

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

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

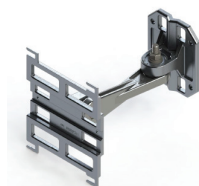
The Laird patent pending PDQ24496 antenna is a 4-port dual-band, dual polarized directional panel antenna for use in 802.11n MIMO indoor and outdoor applications. The antenna is an excellent choice for high density Wi-Fi applications where adjacent interference is of concern. The dual-band frequency 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 be anchored directly to a vertical surface or mast mounted & oriented for optimal signal radiation
- Both horizontal & vertical polarization for multipath mitigation
- IP-67 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



Standard Articulating Mount

| PARAMETER                                  | SPECIFICATIONS                          |           |
|--------------------------------------------|-----------------------------------------|-----------|
| Antenna Model                              | PDQ24496                                |           |
| No. of Ports                               | 4                                       |           |
| Frequency Bands, MHz                       | 2400-2500                               | 4900-5950 |
| Average Peak Gain, dBi                     | 6.4                                     | 4.8       |
| Maximum Peak Gain, dBi                     | 6.8                                     | 6.5       |
| Max Gain $\pm 30^\circ$ above Horizon, dBi | N/A                                     | 3.2       |
| Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol)  | 68°/63°                                 | 58°/57°   |
| Elevation 3dB Beamwidth, Typ (V-pol/H-pol) | 62°/71°                                 | 58°/56°   |
| VSWR, Avg                                  | 1.5:1                                   | 1.3:1     |
| VSWR, Max                                  | <2.0:1                                  | <2.0:1    |
| Port-to-Port Isolation, Avg                | 43 dB                                   | 41 dB     |
| Port-to-Port Isolation, Max                | >30 dB                                  | >30 dB    |
| Nominal Impedance                          | 50 $\Omega$                             |           |
| Polarization                               | 2-ports Vertical, 2-ports Horizontal    |           |
| Front-to-Back Ratio                        | > 15 dB                                 |           |
| Maximum Input Power (per port)             | 1 W (ambient temp of 25°C/77°F)         |           |
| Dimensions                                 | 254 x 254 x 41 mm (10" x 10" x 1.6")    |           |
| Weight (w/out 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 Operational                           | 160 km/hr (100 mph)                     |           |
| Operating Temperature                      | -40°C to +70°C (-40°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 |           |
| Ingress Protection                         | IP-67                                   |           |
| Material Compliance                        | RoHS Compliant                          |           |

| MODEL NUMBER  | CABLE LENGTH        | CONNECTOR           |
|---------------|---------------------|---------------------|
| PDQ24496-FNF  | N/A                 | Fixed Type N Female |
| PDQ24496-91NF | 4x- 91 cm (3.00 ft) | 4x Type N Female    |
| PDQ24496-91NM | 4x- 91 cm (3.00 ft) | 4x Type N Male      |

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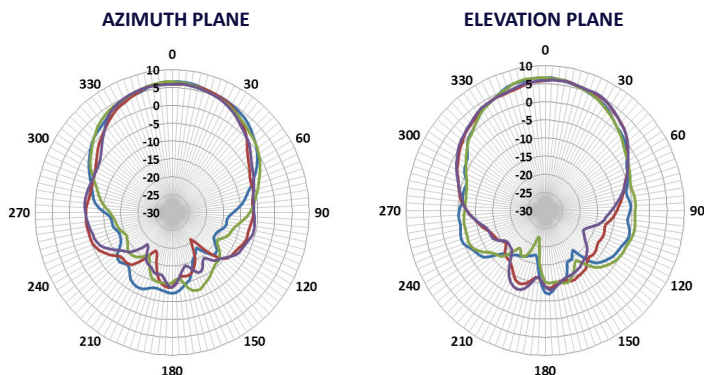
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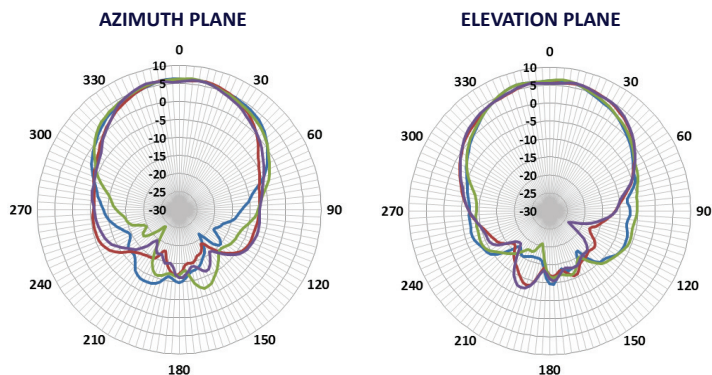
[www.lairdtech.com](http://www.lairdtech.com)

