

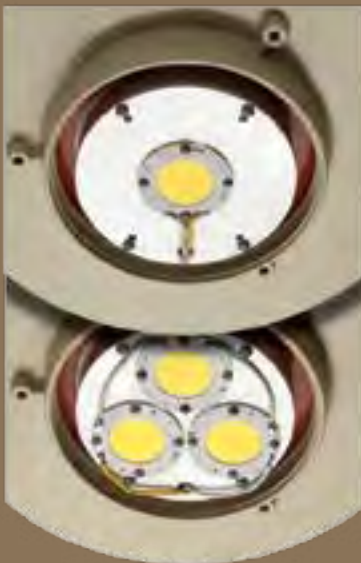
Hazlux® Lighting Fixtures

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.



Hazlux® durability meets LED technology

Superior performance lighting for hazardous locations

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.

Hazlux Model	AC Power (W)	Lumens	Lm/W
DL005	45	5 800	129
DL007	58	7 100	122
DL010	88	10 000	114
DL015	122	15 600	128
DL017	131	17 800	135
DL020	166	20 400	123

Higher T-ratings and optimal thermal management extend LED and driver life expectancy

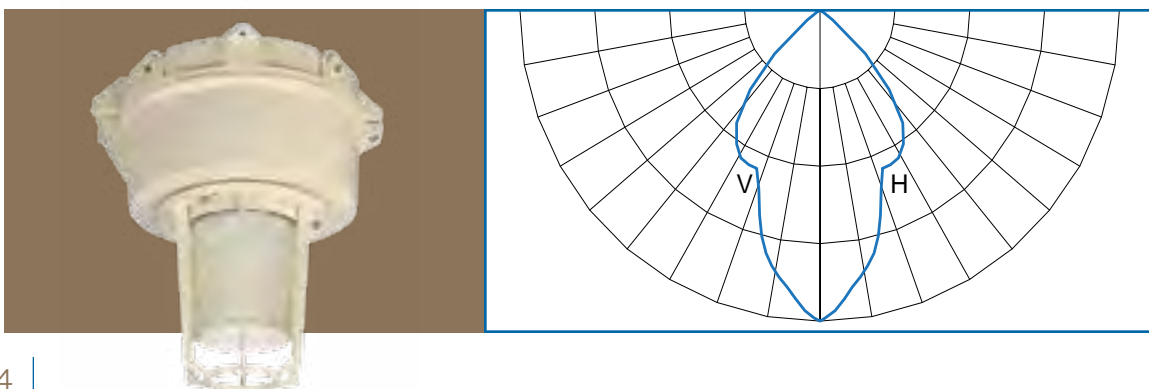
With an exclusive design that maximizes heat dissipation, Hazlux® LED fixtures lower internal temperature allow for higher T-rating and extended LED and driver life in extreme ambient temperatures.

With the entire luminaire acting as a heat sink, Hazlux® LED fixtures allow higher wattages for better performance.

Hazlux Model	T _{amb} = 40 °C		T _{amb} = 55 °C	
	Classe I Div 2	Classe I Div 2 et Classe II	Classe I Div 2	Classe I Div 2 et Classe II
DL005	T5	T4A	T5	T4
DL007	T5	T4A	T5	T4
DL010	T4A	T4A	T4	T4
DL015	T4	T3C	s.o.	s.o.
DL017	T4	T3C	s.o.	s.o.
DL020	T3C	T3C	s.o.	s.o.

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°.



Labor-saving installation and maintenance-friendly construction

Designed for easy retrofit installation

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

Hazlux® 3 LED DL Series

Assembly guide

Complete luminaire consists of : **Mounting Style**

- + a Tank
- + a Globe or Refractor
- + a Optional Guard and/or Reflector



MOUNTING
STYLE



Cone-Top Pendant

Ceiling Mount

HazVerter™ Adapter Ring

Wall Mount

25° Angle Stanchion

Straight Stanchion



BALLAST
TANK



GLOBE or
REFRACTOR



Refractor
Globe



Heat-Resistant
Prismatic
Glass Globe



GUARDS



Polymeric
Guard



Cast
Guard



REFLECTORS
or EXIT
SIGNS



30°
Angle Reflector



Standard
Dome

Catalogue numbering system

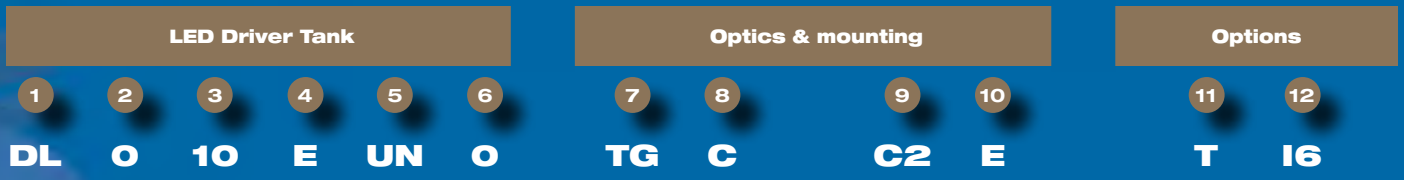
Class I Division 2, Groups A, B, C and D
Zone 2, Groups IIC, IIB, IIA

