



## No matter the area or application Eaton's Crouse-Hinds has an LED to meet your needs



Eaton's Crouse-Hinds offers the broadest portfolio of LED luminaires for any industrial or hazardous application.

Additionally, we utilize more than 100 years of lighting expertise to optimize the benefits of LED technology to offer the safest and most reliable LED luminaire on the market.

### Why LED?

#### Useful life

 Economic life can range anywhere between 60,000 to 170,000 hours or 7 to 20 years of maintenance-free and safe operation

### **Energy efficiency**

 LED consumes on average 50% less energy than HID and 85% less energy than incandescent

#### Start/restart time

 Instant illumination versus ~10 minutes (HID)

### Lighting quality

 Higher color rendering compared to fluorescent and HID

### **Environmental benefits**

- LED reduces carbon footprint
- Mercury-free fixtures means no disposal costs

### Why Crouse-Hinds?

#### Industry-best reliability

 Built to withstand extreme temperatures, high vibration, water and dust

#### Thermal management

 Engineered heat sinking ensures longer life and better lumen output

### **Quality of light**

 Custom optics designed to maximize light distribution and intensity

#### Retrofit compatibility

 LEDs compatible with Crouse-Hinds HID installed base for significant installation savings

### **Certified and compliant**

 Global certifications on most fixtures and a broad range of DLC qualified luminaires

## Selection guide - Harsh/heavy & light industrial

Area Classification	Application	Product		Equivalent light output	Lumen level	Input watts	Input voltage	DLC Qualified
	High/mid bay	Champ <sup>®</sup> Pro PVM		9 models - 70W to 1000W HID replacement	3,000 - 26,000 lumens	29W to 232W	120-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
	Low bay	Vaporgard Pro P2L	TM	1 model - 100W to 200W incandescent; 50W HID	1,600 lumens	22W	90-277 VAC, 12-24 VDC	(select models)*
Harsh/heavy industrial	Flood	Champ <sup>®</sup> Pro PFM		9 models - 70W to 1500W HID replacement	3,000 - 50,000 lumens	28W to 531W	100-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
	Linear c (1) us usten	Champ <sup>®</sup> PLL		2 models - 2 lamp T5H0 replacement	3,600 - 7,100 lumens	29W to 55W	100-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
	Wall pack	Endure™		2 models - 50W to 70W HPS & 70W HID replacement	2,300 - 4,700 lumens	27W to 51W	120-277 VAC	N/A
Light Industrial	High bay	Industrial high bay		5 models - 250W-1000W HID & 4-10 Lamp T5HO replacement	16,000 - 67,000 lumens	145W to 582W	100-277 VAC/ 127-250 VDC, 347-480 VAC	(select models)

<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details.

Not all models are approved for all application categories.

## Find out which solution is right for you.

## Selection guide - Hazardous area

Area classification	Application	Product	Equivalent light output	Lumen level	Input watts	Input voltage	DLC Qualified
	High/mid bay	Champ® VMV	9 models - 70W to 1000W HID replacement	3,000 - 26,000 lumens	29W to 232W	120-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
	Flood  c Use us IEC	Champ® FMV	9 models - 70W to 400W HID replacement	3,000 - 50,000 lumens	28W to 531W	100-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
Class I, Division 2	Low bay	Vaporgard™	1 models - 100W to 200W incandescent & 50W HID	1,600 lumens	22W	90-277 VAC, 12-24 VDC	(select models)*
and/or Zone 2	c Us us	Champ® MLL	2 models - 2 lamp T5H0 , replacement	3,600 - 7,100 lumens	29W and 55W	100-277 VAC/ 108-250 VDC, 347-480 VAC	(select models)*
	Emergency	Light-Pak™ N2LPS	1.5 hours of battery with 28W power consumption	N/A	28W	120, 220, 230, 240, 277 VAC	N/A
	Exit	Ex-Lite/ CCH UX	3 models - Ex-Lite Z & Ex-Lite ZE (with battery) and CCH UX	N/A	N/A	120-277 VAC, 110-250 VDC	N/A
	High/mid bay	Hazard•Gard® EVLL	5 models - 70W to 400W HID/HPS replacement	5,700 - 13,500 lumens	56W to 149W	120-277 VAC/ 108-250 VDC, 347-480 VAC	N/A
	Low bay	EV LED	2 models - 100W to 200W incandescent & 70W-100W HID replacement	1,500 - 2,000 lumens	26W to 36W	100-277 VAC, 10-30 VDC	N/A
	High/mid bay	LPL	4 models - 70W to 250W HID replacement	5,100 - 10,200 lumens	53W to 105W	100-277 VAC	N/A
Class I, Division 1 and/or Zone 1 Zone 21	Linear c	Hazard•Gard® XPL	2 models - 2 lamp T5H0 replacement	3,800 - 7,600 lumens	33W and 63W	100-277 VAC, 347-480 VAC, 108-250 VDC	N/A
	Linear IEC	eLLK	2 models - 2x18W and 2x36W fluorescent replacement	2,100 - 4,100 lumens	2X13W and 2X26W	110-254 VAC, 110-250 VDC	N/A
	Bulkhead <b>IEC</b>	AB05	1 model - 150W incandescent replacement	2,000 lumens	32W	120-240 VAC	N/A
	Low Bay	EV35	1 model - 100W to 150W incandescent & 50W mercury vapor replacement	2,120 lumens	32W	220-240 VAC	N/A

