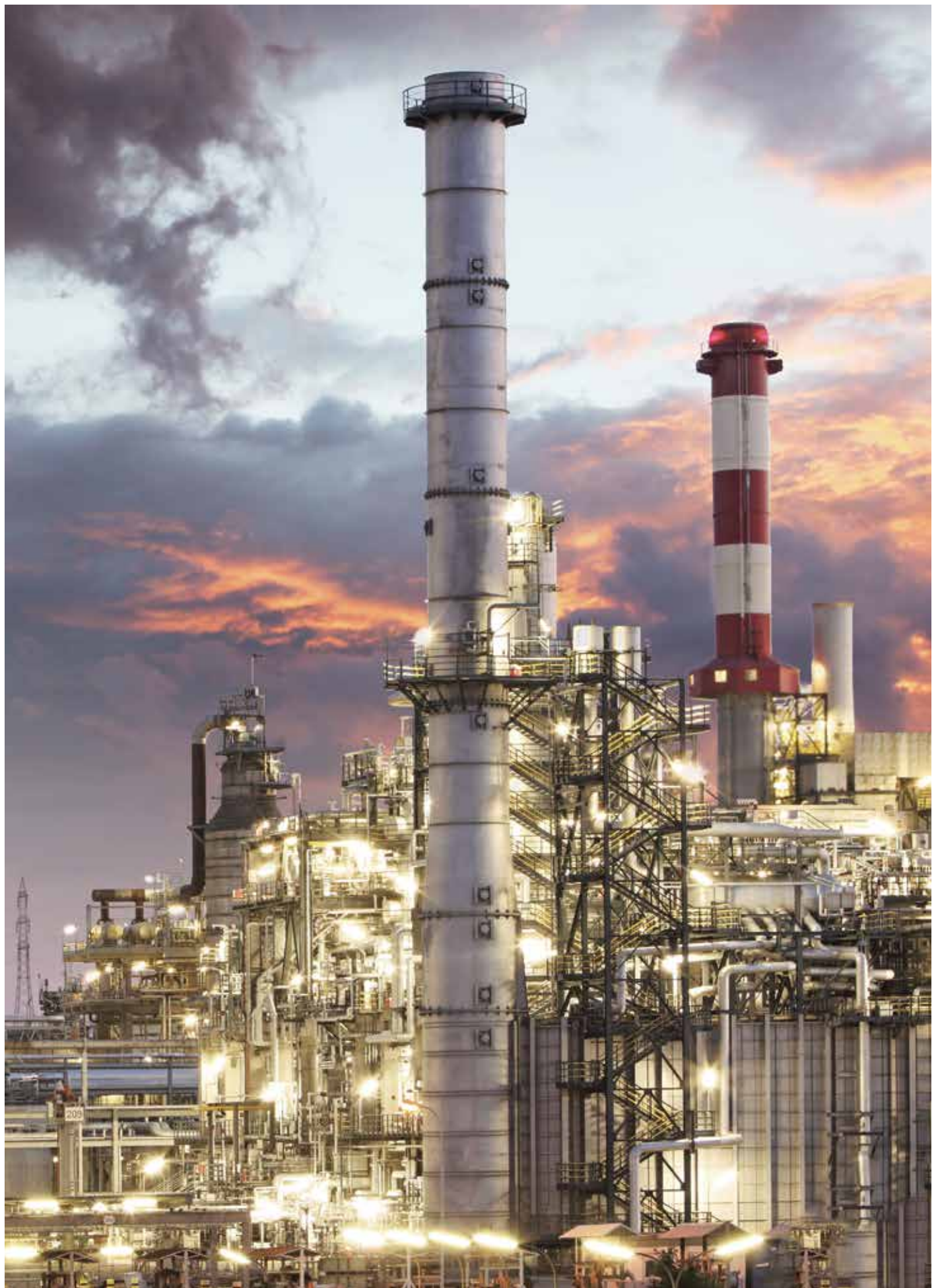


Product Catalogue | May 2015

# Industrial and hazardous location lighting Product catalogue

***Hazlux***<sup>®</sup>

Power and productivity  
for a better world™ **ABB**



# Industrial and hazardous location lighting

## Product catalogue

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# Introduction

## Introduction

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# Introduction

## Made in Canada at the Thomas & Betts production facility

1

Hazlux® products are assembled in Canada to meet strict Thomas & Betts quality standards and shipped quickly. We produce what you need when you need it - no waiting for large production runs or shipments from overseas. All units are inspected on site and then professionally packed so that your order will arrive intact at your installation site. When you need speed and service without sacrificing quality or reliability, you can count on the Thomas & Betts Hazlux® production team.



## Speed

Thomas & Betts offers a lead time advantage thanks to the dedicated Hazlux® production operation in Canada. When you need an order fulfilled right away, we have everything we need in house to meet your requirements. The flexible capacity of our assembly operation can easily accommodate both large and small production runs with a fast turnaround. All units are made to order and assembled by our efficient, experienced in-house Hazlux® team. Your complete order is sent out the door as quickly as possible.



## Excellence

Our skilled professionals build quality into every product at every step of the process, from design to final assembly. Each product is inspected and tested to ensure that it meets strict Thomas & Betts quality standards.

## Dependability

The reliability and high standards of the Thomas & Betts brand stand behind all Hazlux® products. We take extra steps to ensure that each unit is protected all the way from our production facility to your installation. Special expandable foam packaging is used on all units to prevent shifting in transport so that your order arrives safely.

To reduce the carbon footprint and minimize the environmental impact of operations, a Sustainable Development policy is in effect at the Thomas & Betts production facility. Through a series of initiatives, reductions in usage of water, water bottles, electricity and natural gas, packaging, and pallets have already been realized. Forward-looking initiatives include reductions in paper, further recycling of pallets, and implementation of an eco-delivery schedule.

**The Thomas & Betts production facility has been ISO 9001 compliant since 2001.**

# Introduction

## Quality products

1

Thomas & Betts® is committed to delivering high quality industrial lighting fixtures designed, tested and certified for use in hazardous locations and adverse environment conditions. You can rely on Hazlux® to safely provide light where you need it - even under the harshest indoor and outdoor conditions. If safety, labor reduction, quality and reliability are your priorities, consider Hazlux® lighting products.



### Features & benefits

- Nameplate displays third party certification for all electrical ratings and hazardous location ratings as required by the Canadian Electrical Code, OSHA regulations and CSA, allows for peace of mind, confirming the right lighting fixture is installed in a certified condition
- Cast, copper-free aluminum construction for high strength, light weight and corrosion resistance meeting the highest life expectancy you can expect from a lighting fixture in a particular application
- The paint used in our standard finish is baked, electro-deposited, pure epoxy powder for maximum corrosion protection. Additional paint finishes are available, offering increased protection against harsh environment
- All exposed hardware is corrosion-resistant stainless steel will limit and ease all maintenance required on the lighting fixture
- Faster and easier installation with simple hinge arrangement that permits "hands-free" wiring





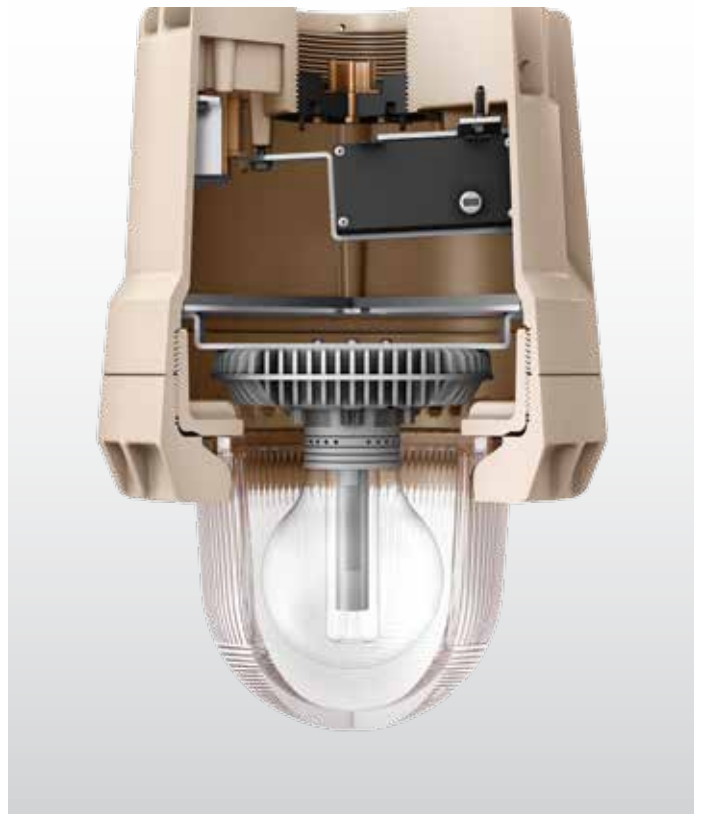


### Design & components

- Hazlux® products are designed with top and bottom fins to provide maximum heat dissipation
- In order to use the whole luminaire as a heat sink, the ballast/generator is installed so that it transfers heat to the luminaire body
- Select induction lamp options feature an additional inner heat sink to provide the coolest possible design for maximum luminaire efficiency
- A metal plate provides two separate compartments for the ballast/generator and lamp source to maximize life expectancy
- Hazlux® 5 fixtures feature electromechanical connect block for quick, safe fixture removal for bench relamping and/or maintenance
- High strength mechanical mounting, robust design and components to withstand ice, strong wind loads or heavy vibrations
- Heat tempered glass for greater strength and thermal shock resistance to selection of refractors to meet your application and lighting requirements

### Installation & operation

- Seizure-resistant threads make installation and maintenance easy over years, and Hazlux® 5, Dual pitch acme threads for easier, faster assembly
- Heat-sunk internal components results in cooler operation for extended ballast life, higher lamp wattage and a broader range of hazardous locations





# Overview

## Overview

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# Overview

## Hazardous locations

Hazardous location - An area where the possibility of explosion and fire is created by the presence of flammable gases, vapors, dust, fibers or flyings.

2

### Class I - Gas

**Class I** - Class I locations are those in which flammable gases, flammable liquid-produced vapors or combustible liquid-produced vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

#### Typical Class I Locations:

- Petroleum refineries and gasoline storage and dispensing areas
- Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations
- Petrochemical companies that manufacture chemicals from gas and oil
- Dry cleaning plants where vapors from cleaning fluids can be present
- Companies that have spraying areas where they coat products with paint or plastics
- Aircraft hangars and fuel serving areas
- Utility gas plants and operations involving storage and handling of liquified petroleum gas or natural gas

### Class II - Dust

**Class II** - Class II locations are those that are hazardous because of the presence of combustible dust.

#### Typical Class II Locations:

- Grain elevators, flour and feed mills
- Plants that manufacture, use or store magnesium or aluminum powders
- Plants that have chemical or metallurgical processes: producers of plastics, medicines and fireworks, etc.
- Producers of starch or candies
- Spice-grinding plants, sugar plants and cocoa plants
- Coal preparation plants and other carbon handling or processing areas

#### Divisions vs. Zones: Area Classification

Continuous Hazard	Intermittent Hazard	Hazard under Abnormal Conditions
Zone 0	Zone 1	Zone 2
Division 1		Division 2

Note: These are simplified definitions - complete data is in the Canadian Electrical Code (C.E.C)

### Class III - Fibers

**Class III** - Class III locations are those that are hazardous because of the presence of easily ignitable fibers or where materials producing combustible flyings are handled, manufactured or used, but in which such fibers/flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.

#### Typical Class III Locations:

- Textile mills, cotton gins, cotton seed mills and flax processing plants
- Any plant that shapes, pulverizes or cuts wood and creates sawdust or flyings

**Note:** Fibers and flyings are not likely to be suspended in the air but can collect around machinery or on lighting fixtures and where heat, a spark or hot metal can ignite them.

#### Division 1 - Normally Hazardous

**Division 1** - Hazardous gases or dusts are present under normal operation conditions or during frequent repair and maintenance activity.

#### Groups A, B, C, D

**Groups A, B, C and D** - The gases and vapors of Class I locations are broken into four groups by the code A, B, C and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammable characteristics.

#### Groups E, F, G

**Groups E, F, G** - Class II dust locations groups E, F and G are classified according to the ignition temperature and the conductivity of the hazardous substance.

#### Division 2 - Not Normally Hazardous

**Division 2** - Hazardous gases or dusts are not present under normal operating conditions.

## Four step method for selecting lighting fixtures for hazardous locations.

### 1. Select a fixture that meets your Class, Division and Group requirements, for example:

- Class I, Division 2, Group D
- Class II, Division 1, Group G

### 2. Determine the T-Number for your selected fixture. Be sure it is for the specific wattage, ballast housing, optical assembly and ambient temperature.

- Use the published information in this catalog or in Hazlux® product brochures

### 3. Determine the Maximum Allowable Temperature for the hazardous materials involved.

#### Class I Gas:

- Ignition Temperature for the Specific Gas (from NFPA497M)

#### Class II Dust:

- Group E - 200°C
- Group F - 200°C
- Group G - 165°C
- Or ignition temperature of dust if lower
- Above from NEC® Table 500-3(F)

### 4. Compare T-Number (from Step 2) to Maximum Allowable Temperature (from Step 3).

- If T-Number is cooler than the Maximum Allowable Temperature, the selected fixture is suitable.
- If T-Number is hotter than the Maximum Allowable Temperature, the selected fixture is not suitable.

T-Number Table

Class I, II, Div. 1, 2 T-Number	Max. Temperature
T1	450°C
T2	300°C
T2A	280°C
T2B	260°C
T2C	230°C
T2D	215°C
T3	200°C
T3A	180°C
T3B	165°C
T3C	160°C
T4	135°C
T4A	120°C
T5	100°C
T6	85°C



# Overview

## Hazlux® Applications

From an offshore oil rig in the Atlantic Ocean to the factory floor, there's a Hazlux® lighting fixture to stand up to virtually every hazardous location.

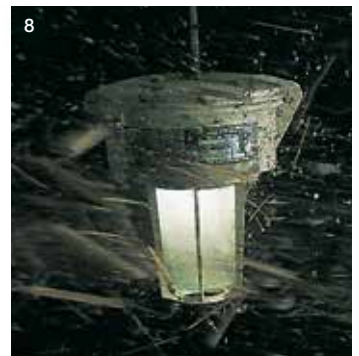
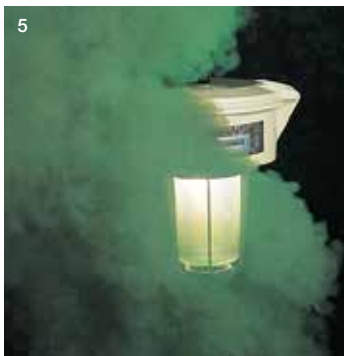
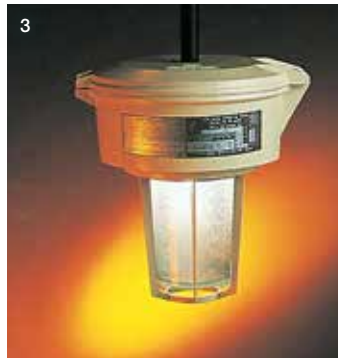
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Here are some of the places you'll find Hazlux® fixtures:

- Chemical manufacturing and processing plants
  - Oil refineries
  - Oil drilling rigs
  - Offshore platforms
  - Pipeline pumping stations
  - Pulp and paper plants
  - Aluminum and copper smelting
  - Steel mills and foundries
  - Mining operations
  - Grain handling facilities
  - Flour, sugar and starch processing
- Food processing plants
  - Paint and rubber manufacturing facilities
  - Marine and coastal facilities
  - Shipyards and shipbuilding plants
  - Power generation plants
  - Waste treatment facilities
  - Paint, chemical and plastic mixing/storage areas
  - Bulk truck terminals
  - Solvent/cleaning areas

**Hazlux® lighting fixtures are built to withstand the harsh environmental conditions that exist in real settings.**

1 Hose Down | 2 Vibration | 3 High Ambient | 4 Dust | 5 Corrosion | 6 Marine | 7 Ice | 8 Wind



### Hose-Down and Wet Locations

- Certified for wet locations - NEMA 4X, IP66 (indoor and outdoor); UL1598A (marine) and CSA Listed
- Superior gasketing system - both tank and globe gasketing systems withstand hose-down pressures
- Uninterrupted globe thread - assures positive seal
- Baked-on, dry epoxy coating - not paint but 100% dry solids
- Globes, refractors and finish designed to withstand thermal shock during hose down

### High-Ambient Temperature Areas

- All standard fixtures are tested and listed for at least 40°C ambient - even under heavy dust blanket and no air flow
- Exclusive heat sink design results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs
- Unmatched selection of high-ambient, temperature rated fixtures- contact factory for fixtures certified for 55°C and 65°C applications
- Steam spray and thermal shock resistant

### Corrosion and Abrasion

- Baked-on, dry epoxy coating - not paint but 100% dry solids
- Stainless steel external hardware
- Sand-blast resistant finish
- Superior silicone gasketing system on both tank and globe. Other gasketing systems available for special corrosive applications such as phosphates
- Aluminum components contain less than 0.4% copper - maximum corrosion resistance
- Special HazCote® corrosion fighter finish available for extremely corrosive areas; consult Thomas & Betts for details

### Ice and Arctic Conditions

- Gasketing system and finish allow for expansion and contraction through wide temperature variations
- Metal halide ballasts start at -29°C; high-pressure sodium ballasts start as low as -51°C (consult Thomas & Betts for details)
- High-strength mechanical mountings withstand extra ice loading
- Tempered glassware available for extra thermal shock safety margin

### Vibration, Seismic Shock and Vandalism

- Vibration tested by UL and CSA
- Vibration-resistant hardware throughout fixture
- Screw retainers on guard ensure retention even if screws are not completely tightened
- Vibration-resistant globe thread and sealing system
- Optional refractors, high-strength tempered glass and Tuff-Skin® globes for protection from vandalism

### Dust Blanket

- Tested and listed by UL and CSA
- Thermal performance is at 40°C ambient; optional thermal performance to 55°C and 65°C ambient available (consult factory)
- Cone pendant mount available (45° sloped sides) for areas where dust or other residue buildup is a problem
- Exclusive heat sink design - results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs

### Marine-Duty Option

- This feature is supplied as standard on most Hazlux® 3 fixtures
- Designed for abuse - hose down, arctic, hurricane, vibration and shock, high temperature, corrosion and other environmental conditions typical of adverse marine locations
- Exclusive combination of marine and hazardous location approvals on the same fixture line

### Wind

- Wind-tunnel tested at McDonnell Douglas Corporation at air flow speeds in excess of 198 mph (320 km/h)
- Guard specially designed to secure reflector during high wind loading
- All fasteners are stainless steel
- High-strength mechanical mountings withstand strong wind loads

**Note:** Tuff-Skin is a registered trademark of Thomas Manufacturing Corp.



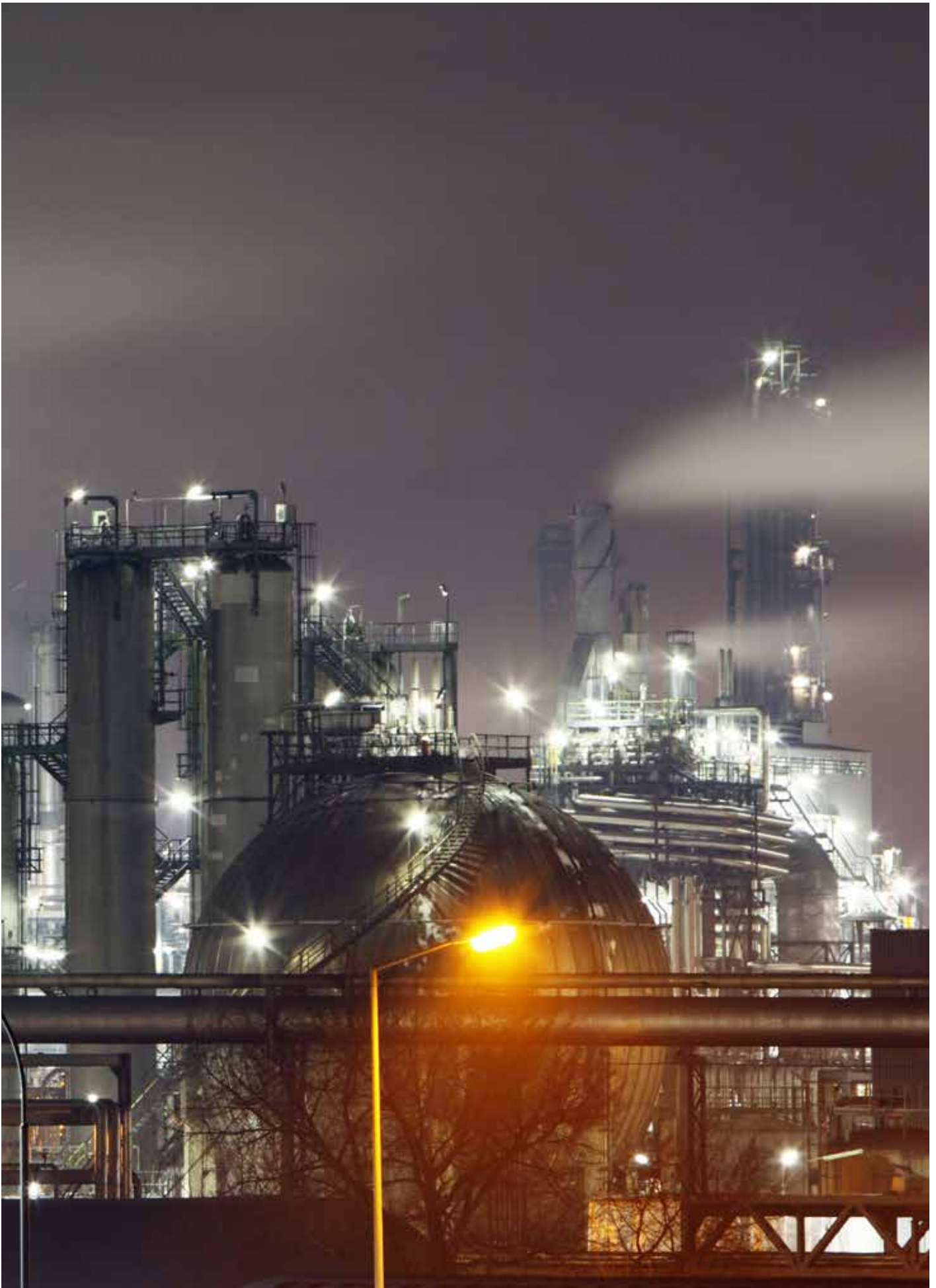


# Industrial and hazardous location lighting

## Hazlux® Area lighting

### Area lighting

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# Area Lighting

## Hazlux® 3 LED DL Series

Hazlux® durability meets LED technology.  
Superior performance lighting for hazardous locations.

### Safe, durable and now available with LED technology for superior energy efficiency.

Thomas & Betts Hazlux® luminaires are known as high quality industrial lighting fixtures designed, tested and certified for use in hazardous locations and adverse environment conditions. Specifiers rely on Hazlux® to safely provide light where it's needed - even under the harshest indoor and outdoor conditions.

Safe, dependable, durable Hazlux® luminaires are now available with LED technology to offer longer life, enhanced energy efficiency, reduced maintenance, and a smaller footprint.

All Hazlux® LED products are designed and assembled in Canada for exceptional service and support with reduced lead times. Experienced assembly operation easily accommodates both large and small production runs with a fast turnaround.

### High-efficacy luminaire offers excellent performance and energy savings

Thomas & Betts has taken the rugged, reliable design of Hazlux® lighting fixtures and introduced the capabilities of LED technology to create a high-performance luminaire with an impressive lumen output.

#### High-efficacy Luminaire

Model	AC Power (W)	Lumen	Lm/W
DL005	45	5,800	129
DL007	58	7,100	122
DL010	88	10,100	114
DL015	122	15,600	128
DL017	131	17,800	135
DL020	166	20,400	123

#### T-ratings & Thermal Management

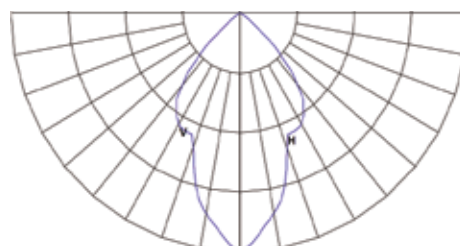
Model	40°C		55°C	
	Class I Div 2	Class I Div 2 & Class II	Class I Div 2	Class I Div 2 & Class II
DL005	T5	T4A	T5	T4
DL007	T5	T4A	T5	T4
DL010	T4A	T4A	T4A	T4
DL015	T4	T3C	N/A	N/A
DL017	T4	T3C	N/A	N/A
DL020	T3C	T3C	N/A	N/A

### Higher T-ratings and optimal thermal management

With an exclusive design that maximizes heat dissipation, Hazlux® LED fixtures lower internal temperature allow for higher T-rating and extended LED and driver life in extreme ambient temperatures. With the entire luminaire acting as a heat sink, Hazlux® LED fixtures allow higher wattages for better performance.

### Versatile optics include reflector options for diffuse light distribution

The Hazlux® LED fixture is available with a thermal-resistant globe and a variety of reflectors for the ideal beam angle from 35° to 65°.



# Area lighting

## Hazlux® 3 LED DL Series

Labor-saving installation  
and maintenance-friendly construction.

### Designed for easy retrofit installation

3

Using the same mounting style options as existing Hazlux® lighting fixtures, the new LED luminaires can easily be attached as retrofit fixtures.\*

The HazVertor™ adapter ring makes it easy to replace Crouse-Hinds Champ® series lighting fixtures without removing the top hat from the conduit system.

### Hinged design for hands-free wiring

Easy tank access allows Hazlux® lighting fixtures to be maintained quickly and safely. The hinged lid is designed to support the weight of the tank, leaving both the installer's hands free.

### Field-replaceable LED engine and driver

The LED driver is designed in its own compartment so it can be easily replaced in the field using a connector, with no re-wiring required. A fiberglass insulator protects the driver from the heat of the LED engine.

### Robust construction for long life expectancy

Cast, copper-free aluminum construction offers corrosion resistance in a strong, lightweight fixture for maximum life expectancy. Baked epoxy powder finishes and stainless steel exposed hardware provide additional corrosion resistance.

### Certifications shown on external surface

An easily identifiable nameplate displays third party certification for all electrical and hazardous location ratings as required by the Canadian Electrical Code, OSHA regulations and CSA to provide peace of mind, confirming that the correct lighting fixture with the required certifications is in place.



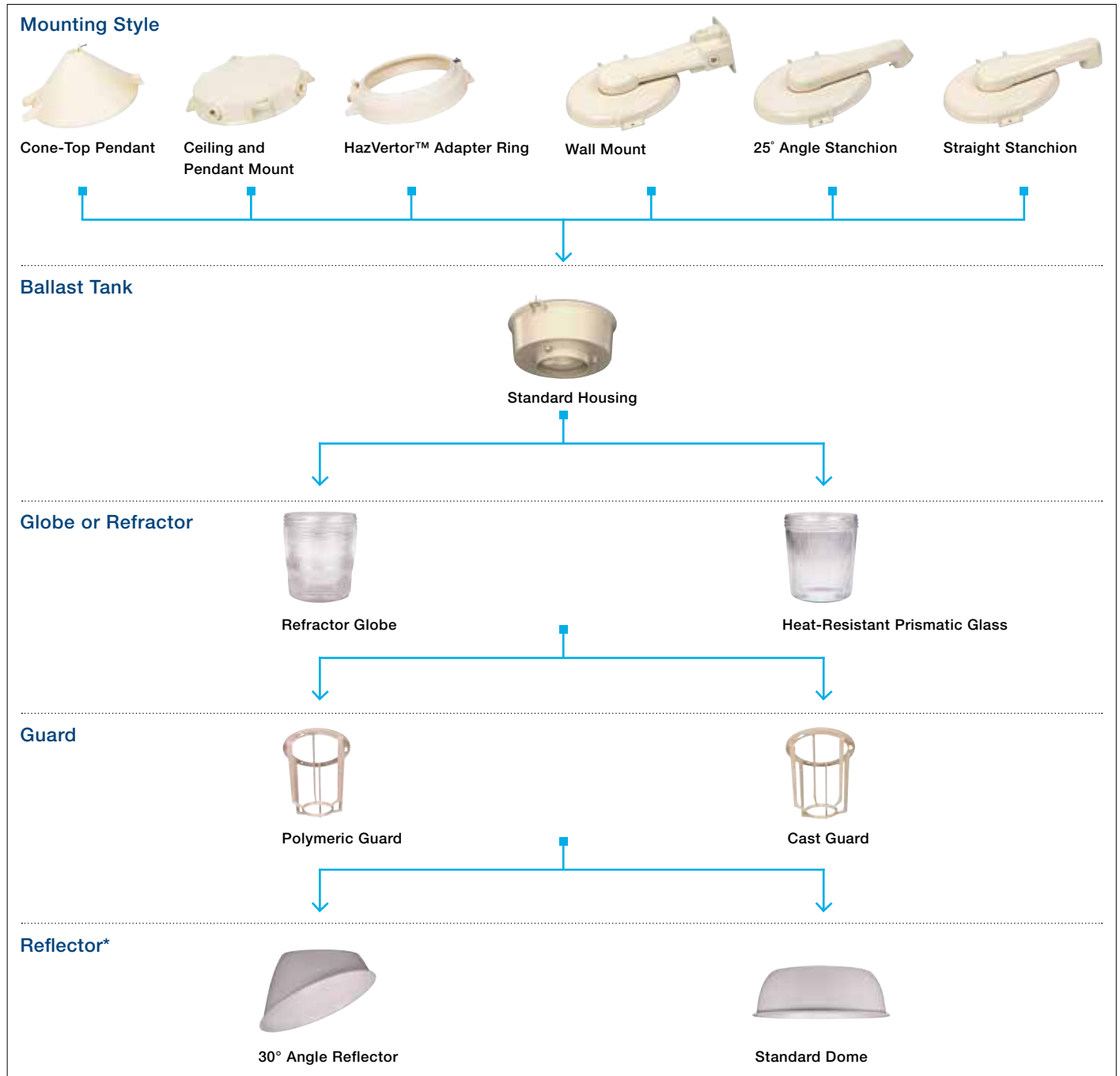
## Assembly guide

### Complete luminaire consists of:

- A mounting style
- Driver Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® 3 LED DL Series - Assembly Guide



\*Reflectors are sold separately

# Area lighting

## Hazlux® 3 LED DL Series

### Catalog numbering system

#### UNIPAK™ =

- LED Driver Tank +
- Optics & Mountings +
- Options (if necessary)

LED driver tank					
<b>DL</b>	<b>0</b>	<b>10</b>	<b>E</b>	<b>UN</b>	<b>0</b>
1	2	3	4	5	6

Optics and mountings			
<b>TG</b>	<b>C</b>	<b>C2</b>	<b>E</b>
7	8	9	10

Options	
<b>T</b>	<b>16</b>
11	12

#### LED Driver Tank

<b>1 Fixture Series</b>	<b>DL</b>	Hazlux® 3 Fixture
<b>2 Fixture</b>	<b>C</b>	Standard Fixture
<b>3 Lumen Output</b>	<b>05</b>	5,800 lumens, 45W
	<b>07</b>	7,100 lumens, 58W
	<b>10</b>	10,100 lumens, 88W
	<b>15</b>	15,600 lumens, 122W
	<b>17</b>	17,800 lumens, 131W
<b>4 Fixture</b>	<b>E</b>	Electronic LED Driver
<b>5 Voltage/ Frequency</b>	<b>UN</b>	120 to 277VAC 50/60Hz (voltage range includes 208V, 220V, 240V etc.)
	<b>UN2</b>	Universal 347/480VAC 50/60Hz (Not available for DL017 and DL020)
<b>6 LED Driver Housing Style</b>	<b>0</b>	Standard Housing
	<b>S</b>	Standard Housing with Stainless Steel Inserts

#### Optics & Mountings

<b>7 Optical Assembly Options</b>	<b>TG</b>	Thermal Shock-Resistant Globe
	<b>R1</b>	Type I Glass Refractor Globe
	<b>R3</b>	Type III Glass Refractor Globe
	<b>R5</b>	Type V Glass Refractor Globe
<b>8 Guard Option</b>	<b>C</b>	Cast Aluminium Guard
	<b>L</b>	Polymeric Guard
<b>9 Mounting Style</b>	<b>A2</b>	3/4" Cone-Top Pendant
	<b>A3</b>	1" Cone-Top Pendant
	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling / Pendant Mount
	<b>C3</b>	1" Ceiling Mount
	<b>HV1</b>	HazVertor™ Ring - Class I, Div. 2, Zone 2
	<b>HV2</b>	HazVertor™ Ring - Class I Div. 2 Zone 2, Class II
	<b>L4</b>	11/4" Straight Stanchion
	<b>L5</b>	11/2" Straight Stanchion
	<b>S4</b>	11/4" 25° Angle Stanchion
<b>S5</b>	11/2" 25° Angle Stanchion	
	<b>Blank</b>	No mounting (to replace existing fixture)
<b>10 UNIPAK™ Options</b>	<b>E</b>	UNIPAK™ with LED Light Source

#### Certifications & Standards

- Class I** – Division 2, Groups A, B, C and D  
– Zone 2, Groups IIC, IIB, IIA
- Class II** – Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X
  - CSA C22.2 No. 137

#### Approvals / Characteristics



#### Options

<b>11 Special Options</b>	<b>T</b>	Hazcote® Custom Anti-corrosion Coating (Consult factory)
	<b>G</b>	Grey Colour Option
<b>12 Light Distribution Options</b>	<b>I3</b>	Internal reflector 35° beam angle*
	<b>I4</b>	Internal reflector 45° beam angle*
	<b>I5</b>	Internal reflector 65° beam angle*

\*DL005, DL007 and DL010 only

## Individual components (to be used with LED driver housing)



Cone-Top Pendant



Ceiling and Pendant Mount



HazVerter™ Adapter Ring



Wall Mount



25° Angle Stanchion



Straight Stanchion

### Mounting Options

Part No.	Description	Conduit Hub Size
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VC2	Ceiling Mount	3/4"
VC3	Ceiling Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	11/4"
VS5-VIB	25° Angle Stanchion	11/2"
VL4-VIB	Straight Stanchion	11/4"
VL5-VIB	Straight Stanchion	11/2"
HV1	HazVerter™ Adapter Ring	N/A
HV2	HazVerter™ Adapter Ring	N/A



Reflector Globe



Heat-Resistant Prismatic Glass Globe

### Globes or Refractors

Part No.	Description
VGT15	Heat-Resistant Prismatic Glass Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe



Polymeric Guard



Cast Guard

### Globes or Refractors

Part No.	Description
VGU22P	Polymeric Guard
VGU22	Cast Guard

## Optional components



30° Angle Reflector



Standard Dome

### Reflectors or Exit Sign

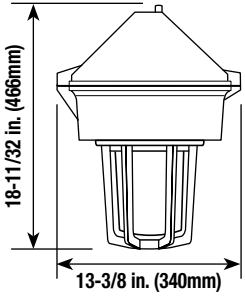
Part No.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	Angular Dome, Fiberglass-Reinforced Polyester

Note: Reflectors are shipped bulk unless specified

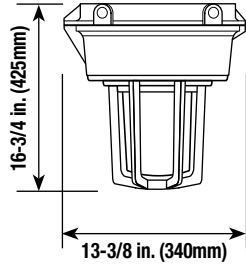
# Area lighting

## Hazlux® 3 LED DL Series

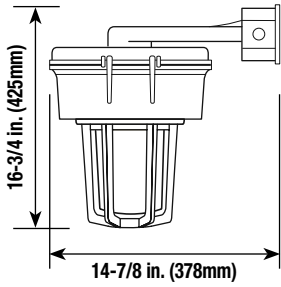
### Dimensions - Standard housing with globe and guard



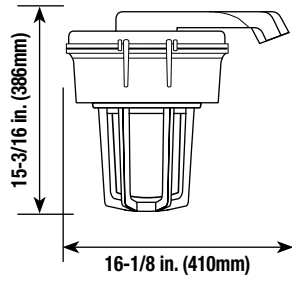
Cone-Top Pendant



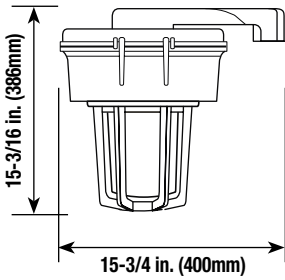
Ceiling Mount



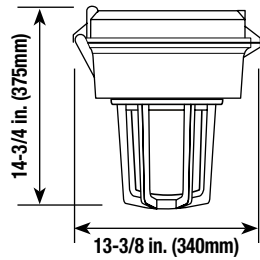
Wall Mount



25° Angle Stanchion



Straight Stanchion



HazVertor™ Ring

### Photometry - Standard housing with globe and guard

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL005EUN0TGC2E</b>	
Luminaire Lumens	5,895	
Luminaire Efficacy Rating (LER)	131	
Input Watt	260	
Spacing Criterion	1.3	
Spacing Criterion (90-270)	1.3	
Spacing Criterion (diagonal)	1.44	

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL010EUN0TGC2E</b>	
Luminaire Lumens	10,123	
Luminaire Efficacy Rating (LER)	115	
Input Watt	88.19	
Spacing Criterion	1.24	
Spacing Criterion (90-270)	1.24	
Spacing Criterion (diagonal)	1.4	

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL010EUN0TGC2E</b>	
Luminaire Lumens	15,605	
Luminaire Efficacy Rating (LER)	128	
Input Watt	121.8	
Spacing Criterion	1.08	
Spacing Criterion (90-270)	1.08	
Spacing Criterion (diagonal)	1.42	

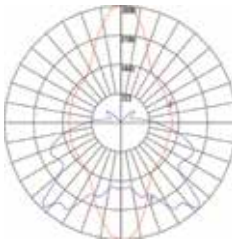
#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL020EUN0TGC2E</b>	
Luminaire Lumens	20,476	
Luminaire Efficacy Rating (LER)	123	
Input Watt	166.1	
Spacing Criterion	1.46	
Spacing Criterion (90-270)	1.46	
Spacing Criterion (diagonal)	1.58	

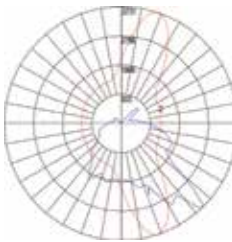


## Photometry - Standard housing with glass refractor - Ceiling mount

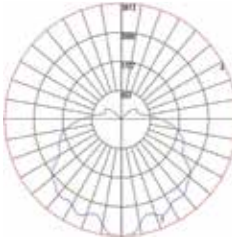
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL010EUN0R1C2E</b>	
Luminaire Lumens	8,047	
Luminaire Efficacy Rating (LER)	92	
Total luminaire watts	87	
Maximum Candela	2,890	
Maximum Candela (< 90° Vertical)	2,890	
Maximum Candela at 90° Vertical	887 (11.0%) luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1,463 (18.2%) luminaire lumens)	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL010EUN0R3C2E</b>	
Luminaire Lumens	8,649	
Luminaire Efficacy Rating (LER)	99	
Total luminaire watts	87.27	
Maximum Candela	3,731	
Maximum Candela (< 90° Vertical)	3,731	
Maximum Candela at 90° Vertical	883 (10.2%) luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1,308 (15.1%) luminaire lumens)	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DL020EUN0R5C2E</b>	
Luminaire Lumens	17,004	
Luminaire Efficacy Rating (LER)	102	
Total luminaire watts	166.3	
Maximum Candela	3,413	
Maximum Candela (< 90° Vertical)	3,413	
Maximum Candela at 90° Vertical	1,171.3 (6.9%) luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1,662.7 (9.8%) luminaire lumens)	



# Area lighting

## Hazlux® 3

Designed, tested and certified for use in hazardous locations and adverse environments. **New labor-saving features for Hazlux® 3 fixtures.**

### Induction Lighting

#### Long life for reduced maintenance

Hazlux® 3 induction lighting provides a 60,000+ hour lamp life, drastically reducing expensive maintenance costs of industrial lighting in hazardous locations.

### HazVertor™ Adapter Ring

#### Replace other brand fixtures without removing the top hat

The HazVertor™ adapter ring gives you the freedom to replace Crouse-Hinds Champ® series lighting fixtures (VMV, DMV or LMV types) with Hazlux® 3 lighting fixtures without removing the Crouse-Hinds top hat from the conduit system, eliminating the need to replace conduit and wiring.

Save time and increase efficiency. The HazVertor™ can be ordered as a separate item or as part of a Hazlux® 3 fixture assembly. Look for the HV1 or HV2 mounting style options and switch to increased efficiency, wider suitability for hazardous locations, improved light distribution and improved T-numbers.

### Hazlux® UNIPAK™ Packaging

- UNIPAK™ is the Hazlux customized packaging system that is designed to save money for all concerned
- UNIPAK™ fixtures are normally assembled and can include globes, guards, reflectors, lamps, fuses and other options
- Outlet boxes are normally shipped separately; consult factory regarding outlet boxes to be assembled to UNIPAK™ fixtures
- Assembled UNIPAK™ fixtures are shipped in one carton with the fixture foam packed in place
- Refer to the “Catalog Numbering System” for each individual Hazlux® fixture series for ordering information

UNIPAK™ saves seven ways:

- Fewer cartons to receive, count, move, open and dispose
- Fewer storage problems
- Reduces inventory expense
- Eliminates lost or back-ordered parts
- Eliminates mismatched fixtures or lamps
- Significantly reduces labor costs
- Reduces total installed cost per fixture



# Area lighting Hazlux® 3

Fixtures for Class I, Division 2; Class II; wet and marine locations.

