



Hazlux[®]

Hazardous location lighting
products and accessories

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 to reduce maintenance and prevent downtime.

Table of contents



Product matrix
2



General information
4



Applications selector
8

Area lighting



AH1 LED Series
12



H3 LED Series
16



FMR LED Series
26



SMR LED Series
32



FC LED Series
36

Area and Flood Hybrid lighting

Flood lighting

Linear lighting



LI1 LED Series
42



LI1-EM LED Series
46



LE2 LED Series
50



WNL LED Series
54



LGS LED Series
58

Accessories



Quick pole assembly
62

Emergency lighting



CERTIFIED
FOR U.S.
ONLY



VB LED Series
66



VC LED Series
68



VE LED Series
70



VR LED Series
71



CERTIFIED
FOR CANADA
ONLY



Hazardous location
battery unit
72



Hazardous location
remote fixture
73



Hazardous location
pictogram sign
74



Hazardous location
combo pictogram
75

Classifications








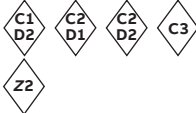

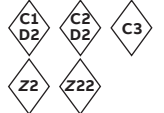


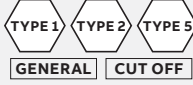
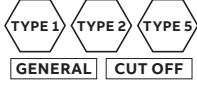












Hazardous locations
classifications
77







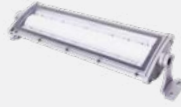


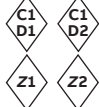

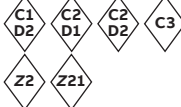



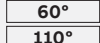



















Ignition temperatures
and group
classifications
78

Product matrix



	Area lighting		Area/Flood lighting	
	AH1 LED p. 12	H3 LED p. 16	FMR LED p. 26	SMR LED p. 32
				
Classification				
Optics - IESNA				
Optics - NEMA	-	-		
IP/NEMA				
DLC	-			-
Certification				
Wattage	40-60W	37-138W	107-310W	26-57W
Lumen	6,499-8,514lm	5,600-20,000lm	12,000-32,000lm	3,000-6,300lm
Voltage	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347VAC, 60Hz
Dimming	-	0-10V dimming	0-10V dimming	0-10V dimming



	Flood lighting		Linear lighting			
	FC LED p. 36	LI1 LED p. 42	LI1-EM LED p. 46	LE2 LED p. 50	WNL LED p. 54	LGS LED p. 58
						
Classification						
Optics - IESNA	-					
Optics - NEMA		-	-	-	-	-
IP/NEMA						
DLC			-		-	-
Certification						
Wattage	80-150W	40-80W	80W (6W EMB)	40-80W	36-109W	12-41W
Lumen	10,400-19,500lm	4,800-9,600lm	10,800lm (812lm EMB)	5,480-10,960lm	4,000-10,000lm	580-2,300lm
Voltage	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120-277VAC, 50/60Hz 347-480VAC, 50/60Hz	120VAC, 50/60Hz 12V or 24V DC
Dimming	-	-	-	-	0-10V dimming	-

¹IP68 only available with DC general location version

Choosing the right partner

For your hazardous location lighting project

When you're looking for hazardous location lighting, you need an experienced partner you can trust. Someone who will accompany you every step of the way and provide expert advice and exceptional service. The ABB sales team has been doing just that for close to a century.

Since 2001, the ABB Hazlux® manufacturing facility has been ISO 9001, 1400 and OHSAS 18001 compliant.

Engineering expertise at your fingertips

Our product engineers are readily available to answer all your technical questions, and partner with you in selecting the best lighting solution to reach your goals.

High standards of quality control

Quality is built 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 our strict quality standards, and then professionally packed so that your order will arrive intact at your installation site.

Product customization

We design and manufacture units, giving us unparalleled capabilities to customize lighting fixtures to meet your specific needs.

Reduced lead time

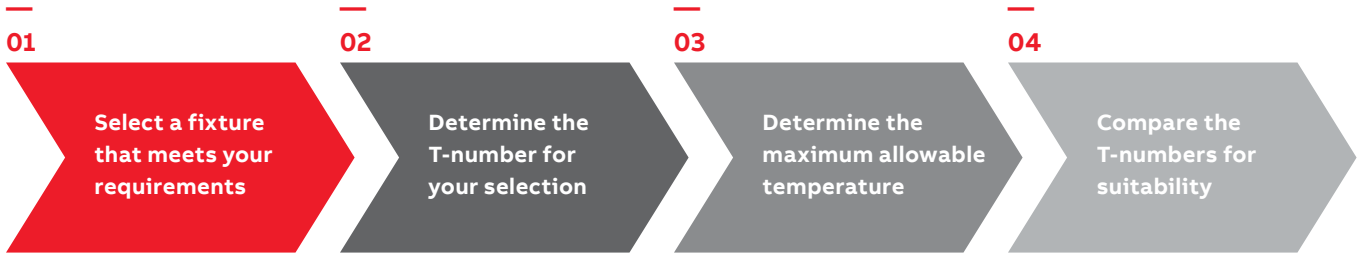
We produce what you need when you need it in our state-of-the-art North American Center of Excellence. We can easily accommodate both large and small production runs with a fast turnaround.

A sustainable development policy is in effect at the ABB production facility to reduce our carbon footprint and minimize the environmental impact of our operations. Through a series of initiatives, reductions in water usage, electricity and natural gas, packaging and pallets are being realized.



Environment selection method

The right fixture in the right application



01
Select a fixture that meets your Class, Division and Group requirements.
 For example : Class I, Division 2, Group D

02
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 contact your Hazlux sales representative.

03
Determine the maximum allowable temperature for the hazardous materials.

Class I Gas	Ignition temperature for the specific gas (from NFPA497M)
Class II Dust	Group E: 392°F (200°C)
	Group F: 392°F (200°C)
	Group G: 329°F (165°C)
	Or ignition temperature of dust if lower
	Above from NEC table 500-3(F)

04
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	842°F (450°C)
T2	572°F (300°C)
T2A	536°F (280°C)
T2B	500°F (260°C)
T2C	446°F (230°C)
T2D	419°F (215°C)
T3	392°F (200°C)
T3A	356°F (180°C)
T3B	329°F (165°C)
T3C	320°F (160°C)
T4	275°F (135°C)
T4A	248°F (120°C)
T5	212°F (100°C)
T6	185°F (85°C)

Hazardous locations applications

We have a fixture for virtually any condition

Hazlux lighting fixtures are built to withstand most hazardous application.

Examples of hazardous locations

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
Power generation plants
Waste treatment facilities
Paint, chemical and plastic mixing/storage areas
Bulk truck terminals
Solvent/cleaning areas



01

Hose-down and wet locations

- Certified for wet locations – NEMA 4X, IP65, IP66, IP67/68 (indoor and outdoor); CSA and cULus 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

02

High ambient temperature areas

- All standard fixtures are tested and listed for at least 104°F (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
- Selection of high ambient temperature rated fixtures – contact your ABB representative for fixtures certified for 131°F (55°C) and 149°F (65°C) applications
- Steam spray and thermal shock resistant



03

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 for maximum corrosion resistance
- Special HazCote® corrosion fighter finish available for extremely corrosive areas; consult your ABB representative for details



Hazlux® fixture applications



04

Ice and arctic conditions

- Gasketing system and finish allow for expansion and contraction through wide temperature variations
- High-strength mechanical mountings withstand ice loading
- Tempered glassware available for extra thermal shock safety margin



05

Vibration 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 Teflon®-coated globes for protection from vandalism



06

Dust blanket

- Tested and listed by UL and CSA
- 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



07

Wind

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

Teflon is a registered trademark of The Chemours Company FC, LLC.

Product application

A wide range of products and features are available to suit the needs of specific hazardous locations. Consider the requirements of each space to select the best lighting fixtures:

- Average footcandles
- Average mounting height
- Lumen output required for the space
- Optics
- Type and number of units

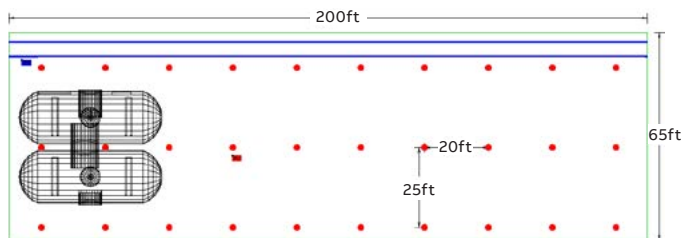
The following examples provide guidance for selecting the right fixtures according to different environments:

H3 LED



Machinery room

H3 LED		
Site	Room dimensions	200ft x 65ft
	Mounting height	25'
Photometric	AVG. Footcandle	30fc
	Reflectances	40-50-20
Product	Lumen output	20,000 lumens
	Wattage	138W
	Optics	TG – Thermal shock-resistant globe
	Part number	DL020EUNOTG
Quantity	Number of fixtures	30

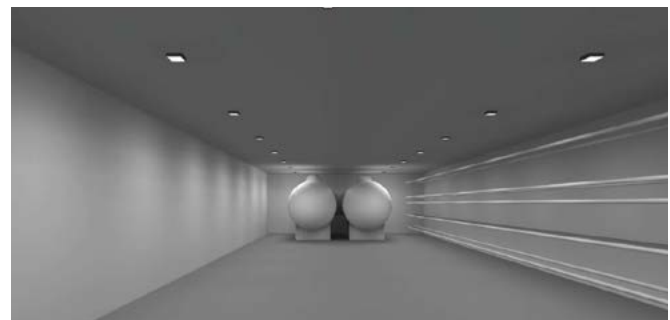


FMR LED



Machinery room

FMR LED		
Site	Room dimensions	200ft x 65ft
	Mounting height	25'
Photometric	AVG. Footcandle	30fc
	Reflectances	40-50-20
Product	Lumen output	32,000 lumens
	Wattage	312W
	Optics	CUT – Wide beam (no optics)
	Part number	FMR30-CUT-W-50-AC
Quantity	Number of fixtures	16



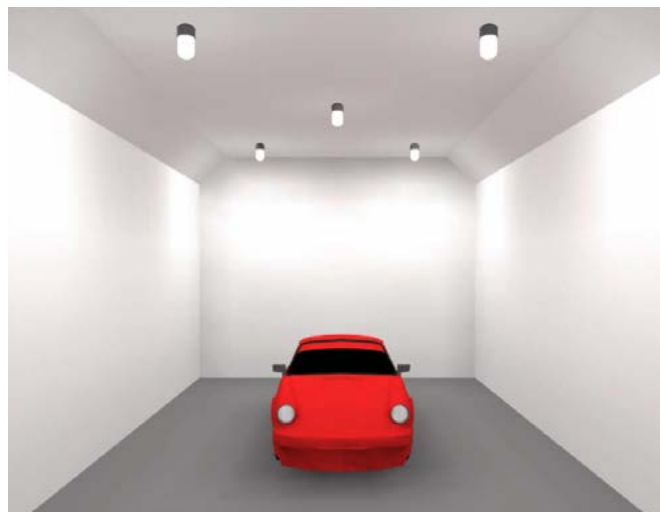
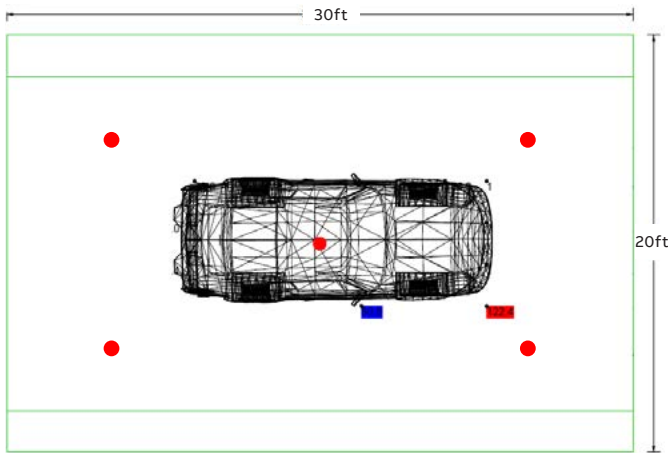
Product application

H3 LED



Inspection area

H3 LED		
Site	Room dimensions	30ft x 20ft
	Mounting height	16'
Photometric	AVG. Footcandle	108fc
	Reflectances	80-80-20
Product	Lumen output	20,000 lumens
	Wattage	138W
	Optics	TG – Thermal shock-resistant globe
	Part number	DL020EUNOTG
Quantity	Number of fixtures	5

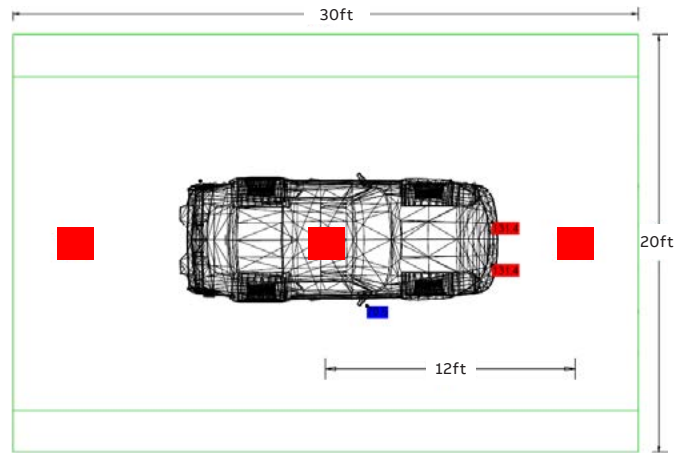


FMR LED



Inspection area

FMR LED		
Site	Room dimensions	30ft x 20ft
	Mounting height	16'
Photometric	AVG. Footcandle	108fc
	Reflectances	80-80-20
Product	Lumen output	32,000 lumens
	Wattage	312W
	Optics	CUT – Wide beam (no optics)
	Part number	FMR30-CUT-W-50-AC
Quantity	Number of fixtures	3



Hazardous Location Lighting



Table of contents

Area lighting products



AH1 LED Series
12



H3 LED Series
16

Area and Flood Hybrid lighting products



FMR LED Series
26



SMR LED Series
32

Flood lighting product

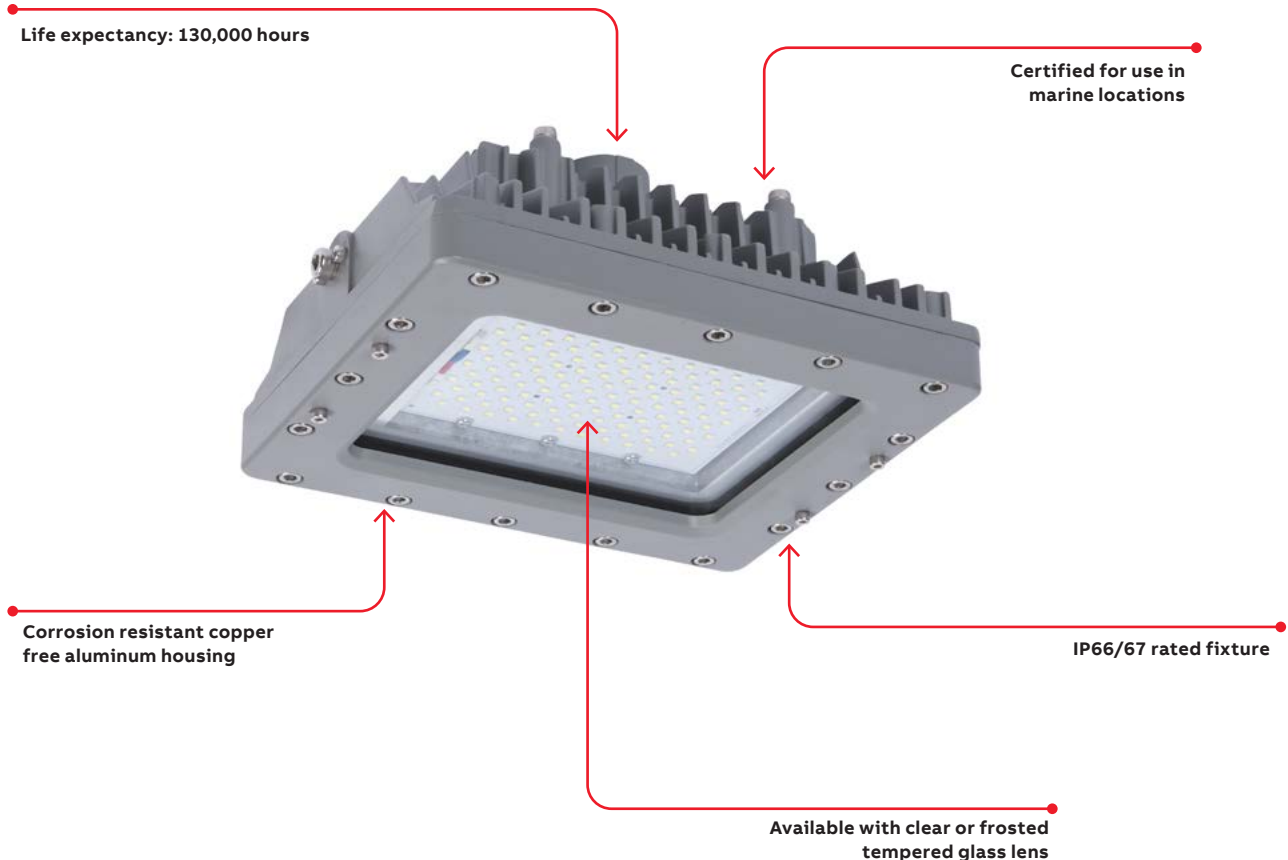


FC LED Series
36

Hazlux® AH1 LED Series

Explosion-proof, shock and vibration resistant lighting fixture, designed for use in marine and wet locations, and a variety of hazardous areas.

CERTIFICATION	APPROVALS	APPLICATIONS
CLASS I Division 1 Group B, C, D Zone 1 Division 2 Group A, B, C, D Zone 2 CLASS II Division 1 Group E, F, G Zone 21 Division 2 Group E, F, G CLASS III Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.	   	Power plants Paper mills Paint spray booth Wastewater treatment plants Chemical processing Petrochemical



Hazlux® AH1 LED Series

Key features and information

FEATURES

Temperature range 40W and 50W models:
-40°F to 149°F (-40°C to 65°C)

Temperature range 60W model:
-40°F to 147°F (-40°C to 64°C)

Exposed hardware made of stainless steel

HOUSING

Housing made of copper-free aluminum

Anti-corrosion housing (tested for 1000hrs)

Tempered glass lens is impact and thermal shock resistant

Lens tested to IK08

High temperature silicone gasketing

Available with multiple distribution patterns

LED

Efficacy: up to 150 Lm/W

Lumen output: From 6,499 lumens to 8,514 lumens

Nichia LED's

CRI Ra>75

Correlated Color Temperature (CCT): 5000K (standard), 3000K and 4000K (optional)

ELECTRICAL

Operating voltage: 120Vac-277Vac : 40W and 60W

Operating voltage: 347Vac-480Vac: 50W

Frequency: 50/60Hz

Power factor .95

Driver efficiency 90%

THD <20%

Surge protection standard at 4KV. Contact your sales representative if higher protection is required.

MOUNTING

Pendant mount

Optional yoke/pipe bracket for wall/ceiling or pole mount

APPROVALS

UL 844

UL 8750 LED safety

UL 1598 wet locations

UL 1598A marine

CUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

IP66/67

IK08

5G (shock and vibration resistant)

1000hrs salt spray

WARRANTY

5 year limited warranty

T-code chart

Fixture	40 watt	50 watt	60 watt
C1D1	T6	T6	T6
C1D2	T4	T4A	T4
CIID2	T6	T6	T5

Electrical specifications

Specification	AH1-40	AH1-50	AH1-60
Rated power	40W	50W	60W
Input voltage	AC120-277V	AC347-480V	AC120-277V
Input frequency	50/60Hz	50/60Hz	50/60Hz
Input current	AC120/277V AC347/480V	0.34/0.16A N.A	N.A 0.48/0.215A
Power factor	≥0.95		

Lighting output

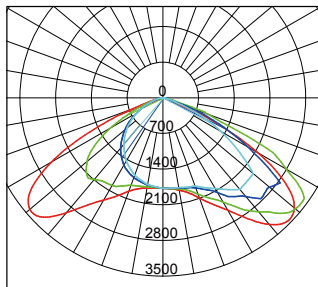
Fixture	40 watt	50 watt	60 watt
Lumen output	6499	7179	8514
Lumen per watt	160	140	140



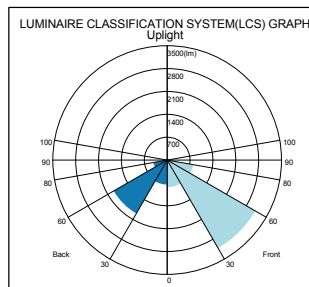
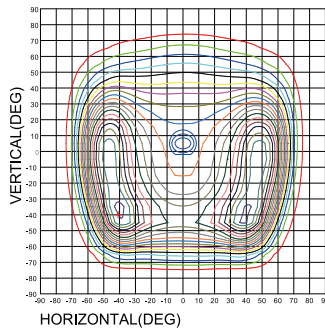
Hazlux® AH1 LED Series

PHOTOMETRY

Type III

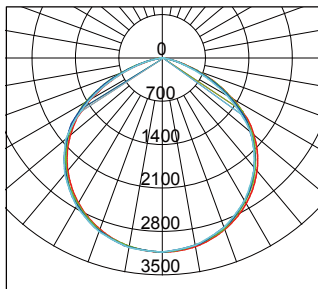


- C0/180,134.6
- C30/210,133.3
- C60/240,98.3
- C90/270,102.0

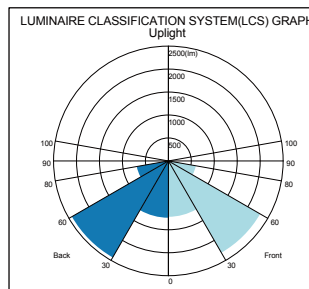
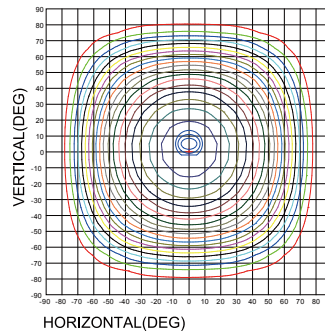


BUG (Back, Up, Glare) Rating: B2-U0-G1

Type V



- C0/180,112.5
- C30/210,113.7
- C60/240,112.9
- C90/270,111.4



BUG (Back, Up, Glare) Rating: B3-U0-G1

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount

(Included standard)

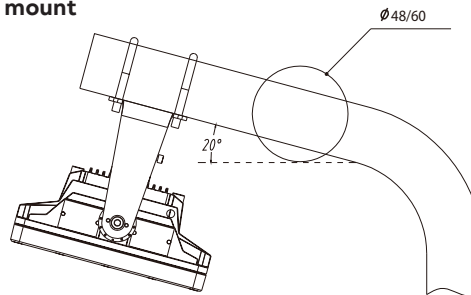


Yoke/pipe bracket

(Optional accessory)



Pole mount



PB02 - Yoke/pipe bracket (SUS 304) stainless steel
(Optional accessory)



PC01 - Pipe clamp (1 pair)
(Optional accessory)



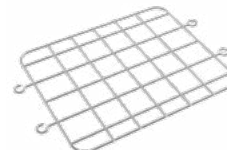
PC01 = Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48 mm)

PC02 - Pipe clamp (1 pair)
(Optional accessory)



PC02 = Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60 mm)

WG04 - Stainless steel wire guard
(Optional accessory)

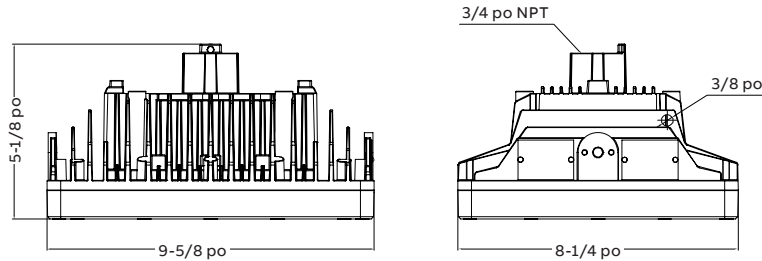


Note: Wall mount bracket required for pipe installation.

