
PART NUMBER	CABLE LENGTH	CONNECTOR
PDQ24499-FNF	N/A	4x – Fixed Type N-Female
PDQ24499-91NF	Dual – 91.0 cm (3.0 ft.)	4x – Type N-Female
PDQ24499-91NM	Dual – 91.0 cm (3.0 ft.)	4x – Type N-Male

RADIATION PATTERNS

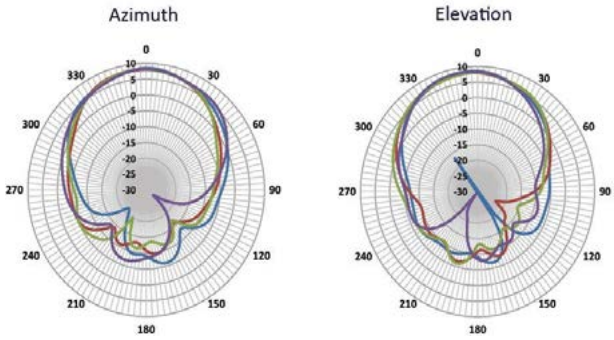
2400 MHz



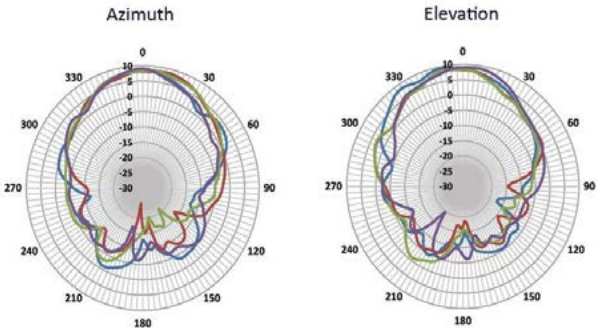
2450 MHz



2500 MHz

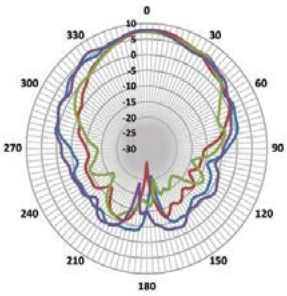


4900 MHz

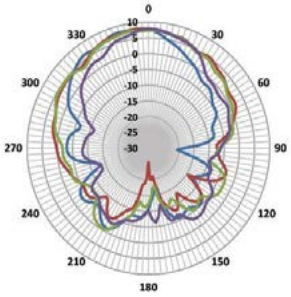


5400 MHz

Azimuth

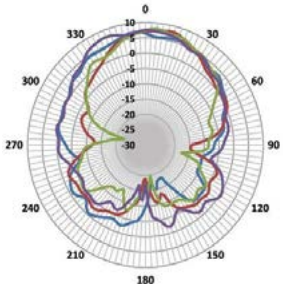


Elevation

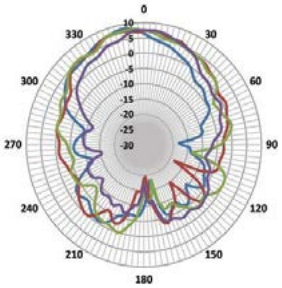


5950 MHz

Azimuth



Elevation



TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

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