<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

## Harsh & heavy industrial

## Champ® Pro PFM LED floodlights

### **PRIMARY APPLICATIONS**

Indoor and outdoor area lighting in manufacturing plants, mine sites and processing areas, platforms, loading docks and parking areas.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
PFM3L	70W	
PFM5L	100W-150W	_
PFM7L	150W-175W	— Up to 72%
PFM9L	175W-250W	reduction in
PFM11L	250W-400W	energy costs and 60,000 hours of
PFM13L	400W	continuous
PFM15L	400W-500W	operation!
PFM25L	600W-750W	
PFM50L	1,500W	

### **CERTIFICATIONS & COMPLIANCES**

- UL1598; UL1598A; UL875
- cUL
- Type 4X
- IP66
- DesignLights Consortium® approved for select models\*
- UL approved up to 65°C ambient (3L-15L)
- cUL Listed to CSA Standard CSA C22.2 No. 250
- IEC Standards: IEC 60598; CE

### **ELECTRICAL RATINGS**

- Voltages: 100-277 VAC, 347-480 VAC, 108-250 VDC
- Input power: 28W, 45W, 62W, 79W, 99W, 112W, 131W, 263W, 531W

### **OPTIONS AND ACCESSORIES**

- Bolt-on visor
- · Bolt-on wire guard
- Floodlight slipfitter (not available on 50L)
- · Slipfitter wall mount adapter
- Polycarbonate lens
- Diffused glass lens
- Dimmable driver (NEC only)
- 3x3 optic (select models)



Up to 6 times longer life and 72% reduction in power consumption compared to equivalent HID floodlights

- Versatile design Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement.
- B Rugged heat sink Designed to perform in high ambient temperatures up to +65°C and as low as -40°C. The thick walls of the castings make for a tough, rugged housing that keeps the internal driver and LED temperatures down.
- **C** High lumen output Up to 117 lumens per watt.
- Full-frame yoke Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations.
- **Multiple lens options -** Tempered and clear glass standard, polycarbonate and diffused glass options available.
- Smaller and lighter 25% smaller and 10 lbs (4.5 kg) lighter that previous model (3L-15L models).

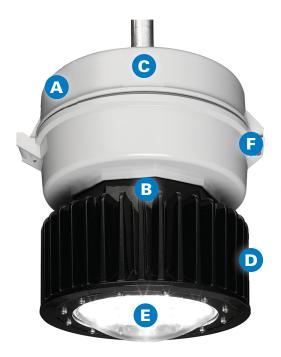








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PVM13L and 17L



PVM21L and 25L

PVM3L - 11L

Custom Type I, III and V optics for better output, zero maintenance and reduced energy consumption

### **DESIGN FEATURES**

- Modular design This contractor-friendly design is ideal for both retrofit and new construction applications.
- Safe, reliable heat transfer Die cast aluminum housing provides safe and effective heat transfer from the LED assembly to the outside environment, ensuring low LED junction temperature, reliability and sustained lumen performance.
- High efficiency drivers Designed to provide reliable operation in even the harshest environments.
- **Type 4X rated** The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly. The impact-resistant lens is sealed from the outside environment and provides ingress protection against water and dust.
- Custom optics Type I, III and V optics designed to maximize light distribution and intensity.
- E Lever-lock connectors and 3-pole terminal block.