Hazlux® AH1 LED Series

DIMENSIONS

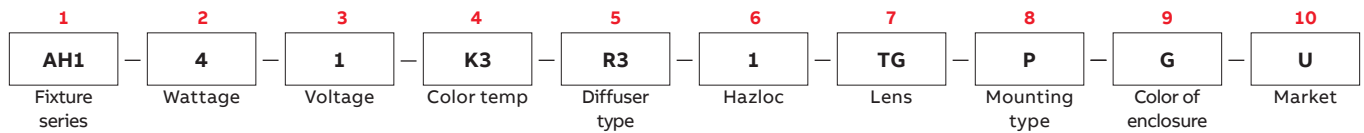
Dimensions are approximate and subject to change.



Model	Net weight C1D1 (Glass)	Product dimensions
AH1-40	4.9kg/10.8lbs	245x210x129mm 9.7x8.3x5.1in
AH1-50	5.3kg/11.7lbs	
AH1-60	5.3kg/11.7lbs	

NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Fixture series	AH1	Hazlux LED Class I Div 1
2 Wattage	4	40 watts
	5	50 watts
	6	60 watts
3 Voltage	1	120-277V (40W and 60W only)
	4	347-480V (50W only)
4 Color temp	K3	3000K ¹
	K4	4000K ¹
	K5	5000K
5 Diffuser type	R3	Type 3 Diffuser ¹
	R5	110° (no diffuser)
6 Hazloc	1	C1D1
7 Lens	TG	Clear glass
	FG	Frosted glass ¹
8 Mounting type	P	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
9 Color of enclosure	G	Gray
10 Market	U	U.S. market
	Blank	Canadian market

¹Longer lead time, contact your sales representative for more details.

Accessories (sold separately)

PC01	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
PB02	Yoke/pipe bracket (SUS 304) stainless steel
WG04	Stainless steel wire guard

Note: For Canadian market, please add "-CA" to the part no. (ex: PC01-CA).

Hazlux® H3 LED Series

A safe, dependable and rugged luminaire with an exclusive design that maximizes heat dissipation, offers excellent performance and energy efficiency.

CERTIFICATION

CLASS I	
Division 2	Group A, B, C, D
Zone 2	Groups IIC, IIB, IIA
CLASS II	
Division 1	Group E, F, G ¹
Division 2	Group F, G ²
CLASS III	

¹Optics: CUT reflector not suitable for Class II, Div 1. Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS



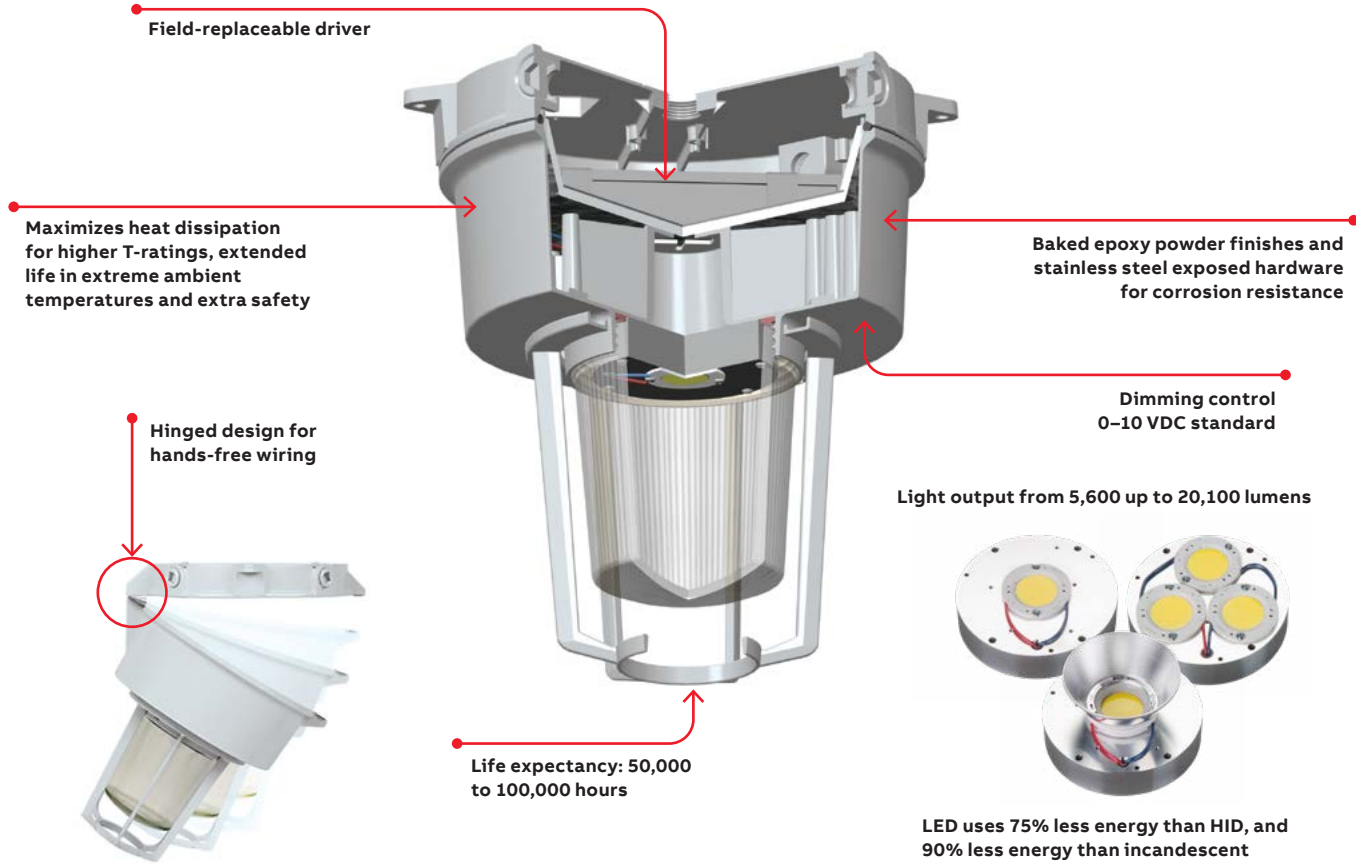
Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl



UL844
UL1598
UL8750

APPLICATIONS

- High mast
- Parking lots
- Tunnels
- Swimming pools
- High bay
- Coolers and freezers
- Inspection
- Quality control areas
- Packaging areas
- Hangars
- Storage facilities
- Oil and gas processing
- Agricultural
- Chemical/industrial facilities



Hazlux® H3 LED Series

Key features and information

FEATURES

Operating Temperature: -40F to 131F (-40C to 55C)

Field-replaceable driver

Higher T-ratings, extended life in extreme ambient temperatures and extra safety

Versatile optics include internal reflector options with 35°, 45° and 65° beam angles

HOUSING

Baked epoxy powder finishes and stainless steel exposed hardware for corrosion resistance

Hinged design for hands-free wiring

Borosilicate glass globes and polycarbonate CUT lens available

Available with multiple distribution patterns

Housing made of copper-free aluminum

Gray color option and special black anti-corrosion coating available (Hazcote)

Glass Teflon coating option available

LED

Efficacy: up to 151 Lm/W

Lumen output: From 5,600 lumens to 20,000 lumens

Bridgelux LED's

CRI Ra>70

Correlated Color Temperature (CCT): 5000K (standard), 3000 K, 3500 K, 4000 K (optional)

ELECTRICAL

0-10 V Dimming

Operating voltage: universal 120-277 VAC (voltage range includes 208 V, 220 V, 240 V etc.), 347-480 VAC (50/60Hz)

Power factor 0.9

Driver efficiency 90%

THD <20%

MOUNTING

Cone-top pendant mount

Ceiling and pendant mount

Wall mount

Pendant mount

25° angle stanchion mount

90° stanchion mount

Hazvertor ring

APPROVALS

UL844

CSA C22.2 No. 137

UL 1598 wet locations

UL 8750 LED safety

CUL approved to CSA 22.2 No. 137,

CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

DLC

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualification.

NEMA 4X

WARRANTY

5 year limited warranty

T-code chart

	Class I Zone 2 Groups IIC, IIB, IIA	Class I Division 2 Groups A, B, C, D	Class II Groups E, F, G	Simultaneous Class I Division 2 and Class II
Glass globe DL005, DL007, DL010				
Ambient temp. -40 to 104°F (-40 to 40°C)	T5	T5	T6	T5
Ambient temp. -40 to 131°F (-40 to 55°C)	T4	T4A	T6	T4A
Glass globe DL005, DL007, DL010 with internal reflector I3, I4, I6				
Ambient temp. -40 to 104°F (-40 to 40°C)	T4	T4A	T6	T4A
Glass globe DL015, DL017, DL020				
Ambient temp. -40 to 104°F (-40 to 40°C)	T4	T4A	T4A	T4A
Optic type cut DL005, DL007, DL010				
Ambient temp. -40 to 104°F (-40 to 40°C)	T5	T5	T5 ¹	T5 ¹
Ambient temp. -40 to 131°F (-40 to 55°C)	T4	T4A	T4A ¹	T4A ¹
Optic type cut DL015, DL017, DL020				
Ambient temp. -40 to 104°F (-40 to 40°C)	T4	T4A	T4A ¹	T4A ¹

¹Cut reflector: Class II, Division 2, Groups F, G only

Surge suppression rating

ANSI C82.77-5 CAT C low compliant – no external surge suppression device required.

ANSI surge type	Differential mode (L-N)	Common mode (L-G, N-G, L and N-G)
1.2/50 μs combination wave (w/t 2 Ω)	6 kV	6 kV

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualification.

Hazlux® H3 LED Series

ELECTRICAL SPECIFICATIONS

Design Lights Consortium (DLC): summary of test results

Electrical, 120-277 VAC			
Model	Power (W)	Power factor	THD
DL010	71.9	0.97	10.1%
DL015	103.0	0.97	11.0%
DL020	137	0.97	12.3%

Photometry, 120-277 VAC	
TG globe	
Lumens	Lm/W
10,706	147.8
16,063	155
20,468	147.2

Photometry, 120-277 VAC	
CUT reflector	
Lumens	Lm/W
9,814	135.4
14,564	140.7
18,782	135.3

Electrical, 347 VAC			
Model	Power (W)	Power factor	THD
DL010	70.2	0.99	7.1%
DL015	104.9	0.99	7.6%
DL020	141.2	0.99	7.8%

Photometry, 347 VAC	
TG globe	
Lumens	Lm/W
10,582	147.7
-	-
21,284	149.6

Photometry, 347 VAC	
CUT reflector	
Lumens	Lm/W
9,659	134.9
-	-
19,065	134.1

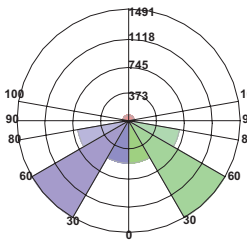
Summary of test results: Certified for optics TG globe and CUT reflector, and for AC input 120V, 277V and 347V

Hazlux® H3 LED Series

PHOTOMETRY

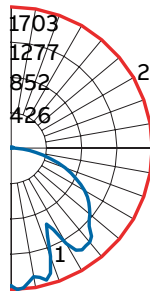
Standard globe	
Catalog number	DL005EUN0-TGC2
Luminaire lumens	5,764
Luminaire efficacy rating (LER)	156
Input watts	37.01
Spacing criterion	0.88
Spacing criterion (90–270)	0.88
Spacing criterion (diagonal)	1.52

Luminaire classification system



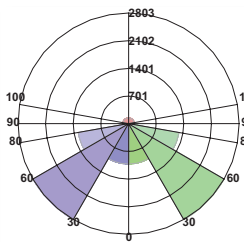
BUG rating : B2-U3-G1

Candlepower curve



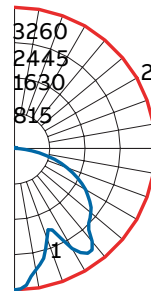
Standard globe	
Catalog number	DL010EUN0-TGC2
Luminaire lumens	10,739
Luminaire efficacy rating (LER)	148
Input watts	72.44
Spacing criterion	0.82
Spacing criterion (90–270)	0.82
Spacing criterion (diagonal)	1.46

Luminaire classification system



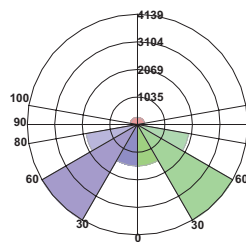
BUG rating : B3-U3-G2

Candlepower curve



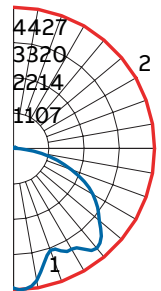
Standard globe	
Catalog number	DL015EUN0-TGC2
Luminaire lumens	16,110
Luminaire efficacy rating (LER)	155
Input watts	103.66
Spacing criterion	1.32
Spacing criterion (90–270)	1.32
Spacing criterion (diagonal)	1.58

Luminaire classification system



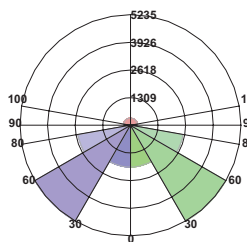
BUG rating : B3-U3-G3

Candlepower curve



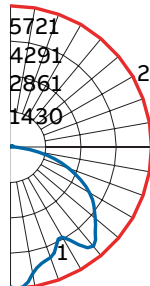
Standard globe	
Catalog number	DL020EUN0-TGC2
Luminaire lumens	20,530
Luminaire efficacy rating (LER)	148
Input watts	139.02
Spacing criterion	1.10
Spacing criterion (90–270)	1.10
Spacing criterion (diagonal)	1.56

Luminaire classification system



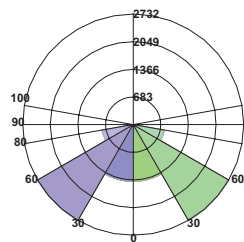
BUG rating : B4-U3-G3

Candlepower curve



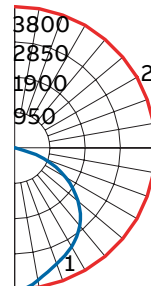
CUT reflector	
Catalog number	DL010EUN0-CUTC2
Luminaire lumens	9,846
Luminaire efficacy rating (LER)	136
Input watts	72.47
Spacing criterion	1.22
Spacing criterion (90–270)	1.22
Spacing criterion (diagonal)	1.38

Luminaire classification system



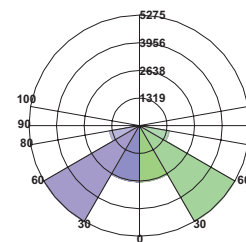
BUG rating : B3-U0-G1

Candlepower curve



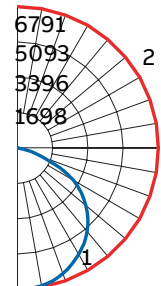
CUT reflector	
Catalog number	DL020EUN0-CUTC2
Luminaire lumens	18,841
Luminaire efficacy rating (LER)	136
Input watts	138.8
Spacing criterion	1.30
Spacing criterion (90–270)	1.30
Spacing criterion (diagonal)	1.42

Luminaire classification system



BUG rating : B4-U0-G1

Candlepower curve

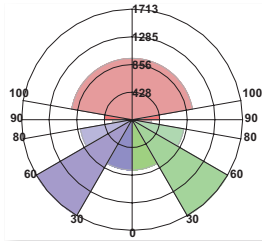


Hazlux® H3 LED

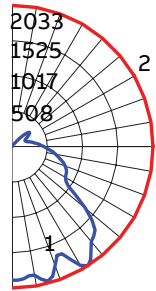
PHOTOMETRY

R5 globe	
Catalog number	DL010-R5
Luminaire lumens	9763
Luminaire efficacy rating (LER)	132
Input watts	75
Spacing criterion	1.42
Spacing criterion (90-270)	1.42
Spacing criterion (diagonal)	1.54

Luminaire classification system



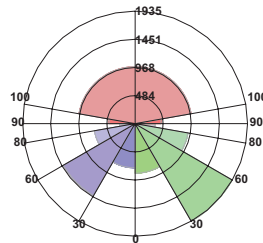
Candlepower curve



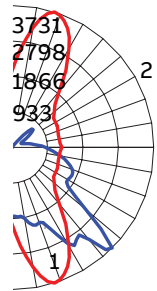
BUG rating : B2-U4-G3

R3 globe	
Catalog number	DL010-R3
Luminaire lumens	9851
Luminaire efficacy rating (LER)	133
Input watts	75
Spacing criterion	1.40
Spacing criterion (90-270)	1.82
Spacing criterion (diagonal)	1.46

Luminaire classification system



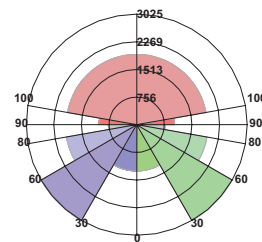
Candlepower curve



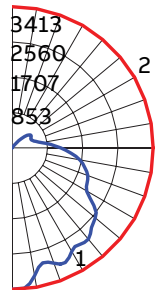
BUG rating : B2-U4-G3

R5 globe	
Catalog number	DL020-R5
Luminaire lumens	18767
Luminaire efficacy rating (LER)	137
Input watts	137
Spacing criterion	1.44
Spacing criterion (90-270)	1.44
Spacing criterion (diagonal)	1.62

Luminaire classification system



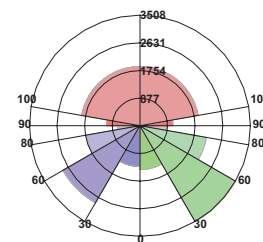
Candlepower curve



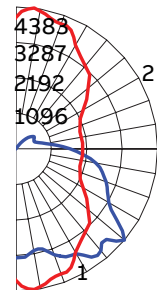
BUG rating : B2-U5-G5

R3 globe	
Catalog number	DL020-R3
Luminaire lumens	18764
Luminaire efficacy rating (LER)	137
Input watts	137
Spacing criterion	1.40
Spacing criterion (90-270)	1.90
Spacing criterion (diagonal)	1.58

Luminaire classification system



Candlepower curve



BUG rating : B3-U5-G5

Hazlux® H3 LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Fixture assembly guide



1 Mounting options



2 LED driver tank



3 Globe or reflector



4 Guard (n/a for CUT)



Mounting accessories

Part number	Description	Conduit hub size
VA2	Cone-top pendant ¹	3/4"
VA3		1"
VC2	Ceiling & pendant mount ¹	3/4"
VC3		1"
VB2-VIB	Wall mount ¹	3/4"
VB3-VIB		1"
VP2	3/4" Rigid pendant ¹	3/4"
VS4-VIB	25° Angle stanchion ¹	1-1/4"
VS5-VIB		1-1/2"
VL4-VIB	Straight stanchion ¹	1-1/4"
VL5-VIB		1-1/2"
HV3*	Hazvertor™ adaptor ring Crouse-Hinds ceiling, pendant ² & straight stanchion top hats ^{1,3}	
HV4*	Hazvertor™ adaptor ring stanchion angle mount ^{1,3}	
HV5*	Hazvertor™ adaptor ring wall mount ^{1,3}	

*HV3, HV4 and HV5 Hazvertors are CSA/CSAus certified

Note: • For Canadian market, please add "-CA" to the part no. (ex: VA2-CA).
 • For gray finish, please add "G" to the part number.
 For US, ex: VA2G. For Canada, ex: VA2G-CA

Globes or refractors

Part number	Description
VGT15	Heat-resistant prismatic glass globe ⁴
VGL15R1	IES type I refractor globe ⁴
VGL15R3	IES type III refractor globe ⁴
VGL15R5	IES type V refractor globe ⁴
CUT	Dark sky cut-off reflector with polycarbonate flat lens ⁴

Note: For Canadian market, please add "-CA" to the part no. (ex: VGT15-CA).

Guards

Part number	Description
VGU22	Cast guard
VGU22P	Polymeric guard

¹ For stainless steel inserts, please add "SI" to part no. (ex:VA2SI)

² Not compatible with HPM2 crouse-hinds top hats

³ Some installations may not be compatible

⁴ Must be replaced by the same refractor.

Note: • For Canadian market, please add "-CA" to the part no. (ex: VGU22-CA).
 • For gray finish, please add "G" to the part number.
 For US, ex: VGU22G. For Canada, ex: VGU22G-CA

Hazvertor™ compatibility



01



02



03

01 Hazvertor™ adaptor ring, model HV3

02 Hazvertor™ adaptor ring, angle machining, model HV4

03 Hazvertor™ adaptor ring, wall mount machining, model HV5

The Hazvertor™ adaptor ring is designed to let you quickly convert most Crouse-Hinds fixtures to Hazlux® H3 LED Generation 2 fixtures. It is available as an accessory or as an integral component to the Hazlux® H3 LED Generation 2 fixture.

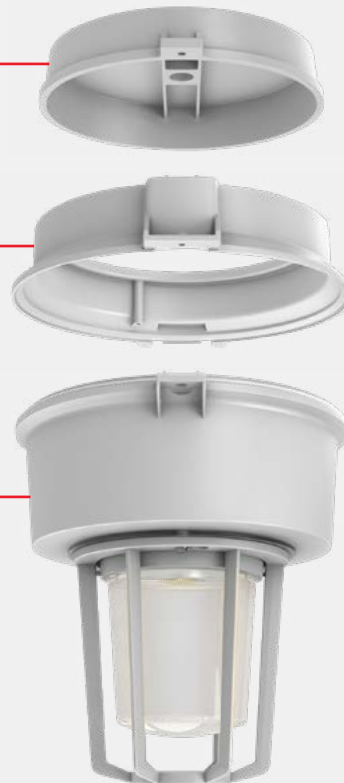
Mounting	Crouse-Hinds model	Crouse-Hinds part number	Hazvertor™ model
Pendant	APM2 3/4 in.	APM2	HV3
	APM3 1 in.		HV3
Ceiling	CM2 3/4 in.	CM2	HV3
	CM3 1 in.		HV3
Wall	TWM2 3/4 in.	TWM2	HV5
	TWM3 1 in.		HV5
Stanchion	JM5 1-1/2 in.	JM5	HV4
	PM5 1-1/2 in.		HV3
Quad mount	QM25 3/4 in.	QM25	HV3



Crouse-Hinds top hat

Hazvertor™ adaptor ring

Hazlux® H3 LED Generation 2



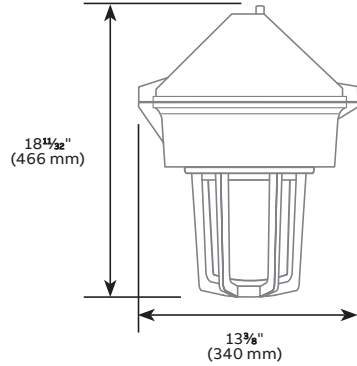
Hazlux® H3 LED Series

DIMENSIONS

Dimensions are approximate and subject to change.

