

PDQ24499

2400 to 2500 MHz/4900 to 5950 MHz 4-port MIMO Directional Antenna

4-PORT MIMO DUAL-BAND, DUAL POLARIZED DIRECTIONAL ANTENNA

The Laird patent pending PDQ24499 antenna is a 4-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 will provide a high-level signal density into engineered coverage areas.

FEATURES

- Ultra thin, compact ASA UV stable white housing.
- Four radiating elements optimized for indoor & outdoor 802.11n or 802.11ac MIMO applications.
- Articulating arm mount can anchored directly to a vertical surface or mast mounted and oriented for optimal signal radiation.
- Both horizontal & vertical polarization for multipath mitigation.
- IP67 Rated and RoHS compliant.

MARKETS / APPLICATIONS

- High density WiFi
- Sports Entertainment- outdoor stadiums, arenas & convention centers
- Hospitality – hotels & casinos
- Transportation – airport, bus, & train terminals
- Retail – stores & indoor pedestrian malls
- Education – libraries & museums



Patent Pending PDQ24499



Standard Articulating Mount

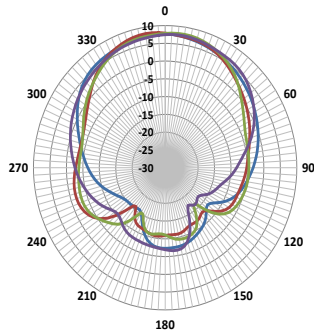
PARAMETERS		SPECIFICATIONS	
Number of Ports	Four (4)		
Frequency Bands, MHz	2400-2500	4900-5950	
Peak Gain, Typical dBi	8.2	8.3	
Peak Gain, Max dBi	8.6	9.4	
Max Gain ± 30o above Horizon, dBi	N/A	7.4	
Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol)	75°/62°	62°/57°	
Elevation 3 dB Beamwidth, Typ (V-pol/H-pol)	62°/73°	50°/65°	
VSWR, Typical	< 1.6:1	< 1.8:1	
VSWR, Max	< 2.0:1	< 2.0:1	
Port-to-Port Isolation, Typical	> 34 dB	> 34 dB	
Port-to-Port Isolation, Maximum	> 30 dB	> 30 dB	
Nominal Impedance	50Ω		
Polarization	2-Ports Vertical, 2-Ports Horizontal		
Front-to-Back Ratio	> 15 dB		
Maximum Input Power (per port)	10 W (ambient temp of 25°C/77°F)		
Dimensions	254 x 254 x 41 mm (10″ x 10″ x 1.6″)		
Weight (without mount)	1.14 kg (2.50 lbs)		
Mounting	Articulating Mount, Mast or Flush Mount		
Cable Type	Low Temperature Plenum Rated Cable		
Wind Survival	200 km/h (125 mph)		
Wind Gust Survival	266 km/h (165 mph)		
Ingress Protection	IP67		
Operating Temperature	-30°C to +70°C (-22°F to +158°F)		
Storage Temperature	-40°C to +85°C (-40°F to +185°F)		
Radome/Baseplate Material	Polycarbonate, UL94-V0, UV Stable White		
Material Compliance	RoHS Compliant		
PART NUMBER	CABLE LENGTH	CONNECTOR	
PDQ24499-FNF	N/A	4x- Fixed Type N-female	
PDQ24499-91NF	Dual- 91 cm (3.00 ft)	4x- Type N- female	
PDQ24499-91NM	Dual- 91 cm (3.00 ft)	4x- Type N- male	

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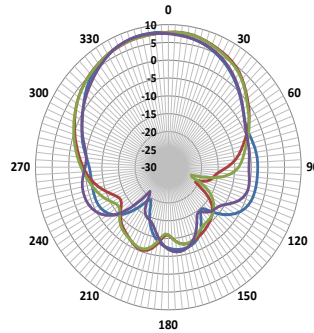
RADIATION PATTERNS