3



## Applications

- Chemical Plants
- Oil Refineries
- Paint, Rubber Manufacturing
- Offshore Platforms
- Oil Drilling Rigs
- Oil, Gas Transmission
- Waste Treatment Facilities
- Airplane, Aerospace Facilities
- Electronics Manufacturing
- Pharmaceutical Plants
- Aircraft Manufacturing
- Vehicle Maintenance Facilities
- Grain Handling, Food Processing
- Coal Handling and Processing
- Flour, Sugar, Starch Processing
- Ammunition Manufacturing
- Coal, Gold and Copper Mining
- Pulp and Paper Manufacturing
- Copper, Aluminum Smelting
- Breweries, Malt Plants
- Shipyards, Shipbuilding Facilities
- Automobile Manufacturing
- Marine and Coastal Facilities
- Utility Power Plants
- Steel Mills, Foundries
- General Manufacturing Plants

## Fixtures for Class I, Division 2; Class II; wet and marine locations.

### Features

- Modular fixture components enable hundreds of easy-to-assemble combinations
- Cast copper-free aluminum housings and mounting covers are lightweight and resist corrosion
- Electrostatically applied powder-coat finish for added corrosion resistance
- Thermal shock-resistant glass globes and refractors protect lamps in wet, marine and outdoor applications
- All glass globes and refractors are fully threaded and provide a dust-tight, watertight seal with silicone rubber gaskets
- Standard globe guards are made from rugged polycarbonate plastic or cast aluminum with keyhole slots for ease of installation and do not interfere with globe threads
- All exposed hardware is stainless steel for corrosion resistance and screws are slotted, hex-head style to further ease installation
- Comprehensive UL Listings for Class I, Division 2; Class I, Zone 2; and Class II
- Available for use with high-pressure sodium and metal halide lamps up to 400 watts
- Eight different mounting styles - rigid pendant, flexible pendant, cone pendant, ceiling, wall, 25° angle stanchion, straight stanchion and HazVertor™ Adapter Ring
- Three ballast housing choices - standard housing, R-housing and large housing
- Heat sinks in ballast housings enable ballasts to operate cooler, provide longer life and improve temperature performance
- Bright white FRP (fiberglass-reinforced polyester) angle or dome reflectors resist corrosion while maximizing lighting effectiveness
- Many optical choices - standard globes, threaded refractor globes, 73/4" globes, 12" refractors, enclosed high-bay reflectors and more
- All mounting covers provided with dual-lead ground wire for connection to field and fixture grounds
- Optional HazCote® coating for extremely corrosive applications
- Optional stainless steel inserts for guard screws and ballast tank closure screw for enhanced corrosion resistance
- Optional Tuff-Skin® silicone coating on glass optics contains fragments if glass is broken (for food processing)
- Optional instant restrike starter for HPS lamps up to 150 watts restarts hot HPS lamp after momentary power failure

**Note:** Tuff-Skin is a registered trademark of Thomas Manufacturing Corp.



### Certifications / Compliances

**UL® Listed (UL844) and CSA certified (csa C22.2 no. 137) for:**

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, Groups IIA, IIB, IIC
- Class II, Divisions 1 & 2, Groups E, F, G
- Class III
- Wet locations

**UL® Listed (UL1598A) for:**

- Marine Locations
- NEMA 4X, IP66

### Materials and Finishes

- Ballast Housings - Copper-free aluminum, powder finish
- Mounting Covers - Copper-free aluminum, powder finish
- Guards - Polycarbonate, copper-free aluminum or steel
- Globes - Tempered glass or borosilicate glass
- Refractor Globes - Borosilicate glass
- Refractors (12") - Borosilicate glass
- Hardware - Stainless steel
- Reflectors - Fiberglass-reinforced polyester (standard dome, angle); anodized aluminum (deep dome, high bay enclosed)
- Gaskets - High-temperature silicone rubber

# Area lighting

## Hazlux® 3 Standard housing

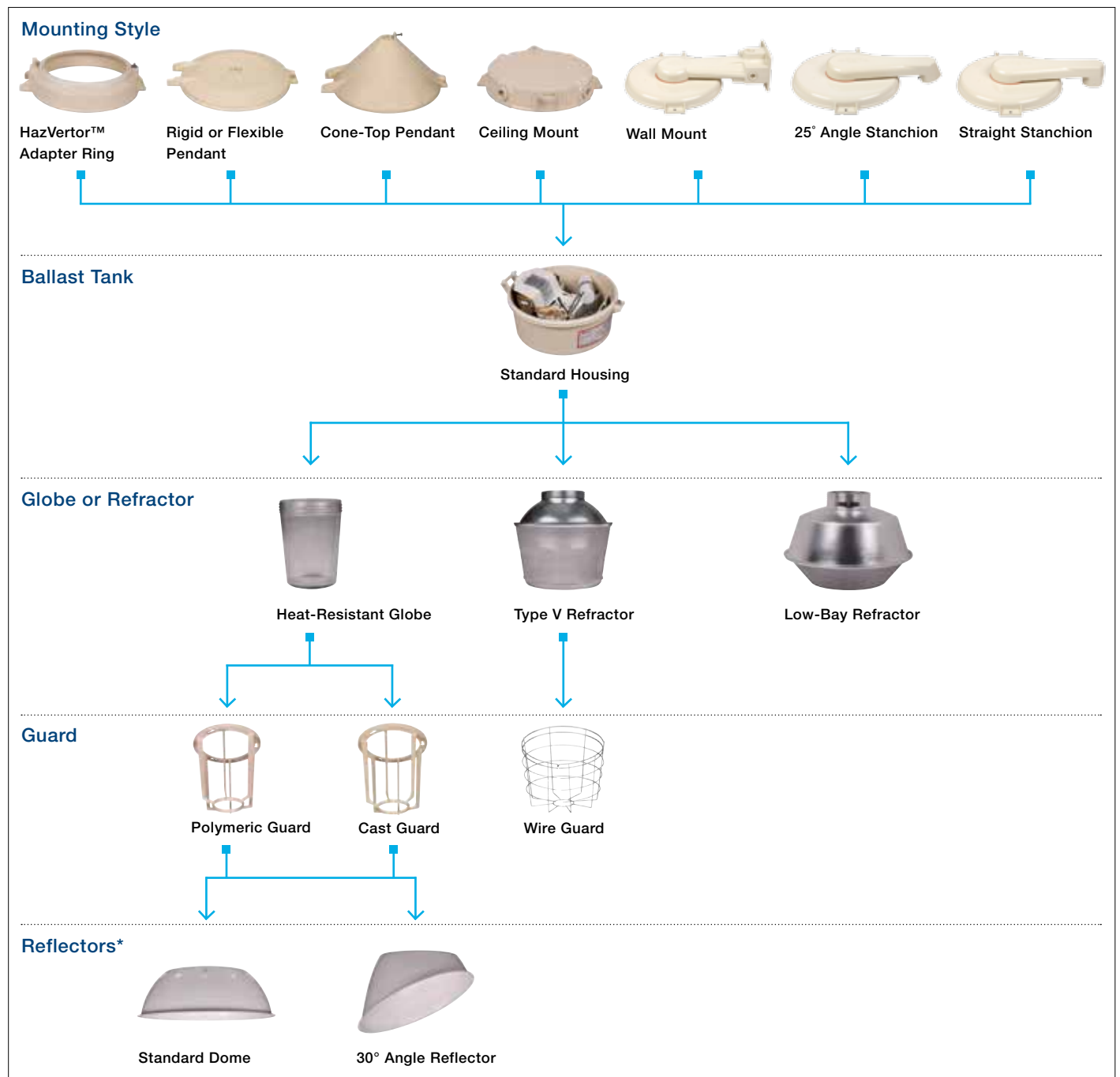
### Assembly guide

#### Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



#### Hazlux® 3 Standard Housing - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank						
<b>D</b>	<b>S</b>	<b>0</b>	<b>15</b>	<b>H</b>	<b>04</b>	<b>0</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

Optics and mountings		
<b>TGL</b>	-	<b>P2</b>
<b>8</b>		<b>9</b>
		<b>E</b>
		<b>10</b>

Options		
<b>T</b>	<b>F</b>	<b>C</b>
<b>11</b>	<b>12</b>	<b>13</b>

### Ballast Tank

<b>1 Fixture Series</b>	<b>D</b>	Hazlux® 3 Fixture		
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium		
	<b>H</b>	Metal Halide		
	<b>C</b>	150-Watt HPS 100V Only		
	<b>0</b>	Standard Fixture (Without Options)		
<b>3 Starter Circuit/ Quartz Options</b>	<b>P</b>	Pulse Start (MH Only)*		
	<b>Q</b>	Quartz Auxiliary Option (Not Hazardous Rated)		
	<b>R</b>	Instant Restart (50 - 150W HPS)		
	<b>J</b>	Auto Shutoff Starter (HPS Only)		
	<b>Y</b>	Auto Shutoff Starter with Quartz Restrike (HPS only, non-UL)		
	<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>		
<b>07</b>		70W ED28	<b>10</b>	100W ED28
<b>17</b>		175W ED28	<b>20</b>	200W ED28PS
<b>25</b>		250W ED28		
<b>High Pressure Sodium Lamps</b>				
<b>05</b>		50W ED23 1/2	<b>07</b>	70W ED23 1/2
<b>10</b>		100W ED23 1/2	<b>15</b>	150W ED23 1/2
<b>5 Ballast Circuit</b>	<b>H</b>	High Reactance		
	<b>C</b>	Constant Wattage Autotransformer (CWA)		
	<b>I</b>	CWI		
	<b>P</b>	Reactor (All ballasts high power factor)		
<b>6 Voltage/ Frequency</b>	<b>03</b>	120/277V, 60 Hz		
	<b>04</b>	120/208/240/277V, 60 Hz		
	<b>09</b>	120/277/347V, 60 Hz (CSA)		
	<b>12</b>	120V, 60 Hz		
	<b>20</b>	208V, 60 Hz		
	<b>24</b>	240V, 60 Hz		
	<b>27</b>	277V, 60 Hz		
	<b>34</b>	347V, 60 Hz		
	<b>48</b>	480V, 60 Hz		
	<b>225</b>	220V, 50 Hz		
	<b>245</b>	240V, 50 Hz		
<b>7 Ballast Housing Style</b>	<b>0</b>	Standard Housing		
	<b>S</b>	Standard Housing with Stainless Steel Inserts		

### Optics & Mountings

<b>8 Optical Assembly Options</b>	<b>TG</b>	Thermal Shock-Resistant Globe		
	<b>TGC</b>	Thermal Shock-Resistant Globe with Cast Guard		
	<b>TGL</b>	Thermal Shock-Resistant Globe with Polymeric Guard		
	<b>SG</b>	Tuff-Skin® Coated Globe		
	<b>SGC</b>	Tuff-Skin® Coated Globe with Cast Guard		
	<b>SGL</b>	Tuff-Skin® Coated Globe with Polymeric Guard		
	<b>R2</b>	12-in. Glass Refractor, Type II		
	<b>R5</b>	12-in. Glass Refractor, Type V		
	<b>R2G</b>	R2 with Wire Guard		
	<b>R5G</b>	R5 with Wire Guard		
	<b>CBDL</b>	Closed Bottom Refractor with Polycarbonate Lens		
	<b>9 Mounting style</b>	<b>A2</b>	3/4" Cone-Top Pendant	
		<b>A3</b>	1" Cone-Top Pendant	
<b>B2</b>		3/4" Wall Mount		
<b>B3</b>		1" Wall Mount		
<b>C2</b>		3/4" Ceiling Mount		
<b>C3</b>		1" Ceiling Mount		
<b>F2</b>		3/4" Flexible Pendant		
<b>F3</b>		1" Flexible Pendant		
<b>HV1</b>		HazVertor™ Ring - Class I, Div. 2, Zone 2		
<b>HV2</b>		HazVertor™ Ring - Class I Div. 2, Zone 2, Class II		
<b>10 UNIPAK™ Options</b>	<b>L4</b>	11/4" Straight Stanchion		
	<b>L5</b>	11/2" Straight Stanchion		
	<b>P2</b>	3/4" Rigid Pendant		
	<b>P3</b>	1" Rigid Pendant		
	<b>S4</b>	11/4" 25° Angle Stanchion		
<b>S5</b>	11/2" 25° Angle Stanchion			
<b>10 UNIPAK™ Options</b>	<b>E</b>	UNIPAK™ with Clear Lamp		
	<b>D</b>	UNIPAK™ with Dual Arc Lamp		
	<b>U</b>	UNIPAK™ No Lamp		

Tuff-Skin is a registered trademark of Thomas Manufacturing Corp

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X , IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>11 Special Options</b>	<b>T</b>	HazCote® custom anti-corrosion coating (Consult factory)
<b>12 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>13 Certification</b>	<b>C</b>	Canadian Market

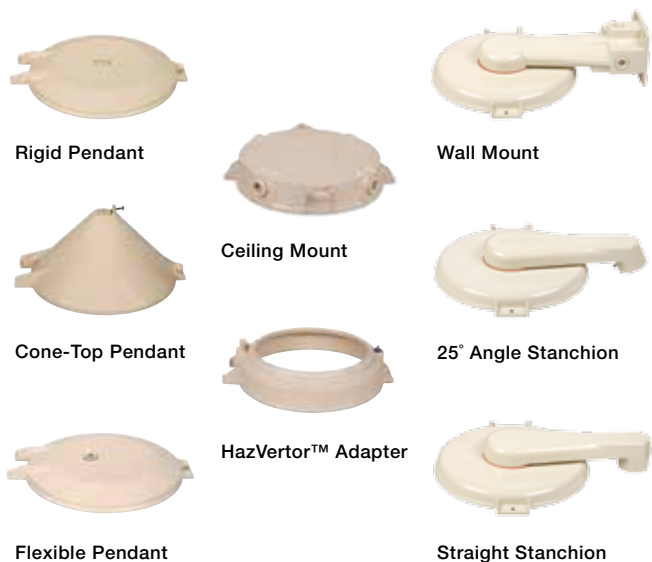
\*Fuse Block are not available for Marine Locations

# Area lighting

## Hazlux® 3 Standard housing

### Individual components (to be used with ballast housing)

3



### Mounting Options

Part No.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling Mount	3/4"
VC3	Ceiling Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1 1/4"
VS5-VIB	25° Angle Stanchion	1 1/2"
VL4-VIB	Straight Stanchion	1 1/4"
VL5-VIB	Straight Stanchion	1 1/2"
HV1	HazVektor™ Adapter Ring	N/A
HV2	HazVektor™ Adapter Ring	N/A



### Globes or Refractors

Part No.	Description
VGT22	5 1/2"-dia. Heat-Resistant Globe (250W max.)
VGT22TS	5 1/2"-dia. Heat-Resistant Globe (250W max.) Coated with Tuff-Skin®
VRF22C2	12"-dia. IES Type II Refractor, 5 1/2" thread
VRF22C5	12"-dia. IES Type V Refractor, 5 1/2" thread
VR22CBDL	Low-Bay Refractor with Plastic Lens



### Globes or Refractors

Part No.	Description
VGU22P	Polymeric Guard for VGT22 Series Globe
VGU22	Polymeric Guard for VGT22 Series Globe
VGR48	Steel Wire Guard for All VRF Series 12" Refractors

### Individual components



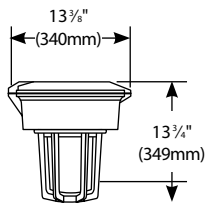
### Reflectors or Exit Sign

Part No.	Description
VR22P	Standard Dome, Fiberglass-Reinforced Polyester
VRA22P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRE22	Three-Sided Exit Sign

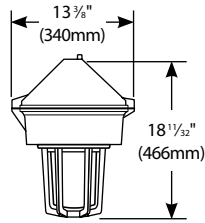
Note: Reflectors are shipped bulk unless specified



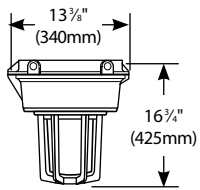
## Dimensions - Standard housing with globe and guard



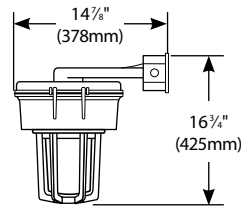
Rigid and Flexible Pendant



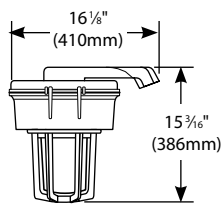
Cone-Top Pendant



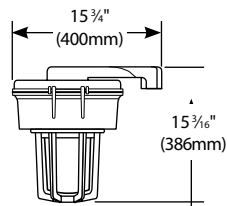
Ceiling Mount



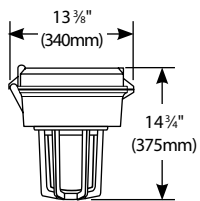
Wall Mount



25° Angle Stanchion



Straight Stanchion



HazVertor™ Ring

## Photometry - Standard housing with globe and guard

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DS010H090-TGLA2E</b>	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	8318	
Efficiency	88%	
Efficacy Rating (LER)	64.0	
Spacing Criterion (0-180)	3.56	
Spacing Criterion (90-270)	3.56	
Spacing Criterion (diagonal)	3.42	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C090-TGLA3E</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	12719	
Efficiency	91%	
Efficacy Rating (LER)	60.6	
Spacing Criterion (0-180)	2.38	
Spacing Criterion (diagonal)	2.36	

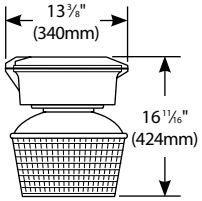
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C090-TGLA3E &amp; VR22P</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	10006	
Efficiency	71%	
Efficacy Rating (LER)	47.7	
Spacing Criterion (0-180)	1.52	
Spacing Criterion (diagonal)	1.68	

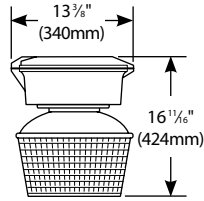
# Area lighting

## Hazlux® 3 Standard housing

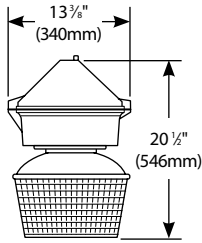
### Dimensions - Standard housing with 12" refractor and guard



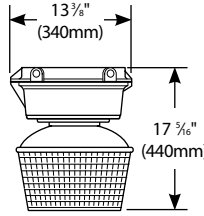
Rigid Pendant



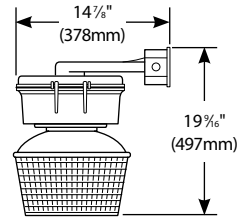
Flexible Pendant



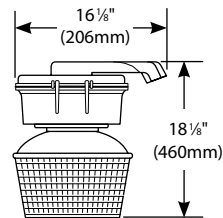
Cone-Top Pendant



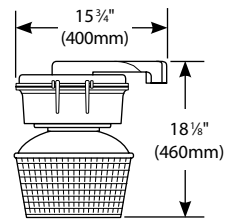
Ceiling Mount



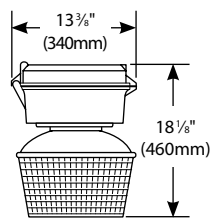
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion

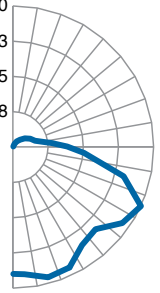


HazVektor™ Ring

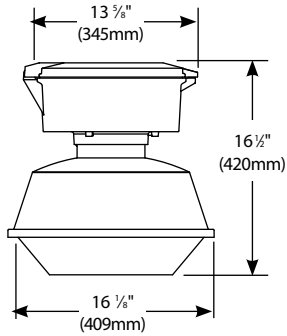
### Photometry - Standard housing with 12" refractor and guard

#### Ceiling Mount

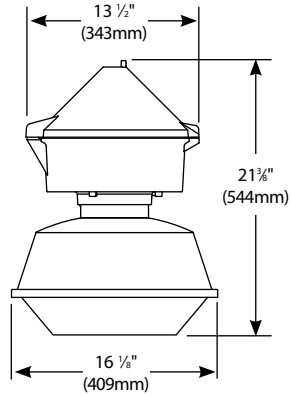
Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C090-R5A2E</b>	1950
Lamp	175W MH ED28	1463
Lamp Lumens	14000	975
Input Watt	210	488
Luminaire Lumens	11690	
Efficiency	84%	
Efficacy Rating (LER)	55.7	
Spacing Criterion (0-180)	1.46	
Spacing Criterion (90-270)	1.46	
Spacing Criterion (diagonal)	1.74	



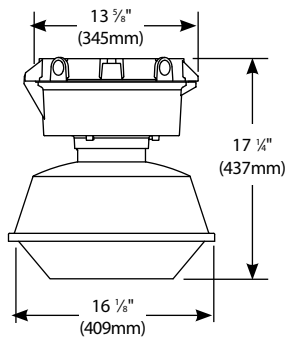
## Dimensions - Standard housing with low bay refractor



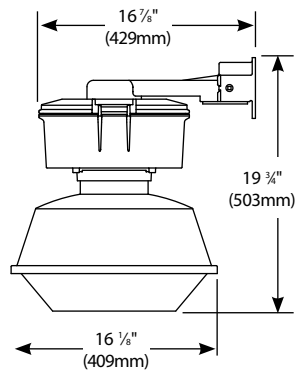
Rigid and Flexible Pendant



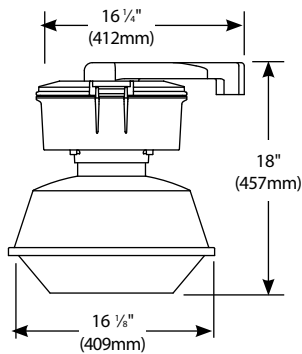
Cone-Top Pendant



Ceiling Mount



Wall Mount

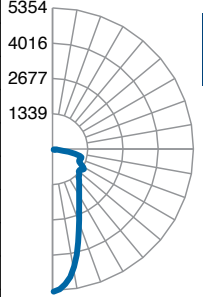


Straight Stanchion

## Photometry - Standard housing with low bay refractor

### Ceiling Mount

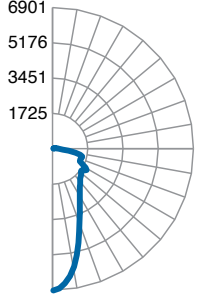
Reference Data		Candlepower Curve
Catalogue No.	<b>DS015H090-CBDL-A2E</b>	5354
Lamp	150W HPS ED23 1/2	4016
Lamp Lumens	16000	2677
Input Watt	165	1339
Luminaire Lumens	8744	
Efficiency	55%	
Efficacy Rating (LER)	53	
Spacing Criterion (0-180)	0.66	
Spacing Criterion (90-270)	0.66	
Spacing Criterion (diagonal)	0.80	



3

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH025C090-CBDL-A2E</b>	6901
Lamp	250W MH ED28	5176
Lamp Lumens	20500	3451
Input Watt	275	1725
Luminaire Lumens	11869	
Efficiency	58%	
Efficacy Rating (LER)	43	
Spacing Criterion (0-180)	0.68	
Spacing Criterion (90-270)	0.68	
Spacing Criterion (diagonal)	0.82	



# Area lighting

## Hazlux® 3 R-Housing

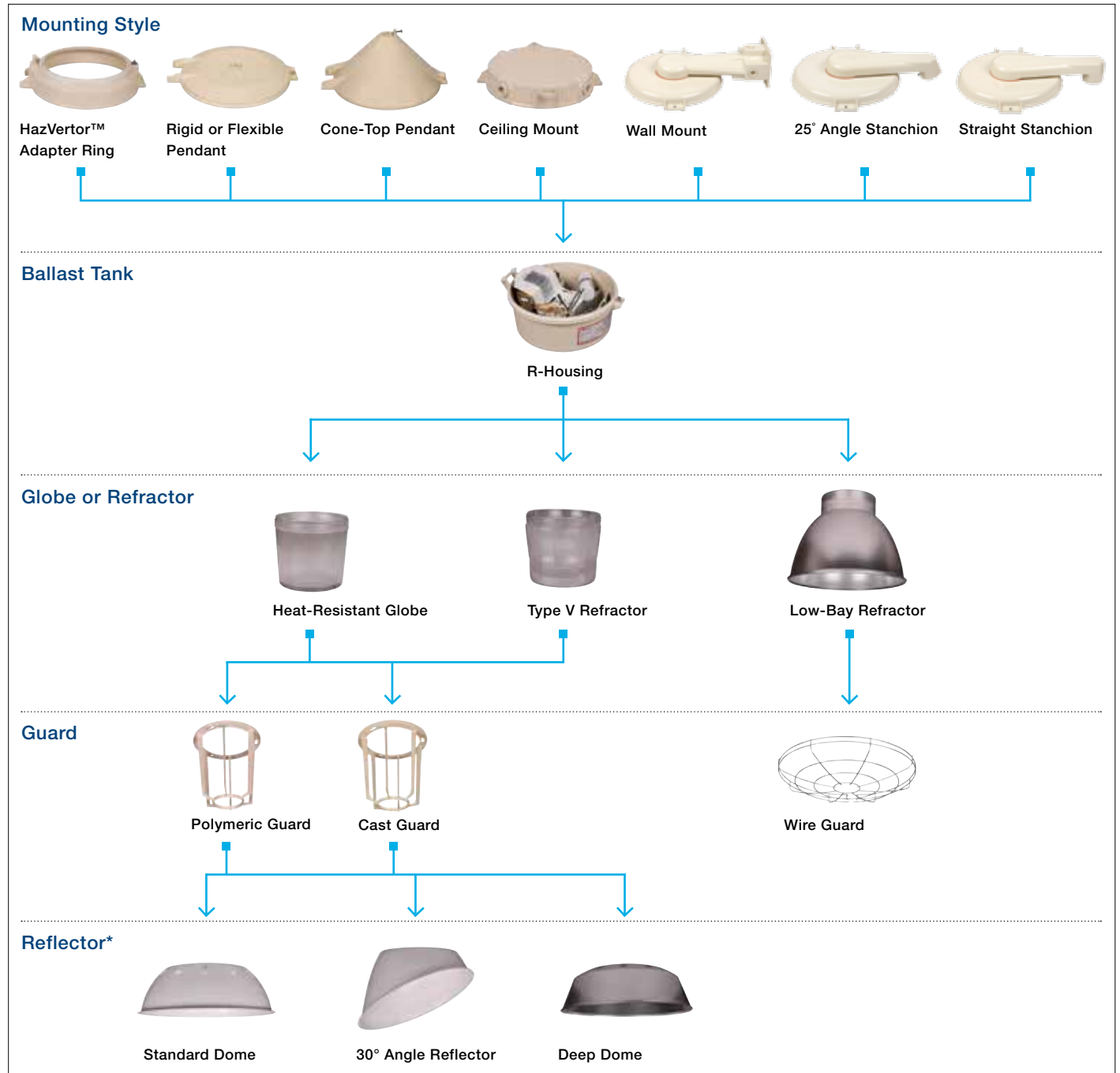
### Assembly guide

**Complete luminaire consists of:**

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® 3 R-Housing - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

#### Ballast tank

D	S	Ø	15	H	04	R
1	2	3	4	5	6	7

#### Optics and mountings

TGP	-	P2	E
8		9	10

#### Options

T	F	C
11	12	13

3

### Ballast Tank

<b>1 Fixture Series</b>	<b>D</b>	Hazlux® 3 Fixture	
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium	
	<b>H</b>	Metal Halide	
<b>3 Starter Circuit/ Quartz Options</b>	<b>Ø</b>	Standard Fixture (Without Options)	
	<b>P</b>	Pulse Start (MH Only)*	
	<b>Q</b>	Quartz Auxiliary Option (Not Hazardous Rated)	
	<b>R</b>	Instant Restart (50 - 150W HPS)	
	<b>J</b>	Auto Shutoff Starter (HPS Only)	
	<b>Y</b>	Auto Shutoff Starter with Quartz Restrike (HPS only, non-UL)	
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>		
	<b>10</b>	100W ED28	<b>17</b> 175W ED28
	<b>20</b>	200W ED28PS	<b>25</b> 250W ED28
	<b>High Pressure Sodium Lamps</b>		
	<b>05</b>	50W ED23 1/2	<b>07</b> 70W ED23 1/2
	<b>10</b>	100W ED23 1/2	<b>15</b> 150W ED23 1/2
<b>5 Ballast Circuit</b>	<b>H</b>	High Reactance	
	<b>C</b>	Constant Wattage Autotransformer (CWA)	
	<b>I</b>	CWI	
	<b>P</b>	Reactor (All ballasts high power factor)	
<b>6 Voltage/ Frequency</b>	<b>03</b>	120/277V, 60 Hz	
	<b>04</b>	120/208/240/277V, 60 Hz	
	<b>09</b>	120/277/347V, 60 Hz (CSA)	
	<b>12</b>	120V, 60 Hz	
	<b>20</b>	208V, 60 Hz	
	<b>24</b>	240V, 60 Hz	
	<b>27</b>	277V, 60 Hz	
	<b>34</b>	347V, 60 Hz	
	<b>48</b>	480V, 60 Hz	
	<b>225</b>	220V, 50 Hz	
<b>245</b>	240V, 50 Hz		
<b>7 Ballast Housing Style</b>	<b>R</b>	R-Housing	
	<b>I</b>	R-Housing with Stainless Steel Inserts	

For high ambient temperature (55°C, 65°C) please consult factory

### Optics & Mountings

<b>8 Optical Assembly Options</b>	<b>R1</b>	73/4" Refractor Globe, Type I	
	<b>R3</b>	73/4" Refractor Globe, Type III	
	<b>R5</b>	73/4" Refractor Globe, Type V	
	<b>R1P</b>	R1 with Polymeric Guard	
	<b>R3P</b>	R3 with Polymeric Guard	
	<b>R5P</b>	R5 with Polymeric Guard	
	<b>R1G</b>	R1 with Cast Guard	
	<b>R3G</b>	R3 with Cast Guard	
	<b>R5G</b>	R5 with Cast Guard	
	<b>TG</b>	73/4" Thermal Shock-Resistant	
	<b>TGP</b>	TG with Polymeric Guard	
	<b>TGC</b>	TG with Cast Guard	
	<b>9 Mounting style</b>	<b>RCB</b>	Enclosed High-Bay Reflector
<b>RCG</b>		RCB with Steel Wire Guard	
<b>A2</b>		3/4" Cone-Top Pendant	
<b>A3</b>		1" Cone-Top Pendant	
<b>B2</b>		3/4" Wall Mount	
<b>B3</b>		1" Wall Mount	
<b>C2</b>		3/4" Ceiling Mount	
<b>C3</b>		1" Ceiling Mount	
<b>F2</b>		3/4" Flexible Pendant	
<b>F3</b>		1" Flexible Pendant	
<b>HV1</b>		HazVektor™ Ring - Class I, Div. 2, Zone 2	
<b>HV2</b>		HazVektor™ Ring - Class I Div. 2, Zone 2, Class II	
<b>L4</b>		11/4" Straight Stanchion	
<b>L5</b>	11/2" Straight Stanchion		
<b>P2</b>	3/4" Rigid Pendant		
<b>P3</b>	1" Rigid Pendant		
<b>S4</b>	11/4" 25° Angle Stanchion		
<b>S5</b>	11/2" 25° Angle Stanchion		
<b>10 UNIPAK™ Options</b>	<b>E</b>	UNIPAK™ with Clear Lamp	
	<b>D</b>	UNIPAK™ with Dual Arc Lamp	
	<b>U</b>	UNIPAK™ No Lamp	

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

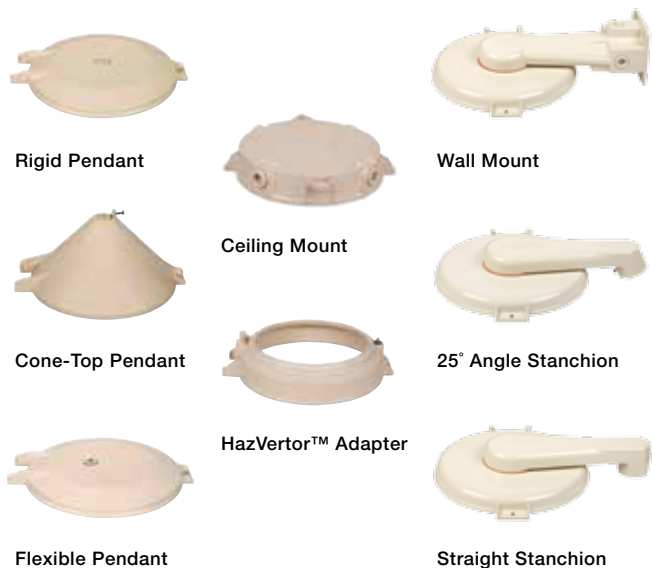
<b>11 Special Options</b>	<b>T</b>	HazCote® custom anti-corrosion coating (Consult factory)
<b>12 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>13 Certification</b>	<b>C</b>	Canadian Market

\*Fuse Block are not available for Marine Locations

# Area lighting Hazlux® 3 R-Housing

## Individual components (to be used with ballast housing)

3



### Mounting Options

Part No.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling Mount	3/4"
VC3	Ceiling Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	11/4"
VS5-VIB	25° Angle Stanchion	11/2"
VL4-VIB	Straight Stanchion	11/4"
VL5-VIB	Straight Stanchion	11/2"
HV1	HazVertor™ Adapter Ring	N/A
HV2	HazVertor™ Adapter Ring	N/A



### Globes or Refractors

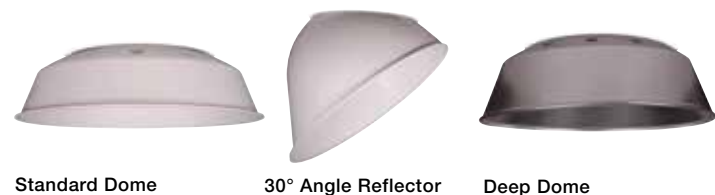
Part No.	Description
VGT31S	73/4" dia. Heat-Resistant Globe (250W max.)
VGT31STS	73/4" dia. Heat-Resistant Globe (250W max.) coated with Tuff-Skin®
VGL31R1	73/4" dia. IES Type I Refractor Globe (250W max.)
VGL31R3	73/4" dia. IES Type III Refractor Globe (250W max.)
VGL31R5	73/4" dia. IES Type V Refractor Globe (250W max.)
VR31CB	Enclosed High-Bay, Anodized Aluminum with Lens



### Guards

Part No.	Description
VGU31RP	Polymeric Guard for VGT31S Globe and VGL31R Series Refractor Globes
VGU31R	Cast Aluminum Guard for VGT31S Globe and VGL31R Series Refractor Globes
VGR64	Steel Wire Guard for VR31CB Enclosed High Bay Reflector

## Optional components

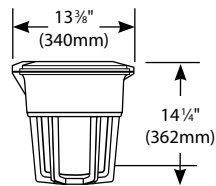


### Reflectors or Exit Sign

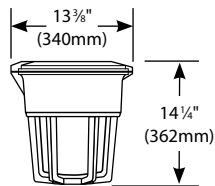
Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRD31	Deep Dome, Anodized Aluminum

Note: Reflectors are shipped bulk unless specified

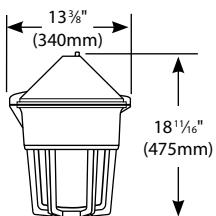
## Dimensions - R-Housing with 7-3/4" refractor and guard



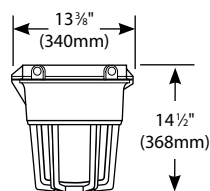
Rigid Pendant



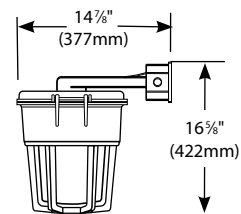
Flexible Pendant



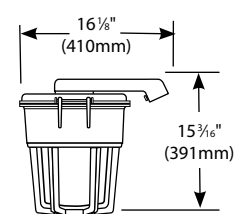
Cone-Top Pendant



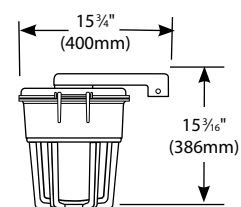
Ceiling Mount



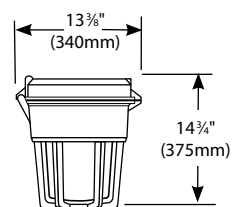
Wall Mount



Straight Stanchion Mount



Straight Stanchion



HazVertor™ Ring

## Photometry - R-Housing with 7-3/4" refractor and guard

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DS010H09R-TGCA3E</b>	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	8318	
Efficiency	88%	
Efficacy Rating (LER)	64.0	
Spacing Criterion (0-180)	3.56	
Spacing Criterion (90-270)	3.56	
Spacing Criterion (diagonal)	3.42	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DHP17C09R-TGA3E</b>	
Lamp	175W MH ED28PS	
Lamp Lumens	17700	
Input Watt	192.5	
Luminaire Lumens	14969	
Efficiency	85%	
Efficacy Rating (LER)	78	
Spacing Criterion (0-180)	1.86	
Spacing Criterion (90-270)	1.86	
Spacing Criterion (diagonal)	2.00	

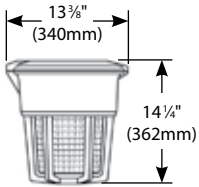
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C09R-TGA3E &amp; VR31P</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	10006	
Efficiency	71%	
Efficacy Rating (LER)	47.7	
Spacing Criterion (0-180)	1.52	
Spacing Criterion (90-270)	1.52	
Spacing Criterion (diagonal)	1.68	

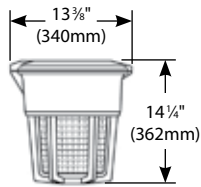
# Area lighting

## Hazlux® 3 R-Housing

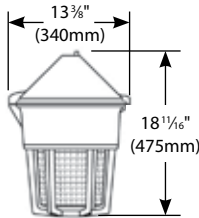
### Dimensions - R-Housing with 7-3/4" refractor and guard



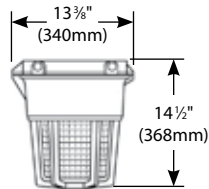
Rigid Pendant



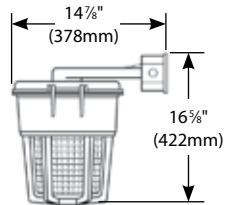
Flexible Pendant



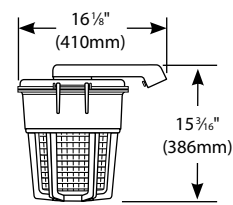
Cone-Top Pendant



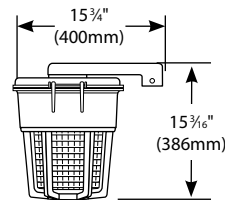
Ceiling Mount



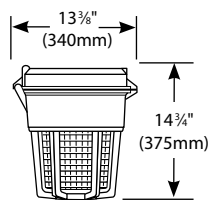
Wall Mount



25° Stanchion Mount



Straight Stanchion



HazVertor™ Ring

### Photometry - R-Housing with 7-3/4" refractor and guard

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C09R-R1A3E</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	10352	
Efficiency	74%	
Efficacy Rating (LER)	49.3	
Spacing Criterion (0-180)	1.68	
Spacing Criterion (90-270)	3.02	
Spacing Criterion (diagonal)	2.02	

#### Ceiling Mount

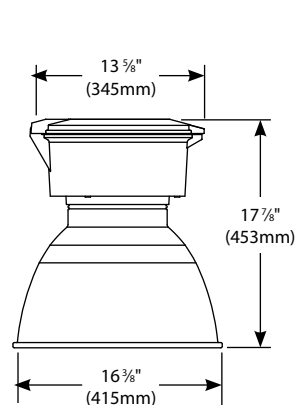
Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C09R-R3A3E</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	10609	
Efficiency	76%	
Efficacy Rating (LER)	50.5	
Spacing Criterion (0-180)	1.62	
Spacing Criterion (90-270)	2.28	
Spacing Criterion (diagonal)	2.10	

#### Ceiling Mount

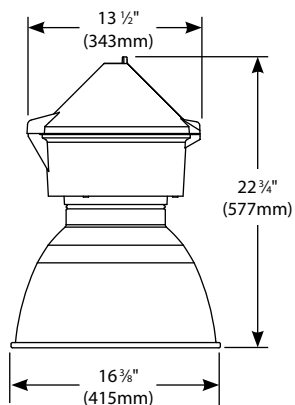
Reference Data		Candlepower Curve
Catalogue No.	<b>DH017C09R-R5A3E</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	10221	
Efficiency	73%	
Efficacy Rating (LER)	48.7	
Spacing Criterion (0-180)	2.00	
Spacing Criterion (90-270)	2.00	
Spacing Criterion (diagonal)	2.30	



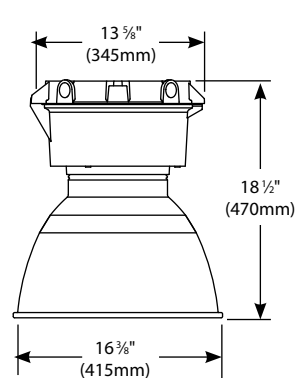
## Dimensions - R-Housing with high bay refractor