<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

## Harsh & heavy industrial

### Champ<sup>®</sup> Pro PVM LED luminaire

### **PRIMARY APPLICATIONS**

Locations requiring continuous and consistent light levels in extreme ambient temperatures, such as manufacturing plants, mine sites, heavy industrial or petrochemical facilities, food and beverage facilities, marine environments, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
PVM3L	70W-100W	_
PVM5L	100W-150W	_
PVM7L	150W-175W	Up to 77%
PVM9L	250W-320W	reduction in
PVM11L	320W-400W	energy costs and 60.000 hours of
PVM13L	400W	continuous
PVM17L	400W-600W	operation!
PVM21L	600W-750W	_
PVM25L	750W-1,000W	_

### **CERTIFICATIONS & COMPLIANCES**

- UL1598; UL1598A
- cUL
- Type 4X
- IP66
- DesignLights Consortium<sup>®</sup> approved for select models\*
- cUL Listed to CSA Standard CSA C22.2 No. 250
- IEC standard: CE
- UL approved up to 65°C ambient (3L-11L UNV1; all other models 55°C)

#### **ELECTRICAL RATINGS**

- Voltages: 120-277 VAC/108-250 VDC, 347/480 VAC
- Input power: 29W, 43W, 62W, 85W, 113W, 131W, 168W, 196W, 232W

- Quick clip
- Diffused lens
- Teflon coated lens
- Polycarbonate lens
- Wire guard
- Trunnion mount
- Cone top hat
- Occupancy sensor and remote

## Harsh & heavy industrial

## Champ<sup>®</sup> PLL linear LED luminaire

### **PRIMARY APPLICATIONS**

Ideal for a variety of non-hazardous applications such as mining, food processing, marine, wastewater treatment heavy manufacturing and general wash down areas.

### **LUMINAIRE MODEL**

Model number	Equivalent fluorecsent luminaire	Typical energy savings/lifetime
PLL2	2 x 2 ft. T5/T8/ T12H0	Up to 67% reduction in energy costs and
PLL4	2 x 4 ft. T5/T8/ T12H0	60,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

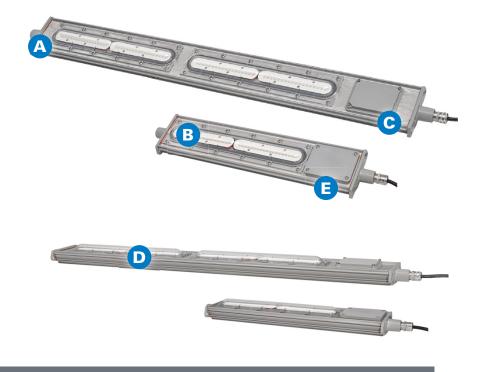
- UL1598; UL1598A
- CSA C22.2 No. 250
- Type 4X, IP66, Wet Locations
- ABS
- DesignLights Consortium® approved for select models\*

### **ELECTRICAL RATINGS**

- Voltage: 100-277 VAC, 347-480 VAC, 108-250 VDC
- Input power: 29W, 55W

### **OPTIONS AND ACCESSORIES**

- Glass or polycarbonate lens
- Diffused glass or polycarbonate lens
- Flush/back, ceiling/swivel, wall, offset wall, pole and pendant mounts
- Safety chain kit
- Epoxy painted or natural aluminum finish



Up to 67% more energy efficient than a T5HO fluorescent light and 8 times the rated life

- A Best-in-class efficacy Up to 130 lumens per watt.
- B Custom optics Standard wide (120°) and narrow (80°) beam pattern for a wide variety of general and targeted applications.
- **Built to last** 2,000 psi high pressure hose down rated; passed 5G vibration test; 60,000 hour lifetime @ 55°C ambient.
- Slim profile 2.7" fixture height (excluding mounting brackets), perfect for mounting in confined or low height areas.
- **Quick & easy installation** Easy access to drivers and wiring; no custom brackets or hardware needed; Seven mounting options available.







<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.



85% more energy-efficient than a 200 watt incandescent and over 20 times the rated life

### **DESIGN FEATURES**

- A Domeless reflector, low profile design Designed for low mounting heights and confined spaces where incandescent and HID based luminaires are too large.
- Installation and replacement made simple Installed using the same mounting modules as existing Eaton's Crouse-Hinds Vaporgard™ fixtures.
- © Safe, reliable heat transfer Heat sink engineered to safely and effectively remove heat from the LED and driver, ensuring long product life and superior T-ratings.
- High power multi-die LED arrays Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.

