#### DOUBLE-RIDGED GUIDE 3119B Double-Ridged Waveguide Horn

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# **Key Features**

- Ultra Broadband
- 400 MHz to 6 GHz
- 1500 W Power Input Capacity
- Optimized High Frequency Gain
- Low VSWR
- Flexible Mounting

#### **Features**

#### Ultra Broadband

The Model 3119 sweeps from 400 MHz to 6 GHz without stopping for band breaks, making it ideal for automated testing. This antenna also covers all known commercial wireless frequencies.

#### Uniform Gain, Low VSWR

This antenna has a more uniform gain and antenna factor because of the better behavior of its radiation pattern. Since the pattern is stable, the gain and the AF also remain stable. Similar antennas of this class exhibit large variations of the gain and the AF as the frequency increases.

#### Power Input

The antenna's high gain and low VSWR over its operating frequency translates into efficient amplifier use and high field strengths. The Model 3119 uses a Type N connector, and accepts up to 1500 watts of continuous input power, with up to 2500 watts of peak power.

#### Flexible Mounting

This antenna includes both an EMCO tripod mount and rear "stinger" mount. The stinger mount permits on-axis rotation/polarization. The back plate has four (4) 3/8-16 threaded mounting holes for custom mounts.

# Specifications

## **Electrical Specifications**

Frequency Minimum: 400 MHz Frequency Maximum: 6 GHz Maximum Continuous Power:

400 MHz: 1500 W6 GHz: 800 W

Peak Power: 2500 W

Impedance (Nominal):  $50 \Omega$  Pattern Type: Directional

Polarization: Linear

VSWR Ratio: (Average) 3.5:1 Maximum; <2:1 Above 500 MHz

Connectors: Type N

#### Physical Specifications

Height: 31.37 cm (12.35 in) Width: 48.84 cm (19.23 in) Depth: 40.00 cm (15.75 in) Weight: 5.2 kg (11.5 lb)

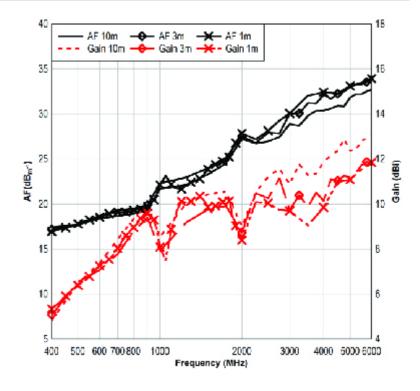
#### Other Specifications

- Antenna
- Mounting Bracket Drilled to Accept ETS-Lindgren or Other Tripod Mounts with 1/4 in x 20 Threads
- Rear "Stinger" for use with On-axis Mount Positioners
- Individually Calibrated at 1 m per SAE ARP 958 at our A2LA accredited lab and 3 m Calibration per ANSI C63.5. Actual antenna factors and a signed Certificate of Calibration Conformance included with manual.
- Manual

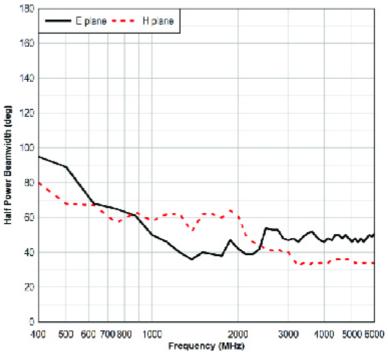


## **Product Charts**

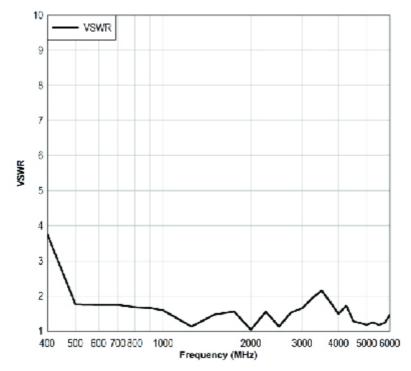
# 3119B Antenna Factor and Gain



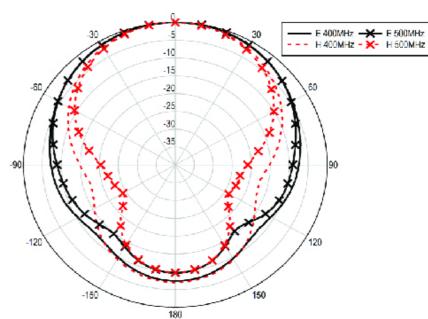
# 3119B Half Power Beamwidth



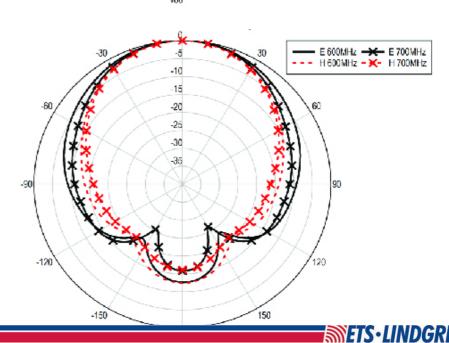
#### **3119B VSWR**



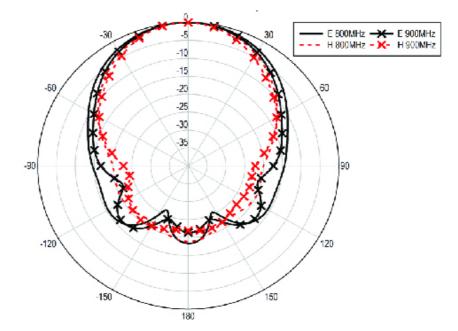
## 3119B E and H Plane 400 MHz to 500 MHz



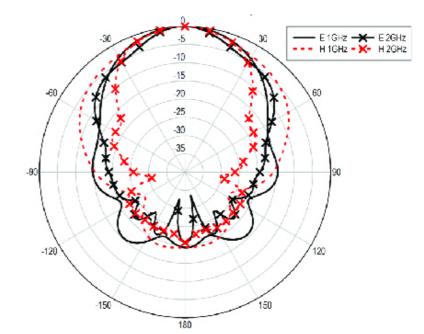
# 3119B E and H Plane 600 MHz to 700 MHz



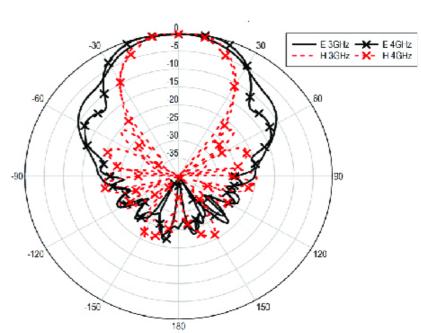
## 3119B E and H Plane 800 MHz to 900 MHz



# 3119B E and H Plane 1 GHz to 2 GHz



# 3119B E and H Plane 3 GHz to 4 GHz



## 3119B E and H Plane 5 GHz to 6 GHz