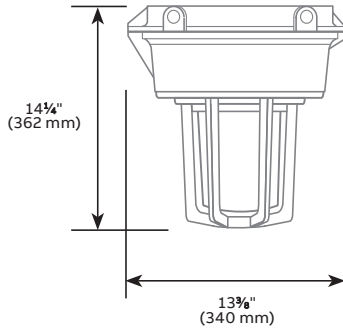
Cone-top pendant

7.3 kg | 16 lbs



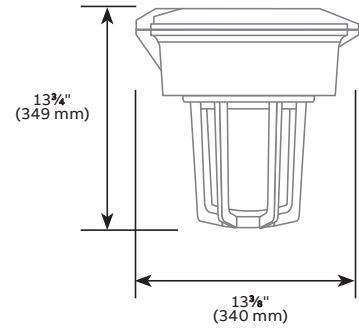
Ceiling and pendant mount

7.3 kg | 16 lbs



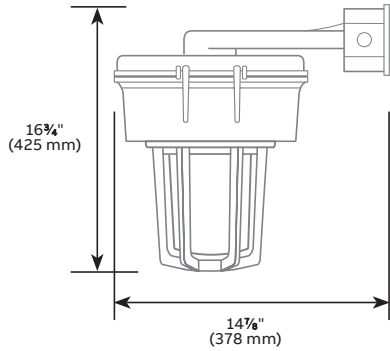
Pendant mount

6.8 kg | 15 lbs



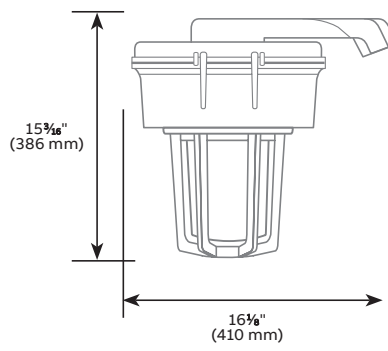
Wall mount

9.1 kg | 20 lbs



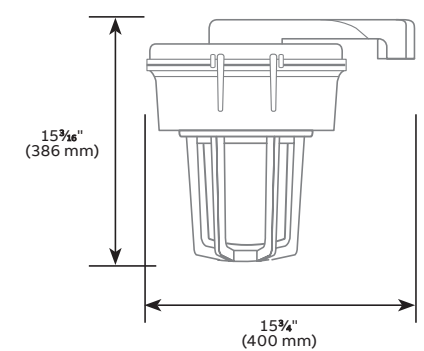
25° Angle stanchion

7.3 kg | 16 lbs



Straight stanchion

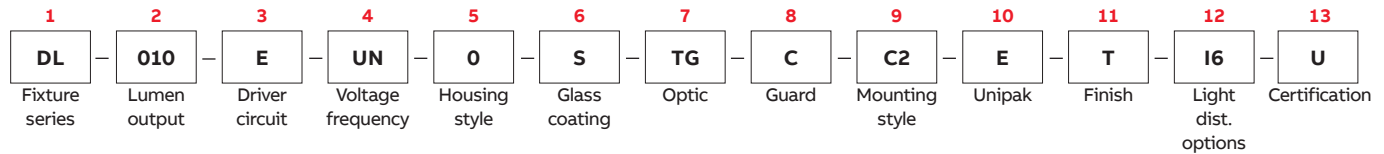
7.3 kg | 16 lbs



Hazlux® H3 LED Series

NUMBERING SYSTEM

Unipak™ = LED driver tank + optics and mountings + options (if necessary)



LED driver tank

Part	Part number	Description
1 Fixture series	DL	Hazlux H3 gen 2
2 Lumen output	005	5,600 lumens, 37 W
	007	7,500 lumens, 48 W
	010	10,500 lumens, 74 W
	015	15,800 lumens, 103 W
	017	17,300 lumens, 115 W
	020	20,100 lumens, 138 W
	3 Driver circuit	E
4 Voltage / Frequency	UN	Universal 120–277 VAC 50/60 Hz (voltage range includes 208V, 220V, 240V etc.)
	UN2	Universal 347-480 VAC 50/60 Hz
5 LED driver housing style	O	Standard housing
	S	Standard housing with stainless-steel insert

Optics

Part	Part number	Description
6 Glass coating	Blank	No teflon coating
	S	Teflon coating ¹
7 Optic	TG	Thermal shock-resistant glass globe
	R1	Type I glass refractor globe
	R3	Type III glass refractor globe
	R5	Type V glass refractor globe
	CUT	Dark sky cut-off polycarbonate flat lens ^{1,2}
8 Guard option	Blank	No guard
	C	Cast aluminum guard ³
	L	Polymeric guard ³

¹ Teflon coating NOT applicable to CUT.

² CUT optics: 3000K < CCT for dark sky. Cannot be used with stanchion mount. Not suitable for Class II, Division 1

³ Cannot be used with CUT

Mounting

Part	Part number	Description
9 Mounting style	A2	¾" Cone-top pendant
	A3	1" Cone-top pendant
	B2	¾" Wall mount
	B3	1" Wall mount
	C2	¾" Ceiling mount / pendant
	C3	1" Ceiling mount / pendant
	HV3	Hazvertor™ adaptor ring Crouse-Hinds® ceiling, pendant ² and straight stanchion top hats ¹
	HV4	Hazvertor™ adaptor ring stanchion angle mount ¹
	HV5	Hazvertor™ adaptor ring wall mount ¹
	L4	1¼" Straight stanchion
	L5	1½" Straight stanchion
	P2	¾" Rigid pendant
	S4	1¼" 25° Angle stanchion
S5	1½" 25° Angle stanchion	
Blank	No mounting (to replace existing fixt.)	
10 Unipak	E	(Standard, Unipak with LED lamp)

¹ HV3, HV4 and HV5 hazvertors are CSA/CSAus certified

Options

Part	Part number	Description
11 Finish	Blank	Ivory
	G	Gray
	T	Hazcote® black custom anti-corrosion coating (consult ABB rep) ¹
12 Light distribution options	I3	Internal reflector 35° beam angle ²
	I4	Internal reflector 45° beam angle ²
	I6	Internal reflector 65° beam angle ²
	Blank	5000K
	K30	3000K ¹
	K35	3500K ¹
	K40	4000K ¹
13 Certification	U	U.S market
	Blank	Canadian market

¹ Option subject to extended lead time.

² DL005, DL007 and DL010 only, maximum 40°C (104°F) ambient temperature, cannot be combined with refractors and CUT. Cannot be added in the field.



Hazlux® FMR LED Series

These multi-functional and feature-rich fixtures are capable of both meeting and exceeding the demands of the food processing industry, industrial and commercial environments and architectural applications.

AREA AND FLOOD HYBRID LIGHTING

CERTIFICATION

CLASS I	
Division 2	Group A, B, C, D
Zone 2	Group IIC
CLASS II	
Division 2	Group F, G
Zone 22	Group IIIB
CLASS III	
Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.	

APPROVALS

Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl










UL844
UL1598A
UL8750
c22.2 no. 137

IP66/67

APPLICATIONS

- High mast
- Parking lots
- Tunnels
- Loading docks
- High bay
- Food processing
- Coolers and freezers
- Inspection
- Meat processing
- Quality control areas
- Packaging areas
- Hangars
- Storage facilities
- Oil and gas processing
- Agricultural
- Marine/wet environments
- Chemical/industrial facilities



Hazlux® FMR LED Series

Key features and information

FEATURES

- Field replaceable driver
- Operating temperature: -40°F to 131°F (-40°C to 55°C)
- Thermally managed for maximum longevity
- Special powder coating for extreme resistance to chemical attack, aggressive cleaning agents and biocides used in food processing industries
- Low surface energy coating and smooth surface texture prevent debris build-up and staining
- Certified for hazardous locations, extreme water resistance, and corrosion protection for marine applications
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution

HOUSING

- Copper-free die-cast aluminum housing and high impact polycarbonate lens
- Available with multiple distribution patterns
- 3/4" NPT conduit entry

LED

- Efficacy: up to 105 Lm/W
- Lumen output: From 12,260 lumens to 31,670 lumens
- CREE LED's
- CRI Ra>90
- Correlated Color Temperature (CCT): 5000K (standard), 27000K, 3000K, 35000K and 4000K (optional)

ELECTRICAL

- 0-10V Dimming (10%–100%)
- Operating voltage: 120-277VAC, 50/60Hz 347-480VAC
- Frequency: 50/60Hz
- Power factor 0.95
- Driver efficiency 88%
- THD <20%
- Surge protection standard at 6KV

MOUNTING

- Surface/suspended mount
- Wall mount
- Hanging pendant
- Pole mount
- Yoke mount
- High vibration yoke
- Slip fitter yoke mount

APPROVALS

- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- NSF-2: splash/non-food zone applications
- UL 1598A & ABS marine locations
- IDA Dark Sky Approved
- DLC
- CUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
- IP66/67

WARRANTY

- 5 year limited warranty

T-code chart

Luminance	Input volt.	Optical models		Flood models		All models
		Ambient temp	Class I, Div 2 T-codes	Ambient temp	Class I, Div 2 T-codes	Class II, Div 2 T-codes
FMR10	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
FMR10	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
FMR15	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
FMR15	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
FMR20	AC	-40 to 131°F (-40 to 55°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
FMR20	HV	-40 to 129°F (-40 to 54°C)	T3C	-40 to 123°F (-40 to 51°C)	T4	T5
FMR25	AC	-40 to 123°F (-40 to 51°C)	T3C	-40 to 131°F (-40 to 55°C)	T4A	T5
FMR25	HV	-40 to 111°F (-40 to 44°C)	T3B	-40 to 122°F (-40 to 50°C)	T4A	T5
FMR30	AC	-40 to 109°F (-40 to 43°C)	T3	-40 to 108°F (-40 to 42°C)	T4A	T5
FMR30	HV	-40 to 109°F (-40 to 43°C)	T3	-40 to 104°F (-40 to 40°C)	T3	T5

Electrical specifications

Luminance	Input voltage	Rated wattage (watts)	Rated voltage (volts)	Frequency (Hz)	Rated current (amps)
FMR10	AC	107	120-277	50/60	1.11-0.48
FMR10	HV	129	347-480	50/60	0.43-0.31
FMR15	AC	145	120-277	50/60	1.42-0.61
FMR15	HV	145	347-480	50/60	0.47-0.34
FMR20	AC	190	120-277	50/60	1.74-0.75
FMR20	HV	187	347-480	50/60	0.59-0.42
FMR25	AC	247	120-277	50/60	2.18-0.95
FMR25	HV	248	347-480	50/60	0.74-0.53
FMR30	AC	312	120-277	50/60	2.82-1.22
FMR30	HV	310	347-480	50/60	0.96-0.70

Hazlux® FMR LED Series

PHOTOMETRY

Modular optics (20 options)

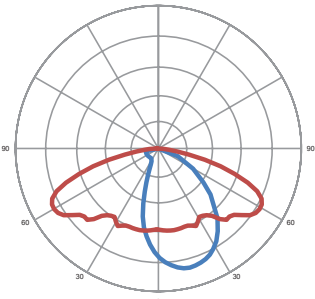
R2 – IESNA Type 2		
Model	Lumens	Lumens/watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

OC – Oval		
Model	Lumens	Lumens/watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

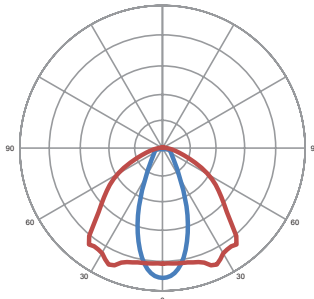
SC – Narrow 18°		
Model	Lumens	Lumens/watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

CUT – Wide beam		
Model	Lumens	Lumens/watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

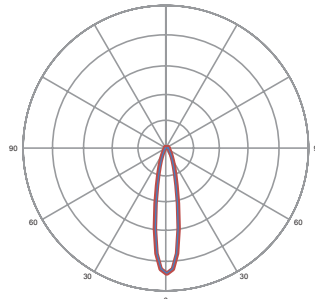
AREA AND FLOOD HYBRID LIGHTING



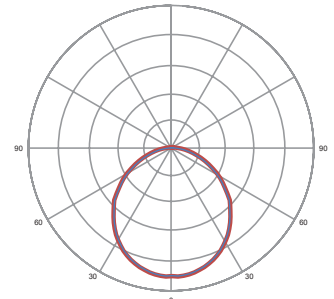
BUG rating : B4-U0-G4



BUG rating : B5-U1-G1



BUG rating : B5-U1-G1



BUG rating : B5-U0-G2

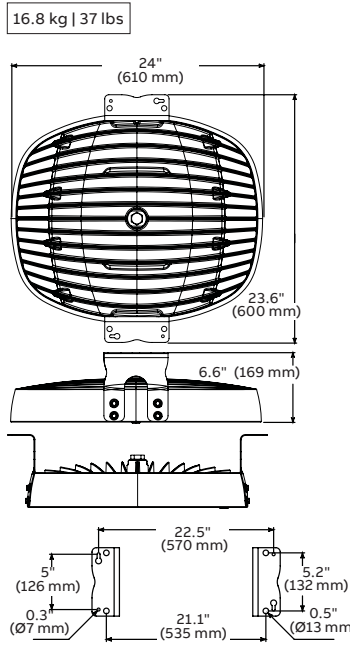
Standard offering above, alternate optical profiles available upon request. Contact sales representative for further details. Minimum order quantities, additional costs and lead times may incur.



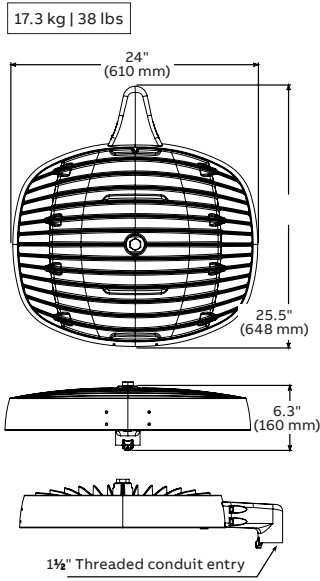
Hazlux® FMR LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

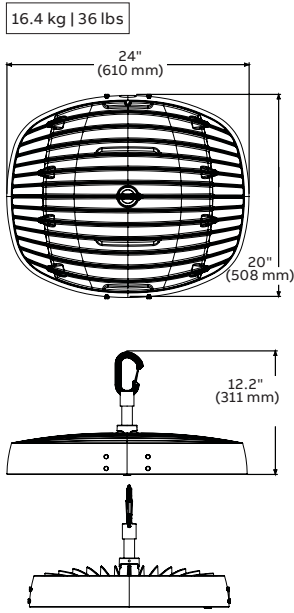
Surface/suspended mount (included standard)



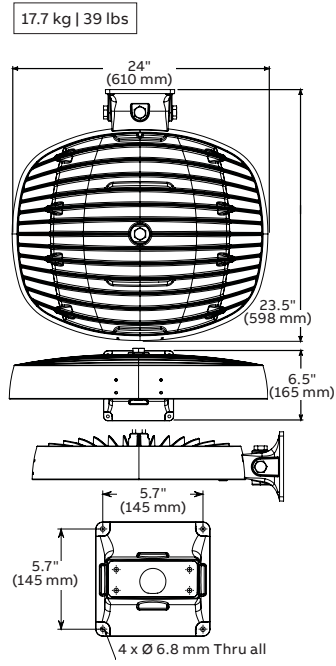
Pole mount FMR-PM (optional accessory)



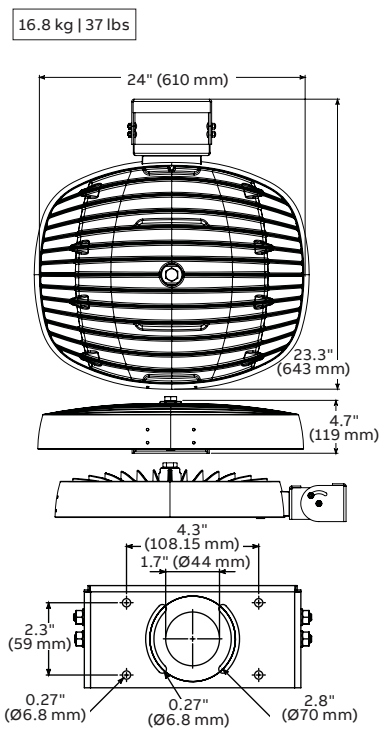
Hanging pendant FMR-HK (optional accessory)



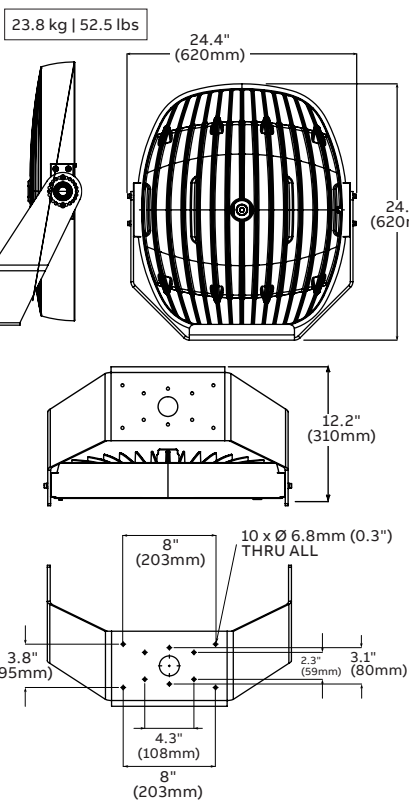
Wall mount FMR-WM (optional accessory)



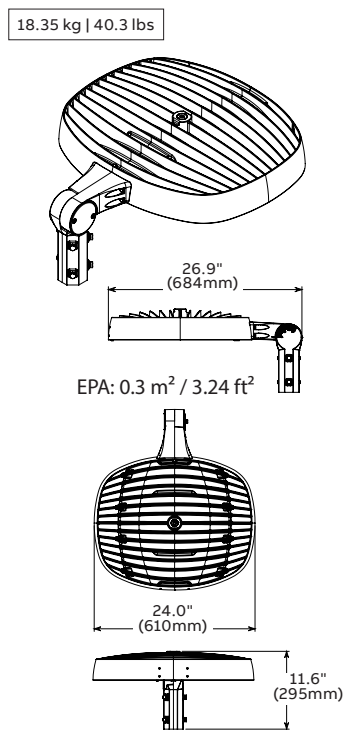
Yoke mount FMR-YM (optional accessory)



High vibration yoke FMR-YK (optional accessory)



Slip fitter yoke mount FMR-SFY (optional accessory)



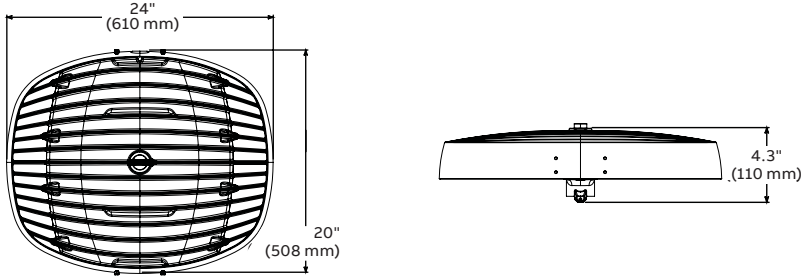
Stepped to accept either 1.5" Trade size (1-13/16" [46mm] to 2" [50mm] OD) & 2" Trade size (2-1/8" [53mm] to 2-7/16" [63mm])

AREA AND FLOOD HYBRID LIGHTING

Hazlux® FMR Series

DIMENSIONS

Dimensions are approximate and subject to change.



NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Model	FMR10	12260 to 12370 lumens
	FMR15	16200 to 16490 lumens
	FMR20	20380 to 20730 lumens
	FMR25	25860 to 26610 lumens
	FMR30	31400 to 31670 lumens
2 Optic	CUT	Wide beam (no optics)
	OC	Oval, 26° x 108° ¹
	R2	IESNA Type 2 ¹
	SC	Spot 18° ¹
3 Finish	GY	Gray
4 Color	27	Warm white (2700K) ¹
	27H	Warm white, high CRI (2700K) ¹
	30	Warm white (3000K) ¹
	30H	Warm white, high CRI (3000K) ¹
	35	Warm white (3500K) ¹
	35H	Warm white, high CRI (3500K) ¹
	40	Natural white (4000K) ¹
	40H	Natural white, high CRI (4000K) ¹
	50	Cool white (5000K)
50H	Cool white, high CRI (5000K)	

¹Option subject to extended lead time and minimum order quantities.

Part	Part number	Description
5 Power	AC	120-277 VAC
	HV	347-480 VAC
6 Location	HL	Hazardous location
7 Market	U	U.S. market
	Blank	Canadian market

Accessories (sold separately)

Part	Part number	Description
Mounting type	FMR-WM-GY	Wall mount ¹
	FMR-HK-GY	Hanging pendant
	FMR-PM-GY	Pole mount ¹
	FMR-YM	Yoke mount ^{1,2}
	FMR-YK	High vibration yoke ^{1,2,3}
	FMR-SFY-GY	Slip fitter yoke mount

¹IDA Fixture seal of approval only applies to fixtures with a CCT of 3000K or less, and that have fixed mounts aiming the fixture perpendicular to the ground.

²Yoke mount only available in stainless steel finish.

³Custom finishes and high vibration yoke mount are not available for NSF listed units.

Note: For Canadian market, please add "-CA" to the part no. (ex: FMR-WM-GY-CA).



Hazlux® SMR LED Series

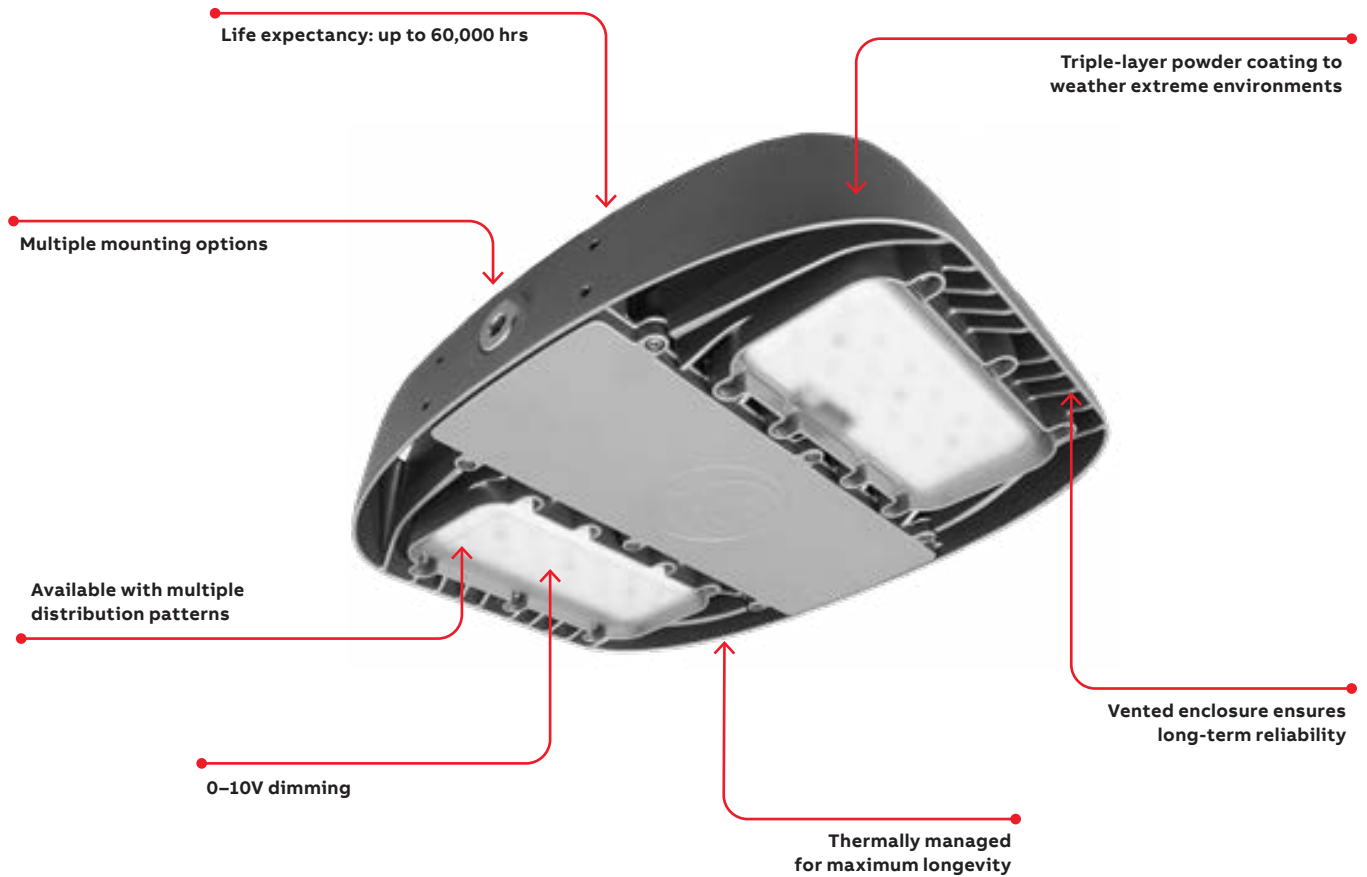
The unique combination of flexibility and robust design allows the implementation of this light fixture in various new or existing facilities. The SMR not only exceeds the expectations of an HID replacement, but establishes a new benchmark in versatility for industrial LED lighting.