## RADIATION PATTERNS

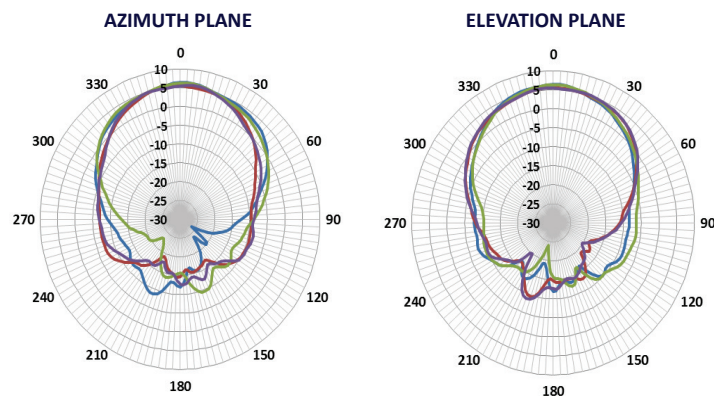
**Radiation Pattern at 2400 MHz**



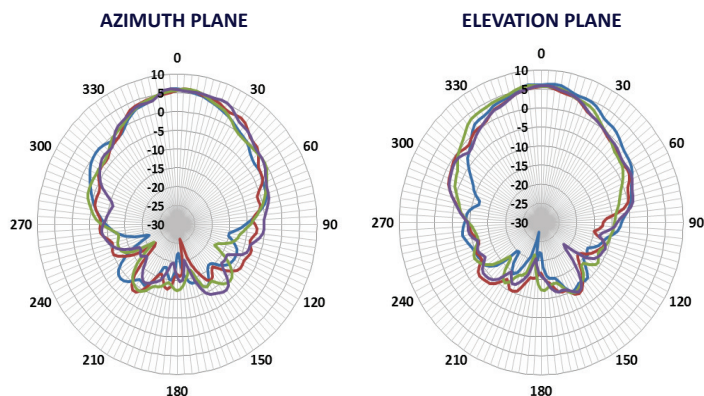
**Radiation Pattern at 2450 MHz**



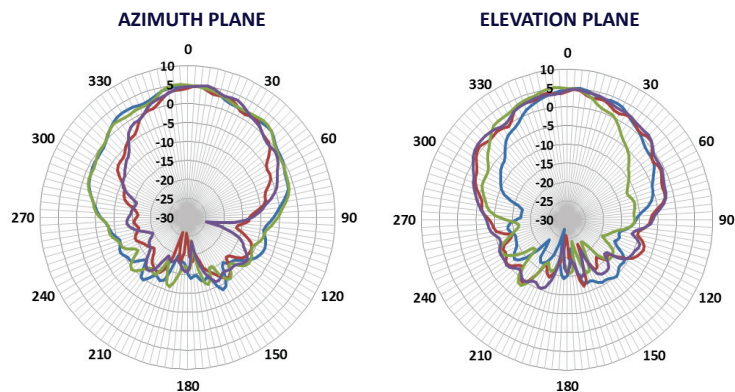
**Radiation Pattern at 2500 MHz**



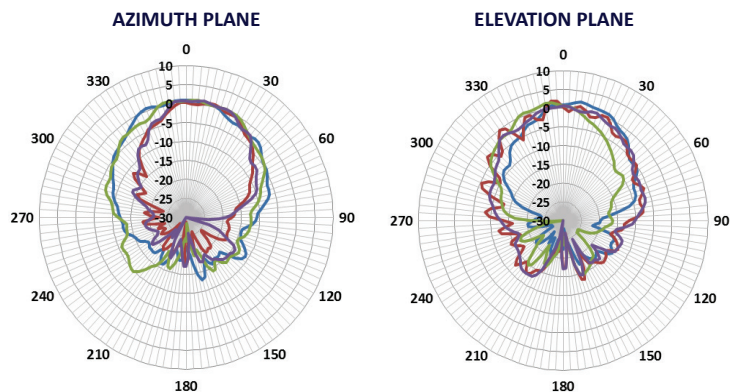
**Radiation Pattern at 4900 MHz**



**Radiation Pattern at 5400 MHz**



**Radiation Pattern at 5950 MHz**



ANT-DS-PDQ24496 1116

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