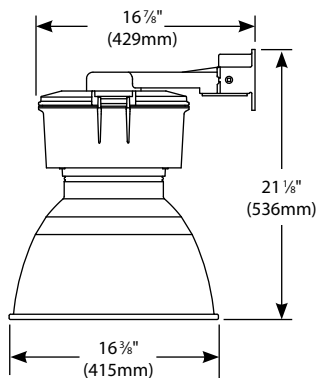
Rigid and Flexible Pendant



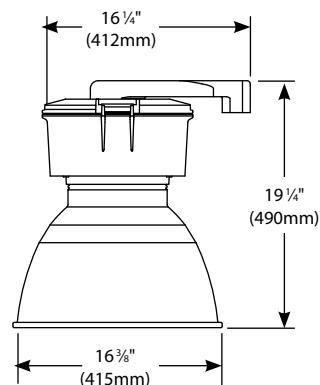
Cone-Top Pendant



Ceiling Mount



Wall Mount

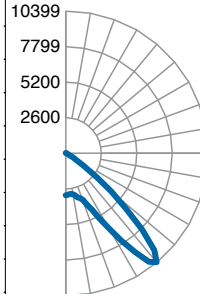


Straight Stanchion

## Photometry - R-Housing with high bay refractor

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DHP25C04R-RCB-P2E</b>	10399
Lamp	250W MH ED28PS	7799
Lamp Lumens	25000	5200
Input Watt	250	2600
Luminaire Lumens	16988	
Efficiency	68%	
Efficacy Rating (LER)	68	
Spacing Criterion (0-180)	2.28	
Spacing Criterion (90-270)	2.28	
Spacing Criterion (diagonal)	1.82	



# Area lighting

## Hazlux® 3 Large housing

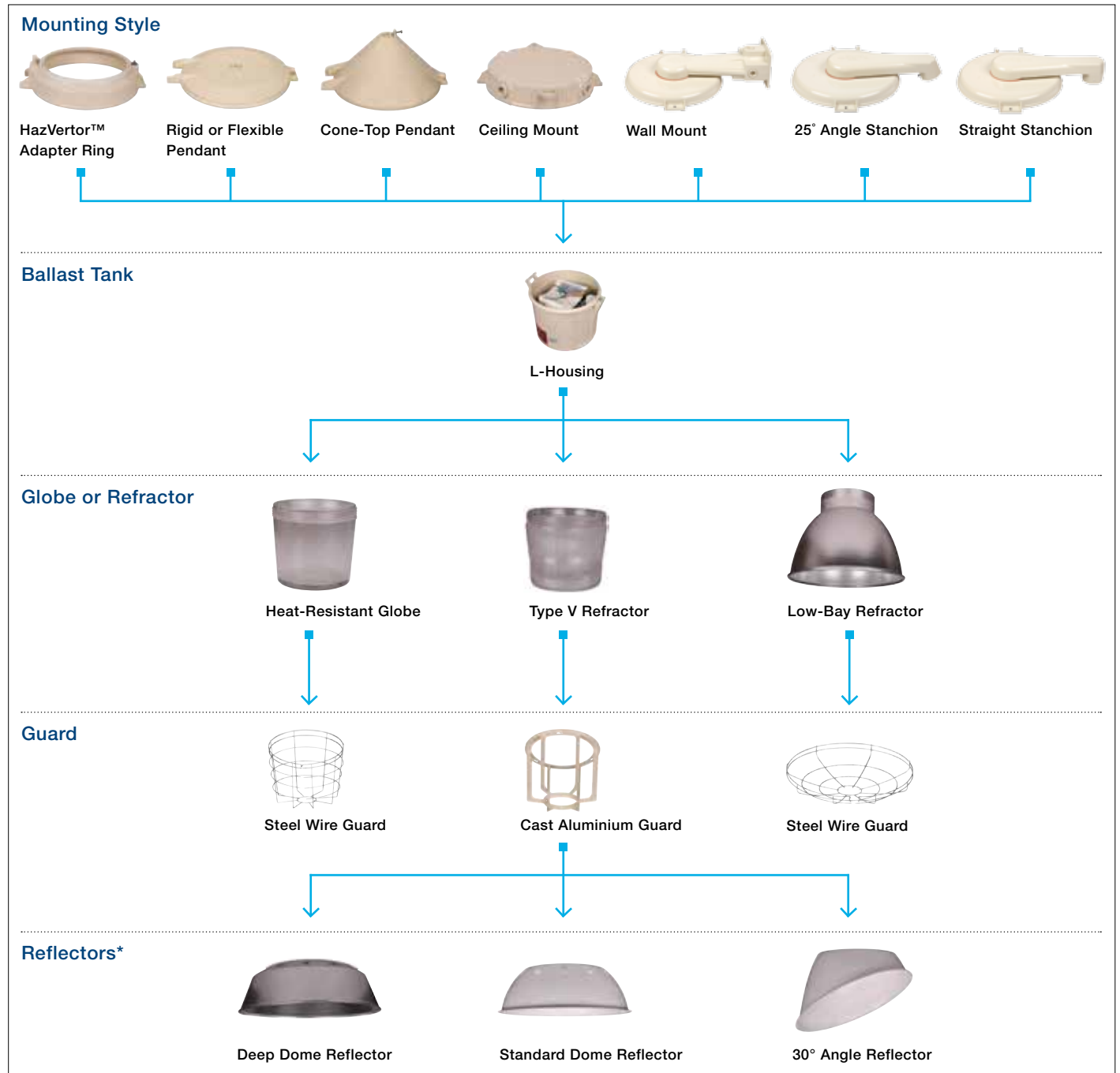
### Assembly guide

**Complete luminaire consists of:**

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® 3 Large Housing - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

#### Ballast tank

<b>D</b>	<b>S</b>	<b>Ø</b>	<b>25</b>	<b>H</b>	<b>04</b>	<b>L</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

#### Optics and mountings

<b>TGC</b>	-	<b>P2</b>	<b>E</b>
<b>8</b>		<b>9</b>	<b>10</b>

#### Options

<b>T</b>	<b>F</b>	<b>C</b>
<b>11</b>	<b>12</b>	<b>13</b>

### Ballast Tank

<b>1 Fixture Series</b>	<b>D</b>	Hazlux® 3 Fixture	
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium	
	<b>H</b>	Metal Halide	
<b>3 Starter Circuit/ Quartz Options</b>	<b>Ø</b>	Standard Fixture (Without Options)	
	<b>P</b>	Pulse Start (MH Only)	
	<b>Q</b>	Quartz Auxiliary Option (Not Hazardous Rated)	
	<b>J</b>	Auto Shutoff Starter (HPS Only)	
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>		
	<b>20</b>	200W ED28PS	<b>25</b> 250W ED28
	<b>32</b>	320W ED28PS	<b>35</b> 350W ED37PS
	<b>40</b>	400W ED37	
	<b>High Pressure Sodium Lamps</b>		
	<b>20</b>	200W ED18	<b>25</b> 250W ED18
	<b>40</b>	400W ED18	
<b>5 Ballast Circuit</b>	<b>H</b>	High Reactance	
	<b>C</b>	Constant Wattage Autotransformer (CWA)	
	<b>I</b>	CWI	
	<b>P</b>	Reactor (All ballasts high power factor)	
<b>6 Voltage/ Frequency</b>	<b>03</b>	120/277V, 60 Hz	
	<b>04</b>	120/208/240/277V, 60 Hz	
	<b>09</b>	120/277/347V, 60 Hz (CSA)	
	<b>12</b>	120V, 60 Hz	
	<b>20</b>	208V, 60 Hz	
	<b>27</b>	277V, 60 Hz	
	<b>34</b>	347V, 60 Hz	
	<b>48</b>	480V, 60 Hz	
	<b>225</b>	220V, 50 Hz	
	<b>245</b>	240V, 50 Hz	
<b>7 Ballast Housing Style</b>	<b>L</b>	Large Housing	
	<b>M</b>	Large Housing with Stainless Steel Inserts	

### Optics & Mountings

<b>8 Optics and Guards</b>	<b>R2</b>	12" Refractor Glass, Type II
	<b>R5</b>	12" Refractor Glass, Type V
	<b>R2G</b>	R2 with Steel Wire Guard
	<b>R5G</b>	R5 with Cast Guard
	<b>RCB</b>	Enclosed High-Bay Reflector
	<b>RCG</b>	RCB with Steel Wire Guard
	<b>TG</b>	73/4" Thermal Shock-Resistant CBDL Globe
	<b>TGC</b>	TG with Cast Aluminum Guard
	<b>SG</b>	Tuff-Skin® Coated Globe*
	<b>SGC</b>	SG with Cast Aluminum Guard
<b>9 Mounting style</b>	<b>A2</b>	3/4" Cone-Top Pendant
	<b>A3</b>	1" Cone-Top Pendant
	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>F2</b>	3/4" Flexible Pendant
	<b>F3</b>	1" Flexible Pendant
	<b>HV1</b>	HazVertor™ Ring - Class I, Div. 2, Zone 2
	<b>HV2</b>	HazVertor™ Ring - Class I Div. 2, Zone 2, Class II
<b>10 UNIPAK™ Options</b>	<b>L4</b>	11/4" Straight Stanchion
	<b>L5</b>	11/2" Straight Stanchion
	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>S4</b>	11/4" 25° Angle Stanchion
	<b>S5</b>	11/2" 25° Angle Stanchion
	<b>E</b>	UNIPAK™ with Clear Lamp
	<b>D</b>	UNIPAK™ with Dual Arc Lamp
	<b>U</b>	UNIPAK™ No Lamp

\*Tuff-Skin is a registered trademark of Thomas Manufacturing Corp

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>11 Special Options</b>	<b>T</b>	HazCote® custom anti-corrosion coating (Consult factory)
<b>12 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>13 Certification</b>	<b>C</b>	Canadian Market

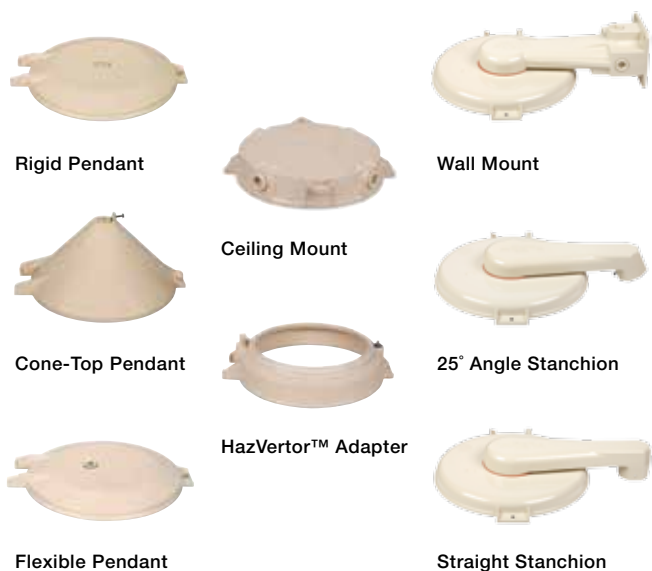
\* Fusing is not available with Marine locations

# Area lighting

## Hazlux® 3 Large housing

### Individual components (to be used with ballast housing)

3



#### Mounting Options

Part No.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling Mount	3/4"
VC3	Ceiling Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1 1/4"
VS5-VIB	25° Angle Stanchion	1 1/2"
VL4-VIB	Straight Stanchion	1 1/4"
VL5-VIB	Straight Stanchion	1 1/2"
HV1	HazVerctor™ Adapter Ring	N/A
HV2	HazVerctor™ Adapter Ring	N/A



#### Globes or Refractors

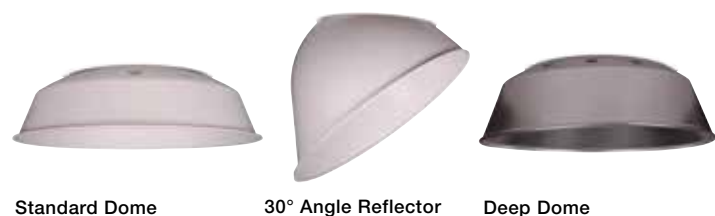
Part No.	Description
VGT31	7 3/4" dia. Heat-Resistant Globe (400W max.)
VGT31TS	7 3/4" dia. Heat-Resistant Globe (400W max.) coated with Tuff-Skin®
VRF31C2	12" dia. IES Type II Refractor, 7 3/4" Thread
VRF31C5	12" dia. IES Type V Refractor, 7 3/4" Thread
VR31CB	Enclosed High-Bay, Anodized Aluminum with Lens



#### Guards

Part No.	Description
VGU31	Cast Aluminum Guard for VGT31 Globe
VGR48	Steel Wire Guard for All VRF Series 12" Refractors
VGR64	Steel Wire Guard for VR31CB Enclosed High Bay Reflector

### Optional components

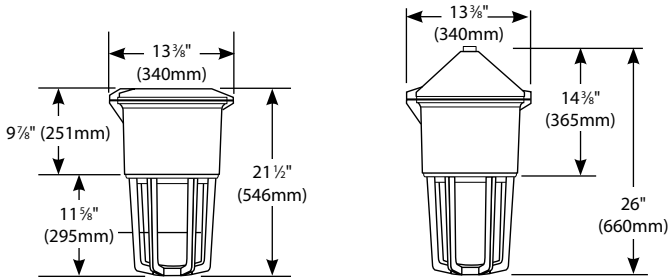


#### Reflectors or Exit Sign

Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRD31	Deep Dome, Anodized Aluminum

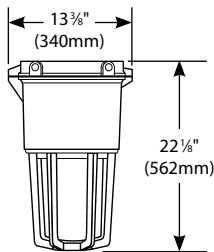
Note: Reflectors are shipped bulk unless specified

## Dimensions - Large housing with globe and guard

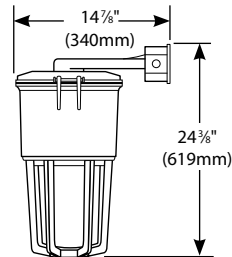


Rigid Pendant

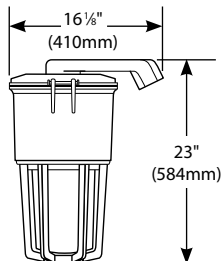
Cone-Top Pendant



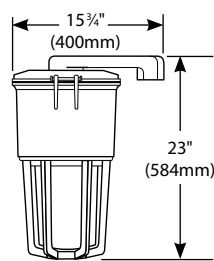
Ceiling Mount



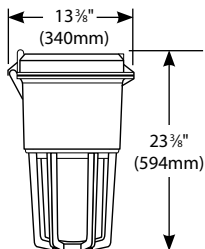
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVertor™ Ring

## Photometry - Large Housing with globe and guard

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DS020C09L-TGCA3E</b>	2090
Lamp	200W HPS ED18	1568
Lamp Lumens	22000	1045
Input Watt	255	523
Luminaire Lumens	18415	
Efficiency	84%	
Efficacy Rating (LER)	72.2	
Spacing Criterion (0-180)	NA	
Spacing Criterion (90-270)	NA	
Spacing Criterion (diagonal)	NA	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DH035C09L-TGCA3E</b>	6090
Lamp	350W MH ED37PS	4568
Lamp Lumens	34000	3045
Input Watt	400	1523
Luminaire Lumens	26392	
Efficiency	78%	
Efficacy Rating (LER)	66.0	
Spacing Criterion (0-180)	1.36	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (diagonal)	1.58	

### Ceiling Mount

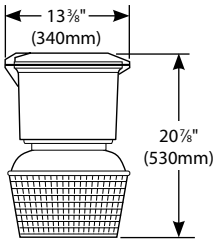
Reference Data		Candlepower Curve
Catalogue No.	<b>DHP40C04L-TG-P2V &amp; VRA31P</b>	9593
Lamp	400W MH ED37PS	7195
Lamp Lumens	44000	4797
Input Watt	400	2398
Luminaire Lumens	30407	
Efficiency	69%	
Efficacy Rating (LER)	76	
Spacing Criterion (0-180)	2.32	
Spacing Criterion (90-270)	1.72	
Spacing Criterion (diagonal)	1.58	

# Area lighting

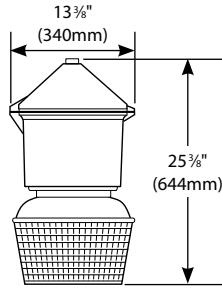
## Hazlux® 3 Large housing

### Dimensions - Large housing with 12" refractor

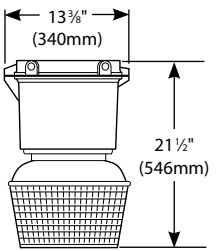
3



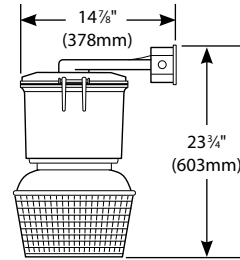
Rigid and Flexible Pendant



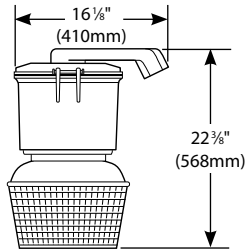
Cone-Top Pendant



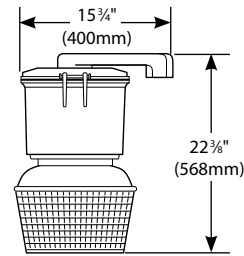
Ceiling Mount



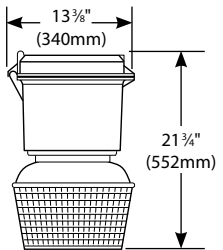
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVertor™ Ring

### Photometry - Large housing with 12" refractor

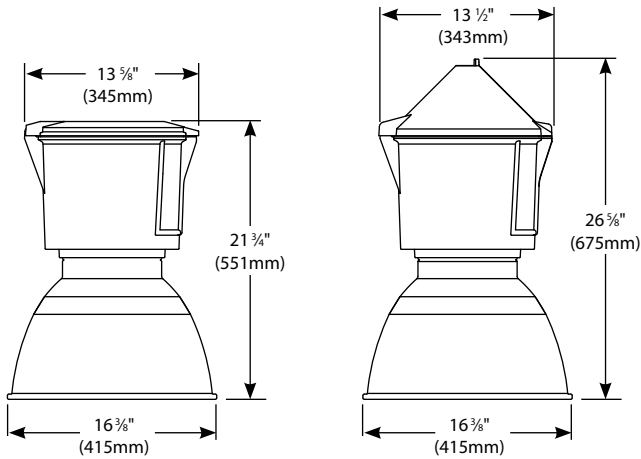
#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DHP32C04L-R2-P2E</b>	
Lamp	320W MH ED28PS	
Lamp Lumens	30000	
Input Watt	352	
Luminaire Lumens	21773	
Efficiency	73%	
Efficacy Rating (LER)	62	
Spacing Criterion (0-180)	1.56	
Spacing Criterion (90-270)	1.50	
Spacing Criterion (diagonal)	1.90	

#### Ceiling Mount

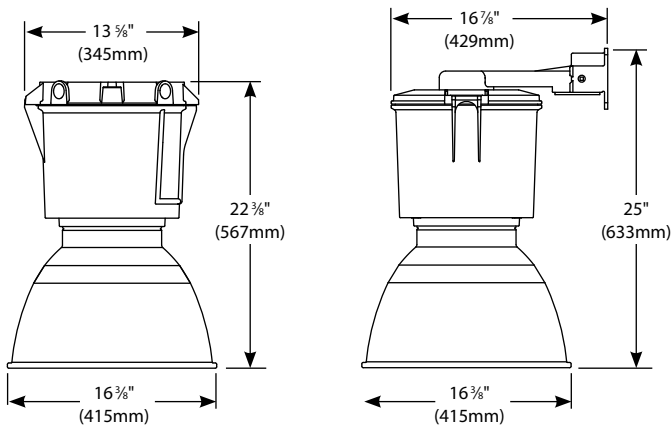
Reference Data		Candlepower Curve
Catalogue No.	<b>DS020C04L-R5-P2E</b>	
Lamp	200W HPS ED18	
Lamp Lumens	22000	
Input Watt	240	
Luminaire Lumens	16414	
Efficiency	75%	
Efficacy Rating (LER)	68	
Spacing Criterion (0-180)	1.66	
Spacing Criterion (90-270)	1.66	
Spacing Criterion (diagonal)	1.80	

## Dimensions - Large housing with high bay refractor



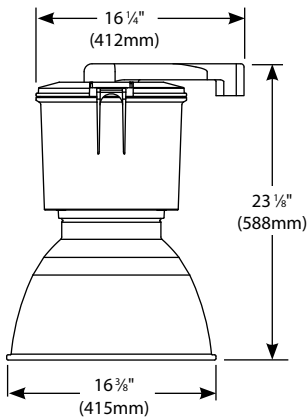
Rigid and Flexible Pendant

Cone-Top Pendant



Ceiling Mount

Wall Mount



Straight Stanchion

## Photometry - Large housing with high bay refractor

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DHP25C04-RCB-A3E</b>	10426
Lamp	250W MH ED28PS	7820
Lamp Lumens	25000	5213
Input Watt	250	2607
Luminaire Lumens	17383	
Efficiency	70%	
Efficacy Rating (LER)	70	
Spacing Criterion (0-180)	2.36	
Spacing Criterion (90-270)	2.36	
Spacing Criterion (diagonal)	1.86	

3

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DS020C04L-RCB-A3E</b>	10426
Lamp	200W HPS ED18	7820
Lamp Lumens	22000	5213
Input Watt	240	2607
Luminaire Lumens	12810	
Efficiency	58%	
Efficacy Rating (LER)	53	
Spacing Criterion (0-180)	1.70	
Spacing Criterion (90-270)	1.70	
Spacing Criterion (diagonal)	1.38	

# Area lighting

## Hazlux® 3 Thermal performance data (40°C)

### Hazlux® 3 Thermal Performance Data (40°C) Hazardous Location

#### Class I, Division 1 Group C & D - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 or S56 Lamp)	200W (S66 Lamp)	250W (S50 Lamp)	400W/D* (S50 Lamp)	Any HPS w/ Auxiliary Qtz.)
	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b> T3C	T3A	T2C	T2A	T2	325	T2A	625
Globe, Guard & Dome Reflector	<b>B</b> T3C	T3A	T2C	T2A	T2	325	T2A	625
Globe, Guard & Angle Reflector	<b>C</b> T3C	T3A	T2C	T2A	T2	325	T2A	625
12" Refractor	<b>D</b> T4	T3C	T2D	T2B	T2A	325	T2B	625
Enclosed Reflector	<b>E</b> N/A	N/A	N/A	N/A	T2A	325	T2B	625
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C	110°C	-

\*Requires use of 400W Diffuse Lamp

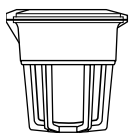
#### Class I, Division 1 Group C & D - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

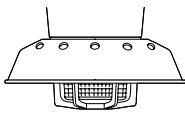
Configuration	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)	400W (M59 Lamp)	Any MH Lamp w/ (Auxiliary Qtz.)
	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b> T3C	T3A	T2A	T2	350	625
Globe, Guard & Dome Reflector	<b>B</b> T3C	T3A	T2C	T2	350	625
Globe, Guard & Angle Reflector	<b>C</b> T3C	T3A	T2A	T2	350	625
12" Refractor	<b>D</b> T2C	T2C	T2C	T2	325	625
Enclosed Reflector	<b>E</b> N/A	N/A	N/A	N/A	325	625
Supply Wire Temp Rating	90°C	90°C	90°C	125°C	110°C	-

Note: Temperature rating for all fixtures with the auxiliary quartz option is 625°C

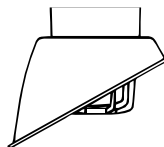
#### Section E Hazlux® 3



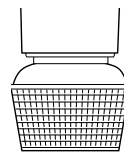
**A**



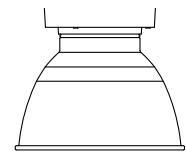
**B**



**C**



**D**



**E**



## Hazlux® 3 Thermal Performance Data (40°C) Hazardous Location

### Class II & III\*, Division 1 & 2 - Maximum External Fixture Temperature In °C @ 40°C Ambient under a Dust Blanket High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

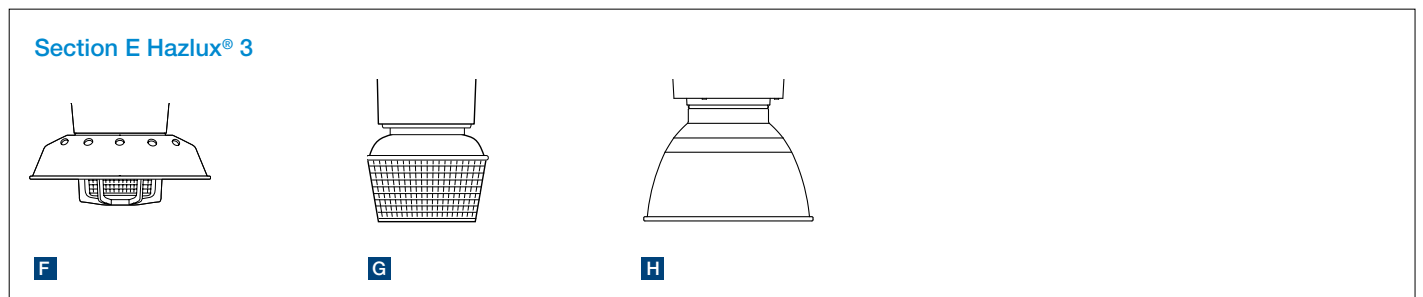
Configuration		50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	200W (S66 Lamp)	250W (S50 Lamp)	400W/D* (S51 Lamp)
		Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector <b>F</b>	EFG	EFG	EFG	N/A	EFG	EFG	N/A
	Reflector <b>G</b>	EFG	EFG	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector <b>H</b>	N/A	N/A	N/A	N/A	EFG	EFG	EFG
With Quartz Auxiliary Lamp (100W)	Globe, Guard & any Reflector <b>F</b>	N/A	N/A	N/A	N/A	EFG	EFG	N/A
	Reflector <b>G</b>	EFG	EFG	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector <b>H</b>	N/A	N/A	N/A	N/A	EFG	EFG	EFG
Supply Wire Temp Rating		90°C	90°C	90°C	90°C	90°C	90°C	110°C

\*Requires use of 400W Diffuse Lamp

### Class II & III\*, Division 1 & 2 - Maximum External Fixture Temperature In °C @ 40°C Ambient under a Dust Blanket Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

Configuration		70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)	400W/ (M59 Lamp)
		Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard	Globe & Guard & any Reflector <b>F</b>	EFG	EFG	N/A	EFG	EFG
	Reflector <b>G</b>	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector <b>H</b>	N/A	N/A	N/A	N/A	EFG
With Quartz Auxiliary Lamp (100W)	Globe & Guard & any Reflector <b>F</b>	N/A	N/A	N/A	N/A	EFG
	Reflector <b>G</b>	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector <b>H</b>	N/A	N/A	N/A	N/A	N/A
Supply Wire Temp Rating		90°C	90°C	90°C	90°C	110°C

\*Note: Fixtures certified for group G are also certified for Class III



# Area lighting

## Hazlux® 3 Thermal performance data (55°C)

### Hazlux® 3 Thermal Performance Data (55°C) Hazardous Location

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 55°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration	Rating	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	Any HPS w/ Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T3	T2C	T2A	625 (2)
Globe, Guard & Dome Reflector	<b>B</b>	T3	T2C	T2A	625 (2)
Globe, Guard & Angle Reflector	<b>C</b>	T3	T2C	T2A	625 (2)
Refractor	<b>D</b>	T3B	T2D	T2B	625 (2)
Enclosed Reflector	<b>E</b>	N/A	N/A	N/A	N/A
Supply Wire Temp Rating		90°C	90°C	90°C	90°C

\*Requires use of 400W Diffuse Lamp

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 55°C Ambient in Free Air

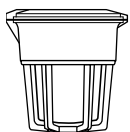
Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

Configuration	Rating	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T3A	T3	T2 (2)	N/A
Globe, Guard & Dome Reflector	<b>B</b>	T3A	T3	T2 (2)	N/A
Globe, Guard & Angle Reflector	<b>C</b>	T3A	T3	T2 (2)	N/A
12" Refractor	<b>D</b>	N/A	N/A	T2B	T2A
Enclosed Reflector	<b>E</b>	N/A	N/A	N/A	N/A
Supply Wire Temp Rating		60°C	75°C	90°C	125°C

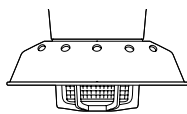
(1) Configuration not tested. (Rating based on hottest fixture configuration)

(2) Consult Factory

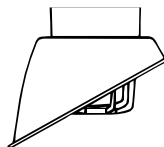
#### Section E Hazlux® 3



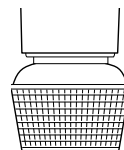
**A**



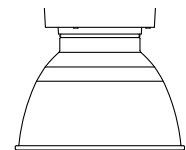
**B**



**C**



**D**



**E**

## Hazlux® 3 Thermal Performance Data (55°C) Hazardous Location

### Class II & III\*, Division 1 & 2 - Maximum External Fixture Temperature @ 55°C Ambient under a Dust Blanket High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration		70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)
		Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector	<b>F</b> EFG	N/A	N/A
	Reflector	<b>G</b> EFG	EFG	EFG
With Quartz Auxiliary Lamp (100W)	Globe, Guard & any Reflector	<b>F</b> N/A	N/A	N/A
	Reflector	<b>G</b> EFG (2)	N/A	N/A
Supply Wire Temp Rating		90°C	90°C	90°C

\*Requires use of 400W Diffuse Lamp

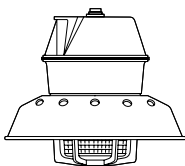
### Class II & III\*, Division 1 & 2 - Maximum External Fixture Temperature @ 55°C Ambient under a Dust Blanket Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

Configuration		70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
		Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard Fixture	Globe, Guard & any Reflector	<b>F</b> N/A	N/A	N/A	N/A
	Reflector	<b>G</b> N/A	N/A	EFG (2)	N/A
Supply Wire Temp Rating		60°C	75°C	90°C	125°C

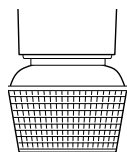
(2) Consult Factory

\*Note: Fixtures certified for group G are also certified for Class III

#### Section E Hazlux® 3



**F**



**G**

# Area lighting

## Hazlux® 3 Thermal performance data (65°C)

### Hazlux® 3 Thermal Performance Data (65°C) Hazardous Location

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 65°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration		70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	Any HPS w/ Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T3	T2C (2)	T2A (2)	N/A
Globe, Guard & Dome Reflector	<b>B</b>	T3	T2C (2)	T2A (2)	N/A
Globe, Guard & Angle Reflector	<b>C</b>	T3	T2C (2)	T2A (2)	N/A
Refractor	<b>D</b>	T3A	T2D (2)	T2B	625 (2)
Supply Wire Temp Rating		125°C	125°C	125°C	125°C

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 65°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

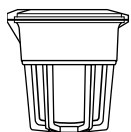
Configuration		70W (M85 Lamp)	100W (M90 Lamp)
		"T" No.	"T" No.
Globe & Guard	<b>A</b>	T3A	T3
Globe, Guard & Dome Reflector	<b>B</b>	T3A	T3
Globe, Guard & Angle Reflector	<b>C</b>	T3A	T3
Refractor	<b>D</b>	N/A	N/A
Supply Wire Temp Rating		75°C	90°C

(1) Configuration not tested.

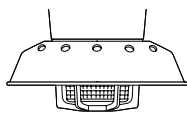
(Rating based on hottest fixture configuration)

(2) Consult Factory

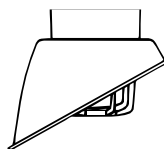
#### Section E Hazlux® 3



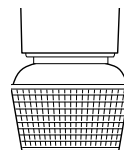
**A**



**B**



**C**



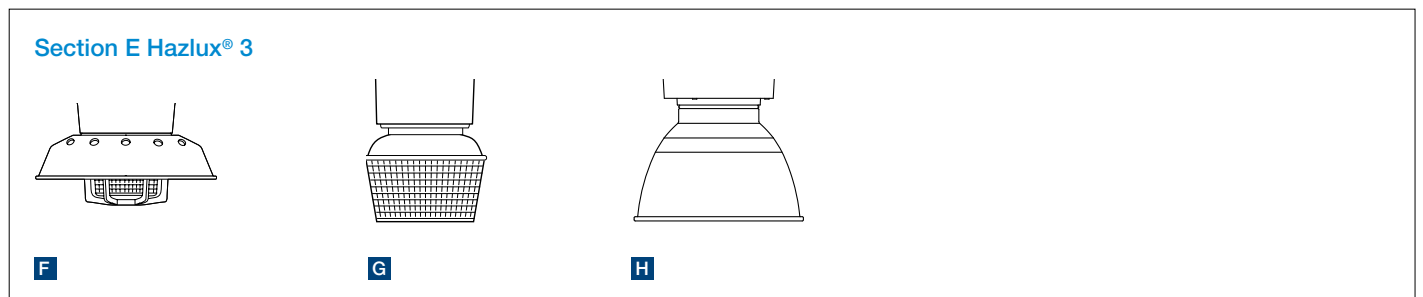
**D**

## Hazlux® 3 Thermal Performance Data (65°C) Hazardous Location

**Class II & III\*, Division 1 & 2 - Maximum External Fixture Temperature @ 65°C Ambient under a Dust Blanket**  
High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration		70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)
		Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector <b>F</b>	EFG	N/A	N/A
	Refractor <b>G</b>	EFG	EFG (2)	EFG (2)
With Quartz Lamp (100W)	Globe, Guard & any Reflector <b>F</b>	N/A	N/A	N/A
	Refractor <b>G</b>	EFG (2)	N/A	N/A
Supply Wire Temp Rating		125°C	125°C	125°C

\*Requires use of 400W Diffuse Lamp



# Area lighting

## Hazlux® 3 R-Housing thermal performance data

### Hazlux® 3 R-Housing Thermal Performance Data (40°C) - Hazardous Location

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

##### High Pressure Sodium

Configuration	35W (S76 Lamp)	50W (S68 Lamp)	70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)		50, 70 or 100W
	Lamp	Lamp	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp w/ Auxiliary Qtz.
Reflector & Guard	??	T3C	T3A	T3A	T3	T3	T2B	T2B	625
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C	90°C	90°C	-

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

##### Metal Halide

Configuration	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
	Lamp	Lamp	Lamp	Lamp
"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Reflector & Guard	T3	T3	T2B	T2
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

### Hazlux® 3 R-Housing Thermal Performance Data (55°C) - Hazardous Location

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 55°C Ambient in Free Air

##### High Pressure Sodium

Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	150W (S56 Lamp)	50W (68 Lamp)
	Lamp	Lamp	Lamp	Lamp	Lamp	Lamp w/ Auxiliary Qtz.
"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Reflector & Guard	T3C	T3A	T2D	T2B	T2C	625
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C

##### Metal Halide

Configuration	50W (M98 Lamp)	100W (M90 Lamp)
	Lamp	Lamp
"T" No.	"T" No.	"T" No.
Reflector & Guard	T3A	T3
Supply Wire Temp Rating	90°C	90°C

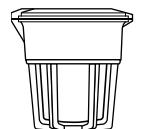
### Hazlux® 3 R-Housing Thermal Performance Data (65°C) - Hazardous Location

#### Class I, Division 2 - Lamp Surface Temperature in °C @ 65°C Ambient in Free Air

##### High Pressure Sodium

Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)
	Lamp	Lamp	Lamp
"T" No.	"T" No.	"T" No.	"T" No.
Reflector & Guard	T3C	T3	T2D
Supply Wire Temp Rating	125°C	125°C	125°C

#### Section E Hazlux® 3



## Hazlux® 3 R-Housing Thermal Performance Data (40°C) - Hazardous Location

Class II & III\*, Division 1 & 2 - Lamp Surface Temperature in °C @ 40°C Ambient under a Dust Blanket  
High Pressure Sodium

Configuration	50W (S68 Lamp)			70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)	
	Lamp	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart
	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG	EFG	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C	90°C	90°C	90°C

Class II & III\*, Division 1 & 2 - Lamp Surface Temperature in °C @ 40°C Ambient under a Dust Blanket  
Metal Halide

Configuration	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
	Lamp	Lamp	Lamp	Lamp
	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

## Hazlux® 3 R-Housing Thermal Performance Data (55°C) - Hazardous Location

Class II & III\*, Division 1 & 2 - Lamp Surface Temperature in °C @ 55°C Ambient under a Dust Blanket  
High Pressure Sodium

Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 or S56 Lamp)
	Lamp	Lamp	Lamp	Lamp
	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

## Hazlux® 3 R-Housing Thermal Performance Data (65°C) - Hazardous Location

Class II & III\*, Division 1 & 2 - Lamp Surface Temperature in °C @ 65°C Ambient under a Dust Blanket  
High Pressure Sodium

Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)
	Lamp	Lamp	Lamp
	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG
Supply Wire Temp Rating	125°C	125°C	125°C







# Area lighting

## Hazlux® 3 Induction

In the typical process industry plant, reliable lighting is often required in hazardous, hard-to-reach places. Lamp replacement not only places employees at risk, but often requires the rental of expensive equipment such as scissor lifts.

With the introduction of Hazlux® Induction Lighting Fixtures for hazardous areas (Class 1, Div. 2 Groups A, B, C, D) and non-hazardous areas, you can benefit from the longest lamp life available on the market.

### Features include:

- 60,000+ hour lamp life
- Reduced maintenance/re-lamp operations
- Instant On/Instant Restrike
- Automatic switch-off in case of failure
- 5000K CCT Standard
- Exceptional energy efficiency
- -45°C to 40°C ambient operating range
- Retrofits into existing Hazlux 3 applications
- RFI-approved (FCC part 18 reference luminaire)

### Here's how you save maintenance costs with Hazlux® Induction Lighting:

- Eliminates the need for expensive HID options such as Quartz Auxiliary Lamps or Instant Restrike
- Reduces risks to installers performing maintenance in hard-to-reach places
- Increases efficiency by decreasing machine shutdown time
- Reduces number of times necessary to de-energize entire circuit of lights for maintenance in hazardous locations
- Lowers cost of expensive rental of scissor lifts or bucket trucks

Hazlux® Induction Lighting reduces the cost of expensive maintenance of industrial lighting in hazardous locations.