## Harsh & heavy industrial

### Vaporgard<sup>™</sup> Pro P2L LED luminaires

### **PRIMARY APPLICATIONS**

Indoor or outdoor areas with low mounting heights or confined spaces, such as tunnels and catwalks, over doorways or entries, landing areas, utility rooms, etc.

### **LUMINAIRE MODELS**

Model number	Equivalent HID Iuminaire	Typical energy savings/lifetime
P2LC/UNV1		Up to 85%
P2LW/UNV1	50W HID or - 100-200W incandescent	reduction in energy costs and
P2LC/DC1		60,000 hours of continuous
P2LW/DC1		operation!

### **CERTIFICATIONS & COMPLIANCES**

- UL1598
- UL1598A
- cUL
- NEMA 4X
- IP66
- DesignLights Consortium® approved for select models\*
- CE

### **ELECTRICAL RATINGS**

• Voltages: 90-264 VAC; 277 VAC, 12-24 VDC

• Input power: 22W

- Frosted lens
- Teflon coated lens
- High temperature option (55°C)
- Warm white (3000K) and cool white (5600K) color temperatures
- 12-24 VDC driver









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## Harsh & heavy industrial

## Endure™ LED wall pack

### **PRIMARY APPLICATIONS**

Ideal for a variety of complex non-hazardous applications such as mining, food processing, marine, wastewater treatment, heavy manufacturing and general wash-down areas.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
FM1 B01	50W	59%
FM1 B02	70W	43%

50,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- UL1598
- cUL
- IP66

### **ELECTRICAL RATINGS**

• Input power: 27W, 51W

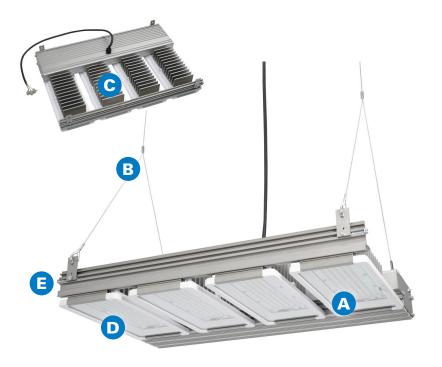


50,000 hours rated life and up to 59% more energy-efficient than equivalent 70 watt HID luminaire

- White light Provides superior color rendering and ambient clarity. Optics are precisely designed to shape the distribution, maximizing efficiency and application spacing.
- B Energy efficiency and longer life 50,000 hours rated life and up to 59% more energy-efficient than the 70W high pressure sodium equivalent.
- Reduction in light pollution Controlled distribution of light means far less light loss.
- IP66 ingress protection rating and -30°C to 50°C ambient temperature rating - Ensures trouble-free operation in a variety of harsh and complex applications.
- **3 Junction box -** Polycarbonate, IP66 rated, four screws to access cover, double row terminal box to expedite installation.







## Perfect replacement for 400-1500 watt HID or 4-10 lamp T5HO fixtures

### **DESIGN FEATURES**

- A Increased efficiency Up to 117 lumens per watt.
- Multiple mounting options Available with pendant, aircraft cable or jack chain mounting.
- Aluminum heat sinks for superior thermal management.
- Multiple lens options Tempered and clear glass standard, diffused glass and clear or diffused polycarbonate options available.
- **E** Optional occupancy sensor kit available.







### \* Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

## Light industrial

## Industrial High Bay LED luminaires

### **PRIMARY APPLICATIONS**

IHB LED luminaires are the perfect replacement for 250W-1,500W HID and 4-10 lamp T5HO fluorescent high bay fixtures. Designed for locations requiring continuous and consistent light levels, requiring frequent on-and-off of lights and that are difficult to relamp or that cause production to be stopped during the lamp maintenance process.

