



Laird Connectivity premium series directional Yagi antennas are available in either fully gold anodized or black powder coat for long life and high corrosion resistance. These antennas feature internal matching to assure broad bandwidth and resistance to severe weather conditions. There is no gamma match to ice up, corrode or detune. Our engineering staff has optimized the product family for forward gain by computer analysis and then field-tested each for conformance.

#### FEATURES AND BENEFITS

- These antennas feature 360° welds around each element and an end-of-boom N connector feed with an internal transmission line feeding the driven element.
- Each Yagi is tuned on a network analyzer for best power match and lowest VSWR.
- All Yagi antennas ship complete with a high-quality cast aluminum mounting kit that includes stainless-steel hardware and allows vertical or horizontal orientation during installation (VHF models require light assembly)

#### APPLICATIONS

- Point-to-point and multi-point/omnidirectional outdoor antennas applications used by private organizations and government agencies around the globe.
- Typical applications include transportation such as railroad switching, remote locations reporting examples that include oil fields, weather conditions and, meter data transmissions for utilities

#### ELECTRICAL SPECIFICATIONS

Model Name	Y(B)8066
Operating Frequency (MHz)	806-896
Frequency Bandwidth (MHz)	90
VSWR	<2.0:1
Return Loss (dB)	-10 max
Gain (dBd)	9.0
Nominal Impedance (Ohms)	50
Max Power - Ambient 25°C (W)	300
Polarization	Vertical or horizontal
Pattern	Directional
Vertical Plane 3 dB Beamwidth	52°
Horizontal Plane 3 dB Beamwidth	56°
Tuning	Fixed
Transmitting/Receiving	Both
Front-to-Back Ratio (dB)	20
Gamma Match Type	Internally matched
Element Construction	Welded
Bracket Included	Included

#### MECHANICAL SPECIFICATIONS

Dimensions – L x H – cm (inches)	70.33 x 18.41 (27.69 x 7.25)
Weight – kg (lbs.)	1.77 (3.9)
Mounting	Up to 2.5-inch diameter mast
Cable Type	None
Material	Aluminum
Equivalent Flat Area – sq. ft.	0.2505
Termination	N-female connector
Color	Gold or black
Lightning Protection	Lightning Arrestor LABH350NN (Sold Separately)



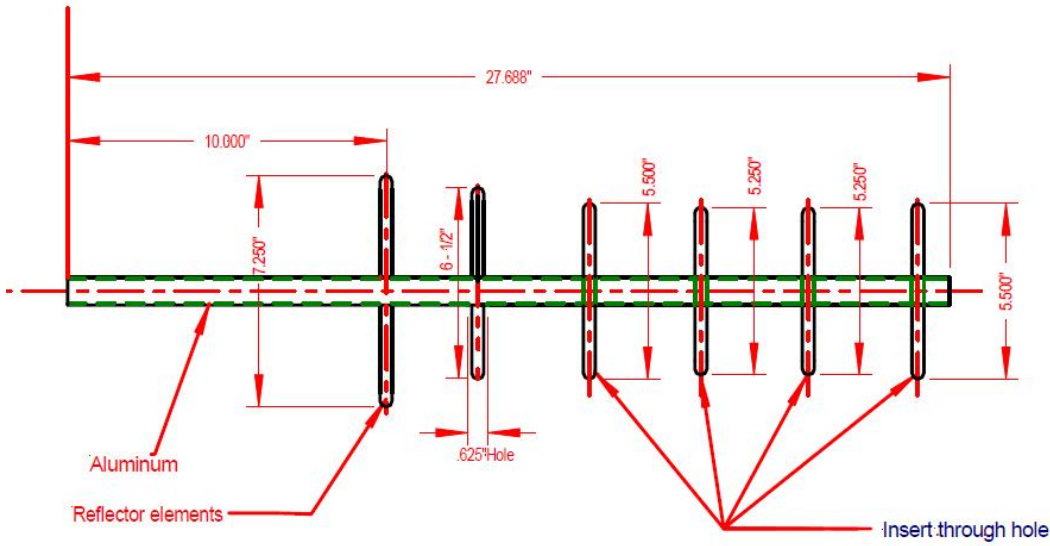
#### ENVIRONMENTAL SPECIFICATIONS

Rated Wind Velocity – km/hr (mph)	241 (150)
Rated Wind Velocity w/ 0.5: radial ice – km/hr (mph)	130 (80)

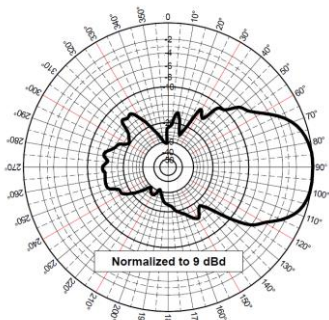
#### CONFIGURATION

PART NUMBER	FREQUENCY RANGE	COLOR
Y8066	806-896 MHz	Gold
YB8066	806-896 MHz	Black

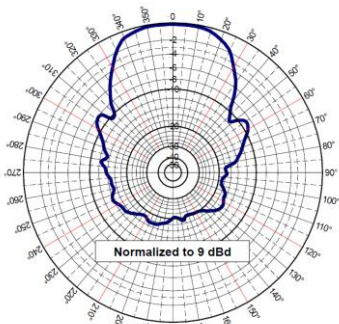
MECHANICAL DRAWING



RADIATION PATTERNS



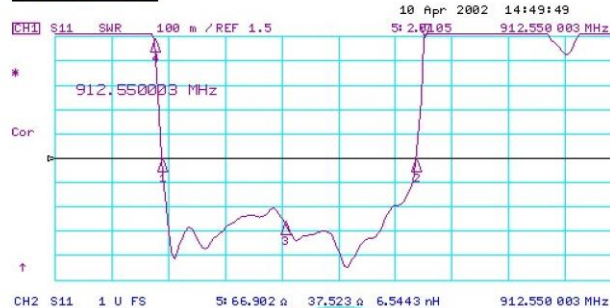
Vertical-to-Vertical Polarization  
Azimuthal Pattern (X, Y or E-Plane)



Horizontal-to-Horizontal Polarization  
Elevation Pattern (Y, Z or H-Plane)

VSWR

VSWR of Y(B)8066



- CH2 Markers  
1: 33.516 Ω  
1.5762 Ω  
796.975 MHz  
2: 63.863 Ω  
18.343 Ω  
908.925 MHz  
3: 51.497 Ω  
-10.715 Ω  
851.025 MHz  
4: 24.908 Ω  
-2.4258 Ω  
793.550 MHz

Y8066 Typical VSWR sweeps – Primary Specifications

- Marker 1: 1.4970 to 1 @ 796.975 MHz
- Marker 2: 1.4942 to 1 @ 908.925 MHz
- Marker 3: 1.2371 to 1 @ 851.025 MHz

Y8066 Typical VSWR sweeps – Secondary Specifications

- Marker 4: 2.0 to 1 @ 793.550 MHz
  - Marker 5: 2.0 to 1 @ 912.550 MHz
- 4/10/2002



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