2400 MHz

Azimuth Radiation Pattern

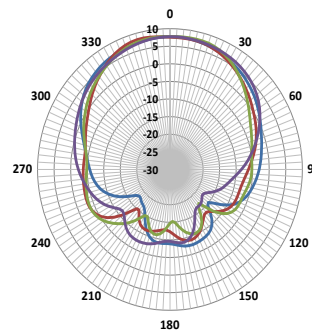


Elevation Radiation Pattern

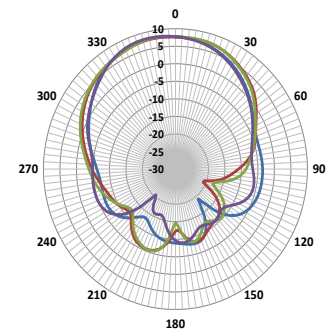


2450 MHz

Azimuth Radiation Pattern

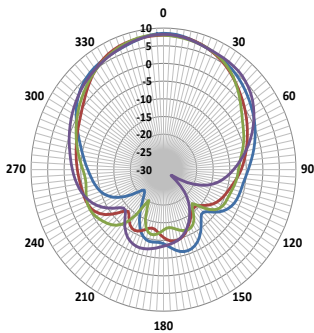


Elevation Radiation Pattern

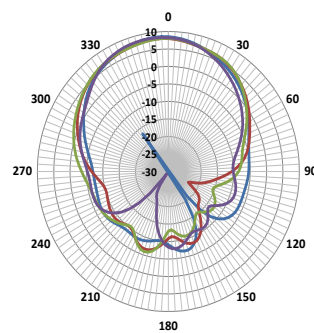


2500 MHz

Azimuth Radiation Pattern

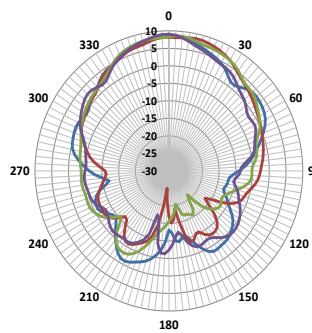


Elevation Radiation Pattern

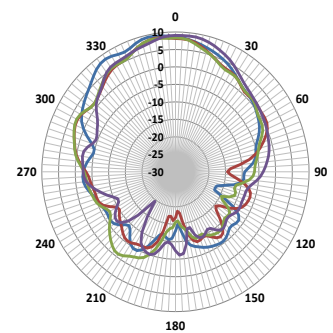


4900 MHz

Azimuth Radiation Pattern

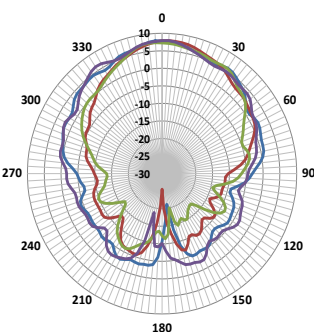


Elevation Radiation Pattern

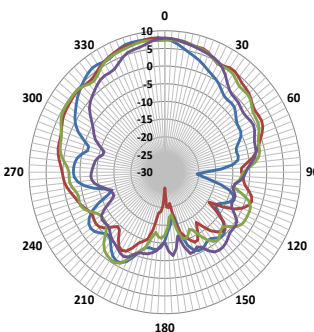


5400 MHz

Azimuth Radiation Pattern

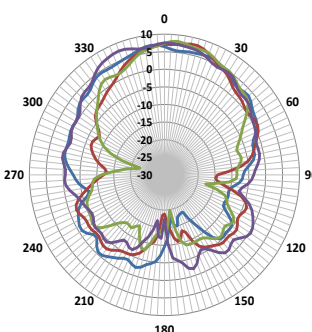


Elevation Radiation Pattern

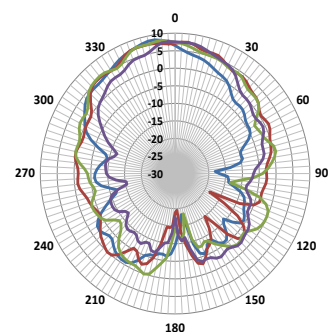


5950 MHz

Azimuth Radiation Pattern



Elevation Radiation Pattern



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