



# PSQ24495

# 4-Port Directional Slant 45° MIMO Antenna 2400-2490 MHz / 4900-6000 MHz

The Laird Connectivity PSQ24495 antenna is a four-port directional antenna for use in 802.11n MIMO applications. The antenna is an excellent choice for high density Wi-Fi applications where adjacent antenna interference is of concern. Equipped with two sets of slant +/-45-degree ports, the antenna takes advantage of both polarization and spatial separation to mitigate multipath issues.

Enclosed in a compact/low profile ASA, UV stable radome and equipped with an articulating arm that can be affixed to a mast or anchored directly to a vertical surface, the antenna can be oriented to take full advantage of the antenna's directionality. Uniform and symmetrical radiation patterns provide a high-level signal density into defined coverage zones. This antenna greatly enhances the performance of 802.11n systems where physical obstructions are anticipated. The dual band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2400-2490 MHz and 4900-6000 MHz bands.

#### **FEATURES AND BENEFITS**

- 802.11n MIMO operation
- Low profile, wide band performance
- Two sets of slant ± 45° polarized radiating elements in a single solution
- Ideal for indoor and outdoor use
- Spatial separation mitigates multipath issues

#### **APPLICATIONS**

- High density Wi-Fi
- Stadiums, arenas, convention centers
- Transport terminals
- Campuses
- Outdoor networks

ELECTRICAL SPECIFICATION				
Model Name	PSQ24495			
Number of Ports		4		
Operating Frequency (MHz)	2400-2490	4900-6000		
VSWR - Avg	<1.6:1	<1.9:1		
VSWR - Max	<2.0:1	<2.0:1		
Peak Gain - Avg. (dBi)	5.5	6.0		
Peak Gain - Max. (dBi)	6.6	7.7		
Max. Gain ± 30° above Horizon (dBi)	N/A	5.8		

ELECTRICAL SPECIFICATION				
Port-to-Port Isolation - Typ. (dB)	>16	>21		
Port-to-Port Isolation - Max. (dB)	>15	>20		
Nominal Impedance (Ohms)	50			
Max Power - Ambient 25°C (W)	10			
Polarization	Slant ± 45°			
Vertical Plane 3 dB Beamwidth	85°	90°		
Azimuth Plane 3 dB Beamwidth	110°	85°		
Front-to-Back Ratio (dB)	>13	>20		

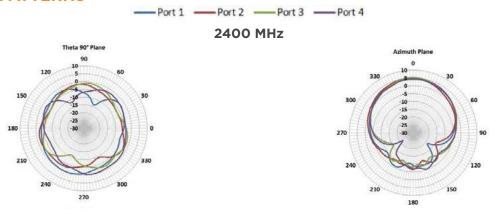
MECHANICAL SPECIFICATION		
Dimensions - mm (inches)	202 x 200 x 40 (7.96 x 7.87 x 1.6)	
Weight (without mount) - kg (lbs.)	0.698 (1.54)	
Mounting	Articulating mast/wall mount	
Cable Type	Low temperature plenum rated	
Radome/Baseplate Material	ASA LURAN S778T	

NVIRONMENT SPECIFICATION		
Operating Environment (Indoor or Outdoor)	Indoor or 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	

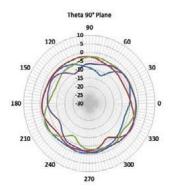
# **CONFIGURATION**

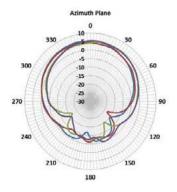
PART NUMBER	CABLE LENGTH	CONNECTOR	
PSQ24495-91NF	4x - 91 cm (3.00 ft.)	Type N-Female	
PSQ24495-91NM	4x - 91 cm (3.00 ft.)	Type N-Male	
PSQ24495-91RSM	4x - 91 cm (3.00 ft.)	Type SMA - Male Reverse Polarity	

# **RADIATION PATTERNS**

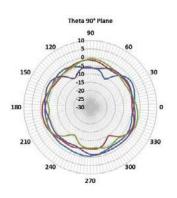


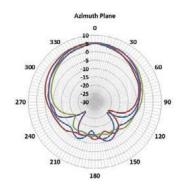
### 2450 MHz



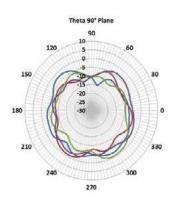


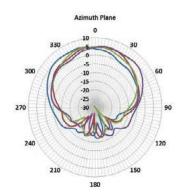
#### 2500 MHz



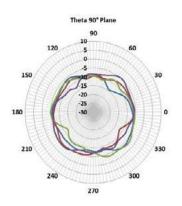


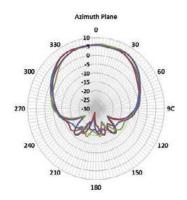
### 4900 MHz



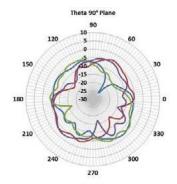


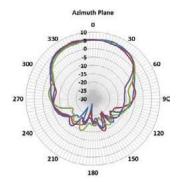
## 5400 MHz





### 6000 MHz





#### TE TECHNICAL SUPPORT CENTER

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