CERTIFICATION	
CLASS I	
Division 2	Group A, B, C, D
Zone 2	Group IIC
CLASS II	
Division 2	Group F, G
Zone 22	
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS	
 <ul style="list-style-type: none"> UL844 UL1598A UL8750 	
	
	

APPLICATIONS
Hazardous locations
Indoor lighting
Tunnel lighting
Industrial facilities
Refinery and petrochemical facilities



Hazlux® SMR LED Series

Key features and information

FEATURES

- Field replaceable driver
- Operating temperature -40°F to 131°F (-40°C to 55°C)
- Thermally managed for longevity
- Easy field angle adjustment
- Extreme vibration resistance
- Direct heat transfer from power supply to external case for optimal performance
- IDA Dark Sky Approved to protect the night time environment and reduce light pollution

HOUSING

- Unique heat sink design creates increased airflow for optimal LED and power supply operating temperature
- Copper-free die-cast aluminum housing and high impact polycarbonate lens
- Available with multiple distribution patterns
- 3/4" NPT conduit entry
- Metal core PCB (MCPCB)
- Modular optics
- Physical separation of electronics for increased system reliability
- Triple-layer coating suitable for marine applications

LED

- Efficacy: up to 116 Lm/W
- Lumen output: From 2,980 lumens to 6,265 lumens
- Nichia LED's
- CRI Ra>80
- Correlated Color Temperature (CCT): 5000K (standard), 2700K, 3000K, 3500K and 4000K (optional)

ELECTRICAL

- 0-10V Dimming (1%–100%)
- Operating voltage: 120-277VAC 50/60Hz, 347-480VAC 60Hz
- Power factor 0.96
- Driver efficiency 86%
- THD <20%
- Surge protection standard at 2.5KV

MOUNTING

- Surface/suspended mount
- Wall pack mount
- Pole mount
- Yoke mount
- Conduit connection mount
- Hook pendant mount
- Slip fitter yoke mount

APPROVALS

- UL 844
- UL 8750 LED safety
- UL 1598 wet locations
- UL 1598A marine
- IDA Dark Sky Approved
- CUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

IP66/67

WARRANTY

5 year limited warranty

T-code chart

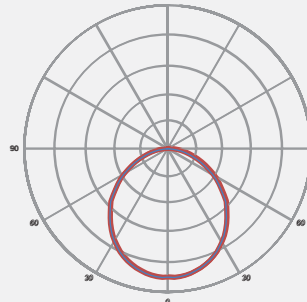
T4	Class 1, Div 2, Groups A, B, C, D
	Class 1, Zone 2, Group IIC
T4A	Class II, Div. 2, Groups F, G

Electrical specifications

Frequency	120-277VAC 50/60 Hz
	347VAC 60 Hz
Power	SMR3: 26W (Cut) - 29 W (R2, OC, SF)
	SMR6: 51W (Cut) - 57 W (R2, OC, SF)
Current	SMR3: AC - 0.25A@120 VAC HV - 010A@347 VAC
	SMR6: AC - 050A@120 VAC HV - 020A@347 VAC

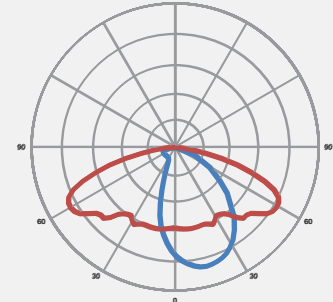
Photometry

CUT – Wide beam (no optic)	
Model	Lumen output (CW)
SMR3	3050
SMR6	5650



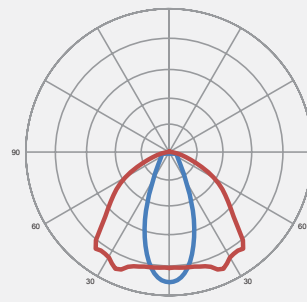
BUG rating : B2-U0-G1

R2 – IESNA Type 2	
Model	Lumen output (CW)
SMR3	2980
SMR6	5520



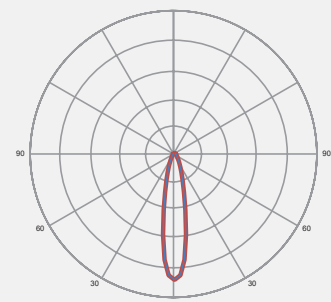
BUG rating : B1-U0-G1

OC – Oval 26° x 108°	
Model	Lumen output (CW)
SMR3	3290
SMR6	6090



BUG rating : B3-U2-G1

SF – Spot 18°	
Model	Lumen output (CW)
SMR3	3380
SMR6	6265



BUG rating : B4-U2-G1

Standard offering above, alternate optical profiles available upon request. Contact sales representative for further details. Minimum order quantities, additional costs and lead times may incur.

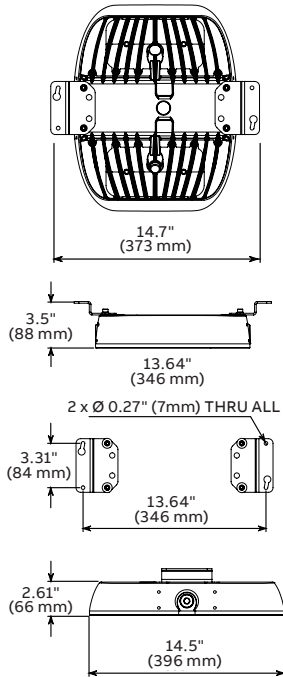
Hazlux® SMR LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

AREA AND FLOOD
HYBRID LIGHTING

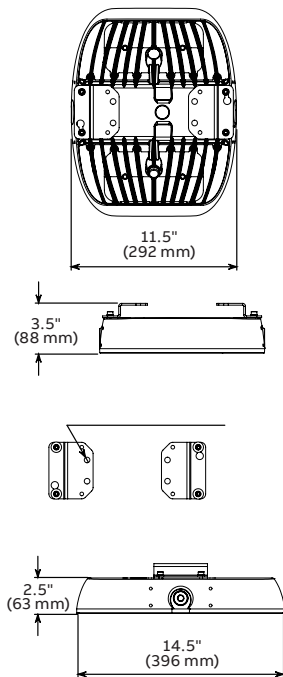
Surface mount (included standard)

5.3 kg | 11.7 lbs



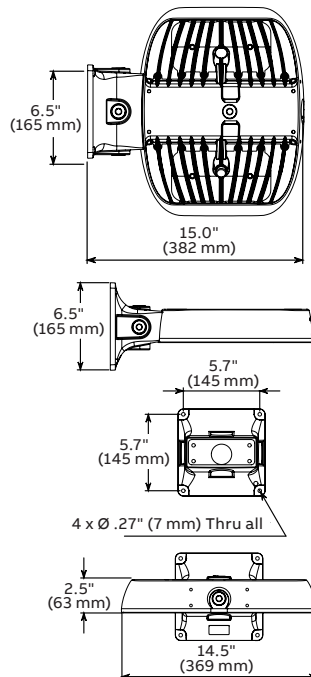
Suspended mount (included standard)

5.3 kg | 11.7 lbs



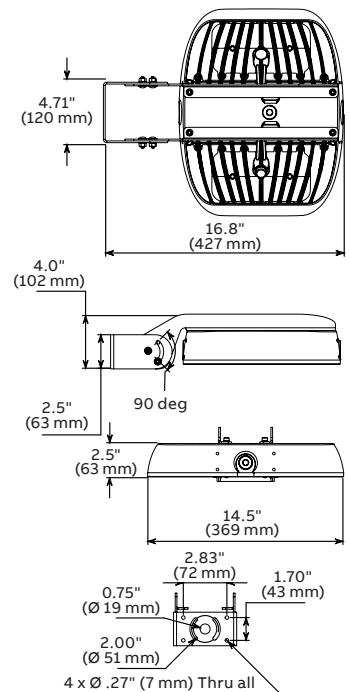
Wall pack mount SMR-WM (optional accessory)

6.8 kg | 15 lbs



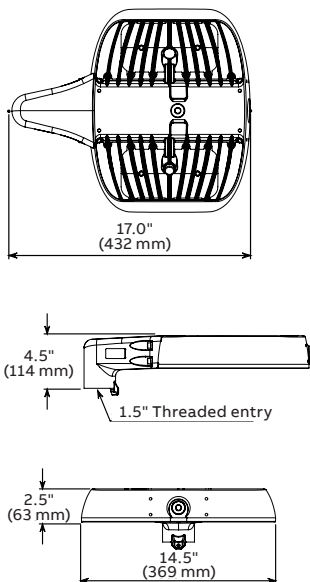
Yoke mount SMR-YM (optional accessory)

6.3 kg | 13.9 lbs



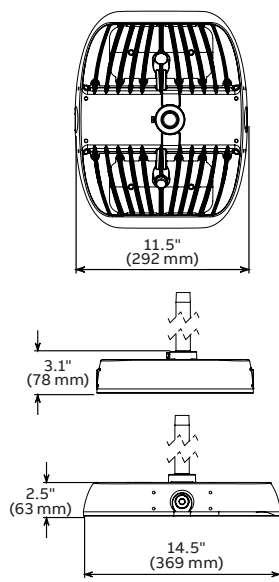
Pole mount SMR-PM (optional accessory)

5.6 kg | 12.4 lbs



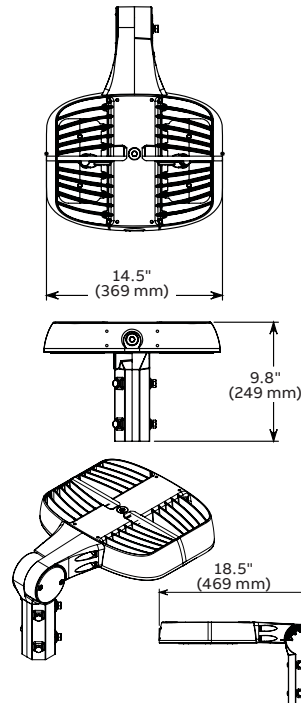
Conduit connection SMR-CC (optional accessory)

5.3 kg | 11.7 lbs



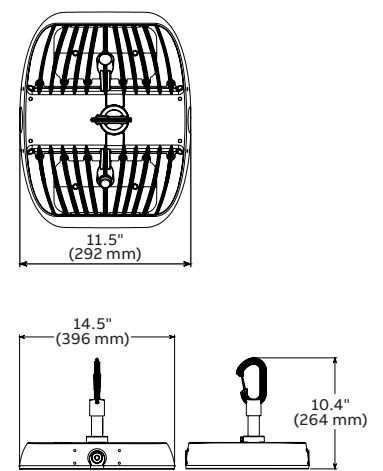
Slip fitter mount SMR-SFY (optional accessory)

6.55 kg | 14.7 lbs

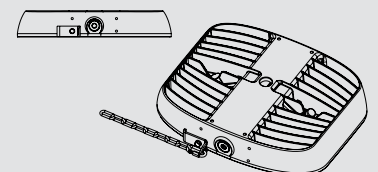


Hook pendant mount SMR-HK (optional accessory)

4.9 kg | 10.8 lbs



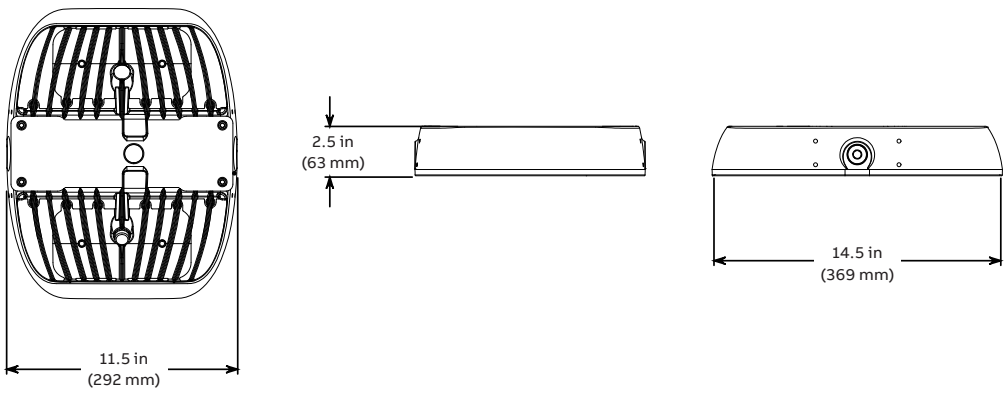
Secondary safety SMR-SS



Hazlux® SMR LED Series

DIMENSIONS

Dimensions are approximate and subject to change.



NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Model	SMR3	2980 to 3380 lumens
	SMR6	5520 to 6265 lumens
2 Optic	CUT	Wide (no optic)
	OC	Oval 26° x 108° ¹
	R2	IESNA Type 2 ¹
	SF	Spot 18° ¹
3 Finish	GY	Gray
4 Color	27	Warm white (2700K) ¹
	30	Warm white (3000K) ¹
	35	Warm white (3500K) ¹
	40	Natural white (4000K) ¹
	CW	Cool white (5000K)
5 Power	AC	120 to 277 VAC
	HV	347 VAC
6 Location	HL	Hazardous location
7 Market	U	U.S. market
	Blank	Canadian market

¹ Option subject to extended lead time and minimum order quantities.

Accessories (sold separately)

SMR-WM-GY	Wall pack mount ³
SMR-PM-GY	Pole mount ³
SMR-YM	Yoke mount ²
SMR-CC-GY	Conduit connection ³
SMR-HK-GY	Hook pendant mount
SMR-SS	Secondary safety
SMR-SFY-GY	Slip fitter mount

² Only available in stainless steel
³ IDA Fixture seal of approval only applies to fixtures with a CCT of 3000K or less, and that have fixed mounts aiming the fixture perpendicular to the ground.

Note: For Canadian market, please add "-CA" to the part no. (ex: SMR-WM-GY-CA).



New product

Hazlux® FC LED Series

The high-intensity floodlight is energy-efficient and made from corrosion-resistant, copper-free aluminum. The explosion-proof fixture can be installed in hazardous, marine locations like power plants, loading docks, and petrochemical facilities.

FLOOD LIGHTING

CERTIFICATION

CLASS I	
Division 1	Group C, D
Division 2	Group A, B, C, D
CLASS II	
Division 2	Group F, G
CLASS III	

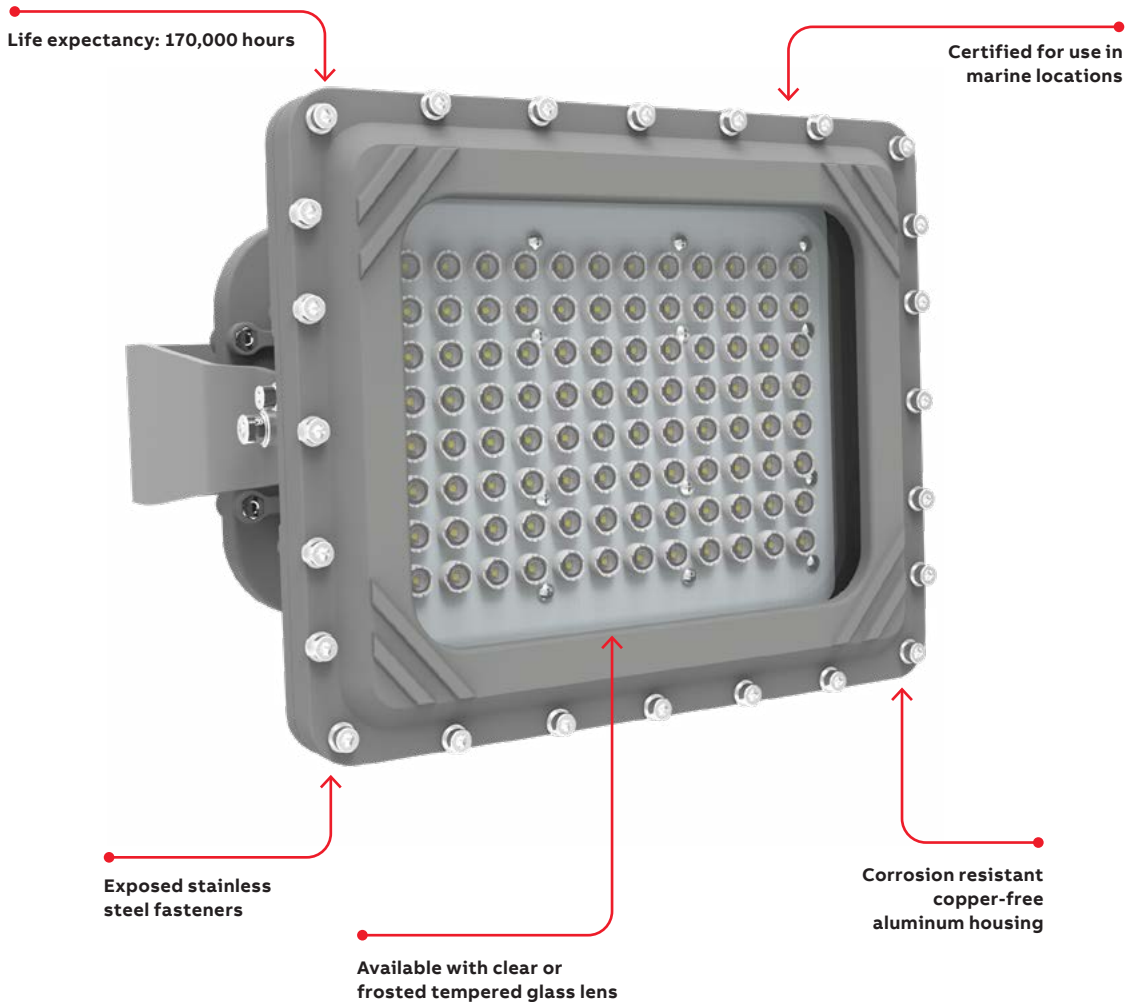
Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS

Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

APPLICATIONS

Power plants
Paper mills
Wastewater treatment plants
Loading docks
Chemical processing
Petrochemical facilities



Hazlux® FC LED Series

Key features and information

FEATURES

Operating temperature: -40°F to 140°F (-40°C +60°C)
optimal 77°F (25°C)

Exposed hardware made of stainless steel

High efficacy for increased energy savings

HOUSING

Housing made of copper-free aluminum

Anti-corrosion housing (tested for 1000hrs)

Tempered glass lens is impact and thermal shock resistant

Lens tested to IK09

High temperature silicone gasketing

LED

Efficacy: up to 130 Lm/W

Lumen output: From 10,400 lumens to 19,500 lumens

OSRAM LED's

CRI Ra>70

Correlated Color Temperature (CCT): 5000K (standard),
3000K and 4000K (optional)

ELECTRICAL

Operating voltage: universal 120-277 VAC,
347-480 VAC (50/60Hz)

Power factor 0.95

Driver efficiency 90%

THD <20%

Surge protection standard at 4KV
(Contact your sales representative if
high protection is required.)

MOUNTING

Pendant mount

Optional yoke/pipe bracket for wall/ceiling or pole mount

APPROVALS

UL844

UL 8750 LED safety

UL 1598 wet locations

UL1598A marine

CUL approved to CSA 22.2 No. 137,
CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

FCC

IP66

IK09

DLC

Not all product variations listed on this page are DLC qualified.
Visit www.designlights.org/search to confirm qualification.

5G (shock and vibration resistant)

1000hrs salt spray

WARRANTY

5 year limited warranty

T-code chart

Fixture	80 watt	100 watt	150 watt
C1D1	T6	T6	T6
C1D2	T4A	T4A	T4A
CIID2	T4A	T4A	T4A

Electrical specifications

Specification	FC-8	FC-10	FC-15	
Rated power	80W	100W	150W	
Input voltage	120-277, 347-480V			
Input frequency	50/60Hz			
Input current	(120/277V) (347/480V)	0.63/0.29A 0.24/0.17A	0.82/0.36A 0.29/0.21A	1.7/0.54A 0.43/0.31A

Lighting output

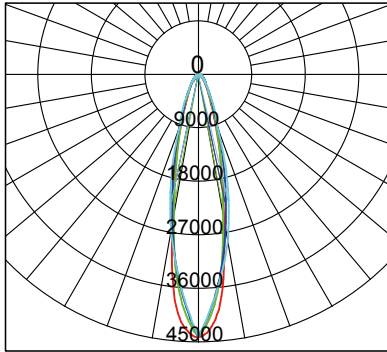
Fixture	80 watt	100 watt	150 watt
Lumen output	10400	13000	19500
Lumen per watt	130	130	130



Hazlux® FC LED Series

PHOTOMETRY

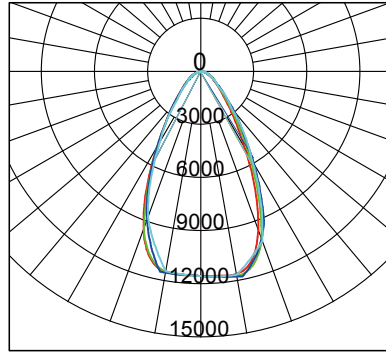
25 degree



- C0/180,22.4
- C30/210,21.5
- C60/240,23.7
- C90/270,25.8

BUG rating: B4-U0-G1

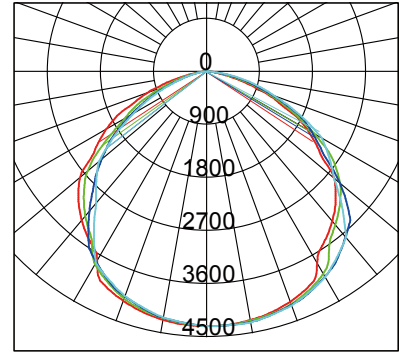
60 degree



- C0/180,56.0
- C30/210,56.7
- C60/240,58.4
- C90/270,56.9

BUG rating: B4-U0-G1

120 degree



- C0/180,114.5
- C30/210,114.1
- C60/240,110.6
- C90/270,113.2

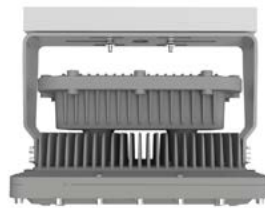
BUG rating: B4-U0-G1

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount (included standard)

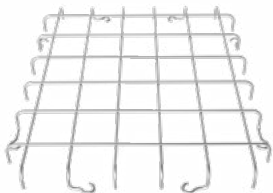


Yoke/pipe bracket mount (optional accessory)



Requires yoke/pipe bracket.

Accessories



WG01 - Stainless steel wire guard

Yoke/pipe bracket



UB01 - Yoke/pipe bracket (SUS 304) stainless steel

UB03 - Anti-vibration U-bracket

Pole type stanchion



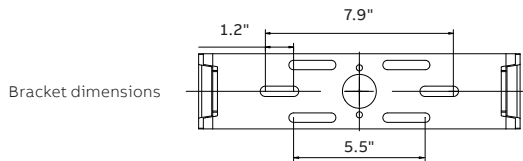
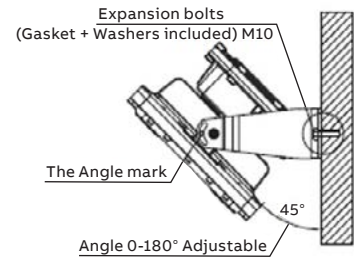
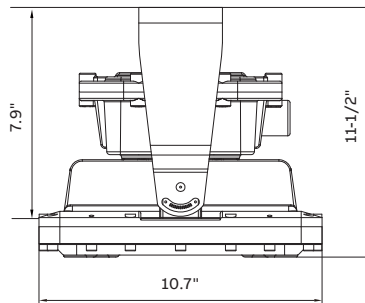
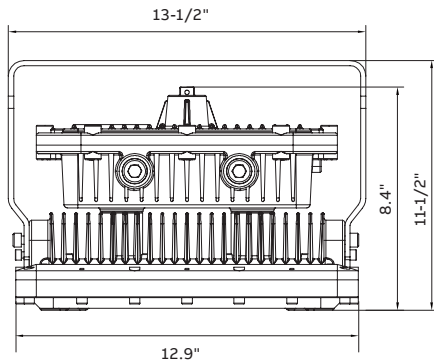
SN01 - Pole type stanchion

Note: Standard slipfitter for 2-3/8" (60mm) pole

Hazlux® FC LED Series

DIMENSIONS

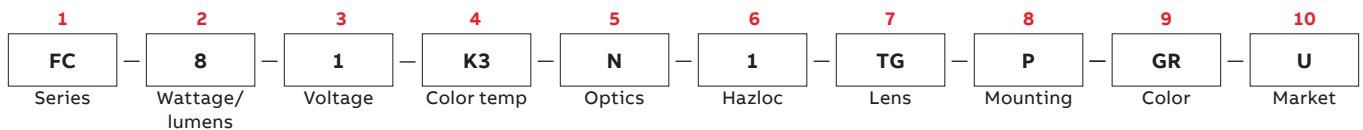
Dimensions are approximate and subject to change.