### Hazlux® 3 Induction Certification Guide

Watts	Ambient Temperature	Class I Div 2 Groups A, B, C, D Temperature Code	Class II Division 1	UL 1598A Marine	NEMA 4X*	Supply Wire Temperature Rating
35 W	40°C	T3B	T6	Yes	Yes	90°C
55 W	40°C	T3B	T6	Yes	Yes	90°C
85 W	40°C	T2A	T6	Yes	Yes	90°C
100 W	40°C	T2A	T6	Yes	Yes	90°C
65 W	40°C	T2A	T6	Yes	Yes	90°C

Note: (1) Simultaneous presence applications: Some Hazlux 3 fixtures are UL Listed for simultaneous presence of gas and dust. Contact Hazlux for specific information

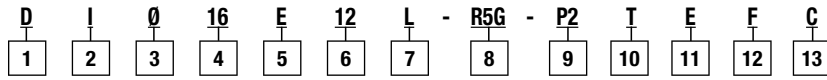
(2) Tuff-Skin Coated Optics: Many Hazlux 3 fixtures are UL Listed with Tuff-Skin (silicone) coating on glass optics. Contact Hazlux for specific information

(3) For UL and CSA Certification Information on other ambient temperatures and fixture configurations, consult the factory

# Area lighting

## Hazlux® 3 Induction - High wattage

### Catalog numbering system



<b>1 Hazlux® 3 HID Fixture</b>	<b>D</b>	Class I, Div. 2, Groups A, B, C and D
	<b>D</b>	Class I, Zone 2, Groups IIA, IIB, IIC
	<b>D</b>	Class II, Div. 1 & 2, Groups E, F and G
	<b>D</b>	Class III UL 595 Marine Locations, Wet Locations, NEMA 4X
<b>2 Lamp Type</b>	<b>H</b>	Induction Lighting
<b>3 Starter Circuit/ Quartz Options</b>	<b>Ø</b>	Standard Fixture
<b>4 Lamp Wattage</b>	<b>16</b>	165 Watt Induction System
<b>5 Ballast Circuit</b>	<b>E</b>	Electronic Ballast (Induction Fixture)
<b>6 Voltage</b>	<b>12</b>	120V, 60 Hz
	<b>06</b>	208/240/277V 50 or 60 Hz
	<b>34</b>	347V 60 Hz (CSA)
<b>7 Ballast Housing Style</b>	<b>L</b>	Large Housing
	<b>M</b>	Large Housing with Stainless Steel Inserts
<b>8 Refractor</b>	<b>R5G</b>	Type V Refractor with Wire Guard
	<b>R5</b>	Type V Refractor

<b>9 Mounting style</b>	<b>A2</b>	3/4" Cone-Top Pendant
	<b>A3</b>	1" Cone-Top Pendant
	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>F2</b>	3/4" Flexible Pendant
	<b>F3</b>	1" Flexible Pendant
	<b>HV1</b>	HazVertor™ Ring - Class I, Division 2, Zone 2
	<b>HV2</b>	HazVertor™ Ring - Class I Div.2, Zone 2, Class II
	<b>L4</b>	11/4" Straight Stanchion
	<b>L5</b>	11/2" Straight Stanchion
	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>S4</b>	11/4" 25° Angle Stanchion
<b>S5</b>	11/2" 25° Angle Stanchion	
<b>10 Coating</b>	<b>T</b>	HazCote® Custom Corrosion Coating
<b>11 UNIPAK™ *</b>	<b>E</b>	UNIPAK™ with Induction Lamp
<b>12 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)**
<b>13 Certification</b>	<b>C</b>	Canadian Market

\*Available Unipak only

\*\* Fusing is not available with Marine locations

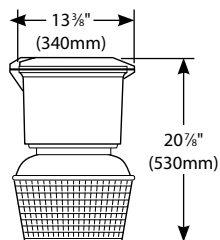
#### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA
  - Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
  - UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

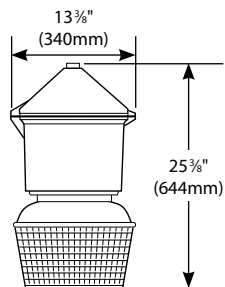
#### Approvals / Characteristics



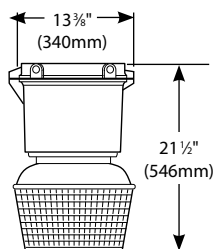
## Dimensions - Large housing with 12" refractor



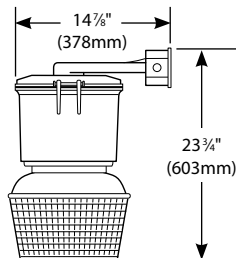
Flexible Pendant



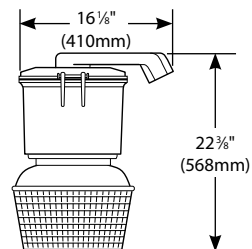
Cone-Top Pendant



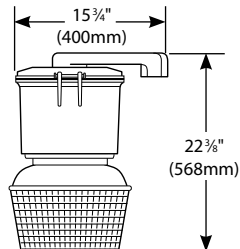
Ceiling Mount



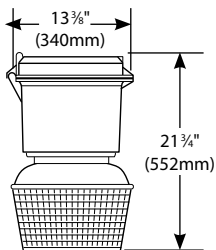
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVertor™ Ring

## Photometry - Large housing with 12" refractor

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DI016E12L-R5-P2E</b>	
Lamp	165W Induction lamp	
Lamp Lumens	12000	
Input Watt	165	
Luminaire Lumens	6890	
Efficiency	57%	
Efficacy Rating (LER)	42	
Spacing Criterion (0-180)	1.12	
Spacing Criterion (90-270)	1.12	
Spacing Criterion (diagonal)	1.30	

# Area lighting

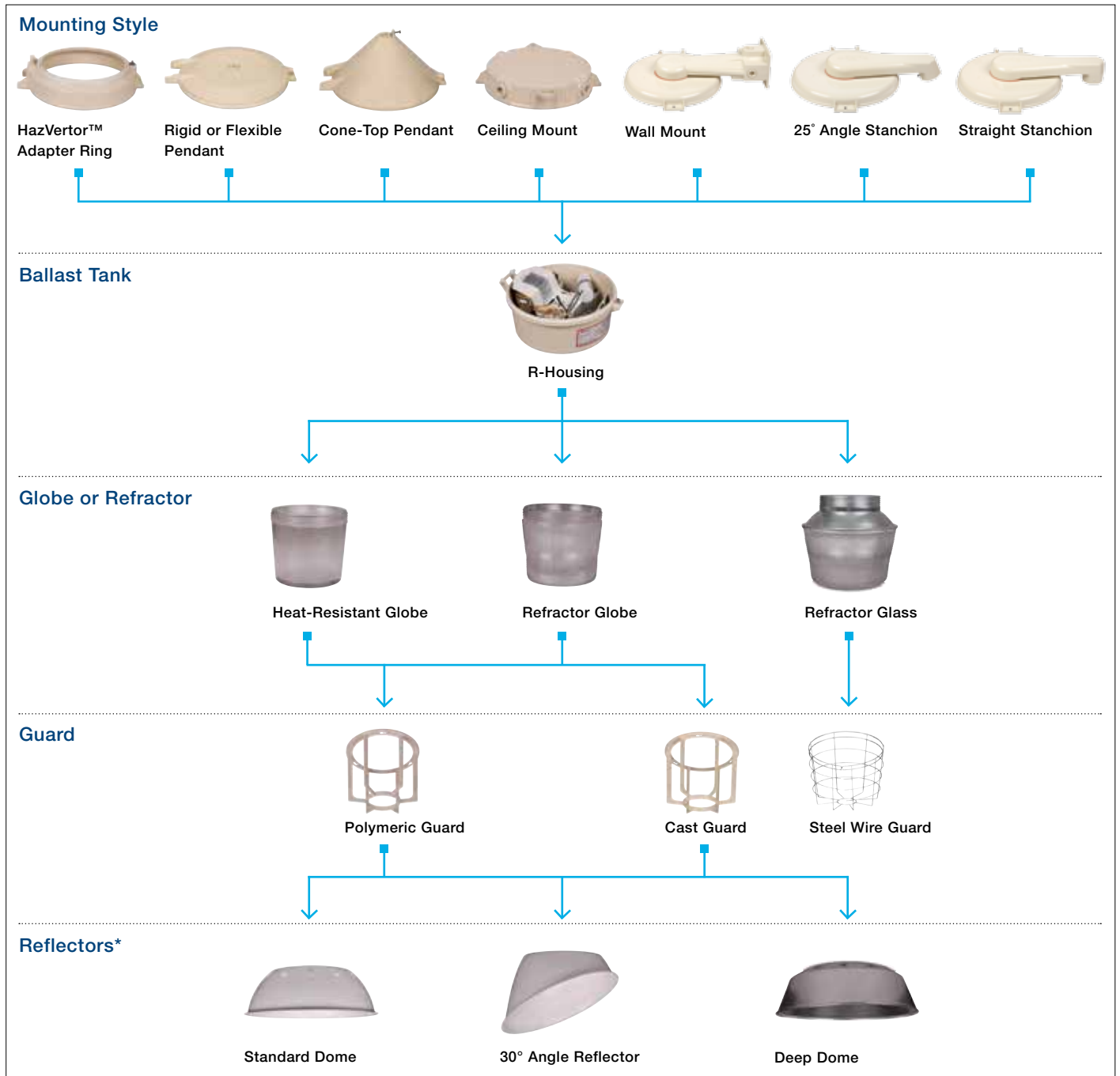
## Hazlux® 3 Induction - Low wattage (Hazardous area - Class I, Div 2)

### Assembly guide

3



#### Hazlux® 3 Induction / Low Wattage - Assembly Guide



\*Reflectors are sold separately

## Catalogue numbering system

<b>DI</b>	<b>Ø</b>	<b>03</b>	<b>E</b>	<b>UN</b>	<b>R</b>	<b>R1</b>	<b>A2</b>	-	<b>T</b>	-	<b>E</b>	<b>F</b>	<b>C</b>
1	2	3	4	5	6	7	8		9		10	11	12



3

### Ballast Tank & Optics

<b>1 Fixture Series</b>	<b>DI</b>	Hazlux® 3 Induction Series	
<b>2 Starter Circuit/ Quartz Options</b>	<b>Ø</b>	Standard Fixture (Without Options)	
	<b>C</b>	Cold Weather Circuit (-45°C)	
<b>3 Lamp Wattage</b>	<b>03</b>	35 Watts	
	<b>05</b>	55 Watts	
	<b>08</b>	85 Watts	
	<b>10</b>	100 Watts	
<b>4 Ballast Circuit</b>	<b>E</b>	Electronic Ballast	
<b>5 Voltage /Frequency</b>	<b>UN</b>	120 to 277 Vac, 50/60 Hz	
	<b>34</b>	347 Vac, 60 Hz	
	<b>48</b>	480 Vac, 60 Hz	
<b>6 Ballast Housing Style</b>	<b>R</b>	R-Housing	
	<b>I</b>	R-Housing with Stainless Steel Inserts	
<b>7 Optical Assembly Options</b> Globes are available only for 35W and 55W	<b>R1</b>	73/4" Refractor Globe, Type I	
	<b>R3</b>	73/4" Refractor Globe, Type III	
	<b>R5</b>	73/4" Refractor Globe, Type V	
	<b>R1C</b>	R1 with Cast Guard	
	<b>R3C</b>	R3 with Cast Guard	
	<b>R5C</b>	R5 with Cast Guard	
	<b>R1P</b>	R1 with Polymeric Guard	
	<b>R3P</b>	R3 with Polymeric Guard	
	<b>R5P</b>	R5 with Polymeric Guard	
	<b>TG</b>	73/4" Thermal Shock-Resistant Globe	
	<b>TGC</b>	TG with Cast Guard	
	<b>TGP</b>	TG with Polymeric Guard	
	Refractor Glass are available for all wattages	<b>RR2</b>	12" Glass Refractor Type II
		<b>RR2G</b>	12" Glass Refractor Type II with Wire Guard
		<b>RR5</b>	12" Glass Refractor Type V
<b>RR5G</b>		RR5 with Wire Guard	

### Mountings

<b>9 Mounting style</b>	<b>A2</b>	3/4" Cone-Top Pendant
	<b>A3</b>	1" Cone-Top Pendant
	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>F2</b>	3/4" Flexible Pendant
	<b>F3</b>	1" Flexible Pendant
	<b>HV1</b>	HazVertor™ Ring - Class I, Division 2, Zone 2
	<b>HV2</b>	HazVertor™ Ring - Class I Div. 2, Zone 2, Class II
	<b>L4</b>	11/4" Straight Stanchion
	<b>L5</b>	11/2" Straight Stanchion
	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>S4</b>	11/4" 25° Angle Stanchion
<b>S5</b>	11/2" 25° Angle Stanchion	
<b>9 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating (consult factory)
<b>10 UNIPAK™ *</b>	<b>E</b>	UNIPAK™ with Induction Lamp
<b>11 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)**
<b>12 Certification</b>	<b>C</b>	Canadian Market

\*Available Unipak only

\*\*Fusing is not available with Marine locations

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

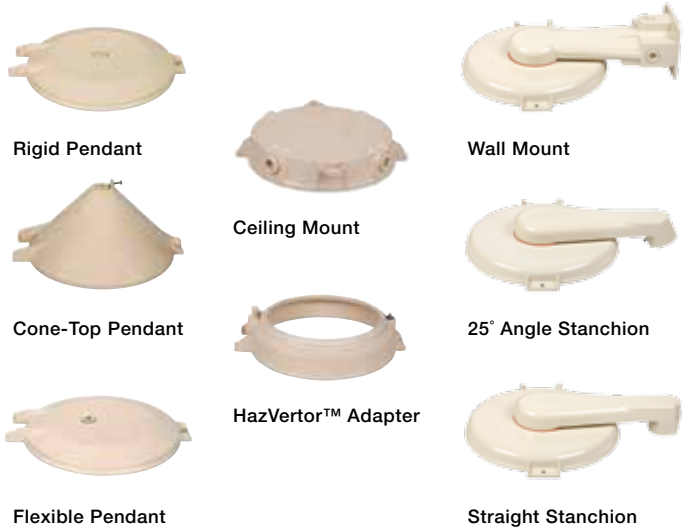
<b>10 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
<b>11 Certification</b>	<b>C</b>	Canadian Market

# Area lighting

## Hazlux® 3 Induction - Low wattage (Hazardous area - Class I, Div 2)

### Individual components (to be used with ballast housing)

3



#### Mounting Options

Part No.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling Mount	3/4"
VC3	Ceiling Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1 1/4"
VS5-VIB	25° Angle Stanchion	1 1/2"
VL4-VIB	Straight Stanchion	1 1/4"
VL5-VIB	Straight Stanchion	1 1/2"
HV1	HazVerter™ Adapter Ring	N/A
HV2	HazVerter™ Adapter Ring	N/A



#### Globes or Refractors

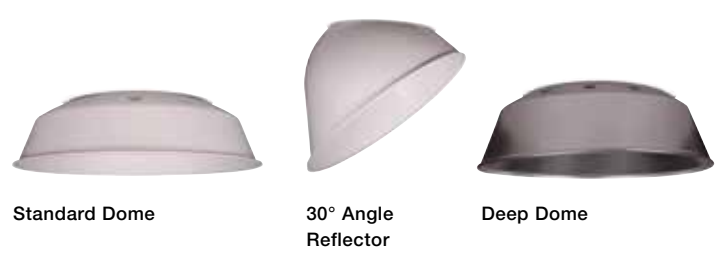
Part No.	Description
VGT31S	7 3/4" dia. Heat-Resistant Globe (250W max.)
VGL31R1	7 3/4" dia. IES Type I Refractor Globe (250W max.)
VGL31R3	7 3/4" dia. IES Type III Refractor Globe (250W max.)
VGL31R5	7 3/4" dia. IES Type V Refractor Globe (250W max.)
VRF31C2	12" dia. IES Type II Refractor Glass, 7/8" Thread
VRF31C5	12" dia. IES Type V Refractor Glass, 7/8" Thread



#### Guards

Part No.	Description
VGU31RP	Polymeric Guard for VGT31S Globe and VGL31R Series Refractor Globes
VGU31R	Cast Aluminum Guard for VGT31S Globe and VGL31R Series Refractor Globes
VGR48	Steel Wire Guard for All VRF Series 12" Refractors

### Optional components

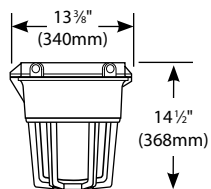


#### Reflectors or Exit Sign

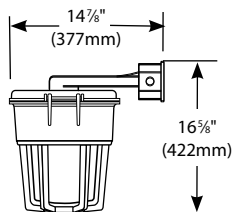
Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRD31	Deep Dome, Anodized Aluminum

Note: Reflectors are shipped bulk unless specified

## Dimensions - R-Housing with globe and guard

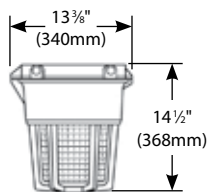


Flexible Pendant

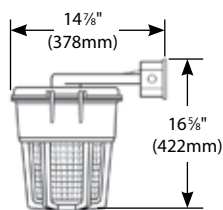


Cone-Top Pendant

## R-Housing with 12" refractor and Guard

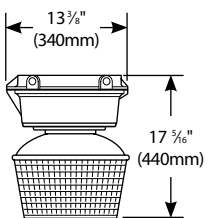


Ceiling Mount

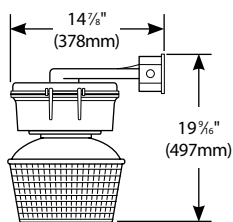


Wall Mount

## R-Housing with refractor glass



25° Angle Stanchion Mount



Straight Stanchion

## Photometry - R-Housing with refractor

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DI55EUNRTGA2-E</b>	
Lamp	55W Induction lamp	
Lamp Lumens	N.A. (absolute)	
Input Watt	55.71	
Luminaire Lumens	3644	
Efficiency	NA	
Efficacy Rating (LER)	65	
Spacing Criterion (0-180)	1.38	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.58	

3

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DI055EUNRR5A2-E</b>	
Lamp	55W Induction lamp	
Lamp Lumens	N.A. (absolute)	
Input Watt	55.87	
Luminaire Lumens	3351	
Efficiency	NA	
Efficacy Rating (LER)	60	
Spacing Criterion (0-180)	1.90	
Spacing Criterion (90-270)	1.90	
Spacing Criterion (diagonal)	2.22	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DI10EUNRRR5A2-E</b>	
Lamp	100W Induction lamp	
Lamp Lumens	N.A. (absolute)	
Input Watt	100.5	
Luminaire Lumens	5245	
Efficiency	NA	
Efficacy Rating (LER)	61	
Spacing Criterion (0-180)	1.36	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (diagonal)	1.70	

# Area lighting

## Hazlux® M3 Hazlite™

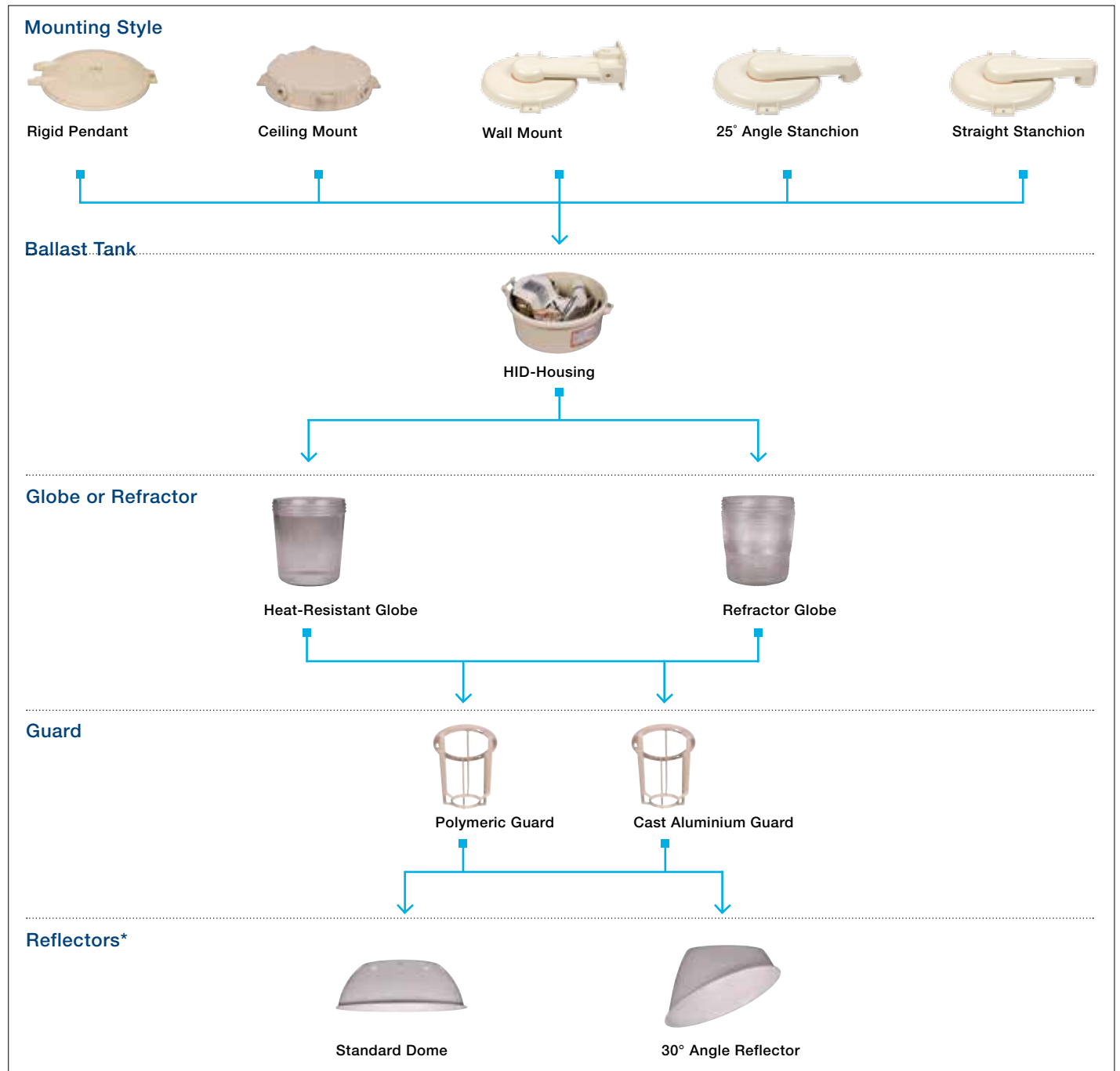
### Assembly guide

#### Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



#### Hazlux® M3 Hazlite™ - Assembly Guide



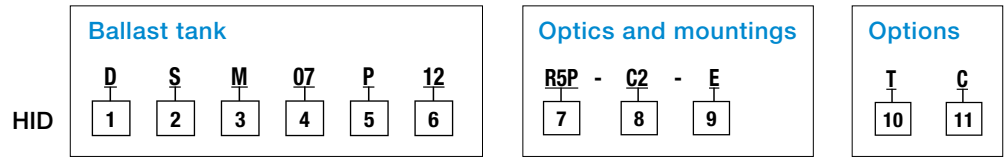
\*Reflectors are sold separately



# Catalog numbering system

## UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)



### Ballast Tank

<b>1 Fixture Series</b>	<b>D</b>	Hazlite™ M3 Fixture
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium
	<b>H</b>	Metal Halide
<b>3 Lampholder</b>	<b>M</b>	Medium-Base Lampholder
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>	
	<b>05</b>	200W ED28PS
	<b>07</b>	70W ED17
	<b>10</b>	100W ED17
	<b>High Pressure Sodium Lamps</b>	
	<b>03</b>	35W BD17
	<b>05</b>	50W BD17
	<b>07</b>	70W BD17
	<b>10</b>	100W BD17
	<b>15</b>	150W BD17
<b>5 Ballast Circuit</b>	<b>P</b>	Reactor Type
<b>6 Voltage</b>	<b>12</b>	120 Volt

### Optics & Mountings

<b>7 Optical Assembly Options</b>	<b>TG</b>	Tempered Globe Only
	<b>TGP</b>	Tempered Globe and Polymeric Guard
	<b>TGC</b>	Tempered Globe and Cast Guard
	<b>R1</b>	Type I (Long and Narrow) Refractor Globe
	<b>R3</b>	Type III (Assymetric) Refractor Globe
	<b>R5</b>	Type V (Symetric) Refractor Globe
	<b>R1P</b>	R1 with Polymeric Guard
	<b>R3P</b>	R3 with Polymeric Guard
	<b>R5P</b>	R5 with Polymeric Guard
	<b>R1C</b>	R1 with Cast Guard
<b>8 Mounting style</b>	<b>R3C</b>	R3 with Cast Guard
	<b>R5C</b>	R5 with Cast Guard
	<b>R5A</b>	8" Refractor Glass (Type V)
	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>L4</b>	11/4" Straight Stanchion
<b>9 UNIPAK™ Options</b>	<b>L5</b>	11/2" Straight Stanchion
	<b>S4</b>	11/4" 25° Angle Stanchion
	<b>S5</b>	11/2" 25° Angle Stanchion
	<b>D</b>	UNIPAK™ with Diffused Coated Lamp
	<b>E</b>	UNIPAK™ with Clear Lamp
	<b>U</b>	UNIPAK™ No Lamp

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
  - UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>10 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
<b>11 Certification</b>	<b>C</b>	Canadian Market

# Area lighting Hazlux® M3 Hazlite™

## Individual components (to be used with ballast housing)

3



Rigid Pendant

Ceiling Mount

Wall Mount



Straight Stanchion



25° Angle Stanchion

### Mounting Options

Part No.	Description	Conduit Hub Size
VMP2	Rigid Pendant	3/4"
VMP3	Rigid Pendant	1"
VMC2	Ceiling Mount	3/4"
VMC3	Ceiling Mount	1"
VMB2	Wall Mount	3/4"
VMB3	Wall Mount	1"
VMS4	25° Angle Stanchion	11/4"
VMS5	25° Angle Stanchion	11/2"
VML4	Straight Stanchion	11/4"
VML5	Straight Stanchion	11/2"



Reflector Globe



Heat-Resistant  
Prismatic Glass Globe

### Globes or Refractors

Part No.	Description
VGT15	Heat-Resistant Prismatic Glass Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe



Cast Aluminum



Polymeric Guard

### Guards

Part No.	Description
VGU15	Cast Aluminum for Use with Glass Globes or Refractors
VGU15P	Polymeric for Use with Glass Globes or Refractors

## Optional components



Standard Dome



30 degree  
Angle Reflector



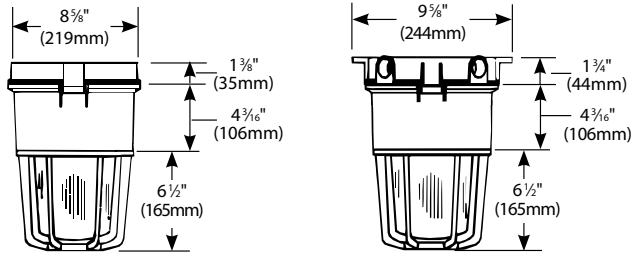
Three-Sided  
Exit Sign

### Reflectors or Exit Sign

Part No.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRE22	Three-Sided Exit Sign

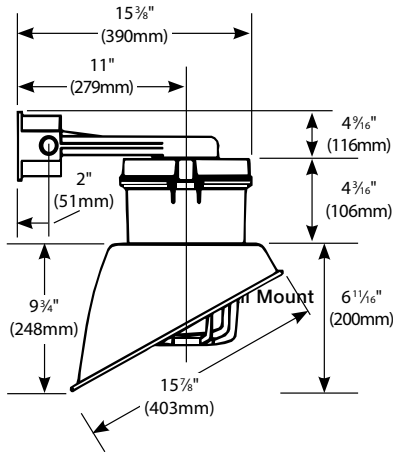
Note: Reflectors are shipped bulk unless specified

## Dimensions - Hazlite™ M3 fixtures with heat-resistant globe

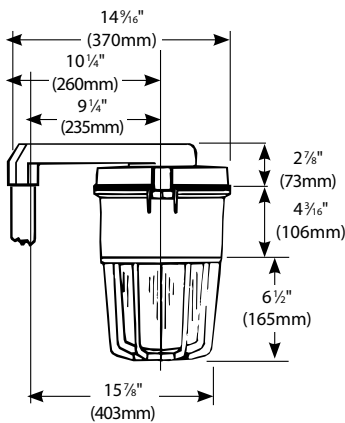


Rigid Pendant

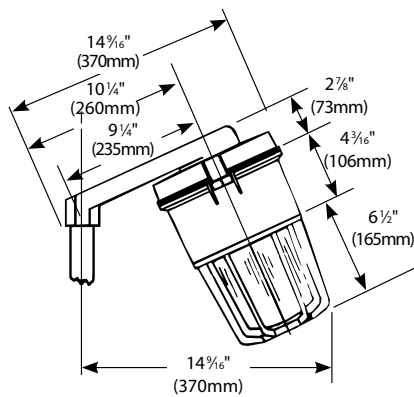
Ceiling Mount



Wall Mount



Straight Stanchion Mount

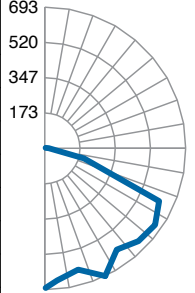


25° Angle Stanchion Mount

## Photometry - Hazlite™ M3 fixtures with heat-resistant globe

### Ceiling Mount

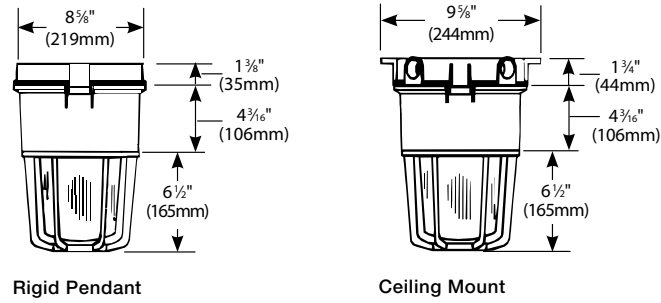
Reference Data		Candlepower Curve
Catalogue No.	<b>DSM05P12-TG-P2-E &amp; VR15P</b>	693
Lamp	50W HPS BD17	520
Lamp Lumens	4000	347
Input Watt	62	173
Luminaire Lumens	2865	
Efficiency	72%	
Efficacy Rating (LER)	46.2	
Spacing Criterion (0-180)	1.38	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.70	



# Area lighting

## Hazlux® M3 Hazlite™

### Dimensions - Hazlite™ M3 fixtures with heat-resistant globe



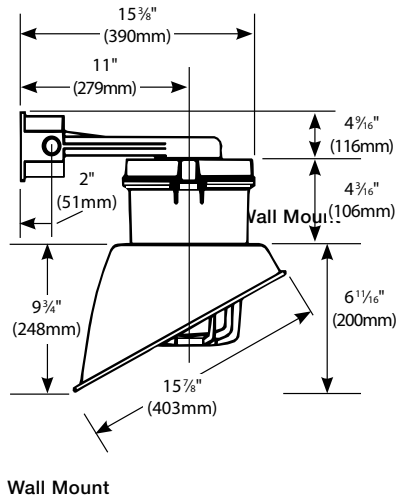
### Photometry - Hazlite™ M3 fixtures with heat-resistant globe

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DSM05P12-R1-P2-E</b>	4131
Lamp	50W HPS BD17	3098
Lamp Lumens	4000	2066
Input Watt	62	1033
Luminaire Lumens	3340	
Efficiency	83%	
Efficacy Rating (LER)	53.9	
Spacing Criterion (0-180)	1.44	
Spacing Criterion (90-270)	3.60	
Spacing Criterion (diagonal)	2.32	

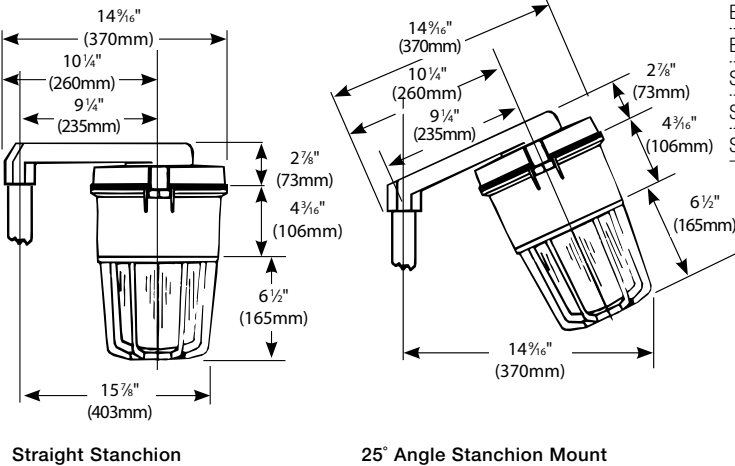
#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DSM05P12-R3-P2-E</b>	1366
Lamp	50W HPS BD17	1025
Lamp Lumens	4000	683
Input Watt	62	342
Luminaire Lumens	2979	
Efficiency	74%	
Efficacy Rating (LER)	48.1	
Spacing Criterion (0-180)	1.30	
Spacing Criterion (90-270)	1.70	
Spacing Criterion (diagonal)	2.40	



#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>DSM05P12-R5-P2-E</b>	644
Lamp	50W HPS BD17	483
Lamp Lumens	4000	322
Input Watt	62	161
Luminaire Lumens	2935	
Efficiency	73%	
Efficacy Rating (LER)	47.3	
Spacing Criterion (0-180)	1.88	
Spacing Criterion (90-270)	1.88	
Spacing Criterion (diagonal)	2.84	



**Hazlite™ M3 Thermal Data - This data includes Globe, Guard and Reflector**

Lamp Type	Ambient Temperature	Class II & III Globes or TR-REFR. Div 2 Temp. Code	8" REFR.	Supply Wire	Suitable °C	Voltage
			Groups	Groups		
35 Watt	40°C	T3A	EFG	EFG	75°C	120 V
HPS	55°C	T3A	EFG	EFG	75°C	120 V
Type S76	65°C	T3	EFG	EFG	85°C	120 V
50 Watt	40°C	T3	EFG	EFG	75°C	120 V
HPS	55°C	T2D	EFG	EFG	85°C	120 V
Type S68	65°C	T2D	EFG	EFG	90°C	120 V
70 Watt	40°C	T2B	EFG	EFG	75°C	120 V
HPS	55°C	T2B	EFG	EFG	85°C	120 V
Type S62	65°C	T2B	EFG	EFG	90°C	120 V
100 WATT HPS	40°C	T2A	EF	EFG	85°C	120 V
Type S54	55°C	T2	EF	EFG	110°C	120 V
150 WATT HPS						
Type S55	40°C	325°C	EF	EFG	110°C	120 V
100 WATT M.V						
Type S38	40°C	325°C	EF	EFG	110°C	120 V
9 Watt Fluor.	40°C	TC3	EFG	EFG	90°C	120 V
18 Watt Fluor. (2 lamps) Type PL9	40°C	TC3	EFG	EFG	90°C	120 V
13 Watt Fluor.	40°C	TC3	EFG	EFG	90°C	120 V
26 Watt Fluor. Type PL13	40°C	T3	EFG	EFG	90°C	120 V
60 Watt	T2B	T3	EF	EFG	75°C	120 V
Incandescent	T2B	T3	EF	EFG	90°C	120 V
Type A19	65°C	T2D	EF	EFG	110°C	120 V
100 Watt	40°C	T3	EF	EFG	75°C	120 V
Incandescent	55°C	T3	EF	EFG	90°C	120 V
Type A19 or A21	65°C	T2D	EF	EFG	110°C	120 V
150 Watt	40°C	T2B	–	EFG	90°C	120 V
Incandescent	55°C	T2B	–	EFG	110°C	120 V
Type A21	65°C	T2B	–	EFG	110°C	120 V
Metal Halide						
70 Watt						
Type M98	40°C	T2A	EF	–	90°C	120 V
Metal Halide						
100 Watt						
Type M90	40°C	T2A	EF	–	90°C	120 V



# Area lighting

## Hazlux® 1

Hazlux® 1 mogul base polymeric lighting fixtures are certified for use in Class I, Zone 2 and Division 2 locations and indoor or outdoor locations where lighting fixtures are exposed to corrosion accelerators such as dust, rain, hose-directed water and ice formation.

### Features & benefits

- Fiberglass-reinforced polyester housing and mounting covers provide excellent strength, durability and corrosion resistance
- Impact-resistant and corrosion-resistant polycarbonate guards protect glass globes and refractors
- Guards have keyhole slots for ease of attachment to grounded, stainless steel guard screws
- Thermal shock-resistant globes and refractor globes provide superior protection for HID lamps and effective options for light distribution
- Polymeric reflectors are reinforced fiberglass that resist corrosion, UV rays and weathering and are bright white for maximum reflectance

### Hazlux® 1 Certification Guide (40°C Ambient)

Lamp Type	Wattage	Ambient Temperature	Class I Division 2 Temperature Code		Marine	NEMA 4X (Suitable for Hosedown)	Wet Locations	Supply wire Temperature Rating
			Globe/Guard & Reflector	Refractor/Guard				
High Pressure Sodium	50 W	40°C	T3	T3	Yes	Yes	Yes	90°C
	70 W	40°C	T3	T3	Yes	Yes	Yes	90°C
	100 W	40°C	T3	T3	Yes	Yes	Yes	90°C
	150 W	40°C	T2C	T2C	Yes	Yes	Yes	90°C
Metal Halide	70 W	40°C	T3C	T3C	Yes	Yes	Yes	90°C
	100 W	40°C	T3	T3	Yes	Yes	Yes	90°C
	150 W	40°C	T2B	T2A	Yes	Yes	Yes	90°C

### Hazlux® M1 Certification Guide

Lamp Type	Ambient Temperature	Marine	Ordinary	Class I Division 2 Globes - 'TR' Refractor with/without Reflectors		NEMA 4X (Suitable for Hosedown)	Supply wire Suitable	Voltage
				Temperature	Temp. Code			
35-Watt	40°C	Yes	Yes	180°C	T3A	Yes	75°C	120 V
HPS Type S76	55°C	Yes	Yes	200°C	T3	Yes	90°C	120 V
50-Watt	40°C	Yes	Yes	215°C	T2D	Yes	75°C	120 V
HPS Type S68	55°C	Yes	Yes	215°C	T2D	Yes	90°C	120 V
70-Watt	40°C	Yes	Yes	260°C	T2B	Yes	75°C	120 V
HPS Type S62	55°C	Yes	Yes	260°C	T2B	Yes	90°C	120 V
70-Watt	40°C	Yes	Yes	260°C	T2B	Yes	75°C	120 V
HPS Type S62	55°C	Yes	Yes	260°C	T2B	Yes	90°C	120 V
100-Watt								
HPS Type S54	40°C	No	Yes	280°C	T2A	Yes	125°C	120 V
70-Watt								
MH T-rating	40°C	Yes	Yes	290°C	T2A	Yes	125°C	120 V
100-Watt								
MH T-rating	40°C	No	Yes	290°C	T2A	Yes	125°C	120 V

# Area lighting Hazlux® 1

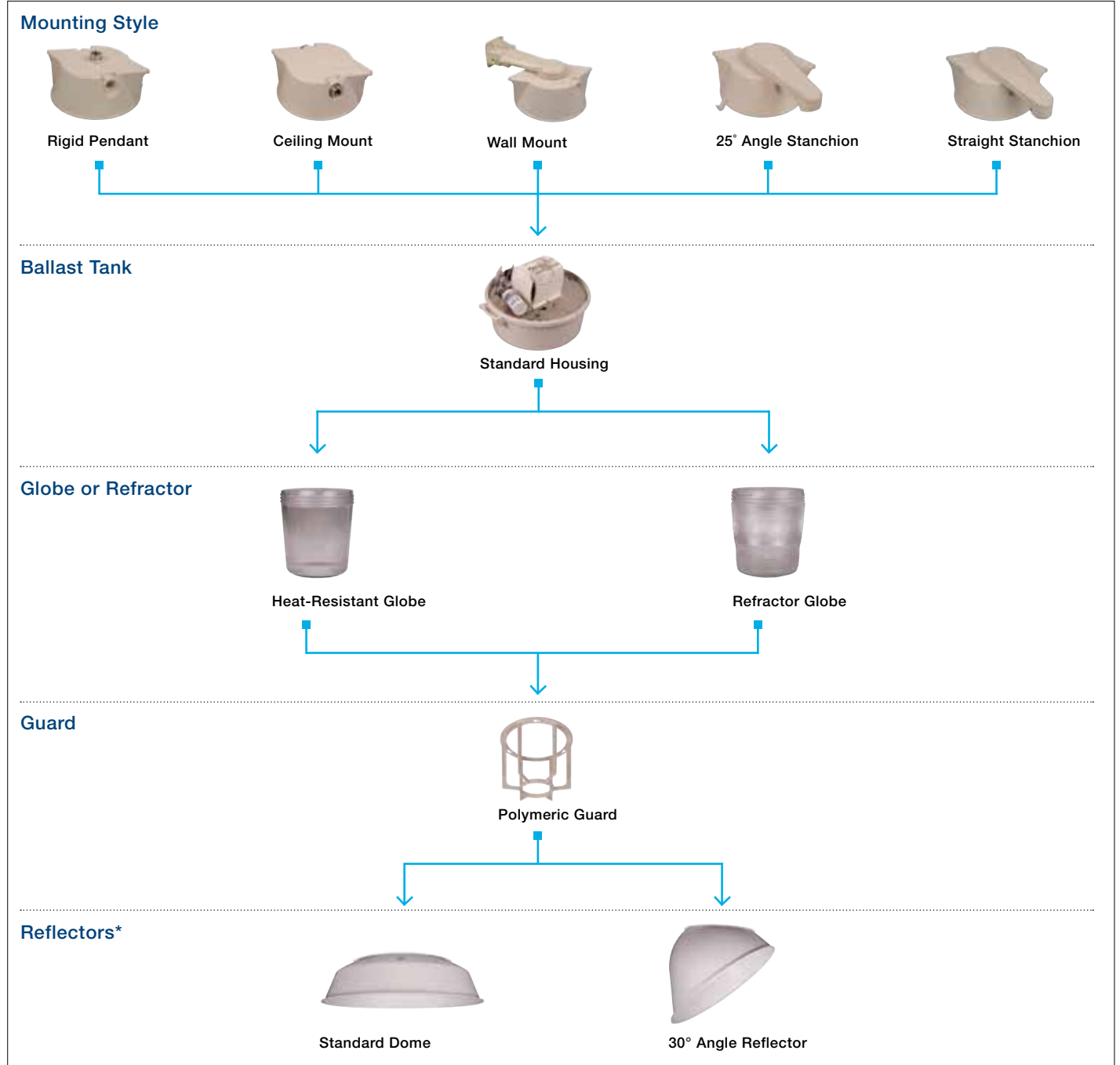
## Assembly guide

### Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® 1 - Assembly Guide



\*Reflectors are sold separately

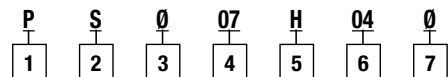


## Catalog numbering system

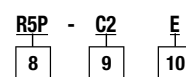
### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

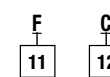
#### Ballast tank



#### Optics and mountings



#### Options



3

### Ballast Tank

<b>1 Fixture Series</b>	<b>P</b>	Hazlux® 1 Fixture
<b>2 Lamp Type</b>	<b>H</b>	Metal Halide
	<b>S</b>	High-Pressure Sodium
<b>3 Starter Circuit/ Quartz Options</b>	<b>Ø</b>	Standard Fixture
	<b>J</b>	Auto Shutoff
	<b>P</b>	Pulse Start (Metal Halide only)*
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>	
	<b>10</b>	100 Watts
	<b>17</b>	175 Watts
	<b>High Pressure Sodium Lamps</b>	
	<b>05</b>	50 Watts
	<b>07</b>	70 Watts
	<b>10</b>	100 Watts
<b>5 Ballast Circuit</b>	<b>C</b>	Constant Wattage Auto Transformer
	<b>H</b>	High Reactance
	<b>P</b>	Reactor Type
	<b>I</b>	CWI
<b>6 Voltage/ Frequency</b>	<b>03</b>	120/277 Volt
	<b>04</b>	120/208/240/277 Volt
	<b>09</b>	120/277/347 Volt
	<b>12</b>	120 Volt
	<b>20</b>	208 Volt
	<b>27</b>	277 Volt
	<b>34</b>	347 Volt
<b>7 Ballast Housing Style</b>	<b>Ø</b>	Standard Housing

\*150-Watt Metal Halide and 175-Watt Metal Halide not available with Pendant Mount

### Optics & Mountings

<b>8 Optical Assembly Options</b>	<b>TG</b>	Tempered Globe Only
	<b>TGP</b>	Tempered Globe with Polymeric Guard
	<b>R1</b>	Reflector Globe (IES Type I)
	<b>R3</b>	Reflector Globe (IES Type III)
	<b>R5</b>	Reflector Globe (IES Type V)
	<b>R1P</b>	Reflector Globe (IES Type I) with Polymeric Guard
<b>9 Mounting style</b>	<b>R3P</b>	Reflector Globe (IES Type III) with Polymeric Guard
	<b>R5P</b>	Reflector Globe (IES Type V) with Polymeric Guard
	<b>P2</b>	3/4" Pendant Mount*
	<b>B2</b>	3/4" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
<b>10 UNIPAK™ Options</b>	<b>S5</b>	1 1/2" 25° Angle Stanchion
	<b>L5</b>	1 1/2" Straight Stanchion
	<b>E</b>	UNIPAK™ with Clear Lamp
	<b>D</b>	UNIPAK™ with Diffused Coated Lamp
	<b>U</b>	UNIPAK™ without Lamp

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>11 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>12 Certification</b>	<b>C</b>	Canadian Market

\* Fusing is not available with Marine locations

# Area lighting Hazlux® 1

## Individual components (to be used with ballast housing)

3



Rigid Pendant



Ceiling Mount



Wall Mount with  
Metallic Arm



25° Angle Stanchion



Straight Stanchion



Heat-Resistant  
Glass Globe



Refractor Globe



Polymeric Guard

## Optional components



Standard Dome



30 degree Angle Reflector

### Mounting Options

Part No.	Description	Conduit Hub Size
VNP2	Rigid Pendant	3/4"
VNC2	Ceiling Mount	3/4"
VNB2	Wall Mount with Metallic Arm	3/4"
VNS5	25° Angle Stanchion	1 1/2"
VNL5	Straight Stanchion	1 1/2"

Designed for all Hazlux® 1 Ballasts Housings

### Globes or Refractors

Part No.	Description
VGT31S	Heat-Resistant Glass Globe (73/4" dia.) 250 Watt Max
VGT31STS	Heat-Resistant Glass Globe (73/4" dia.) Coated with Tuff-Skin®, 250 Watt Max.
VGL31R1	IES Type I Light Distribution (Long and Narrow) Threaded Glass Globe Refractor 73/4" dia.
VGL31R3	IES Type III Light Distribution (Asymmetric) Threaded Glass Globe Refractor 73/4" dia.
VGL31R5	IES Type V Light Distribution (Symmetric) Threaded Glass Globe Refractor 73/4" dia.

