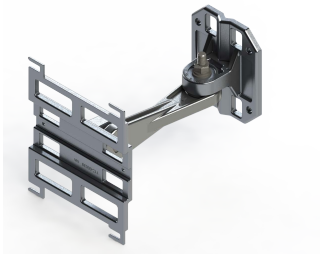
Smart Technology. Delivered.

PDQ24499
2400 to 2500 MHz/4900 to 5950 MHz 4-port MIMO Directional Antenna

Patent Pending PDQ24499



Standard Articulating Mount

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 RoHS

- 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

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

Americas: +1.847 839.6925
IAS-AmericasEastSales@lairdtech.com
Europe: +44.1628.858941
IAS-EUSales@lairdtech.com
Asia: +86.215855.0827.127
IAS-AsiaSales@lairdtech.com
www.lairdtech.com

Laird

Smart Technology. Delivered.

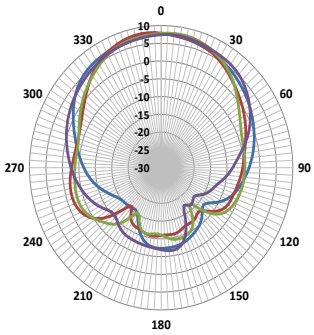
PDQ24499

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

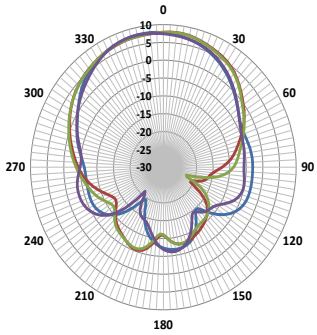
RADIATION PATTERNS

2400 MHz

Azimuth Radiation Pattern

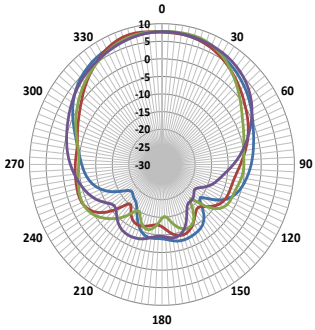


Elevation Radiation Pattern

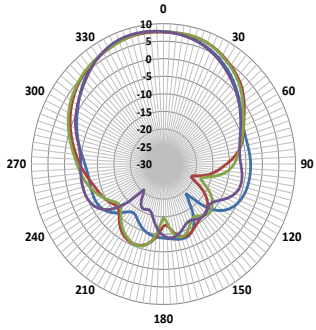


2450 MHz

Azimuth Radiation Pattern

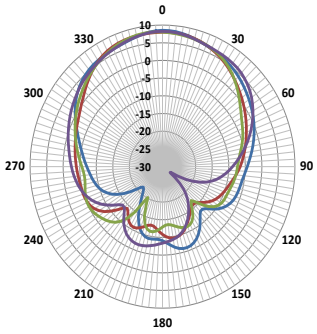


Elevation Radiation Pattern

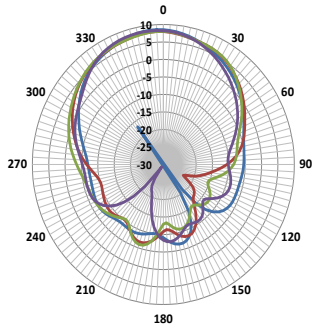


2500 MHz

Azimuth Radiation Pattern

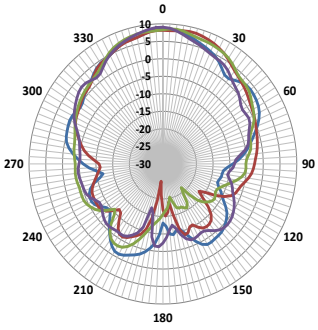


Elevation Radiation Pattern

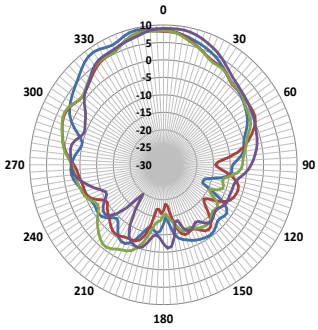


4900 MHz

Azimuth Radiation Pattern

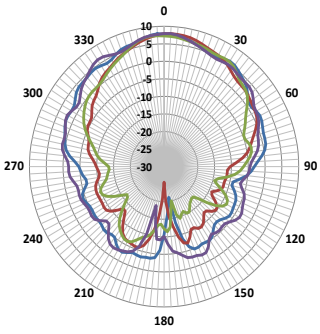


Elevation Radiation Pattern

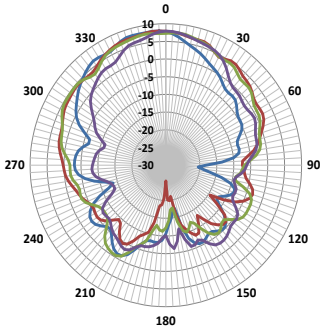


5400 MHz

Azimuth Radiation Pattern

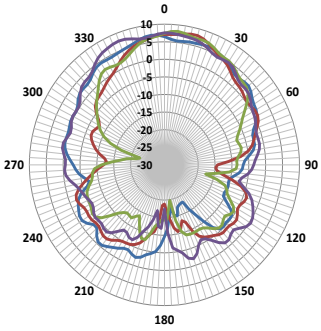


Elevation Radiation Pattern

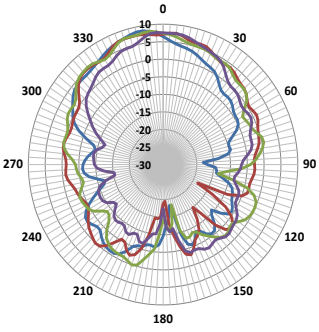


5950 MHz

Azimuth Radiation Pattern



Elevation Radiation Pattern



Laird warrants to the original end user customer of its products that its products are free from defects in material andworkmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

5 YEAR WARRANTY

ANT-DS-PDQ24499 0216

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2016 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trade marks or registered trade marks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.