Class II Divisions I and 2, Groups E, F and G

Class III
- UL1598A for Marine Locations
- NEMA-4X
- UL844
- CSA C22.2 No 137

Contact your Thomas & Betts sales representative to verify classification

Simultaneous Class I Division 2 and Class II



1 Fixture series

DL = Hazlux® 3 LED series

2 Fixture

O = Standard fixture

3 Lumen output

05 = 5,800 lumens, 45W
07 = 7,100 lumens, 58W
10 = 10,100 lumens, 88W
15 = 15,600 lumens, 122W
17 = 17,800 lumens, 131W
20 = 20,400 lumens, 166W

4 Driver circuit

E = Electronic LED driver

5 Voltage/Frequency

UN = Universal 120 to 277VAC
50/60Hz (voltage range includes 208V, 220V, 240V etc.)

UN2 = Universal 347/480VAC
50/60Hz (Not available for DL017 and DL020)

6 LED driver housing style

O = Standard housing
S = Standard housing with stainless-steel insert

7 Order assembly options

TG = Thermal shock-resistant glass globe
R1 = Type I glass refractor globe
R3 = Type III glass refractor globe
R5 = Type V glass refractor globe

8 Guard option

Blank= No guard
C = Cast aluminum guard
L = Polymeric guard

9 Mounting style

A2 = 3/4 in. cone-top pendant
A3 = 1 in. cone-top pendant
B2 = 3/4 in. wall mount
B3 = 1 in. wall mount
C2 = 3/4 in. ceiling mount
C3 = 1 in. ceiling mount
HV1 = HazVektor™ adapter ring
Class I Div. 2, Zone 2
HV2 = HazVektor™ adapter ring
Class I Div. 2, Zone 2
Class 2
L4 = 1-1/4 in. straight stanchion
L5 = 1-1/2 in. straight stanchion
S4 = 1-1/4 in. 25° angle stanchion
S5 = 1-1/2 in. 25° angle stanchion
Blank= No mounting
(to replace existing fixture)

10 UNIPAK™ option

E = UNIPAK™ with LED light source

11 Special options

T = HazCote® custom anti-corrosion coating (Consult factory)
G = Grey colour option

12 Light distribution options

I3 = Internal reflector 35° beam angle*
I4 = Internal reflector 45° beam angle*
I6 = Internal reflector 65° beam angle*

* : DL005, DL007 and DL010 only

Hazlux® 3 LED DL Series

Individual Components

MOUNTING OPTIONS



Catalogue Number	Description	Conduit Hub Size
VA2 VA3	Cone-Top Pendant	3/4 in. 1 in.
VC2 VC3	Ceiling Mount	3/4 in. 1 in.
VB2 VB3-VIB	Wall Mount	3/4 in. 1 in.
VS4-VIB VS5-VIB	25° Angle Stanchion	1-1/4 in. 1-1/2 in.
VL4-VIB VL5-VIB	Straight Stanchion	1-1/4 in. 1-1/2 in.
HV1	HazVertor™ Adapter Ring - Class I Div. 2, Zone 2	N/A
HV2	HazVertor™ Adapter Ring - Class I Div. 2, Zone 2 Class 2	N/A

GLOBES or REFRACTORS



Catalogue Number	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

GUARDS

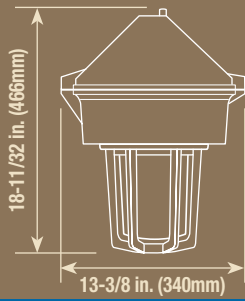


Catalogue Number	Description
VGU22P	Polymeric Guard
VGU22	Cast Guard

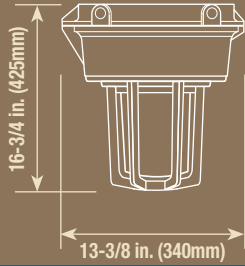
REFLECTORS



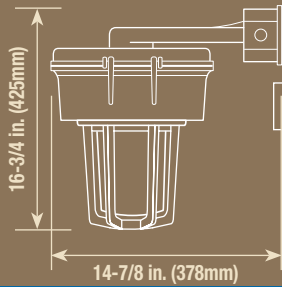
Catalogue Number	Description
VR15P	Standard Dome, Fiberglass Reinforced Polyester
VRA15P	Angular Dome, Fiberglass Reinforced Polyester



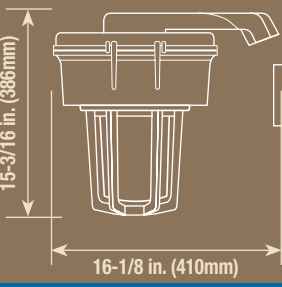
Cone-Top Pendant



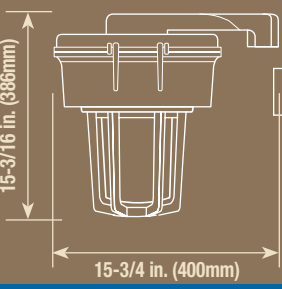
Ceiling Mount



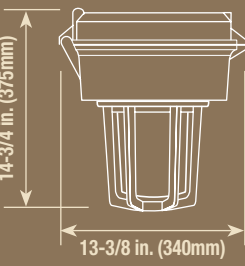
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion

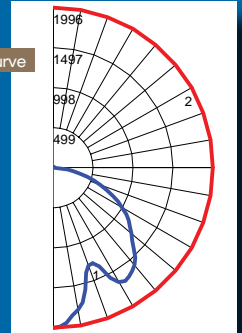


HazVector™ Ring

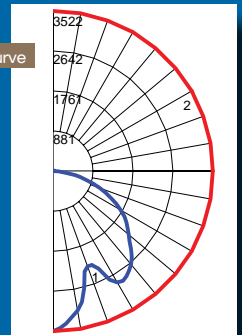
Dimensions & globe photometric data

Photometry Reference Data — Standard Housing with Globe and Guard — Ceiling Mount

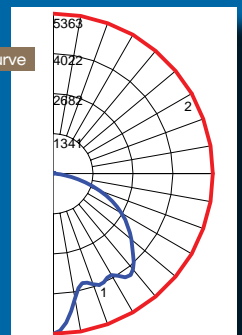
Catalogue No.	DLO05EUNOTGC2E	Candlepower Curve
Luminaire Lumens	5,895	
Luminaire Efficacy Rating (LER)	131	
Input Watt	45.07	
Spacing Criterion (0-180)	1.3	
Spacing Criterion (90-270)	1.3	
Spacing Criterion (Diagonal)	1.44	



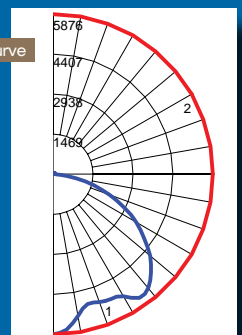
Catalogue No.	DLO10EUNOTGC2E	Candlepower Curve
Luminaire Lumens	10,123	
Luminaire Efficacy Rating (LER)	115	
Input Watt	88.19	
Spacing Criterion (0-180)	1.24	
Spacing Criterion (90-270)	1.24	
Spacing Criterion (Diagonal)	1.4	



Catalogue No.	DLO15EUNOTGC2E	Candlepower Curve
Luminaire Lumens	15,605	
Luminaire Efficacy Rating (LER)	128	
Input Watt	121.8	
Spacing Criterion (0-180)	1.08	
Spacing Criterion (90-270)	1.08	
Spacing Criterion (Diagonal)	1.42	



Catalogue No.	DLO20EUNOTGC2E	Candlepower Curve
Luminaire Lumens	20,476	
Luminaire Efficacy Rating (LER)	123	
Input Watt	166.1	
Spacing Criterion (0-180)	1.46	
Spacing Criterion (90-270)	1.46	
Spacing Criterion (Diagonal)	1.58	



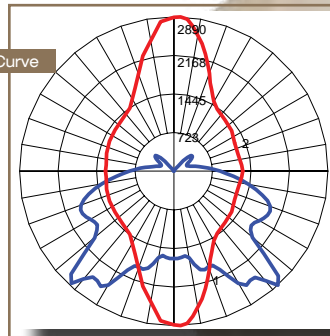
Hazlux® 3 LED DL Series

Refractor photometric data

Photometry reference data –
Standard ballast housing with glass refractor – Ceiling mount

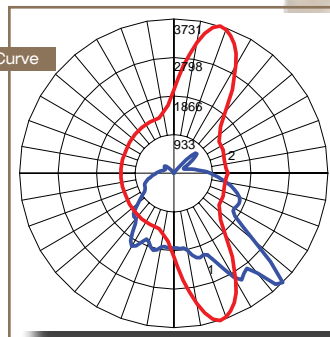
Catalogue No. **DLO10EUNOR1C2E** Candlepower Curve

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)



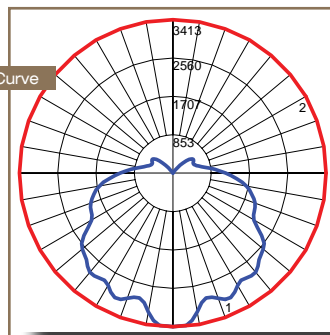
Catalogue No. **DLO10EUNOR3C2E** Candlepower Curve

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)



Catalogue No. **DLO20EUNOR5C2E** Candlepower Curve

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)



Overview Hazardous Locations

Hazardous Locations

A hazardous location is defined as an area where the possibility of explosion and fire is created by the presence of flammable gases, vapors, dust, fibers or flyings.

Class I — Gas

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 liquefied petroleum gas or natural gas

Class II — Dust

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

Class III — Fibers

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

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

Division 2 — Not Normally Hazardous

Hazardous gases or dusts are not present under normal operating conditions.

Groups A, B, C, 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

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

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