Model	Weight	Dimensions (L x W x H)
FC-8	15.2kg/33.5lbs	12.9 x 10.7 x 6.9 in
FC-10	15.3kg/33.7lbs	
FC-15	15.5kg/34.2lbs	

NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Series	FC	Hazlux® flood light LED
2 Wattage/lumens	8	80W (10,400 lm)
	10	100W (13,000 lm)
	15	150W (19,500 lm)
3 Voltage	1	120-277V
	4	347-480V
4 Color temp	K3	3000K ¹
	K4	4000K ¹
	K5	5000K (standard)
5 Optics	N	25° ¹
	M	60° ¹
	W	120° (standard)
6 Hazloc	1	CID1
	2	CID2, CIID2
7 Lens	TG	Clear glass
	FG	Frosted glass ¹
8 Mounting	P	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
9 Color	G	Gray
10 Market	U	U.S. market
	Blank	Canadian market

¹Longer lead time, contact your sales representative for more details

Accessories (sold separately)

SN01	Pole type stanchion
UB01	Yoke/pipe bracket (SUS 304) stainless steel
UB03	Anti-vibration U-bracket
WG01	Stainless steel wire guard

Note: For Canadian market, please add "-CA" to the part no. (ex: SN01-CA).





Table of contents

Linear lighting products



L11 LED Series
46



L11-EM LED Series
50



LE2 LED Series
50



WNL LED Series
54



LGS LED Series
58

Accessories



Quick pole assembly
62

New product

Hazlux® LI1 LED Series

Extremely durable and water-tight, the LI1 LED Series has a slim and compact design. This explosion-proof fixture can withstand the most demanding hazardous location environments like paper mills, chemical facilities, and wastewater treatment plants.

CERTIFICATION

CLASS I	
Division 1	Group C, D
Zone 1	
Division 2	Group A, B, C, D
Zone 2	
Simultaneous presence	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS

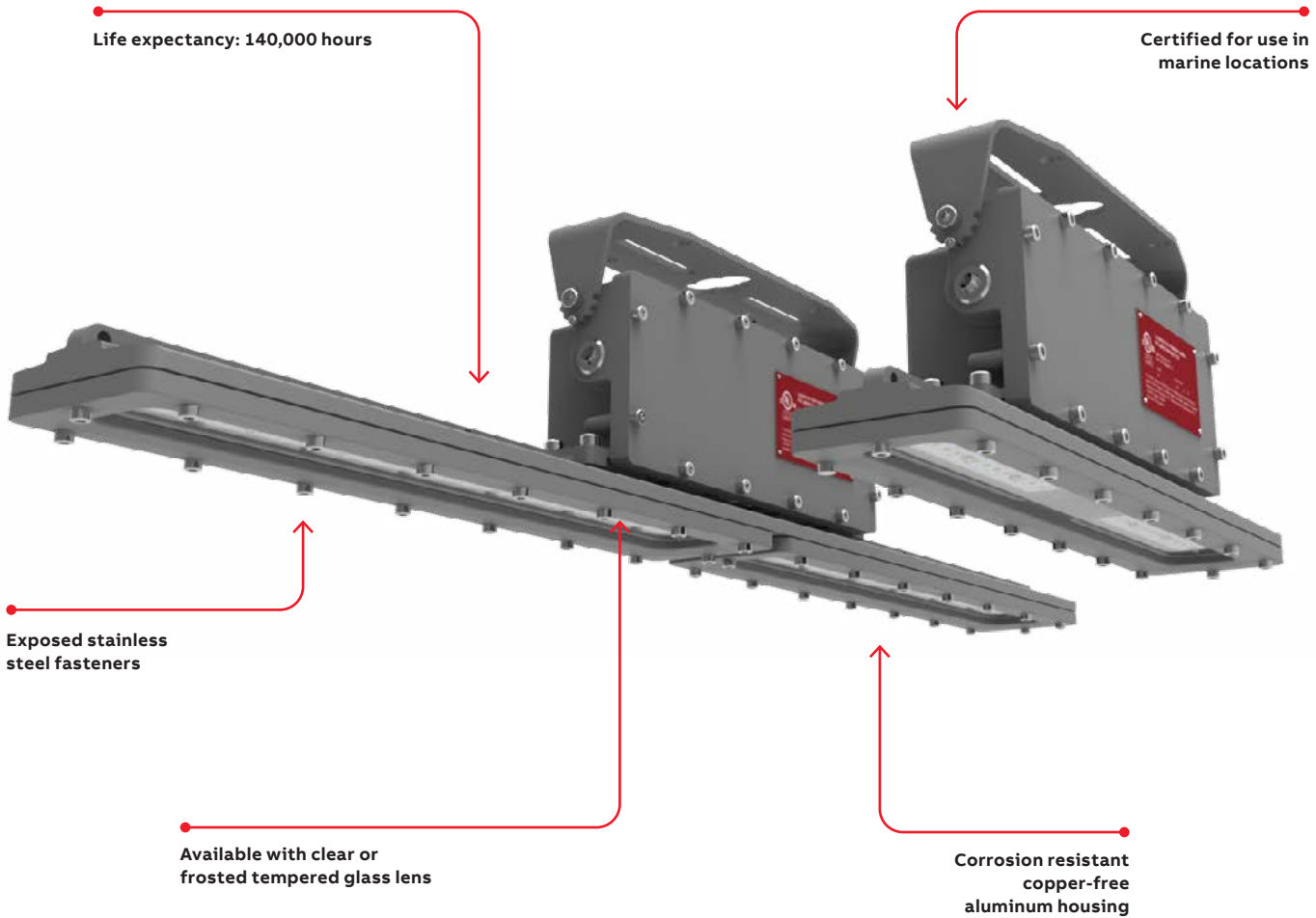


Not all DL series are DLC qualified. For all qualified products, please visit: www.designlights.org/qpl

APPLICATIONS

Mining
Paper mills
Chemical/industrial facilities
Wastewater treatment plants
Loading docks
Petrochemical facilities
Paint spray booth

LINEAR LIGHTING



Hazlux® LI1 LED Series

Key features and information

FEATURES

Operating temperature: -40°F to 140°F (-40°C +60°C)
optimal 77°F (25°C)

Exposed hardware made of stainless steel

Slim and compact design

HOUSING

Housing made of copper-free aluminum

Anti-corrosion housing (tested for 1000hrs)

Tempered glass lens is impact and thermal shock resistant

LED

Efficacy: up to 120 Lm/W

Lumen output: from 4,800 lumens to 9,600 lumens

OSRAM LED's

UL 8750 LED safety

CRI Ra>70

Correlated Color Temperature (CCT): 5000K (standard),
3000K and 4000K (optional)

ELECTRICAL

Operating voltage: universal 120-277 VAC, 347-480 VAC
(50/60Hz)

Power factor 0.95

Driver efficiency 90%

THD <20%

Surge protection standard up to 10KV
(Contact your sales representative if high protection is required.)

MOUNTING

Pendant mount

Optional yoke/pipe bracket for wall/ceiling or pole mount

Chain mount ("Chain" supplied by others)

APPROVALS

UL 844

UL 1598A marine outside type

UL 1598 wet locations

UL 8750 LED safety

CUL approved to CSA 22.2 No. 137,
CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

IP66

DLC

Not all product variations listed on this page are DLC qualified.
Visit www.designlights.org/search to confirm qualification.

5G (shock and vibration resistant)

1000hrs salt spray

WARRANTY

5 year limited warranty

T-code chart

Fixture	40 watt	80 watt
C1D1	T6	T6
C1D2	T3C	T3C

Electrical specifications

Specification	LI1-4	LI1-8	
Rated power	40W	80W	
Input voltage	120-277, 347-480V		
Input frequency	50/60Hz		
Input current	(120/277V) (347/480V)	0.4/0.14A 0.14/0.08A	0.8/0.29A 0.29/0.17A

Lighting output

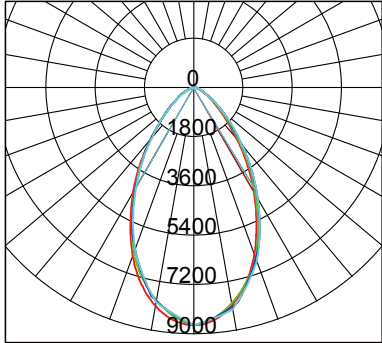
Fixture	40 watt	80 watt
Lumen output	4800	9600
Lumen per watt	120	120



Hazlux® LI1 LED Series

PHOTOMETRY

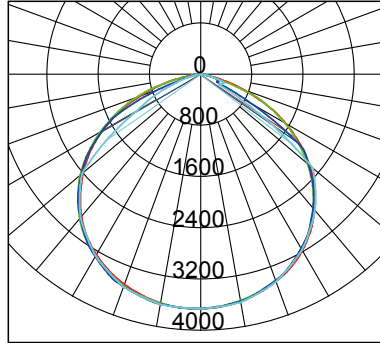
60 degree



- C0/180,60.8
- C30/210,60.8
- C60/240,61.3
- C90/270,61.0

BUG rating: B3-U0-G2

110 degree

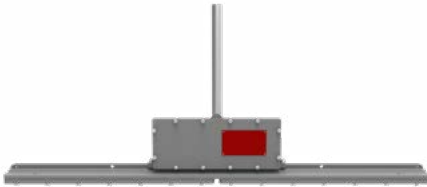


- C0/180,115.0
- C30/210,115.0
- C60/240,114.0
- C90/270,107.0

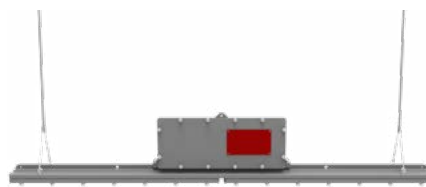
BUG rating: B3-U0-G2

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount (included standard)

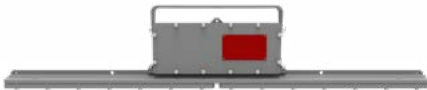


Chain mount (compatible)

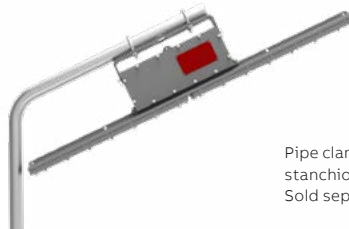


Chain supplied by others.

Ceiling & wall mount (optional accessory)



Stanchion mount (optional accessory)



Pipe clamp and yoke/pipe bracket required for stanchion installation. Sold separately.

Accessories



PC01 - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)



PC02 - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)



UB02 - Yoke/pipe bracket (SUS 304) stainless steel

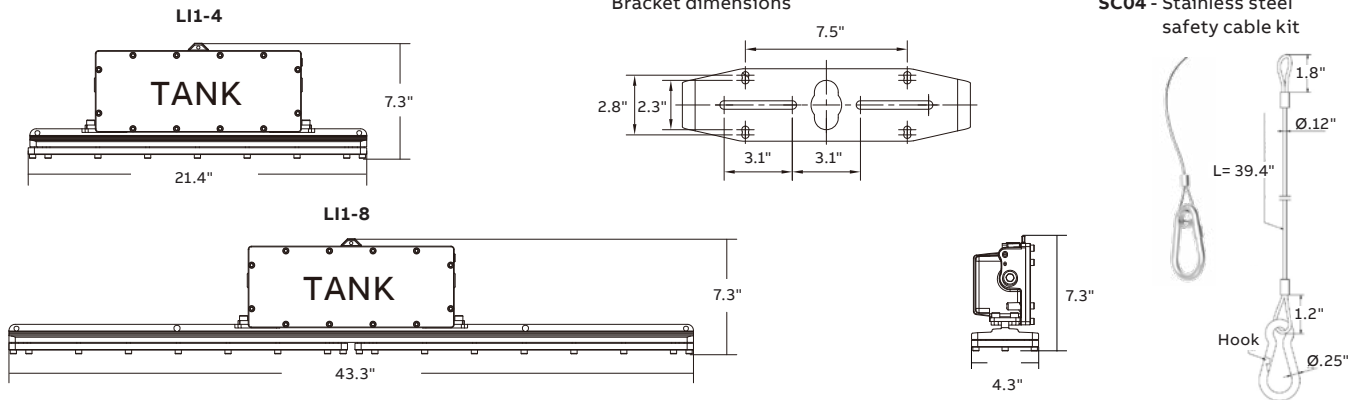


SC04 - Stainless steel safety cable kit

Hazlux® LI1 LED Series

DIMENSIONS

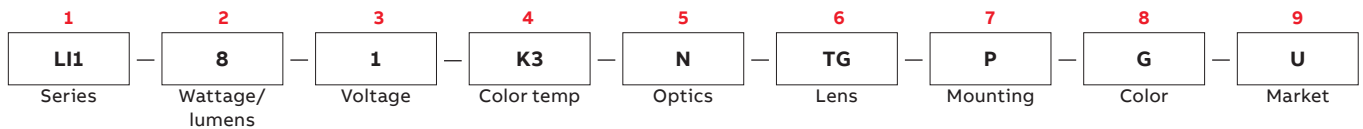
Dimensions are approximate and subject to change.



Model	Weight	Dimensions (L x W x H)
LI1-4	7.3kg/16.1lbs	21.4 x 4.3 x 7.3 in
LI1-8	10.8kg/23.8lbs	43.3 x 4.3 x 7.3 in

NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Series	LI1	Hazlux® linear light LED
2 Wattage/lumens	4	40W (4,800 lm)
	8	80W (9,600 lm)
3 Voltage	1	120-277V
	4	347-480V
4 Color temp	K3	3000K ¹
	K4	4000K ¹
	K5	5000K (standard)
5 Optics	N	60° ¹
	W	110° (standard)
6 Lens	TG	Clear glass
	FG	Frosted glass ¹
7 Mounting	P	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	G	Gray
9 Market	U	U.S. market
	Blank	Canadian market

¹Longer lead time, contact your sales representative for more details

Accessories (sold separately)

PC01	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC04	Stainless steel safety cable kit
UB02	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "-CA" to the part no. (ex: PC01-CA).

New product

Hazlux® LI1-EM LED Series

Versatile, shock-resistant, and explosion-proof lighting with a slim design, the LI1-EM LED Series can be mounted on a wall, ceiling, and pole in various hazardous locations, ranging from mines to petrochemical facilities.

CERTIFICATION

CLASS I	
Division 1	Group C, D
Zone 1	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

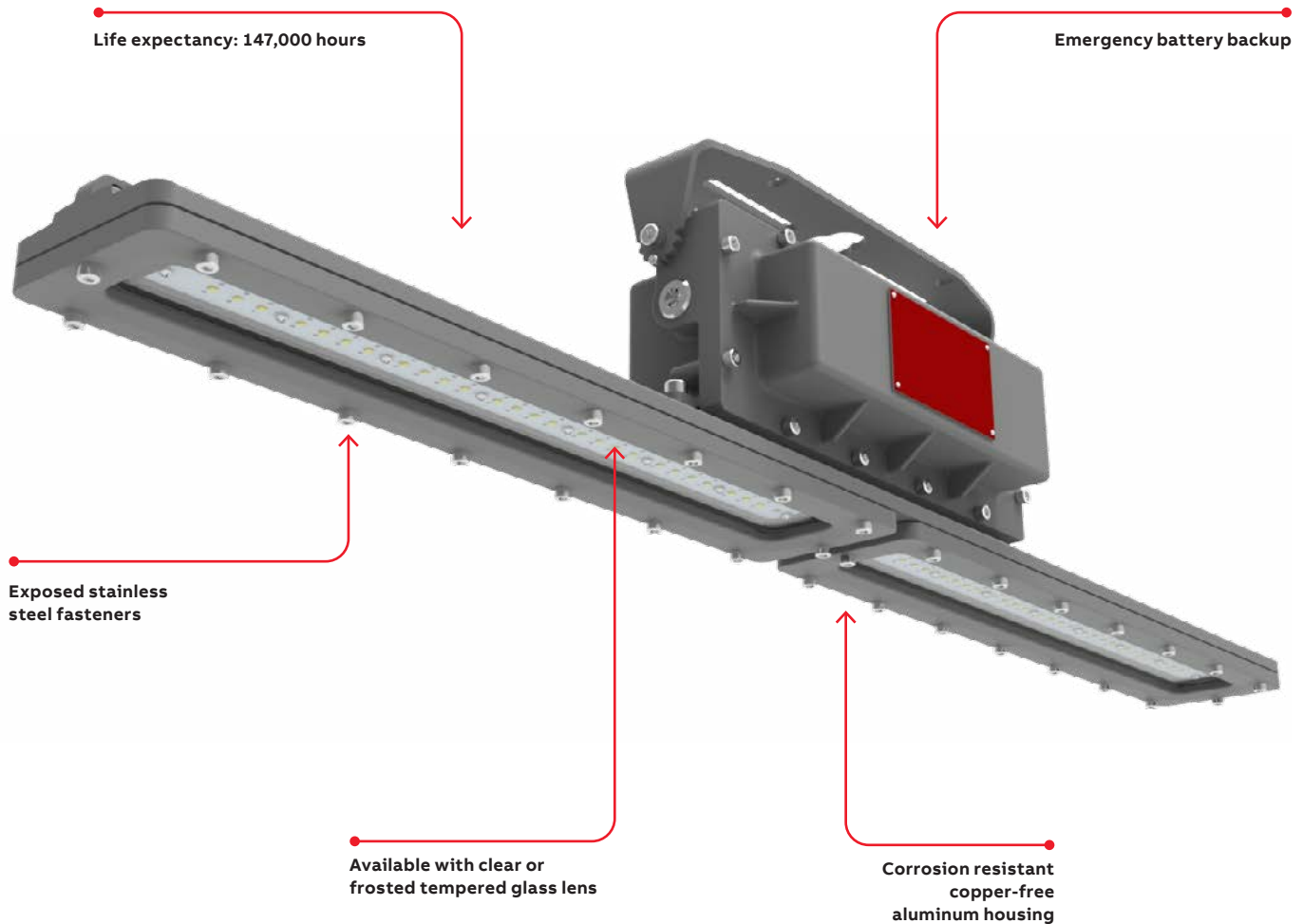
APPROVALS



APPLICATIONS

Mining
Paper mills
Chemical/industrial facilities
Wastewater treatment plants
Petrochemical facilities

LINEAR LIGHTING



Hazlux® LI1-EM LED Series

Key features and information

FEATURES

Operating temperature: -4°F to 113°F (-20°C +45°C)
optimal 77°F (25°C)

Exposed hardware made of stainless steel

Slim and compact design

Emergency run time: 90 minutes

HOUSING

Housing made of copper-free aluminum

Tempered glass lens is impact and thermal shock resistant

LED

Efficacy: up to 136 Lm/W

Lumen output: 10,800 lumens

OSRAM LED's

CRI Ra>70

Correlated Color Temperature (CCT): 5000K (standard)

ELECTRICAL

Operating voltage: 120-277 VAC (50/60Hz)

Power factor 0.95

Driver efficiency 90%

THD <20%

Surge protection standard up to 10KV
(Contact your sales representative if high protection is required.)

MOUNTING

Pendant mount

Optional yoke/pipe bracket for wall/ceiling or pole mount

Chain mount ("Chain" supplied by others)

APPROVALS

UL 844

UL924

CUL approved to CSA 22.2 No. 137,
CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

IP66

5G (shock and vibration resistant)

1000hrs salt spray

WARRANTY

5 year limited warranty

T-code chart

Fixture	80 watt
C1D1	T6

Electrical specifications

Specification	LI1-EM-8 (battery backup)
Rated power	80W (6W)
Input voltage	120-277V only (50/60Hz)
Battery	Nickel-cadmium
Expected battery life	5 years
Charge time	24 hours
Emergency run time	90 min.
Input current (standard mode)	0.67/0.29A (AC120/277V)

Lighting output

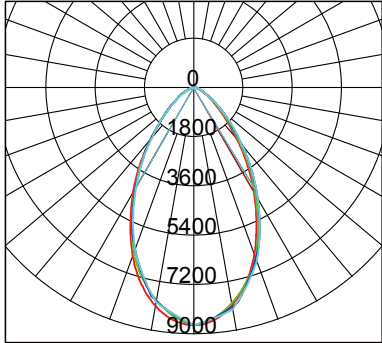
Fixture	80 watt
Lumen output - normal mode	10,800
Lumen output - emergency mode	812
Lumen per watt - normal mode	136



Hazlux® LI1-EM LED Series

PHOTOMETRY

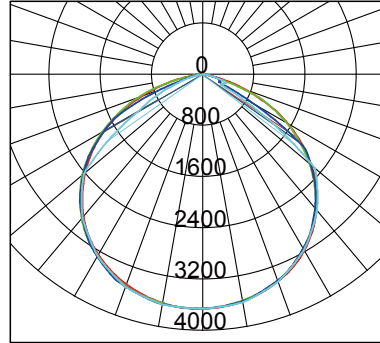
60 degree



- C0/180,60.8
- C30/210,60.8
- C60/240,61.3
- C90/270,61.0

BUG rating: B3-U0-G2

110 degree

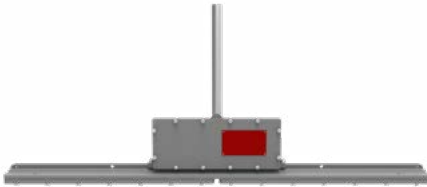


- C0/180,115.0
- C30/210,115.0
- C60/240,114.0
- C90/270,107.0

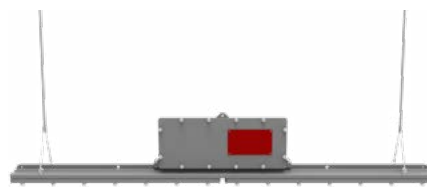
BUG rating: B3-U0-G2

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount (included standard)

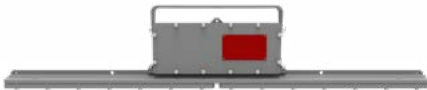


Chain mount (compatible)

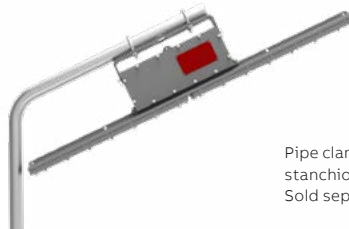


Chain supplied by others.

Ceiling & wall mount (optional accessory)



Stanchion mount (optional accessory)



Pipe clamp and yoke/pipe bracket required for stanchion installation. Sold separately.