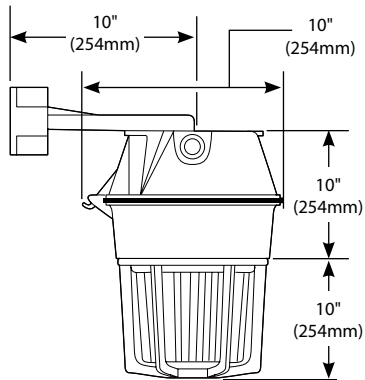
### Guards

Part No.	Description
VGU31RP	Polymeric Guard for Use with Threaded Glass Globes and Refractors (73/4" dia.)

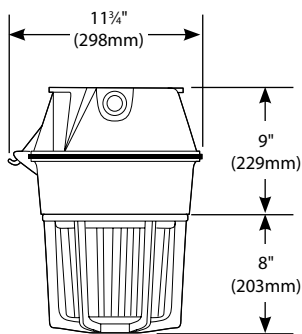
### Reflectors or Exit Sign

Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester, for use with 73/4"-dia. Globes
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester, for use with 73/4"-dia. Globes

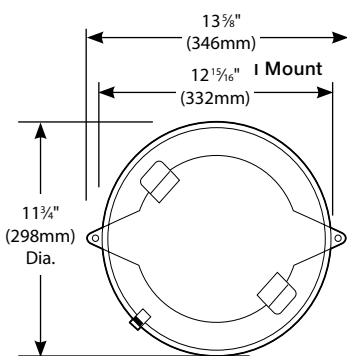
## Dimensions - Hazlux® 1 fixtures



Wall Arm Mount with Globe and Guard



Ceiling Mount with Globe and Guard

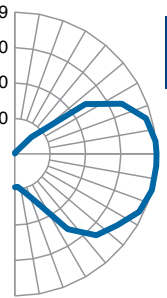


Ceiling Mount Top View

## Photometry - Hazlux® 1 fixtures

### Ceiling Mount

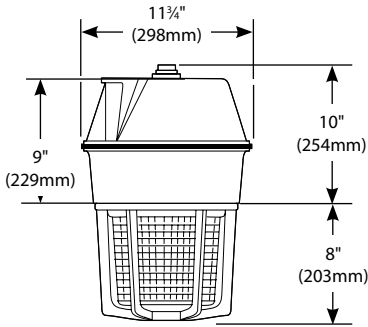
Reference Data		Candlepower Curve
Catalogue No.	<b>PS015H090-TGP-C2E</b>	1519
Lamp	150W HPS ED23 1/2	1140
Lamp Lumens	16000	760
Input Watt	188	380
Luminaire Lumens	13388	
Efficiency	84%	
Efficacy Rating (LER)	71.2	
Spacing Criterion (0-180)	NA	
Spacing Criterion (90-270)	NA	
Spacing Criterion (diagonal)	NA	



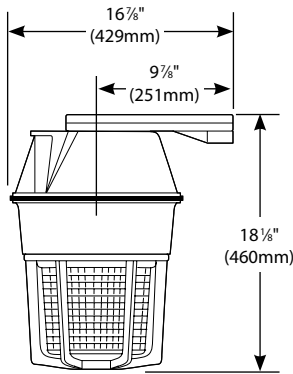
# Area lighting Hazlux® 1

## Dimensions - Hazlux® 1 fixtures

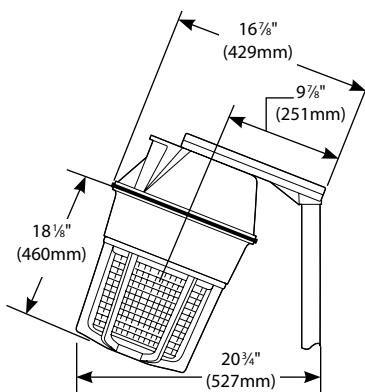
3



Pendant Mount with Refractor and Guard



Straight Stanchion Mount

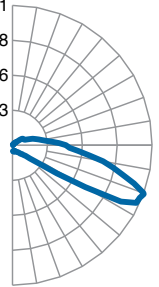


25° Angle Stanchion Mount

## Photometry - Hazlux® 1 fixtures

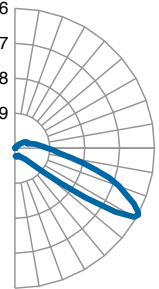
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PH017C090-R1-C2E</b>	13171
Lamp	175W MH ED28	9878
Lamp Lumens	14000	6586
Input Watt	210	3293
Luminaire Lumens	11973	
Efficiency	86%	
Efficacy Rating (LER)	57.0	
Spacing Criterion (0-180)	1.82	
Spacing Criterion (90-270)	6.64	
Spacing Criterion (diagonal)	3.10	



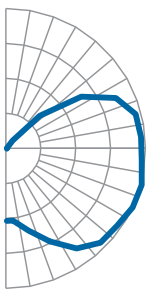
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PS015H090-R3-C2E</b>	15476
Lamp	150W HPS ED23 1/2	11607
Lamp Lumens	16000	7738
Input Watt	188	3869
Luminaire Lumens	14148	
Efficiency	88%	
Efficacy Rating (LER)	75.3	
Spacing Criterion (0-180)	1.44	
Spacing Criterion (90-270)	1.84	
Spacing Criterion (diagonal)	2.78	

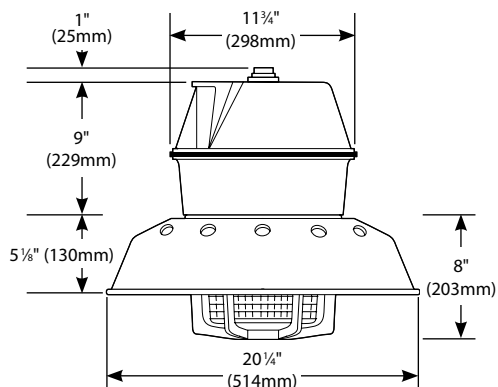


### Ceiling Mount

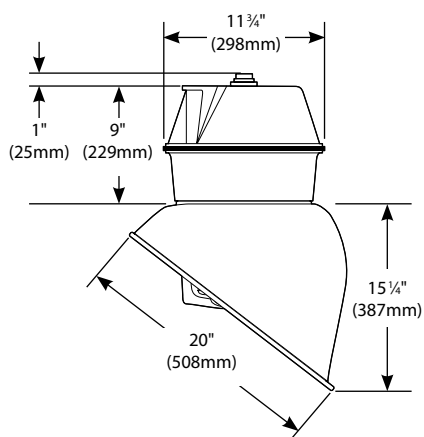
Reference Data		Candlepower Curve
Catalogue No.	<b>PH017C090-R5-C2E</b>	1302
Lamp	175W MH ED28	976
Lamp Lumens	14000	651
Input Watt	210	325
Luminaire Lumens	12489	
Efficiency	89%	
Efficacy Rating (LER)	59.5	
Spacing Criterion (0-180)	2.38	
Spacing Criterion (90-270)	2.38	
Spacing Criterion (diagonal)	2.40	



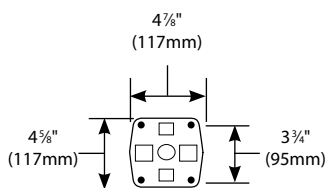
## Dimensions - Hazlux® 1 fixtures



Dome Reflector with Refractor and Guard



Angle Reflector with Globe and Guard



Wall-Mount Flange Template

## Photometry - Hazlux® 1 fixtures

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PH017C090-TGP-C2E &amp; VR31P</b>	2509
Lamp	175W MH ED28	1882
Lamp Lumens	14000	1255
Input Watt	210	627
Luminaire Lumens	10873	
Efficiency	78%	
Efficacy Rating (LER)	51.8	
Spacing Criterion (0-180)	1.36	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (diagonal)	158	

3

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PH017C090-TGP-C2E &amp; VRA31P</b>	2995
Lamp	175W MH ED28	2246
Lamp Lumens	14000	1498
Input Watt	210	749
Luminaire Lumens	9587	
Efficiency	68%	
Efficacy Rating (LER)	45.7	
Spacing Criterion (0-180)	2.14	
Spacing Criterion (90-270)	1.64	
Spacing Criterion (diagonal)	1.54	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PS015H090-TGP-C2E &amp; VR31P</b>	2981
Lamp	150W HPS ED23 1/2	2236
Lamp Lumens	16000	1490
Input Watt	188	745
Luminaire Lumens	12675	
Efficiency	79%	
Efficacy Rating (LER)	67.4	
Spacing Criterion (0-180)	0.90	
Spacing Criterion (90-270)	0.90	
Spacing Criterion (diagonal)	1.50	

# Area lighting Hazlux® M1 Hazlite™

## Assembly guide

### Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® M1 Hazlite™ - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

High -  
Pressure  
Sodium /  
Metal Halide

#### Ballast tank

PD	S	M	05	P	12	0
1	2	3	4	5	6	7

#### Optics and mountings

TGP	C2	E
8	9	10

#### Options

F	C
11	12

3

### Ballast Tank

<b>1 Fixture Series</b>	<b>PD</b>	Hazlite™ M1 Fixture
<b>2 Lamp Type</b>	<b>H</b>	Metal Halide
	<b>S</b>	High-Pressure Sodium
<b>3 Lampholder</b>	<b>M</b>	Medium Base Lampholder
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>	
	<b>05</b>	50W ED17
	<b>07</b>	70W ED17
	<b>10</b>	100W ED17
	<b>High Pressure Sodium Lamps</b>	
	<b>03</b>	35W BD17
	<b>05</b>	50W BD17
	<b>07</b>	70W BD17
	<b>10</b>	100W BD17
	<b>5 Ballast Circuit</b>	<b>P</b>
<b>6 Voltage</b>	<b>12</b>	120 Volt
<b>7 Ballast Housing Style</b>	<b>0</b>	Standard Housing

### Optics & Mountings

<b>8 Optical Assembly Options</b>	<b>TG</b>	Tempered Globe Only
	<b>TGP</b>	Tempered Globe with Polymeric Guard
	<b>R1</b>	Refractor Globe (IES Type I)
	<b>R3</b>	Refractor Globe (IES Type III)
	<b>R5</b>	Refractor Globe (IES Type V)
	<b>R1P</b>	Refractor Globe (IES Type I) with Polymeric Guard
<b>9 Mounting style</b>	<b>R3P</b>	Refractor Globe (IES Type III) with Polymeric Guard
	<b>R5P</b>	Refractor Globe (IES Type V) with Polymeric Guard
	<b>P2</b>	3/4" Cone Pendant
	<b>C2</b>	3/4" Ceiling, 1 Hub
<b>10 UNIPAK™ Options</b>	<b>C22</b>	3/4" Ceiling, 2 Hubs
	<b>E</b>	UNIPAK™ with Clear Lamp
	<b>U</b>	UNIPAK™ without Lamp

### Certifications & Standards

- Class I** - Zone 2, Groups IIC, IIB, IIA  
- Division 2, Groups A, B, C and D
- UL® Listed (UL1598A) for Marine Locations
  - UL844
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>11 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>12 Certification</b>	<b>C</b>	Canadian Market

\* Fusing is not available with Marine locations

# Area lighting Hazlux® M1 Hazlite™

Individual components (to be used with ballast housing)

3



Rigid Pendant Cone



Ceiling Mount



Three-Sided Exit Sign



Reflector Globe



Heat-Resistant Glass Globe



Polymeric Guard

## Optional components



Standard Dome



30 degree Angle Reflector

### Mounting Options

Part No.	Description	Conduit Hub Size	Std. Pkg.
VPA2	Rigid Pendant Cone	3/4"	5
VPC2	Ceiling Mount	3/4"	5
VPC22	Feed-through		

### Exit Sign

Part No.	Description	Colour	Std. Pkg.
VRE22	Three-sided Exit Sign	Red	1

### Globes or Refractors

Part No.	Description
VGT15	Heat-Resistant Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe

### Guards

Part No.	Description
VGU15P	Polymeric Guard for use with Glass Globes and Refractors

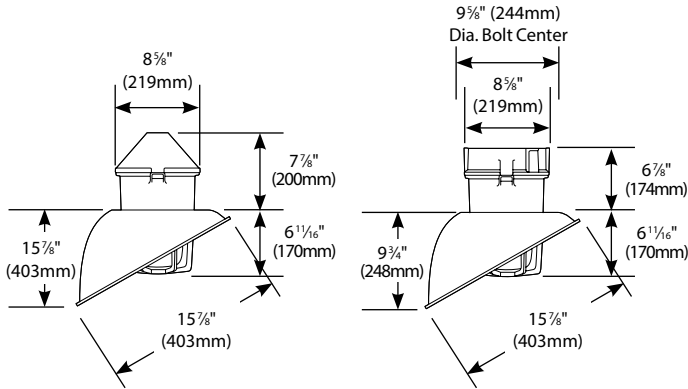
### Reflectors

Part No.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester

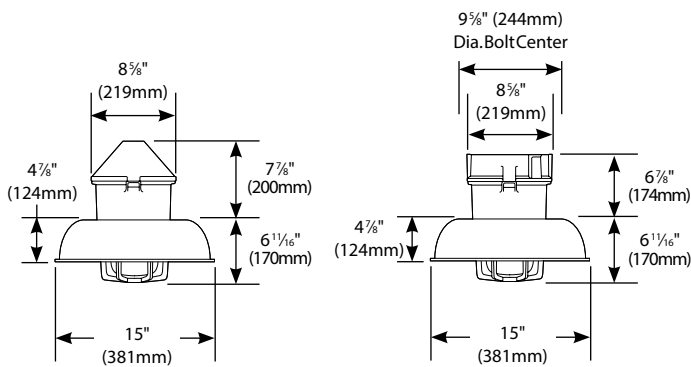


## Dimensions

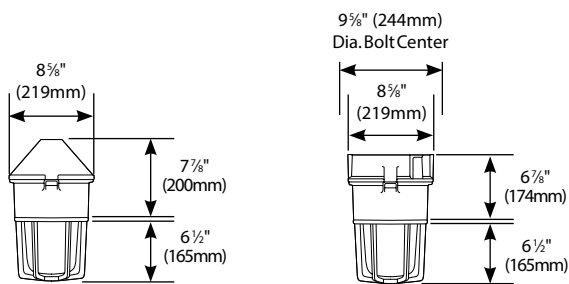
### Cone pendant mount    Ceiling mount



Glass Globe with Angled Reflector



Glass Globe with Dome Reflector



Glass Globe and No Reflector

## Photometry

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07P120TGLC2 &amp; VR15P</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	3756	
Efficiency	66%	
Efficacy Rating (LER)	49	
Spacing Criterion (0-180)	1.42	
Spacing Criterion (90-270)	1.42	
Spacing Criterion (diagonal)	1.72	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07P120TGLC2</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4804	
Efficiency	84%	
Efficacy Rating (LER)	62	
Spacing Criterion (0-180)	2.26	
Spacing Criterion (90-270)	2.26	
Spacing Criterion (diagonal)	2.38	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07H120TGLC22 &amp; VRA15P</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	3855	
Efficiency	68%	
Efficacy Rating (LER)	50	
Spacing Criterion (0-180)	1.92	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.64	

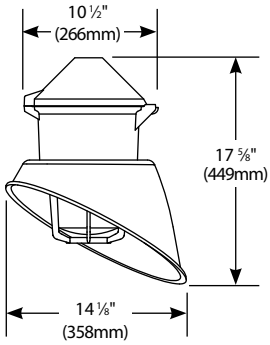
# Area lighting

## Hazlux® M1 Hazlite™

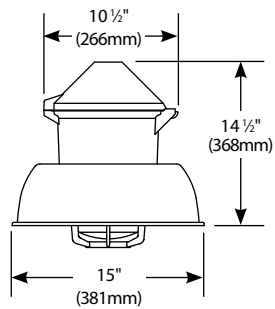
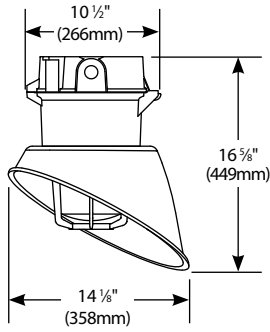
### Dimensions

#### Cone pendant mount

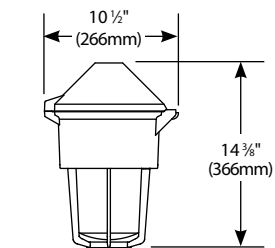
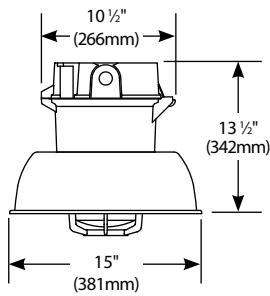
#### Ceiling mount



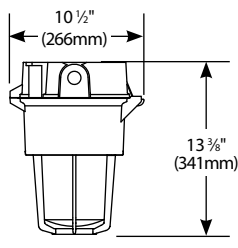
Glass Globe with Angled Reflector



Glass Globe with Dome Reflector



Glass Globe and No Reflector



### Photometry

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07P120R1</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4490	
Efficiency	79%	
Efficacy Rating (LER)	58	
Spacing Criterion (0-180)	1.42	
Spacing Criterion (90-270)	5.04	
Spacing Criterion (diagonal)	2.98	

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07P120R3</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4864	
Efficiency	85%	
Efficacy Rating (LER)	63	
Spacing Criterion (0-180)	1.24	
Spacing Criterion (90-270)	1.62	
Spacing Criterion (diagonal)	1.62	

#### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>PDHM07P120R5</b>	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4791	
Efficiency	84%	
Efficacy Rating (LER)	62	
Spacing Criterion (0-180)	1.68	
Spacing Criterion (90-270)	1.68	
Spacing Criterion (diagonal)	3.08	





# Area lighting

## Hazlux® 5 Induction

### Hazlux® 5 HID Lighting Fixtures for Class I, Division 1, Groups C and D Hazardous Locations.

#### Features

- UL® Listed for Class I, Division 1 for safe, explosion-proof application in a variety of hazardous areas
- Factory-sealed assembly meets code requirements without the need for external sealing fittings
- Dual-pitch Acme threads make assembly easy and faster than designs with standard V-cut threads, greatly reducing the risk of cross threading
- Factory-wired connection block means ballast is pre-wired to lower half of electrical connection block, allowing wireless connection of ballast housing to mounting module
- Five mounting styles - pendant, ceiling, wall, angle stanchion and bulkhead - provide versatility for installation
- Thermal shock-resistant glass globes are factory assembled and pre-tested to ensure the highest quality and safety
- Die-cast aluminum guards are epoxy powder coated for corrosion resistance and have keyhole slots for easy attachment to stainless steel screws
- Choice of high-pressure sodium and metal halide light sources in wattages from 50 to 400 watts
- Polymeric reflectors are available in standard dome and 30° angle versions
- UL® Listed for Marine and Wet Locations, making Hazlux® 5 fixtures ideal for use in many outdoor, offshore, hosesdown and coastal locations
- UL® Paint Spray Listed in wattages up to 100 watts

#### Applications

- Chemical Plants
- Oil Refineries
- Offshore Platforms
- Waste Treatment Facilities
- Automotive Manufacturing Plants
- Paint Manufacturing Facilities
- Paint Spray Locations
- Chemical and Plastic Mixing and Storage Areas
- Pipeline Pumping Stations
- Oil and Gas Terminals
- Defense and Government Facilities

#### Wattages and Voltages

- High-Pressure Sodium: 50-400 Watts
- Metal Halide: 70-400 Watts
- All Luminaires: Multi-Tap standard (120, 208, 240, 277V), wired 120V (Other voltages, frequencies available)



#### Materials and Finishes

- Ballast Housing: Copper-free aluminum, powder finish
- Mounting Modules: Copper-free aluminum, powder finish
- Hardware: Stainless steel
- Globes: Tempered glass
- Guard: Copper-free aluminum, powder finish
- Reflectors: Fiberglass-reinforced

#### Certifications

- UL844 Class I, Division 1, Groups C, D
- UL844 Paint Spray (100W max.)
- UL844 Class II, Division 1, Groups E, F, G
- Outdoor Wet Locations
- UL1598A Marine Locations
- Temperature Range: -30°C to 40°C

# Area lighting Hazlux® 5

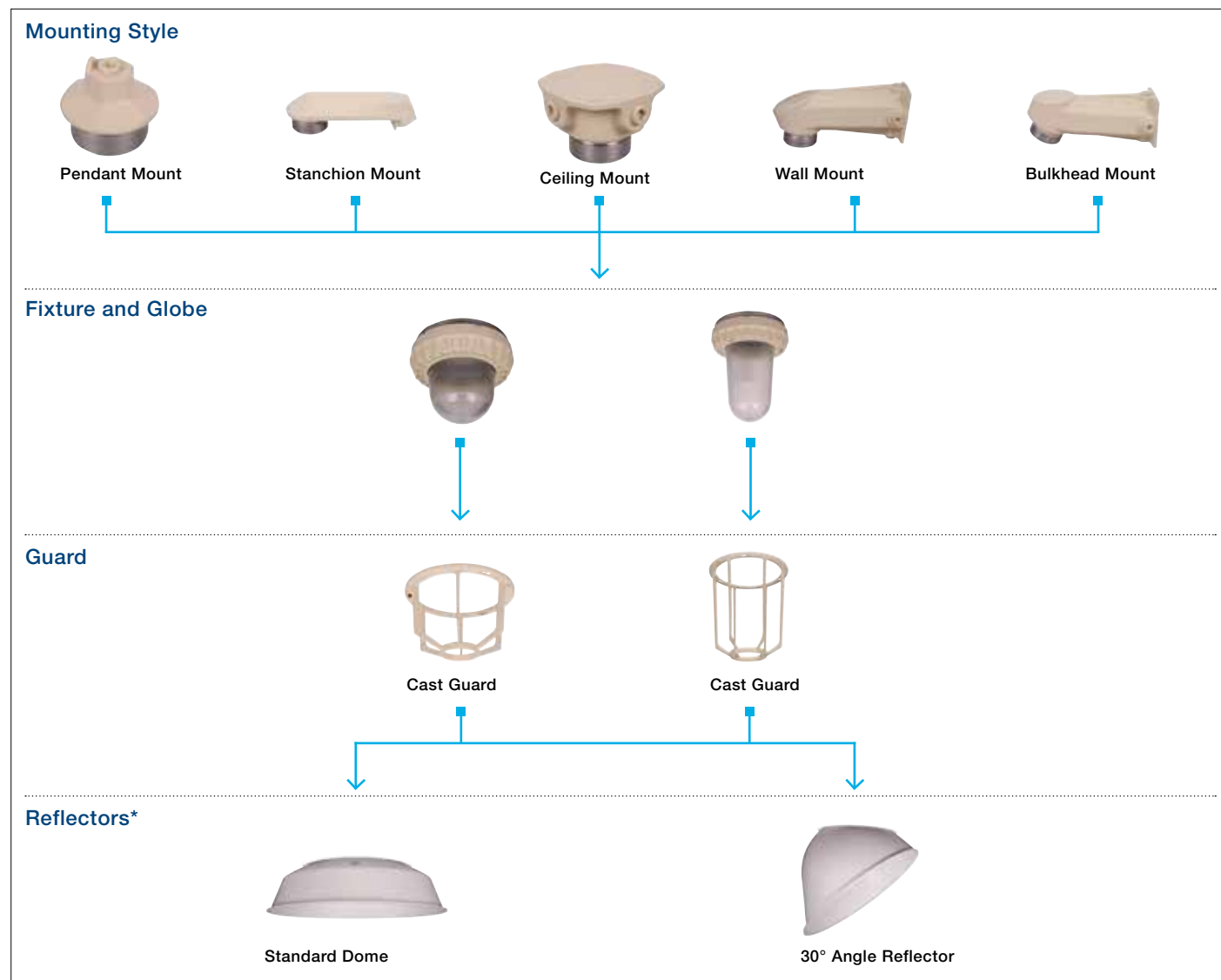
## Assembly guide

### Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



### Hazlux® 5 - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

#### Ballast tank

X	S	Q	07	H	04	0
1	2	3	4	5	6	7

#### Optics and mountings

G	-	C2	-	E
8		9		10

#### Options

T	F	C
11	12	13

3

### Ballast Tank

<b>1 Fixture Series</b>	<b>X</b>	Hazlux® 5 Fixture	
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium	
	<b>H</b>	Metal Halide	
<b>3 Starter Circuit/ Quartz Options</b>	<b>0</b>	Standard Fixture (Without Options)	
	<b>P</b>	Pulse Start (Metal Halide Only)	
	<b>Q</b>	Quartz Auxiliary Option (Not Hazardous Rated)	
	<b>R</b>	Fixture with Instant Restart Option (70, 100 and 150 HPS Only)	
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>		
	<b>10</b>	100W ED28	<b>17</b> 175W ED28
	<b>25</b>	250W ED28	<b>32</b> 320W ED28PS
	<b>40</b>	400W ED37	
	<b>High Pressure Sodium Lamps</b>		
	<b>05</b>	50W ED23 1/2	<b>07</b> 70W ED23 1/2
	<b>10</b>	100W ED23 1/2	<b>15</b> 150W ED23 1/2
	<b>20</b>	200W ED18	<b>25</b> 250W ED18
	<b>40</b>	100W ED18	
	<b>5 Ballast Circuit</b>	<b>C</b>	Constant Wattage Autotransformer (CWA)
<b>I</b>		Constant Wattage Insulated Transformer (CWI)	
<b>H</b>		High Reactance	
<b>P</b>		Reactor	
<b>6 Ballast Voltage</b>	<b>04</b>	Multi-Tap 120/208/240/277 Volt	
	<b>09</b>	120/277/347V Volt (CSA)	
	<b>12</b>	120 Volt	
	<b>24</b>	240V Volt	
	<b>20</b>	208V Volt	
	<b>27</b>	277V, 60 Hz	
	<b>34</b>	347V Volt	
<b>48</b>	480V Volt		
<b>7 Ballast Housing Style</b>	<b>0</b>	Standard Housing	
	<b>S</b>	Standard Housing with Stainless Steel Inserts	

### Optics & Mountings

<b>8 Guard</b>	<b>G</b>	Cast Guard (Omit "G" if Guard Not Required)
<b>9 Mounting style</b>	<b>P2</b>	3/4" Pendant
	<b>P3</b>	1" Pendant
	<b>C2</b>	3/4" Ceiling
	<b>C3</b>	1" Ceiling
	<b>B2</b>	3/4" Wall
	<b>B3</b>	1" Wall
	<b>J2</b>	3/4" Bulkhead
	<b>J3</b>	1" Bulkhead
	<b>S4</b>	11/4" 25° Stanchion
<b>S5</b>	11/2" 25° Stanchion	
<b>10 UNIPAK™ Options</b>	<b>D</b>	UNIPAK™ with Dual Arc Lamp
	<b>E</b>	UNIPAK™ with Clear Lamp

### Options

<b>11 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
<b>12 Fusing Options</b>	<b>F</b>	Fuse Block(s) with Fuse(s)*
<b>13 Certification</b>	<b>C</b>	Canadian Market

\* Fusing is not available with Marine locations

### Certifications & Standards

- Class I** - Division 1, Groups C and D  
 - Zone 2, Groups IIC, IIB and IIA  
 - Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G  
 - UL® Listed (UL1598A) for Marine Locations  
 - UL844  
 - NEMA 4X, IP66  
 - CSA C22.2 No. 137

### Approvals / Characteristics



# Area lighting Hazlux® 5

## Individual components (to be used with ballast housing)

3



Pendant Mount



Stanchion Mount



Ceiling Mount



Wall Mount



Bulhead Mount

### Mounting Options

Part No.	Description	Conduit Hub Size	Std. Pkg.
XP2	Pendant Mount	3/4"	1
XP3	Pendant Mount	1"	
XS4	Stanchion Mount	1 1/4"	1
XS5	Stanchion Mount	1 1/2"	
XC2	Ceiling Mount	3/4"	1
XC3	Ceiling Mount	1"	
XB2	Wall Mount	3/4"	1
XB3	Wall Mount	1"	
XJ2	Bulhead Mount	3/4"	1
XJ3	Bulhead Mount	1"	

Outlet Boxes include female electrical connectors and appropriate close-up plugs



XGSA44 Replacement  
Globe Assembly



XGSA44A Replacement  
Globe Assembly

### Replacement Globe Assemblies

Part No.	Description
XGSA44	Hazlux 5 Replacement Globe Assembly - 150 HPS
XGSA44A	Hazlux 5 Replacement Globe Assembly - 400 Watts and 250 HPS/MH

## Optional components



XGU44 Cast Aluminum



VGU31 Cast Aluminum

### Guards

Part No.	Description
XGU44	Cast Aluminum Guard
VGU31*	Cast Aluminum Guard

\* Used on all 400-watt fixtures, 250-watt HPS fixtures and 250-watt metal halide fixtures



Standard Dome



30° Angle Reflector

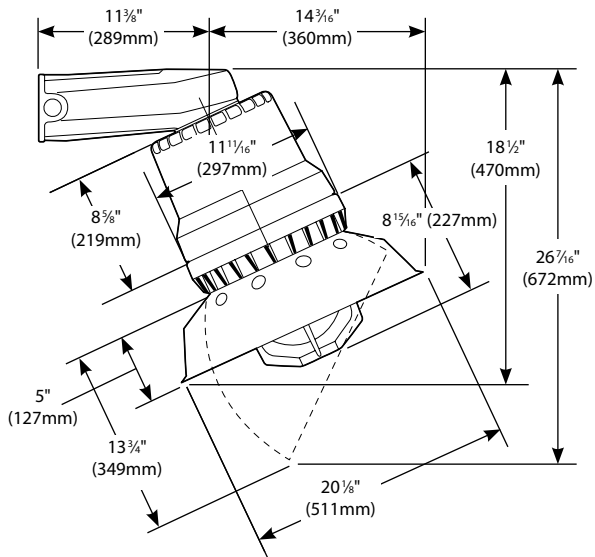
### Reflectors

Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester

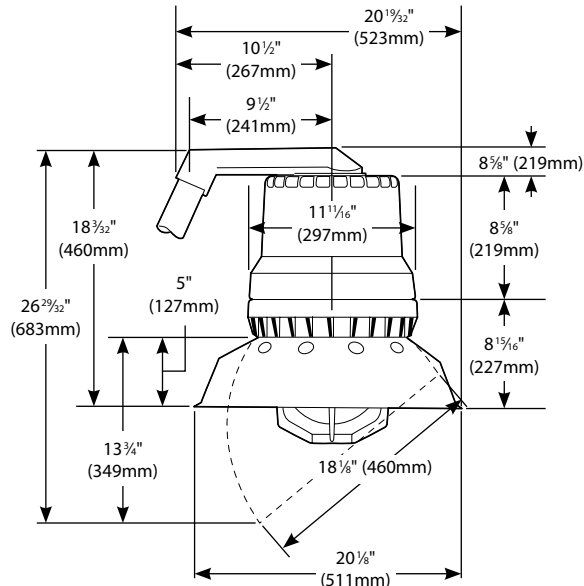
Note: Reflectors are shipped bulk unless specified



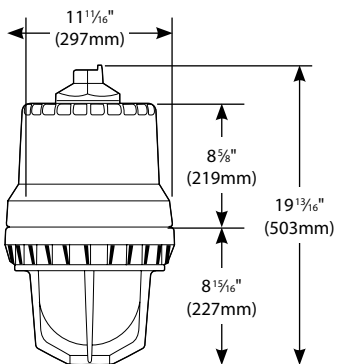
## Dimensions - Hazlux® 5 fixtures



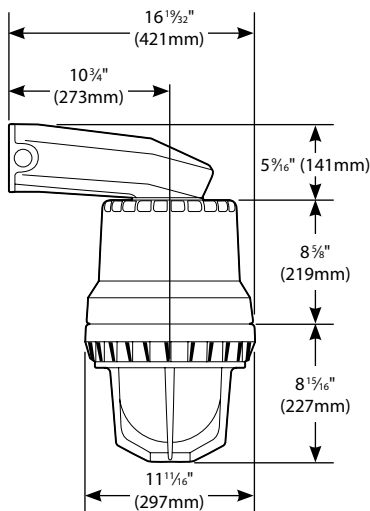
Bulkhead Mount with Globe, Guard and Reflector



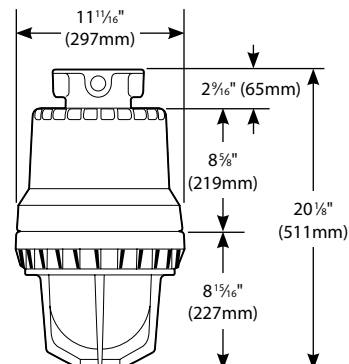
Stanchion Mount with Globe, Guard and Reflector



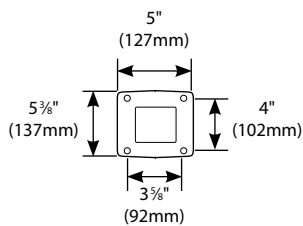
Pendant Mount with Globe and Guard



Wall Mount with Globe and Guard



Ceiling Mount with Globe and Guard

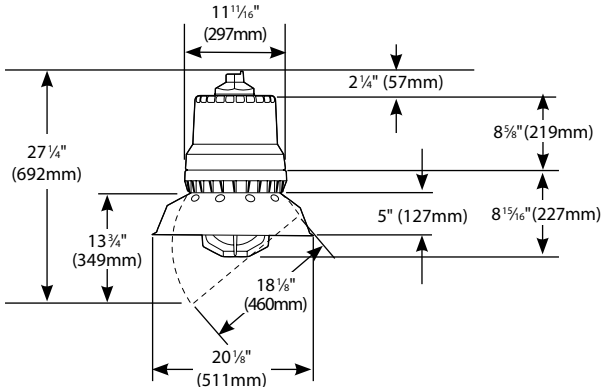


Template for Bulkhead for Wall Mount

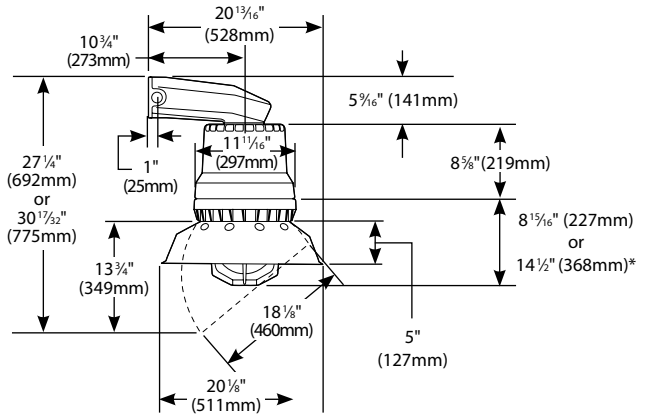
# Area lighting Hazlux® 5

## Dimensions - Hazlux® 5 fixtures (continued)

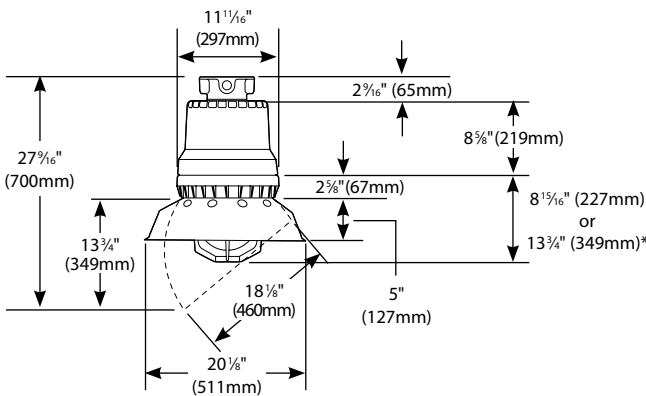
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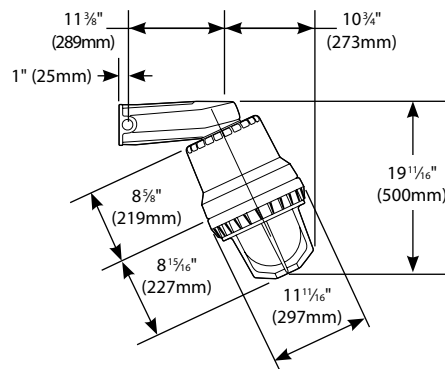
Pendant Mount with Globe, Guard and Reflector



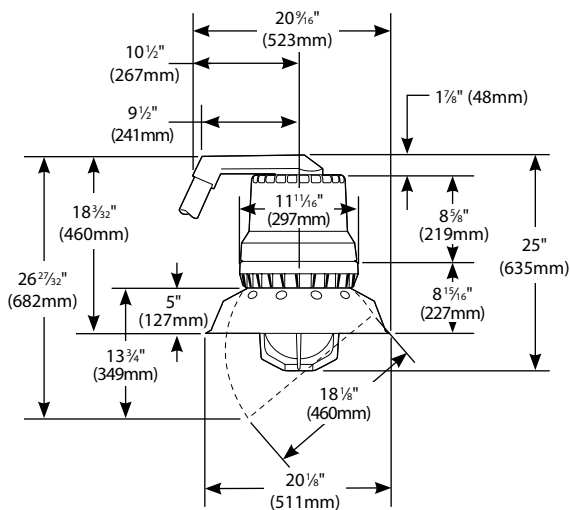
Wall Mount with Globe, Guard and Reflector



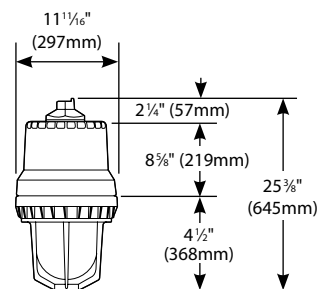
Ceiling Mount with Globe, Guard and Reflector



Bulkhead Mount with Globe and Guard



Stanchion Mount with Globe, Guard and Reflector\*



Pendant Mount with Globe and Guard\*

\* When XGSA44A globe assembly is used with ED18 and ED37

## Photometry - Hazlux® 5 fixtures

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XS010H090G-C2-E</b>	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	7162	
Efficiency	75%	
Efficacy Rating (LER)	55.1	
Spacing Criterion (0-180)	2.66	
Spacing Criterion (90-270)	2.66	
Spacing Criterion (diagonal)	2.74	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XH017C090G-C2-E</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	9368	
Efficiency	67%	
Efficacy Rating (LER)	44.6	
Spacing Criterion (0-180)	1.82	
Spacing Criterion (90-270)	1.82	
Spacing Criterion (diagonal)	2.20	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XS010H090G-C2-E &amp; VR31P</b>	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	6254	
Efficiency	66%	
Efficacy Rating (LER)	48.1	
Spacing Criterion (0-180)	1.60	
Spacing Criterion (90-270)	1.60	
Spacing Criterion (diagonal)	1.70	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XH017C090G-C2-E &amp; VR31P</b>	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	8264	
Efficiency	59%	
Efficacy Rating (LER)	39.4	
Spacing Criterion (0-180)	1.44	
Spacing Criterion (90-270)	1.44	
Spacing Criterion (diagonal)	1.54	

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XH032C090-C2-E</b>	
Lamp	320W MH ED28PS	
Lamp Lumens	30000	
Input Watt	368	
Luminaire Lumens	27341	
Efficiency	91%	
Efficacy Rating (LER)	74.3	
Spacing Criterion (0-180)	NA	
Spacing Criterion (90-270)	NA	
Spacing Criterion (diagonal)	NA	