### **LUMINAIRE MODEL**

Model number	Equivalent luminaire	Typical energy savings/lifetime
IHB16L	250-500W HID or 4 lamp T5H0	
IHB24L	400-750W HID or 4-6 lamp T5H0	Up to 72% reduction in
IHB32L	500-1000W HID or 6-8 lamp T5H0	energy costs and 60,000 hours of
IHB48L	750-1,500W HID or 8-10 lamp T5H0	continuous operation!
IHB64L	1,000-1,500W HID or 10 lamp T5H0	

### **CERTIFICATIONS & COMPLIANCES**

- UL1598; UL8750
- cULus
- Damp location
- DesignLights Consortium® approved for select models

### **ELECTRICAL RATINGS**

- Voltages: 100-277 VAC/127-250 VDC, 347-480 VAC
- Input power: 145W, 216W, 289W, 436W, 582W

- Occupancy sensor kits
- Diffused or clear lens (glass or polycarbonate)
- · Lens guard
- · Open ended and closed dust cover kits
- Dimmable driver
- Wide or aisle optic
- Pendant, aircraft cable or jack chain mounting

## Champ<sup>®</sup> FMV LED floodlights

### PRIMARY APPLICATIONS

Indoor and outdoor area lighting in manufacturing plants, heavy industrial chemical and petrochemical facilities, platforms, loading docks sand parking lots.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
FMV3L	70W	
FMV5L	100W-150W	_
FMV7L	150W-175W	Up to 72%
FMV9L	175W-250W	reduction in
FMV11L	250W-400W	energy costs and 60,000 hours of
FMV13L	400W	continuous
FMV15L	400W-500W	operation!
FMV25L	600W-750W	_
FMV50L	1,500W	_

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- Class II, Groups E, F, G; Simultaneous Presence; Class III
- Type 4X, IP66
- UL844; UL1598; UL1598A; UL8750
- CSA C22.2 No. 137
- IECEx/ATEX Certified; Zone 2/22
- CE
- DesignLights Consortium® approved for select models\*

#### **ELECTRICAL RATINGS**

- Voltages: 100-277 VAC/108-250 VDC, 347-480 VAC
- Input power: 28W, 45W, 62W, 79W, 99W, 112W, 131W, 263W, 531W

#### **OPTIONS AND ACCESSORIES**

- · Bolt-on visor; bolt-on wire guard
- · Floodlight slipfitter
- Slipfitter wall mount adapter (not available for 50L)
- · Diffused glass lens
- Dimmable driver (NEC rated models only)
- 3x3 optic (select models)



Up to 6 times longer life and 65% reduction in power consumption compared to equivalent HID floodlights

- Versatile design Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement.
- B Rugged heat sink Designed to perform in high ambient temperatures up to +65°C and as low as -40°C. The thick walls of the castings make for a tough, rugged housing that keeps the internal driver and LED temperatures down.
- **C** High lumen output Up to 117 lumens per watt.
- Full-frame yoke Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations.
- Multiple lens options Tempered and clear glass standard, polycarbonate and diffused glass options available.
- Smaller and lighter 25% smaller and 10 lbs (4.5 kg) lighter that previous model (3L-15L models).







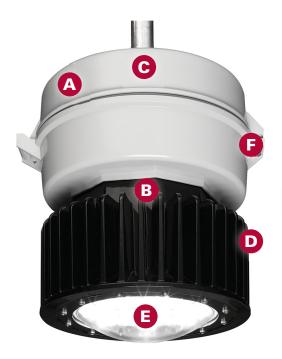








<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.





VMV13L and 17L



VMV21L and 25L

VMV3L - 11L

Custom Type I, III and V optics for better output, zero maintenance and reduced energy consumption

### **DESIGN FEATURES**

- Modular design This contractor-friendly design is ideal for both retrofit and new construction applications.
- Safe, reliable heat transfer Die cast aluminum housing provides safe and effective heat transfer from the LED assembly to the outside environment, ensuring low LED junction temperature, reliability and sustained lumen performance.
- High efficiency drivers Designed to provide reliable operation in even the harshest environments.
- **Type 4X rated** The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly. The impact-resistant lens is sealed from the outside environment and provides ingress protection against water and dust.
- Custom optics Type I, III and V optics designed to maximize light distribution and intensity.
- **E** Lever-lock connectors and 3-pole terminal block.

