Accessories



PC01 - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)



PC02 - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)



UB02 - Yoke/pipe bracket (SUS 304) stainless steel

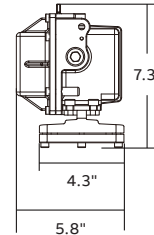
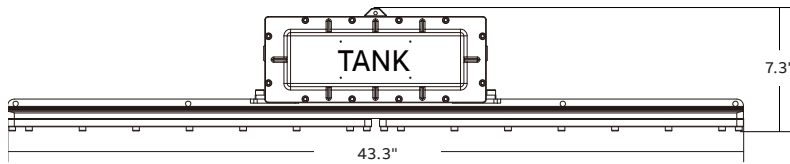


SC04 - Stainless steel safety cable kit

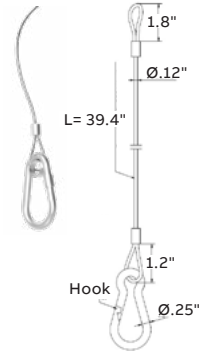
Hazlux® LI1-EM LED Series

DIMENSIONS

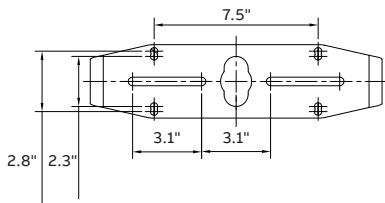
Dimensions are approximate and subject to change.



SC04 - Stainless steel safety cable kit



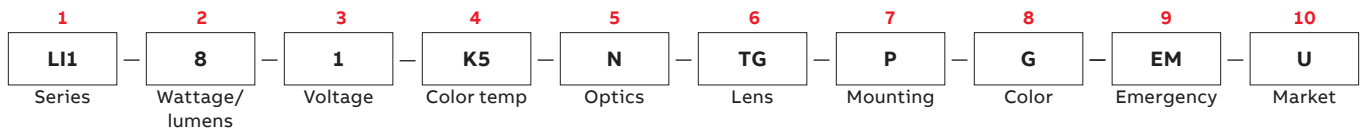
Bracket dimensions



Model	Weight	Dimensions (L x W x H)
LI1-EM-8	12.2kg/26.9lbs	43.3 x 5.8 x 7.3 in

NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Series	LI1	Hazlux® linear light LED
2 Wattage/lumens	8	80W (10,800 lm)
3 Voltage	1	120-277V
4 Color temp	K5	5000K
5 Optics	N	60° ¹
	W	110° (standard)
6 Lens	TG	Clear glass
	FG	Frosted glass ¹
7 Mounting	P	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	G	Gray
9 Emergency	EM	Emergency 90 minutes
10 Market	U	U.S. market
	Blank	Canadian market

¹Longer lead time, contact your sales representative for more details

Accessories (sold separately)

PC01	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC04	Stainless steel safety cable kit
UB02	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "-CA" to the part no. (ex: PC01-CA).

New product

Hazlux® LE2 LED Series

The LE2 LED Series is a slim, shock and vibration resistant fixture made of copper-free aluminum. This durable product has exposed hardware made from stainless steel and is suitable for marine and wet locations.

CERTIFICATION

CLASS I	
Division 2	Group A, B, C, D
Zone 2	
CLASS II	
Division 1	Group E, F, G
Zone 21	
CLASS III	
Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.	

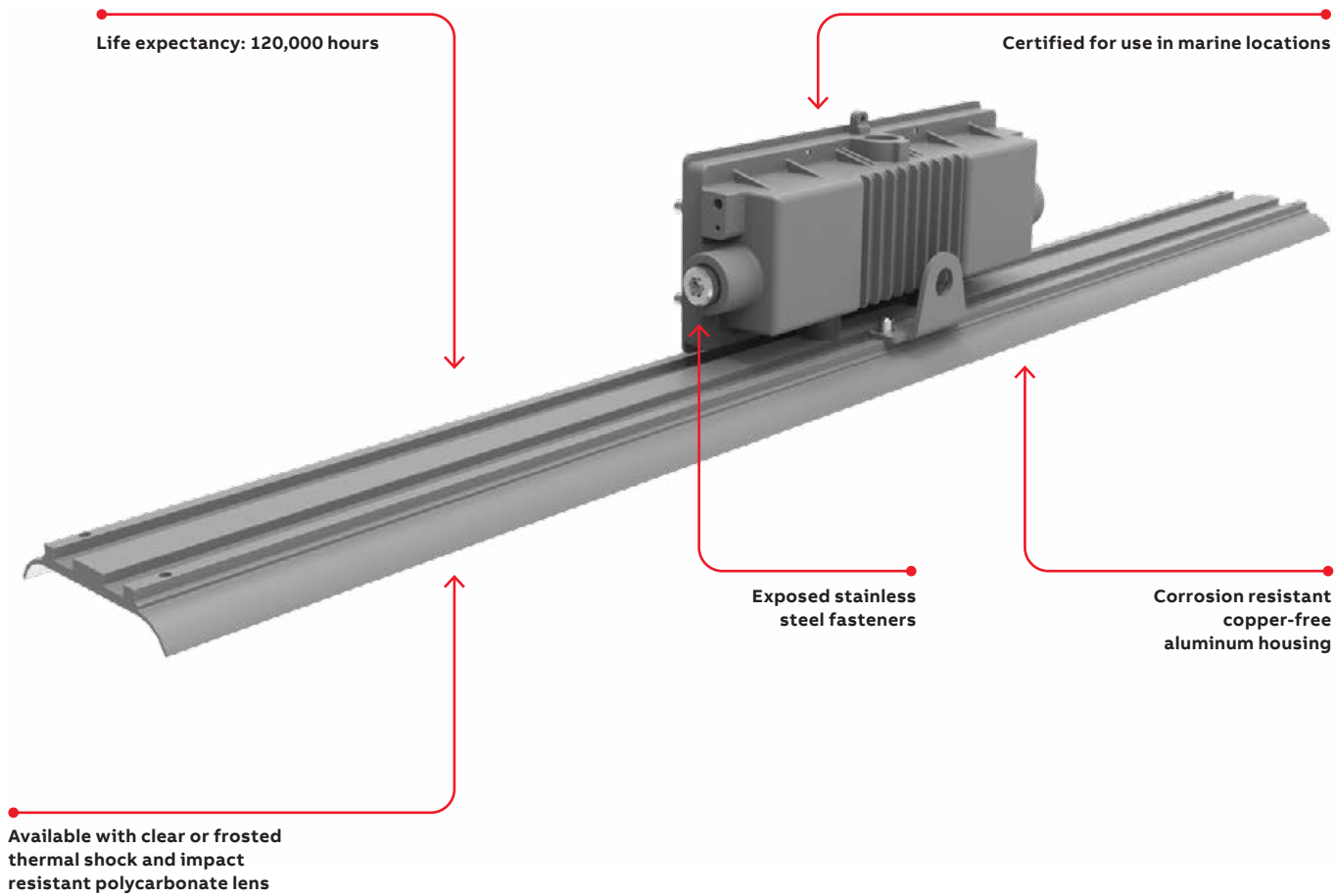
APPROVALS



APPLICATIONS

Power plants
Paper mills
Wastewater treatment plants
Loading docks
Chemical processing
Storage facilities

LINEAR LIGHTING



Hazlux® LE2 LED Series

Key features and information

FEATURES

Operating temperature: -40°F to 122°F (-40°C +50°C)
optimal 77°F (25°C)

Exposed hardware made of stainless steel

Slim and compact design

HOUSING

Housing made of copper-free aluminum

Anti-corrosion housing (tested for 1000hrs)

Shock and impact resistant polycarbonate lens

Lens tested to IK08

LED

Efficacy: up to 137 Lm/W

Lumen output: from 5,480 lumens to 10,960 lumens

Meanwell LED's

UL 8750 LED safety

CRI Ra>70

Correlated Color Temperature (CCT): 5000K (standard),
3000K and 4000K (optional)

ELECTRICAL

Operating voltage: universal 120-277 VAC, 347-480 VAC
(50/60Hz)

Power factor 0.95

Driver efficiency 90%

THD <20%

Surge protection standard at 4KV
(Contact your sales representative if high protection is
required.)

MOUNTING

Pendant mount

Optional yoke/pipe bracket for wall/ceiling or
pole mount

Chain mount ("Chain" supplied by others)

APPROVALS

UL844

UL 1598A marine

UL 1598 wet locations

UL 8750 LED safety

CUL approved to CSA 22.2 No. 137,
CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

FCC

IP66

IK08

DLC

Not all product variations listed on this page are DLC qualified.
Visit www.designlights.org/search to confirm qualification.

5G (shock and vibration resistant)

1000hrs salt spray

WARRANTY

5 year limited warranty

T-code chart

Fixture	40 watt	80 watt
C1D2	T3C	T3C
C1D1	T4A	T4A

Electrical specifications

Specification	LE2-4	LE2-8
Rated power	40W	80W
Input voltage	120-277, 347-480V	
Input frequency	50/60Hz	
Input current	(120/277V) 0.34/0.16A	0.67/0.32A
	(347/480V) 0.13/0.09A	0.25/0.18A

Lighting output

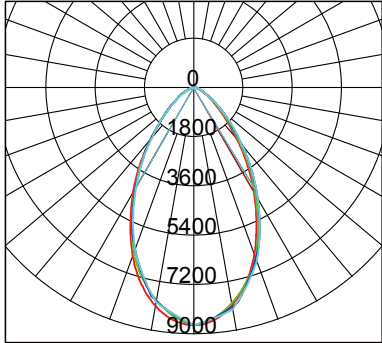
Fixture	40 watt	80 watt
Lumen output	5480	10960
Lumen per watt	137	137



Hazlux® LE2 LED Series

PHOTOMETRY

110 degree



- C0/180,60.8
- C30/210,60.8
- C60/240,61.3
- C90/270,61.0

BUG rating: B3-U0-G1

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Pendant mount (included standard)

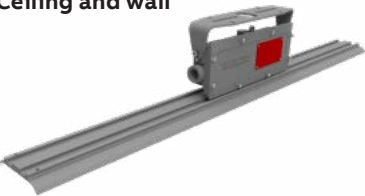


Chain mount (compatible)

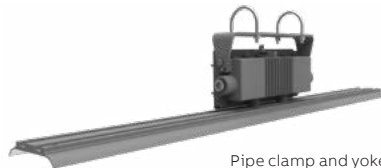


Chain supplied by others.

Yoke/pipe bracket (optional accessory)
Ceiling and wall



Stanchion mount (optional accessory)



Pipe clamp and yoke/pipe bracket required for stanchion installation.
Sold separately.

Accessories



PC01 - Pipe clamp (1 pair)
Pipe clamp (M8*48mm) for pole Ø1-7/8" (48mm)



PC02 - Pipe clamp (1 pair)
Pipe clamp (M8*60mm) for pole Ø2-3/8" (60mm)



UB02 - Yoke/pipe bracket
(SUS 304) stainless steel

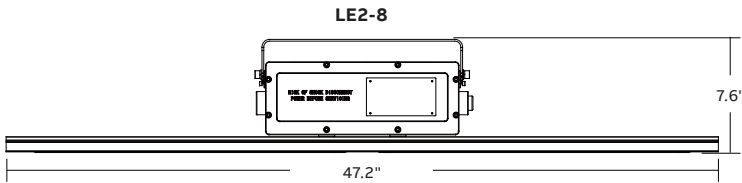
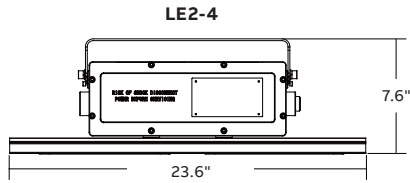


SC02 - Stainless steel safety cable kit

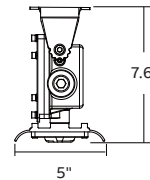
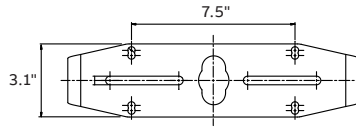
Hazlux® LE2 LED Series

DIMENSIONS

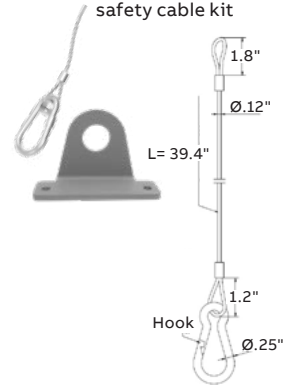
Dimensions are approximate and subject to change.



Bracket dimensions



SC02 - Stainless steel safety cable kit

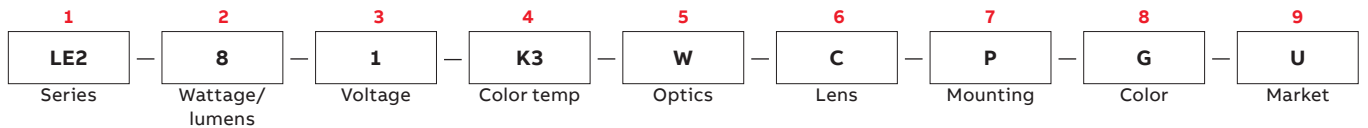


Model	Weight	Dimensions (L x W x H)
LE2-4	5.5kg/12.1lbs	23.6 x 5.0 x 7.6 in
LE2-8	7.6kg/16.7lbs	47.2 x 5.0 x 7.6 in

¹Dimensions are approximate and subject to change.

NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Series	LE2	Hazlux® linear light LED
2 Wattage/lumens	4	40W (5,480 lm)
	8	80W (10,960 lm)
3 Voltage	1	120-277V
	4	347-480V
4 Color temp	K3	3000K ¹
	K4	4000K ¹
	K5	5000K (standard)
5 Optics	W	110°
6 Lens	C	Clear polycarbonate
	F	Frosted polycarbonate ¹
7 Mounting	P	NPT 3/4 pendant mount
	U	NPT 3/4 pendant mount + yoke bracket
8 Color	G	Gray
9 Market	U	U.S. market
	Blank	Canadian market

¹Longer lead time, contact your sales representative for more details

Accessories (sold separately)

PC01	Pipe clamp (1 pair) Pipe clamp (M8*48mm) for pole Ø 1-7/8" (48mm)
PC02	Pipe clamp (1 pair) Pipe clamp (M8*60mm) for pole Ø 2-3/8" (60mm)
SC02	Stainless steel safety cable kit
UB02	Yoke/pipe bracket (SUS 304) stainless steel

Note: For Canadian market, please add "-CA" to the part no. (ex: PC01-CA).

Hazlux® WNL LED Series

A durable and robust linear luminaire designed to replace conventional fluorescent fixtures in industrial, commercial and tunnel applications.

CERTIFICATION

CLASS I	
Division 2	Group A, B, C, D
Zone 2	Group IIC
CLASS II	
Division 2	Group F, G
Zone 22	Group IIB
CLASS III	

Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.

APPROVALS



UL844
UL1598A
UL8750

APPLICATIONS

Tunnels
Interior fluorescent replacement
Loading docks

LINEAR LIGHTING



Hazlux® WNL LED Series

Key features and information

FEATURES

Field replaceable driver
 Operating temperature: -40 to 114°F (-40 to 46°C)
 Ideal for dirty, wet and corrosive environments
 IDA Dark Sky Approved to protect the night time environment and reduce light pollution Features
 Multiple light output options to replace fluorescent fixtures

HOUSING

IP66 vented enclosure eliminates pressure differentials for reliable sealing
 Powder-coated end caps
 Copper-free die-cast aluminum housing and high impact polycarbonate lens
 Available with multiple distribution patterns
 3/4" NPT conduit entry

LED

Efficacy: up to 115 Lm/W
 Lumen output: From 3,970 lumens to 10,470 lumens
 Nichia LED's
 CRI Ra>70
 Metal core PCB
 Correlated Color Temperature (CCT): 5000K (standard), 2700K, 3000K, 3500K and 4000K (optional)

ELECTRICAL

0-10V Dimming (1%–100%)
 Operating voltage: 120-277VAC, 347-480VAC
 Frequency: 50/60Hz
 Power factor 0.95
 Driver efficiency 88%
 THD <20%
 Surge protection standard at 6KV
 Fault tolerant and fail-over design ensures reliability and resilience to damage

MOUNTING

Surface mount
 Suspended mount
 Angle adjustable mount

APPROVALS

UL 844
 UL 8750 LED safety
 UL 1598 wet locations
 UL 1598A and ABS marine locations
 CUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13
 IP66

WARRANTY

5 year limited warranty

T-code chart

Model	Input voltage	Rated voltage (Volts)	T-codes (Class I Div. 2)	T-codes (Class II Div. 2)
WNL2S	AC	120-277	T4A	T4
	HV	347-480	T4A	T4
WNL2H	AC	120-277	T4A	T4
	HV	347-480	T4A	T4
WNL2X	AC	120-277	T5	T4
	HV	347-480	T5	T4A
WNL4S	AC	120-277	T4A	T4A
	HV	347-480	T4A	T4A
WNL4H	AC	120-277	T4A	T4A
	HV	347-480	T4A	T4A

Electrical specifications and lighting output

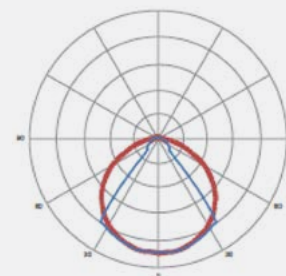
Model	Input voltage	Rated wattage (Watts)	Rated voltage (Volts)	Freq. (Hz)	Ambient temp.	Total lumens
WNL2S	AC	36	120-277	50/60	-40 to 131°F (-40 to 55°C)	3,970
	HV	36	347-480	50/60	-40 to 129°F (-40 to 54°C)	3,970
WNL2H	AC	52	120-277	50/60	-40 to 131°F (-40 to 55°C)	5,143
	HV	52	347-480	50/60	-40 to 129°F (-40 to 54°C)	5,143
WNL2X	AC	70	120-277	50/60	-40 to 126°F (-40 to 52°C)	7,965
	HV	82	347-480	50/60	-40 to 115°F (-40 to 46°C)	7,965
WNL4S	AC	85	120-277	50/60	-40 to 131°F (-40 to 55°C)	8,697
	HV	90	347-480	50/60	-40 to 129°F (-40 to 54°C)	8,697
WNL4H	AC	105	120-277	50/60	-40 to 129°F (-40 to 54°C)	10,470
	HV	109	347-480	50/60	-40 to 126°F (-40 to 52°C)	10,470

PHOTOMETRY

Optic options

WC Wide 100°

Model	BUG Rating
NL2	B3-U1-G1
NL4	B3-U2-G1



Hazlux® WNL LED Series

MOUNTING AND OPTIONAL ACCESSORIES (sold separately)

Surface mount (standard)



Suspended mount (standard)



Two 6.5 mm x 10 mm slots on each end for suspension hardware (not provided).

Angle adjustable mount (order separately)

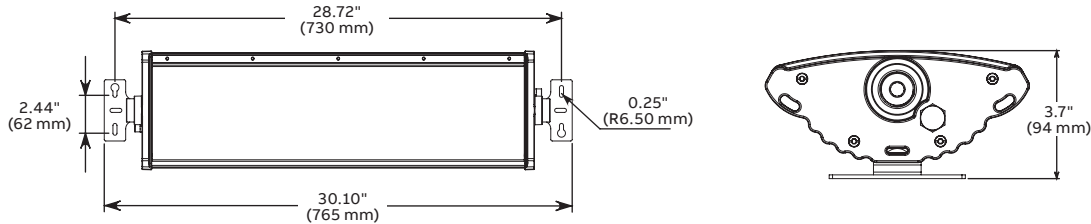


Easy field 360° angle adjustment with 3 mm hex key.

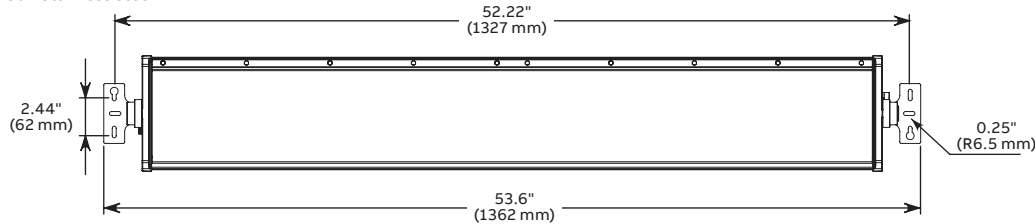
Surface/suspended mount (standard)

WNL2 : 5.1 kg | 11.3 lbs WNL4 : 10 kg | 22 lbs

WNL2 – Surface mount 5.3 kg | 12 lbs (included standard)
304 Stainless steel



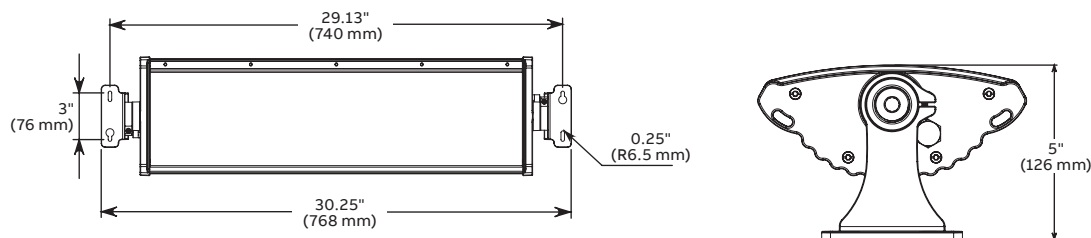
WNL4 – Surface mount 8.6 kg | 19 lbs (included standard)
304 Stainless steel



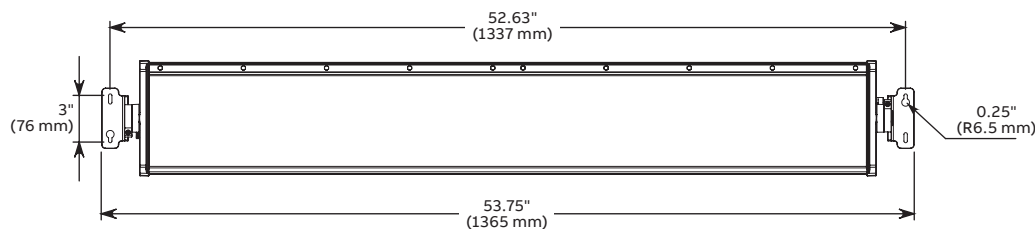
Adjustable mount (WNL-AM - optional)

WNL2 : 5.1 kg | 11.3 lbs WNL4 : 10 kg | 22 lbs

WNL2 – Angle adjustable mount (WNL-AM) 5.3 kg | 12 lbs (optional accessory)



WNL4 – Angle adjustable mount (WNL-AM) 8.6 kg | 19 lbs (optional accessory)

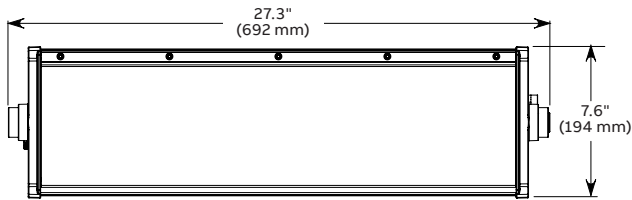


Hazlux® WNL LED Series

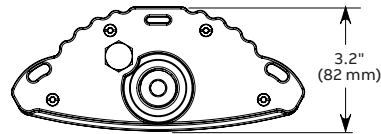
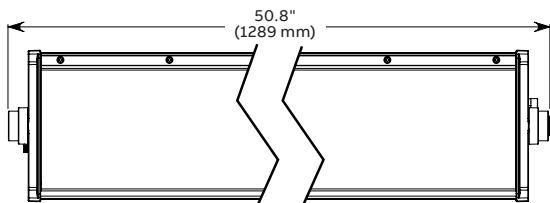
DIMENSIONS

Dimensions are approximate and subject to change.

WNL2

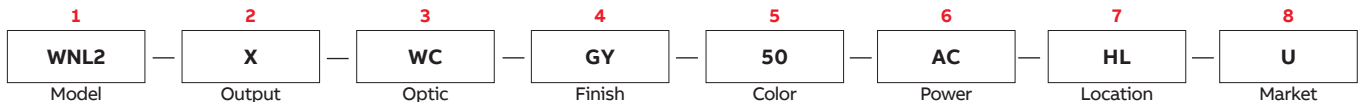


WNL4



NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Model	WNL2	2 foot
	WNL4	4 foot
2 Output	S	Standard
	H	High-output
	X	Extra high-output (not available with WNL4)
3 Optic	WC	Wide (no optics)
4 Finish	GY	Gray
5 Color	27	Warm white (2700K) ¹
	30	Warm white (3000K) ¹
	35	Warm white (3500K) ¹
	40	Natural white (4000K) ¹
	50	Cool white (5000K)
6 Power	AC	120 to 277 VAC
	HV	347 to 480 VAC
7 Location	HL	Hazardous location
8 Market	BLANK	Canadian market
	U	US market

¹ Option subject to extended lead time and minimum order quantities.