# Area lighting

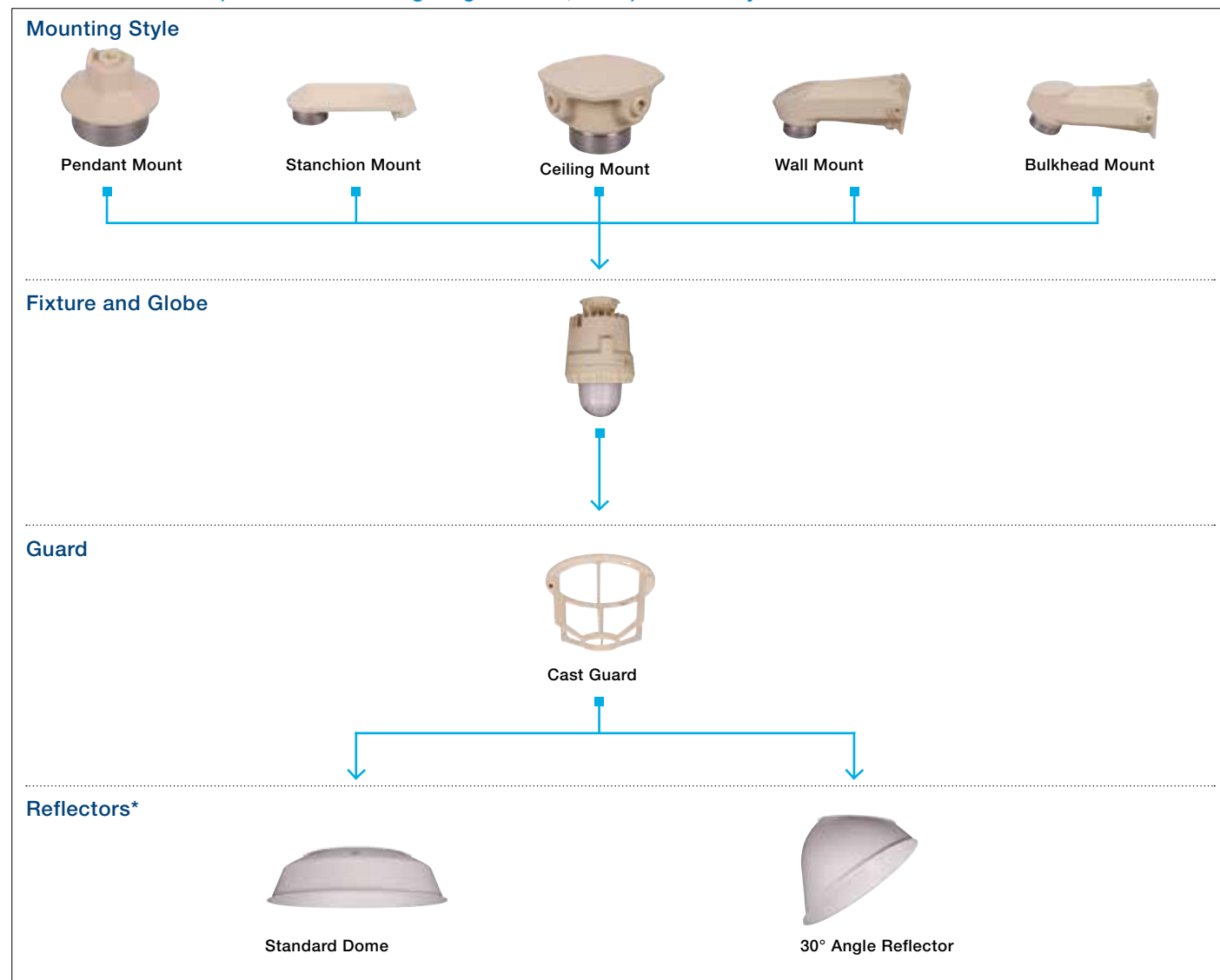
## Hazlux® 5 Induction (Hazardous area - Class I, Div1)

### Assembly guide



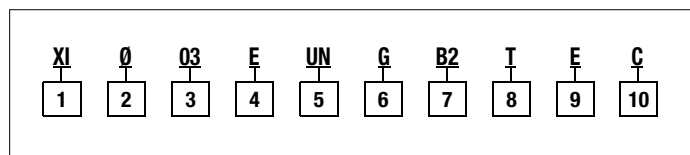
3

#### Hazlux® 5 Induction (Hazardous Area Lighting - Class I, Div 1) - Assembly Guide



\* Reflectors are sold separately

## Catalog numbering system



<b>1 Fixture Series</b>	<b>XI</b>	Hazlux® 5 Induction Series
<b>2 Starter Circuit/</b>	<b>Ø</b>	Standard Fixture (Without Options)
	<b>C</b>	Cold Weather Circuit (-45°C)
<b>3 Lamp Wattage</b>	<b>03</b>	35 Watts
	<b>05</b>	55 Watts
	<b>08</b>	85 Watts
<b>4 Ballast Circuit</b>	<b>E</b>	Electronic Ballast
<b>5 Voltages/Frequency</b>	<b>UN</b>	120 to 277 Vac, 50/60 Hz
	<b>34</b>	347 Vac, 60 Hz
	<b>48</b>	480 Vac, 60 Hz

<b>6 Guard</b>	<b>Blank</b>	No Guard
	<b>G</b>	Cast Guard
<b>7 Mounting style</b>	<b>B2</b>	3/4" Wall Mount
	<b>B3</b>	1" Wall Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>J2</b>	3/4" Bulkhead
	<b>J3</b>	1" Bulkhead
	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>S4</b>	11/4" 25° Angle Stanchion
	<b>S5</b>	11/2" 25° Angle Stanchion
<b>8 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating on all Aluminum Parts
	<b>PS</b>	UL® Listed Fixture for Paint Spray Areas
	<b>PST</b>	UL® Listed Fixture for Paint Spray Areas with HazCote®
<b>9 UNIPAK™ Options</b>	<b>E</b>	UNIPAK™ with Clear Lamp
<b>10 Certification</b>	<b>C</b>	Canadian Market

### Certifications & Standards

- Class I** - Division 1, Groups C and D  
 - Zone 2, Groups IIC, IIB and IIA  
 - Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G  
 - UL844  
 - CSA C22.2 No. 137

### Approvals / Characteristics



# Area lighting

## Hazlux® 5 Induction (Hazardous area - Class I, Div1)

Individual components (to be used with ballast housing)

3



Pendant Mount



Stanchion Mount



Ceiling Mount



Wall Mount



Bulhead Mount



XGU44 Cast Aluminum Guard



Standard Dome



30° Angle Reflector

### Mounting Options

Part No.	Description	Conduit Hub Size	Std. Pkg.
XP2	Pendant Mount	3/4"	1
XP3		1"	
XS4	Stanchion Mount	1 1/4"	1
XS5		1 1/2"	
XC2	Ceiling Mount	3/4"	1
XC3		1"	
XB2	Wall Mount	3/4"	1
XB3		1"	
XJ2	Bulhead Mount	3/4"	1
XJ3		1"	

Outlet Boxes include female electrical connectors and appropriate close-up plugs

### Guards

Part No.	Description
XGU44	Cast Aluminum Guard

### Replacement Globe Assemblies

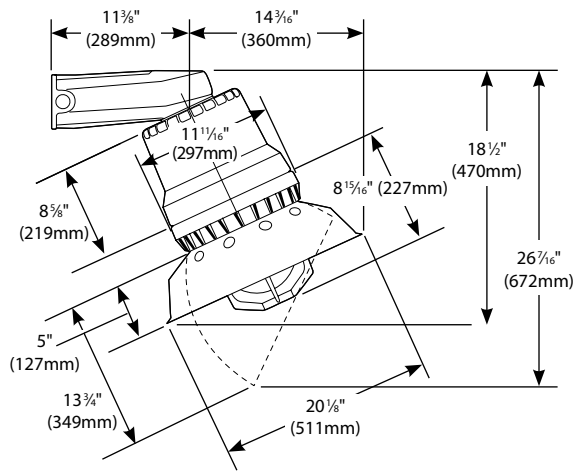
Part No.	Description
XGSA44	Hazlux 5 Replacement Globe Assembly

### Reflectors

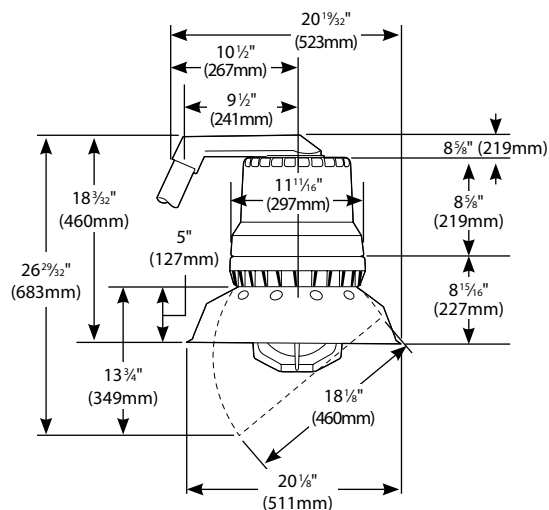
Part No.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester

Note: Reflectors are shipped bulk unless specified

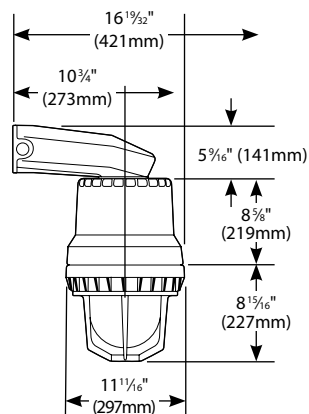
## Dimensions - Hazlux® 5 fixtures



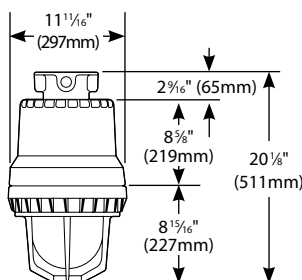
Bulkhead Mount with Globe, Guard and Reflector



Stanchion Mount with Globe, Guard and Reflector



Wall Mount with Globe and Guard

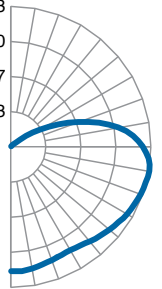


Ceiling Mount with Globe and Guard

## Photometry - Hazlux® 5 fixtures

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>X1008EUNC2E</b>	453
Lamp	85W Induction lamp	340
Lamp Lumens	N.A. (absolute)	227
Input Watt	80.45	113
Luminaire Lumens	3633	
Efficiency	N.A.	
Efficacy Rating (LER)	45	
Spacing Criterion (0-180)	1.50	
Spacing Criterion (90-270)	1.50	
Spacing Criterion (diagonal)	1.80	



# Area lighting Hazlux® M5 Hazlite™

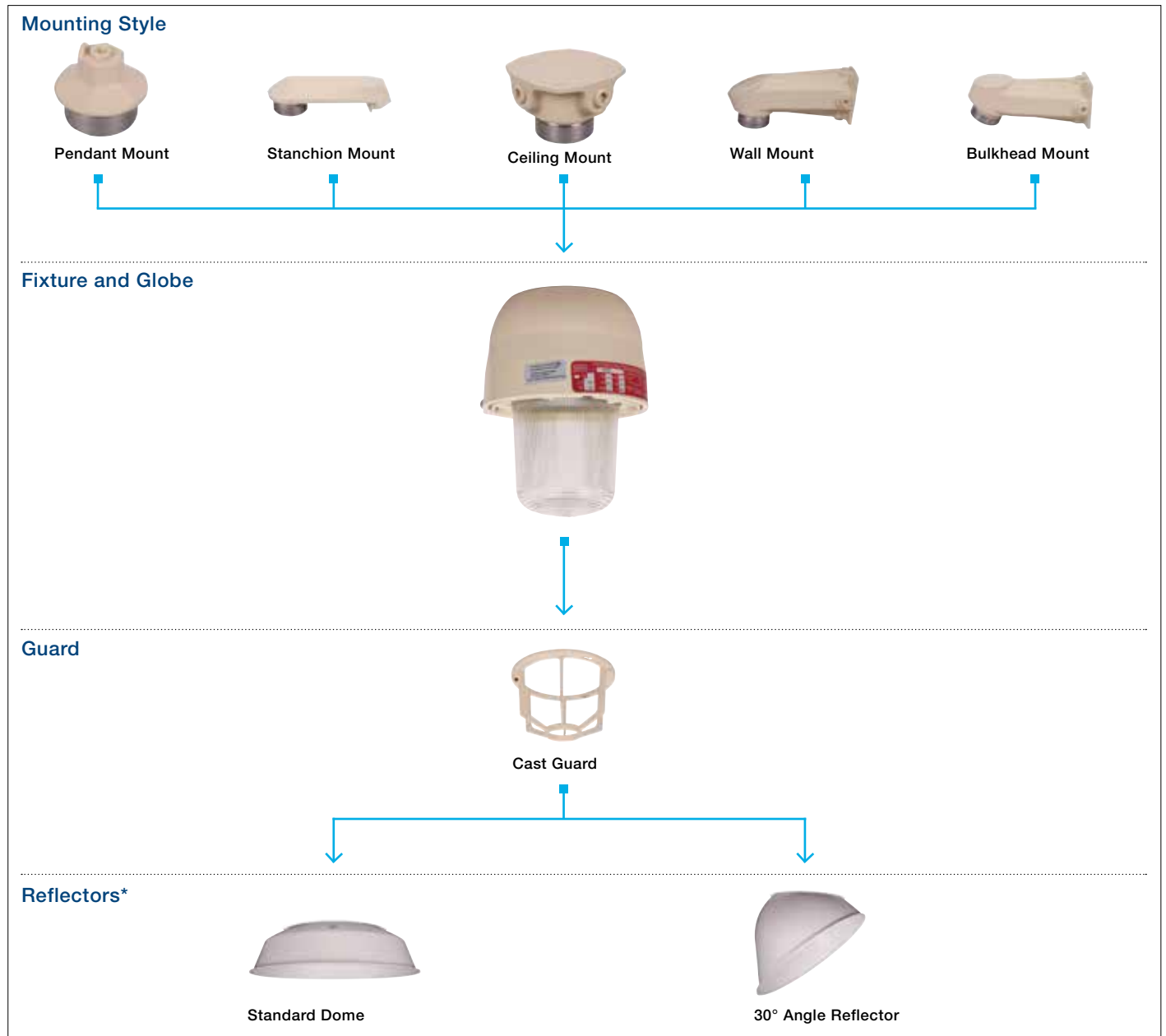
## Assembly guide

### Complete luminaire consists of:

- A mounting style
- Fixture
- Globe
- Optional Guard and/or Reflector



### Hazlux® M5 Hazlite™ - Assembly Guide



\*Reflectors are sold separately



## Catalog numbering system

### UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

**High-  
Pressure  
Sodium**

Fixture and globe						
X	S	M	05	P	12	Ø
1	2	3	4	5	6	7

Optics and mountings		
G	-	C2
8	9	10

Options	
T	C
11	12

3

### Ballast Tank

<b>1 Fixture Series</b>	<b>X</b>	Hazlite™ M5 Fixture
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium
<b>3 Lampholder</b>	<b>M</b>	Medium Base Lampholder
<b>4 Lamp Wattage</b>	<b>High Pressure Sodium</b>	
	<b>05</b>	50W BD17
	<b>07</b>	70W BD17
	<b>15</b>	150W BD17
	<b>10</b>	100W BD17
<b>5 Ballast Circuit</b>	<b>P</b>	Reactor Type
<b>6 Voltage</b>	<b>12</b>	120 Volt
<b>7 Ballast Housing Style</b>	<b>Ø</b>	Standard Housing
	<b>S</b>	Standard Housing with Stainless Steel Inserts

### Optics & Mountings

<b>8 Optics and Guards</b>	<b>G</b>	Cast Guard (Omit "G" if Guard is Not Required)
<b>9 Mounting style</b>	<b>P2</b>	3/4" Rigid Pendant
	<b>P3</b>	1" Rigid Pendant
	<b>C2</b>	3/4" Ceiling
	<b>C3</b>	1" Ceiling
	<b>B2</b>	3/4" Wall
	<b>B3</b>	1" Wall
	<b>J2</b>	3/4" Bulkhead
	<b>J3</b>	1" Bulkhead
<b>10 UNIPAK™ Options</b>	<b>S4</b>	11/4" 25° Angle Stanchion
	<b>S5</b>	11/2" 25° Angle Stanchion
	<b>D</b>	UNIPAK™ with Diffuse Coated Lamp
	<b>E</b>	UNIPAK™ with Clear Lamp

### Certifications & Standards

- Class I** - Division 1, Groups C and D  
 - Zone 2, Groups IIC, IIB and IIA  
 - Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G  
 - UL® Listed (UL1598A) for Marine Locations  
 - UL844  
 - NEMA 4X, IP66  
 - CSA C22.2 No. 137

### Approvals / Characteristics



### Options

<b>11 Special Options</b>	<b>T</b>	HazCote® Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
	<b>PS</b>	Paint Spray Label
<b>12 Certification</b>	<b>C</b>	Canadian Market

# Area lighting Hazlux® M5 Hazlite™

Individual components (to be used with ballast tank)

3



Pendant Mount



Stanchion Mount



Ceiling Mount



Wall Mount



Bulhead Mount



## Optional components



Standard Dome



30° Angle Reflector

## Mounting Options

Part No.	Description	Conduit Hub Size	Std. Pkg.
XP2	Pendant Mount	3/4"	1
XP3		1"	
XS4	Stanchion Mount	1 1/4"	1
XS5		1 1/2"	
XC2	Ceiling Mount	3/4"	1
XC3		1"	
XB2	Wall Mount	3/4"	1
XB3		1"	
XJ2	Bulhead Mount	3/4"	1
XJ3		1"	

Outlet Boxes include female electrical connectors and appropriate close-up plugs

## Replacement Globe Assemblies

Part No.	Description
XGSA15	Replacement Globe Assembly, 35–150 Watts

## Guards

Part No.	Description
XGU15	Cast Aluminum, Powder Finish

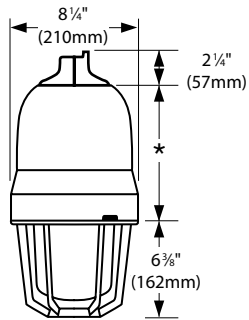
## Reflectors

Part No.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester

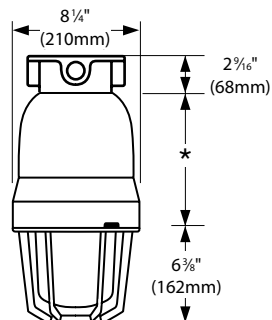
Note: Reflectors are shipped bulk unless specified

## Dimensions - Hazlux® M5 Hazlite™ fixtures

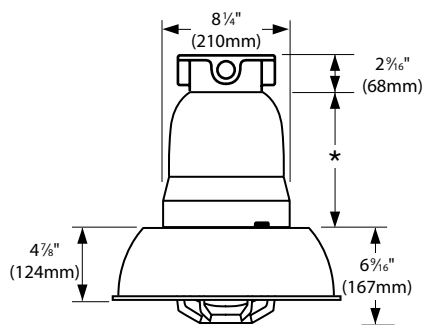
## Photometry - Hazlux® M5 Hazlite™ fixtures



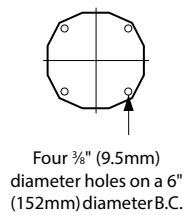
Rigid Pendant Globe/Guard



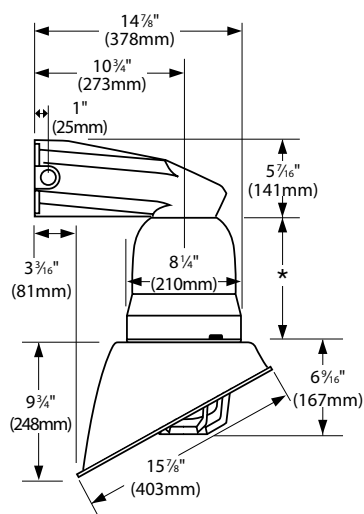
Ceiling Mount Globe/Guard



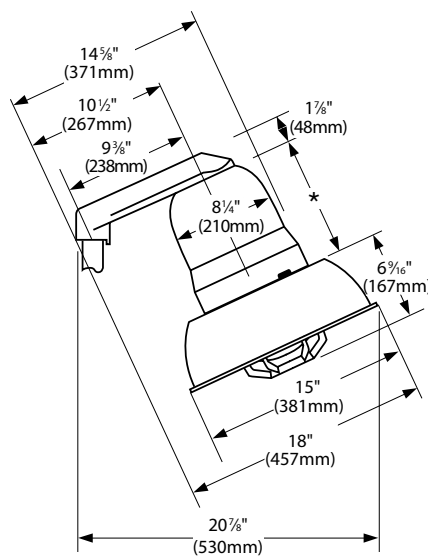
Ceiling Mount Globe/Guard with Dome Reflector



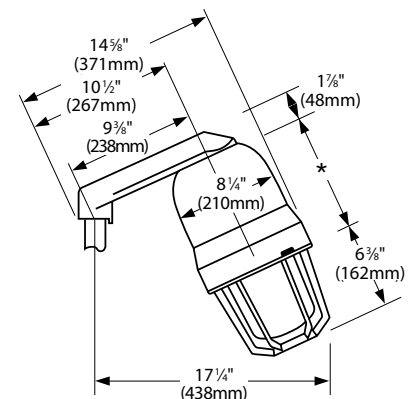
Four 3/8" (9.5mm) diameter holes on a 6" (152mm) diameter B.C.



Wall Mount Globe/Guard with 30° Angle Reflector



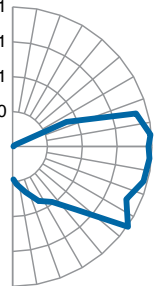
Stanchion Mount Globe/Guard with 30° Angle Reflector



Stanchion Mount Globe/Guard

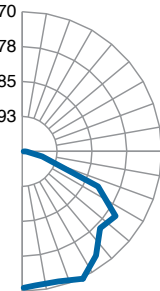
### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XSM05P12-0-P2E</b>	401
Lamp	50W HPS BD17	301
Lamp Lumens	4000	201
Input Watt	66	100
Luminaire Lumens	2984	
Efficiency	75%	
Efficacy Rating (LER)	45.2	
Spacing Criterion (0-180)	3.48	
Spacing Criterion (90-270)	3.48	
Spacing Criterion (diagonal)	3.22	



### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>XSM05P12-0-P2E &amp; VR15P</b>	2370
Lamp	50W HPS BD17	1778
Lamp Lumens	4000	1185
Input Watt	66	593
Luminaire Lumens	2651	
Efficiency	66%	
Efficacy Rating (LER)	40.2	
Spacing Criterion (0-180)	1.54	
Spacing Criterion (90-270)	1.54	
Spacing Criterion (diagonal)	1.88	



# Area lighting

## Hazlux® 5 Thermal performance data

### Hazlux® 5 Thermal Performance Data (40°C) - Hazardous Location

#### Class I, Division 1 Group C & D - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)	
		Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T6	T4A	T6	T4A	T5	T4	T4A	T4A
Globe, Guard & Dome Reflector	<b>B</b>	T6	T4A	T6	T4A	T5	T4	T4A	T3C
Globe, Guard & Angle Reflector	<b>C</b>	T6	T4A	T6	T4A	T5	T3C	T4A	T3C

#### Class I, Division 1 Group C & D - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

Configuration		100W (M90 Lamp)	175W (M57 Lamp)		150W (S56 Lamp)	
		Lamp	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T5	T4A	T3C (2)	T3C	T3C (2)
Globe, Guard & Dome Reflector	<b>B</b>	T5	T4A	T3C (2)	T3C	T3A (2)
Globe, Guard & Angle Reflector	<b>C</b>	T5	T4A	T3C (2)	T3C	T3A (2)

### Hazlux® 5 Thermal Performance Data (40°C) - Hazardous Location

#### Class II & III,\* Division 1 & 2 - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion

Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)	
		Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.
		Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Globe & Guard	<b>A</b>	EFG	EFG	EFG	EFG	EFG	EF	EFG	EF
Globe, Guard & Dome Reflector	<b>B</b>	EFG	EFG	EFG	EFG	EFG	EF	EFG	EF
Globe, Guard & Angle Reflector	<b>C</b>	EFG	EFG	EFG	EFG	EFG	EF	EFG	EF

#### Class II & III,\* Division 1 & 2 - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion

Configuration		175W (M57 Lamp)	250W (M58 Lamp)
		Lamp	Lamp
Configuration		Class II Groups	Class II Groups
Globe & Guard	<b>A</b>	EF	EF
Globe, Guard & Dome Reflector	<b>B</b>	EF	EF
Globe, Guard & Angle Reflector	<b>C</b>	EF	EF

## Hazlux® 5 Thermal Performance Data (55°C) - Hazardous Location

**Class I, Division 1 Group C & D - Maximum External Fixture Temperature in °C @ 55°C Ambient in Free Air**  
**High Pressure Sodium** / Nameplate marked with Rating based on hottest fixture congestion

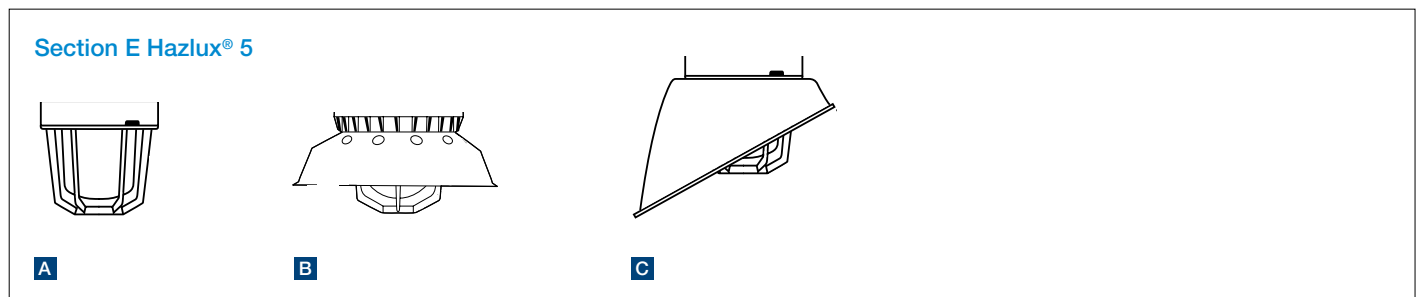
Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)	
		Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T6	T4	T5	T4	T5	T4A	N/A	T4A
Globe, Guard & Dome Reflector	<b>B</b>	T6	T4	T5	T4	T5	T4A	N/A	T4A
Globe, Guard & Angle Reflector	<b>C</b>	T6	T4	T5	T4	T5	T4A	N/A	T4A

3

## Hazlux® 5 Thermal Performance Data (65°C) - Hazardous Location

**Class I, Division 1 Group C & D - Maximum External Fixture Temperature in °C @ 65°C Ambient in Free Air**  
**High Pressure Sodium** / Nameplate marked with Rating based on hottest fixture congestion

Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)
		Lamp	Lamp w/Auxiliary Qtz.	Lamp	Lamp w/Auxiliary Qtz.	Lamp
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	<b>A</b>	T5	N/A	T4A	N/A	T4A
Globe, Guard & Dome Reflector	<b>B</b>	T5	N/A	T4A	N/A	T4A
Globe, Guard & Angle Reflector	<b>C</b>	T5	N/A	T4A	N/A	T4A



# Area lighting

## Hazlux® 5 Thermal data

### Hazlite™ 5 (400 Series) Thermal Data

Hazlite™ 5 (400 Series) Thermal Data - This data includes Globe, Guard and Reflector

Lamp Type	Ambient Temperature	Class I		Supply Wire Suitable Temperature
		Groups	Temp. Code	
<b>250 Watt HPS</b> Type S50	40	C,D	T4A	85
<b>400 Watt HPS</b> Type S51	40	C,D	T4C	85
<b>400 Watt M.H.</b> Type M59	40°C 40°C	C,D C,D	T3B T3B	85°C 85°C

### Hazlite™ M5 Thermal Data

Hazlite™ M5 Thermal Data - This data includes Globe, Guard and Reflector

Lamp Type	Ambient Temperature	Class I		Class II		Supply Wire Suitable Temperature
		Groups	Temp. Code	Groups	Temp. Code	
<b>35 Watt</b> HPS Type S76	40°C 55°C 65°C	C,D C,D C,D	T6 T6 T5	E,F,G E,F,G E,F,G	T5 T4A T4A	60°C 75°C 85°C
<b>50 Watt</b> HPS Type S68	40°C 55°C 65°C	C,D C,D C,D	T6 T6 T5	E,F,G E,F,G E,F,G	T4A T4A T4	60°C 75°C 85°C
<b>70 Watt</b> HPS Type S62	40°C 55°C 65°C	C,D C,D C,D	T5 T4A T4A	E,F,G E,F,G E,F,G	T4 T3C T3C	75°C 75°C 85°C
<b>100 WATT HPS</b> Type S54	40°C 55°C	C,D C,D	T4A T4A	E,F,G E,F,G	T3C T3C	75°C 85°C







# Area lighting

## Hazlux® M4 Hazlite™

### Hazardous Location Fixtures for Class I, Division 2; Class II; and Wet and Marine Locations.

Hazlite™ M4 lighting fixtures have a compact, low-profile design that is ideally suited for areas where space or fixture weight is restricted. While it is available for use with both incandescent and fluorescent lamps, the Hazlite™ M4 fixture with fluorescent lamps is particularly energy efficient.

- Easy-to-assemble, modular construction
- Fully threaded glass globes, refractors and silicone rubber gaskets seal out dirt, dust and moisture
- Bright white FRP material reflectors optimize light output and resist corrosion and abuse
- Clear glass globes are standard; tempered globes, colored glass globes and plastic globes are also available
- 13/4"-deep boxes are standard on ceiling and wall mount fixtures; 3"-deep boxes available for added wiring room

- Four mounting styles - pendant, ceiling, wall, angle stanchion - to meet all mounting needs
- Polycarbonate guards are corrosion and impact resistant and do not interfere with globe seal

#### Incandescent:

- Two basic sizes cover all popular wattages up to 300 watts

#### Fluorescent:

- Factory-wired integral ballasts for easy installation
- 10,000-hour rated lamp life - extremely energy efficient
- One or two 13-, 22- and 28-watt lamps provide up to 44 watts of fluorescent light
- 22-, 28- and 44-watt fixtures start and operate reliably in cold temperature applications (-29°C)

#### Lighting Fixture Components - Temperature Ratings

Maximum Lamp Watts	Without Reflector	With Reflector
150	T2A	T2
300	T1	T1

#### Certifications & Standards

- Class I** - Division 2, Groups A, B, C and D  
**Class II** - Division 2, Groups E, F, and G\*  
 - Enclosed and Gasketed for Wet Locations  
 - UL® Listed (UL1598A) for Marine Locations  
 - NEMA 4X, IP66  
 \*Pendant mount only, 100 watts max

#### Approvals / Characteristics



#### Hazlite™ M4 Compact Fluorescent Lighting Fixtures - Temperature Information Chart

Fixture Wattage	Ambient Temperature		Class I, Division 2 Supply Wire Temperature	T-Number	
	Minimum	Maximum		Globe, Guard	Globe, Guard & Reflector
13 Watt	0°C (32° F)	40°C (104° F)	110°C	T3	T3
22 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3
26 Watt	0°C (32° F)	40°C (104° F)	110°C	T3	T3
28 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3
44 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3

#### Certifications & Standards

- Class I** - Division 2, Groups A, B, C and D  
**Class II** - Division 2, Groups E, F, and G\*  
 - UL844  
 - Enclosed and Gasketed for Wet Locations  
 - NEMA 4X, IP66  
 \*Pendant mount only

#### Approvals / Characteristics



# Area lighting

## Hazlux® M4 Hazlite™ Incandescent

### Assembly guide

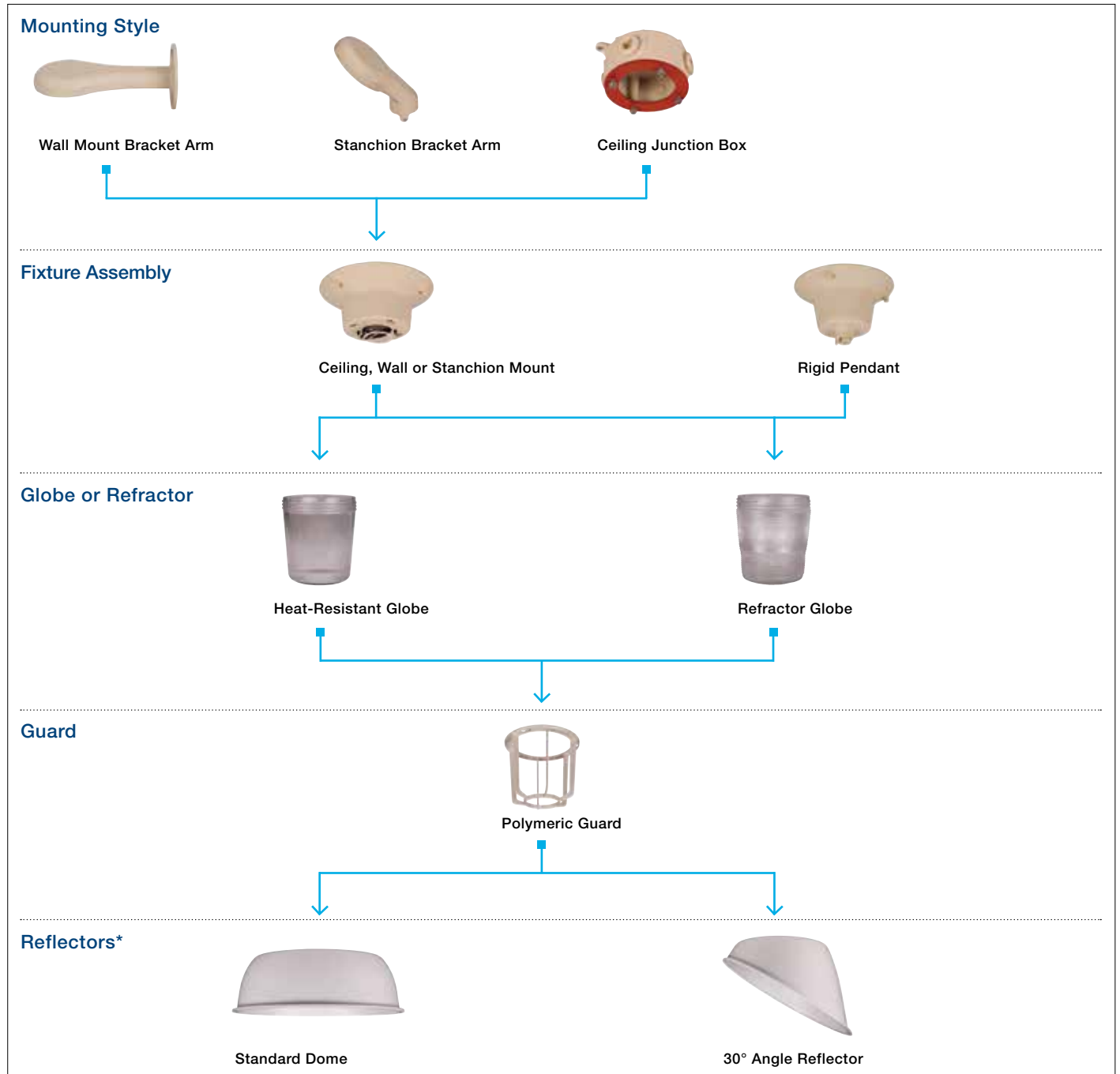
**Complete luminaire consists of:**

- A mounting style
- Fixture Assembly
- Globe or Refractor
- Optional Guard and/or Reflector



3

### Hazlux® 5 Induction - Assembly Guide



\*Reflectors are sold separately

## Catalog numbering system

<b>VDA</b>	<b>2</b>	<b>5</b>	<b>GP</b>	<b>RD</b>	<b>C</b>
1	2	3	4	5	6



<b>1 Fixture Series and Mounting Style</b>	<b>VDA</b>	M4 Incandescent Pendant Mount Fixture
	<b>VXH</b>	M4 Incandescent Fixture Body for Ceiling, Wall or Stanchion Mount
	<b>VXHA</b>	M4 Incandescent Stanchion Mount Fixture
	<b>VXHB</b>	M4 Incandescent Wall Mount Fixture (No Box)
	<b>VXHBF</b>	Wall Mount Fixture with Box
	<b>VXHF</b>	Ceiling Mount with Box
<b>2 Hub Size</b>	<b>2</b>	3/4" in. NPT Hub
	<b>4</b>	1 1/4" in. NPT Hub
<b>3 Lamp Wattage</b>	<b>5</b>	150 Watt Maximum
	<b>2</b>	200 to 300 Watt

<b>4 Optics and Guards</b>	<b>GP</b>	Clear Globe with Polymeric Guard
	<b>TG</b>	Tempered Globe
	<b>TGP</b>	Tempered Globe with Polymeric Guard
	<b>ACG</b>	Amber Globe
	<b>BCG</b>	Blue Globe
	<b>GCG</b>	Green Globe
	<b>RCG</b>	Red Globe
	<b>ACGP</b>	Amber Globe with Polymeric Guard
	<b>BCGP</b>	Blue Globe with Polymeric Guard
	<b>GCGP</b>	Green Globe with Polymeric Guard
	<b>RCGP</b>	Red Globe with Polymeric Guard
	<b>RI</b>	Reflector Globe (IES Type I)*
	<b>R3</b>	Reflector Globe (IES Type III)*
	<b>R5</b>	Reflector Globe (IES Type V)*
	<b>R1P</b>	Reflector Globe (IES Type I) with Polymeric Guard
	<b>R3P</b>	Reflector Globe (IES Type III) with Polymeric Guard
<b>R5P</b>	Reflector Globe (IES Type V) with Polymeric Guard	

\*150 Watt maximum

### Certifications & Standards

- Class I** - Division 2, Groups A, B, C and D  
**Class II** - Division 2, Groups E, F and G\*
- Enclosed and Gasketed for Wet Locations
  - UL® Listed (UL1598A) for Marine Locations
  - NEMA 4X, IP66
  - CSA C22.2 No. 137

\*Pendant mount only, 100 watts max.

### Approvals / Characteristics



<b>5 Reflector Options</b>	<b>RD</b>	Dome Reflector
	<b>RA</b>	Angle Reflector
<b>6 Certification</b>	<b>C</b>	Canadian Market

# Area lighting

## Hazlux® M4 Hazlite™ Incandescent

### Individual components

3



Wall Mount Bracket Arm



Stanchion Bracket Arm



Pendant Mount



Ceiling, Wall or Stanchion Mount

#### Mounting Options

Part No.	Description	Conduit Hub Size
VXB	Wall Mount Bracket Arm	N.A.
VXA4	Stanchion Bracket Arm	1 1/4"

#### Fixture Assembly

Part No.	Watt max. Lamp Size	Conduit Hub Size
VDA15	150W	1/2"
VDA25	150W	3/4"
VDA12	200–300W	1/2"
VDA22	200–300W	3/4"
VXH15	150W	N.A.
VXH12	200–300W	N.A.

#### Junction Box for Wall or Ceiling

Part No. (4 Hubs)	Part No. (5 Hubs)	Conduit Hub Size
VXF10	VXFT10	1/2"

#### Covers and Gaskets

Part No.	Description	Conduit Hub Size
VHC2	Fixture Hanger Hub Cover for VXF and VXFD Boxes	3/4"
GASK643	Covers, Flat Covers and Bracket Arms	N.A.



