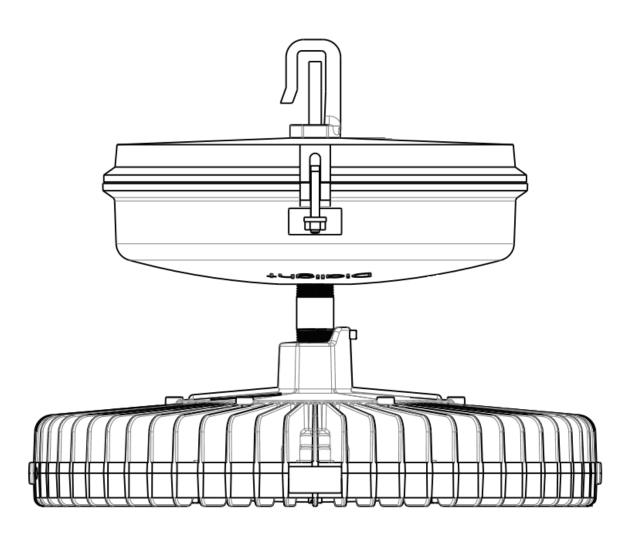


# INSTALLATION AND MAINTENANCE MANUAL Vigilant® SERIES LED HIGH BAY, 347-480VAC Document No: 9100-127-2339-99 Rev D

Document No: 9100-127-2339-99 Rev D January 2017

MODEL #'s

# HExxx5xxxxx





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### 1: Introduction

This High Bay light is designed for illumination of industrial locations. It uses the latest in solid state lighting technology for long life, low maintenance, and high efficiency.

The unique optical design focuses light downward to where it is needed, giving improved efficiency over a conventional HID luminaire.

An internal power-factor-corrected switch-mode supply allows it to be used from any nominal 347V-480V, 50/60Hz AC supply without any variation in light output.

All models are suitable for use in dry locations per UL-1598.

For models suitable for use in wet locations per UL-1598 and Outdoor Type (Salt Water) per UL-1598A; see outside label of unit.

Note: Save these instructions for future reference.

### 2: Installation

## <u>Marning:</u>

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.

#### **Marning:**

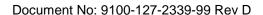
To avoid electric shock:

- Be certain electrical power is OFF before and during installation and maintenance.
- Luminaire must be connected to a wiring system with an equipment-grounding conductor.

### **Marning:**

- Make sure the supply voltage is the same as the rated luminaire voltage.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.

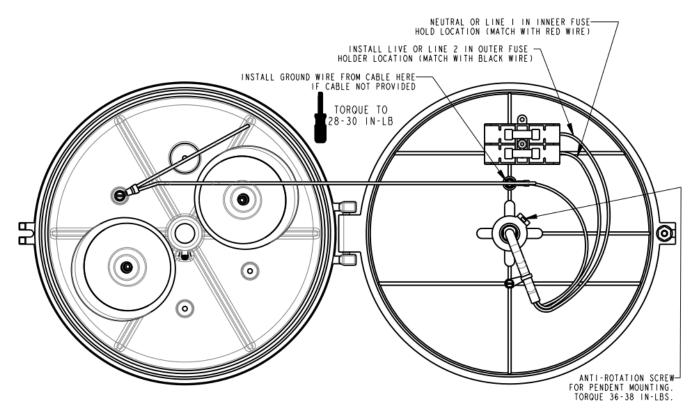
Recommended mounting height: 25-40 feet





#### **Pendent Mount Installation Steps:**

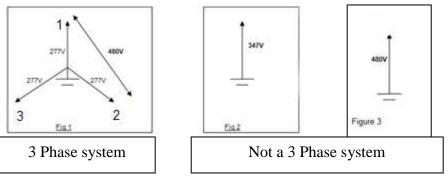
- For maximum long term reliability and light output, the light must be installed in free air.
  - The High Bay fixture design incorporates an over-temperature control circuit that reduces input power should internal temperatures reach a maximum level. As a result, light output may be reduced.
- The High Bay fixture is threaded for 3/4" NPT in order to be assembled to conduit.
  - Calculate and measure required conduit length.
  - Feed the power cable through the conduit and into the junction box.
  - Attach the fixture to the conduit (using Teflon tape or pipe sealant).
  - o Insert 1/4-20 set screw in order to secure the fixture to the conduit.
- If whip is factory installed, connect power cable conductors as follows:
  - o For single phase (Non 3-phase systems)
    - Green wire connects to Safety Ground.
    - Black wire connects to Neutral
    - Red wire connects to Live
  - For two phase (3-phase systems)
    - Green wire connects to Safety Ground.
    - Red wire connects to phase 1.
    - Black wire connects to phase 2.
- If whip is not factory installed, use below diagram to install fixture:



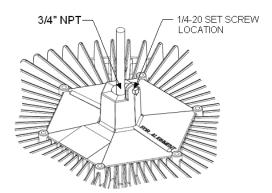
Restore power and verify operation.