Accessories (sold separately)

WNL-AM-GY	Adjustable mount
-----------	------------------

Note: For Canadian market, please add "-CA" to the part no. (ex: WNL-AM-GY-CA).

Hazlux® LGS LED Series

Lightweight, extremely durable and water-tight linear strip fixtures to withstand the most demanding hazardous location environments.

CERTIFICATION	APPROVALS	APPLICATIONS
CLASS I Division 2 Group A, B, C, D Zone 2 Group IIC CLASS II Division 2 Group F, G Zone 22 Group IIB CLASS III Classification may vary depending on the product configuration. Please follow catalogue information and exceptions.	   IP66/67/68 ¹   UL844 UL1598A UL8750  c22.2 no. 137 c22.2 no. 250 c22.2 no 250.13	Vehicle/equipment Enclosures Tunnel lighting

¹IP68 only available with DC general location version

LINEAR LIGHTING



Hazlux® LGS LED Series

Key features and information

FEATURES

Operating temperature:
 AC -40 to 149°F (-40 to 65°C)
 DC -40 to 140°F (-40 to 60°C)

Light weight linear strip luminaire

IDA Dark Sky Approved to protect the night time environment and reduce light pollution Features

High efficiency internal reflector maximizes output

Suitable for wet location

HOUSING

Heat-sink designed for optimal heat dissipation

Unique case design utilizes compression for sealing and eliminates fasteners on the front face

MIL-SPEC Hard anodizing (body) and super-durable powdercoat (end caps) suitable for rugged outdoor environments

Copper-free die-cast aluminum housing and high impact polycarbonate lens

LED

Efficacy: up to 58 Lm/W

Lumen output: from 559 lumens to 2,289 lumens

CREE LED's

CRI Ra>80

Metal core PCB

Correlated Color Temperature (CCT): 5000K (standard), 3000K, 3500K and 4000K (optional)

Note : Special LED colors for LGS DC version available upon request (amber, blue, green and red).

ELECTRICAL

Standard with 3ft. whip

AC and DC options

Operating voltage: 11–16 VDC; 21–28 VDC; 120 VAC, 50/60Hz

Power factor 0.95

Driver efficiency 80%

THD <20%

Surge protection standard at 2.5KV

12V or 24V DC input options can run directly off of vehicle or facility low voltage DC

MOUNTING

Adjustable mount

Carriage bolt mount

APPROVALS

UL 844

UL 8750 LED safety

UL 1598 wet locations

UL 1598A and ABS marine locations

IDA Dark Sky Approved

CUL approved to CSA 22.2 No. 137, CSA 22.2 No. 250.0-08, CSA 22.2 No. 250.13

IP66/67/68

(IP68 only available with DC general location version)

WARRANTY

5 year limited warranty

T-code chart

T5	Class 1, Div 2, Groups A, B, C, D
T4A	Class II, Div. 2, Groups F, G

Electrical specifications

Model		LGS-1	LGS-2	LGS-3	LGS-4
Power	12 VDC	12W	21W	36W	48W
	24 VDC	11W	21W	32W	42W
	120 VAC	10W	20W	31W	41W
Current	12 VDC	0.75A	1.5A	2.3A	3.0A
	24 VDC	0.40A	0.75A	1.1A	1.5A
	120 VAC	0.09A	0.17A	0.23A	0.34A

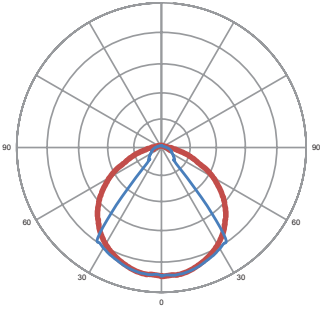


LINEAR LIGHTING

Hazlux® LGS LED Series

PHOTOMETRY

Optic options



W – Wide 100°

Model	Lumen output (CW)
LGS-1	586

LGS-1 586

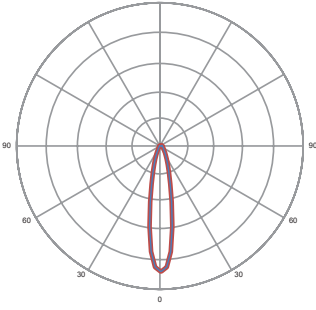
BUG rating : B1-U0-G0

LGS-2	1172
-------	------

LGS-3 1758

LGS-4 2289

BUG rating : B2-U0-G0



N – Narrow 30° (DC only)

Model	Lumen output (CW)
LGS-1	559

LGS-1 559

BUG rating : B2-U0-G0

LGS-2	1118
-------	------

LGS-3 1677

LGS-4 2236

BUG rating : B3-U0-G0

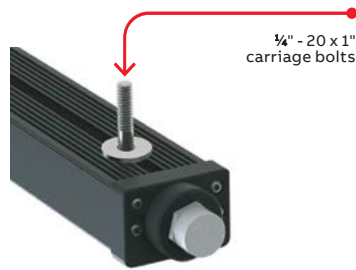
LINEAR LIGHTING

MOUNTING OPTIONS

A - Adjustable mounting bracket (standard)



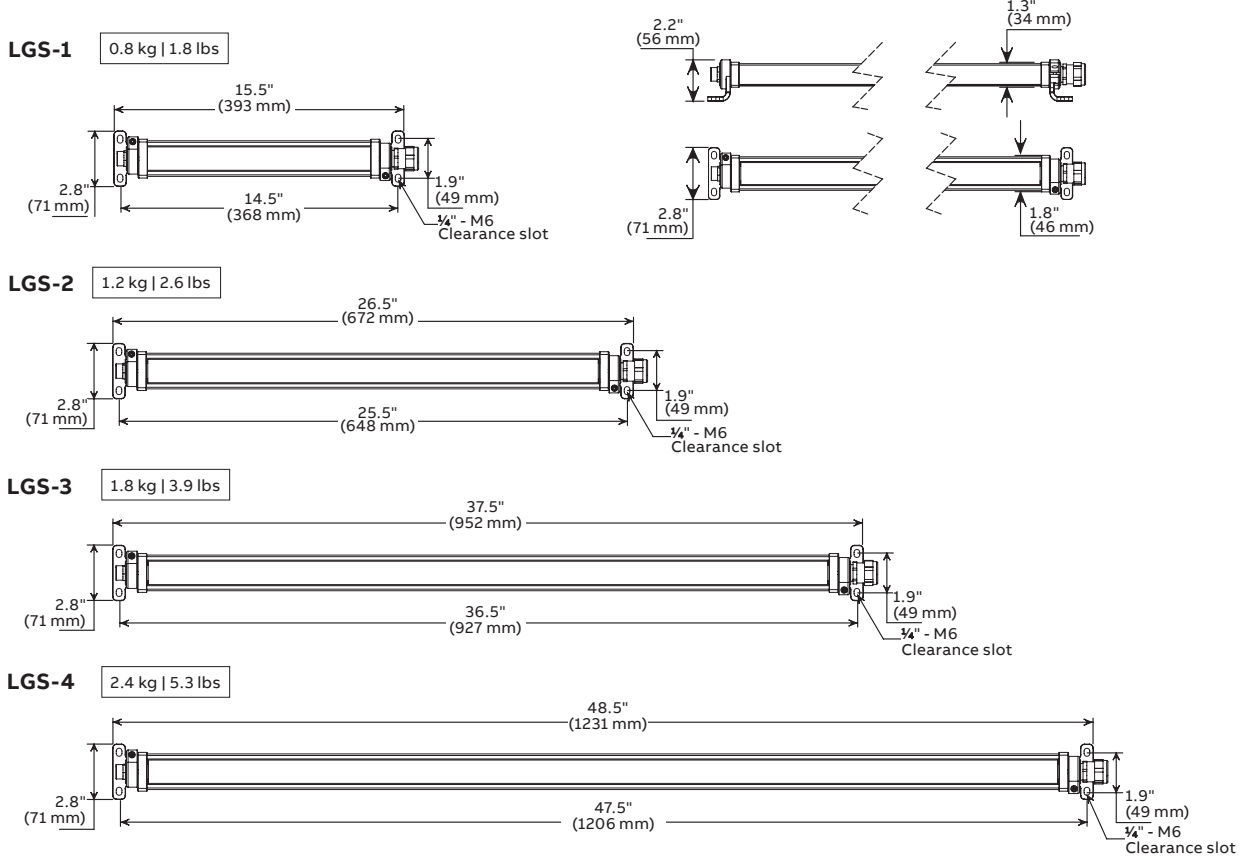
B - Carriage bolt/surface mount (optional)



Hazlux® LGS LED Series

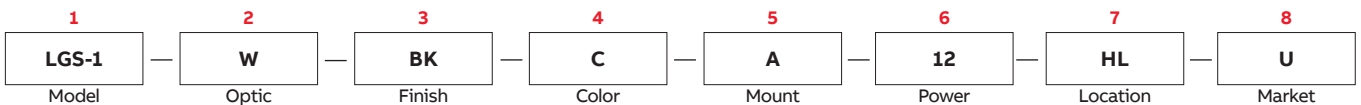
DIMENSIONS

Dimensions are approximate and subject to change.



NUMBERING SYSTEM

Lighting fixture



Ordering information

Part	Part number	Description
1 Model	LGS-1	559 to 586 lumens
	LGS-2	1118 to 1172 lumens
	LGS-3	1677 to 1758 lumens
	LGS-4	2236 to 2289 lumens
2 Optic	W	Wide 100°
	N	Narrow 30° (DC version only)
3 Finish	BK	Black
4 Color	30	Warm white (3000 K) ¹
	W	Warm white (3500 K) ¹
	40	Natural white (4000 K) ¹
	C	Cool white (5000 K)

Part	Part number	Description
5 Mount	A	Adjustable
	B	Carriage bolt ²
6 Power	12	11–16 VDC
	24	21–28 VDC
	120	120 VAC, 50/60Hz
7 Location	HL	Hazardous location
	GL68	General location IP68 (Only available with DC versions)
8 Market	BLANK	Canadian market
	U	US market

²IDA Fixture Seal of Approval only applies to fixtures with a CCT of 3000K or less, and have fixed mounts aiming the fixture perpendicular to the ground.

¹Option subject to extended lead time and minimum order quantities.

Accessories - Quick pole assembly

Key features and benefits

FEATURES AND BENEFITS

Sphere-shaped, quick knuckle features round edges, preventing injuries and contaminant build-up on 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

Supplied standard with unique fixture hanging hook

QUICK POLE ASSEMBLY

Operates in any kind of weather

Overall length is 10' (3 m)

Galvanized pole trade size is 1½" 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 loosened, 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
Contact your sales representative

SAFETY FIRST

One-person operation

No ladders or lifts required

Simplified maintenance

Hot dipped galvanized steel and aluminum finishes

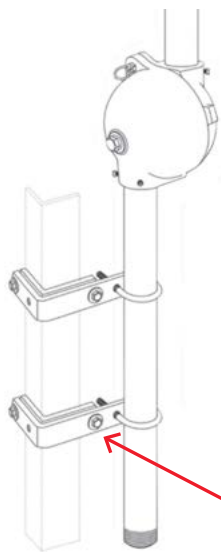
Frees up catwalks and walkways during maintenance

Suitable for 113 mph winds as per AASHTO LTS-4 2001

Maximum fixture weight capacity of 50 lbs.

Steel pole threads are treated and protected to prevent galvanic reaction as per AASHTO LTS-4 2001

NOTE: Please consult your local authority to confirm acceptability of the Quick pole installation in classified areas.



Standard kit

- Overall height of 10' (3 m)
- 1½" NPT threads at both ends (1⅞" O.D. pipe)
- Rotating quick knuckle assembly
- Installed with two rail angle iron mounting brackets, allowing the pole section to rotate before final positioning

Q-P-5-10-N (Galvanized steel 1⅞" O.D. pipe)
Q-P-A-5-10-N (Aluminum 2⅜" O.D. pipe)
Standard Kit

Note: For Canadian market, please add "-CA" to the part no. (ex: AMB-QP-A-BKT-N-CA).

Bracket sold separately

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
- Rotating quick knuckle assembly
- Steel and aluminum adaptor sleeve (2" ID) fits over standard 1¼" NPT (1.66" OD) or 1½" NPT (1.90" OD) pipe

RQ-P-5-10-N (Galvanized steel 1⅞" O.D. pipe)
RQ-P-A-5-10-N (Aluminum 2⅜" O.D. pipe)
Retrofit Kit

Customer existing pipe (not supplied)

The quick pole assembly blocks at a 90° angle.


US
LR054870



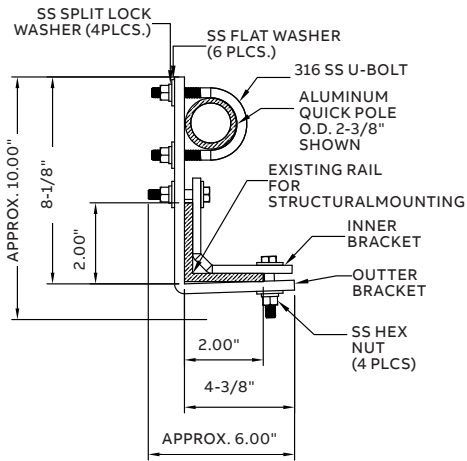
Quick pole assembly

UNIVERSAL BRACKET KIT

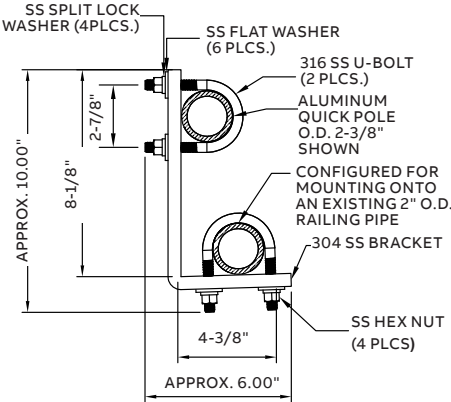
Stainless steel (aluminum pole)

Note: For Canadian market, please add "-CA" to the part no. (ex: AMB-QP-A-BKT-N-CA).

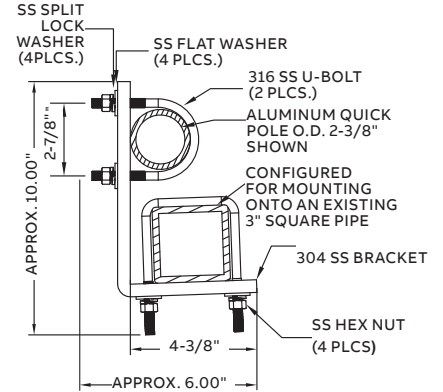
AMB-QP-A-BKT-N
Bracket for structural angle mounting



RMB-QP-A-BKT-N
Bracket for structural pole mounting



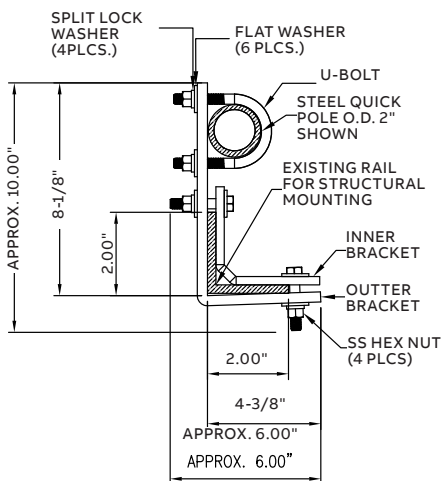
RMB-QP-A-BKT-3
Bracket for structural square mounting



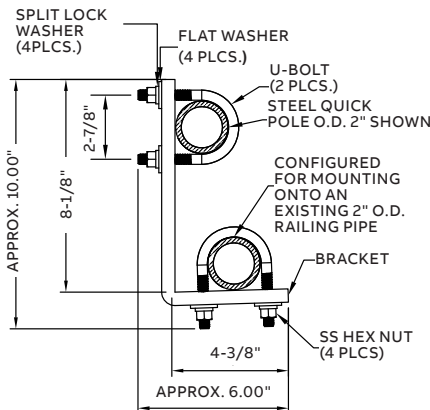
Galvanized steel (galvanized pole)

Note: For Canadian market, please add "-CA" to the part no. (ex: AMB-QP-A-BKT-N-CA).

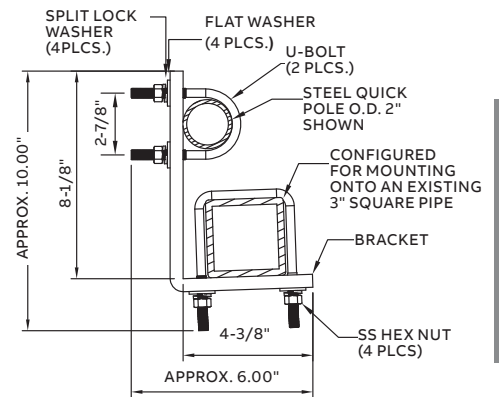
AMB-QP-BKT-N
Bracket for structural angle mounting



RMB-QP-BKT-N
Bracket for structural pole mounting

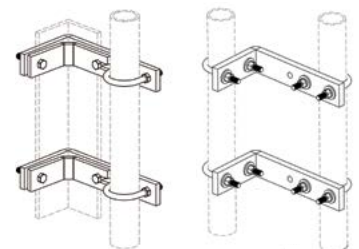


RMB-QP-BKT-3
Bracket for structural square mounting



Universal bracket kit

- Quick bolt-on installation, no welding or drilling
- Can be attached to angle iron guardrails up to 3"
- Supplied to be installed on tubular structures 2" O.D. or less but designed for up to 2-3/8" U-Bolt in both positions
- Allows the pole sections to rotate before final positioning



Emergency Lighting Products



Table of contents

Emergency lighting products



VB LED Series
66



VC LED Series
68



VE LED Series
70



VR LED Series
71



**Hazardous location
battery unit**
72



**Hazardous location
remote fixture**
73



**Hazardous location
pictogram sign**
74



**Hazardous location
combo pictogram**
75

VB LED Series

Hazardous location battery unit

CERTIFICATION

CLASS I

Division 2

Group A, B, C, D

Contact your ABB sales representative to verify classification

APPROVALS



UL844
UL924



CERTIFIED
FOR U.S. ONLY

US
LR111065

FEATURES



nexus



Key features and benefits

HOUSING

Class I Division 2, Groups A, B, C and D

Vandal-resistant UV stabilized polycarbonate lamp cover

Front and back plates are of a heavy-duty aluminum

Stainless steel tamper-proof screws

MOUNTING

Surface wall mount only

Includes mounting lugs on each side of the housing

Universal J-box mounting

1/2 inch entry on both sides and top of housing

Lamp type

Choice of MR16 LED lamp wattages

LAMP TYPE

Choice of MR16 LED lamp wattages

ELECTRONICS

Pulse plus charger

Low voltage disconnect

Automatic brownout protection

Battery lockout

Fused output circuit

Magnetic test switch

Standard **Advanced Diagnostics (non-audible)**

Optional Nexus® monitoring system

120/277 60Hz

BATTERY TYPE

6 or 12V lead-calcium battery

APPROVALS

CSA-US (to UL 924 Standard)

Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

NEC, OSHA and NEMA compliant for above Classes and Groups

Temperature code T4 (for no lamp version only). Max temperature 275°F/135°C.

Damp and wet location 10 to 40°C (50 to 104°F)

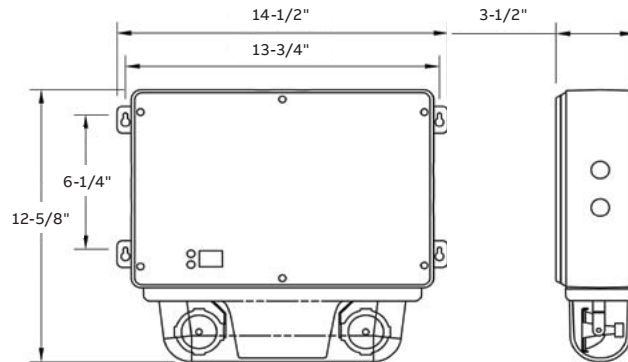
WARRANTY

Unit has a five year limited warranty

VB LED Series

DIMENSIONS

Dimensions are approximate and subject to change.



TEMPERATURE CODES

Lamp rating ¹	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	248°F/120°C	580.0097
6V-5W	T4A	248°F/120°C	580.0122
12V-4W	T5	212°F/100°C	580.0080
12V-5W	T4A	248°F/120°C	580.0104
12V-6W	T4	275°F/135°C	580.0106

¹Use qualified replacement lamps to avoid risk of over-heating

EMERGENCY LIGHTING FIXTURE

Part	Part number	Description
1 Series	VB0618	6V 18W lead-calcium
	VB1236	12V 36W lead-calcium
	VB1260	12V 60W lead-calcium
	VB1272	12V 72W lead-calcium
2 Lamps	0	No heads, no lamp
	L1	2 x MR16 LED 6V 4W
	L2	2 x MR16 LED 6V 5W
	L7	2 x MR16 LED 12V 4W
	L9	2 x MR16 LED 12V 5W
	L10	2 x MR16 LED 12V 6W
3 Voltage	03	120/277V 60 HZ
4 Color	G	Gray housing
5 Charger type	Blank	Advanced Diagnostics non-audible
	DA	Advanced Diagnostics audible
	NEXRF	Nexus® wireless
6 Options	Blank	No option
	-T3	Time delay 15 minutes

VC LED Series

Hazardous location combination unit

CERTIFICATION

CLASS I

Division 2

Group A, B, C, D

Contact your ABB sales representative to verify classification

APPROVALS



UL844
UL924



CERTIFIED
FOR U.S. ONLY

US
LR111065

FEATURES



nexus



Key features and benefits

CONSTRUCTION

Fully gasketed housing frame

Faceplate: heavy-duty, vandal-resistant polycarbonate

Backplate: heavy-duty aluminum

Vandal-resistant UV stabilized polycarbonate lamp cover

Stainless steel tamper-proof screws

6 inch EXIT lettering legend, available in red or green

Field-selectable chevrons

MOUNTING

Surface wall mount only

Backplate features universal knockouts for a standard 4 inch junction box, and four mounting eyelets used in wall mount applications

1/2 inch conduit entry on top and sides

LAMP TYPE

Choice of MR16 LED lamp wattages

ELECTRONICS

Magnetic test switch

Standard **Advanced Diagnostics (non-audible)**

Optional Nexus® monitoring system

120/277 60Hz

BATTERY TYPE

VC Model, nickel-cadmium battery, 6V-20W total battery capacity

VC12N Model, nickel-cadmium battery, 12V-24W total battery capacity

APPROVALS

CSA-US (to UL 924 Standard)

Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

NEC, OSHA and NEMA compliant for above Classes and Groups

Damp and wet location 10 to 40°C (50 to 104°F)

Temperature code T4 (for no lamp version only). Max temperature 275°F/135°C.

Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards

Temperature code T4 (for no lamp version only). Max temperature 275°F/135°C.

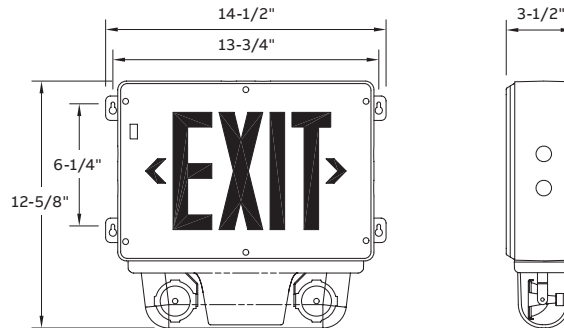
WARRANTY

Five year limited warranty

VC LED Series

DIMENSIONS

Dimensions are approximate and subject to change.