1 3/4" Inside Depth



Cover



Gasket



Clear\*



Red



Green



Blue



Amber



Reflector Globe

### Replacement Globe Assemblies

Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VGT15	VGT22	Clear, Heat Resistant
VGT15R	VGT22R	Red
VG15G	VGT22G	Green
VGT15B	VGT22B	Blue
VGT15A	VGT22A	Amber
VGL15	VGL22	Clear
VGL15R1	VGL22R1	IES Type V Refractor
VGL15R3	VGL22R3	IES Type V Refractor
VGL15R5	VGL22R5	IES Type V Refractor

\*Not Heat-Resistant

### Optional Components



Polymeric Guard



Standard Dome



30° Angle Reflector

### Guards

Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VGU15P	VGU22P	Polymeric Guard

### Reflectors

Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VR15P	VR22P	Dome
VRA15P	VRA22P	Angled

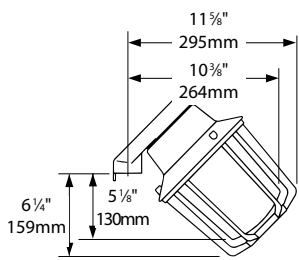
Note: Reflectors are shipped bulk unless specified

# Area lighting

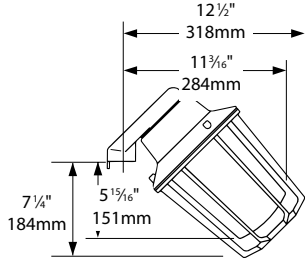
## Hazlux® M4 Hazlite™ Incandescent

### Dimensions - Hazlite™ M4 Incandescent fixtures

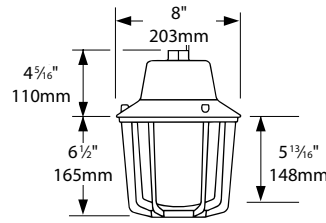
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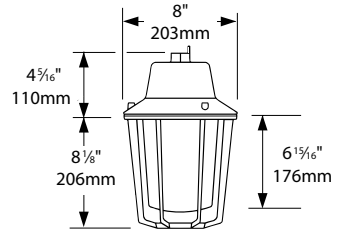
**Angle Stanchion Mount**  
150 Watts Maximum



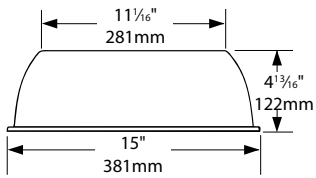
**Angle Stanchion Mount**  
300 Watts Maximum



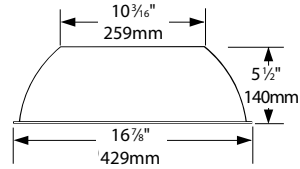
**Pendant Mount**  
150 Watts Maximum



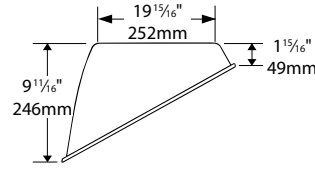
**Pendant Mount**  
300 Watts Maximum



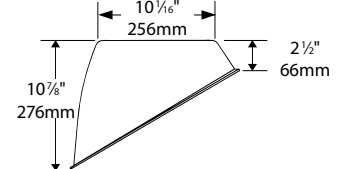
**Dome Reflector**  
150 Watts Maximum



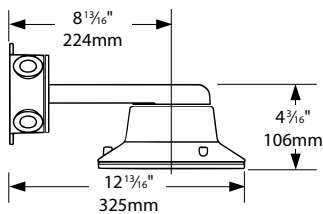
**Dome Reflector**  
300 Watts Maximum



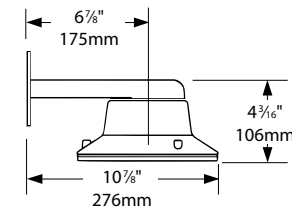
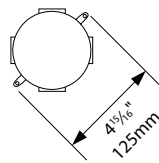
**Angle Dome**  
150 Watts Maximum



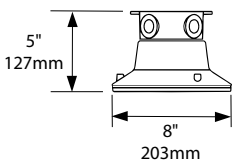
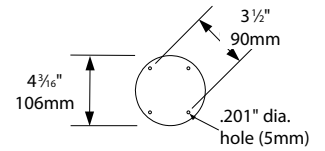
**Angle Reflector**  
300 Watts Maximum



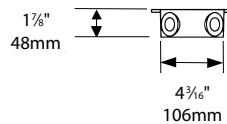
**Wall Mount with Box**



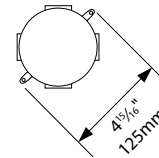
**Wall Mount without Box**



**Ceiling Mount**



**Junction Box for Wall or Ceiling Mount**



# Area lighting

## Hazlux® M4 Hazlite™ Fluorescent

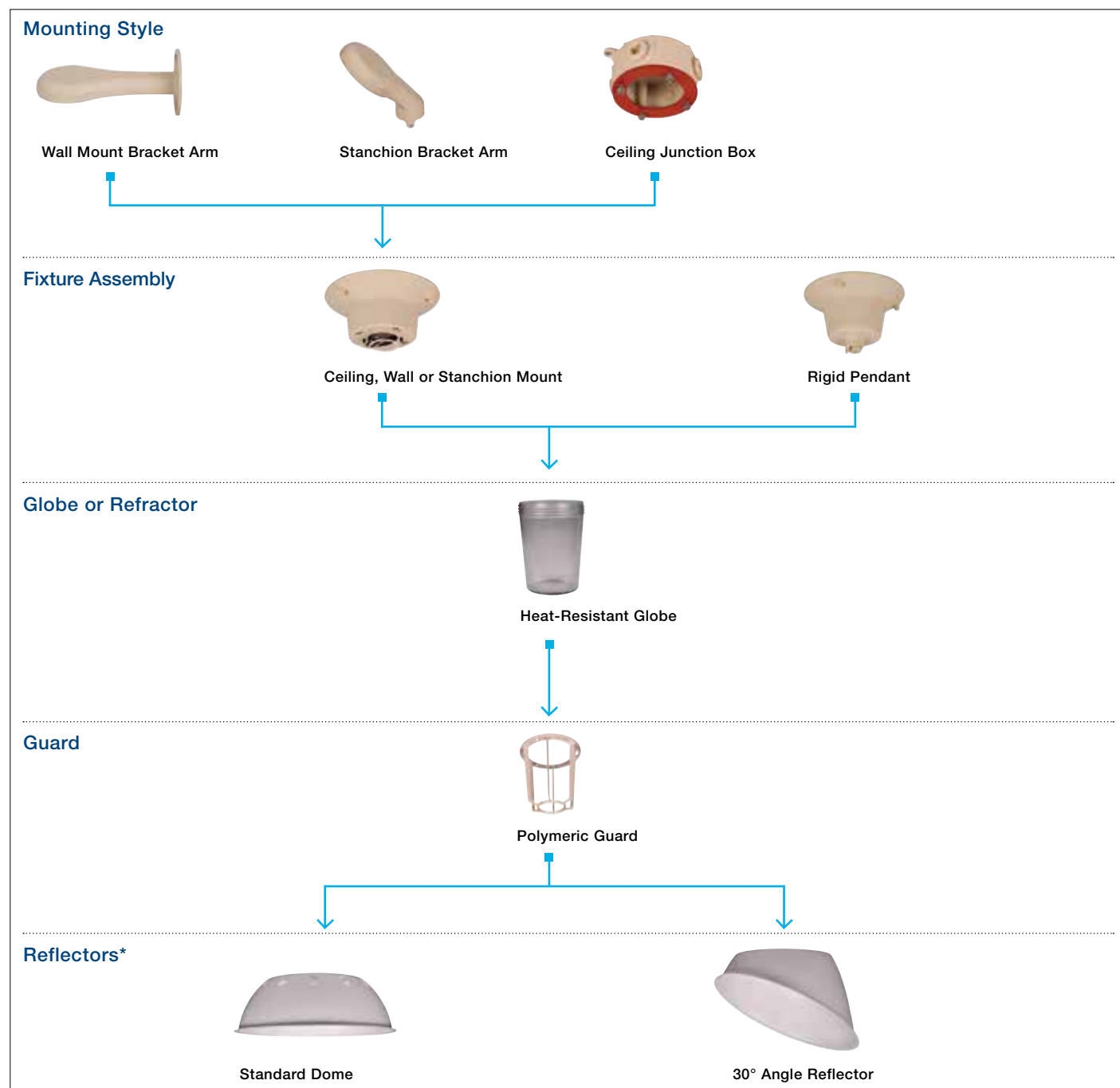
### Assembly guide

#### Complete luminaire consists of:

- A mounting style
- Fixture Assembly
- Globe or Refractor
- Optional Guard and/or Reflector



#### Hazlux® M4 Hazlite™ Fluorescent - Assembly Guide



\*Reflectors are sold separately

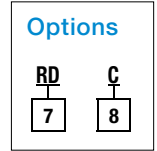
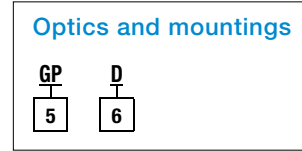
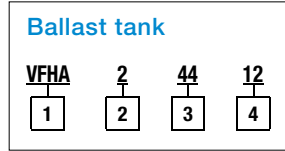
# Area lighting

## Hazlux® M4 Hazlite™ Fluorescent

### Catalog numbering system

#### UNIPAK™ =

- Fixture Assembly +
- Optics & Mountings +
- Options (if necessary)



#### Fixture Assembly

<b>1 Fixture Series and Mounting Style</b>	<b>VFA</b>	M4 Fluorescent Pendant Mount
	<b>VFH</b>	M4 Fluorescent Body for Ceiling, Wall or Stanchion Mount
	<b>VFHA</b>	M4 Fluorescent Stanchion Mount
	<b>VFHB</b>	M4 Fluorescent Wall Mount (No Box)
	<b>VFHBF</b>	Fluorescent Wall Mount (Std. Box)
	<b>VFHbfd</b>	M4 Fluorescent Wall Mount (Deep Box)
	<b>VFHF</b>	M4 Fluorescent Ceiling Mount (Std. Box)
	<b>VFHFD</b>	M4 Fluorescent Wall Mount (Deep Box)
<b>2 Hub Size</b>	<b>1</b>	1/2" NPT Hub (Except VFH and VFHB)
	<b>2</b>	3/4" in. NPT Hub
	<b>4</b>	1 1/4" in. NPT Hub
<b>3 Lamp Wattage</b>	<b>13</b>	13 Watt (One 13W Lamp)
	<b>22</b>	22 Watt (One 22W Lamp)
	<b>26</b>	26 Watt (Two 13W Lamps)
	<b>28</b>	28 Watt (One 28W Lamp)
	<b>44</b>	44 Watt (Two 22W Lamps)
<b>4 Voltage</b>	<b>12</b>	120VAC

#### Optics & Mountings

<b>5 Optics and Guards</b>	<b>GP</b>	Clear Globe with Polymeric Guard
	<b>TG</b>	Tempered Globe
	<b>TGP</b>	Tempered Globe with Polymeric Guard
	<b>ACG</b>	Amber Globe
	<b>BCG</b>	Blue Globe
	<b>GCG</b>	Green Globe
	<b>RCG</b>	Red Globe
	<b>ACGP</b>	Amber Globe with Polymeric Guard
	<b>BCGP</b>	Blue Globe with Polymeric Guard
	<b>RCGP</b>	Red Globe with Polymeric Guard
<b>6 Packaging Options</b>	<b>D</b>	UNIPAK® Packaging (Completely Assembled with Lamps in One Carton)
	<b>P</b>	PROJECPAK™ Packaging (All Components, Including Lamp(s), in One Carton, Unassembled)

#### Certifications & Standards

**Class I** - Zone 2, Groups IIC, IIB, IIA,  
- Division 2, Groups A, B, C and D

**Class II** - Division 2, Groups E, F and G

- Enclosed and Gasketed for Wet Locations
- UL844
- NEMA 4X, IP66
- CSA C22.2 No. 137

#### Approvals / Characteristics



#### Options

<b>7 Reflector Options</b>	<b>RD</b>	Dome Reflector
	<b>RA</b>	Angle Reflector
<b>8 Certification</b>	<b>C</b>	Canadian Market

Note: If no packaging code is specified, fixture components will be shipped in separate cartons  
All fixtures and fixture housings include lamps



## Individual components



Wall Mount Bracket Arm



Stanchion Bracket Arm



Pendant Mount



Ceiling, Wall or Stanchion Mount



13/4" Inside Depth



Cover



Gasket

### Mounting Options

Part No.	Description	Conduit Hub Size
VXB	Wall Mount Bracket Arm	N.A.
VXA4	Stanchion Bracket Arm	1 1/4"

3

### Fixture Assembly

Part No.	Conduit Hub Size
VFH	N.A.
VFA	1/2"

Part No. 4 Hubs	Part No. 5 Hubs	Conduit Hub Size
VXF10	VXFT10	1/2"
VXF20	VXFT20	3/4"

### Covers and Gaskets

Part No.	Description	Conduit Hub Size
VHC1	Fixture Hanger	1/2"
VHC2	FiHub Cover for VXF and VXF Boxes	3/4"
GASK643	Gasket for Hub Covers, Flat Covers and Bracket Arms	N.A.

# Area lighting

## Hazlux® M4 Hazlite™ Fluorescent

### Individual components (continued)

3



Three-Sided Exit Sign



Globe

#### Globes and Exit Sign

Part No.	Description
VGL22	Clear, Non Heat Resistant
VGT22	Clear, Heat Resistant
VGT22R	Red
VGT22G	Green
VGT22B	Blue
VGT22A	Amber
VRE22	Three-Sided Exit Sign



Polymeric Guard

#### Guards

Part No.	Description
VGU22P	Polymeric Guard

### Optional components



Standard Dome



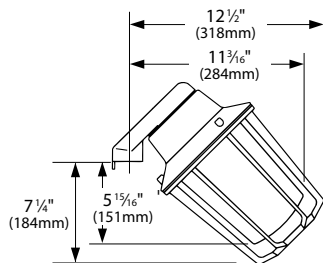
30° Angle Reflector

#### Reflectors

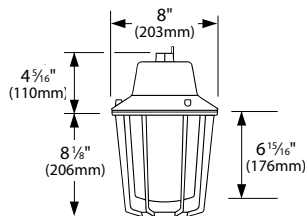
Part No.	Description
VR22P	Dome
VRA22P	Angled

Note: Reflectors are shipped bulk unless specified

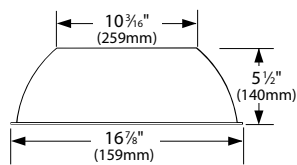
## Dimensions - Hazlite™ M4 Fluorescent fixtures



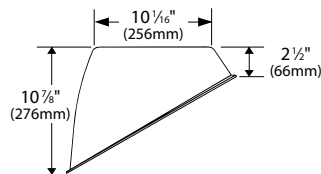
**Angle Stanchion Mount  
Fluorescent**



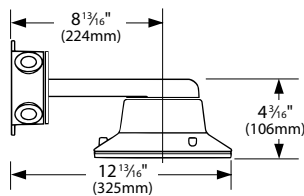
**Pendant Mount  
Fluorescent**



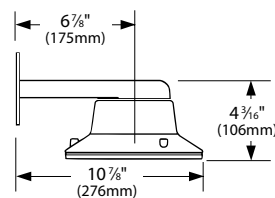
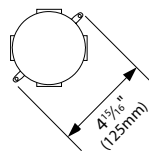
**Dome Reflector  
Fluorescent**



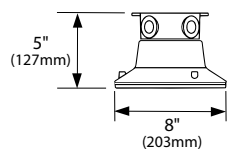
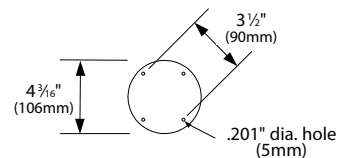
**Angle Reflector  
Fluorescent**



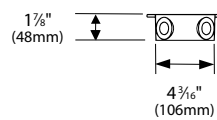
**Wall Mount with Box**



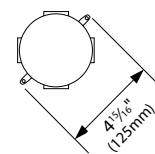
**Wall Mount without Box**



**Ceiling Mount**



**Junction Box for Wall or Ceiling Mount**



# Area lighting

## Hazlux® 6 DFP Series - Safety technology

### DFP Series

#### Vapor / Dust Proof Lighting

3

#### Standard Features:

- Front access fixture for hazardous locations
- Hinged front door frame with hinged ballast tray
- Spring loaded lamp holders - standard
- Available in 2, 3, 4, 5 and 6 lamp options
- Multiple hub locations can meet most wiring needs

#### Construction

- Sturdy 18 Ga. Steel white powder coated housing
- 3/16" tempered glass lens
- Zinc latches

#### Electrical

- Available with T5, T5HO, T8, T8HO
- Wattage available in 28, 32, 44 and 54 watts
- Through feed wiring
- Voltage of 120, 277, 347 and 480

#### Options

- Adjustable surface mount brackets
- Cable mount
- Wire guard
- Acrylic lens
- Polycarbonate lens
- HLO (high light output ballast for T8 32 watt lamp only)

#### Accessories

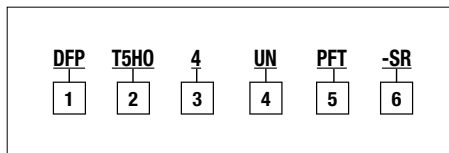
- Chain mount kit
- 8 ft. 3 wire whip



#### T-Ratings

Model	Rated Ambient Deg. C	Supply Wiring Temp.	Class I, Div 2 Operating Temperature Code	Class II, Div 2 Operating Temperature Code
DFPT5	40	75	T3C (160°C)	T4A (120°C)
DFPT5HO	40	75	T3C (160°C)	T4A (120°C)
DFPT8HO	40	75	TT4A (120°C)	T4A (120°C)
DFPT8	55*	75	T5 (100°C)	T4A (120°C)

## Catalog numbering system



<b>1 Fixture Series</b>	<b>DFP</b>	Hazlux Linear Class I Div 1
<b>2 Lamp Type</b> (lamps not included)	<b>T5</b>	28W T5 Fluorescent
	<b>T5HO</b>	54W T5HO Fluorescent
	<b>T8</b>	32W T8 Fluorescent
	<b>T8HO</b>	44W T8HO Fluorescent
<b>3 Lamp Quantity</b>	<b>2</b>	2 lamp configuration, 4' length
	<b>3</b>	3 lamp configuration, 4' length
	<b>4</b>	4 lamp configuration, 4' length
	<b>5</b>	5 lamp configuration, 4' length
	<b>6</b>	1000W BT37
	<b>4 Voltages</b>	<b>UN</b>
<b>UN2</b>		Universal voltage 347 - 480, 50/60Hz (T5HO only)
<b>34</b>		347 Volt
<b>5 Hub</b>	<b>PFT</b>	1/2" NPT hubs on top and side
<b>6 Options</b>	<b>KH</b>	Adjustable surface mount brackets (galvanized)
	<b>CX</b>	5ft. Cable Mount
	<b>PW</b>	8 ft. 3 wire whip
	<b>SR</b>	Specular reflector
	<b>WG</b>	Wire guard
	<b>F</b>	Fusing (not listed for Canada)
	<b>A</b>	Acrylic lens
	<b>P</b>	Polycarbonate Shield
	<b>EM</b>	Emergency lighting ballast

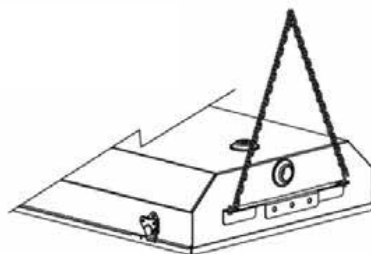
### Certifications & Standards

- Class I** - Division 2, Groups A, B, C and D
- Class II** - Division I and 2, Groups F and G
- Class III**
- Class I** - Zone 2, Groups IIC, IIB and IIA
  - UL844
  - IP65, Wet Location
  - CSA C22.2 No. 137

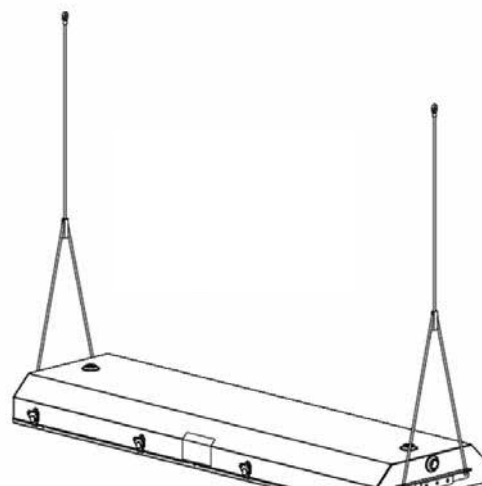
### Approvals / Characteristics



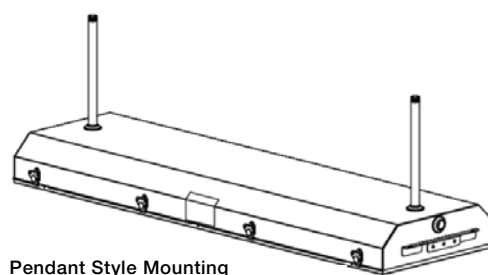
## Mounting accessory drawings (order separately)



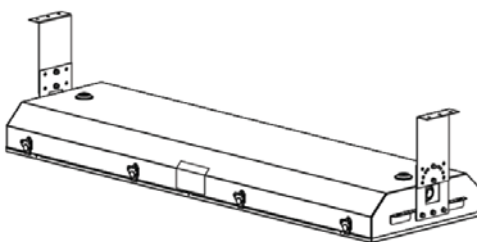
Chain Kit  
P/N: DFP-CHAIN



Cable Hang Kit  
P/N: DFP-CABLE (zinc coated), Qty 2 cables with



Pendant Style Mounting  
Note: Conduit supply by others  
45" between conduit



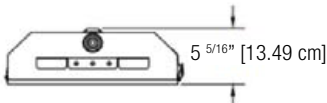
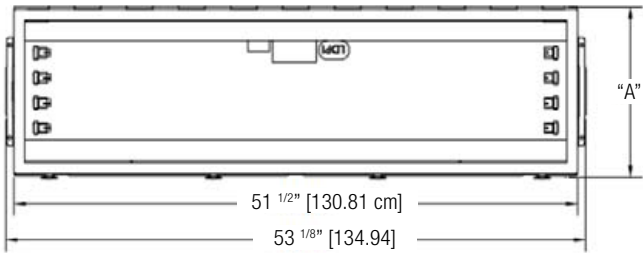
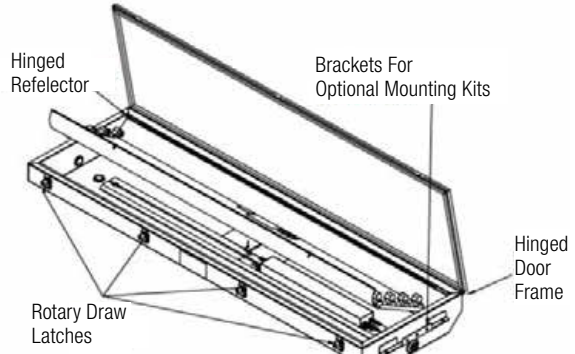
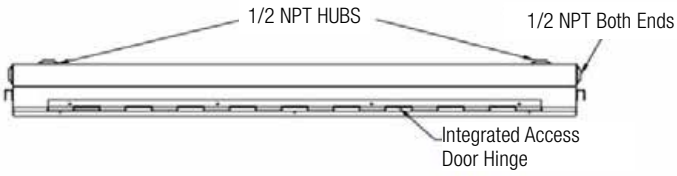
Adjustable Surface Mounting Bracket Kit  
P/N: DFP-SURFACE (galvanized),  
toggle ends and qty 2 self locking gripples

# Area lighting

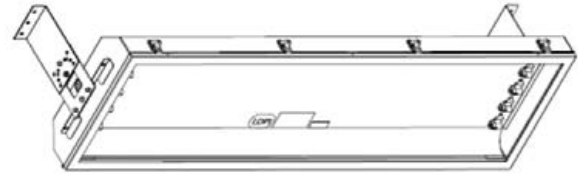
## Hazlux® 6 DFP Series - Safety technology

### Dimensions - Nominal

3



"A":  
2 Lamp: 12 3/16" [30.96 cm]  
3 & 4 Lamp: 16 3/16" [41.12]  
5 & 6 Lamp: 20 11/16" [52.54 cm]



## Photometry - Description information

### Description Information

IESNA: LM-63-2002

[TEST]27371

[TESTLAB]LIGHTING SCIENCES, INC. [ISSUEDATE] 7/22/2010

[MANUFAC]Thomas & Betts - 4' LINEAR FLUORSCENT LUMINAIRE

[LUMCAT]DFPT84UNPFT[LUMINAIRE]WITH WHITE INTERIOR AND CLEAR FLAT GLASS LENS

[LAMP]FOUR 32 WATT T8 LAMPS [LAMPCAT]F32T8/TL850. LUMEN RATING = 3100 LMS.

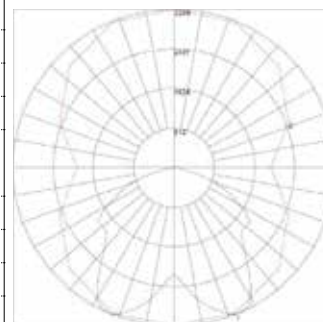
[OTHER]ONE PHILIPS ICN-4P32-SC BALLAST OPERATING AT 120 VAC AND 103 WATTS

### Zonal Lumen Summary

Zone	Lumens	% Lamp	%FixT
0-20	1070.4	8.60	12.00
0-30	2321.08	18.70	26.00
0-40	3886.93	31.30	43.50
0-60	7132.08	57.50	79.90
0-80	8860.05	71.50	99.20
0-90	8927.15	72.00	100.00
10-90	8654.5	69.80	96.90
20-40	2816.53	22.70	31.60
20-50	4500.47	36.30	50.40
40-70	4418.19	35.60	49.50
60-80	1727.97	13.90	19.40
70-80	554.94	4.50	6.20
80-90	67.09	0.50	0.80
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	8927.15	72.00	100.00

Total Luminaire Efficiency = 72.00%

Characteristics	Polar Graph
Lumens Per Lamp	3100 (4 lamps)
Total Lamp Lumens	12400
Luminaire Lumens	8927
Total Luminaire Efficiency	72%
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	103
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.42
Spacing Criterion (diagonal)	1.50
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.96 ft
Luminous Width (90-270)	1.11 ft
Luminous Height	0.00 ft



Maximum Candela = 3248.9, Located at Horizontal Angle = 90, Vertical Angle = 25  
 (1) Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
 (2) Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)

### Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	101	101	101	101	98	98	98	98	94	94	94	90	90	90	86	86	86	84	84	84	84
1	90	86	82	78	88	84	80	77	80	77	74	77	74	72	86	86	86	84	84	84	84
2	81	74	67	62	79	72	66	61	69	64	60	66	62	58	63	60	57	55	55	55	55
3	74	64	56	50	72	63	56	50	60	54	49	58	52	48	55	51	47	38	38	38	38
4	67	56	48	42	65	55	48	42	53	46	41	51	45	41	49	44	40	38	38	38	38
5	62	50	42	36	60	49	41	36	47	40	35	45	40	35	44	39	34	33	33	33	33
6	57	45	37	31	55	44	36	31	42	36	31	41	35	30	40	34	30	28	28	28	28
7	53	41	33	27	51	40	32	27	38	32	27	37	31	27	36	31	27	25	25	25	25
8	49	37	29	24	47	36	29	24	35	29	24	34	28	24	33	28	24	22	22	22	22
9	46	34	27	22	44	33	26	22	31	26	21	30	25	21	30	25	21	20	20	20	20
10	43	31	24	20	42	31	24	20	30	24	19	29	23	19	28	23	19	18	18	18	18

# Area lighting

## Hazlux® 7 XFM Series - Safety technology

### XFM Series

#### Explosion Proof Lighting

3

#### Standard Features:

- Factory sealed, lightweight cast natural aluminum
- 5 different 1/2" NPT hubs entries at each end
- Center ballast placement for better balanced and low profile
- Available with 2 lamp in 2ft and 4ft
- Available in 3 or 4 lamp in 4ft
- One piece painted aluminum reflector
- Suitable for use inside a spray booth

#### Construction

- Cast natural aluminum
- .189" wall Borosilicate glass tubes

#### Electrical

- Available with T5, T5HO, T8, T8HO
- 120V (T8HO), 277V (T8HO) and 347V (T5HO & T8 only)

#### Options

- Wall / Ceiling Mount Kit (4 Lamps)
- Wire guard
- Polycarbonate shield
- 93% reflective premium specular reflector insert

#### Accessories

- Wall / Ceiling and Drop Mount K



#### T-Ratings - Operating Temperature Codes based on 40° Ambient

Fixture	Class I, Div 1 Groups C & D	Class I, Div 2 Groups A, B, C & D	Class II, Div 1 Groups E, F & G	Class III	Simultaneous Presence Class I & II
XFM	T6 = 85°C	T4 = 135°C	T4 = 135°C	T4 = 135°C	T4 = 135°C

#### Weights

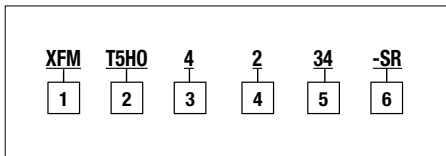
Configuration	Fixture Weight	Shipping Weight
2L - 2 Ft.	30 lbs	33 lbs
2L - 4 Ft.	40 lbs	43 lbs
2L - 4 Ft. (EB)	57 lbs	60 lbs
3L - 4 Ft.	45 lbs	52 lbs
4L - 4 Ft.	80 lbs	84 lbs

#### Lamp Wattage

2FT.	Watts	4FT.	Watts
T5	14 Watt	T5	28 W
T5HO	24 Watt	T5HO	54 W
T8.	17 Watt	T8	32 W
T8HO	N.A.	T8HO	44 W



## Catalog Numbering System



<b>1 Fixture Series</b>	<b>XFM</b>	Hazlux Linear Class I Div 1
<b>2 Lamp Type</b> (lamps included)	<b>T5</b>	T5 Fluorescent
	<b>T5HO</b>	T5HO Fluorescent
	<b>T8</b>	T8 Fluorescent
	<b>T8HO</b>	T8HO Fluorescent
<b>3 Lamp Quantity</b>	<b>2</b>	2 lamp configuration
	<b>3</b>	3 lamp configuration
	<b>4</b>	4 lamp configuration
<b>4 Length (Ft.)</b>	<b>2</b>	2 Ft.
	<b>4</b>	4 Ft.
<b>5 Voltage</b>	<b>UN</b>	Universal voltage 120 - 277, 50/60Hz
	<b>34</b>	347 Volt
<b>6 Options</b>	<b>WG</b>	Stainless Steel Wire Guard
	<b>P</b>	Polycarbonate Shield
	<b>SR</b>	Premium Specular Reflector
	<b>MK</b>	Wall / Ceiling Mount Kit (4 Lamps)

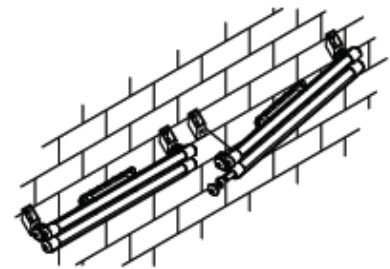
### Certifications & Standards

- Class I** - Division 1, Groups C and D  
- Division 2, Groups A, B, C and D
- Class II** - Division I and 2, Groups E, F and G
- Class III**
- Class I** - Zone 1, Groups IIB and IIA
- UL Listed (UL1598) for Marine Locations
  - NEMA 4X
  - NFPA Standard 33 and NEC Article 516
  - UL844
  - CSA C22.2 No. 137

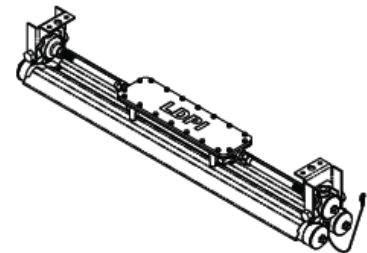
### Approvals / Characteristics



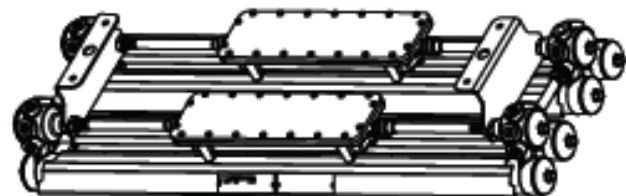
## Mounting options



Wall/Ceiling mount kit for 2 or 3 lamps  
P/N: XFM-4401



Wall/Ceiling mount kit for 4 lamps  
P/N: XFM-4400  
These are factory fitted please contact sales office for further details



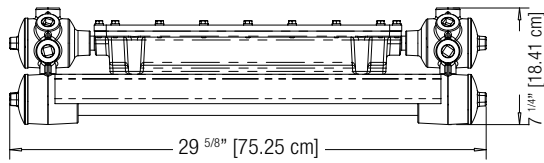
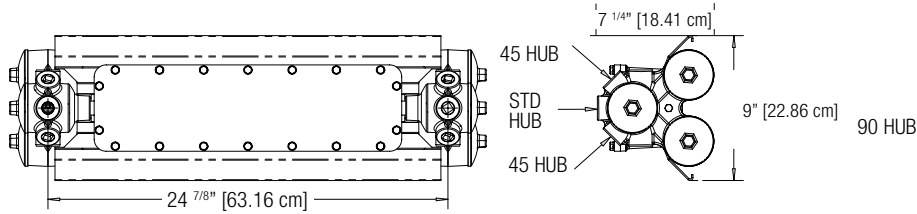
Drop mount kit for 2 or 3 lamps  
P/N: XFM-4401  
For 4 lamps  
P/N: XFM-4403

# Area lighting

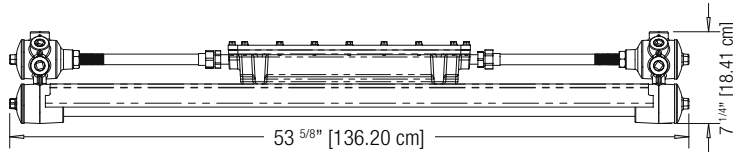
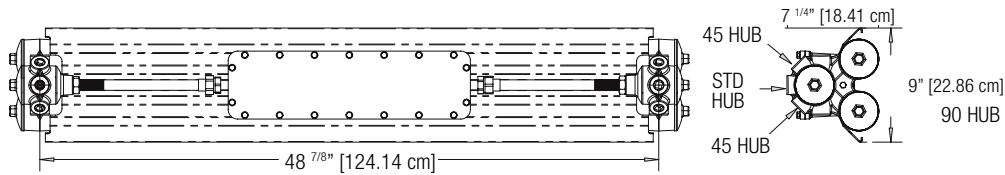
## Hazlux® 7 XFM Series - Safety technology

### Dimensions - Nominal

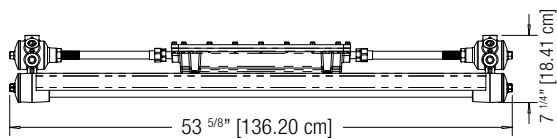
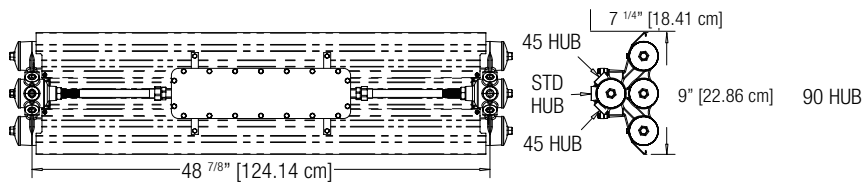
3



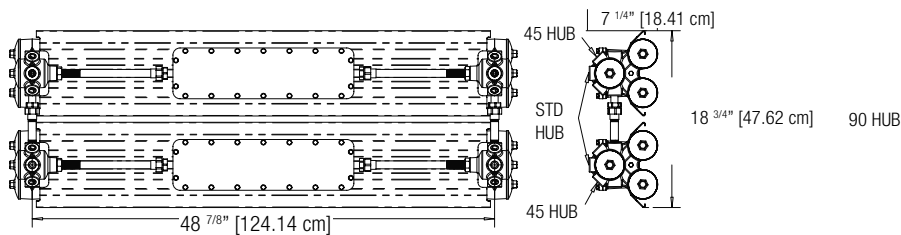
2L 2FT. Dimensions



2L 4FT. Dimensions



3L 4FT. Dimensions



4L 4FT. Dimensions

# Photometry - Description information

## Description Information

IES Indoor Report / Photometric Filename: XFMT844UN.IES

IESNA: LM-63-1995

[TEST] THOMAS & BETTS PHOTOMETRIC REPORT

[LUMINAIRE] PROJECT: XFMT844UN CAST ALUMINUM BALLAST HOUSING AND HUB ASSEMBLIES

WHITE POWDER C ALUMINUM REFLECTORS. CYLINDRICAL GLASS LAMP ENCLOSURES

LAMP TUBES ORIENTED HORIZONTALLY. LAMP F32T8/TL850 2950 LUMENS

## Zonal Lumen Summary

Zone	Lumens	% Lamp	%FixT
0-20	1048.45	9.20	10.90
0-30	2249.54	19.70	23.40
0-40	3736.08	32.80	38.80
0-60	6879.98	60.40	71.40
0-80	9249.22	81.10	96.00
0-90	9632.88	84.50	100.00
10-90	9366.11	82.20	97.20
20-40	2687.63	23.60	27.90
20-50	4282.04	37.60	44.50
40-70	4513.03	39.60	46.90
60-80	2369.24	20.80	24.60
70-80	1000.1	8.80	10.40
80-90	383.66	3.40	4.00
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	9632.88	84.50	100.00

Total Luminaire Efficiency = 84.50%

Characteristics		Polar Graph
Lumens Per Lamp	2850 (4 lamps)	
Total Lamp Lumens	11400	
Luminaire Lumens	9633	
Total Luminaire Efficiency	84%	
Luminaire Efficacy Rating (LER)	62	
Total Luminaire Watts	156	
Ballast Factor	1.00	
CIE Type	Direct	
Spacing Criterion (0-180)	1.42	
Spacing Criterion (90-270)	1.48	
Spacing Criterion (diagonal)	1.52	
Basic Luminous Shape	Rectangular w/Sides	
Luminous Length (0-180)	4.34 ft	
Luminous Width (90-270)	1.53 ft	
Luminous Height	0.28 ft	

Maximum Candela = 3248.9, Located at Horizontal Angle = 90, Vertical Angle = 25

(1) Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)

(2) Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)

## Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				10				0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
0	101	101	101	101	98	98	98	98	94	94	94	90	90	90	86	86	86	84	84	84	84	84	84	84	84	84
1	90	86	82	78	88	84	80	77	80	77	74	77	74	72	86	86	86	84	84	84	84	84	84	84	84	84
2	81	74	67	62	79	72	66	61	69	64	60	66	62	58	63	60	57	55	55	55	55	55	55	55	55	55
3	74	64	56	50	72	63	56	50	60	54	49	58	52	48	55	51	47	38	38	38	38	38	38	38	38	38
4	67	56	48	42	65	55	48	42	53	46	41	51	45	41	49	44	40	33	33	33	33	33	33	33	33	33
5	62	50	42	36	60	49	41	36	47	40	35	45	40	35	44	39	34	28	28	28	28	28	28	28	28	28
6	57	45	37	31	55	44	36	31	42	36	31	41	35	30	40	34	30	25	25	25	25	25	25	25	25	25
7	53	41	33	27	51	40	32	27	38	32	27	37	31	27	36	31	27	23	23	23	23	23	23	23	23	23
8	49	37	29	24	47	36	29	24	35	29	24	34	28	24	33	28	24	21	21	21	21	21	21	21	21	21
9	46	34	27	22	44	33	26	22	31	26	21	30	25	21	30	25	21	19	19	19	19	19	19	19	19	19
10	43	31	24	20	42	31	24	20	30	24	19	29	23	19	28	23	19	18	18	18	18	18	18	18	18	18



# Industrial and hazardous location lighting

## Hazlux® Floodlights

### Floodlights

Hazlux® 3 Marine-duty floodlights	4/2
Hazlux® 3 HID Floodlights for wet locations	4/4

# Floodlights

## Hazlux® 3 Marine-duty floodlights

### Marine-Duty Floodlights Class I, Division 2

#### Applications

- Chemical plants
- Oil refineries
- Offshore platforms
- Waste treatment facilities
- Food processing plants
- Steel mills, foundries
- Power plants
- Pulp and paper facilities
- General manufacturing plants
- Shipyards and shipbuilding facilities
- Airplane manufacturing plants
- Defense and government facilities

#### Features and Benefits

- **Computer-Designed Reflectors** - for optimal light distribution and efficiency
- **Die-Cast Aluminum** - housings and covers for excellent strength, light weight, and corrosion resistance; Marine-duty floodlights are copper-free aluminum alloy
- **Polyester Powder Finish** - provides superior corrosion resistance and attractive appearance
- **Fully Pivoting Steel Yoke** - is standard for ease of aiming and mounting flexibility
- **Tempered Glass Lens** - resists thermal shock and is fully sealed and mechanically retained
- **Hinged Door** - swings down for easy lamp replacement; is easily removable for maintenance
- **Aiming Sight** - is standard on all Hazlux UltraFlood® floodlights which makes installation faster and easier

#### Wattages, Voltages

- High-Pressure Sodium: 70-1000 watts
- Metal Halide: 175-1000 watts
- All Floodlights: 120, 277, 480 or Multi-tap voltages available

#### Materials, Finishes

- Housings, Covers: Powder-coated aluminum
- Hardware: Corrosion-resistant steel
- Lens: Tempered glass

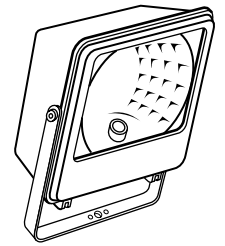
#### Certifications

- Class I, Division 2, Groups A, B, C, D - All (UL844)
- CSA C22.2 No 137
- Outdoor Wet Locations - All
- Marine Locations (UL1598A) - FDM Series
- Temperature Range:
  - 70W-400W (All) -30°C to 40°C
  - 1000W HPS -30°C to 40°C
  - 1000W MH -30°C to 25°C



## Catalog numbering system

<b>FD</b>	<b>S</b>	<b>O</b>	<b>40</b>	<b>C</b>	<b>48</b>	<b>0</b>	-	<b>Y</b>	<b>W</b>	<b>E</b>	-	<b>FF</b>	<b>C</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>		<b>8</b>	<b>9</b>	<b>10</b>		<b>11</b>	<b>12</b>