<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

### Hazardous Area

## Champ<sup>®</sup> VMV LED luminaires

### **PRIMARY APPLICATIONS**

Locations requiring continuous and consistent light levels in extreme ambient temperatures, such as manufacturing plants, heavy industrial or petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
VMV3L	70W-100W	
VMV5L	100W-150W	
VMV7L	150W-175W	Up to 77%
VMV9L	250W-320W	reduction in
VMV11L	320W-400W	energy costs and 60,000 hours of
VMV13L	400W	continuous
VMV17L	400W-600W	operation!
VMV21L	600W-750W	
VMV25L	750W-1000W	_

### **CERTIFICATIONS & COMPLIANCES**

- · Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2 nA nR; Zone 21 tb
- Class II, Groups E, F, G
- Class III
- UL844; UL1598; UL1598A; UL8750; UL50; UL50E
- CSA C22.2 No. 137
- Type 4X, IP66
- IECEx/ATEX Certified; Zone 2/21
- DesignLights Consortium® approved for select models\*
- CE

### **ELECTRICAL RATINGS**

- Voltages: 120-277 VAC/ 108-250 VDC, 347/480 VAC
- Input power: 29W, 43W, 62W, 85W, 113W, 131W, 168W, 196W, 232W

- Quick clip
- Diffused lens
- · Teflon coated lens
- Polycarbonate lens
- Wire guard
- Trunnion mount
- Cone top hat
- Type I, III and V optics
- Terminal block (TB6) 6-pole

## Hazard•Gard<sup>®</sup> XPL linear LED luminaires

### **PRIMARY APPLICATIONS**

Ideal for Class I, Division 1 and Class II, Division 1 areas in wastewater treatment, oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present.

### **LUMINAIRE MODEL**

Model number	Equivalent fluorecsent luminaire	Typical energy savings/lifetime
XPL2	2 x 2 ft. T5/T8/ T12H0	Up to 53% reduction in energy costs and
XPL4	2 x 4 ft. T5/T8/ T12H0	60,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 1, Groups C, D
- · Class II, Division 1, Groups E, F, G
- Class III
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- NEMA 4X, IP66, Marine and Wet Locations, Paint spray rated

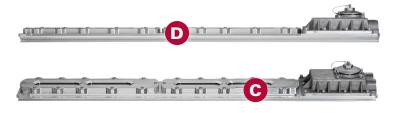
### **ELECTRICAL RATINGS**

- Voltage: 100-277 VAC/108-250 VDC, 347-480 VAC
- Input power: 34W, 63W

### **OPTIONS AND ACCESSORIES**

- Glass or difussed glass lens
- Flush, pole and swivel/surface mounts
- · Polycarbonate paint spray lens shield kit
- · Safety chain kit





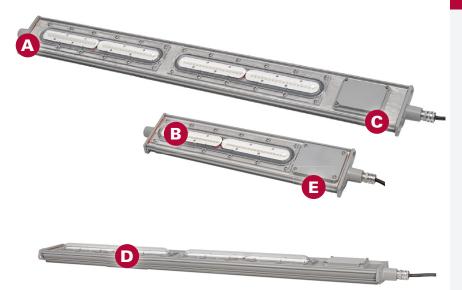


Up to 53% more energy efficient than a T5HO fluorescent light and 8 times the rated life

- A Best-in-class efficacy Up to 130 lumens per watt.
- **B** Custom optics Standard wide (120°) beam spread maximizes illumination on wall panels.
- **Built to last** 2,000 psi high pressure hose down rated; passed 5G vibration test; 60,000 hour lifetime @ 55°C ambient.
- Slim profile Less than 5" fixture height (excluding mounting brackets), perfect for mounting in confined or low height areas.
- Quick & easy installation Easy access to drivers and wiring; no custom brackets or hardware needed; Two mounting options available.







# Up to 67% more energy efficient than a T5HO fluorescent light and 8 times the rated life

### **DESIGN FEATURES**

- A Best-in-class efficacy Up to 130 lumens per watt.
- Custom optics Standard wide (120°) and narrow (80°) beam pattern for a wide variety of general and targeted applications.
- **G** Built to last Passed 2,000 psi high pressure hose test; passed 5G vibration test; 60,000 hour lifetime @ 55°C ambient.
- Slim profile 2.7" fixture height (excluding mounting brackets), perfect for mounting in confined or low height areas.
- **Quick & easy installation** Easy access to drivers and wiring; no custom brackets or hardware needed; Seven mounting options available.

### Hazardous area

## Champ<sup>®</sup> MLL linear LED luminaires

### **PRIMARY APPLICATIONS**

Oil and gas refineries, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels outdoor and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present.