TEMPERATURE CODES

Lamp rating ¹	Temperature code	Max. temperature	Replacement part #
6V-4W	T4A	248°F/120°C	580.0097
6V-5W	T4A	248°F/120°C	580.0122
12V-4W	T5	212°F/100°C	580.0080
12V-5W	T4A	248°F/120°C	580.0104
12V-6W	T4	275°F/135°C	580.0106

¹Use qualified replacement lamps to avoid risk of over-heating

EMERGENCY LIGHTING FIXTURE

Part	Part number	Description
1 Series/capacity	VC	6V-20W, NICD
	V12N	12V-24W, NICD
2 LED	0	No heads, no lamp
	L1	2 x MR16 LED 6V 4W
	L2	2 x MR16 LED 6V 5W
	L7	2 x MR16 LED 12V 4W
	L9	2 x MR16 LED 12V 5W
	L10	2 x MR16 LED 12V 6W
3 Voltage	03	120/277V 60 HZ
4 Housing/face color	GG	Gray/gray
5 Legend color	R	Red legend
	G	Green legend
6 Diagnostics	Blank	Advanced Diagnostics non-audible
	DA	Advanced Diagnostics audible
	NEXRF	Nexus® wireless

VE LED Series

Hazardous location exit sign



CERTIFICATION

CLASS I
 Division 2 Group A, B, C, D
 Contact your ABB sales representative to verify classification

APPROVALS



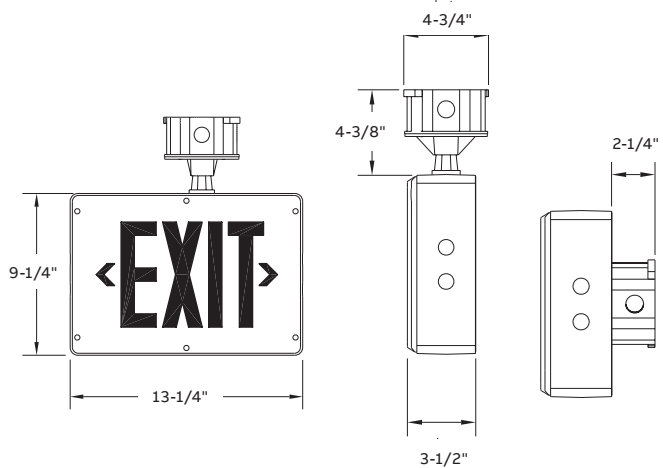
FEATURES



Key features and benefits

- HOUSING**
 - Fully gasketed housing frame
 - Faceplate: heavy-duty, vandal-resistant polycarbonate
 - Backplate: heavy-duty aluminum
 - Stainless steel tamper-proof screws
 - 6 inch EXIT lettering legend, available in red or green
 - Field-selectable chevrons
- MOUNTING**
 - Surface mount
 - Junction box included for wall, end or ceiling mount applications
 - 1/2 inch conduit knock-out entry on top and sides
- ELECTRONICS**
 - Magnetic test switch
 - Standard **Advanced Diagnostics (non-audible)**
 - Optional Nexus® monitoring system
 - 120/277 60Hz
- APPROVALS**
 - CSA-US (to UL 924 Standard)
 - Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, and D
 - NEC, OSHA and NEMA compliant for above Classes and Groups
 - Temperature code T6 (Max. temperature 185°F/85°C)
 - Damp and wet location 10 to 40°C (50 to 104°F)
 - Meets NFPA101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards
- WARRANTY**
 - Five year limited warranty

DIMENSIONS Dimensions are approximate and subject to change.



EXIT SIGN

Part	Part number	Description
1 Series	VE	AC/DC (50° to 104°F Amb)
	VEN	Self-powered (Ni-Cd) (50° to 104°F)
2 Face(s)	1	Single (ceiling/wall mount)
	2	Double (ceiling mount only)
3 Voltage	03	120/277V 60 Hz
4 Color of body/face	GG	Gray
5 Legend	R	Red
	G	Green
6 Diagnostic	Blank	AC/DC
	D	Advanced Diagnostics non-audible (self-powered)
	NEXRF	Nexus® wireless ¹
7 Options	CW	Cold weather (-4° to 104°F Amb) ¹

¹Available with VEN only

EMERGENCY LIGHTING

VR LED Series

Hazardous location remote fixture



CERTIFICATION

CLASS I

Division 2 Group A, B, C, D

Contact your ABB sales representative to verify classification



UL844
UL924

US
LR111065



APPROVALS

FEATURES



nexus®

Key features and benefits

DESCRIPTION

- Available with single or double lamp heads
- Die-cast aluminum back plate with gasket
- Vandal-resistant UV stabilized polycarbonate lamp cover
- Comes standard with tamper-proof screws and bit
- Universal J-box mounting
- Extreme operational temperature range: 10 to 40°C (50 to 104°F)

MOUNTING

- Surface mount
- Conduit entry 1/2" NPT

APPROVALS

- CSA-US (to UL 924 Standard)
- Evaluated to the UL 844 Standard for Class I Division 2, Groups A, B, C and D

WARRANTY

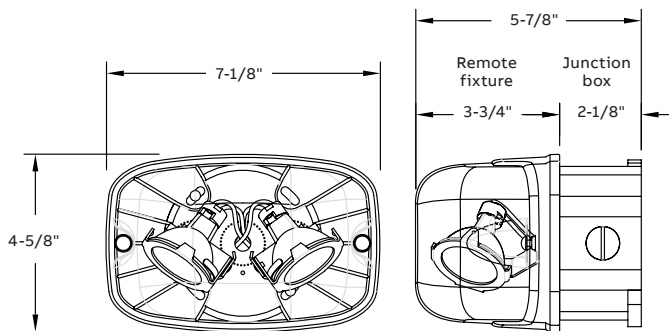
- Five year limited warranty

LAMP SELECTION CHART AND TEMPERATURE CODE

Lamp suffix	Voltage	Watt.	Lumens	Replacement #	Temp. code	Max temp.
L1	6	4	200	580.0097-E	T4A	248°F/120°C
L2	6	5	415	580.0122-E	T4A	248°F/120°C
L7	12	4	220	580.0093-E	T5	212°F/100°C
L9	12	5	340	580.0104-E	T4A	248°F/120°C
L10	12	6	540	580.0106-E	T4	275°F/135°C

DIMENSIONS

Dimensions are approximate and subject to change.



REMOTE FIXTURE

Part	Part number	Description
1 Series	VR	Single C1D2
	VRD	Double C1D2
2 LED	L1	6V 4W, MR16 LED
	L2	6V 5W, MR16 LED
	L7	12V 4W, MR16 LED
	L9	12V 5W, MR16 LED
	L10	12V 6W, MR16 LED
3 Color	G	Gray

Hazardous location battery unit



CERTIFICATION

CLASS I

Division 2 Group A, B, C, D

CLASS II

Division 1 & 2 Group E, F, G

CLASS III

Contact your ABB sales representative to verify classification



APPROVALS



Key features and benefits

Includes the addition of Class II Div 1&2 Groups E, F and G as well as Class III ratings

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981

Certified temperature codes for several types of emergency lamps

Suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere

Heavy-duty 1/8" thick aluminum back plate with keyholes for secure wall-mount installation

Two LED lamps, shielded by a cast aluminum housing and a polycarbonate cover

6W LED emergency lights provide 100 ft of egress illumination on a 6-foot wide path

Sealed, maintenance-free, lead-calcium batteries with up to 150W emergency power

Built-in microcontroller-based battery charger and auto-diagnostics circuitry

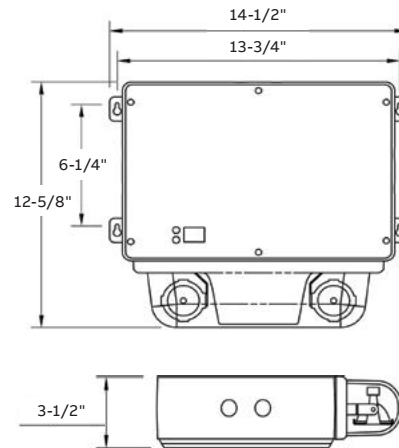
1/2" electrical conduit entry on both sides and at the top

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22.2 No.141-15

DIMENSIONS

Dimensions are approximate and subject to change.



Hazardous location remote fixture



CERTIFICATION

CLASS I

Division 2 Group A, B, C, D

CLASS II

Division 1 & 2 Group E, F, G

CLASS III

Contact your ABB sales representative to verify classification



APPROVALS



Key features and benefits

Quality illumination requires fewer fixtures

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2

No.137-M1981

Temperature codes: T4, T4A and T5 as per Canadian Electrical Code, Part I and CSA C22.2 No.137-M1981)

Extreme operational temperature range: -40°C (-40°F)

Choice of single- or double-lamp models

High efficacy LED lamps of 4W, 5W and 6W

Input voltage: 6V, 12V, 24V or 120V

Fully gasketed die-cast aluminum back plate

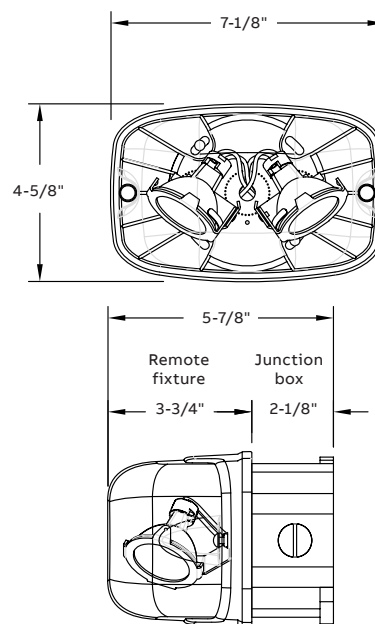
Clear polycarbonate cover, UV and impact resistant

Easy installation on a 4-inch octagonal box (included)

Comes standard with tamper-proof screws and bit

Certified to CSA 22.2 No.141-15

DIMENSIONS Dimensions are approximate and subject to change.





Hazardous location pictogram sign

CERTIFICATION

CLASS I

Division 2 Group A, B, C, D

CLASS II

Division 1 & 2 Group E, F, G

CLASS III

Contact your ABB sales representative to verify classification



APPROVALS



Key features and benefits

Includes the addition of Class II Div 1&2 Groups E, F and G as well as Class III ratings

Certified Class I Zone 2, Groups IIA, IIB and IIC

Certified Class I Division 2, Groups A, B, C and D as per CSA C22.2 No.137-M1981

Certified temperature codes for several types of emergency lamps

Suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere

Heavy-duty 1/8" thick aluminum back plate with keyholes for secure wall-mount installation

Two LED lamps, shielded by a cast aluminum housing and a polycarbonate cover

6W LED emergency lights provide 100 ft of egress illumination on a 6-foot wide path

Sealed, maintenance-free, lead-calcium batteries with up to 150W emergency power

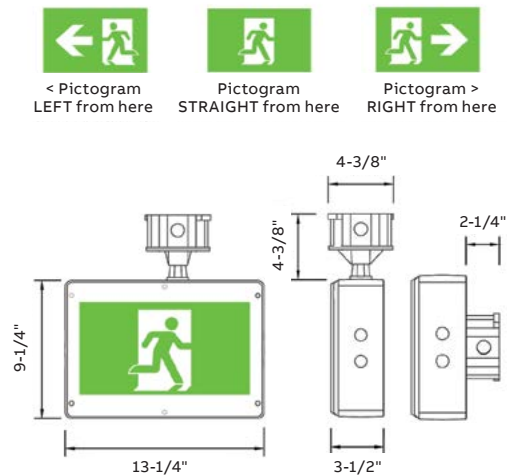
Built-in microcontroller-based battery charger and auto-diagnostics circuitry

1/2" electrical conduit entry on both sides and at the top

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22.2 No.141-15

DIMENSIONS Dimensions are approximate and subject to change.



Hazardous location combo pictogram



CERTIFICATION

CLASS I

Division 2 Group A, B, C, D

CLASS II

Division 1 & 2 Group E, F, G

CLASS III

Contact your ABB sales representative
to verify classification



APPROVALS

Key features and benefits

Certified Class I Division 2, Groups A, B, C and D as per CSA C22 .2
No .137-M1981

Includes the addition of Class II Div 1&2 Groups E, F and G as well as
Class III ratings

Certified temperature codes for several types of emergency lamps

Polyvinyl chloride frame, with built-in gasket to prevent water
infiltration

Heavy-duty 1/8-inch thick aluminum back plate with key-holes for wall-
mount installation

Sealed, polycarbonate vandal-resistant faceplate

Legend illuminated by long-life white LEDs is warranted for 10 years

Comes standard with two pictogram films for direction selection

Two LED lamps shielded by a clear polycarbonate cover

Sealed, maintenance-free lead-calcium or nickel-cadmium batteries

Comes standard with auto-test, **non-audible**

Remote load capacity: covers with LED lights 200 ft up to 500 ft of
egress illumination

Cold-weather option: -40°C (-40°F) with only 14W extra power
consumption

Auto-testing capabilities (specific load requirements)

Meets or exceeds CSA C22 .2 No .141-15

DIMENSIONS Dimensions are approximate and subject to change.



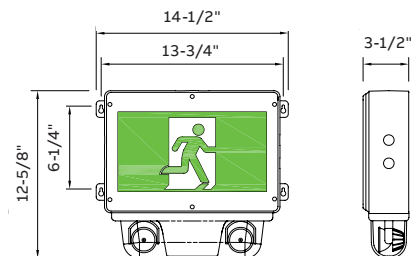
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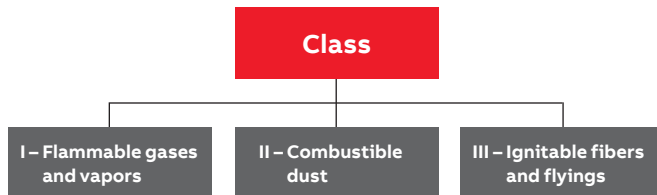
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Hazardous locations Classification

Areas where the possibility of explosion and fire is created by the presence of flammable gases, vapors, liquids, dust, fibers or flyings.



Class I – Gases, vapors or liquids

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 – Combustible dusts

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 and flyings

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

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, vapors or dusts are present under normal operation conditions or during frequent repair and maintenance activity.

Division 2 – Not normally hazardous

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

Area classification | Divisions versus zones

Continuous hazard	Intermittent hazard	Hazard under abnormal conditions
Zone 0	Zone 1	Zone 2
	Division 1	Division 2

These are simplified definitions. Complete data is in the U.S. National Electrical Code (NEC) and the Canadian Electrical Code (CEC).

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.

Hazardous locations

Zone classification

Zone system

Hazardous locations per the Zone system are classified according to its Zone which can be gas or dust. For gas atmospheres electrical equipment is further divided into Groups and Subgroups.

Zone – The Zone defines the probability of the hazardous material, gas or dust, being present in sufficient quantities to produce explosive or ignitable mixtures.

1. Gas

- a. **Zone 0** – Ignitable concentrations of flammable gases or vapors which are present continuously or for long periods of time.
- b. **Zone 1** – Ignitable concentrations of flammable gases or vapors which are likely to occur under normal operating conditions.
- c. **Zone 2** – Ignitable concentrations of flammable gases or vapors which are not likely to occur under normal operating conditions and do so only for a short period of time.

2. Dust

- a. **Zone 20** – An area where combustible dusts or ignitable fibers and flyings are present continuously or for long periods of time.
- b. **Zone 21** – An area where combustible dusts or ignitable fibers and flyings are likely to occur under normal operating conditions.
- c. **Zone 22** – An area where combustible dusts or ignitable fibers and flyings are not likely to occur under normal operating conditions and do so only for a short period of time.

Comparison between Zones and Classes/Divisions

Standards	NEC 505	NEC 500
Atmosphere		
Gases, vapors	Zone 0 Zone 1	Class I, Div. 1
	Zone 2	Class I, Div. 2
Dusts	Zone 20 Zone 21	Class II, Div. 1
	Zone 22	Class II, Div. 2

Group

Electrical equipment is divided into three groups:

Group I – Equipment intended for use in mines susceptible to firedamp (flammable mixture of gases naturally occurring in a mine).

Group II – Equipment intended for use in places with an explosive gas atmosphere other than mines susceptible to firedamp. Group II equipment is subdivided into three subgroups.

- **Group IIA** – Atmospheres containing propane, or gases and vapors of equivalent hazard.
- **Group IIB** – Atmospheres containing ethylene, or gases and vapors of equivalent hazard.
- **Group IIC** – Atmospheres containing acetylene or hydrogen, or gases and vapors of equivalent hazard.

Group III – Equipment intended for use in places with an explosive dust atmosphere. Group III equipment is subdivided into three subgroups.

- **Group IIIA** – Atmospheres containing combustible flyings.
- **Group IIIB** – Atmospheres containing non-conductive dust.
- **Group IIIC** – Atmospheres containing conductive dust.

Zone system: Gas groups

Gas groups	Representative gas
IIA	Propane
IIB	Ethylene
IIB H ₂	Hydrogen
IIC	Acetylene

Zone system: Dust groups

Dust groups	Dust type
IIIC	Combustible and conductive dust (metal dusts)
IIIB	Combustible and non-conductive (not metal) dust
IIIA	Combustible flyings

Ignition temperatures

Group classifications

Ignition temperatures and group classifications for flammable gases and vapors

Material	Group	Autoignition temperature		Material	Group	Autoignition temperature	
		° F	° C			° F	° C
Acetaldehyde	C	347	175	Di-N-Propylamine	C	570	299
Acetic acid	D	867	464	Diacetone alcohol	D	1118	603
Acetic anhydride	D	600	316	O-Dichlorobenzene	D	1198	647
Acetone	D	869	465	1,1-Dichloroethane	D	820	438
Acetone cyanohydrin	D	1270	688	1,2-Dichloroethylene	D	860	460
Acetonitrile	D	975	524	Dicylopentadiene	C	937	503
Acetylene	A	581	305	Diethyl benzene	D	743–842	395–450
Acrolein (inhibited)	B (c)	455	285	Diethyl ether	C	320	160
Acrylic acid	D	820	438	Diethylamine	C	594	312
Acrylonitrile	D	898	481	Diethylene glycol monobutyl ether	C	442	228
Allyl alcohol	C	713	378	Diethylene glycol monomethyl ether	C	465	241
Allyl chloride	D	905	485	N-N-Dimethyl aniline	C	700	371
Alpha-methyl styrene	D	1066	574	Dimethyl formamide	D	833	455
Ammonia	D	928	498	Dimethyl sulfate	D	370	188
N-Amyl acetate	D	680	360	Dimethylamine	C	752	400
Aniline	D	1139	615	1,4-Dioxane	C	356	180
Benzene	D	928	498	Dipentene	D	458	237
Benzyl chloride	D	1085	1085	Dodecene	D	491	255
1,3-Butadiene	B (d)	788	420	Du-isopropylamine	C	600	316
Butane	D	550	288	Epichlorohydrin	C	772	411
1-Butanol	D	650	343	Ethane	D	882	472
2-Butanol	D	761	405	Ethanol	D	685	363
N-Butyl acetate	D	790	421	Ethyl acetate	D	800	427
N-Butyl acrylate (inhibited)	D	559	293	Ethyl acetate (inhibited)	D	702	372
Butylamine	D	594	312	Ethyl benzene	D	810	432
Butylene	D	725	385	Ethyl chloride	D	966	519
N-Butyraldehyde	C	425	218	Ethyl formate	D	851	455
N-Butyric acid	D	830	443	2-Ethyl hexanol	D	448	231
Carbon disulfide	*	194	90	2-Ethyl hexyl acrylate	D	485	252
Carbon monoxide	C	1128	609	Ethyl mercaptan	C	572	300
Chlorobenzene	D	1099	593	Ethylamine	D	725	385
Cresol	D	1038–1110	559–599	Ethylene	C	842	450
Crotonaldehyde	C	450	232	Ethylene chlorohydrin	D	797	425
Cumene	D	795	424	Ethylene dichloride	D	775	413
Cyclohexane	D	473	245	Ethylene glycol monobutyl ether	C	460	238
Cyclohexanol	D	572	300	Ethylene glycol monobutyl ether acetate	C	645	340
Cyclohexanone	D	473	245	Ethylene glycol monoethyl ether	C	455	235
Cyclohexene	D	471	244	Ethylene glycol monoethyl ether acetate	C	715	379
Cyclopropane	D	938	503	Ethylene glycol monomethyl ether	D	545	285
P-Cymene	D	817	436	Ethylene oxide	B (C)	804	429
N-Decanol	D	550	288	Ethylenediamine	D	725	385
Decene	D	455	235	Ethylenimine	C	608	320
Di-Isobutyl ketone	D	745	396	2-Ethylhexaldehyde	C	375	191
Di-Isobutylene	D	736	391	Formaldehyde (gas)	B	795	429

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

Ignition temperatures

Group classifications

Ignition temperatures and group classifications for flammable gases and vapors

Material	Autoignition temperature			Material	Autoignition temperature		
	Group	° F	° C		Group	° F	° C
Fuel oils	D	410–765	210–407	Monoethanolamine	D	770	410
Furfural	C	600	316	Monoisopropanolamine	D	705	374
Furfuryl alcohol	C	915	490	Monomethyl aniline	C	900	482
Gasoline	D	536–880	280–471	Monomethyl hydrazine	C	382	194
Heptane	D	399	204	Morpholine	C	590	310
Heptene	D	500	260	Naphtha (coal tar)	D	531	277
Hexane	D	437	225	Naphtha (petroleum)	D	550	288
2-Hexanone	D	795	424	Nitrobenzene	D	900	482
Hexenes	D	473	245	Nitroethane	C	778	414
Hydrazine	C	74–518	23–270	Nitromethane	C	785	418
Hydrogen	B	968	520	2-Nitropropane	C	802	428
Hydrogen cyanide	C	1000	538	1-Nitropropane	C	789	421
Hydrogen sulfide	C	500	260	Nonane	D	401	205
Iso-Butyl acetate	D	790	421	Octane	D	403	206
Iso-Octyl aldehyde	C	387	197	Octene	D	446	230
Isoamyl acetate	D	680	360	Pentane	D	470	243
Isoamyl alcohol	D	662	350	1-Pentanol	D	572	300
Isobutyl acrylate	D	800	427	2-Pentanone	D	846	452
Isobutyraldehyde	C	385	196	1-Pentene	D	527	275
Isophorone	D	860	460	Propane	D	842	450
Isoprene	D	428	220	2-Propanol	D	750	399
Isopropyl acetate	D	860	460	1-Propanol	D	775	413
Isopropyl ether	D	830	443	Propionaldehyde	C	405	207
Isopropylamine	D	756	402	Propionic acid	D	870	466
Kerosene	D	410	210	Propionic anhydride	D	545	285
Liquified petroleum gas	D	761–842	405–450	N-Propyl acetate	D	842	450
Mesityl oxide	D	652	344	N-Propyl ether	C	419	215
Methane	D	999	537	Propyl nitrate	B	347	175
Methanol	D	725	385	Propylene	D	851	455
Methyl acetate	D	850	454	Propylene dichloride	D	1035	537
Methyl acrylate	D	875	468	Propylene oxide	B (C)	840	449
Methyl ether	C	662	350	Pyridine	D	900	482
Methyl ethyl ketone	D	759	404	Styrene	D	914	490
Methyl formal	C	460	238	Tetrahydrofuran	C	610	321
Methyl formate	D	840	449	Tetrahydronaphthalene	D	725	385
Methyl isobutyl ketone	D	840	449	Toluene	D	896	480
Methyl isocyanate	D	994	534	Turpentine	D	488	253
Methyl methacrylate	D	792	422	Unsymmetrical dimethyl hydrazine (UDMH)	C	480	249
Methyl N-Amyl ketone	D	740	393	Valeraldehyde	C	432	222
2-Methyl-1-Propanol	D	780	416	Vinyl acetate	D	756	402
2-Methyl-2-Propanol	D	892	478	Vinyl chloride	D	882	472
Methylamine	D	806	430	Vinyl toluene	D	921	494
Methylcyclohexane	D	482	250	Vinylidene chloride	D	1058	570
Methylcyclohexanol	D	565	296	Xylenes	D	867–984	464–529



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