### **Suitable Supply Voltages**



- For use with 480VAC (Fig 1) produced from two, 277VAC phases (277VAC line-ground),
- For use with single-phase 347VAC (Fig 2), or single-phase 480VAC. (Fig 3).
   Neither a 3 phase system.
- Not for use with nominal 3-phase voltages above 305VAC.
- Not for use with nominal 3-phase voltages below 200VAC.



### Interfacing to an Occupancy Sensor:

The Dialight High Bay fixture is ideally suited for control by an occupancy sensor in order to maximize energy savings based on its instant-on behavior and low power consumption. Instructions for connecting the High Bay fixture to an occupancy sensor are listed below.

**WARNING**: TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.

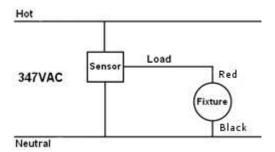
WARNING: CONTROLLING A LOAD IN EXCESS OF THE SPECIFIED RATINGS OF THE OCCUPANCY SENSOR COULD DAMAGE THE UNIT AND POSE RISK OF FIRE, ELECTRIC SHOCK, PERSONAL INJURY, OR DEATH. CHECK LOAD RATINGS TO DETERMINE THE UNIT'S SUITABILITY FOR YOUR APPLICATION.

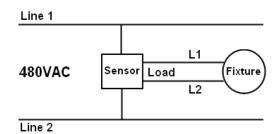
**NOTE**: SEE OCCUPANCY SENSOR INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION.



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- 1) WARNING: TO AVOID FIRE, SHOCK OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.
- 2) Install occupancy sensor as per sensor instructions to provide desired coverage of area.
- 3) Connect luminaire wires per wiring diagrams below. For 347VAC operation: red lead to load of the occupancy sensor, black lead to the line (neutral), green lead to earth ground. For 480VAC operation: red and black leads to load of occupancy sensor, green lead to earth ground. Multiple fixtures may be connected to a sensor, as long as the rated load of the sensor is not exceeded.
- 4) Restore power at circuit breaker or fuse.
- 5) Verify operation of system. If the light will not turn on, check the operation of the fixture and sensor individually, and check that the wiring is done correctly. If the light will not turn off or turns off and on quickly, see the sensor's installation instructions for further guidance.





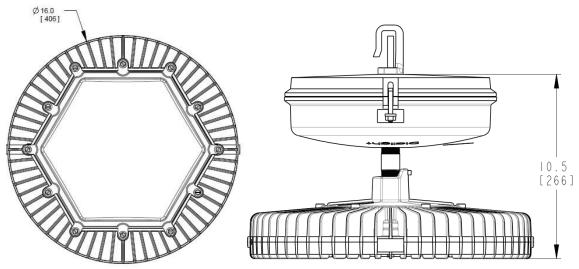
### 3: Maintenance

- To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.
- <u>Warning</u>: No user serviceable parts inside of fixture. Risk of electric shock. Removal of the lens will void the warranty.
- Perform visual, mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended Practice for Electrical Equipment.
- 2) The lens should be cleaned periodically as needed to ensure continued photometric performance. Clean the lens with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- 3) Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.



## 4: Specifications

Nominal AC Supply Voltage	347-480VAC, 50/60Hz
Power consumption	HExxx5Pxxxx: 235W nominal HExxx5Kxxxx: 164W nominal HExxx5Gxxxx: 135W nominal HExxx5Dxxxx: 110W nominal
Operating temperature range	-40°F to +149°F [-40°C to +65°C]
Power factor	>0.9
ATHD	<20%
Dimensions (Height x Diameter)	10.5" x 16" [267cm x 40.6cm]
Weight	33 lbs [15 kg]



**DIMENSIONS ARE FOR REFERENCE ONLY.** 

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