### **LUMINAIRE MODEL**

Model Number	Equivalent fluorecsent luminaire	Typical energy savings/lifetime
MLL2	2 x 2 ft. T5/T8/ T12H0	Up to 67% reduction in energy costs and
MLL4	2 x 4 ft. T5/T8/ T12H0	60,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups F, G\*\*
- UL844; UL1598; UL1598A; UL924
- CSA C22.2 No. 137
- NEMA 4X, IP66, Marine and Wet Locations
- DesignLights Consortium® approved for select models\*
- ABS

### **ELECTRICAL RATINGS**

- Voltage: 100-277 VAC, 347-480 VAC, 108-250 VDC
- Input power: 29W, 55W

- Glass or polycarbonate lens
- Diffused glass or polycarbonate lens
- Flush/back, ceiling/swivel, wall, offset wall, pole and pendant mounts
- Safety chain kit
- Epoxy painted or natural aluminum finish







<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

<sup>\*\*</sup> See product brochure for lens type.

## Hazard•Gard® EVLL LED luminaires

### **PRIMARY APPLICATIONS**

Used for general lighting in areas where flammable or explosive vapors or gases are present, such as petroleum refineries, chemical and petrochemical plants, oil terminals, gas plants, drilling platforms and wastewater treatment plants.

### **LUMINAIRE MODELS**

Model number	Equivalent HID luminaire	Typical energy savings/lifetime
EVLL5L	100W-150W	_ Up to 62%
EVLL7L	150W-175W	reduction in
EVLL9L	175W-250W	energy costs and 60,000 hours of
EVLL11L	250W-320W	continuous
EVLL13L	320W-400W	operation!

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 1, Groups B, C, D
- Class I, Zone 1, Groups IIB + H<sub>2</sub>, IIB, IIA
- Class II, Groups E, F, G
- Class III, Simultaneous Presence
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- NEMA 4X, IP66
- CE
- ATEX/IECEX, Zone 1/21

#### **ELECTRICAL RATINGS**

- Voltages: 120-277 VAC/108-250 VDC, 347-480 VAC
- Input power: 56W, 85W, 112W, 115W, 149W

### **OPTIONS AND ACCESSORIES**

- Trunnion mount
- Guard
- Color temperature: warm (3000K) or cool (5000K)
- Pendant, ceiling, stanchion and wall mounts



Energy-efficient and globally certified explosionproof workhorse for general area and high bay lighting applications

- A Retrofittable to install base Adapter available for connection to existing Hazard Gard ® EVI, EVLP and EVM modules.
- **Quick-connect design -** Install and wire the mounting module, then simply screw in the luminaire.
- **©** Factory sealed No external sealing fittings required in Groups B, C and D.
- 60,000 hours rated life Eliminates the need for frequent lamp replacement.
- Shock- and vibration-resistant The LED housing is constructed of durable diecast aluminum, providing efficient long life





## Up to 85% reduction in energy costs and 50,000 hours of continuous operation

### **DESIGN FEATURES**

- A Retrofittable mounting modules Compatible with existing EV Series mounting modules, which reduces retrofit installation time and materials costs, and makes new construction installation easy.
- **3** Dark Sky Compliant light distribution Certified by the International Dark Sky Association as Dark Sky Compliant, virtually no light pollution will escape up into the atmosphere.
- © 20 times longer life than incandescents in tough-to-maintain Division 1 locations.

### Hazardous area

### EV LED luminaires

### **PRIMARY APPLICATIONS**

Indoors or outdoors in process and storage areas, corridors, bridges and stairs.

### **LUMINAIRE MODELS**

Model number	Equivalent luminaire	Typical energy savings/lifetime
EVLEDC201	100W-200W incandescent	Up to 85% reduction in energy costs and
EVLEDC701	70W-100W HID	50,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 1, Groups C, D
- Class I, Zone 1 & 2, Group IIB
- Class II, Groups E, F, G
- Class III; Simultaneous Presence
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- Type 4X, IP66

#### **ELECTRICAL RATINGS**

- Voltages: 100-277 VAC, 10-30 VDC
- Input power: 26W, 30W, 36W

- Amber color
- Color temperature: warm white (3500K)
- 10-30 VDC









### Vaporgard<sup>™</sup> LED luminaires

### **PRIMARY APPLICATIONS**

Indoor or outdoor areas with low mounting heights or confined spaces, such as tunnels and catwalks, over doorways or entries, landing areas, utility rooms, etc.