<b>1 Fixture Series</b>	<b>FD</b>	Class I, Division 2, Groups A, B, C, D		
	<b>FDM</b>	Class I, Division 2, Groups A, B, C, D and Marine Locations*		
<b>2 Lamp Type</b>	<b>S</b>	High-Pressure Sodium		
	<b>H</b>	Metal Halide		
<b>3 Starter Circuit</b>	<b>0</b>	Standard Fixture (Without Options)		
	<b>R</b>	Instant Restart (HPS) 150W max		
	<b>P</b>	Pulse Star (MH)		
<b>4 Lamp Wattage</b>	<b>Metal Halide Lamps</b>			
	<b>10</b>	100W ED28	<b>15</b> 150W ED23 1/2	
	<b>20</b>	200W ED18	<b>40</b> 400W ED37	
	<b>00</b>	1000W BT37		
	<b>High Pressure Sodium Lamps</b>			
	<b>10</b>	100W ED23 1/2	<b>15</b> 150W ED23 1/2	
	<b>20</b>	200W ED18	<b>25</b> 250W ED18	
	<b>40</b>	400W ED18	<b>00</b> 1000W ED37	
	<b>5 Ballast Circuit</b>	<b>C</b>	Constant Wattage Autotransformer	
		<b>H</b>	High Reactance	
<b>I</b>		Constant Wattage insulated (for 208,240,480 Volts)		
<b>6 Voltage</b>	<b>04</b>	120/208/277/240VAC (wired to 120VAC)		
	<b>08</b>	120/277/347VAC (wired to 120V)		
	<b>09</b>	120/277/347VAC (wired to 277V)		
	<b>10</b>	120/277/347VAC (wired to 347V)		
	<b>12</b>	20VAC		
	<b>20</b>	208VAC		
	<b>24</b>	240VAC		
	<b>27</b>	277VAC		
<b>48</b>	480VAC			

Contact the factory for other available voltages

### Certifications & Standards

- Class I - Division 2, Groups A, B, C and D
- UL844
- UL1598A for Marine Locations
- NEMA 4X (FDM Series)
- NEMA 3R
- CSA C22.2 No 137

### Approvals / Characteristics






<b>7 Housing Size</b>	<b>0</b>	Standard Housing (400W max.)
	<b>L</b>	Large Housing (1000W)
<b>8 Mounting style</b>	<b>Y</b>	Yoke (Trunnion) Mount
<b>9 Beam Type</b>	<b>W</b>	Wide Beam
	<b>N</b>	Narrow Beam (Not available with 1000W MH)
	<b>E</b>	UNIPAK™ with Clear Lamp
<b>10 Packaging</b>	<b>D</b>	UNIPAK™ with Diffuse Lamp
	<b>11 Options</b>	<b>OF</b> Single Fuse
<b>11 Options</b>	<b>FF</b>	Double Fuse
	<b>BRZ</b>	Bronze Color
	<b>BLK</b>	Black Color
<b>12 Certification</b>	<b>C</b>	Canadian Market

Note: Standard color is grey

\* Minimum order quantity applies; consult customer service for details


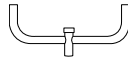
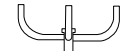
### Yoke Mount Floodlights - Mounting Brackets

	Cat. No.	Description
	9901H-TB	Steel Cross-Arm Mounting Bracket
	9902H-TB	Pole-Top Mounting Bracket
	9920H-TB	Universal Wall Mounting Bracket

### Accessories

Cat. No.	Description
75-8-TB	Polycarbonate Vandal Shield
75-V-TB	Glare Control Shield

### Integral Slipfitter Floodlights - Mounting Brackets

	Cat. No.	Description
	9605	Wall Mount Pipe Bracket (2") with Flange (Prime Coated)
	9605-G	Wall Mount Pipe Bracket (2") with Flange (Galvanized)
	9352-TB	Pole-Top Mounting Bracket
	9333-TB	Universal Wall Mounting Bracket

# Floodlights

## Hazlux® 3 HID Floodlights for wet locations

### Hazlux® 3 - Class I, Division 2 HID Floodlights for Wet Locations

Lamp Type	Lamp Watts	Voltage	Yoke (Trunnion) Mount	Beam Type*
High-Pressure Sodium	100 W	120 V	FDS010P120-YW	Wide
		MT	FDS010H080-YW	
	150 W	120 V	FDS015P120-YW	Wide
		MT	FDS015H080-YW	
	200 W	120 V	FDS020C120-YW	Wide
		MT	FDS020C080-YW	
	250 W	120 V	FDS025C120-YW	Wide
		MT	FDS025C080-YW	
	400 W	120 V	FDS040C120-YW	Wide
		MT	FDS040C080-YW	
	1000 W	120 V	FDS000C120-YW	Wide
		MT	FDS000C080-YW	
Metal Halide	100 W	120 V	FDH010H120-YW	Wide
		MT	FDH010H080-YW	
	175 W	120 V	FDH017C120-YW	Wide
		MT	FDH017C080-YW	
	250 W	120 V	FDH025C120-YW	Wide
		MT	FDH025C080-YW	
	400 W	120 V	FDH040C120-YW	Wide
		MT	FDH040C080-YW	
	1000 W	120 V	FDH000C12L-YW	Wide
		MT	FDH000C08L-YW	

\*For narrow-beam floodlights, replace 'W' at end part number with 'N'

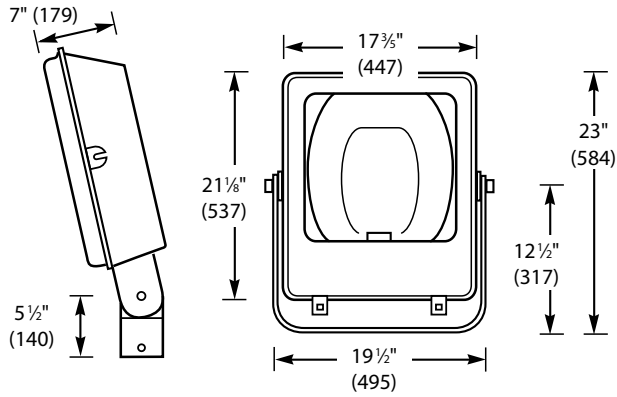
### Hazlux® 3 - Class I, Division 2 HID Floodlights for Marine Locations

Lamp Type	Lamp Watts	Voltage	Yoke (Trunnion) Mount	Beam Type*
High-Pressure Sodium	100 W	120 V	FDMS010P120-YW	Wide
		MT	FDMS010H080-YW	
	150 W	120 V	FDMS015P120-YW	Wide
		MT	FDMS015H080-YW	
	200 W	120 V	FDMS020C120-YW	Wide
		MT	FDMS020C080-YW	
	250 W	120 V	FDMS025C120-YW	Wide
		MT	FDMS025C080-YW	
	400 W	120 V	FDMS040C120-YW	Wide
		MT	FDMS040C080-YW	
	1000 W	120 V	FDMS000C120-YW	Wide
		MT	FDMS000C080-YW	
Metal Halide	100 W	120 V	FDMH010H120-YW	Wide
		MT	FDMH010H080-YW	
	175 W	120 V	FDMH017C120-YW	Wide
		MT	FDMH017C080-YW	
	250 W	120 V	FDMH025C120-YW	Wide
		MT	FDMH025C080-YW	
	400 W	120 V	FDMH040C120-YW	Wide
		MT	FDMH040C080-YW	
	1000 W	120 V	FDMH000C12L-YW	Wide
		MT	FDMH000C08L-YW	

\*For narrow-beam floodlights, replace 'W' at end part number with 'N'



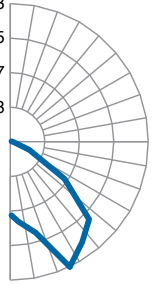
## Dimensions - Hazlux® 3 Floodlight HID fixtures



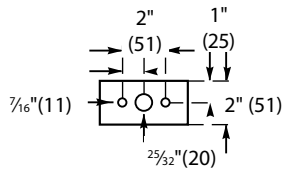
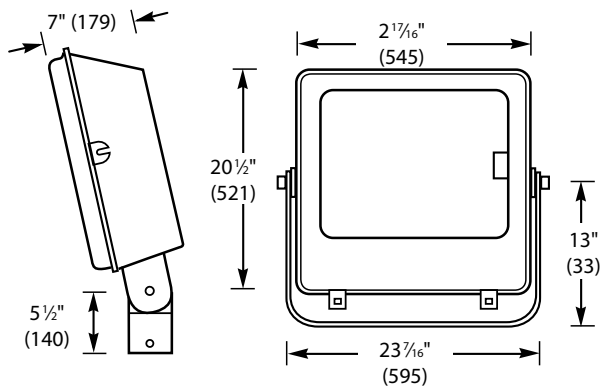
## Photometry - Hazlux® 3 Floodlight HID fixtures

### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>FDH040H090-YWE</b>	19153
Lamp	400W MH ED37	14365
Lamp Lumens	34000	9577
NEMA Type	7 H x 6 V	4788
Maximum Candela	19153	
Maximum Candela Angle	25H 0V	
Horizontal Beam Angle (50%)	108.2	
Vertical Beam Angle (50%)	33.8	
Horizontal Field Angle (10%)	137.2	
Vertical Field Angle (10%)	123.3	
Luminaire Lumens	25756	
Total Efficiency	76%	
Total Luminaire Watts	465	
Ballast Factor	1.00	

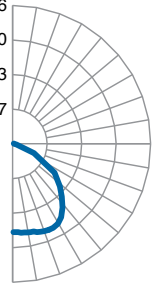


4



### Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	<b>FDH0100H090-YWE</b>	33506
Lamp	1000W MH BT37	25130
Lamp Lumens	107800	16753
NEMA Type	6 H x 6 V	8377
Maximum Candela	33506	
Maximum Candela Angle	0H 33V	
Horizontal Beam Angle (50%)	86.2	
Vertical Beam Angle (50%)	95.5	
Horizontal Field Angle (10%)	128.5	
Vertical Field Angle (10%)	126.1	
Luminaire Lumens	68208	
Total Efficiency	63%	
Total Luminaire Watts	1069	
Ballast Factor	1.00	





# Industrial and hazardous location lighting

## Strobe lights

### Strobe Lights

Introduction	5/3
Hazlux® M4 HazFlash Series	5/4
Hazlux® M5 HazFlash Series	5/6



# Introduction

## Strobe lights

HazFlash M4 induction lighting provides a 100,000+ hour lamp life, drastically reducing expensive maintenance costs of industrial lighting in hazardous locations.

Lamp replacement not only places employees at risk, but often requires the rental of expensive equipment such as scissors lifts. With the introduction of Hazlux Induction Lighting Fixtures for hazardous areas (Class 1, Div. 2 Groups A, B, C, D) and non-hazardous areas, you can benefit from the longest lamp life available on the market.

HazFlash M4 lights are equipped with Philips® QL Induction lamps for the longest lamp life ever.

### Strobe Series and Suitability

- DXS = HazFlash® M4 Xenon Strobe
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups E, F, G
- Class II: Pendant-Mount Strobes Only

### Flash Rate

6 = 60 Flashes per Minute

### Voltage

- 1 = 120 Volts AC, 50/60 Hz (Standard)
- 2 = 240 Volts AC, 50/60 Hz
- 8 = 10-30 Volts DC
- 9 = 90-130 Volts DC

### Lens Color

- R = Red
- B = Blue
- C = Clear
- G = Green
- A = Amber

### Optical Assembly Options

TG = Tempered Glass Globe

TGP = Tempered Globe and Polymeric Guard

### Mounting Style

P2 = 3/4" Pendant Mount

C2 = 3/4" Ceiling Mount

B2 = 3/4" Wall Mount with Box

S4 = 1 1/4" Angle Stanchion Mount

### Options

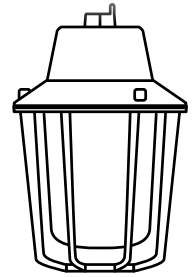
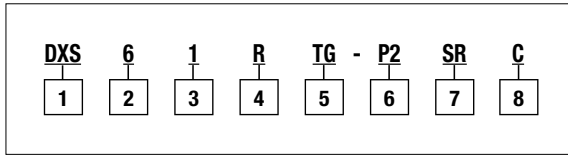
SR = Sealing Ring Kit for Inverted Mounting  
(Maintains Marine Listing in Globe-Up Position)



# Strobe lights

## Hazlux® M4 HazFlash Series - Hazardous area strobe lights

### Catalog numbering system



5

<b>1 Strobe Series and Suitability</b>	<b>DXS</b>	HazFlash® M4 Xenon Strobe Class I, Division 2, Groups A, B, C, D Class II, Division 1, Groups E, F, G*
<b>2 Flash Rate</b>	<b>6</b>	60 Flashes per Minute
<b>3 Voltage</b>	<b>1</b>	120 Volts AC, 50/60 Hz (Standard)
	<b>2</b>	240 Volts AC, 50/60 Hz
	<b>8</b>	10-30 Volts DC
<b>4 Lens Color</b>	<b>9</b>	90-130 Volts DC
	<b>R</b>	Red
	<b>B</b>	Blue
	<b>C</b>	Clear
	<b>G</b>	Green
	<b>A</b>	Amber

<b>5 Optical Assembly Options</b>	<b>TG</b>	Tempered Glass Globe
	<b>TGP</b>	Tempered Globe and Polymeric Guard
<b>6 Mounting style</b>	<b>P2</b>	3/4" Pendant Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>B2</b>	3/4" Wall Mount with Box
	<b>S4</b>	1 1/4" Angle Stanchion Mount
<b>7 Options</b>	<b>SR</b>	Sealing Ring Kit for Inverted Mounting (Maintains Marine Listing in Globe-Up Position)
<b>8 Certification</b>	<b>C</b>	Canadian Market

\*Class II: Pendant Mount Strobes only

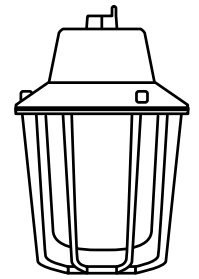
\*\*Sealing Ring Option required when mounting in globe-up position

#### Certifications & Standards

- Class I** - Division 2, Groups A, B, C and D
- Class II** - Division 1, Groups E, F, and G\*
  - CSA - NRTL/C
  - Outdoor Wet Locations, NEMA 3R
  - Outdoor Marine\*\*, NEMA 4X\*\*

#### Approvals / Characteristics





## Hazlux® M4 HazFlash Series - Hazardous area strobe lights

Mounting Style	Conduit Size	120 VAC, 50/60 HZ Cat. No.	240 VAC, 50/60 HZ Cat. No.	10-30 VDC Cat. No.	90-130 VDC Cat. No.
<b>Red Lens HazFlash® M4 DXS Strobe Lights</b>					
Pendant	3/4"	DXS61RGP-P2	DSX62RGP-P2	DXS68RGP-P2	DXS69RGP-P2
Ceiling	3/4"	DXS61RGP-C2	DXS62RGP-C2	DXS68RGP-C2	DXS69RGP-C2
Wall	3/4"	DXS61RGP-B2	DXS62RGP-B2	DXS68RGP-B2	DXS69RGP-B2
Stanchion	1 1/4"	DXS61RGP-S4	DXS62RGP-S4	DXS68RGP-S4	DXS69RGP-S4
<b>Blue Lens HazFlash® M4 DXS Strobe Lights</b>					
Pendant	3/4"	DXS61BGP-P2	DSX62BGP-P2	DXS68BGP-P2	DXS69BGP-P2
Ceiling	3/4"	DXS61BGP-C2	DXS62BGP-C2	DXS68BGP-C2	DXS69BGP-C2
Wall	3/4"	DXS61BGP-B2	DXS62BGP-B2	DXS68BGP-B2	DXS69BGP-B2
Stanchion	1 1/4"	DXS61BGP-S4	DXS62BGP-S4	DXS68BGP-S4	DXS69BGP-S4
<b>Clear Lens HazFlash® M4 DXS Strobe Lights</b>					
Pendant	3/4"	DXS61CGP-P2	DSX62CGP-P2	DXS68CGP-P2	DXS69CGP-P2
Ceiling	3/4"	DXS61CGP-C2	DXS62CGP-C2	DXS68CGP-C2	DXS69CGP-C2
Wall	3/4"	DXS61CGP-B2	DXS62CGP-B2	DXS68CGP-B2	DXS69CGP-B2
Stanchion	1 1/4"	DXS61CGP-S4	DXS62CGP-S4	DXS68CGP-S4	DXS69CGP-S4
<b>Green Lens HazFlash® M4 DXS Strobe Lights</b>					
Pendant	3/4"	DXS61GGP-P2	DSX62GGP-P2	DXS68GGP-P2	DXS69GGP-P2
Ceiling	3/4"	DXS61GGP-C2	DXS62GGP-C2	DXS68GGP-C2	DXS69GGP-C2
Wall	3/4"	DXS61GGP-B2	DXS62GGP-B2	DXS68GGP-B2	DXS69GGP-B2
Stanchion	1 1/4"	DXS61GGP-S4	DXS62GGP-S4	DXS68GGP-S4	DXS69GGP-S4
<b>Amber Lens HazFlash® M4 DXS Strobe Lights</b>					
Pendant	3/4"	DXS61AGP-P2	DSX62AGP-P2	DXS68AGP-P2	DXS69AGP-P2
Ceiling	3/4"	DXS61AGP-C2	DXS62AGP-C2	DXS68AGP-C2	DXS69AGP-C2
Wall	3/4"	DXS61AGP-B2	DXS62AGP-B2	DXS68AGP-B2	DXS69AGP-B2
Stanchion	1 1/4"	DXS61AGP-S4	DXS62AGP-S4	DXS68AGP-S4	DXS69AGP-S4

Use pendant mount strobes only for Class II locations

Use sealing ring kit (below) to maintain Outdoor Marine and NEMA 4X ratings when installing in the inverted position

To order DXS strobe light with sealing ring kit for inverted mounting (globe pointing up), add suffix "-SR" to the catalog number. Example: DXS61RGP-P2-SR

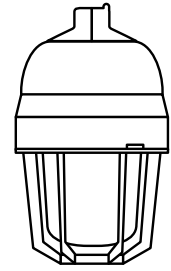
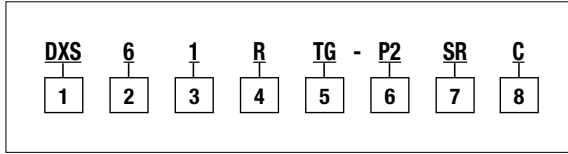
## DXS Strobe Light Replacement Parts

Cat. No.	Description
XSFT	Replacement Flash Tube
XSFL-R	Replacement Fresnel Lens - Red
XSFL-B	Replacement Fresnel Lens - Blue
XSFL-C	Replacement Fresnel Lens - Clear
XSFL-G	Replacement Fresnel Lens - Green
XSFL-A	Replacement Fresnel Lens - Amber
VGU22P	Replacement Polycarbonate Guard
VGL22	Clear Globe
VG22	Tempered Globe
SRKIT-1	Sealing Ring Kit - includes sealing ring and gasket

# Strobe lights

## Hazlux® M5 HazFlash Series - Explosion-proof strobe lights

### Catalog numbering system



5

<b>1 Strobe Series and Suitability</b>	<b>XXS</b>	HazFlash® M5 Xenon Strobe Class I, Division 1, Groups C, D Class II, Division 1, Groups E, F, G
<b>2 Flash Rate</b>	<b>6</b>	60 Flashes per Minute
	<b>4</b>	40 Flashes per Minute (Standard)
	<b>8</b>	80 Flashes per Minute
<b>3 Electrical Ratings</b>	<b>1</b>	120 Volts AC, 50/60 Hz (Standard)
	<b>2</b>	240 Volts AC, 50/60 Hz
	<b>8</b>	10-30 Volts DC
	<b>9</b>	90-130 Volts DC
<b>4 Lens Color</b>	<b>R</b>	Red
	<b>B</b>	Blue
	<b>C</b>	Clear
	<b>G</b>	Green
	<b>A</b>	Amber

<b>5 Guard</b>	<b>G</b>	Cast Guard (Omit "G" if guard is not required.)
<b>6 Mounting style</b>	<b>P2</b>	3/4" Pendant Mount
	<b>P3</b>	1" Pendant Mount
	<b>C2</b>	3/4" Ceiling Mount
	<b>C3</b>	1" Ceiling Mount
	<b>B2</b>	3/4" Wall Mount with Box
	<b>B3</b>	1" Wall Mount with Box
	<b>J2</b>	3/4" Bulkhead Mount
	<b>J3</b>	1" Bulkhead Mount
	<b>S4</b>	1 1/4" Angle Stanchion Mount
	<b>S5</b>	1 1/4" Angle Stanchion Mount
<b>7 Options</b>	<b>SR</b>	Sealing Ring Kit for Inverted Mounting (Maintains Marine Listing in Globe-Up Position)
<b>8 Certification</b>	<b>C</b>	Canadian Market

\*Pendant Mount only

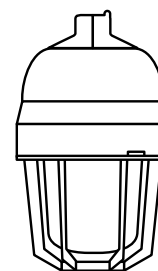
#### Certifications & Standards

- Class I** - Division 1, Groups C and D  
**Class II** - Division 1, Groups E, F, and G\*  
 - Outdoor Wet Locations\*, NEMA 4X  
 - UL864, UL1598, UL844  
 - CSA C22.2 No. 137

#### Approvals / Characteristics







## Hazlux® M5 HazFlash Series - Explosion-proof strobe lights

Mounting Style	Conduit Size	120 VAC, 50/60 HZ Cat. No.	240 VAC, 50/60 HZ Cat. No.	10–30 VDC Cat. No.	90–130 VDC Cat. No.
<b>Red Lens HazFlash® M5 XXS Strobe Lights</b>					
Pendant	3/4"	XXS61R-G-P2	XXS62R-G-P2	XXS68R-G-P2	XXS69R-G-P2
Ceiling	3/4"	XXS61R-G-C2	XXS62R-G-C2	XXS68R-G-C2	XXS69R-G-C2
Wall	3/4"	XXS61R-G-B2	XXS62R-G-B2	XXS68R-G-B2	XXS69R-G-B2
Stanchion	1 1/4"	XXS61R-G-S4	XXS62R-G-S4	XXS68R-G-S4	XXS69R-G-S4
<b>Blue Lens HazFlash® M5 XXS Strobe Lights</b>					
Pendant	3/4"	XXS61B-G-P2	XXS62B-G-P2	XXS68B-G-P2	XXS69B-G-P2
Ceiling	3/4"	XXS61B-G-C2	XXS62B-G-C2	XXS68B-G-C2	XXS69B-G-C2
Wall	3/4"	XXS61B-G-B2	XXS62B-G-B2	XXS68B-G-B2	XXS69B-G-B2
Stanchion	1 1/4"	XXS61B-G-S4	XXS62B-G-S4	XXS68B-G-S4	XXS69B-G-S4
<b>Clear Lens HazFlash® M5 XXS Strobe Lights</b>					
Pendant	3/4"	DXS61C-G-P2	DXS62C-G-P2	DXS68C-G-P2	DXS69C-G-P2
Ceiling	3/4"	DXS61C-G-C2	DXS62C-G-C2	DXS68C-G-C2	DXS69C-G-C2
Wall	3/4"	DXS61C-G-B2	DXS62C-G-B2	DXS68C-G-B2	DXS69C-G-B2
Stanchion	1 1/4"	DXS61C-G-S4	DXS62C-G-S4	DXS68C-G-S4	DXS69C-G-S4
<b>Green Lens HazFlash® M5 XXS Strobe Lights</b>					
Pendant	3/4"	XXS61G-G-P2	XXS62G-G-P2	XXS68G-G-P2	XXS69G-G-P2
Ceiling	3/4"	XXS61G-G-C2	XXS62G-G-C2	XXS68G-G-C2	XXS69G-G-C2
Wall	3/4"	XXS61G-G-B2	XXS62G-G-B2	XXS68G-G-B2	XXS69G-G-B2
Stanchion	1 1/4"	XXS61G-G-S4	XXS62G-G-S4	XXS68G-G-S4	XXS69G-G-S4
<b>Amber Lens HazFlash® M5 XXS Strobe Lights</b>					
Pendant	3/4"	XXS61A-G-P2	XXS62A-G-P2	XXS68A-G-P2	XXS69A-G-P2
Ceiling	3/4"	XXS61A-G-C2	XXS62A-G-C2	XXS68A-G-C2	XXS69A-G-C2
Wall	3/4"	XXS61A-G-B2	XXS62A-G-B2	XXS68A-G-B2	XXS69A-G-B2
Stanchion	1 1/4"	XXS61A-G-S4	XXS62A-G-S4	XXS68A-G-S4	XXS69A-G-S4

Note: To order XXS strobe light with sealing ring kit for inverted mounting (globe pointing up), add suffix "-SR" to the catalog number. Example: XXS61RGP-P2-SR

## DXS Strobe Light Replacement Parts

Cat. No.	Description
XSFT	Replacement Flash Tube
XSFL-R	Replacement Fresnel Lens - Red
XSFL-B	Replacement Fresnel Lens - Blue
XSFL-C	Replacement Fresnel Lens - Clear
XSFL-G	Replacement Fresnel Lens - Green
XSFL-A	Replacement Fresnel Lens - Amber
XGU15	Replacement Guard
XGSA15	Replacement Globe Assembly



# Technical section

## Product characteristics, classification & performance

### Technical Section

Ignition Temperatures and Group Classifications	6/2
Lamp Charts	6/4

# Technical section

## Ignition temperatures and group classifications

### Ignition Temperatures and Group Classifications for Flammable Gases and Vapors

Material	Group	Autoignition Temperature		Material	Group	Autoignition Temperature	
		Degrees F	Degrees C			Degrees F	Degrees C
Acetaldehyde	C	347	175	1,2-Dichloroethylene	D	860	460
Acetic Acid	D	867	464	Dicyclopentadiene	C	937	503
Acetic Anhydride	D	600	316	Diethyl Benzene	D	743–842	395–450
Acetone	D	869	465	Diethyl Ether	C	320	160
Acetone Cyanohydrin	D	1270	688	Diethylamine	C	594	312
Acetonitrile	D	975	524	Diethylene Glycol Monobutyl Ether	C	442	228
Acetylene	A	581	305	Diethylene Glycol Monomethyl Ether	C	465	241
Acrolein (Inhibited)	B (C)	455	285	n-n-Dimethyl Aniline	C	700	371
Acrylic Acid	D	820	438	Dimethyl Formamide	D	833	455
Acrylonitrile	D	898	481	Dimethyl Sulfate	D	370	188
Allyl Alcohol	C	713	378	Dimethylamine	C	752	400
Allyl Chloride	D	905	485	1,4-Dioxane	C	356	180
Alpha-Methyl Styrene	D	1066	574	Dipentene	D	458	237
Ammonia	D	928	498	Dodecene	D	491	255
n-Amyl Acetate	D	680	360	Du-Isopropylamine	C	600	316
Aniline	D	1139	615	Epichlorohydrin	C	772	411
Benzene	D	928	498	Ethane	D	882	472
Benzyl Chloride	D	1085	585	Ethanol	D	685	363
1,3-Butadiene	B (D)	788	420	Ethyl Acetate	D	800	427
Butane	D	550	288	Ethyl Acetate (Inhibited)	D	702	372
1-Butanol	D	650	343	Ethyl Benzene	D	810	432
2-Butanol	D	761	405	Ethyl Chloride	D	966	519
n-Butyl Acetate	D	790	421	Ethyl Formate	D	851	455
n-Butyl Acrylate (Inhibited)	D	559	293	2-Ethyl Hexanol	D	448	231
Butylamine	D	594	312	2-Ethyl Hexyl Acrylate	D	485	252
Butylene	D	725	385	Ethyl Mercaptan	C	572	300
n-Butyraldehyde	C	425	218	Ethylamine	D	725	385
n-Butyric Acid	D	830	443	Ethylene	C	842	450
Carbon Disulfide	*	194	90	Ethylene Chlorohydrin	D	797	425
Carbon Monoxide	C	1128	609	Ethylene Dichloride	D	775	413
Chlorobenzene	D	1099	593	Ethylene Glycol Monobutyl Ether	C	460	238
Cresol	D	1038–1110	559–599	Ethylene Glycol Monobutyl Ether Acetate	C	645	340
Crotonaldehyde	C	450	232	Ethylene Glycol Monoethyl Ether	C	455	235
Cumene	D	795	424	Ethylene Glycol Monoethyl Ether Acetate	C	715	379
Cyclohexane	D	473	245	Ethylene Glycol Monomethyl Ether	D	545	285
Cyclohexanol	D	572	300	Ethylene Oxide	B (C)	804	429
Cyclohexanone	D	473	245	Ethylenediamine	D	725	385
Cyclohexene	D	471	244	Ethylenimine	C	608	320
Cyclopropane	D	938	503	2-Ethylehexaldehyde	C	375	191
p-Cymene	D	817	436	Formaldehyde (Gas)	B	795	429
n-Decanol	D	550	288	Formic Acid (90%)	D	813	434
Decene	D	455	235	Fuel Oils	D	410–765	210–407
Di-Isobutyl Ketone	D	745	396	Furfural	C	600	316
Di-Isobutylene	D	736	391	Furfuryl Alcohol	C	915	490
Di-N-Propylamine	C	570	299	Gasoline	D	536–880	280–471
Diacetone Alcohol	D	1118	603	Heptane	D	399	204
o-Dichlorobenzene	D	1198	647	Heptene	D	500	260
1,1-Dichloroethane	D	820	438	Hexane	D	437	225

\*Carbon Disulfide has characteristics which require safeguards beyond those required for any of the above groups

## Ignition Temperatures and Group Classifications for Flammable Gases and Vapors (continued)

Material	Group	Autoignition Temperature		Material	Group	Autoignition Temperature	
		Degrees F	Degrees C			Degrees F	Degrees C
2-Hexanone	D	795	424	1-Nitropropane	C	789	421
Hexenes	D	473	245	Nonane	D	401	205
Hydrazine	C	74–518	23–270	Octane	D	403	206
Hydrogen	B	968	520	Octene	D	446	230
Hydrogen Cyanide	C	1000	538	Pentane	D	470	243
Hydrogen Sulfide	C	500	260	1-Pentanol	D	572	300
Iso-Butyl Acetate	D	790	421	2-Pentanone	D	846	452
Iso-Octyl Aldehyde	C	387	197	1-Pentene	D	527	275
Isoamyl Acetate	D	680	360	Propane	D	842	450
Isoamyl Alcohol	D	662	350	2-Propanol	D	750	399
Isobutyl Acrylate	D	800	427	1-Propanol	D	775	413
Isobutyraldehyde	C	385	196	Propionaldehyde	C	405	207
Isophorone	D	860	460	Propionic Acid	D	870	466
Isoprene	D	428	220	Propionic Anhydride	D	545	285
Isopropyl Acetate	D	860	460	N-Propyl Acetate	D	842	450
Isopropyl Ether	D	830	443	N-Propyl Ether	C	419	215
Isopropylamine	D	756	402	Propyl Nitrate	B	347	175
Kerosene	D	410	210	Propylene	D	851	455
Liquified Petroleum Gas	D	761–842	405–450	Propylene Dichloride	D	1035	537
Mesityl Oxide	D	652	344	Propylene Oxide	B (C)	840	449
Methane	D	999	537	Pyridine	D	900	482
Methanol	D	725	385	Styrene	D	914	490
Methyl Acetate	D	850	454	Tetrahydrofuran	C	610	321
Methyl Acrylate	D	875	468	Tetrahydronaphthalene	D	725	385
Methyl Ether	C	662	350	Toluene	D	896	480
Methyl Ethyl Ketone	D	759	404	Turpentine	D	488	253
Methyl Formal	C	460	238	Unsymmetrical Dimethyl Hydrazine (Udmh)	C	480	249
Methyl Formate	D	840	449	Valeraldehyde	C	432	222
Methyl Isobutyl Ketone	D	840	449	Vinyl Acetate	D	756	402
Methyl Isocyanate	D	994	534	Vinyl Chloride	D	882	472
Methyl Methacrylate	D	792	422	Vinyl Toluene	D	921	494
Methyl N-Amyl Ketone	D	740	393	Vinylidene Chloride	D	1058	570
2-Methyl-1-Propanol	D	780	416	Xylenes	D	867–984	464–529
2-Methyl-2-Propanol	D	892	478				
Methylamine	D	806	430				
Methylcyclohexane	D	482	250				
Methylcyclohexanol	D	565	296				
Monoethanolamine	D	770	410				
Monoisopropanolamine	D	705	374				
Monomethyl Aniline	C	900	482				
Monomethyl Hydrazine	C	382	194				
Morpholine	C	590	310				
Naphtha (Coal Tar)	D	531	277				
Naphtha (Petroleum)	D	550	288				
Nitrobenzene	D	900	482				
Nitroethane	C	778	414				
Nitromethane	C	785	418				
2-Nitropropane	C	802	428				

# Technical section

## Lamp charts

### Hazlux® 3 - Standard Tank / R-Tank - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-0	Mog.	14,000	16,000	3500	62
200	ED28PS	M136/E	Mog.	15,000	21,000	4000	68
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
<b>High Pressure Sodium</b>							
50	ED23 1/2	S68	Mog.	24,000+	4,000	2100	21
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21

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### Hazlux® 3 - Large Tan - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
200	ED28PS	M136/E	Mog.	15,000	21,000	4000	68
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
320	ED28PS	M154/M132/E	Mog.	20,000	30,000	4100	62
350	ED37PS	M131/E	Mog.	20,000	37,000	4000	68
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/M135/S	Mog.	15,000	40,000	3800	65
<b>High Pressure Sodium</b>							
200	ED18	S66MN-200	Mog.	24,000+	21,400	2100	21
250	ED18	S50	Mog.	24,000+	28,500	2100	21
400	ED18	S51	Mog.	24,000+	50,000	2100	21

### Hazlux® 3 - M3 Hazlite™ - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
50	ED17	M148/M110/0	Med.	20,000	3,750	4000	92
70	ED17	M143/M98/E	Med.	20,000	5,900	4000	92
100	ED17	M140/M90/E	Med.	20,000	9,000	4000	92
<b>High Pressure Sodium</b>							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Med.	24,000+	16,000	2100	21

### Hazlux® 1 - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
<b>High Pressure Sodium</b>							
50	ED23 1/2	S68	Mog.	24,000+	4,000	2100	21
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21

### Hazlux® M1 Hazlite™ - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
50	ED17	M148/M110/O	Med.	20,000	3,600	4000	92
70	ED17	M143/M98/E	Med.	20,000	5,900	4000	92
100	ED17	M140/M90/E	Med.	20,000	9,000	4000	92
<b>High Pressure Sodium</b>							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21

### Hazlux® 5 - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-0	Mog.	14,000	16,000	3500	62
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/O	Mog.	24,000	21,300	4200	90
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/M135/S	Mog.	15,000	40,000	3800	65
<b>High Pressure Sodium</b>							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Med.	24,000+	16,000	2100	21

# Technical section

## Lamp charts

### Hazlux® M5 Hazlite™ - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>High Pressure Sodium</b>							
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Mog.	24,000+	16,000	2100	21

### Hazlux® 3 Floodlight - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temp.	CRI
<b>Metal Halide Lamps</b>							
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-0	Mog.	14,000	16,000	3500	62
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/M135/S	Mog.	15,000	40,000	3800	65
400	ED37PS	M47E	Mog.	10,000	110,000	3700	65
<b>High Pressure Sodium</b>							
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21
250	ED18	S50	Mog.	24,000+	28,500	2100	21
400	ED18	S51	Mog.	4,000+	50,000	2100	21
1000	ED37	S52	Mog.	24,000	125,000	2100	21







# Industrial and hazardous location lighting

## Hazlux® Quick pole assembly

### Quick Pole Assembly

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# Introduction

## Hazlux® Quick pole assembly

### Quick pole assembly

- Operates in any kind of weather
- Overall length is 10' (3 m)
- Pole trade size is 1-1/2" threaded NPT. Aluminum pole trade size is 2" threaded NPT
- Top pole section is 70" (1.78 m) long
- Lower pole section is 50" (1.27 m) long
- Set screws secure top and bottom section into the quick knuckle

### Quick knuckle assembly

- Rotates 180° (90° left and right) around knuckle's center axis allowing freedom of installation and easy adjustment
- Easy one man operation. After center bolt is loosen, use the pull pin to lock and unlock the assembly
- Pre-fished with tape to ease wiring

### Brackets

- Universal mounting for 2" to 3" angle iron railings
- Quick mounting brackets can be installed inside or outside the guardrails
- Quick knuckle assembly should be mounted above hand rail allowing the pole sections to rotate before final positioning

### Features & benefits

- Sphere shaped, quick knuckle features round edges, preventing injuries and contaminant build-up of components
- The quick release mechanism is activated using one hand and one pull pin
- The quick pole assembly blocks at a 90° angle when the pull pin reaches the stopper
- All quick knuckle hardware is made of stainless steel
- All mounting brackets hardware are hot dip galvanized

The quick pole assembly blocks at a 90° angle



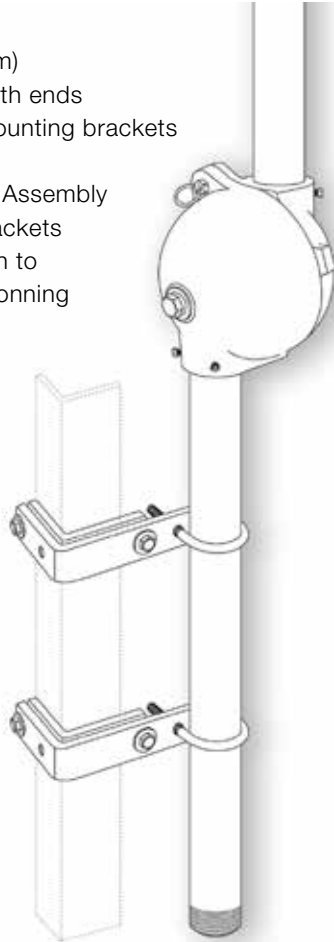
# Hazlux® - Quick pole assembly

## Galvanised standard kit & Retro kit

### Galvanised standard kit

- Overall height of 10' (3 m)
- 1-1/2" NPT treads at both ends
- Installed with two rail mounting brackets

1. Rotating Quick Knuckle Assembly
2. Angle Iron Mounting Brackets allowing the pole section to rotate before final positioning

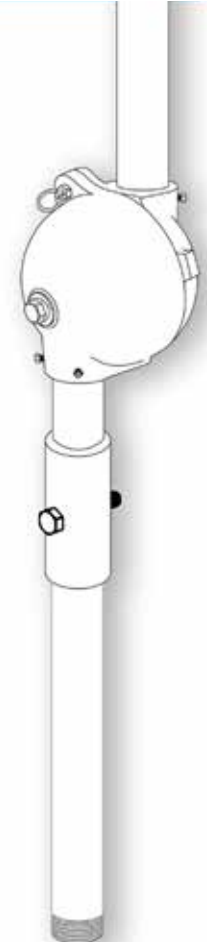


Type Q-P-5-10-N  
Type Q-P-A-5-10-N (Aluminum)  
Galvanise Standard Kit

### Retrofit kit

- Overall maximum and predetermined height of 10' (3 m) once assembled
- Can be adapted to existing pole
- Upgrades existing assembly with quick and easy maintenance features
- See instruction sheets provided with product for installation details

1. Rotating Quick Knuckle Assembly
2. Tapered Adaptor, fits over Standard 1-1/4" or 1-1/2" NPT Pipe



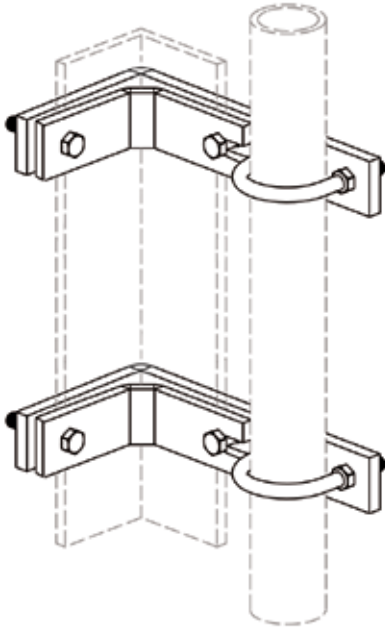
Type RQ-P-5-10-N  
Type RQ-P-A-5-10-N (Aluminum)  
Retrofit Kit

### Safety first

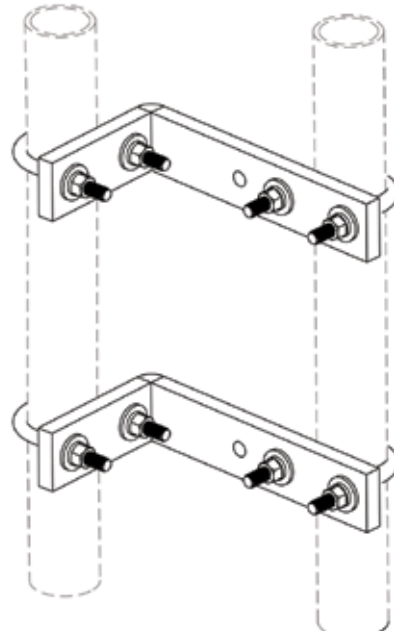
- One person operation
- No ladders or lifts required
- Simplified maintenance
- Hot dipped galvanized steel and aluminum finishes
- Free's up catwalks and walkways during maintenance
- Epoxy coated finishes available
- Suitable for 180km/h winds\* as per AASHTO LTS-4 2001
- Steel pole treads are treated and protected to prevent galvanic reaction as per AASHTO LTS-4 2001
- CSA certified products



# Hazlux® - Quick pole assembly Universal bracket kit



Type AMB-QP-BKT-N  
Type AMB-QP-A-BKT-N (Aluminum)  
Universal Bracket Kit



Type RMB-QP-BKT-N  
Type RMB-QP-A-BKT-N (Aluminum)  
Universal Bracket Kit

## Universal bracket kit

- Quick bolt-on installation, no welding or drilling
- Can be attached to angle iron guardrails up to 3"
- Can be installed on tubular structures less than 2" O.D.
- Allows the pole sections to rotate before final positioning

## Quick bolt-on installation



# Notes

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# Notes

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