### **LUMINAIRE MODEL**

Model number	Equivalent luminaire	Typical energy savings/lifetime
	100W-200W incandescent	Up to 85% reduction in
V2L	50W HID	energy costs and 60,000 hours of continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups F, G
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- NEMA 4X
- UL1598; UL1598A
- IP66
- RoHS Compliant
- ATEX/IECEX Zone2/22
- DesignLights Consortium® approved for select models\*
- CE

### **ELECTRICAL RATINGS**

• Voltages: 90-264 VAC, 277 VAC, 12-24 VDC

• Input power: 22W

### **OPTIONS AND ACCESSORIES**

- Frosted lens
- Teflon coated lens
- High temperature option (55°C)
- Brazil (CEPEL) Certification
- Color temperature: Warm white (3000K)
- 12-24 VDC Driver



85% more energy-efficient than a 200 watt incandescent and over 20 times the rated life

- Opmeless reflector, low profile design Designed for low mounting heights and confined spaces where incandescent and HID based luminaires are too large.
- B Installation and replacement made simple Installed using the same mounting modules as existing Eaton's Crouse-Hinds Vaporgard™ fixtures.
- Safe, reliable heat transfer Heat sink engineered to safely and effectively remove heat from the LED and driver, ensuring long product life and superior T-ratings.
- High power multi-die LED arrays Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.













<sup>\*</sup> Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.





LED egress, emergency and exit lighting designed for harsh and hazardous locations

### **N2LPS DESIGN FEATURES**

- Non-metallic, enclosed, gasketed housing Provides corrosion protection in the most extreme environments.
- Durable and marine rated LED lamp head assemblies Provide protection against water ingress, corrosion and impact.
- Nickel cadmium battery High temperature rated nickel cadmium battery for reliable operation up to 55°C ambient.
- Reduced maintenance costs Self-test, monitoring and diagnostics reduce costly maintenance checks.
- Remote mountable lamp heads Lamp heads can be mounted independently from the enclosure, allowing you to focus light where you need it.

### **Exit Lighting DESIGN FEATURES**

- Corrosion- and impact-resistant housing Ensures long product life and reliability.
- G Nickel cadmium battery Premium heavy duty nickel cadmium battery with 24-hour charge and recharge time increases safety by recovering quickly from an outage.
- **(B) "EXIT" legend with alternative directional arrows -** Left, right or left and right; simple field modification (Ex-Lite only).





**Emergency & exit lighting** 

**Exit lighting only** 

### Hazardous area

## LED emergency and exit luminaires

## Light-Pak™ N2LPS Emergency Lighting PRIMARY APPLICATIONS

Used to provide reliable illumination for egress areas during failure or interruption of power to the normal lighting system.

### **LUMINAIRE MODEL**

Model number	Battery life
N2LPS	90 minutes

### **CERTIFICATIONS & COMPLIANCES**

- · Class I, Division 2, Groups B, C, D
- Class I, Zone 2
- UL844; UL924; UL1598A
- C22.2 No. 141-M1985; C22.2 No. 137-M1981
- Life Safety Code NFPA101® Section 5-9
- Type 4X

#### **ELECTRICAL RATINGS**

 Power supply input: 120, 220, 230, 240, 277 sVAC; 28W max.

## LED Exit Signs PRIMARY APPLICATIONS

Used for marking escape routes and exits in potentially explosive atmospheres.

### **LUMINAIRE MODELS**

Model Number	Rating	Battery
Ex-Lite Z	Hazardous	No
Ex-Lite ZE	Hazardous	Yes
CCH UX	Industrial/Hazardous	Optional

### **CERTIFICATIONS & COMPLIANCES**

#### Ex-Lite:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 1, AEx em ib IIC (NEC)
- Class I, Zone 1, Ex em ib IIC (CEC)
- Class II, Division 2, Groups F, G (NEC)
- Class II, Division 2, Groups E, F, G (CEC)
- IP66
- UL844; UL924/CSA22.2 No. 141-02; UL60079CSA22.2 E60079; UL1203/CSA22.2 E6124-1-1-02

### CCH UX:

- NEMA 4X; UL50
- UL924 Wet Location
- IP65; IP66
- Class I, Division 2, Groups A, B, C, D
- NSF

### **ELECTRICAL RATINGS**

- Voltages: 120-277 VAC, 110-250 VDC (Ex-Lite only)
- Power consumption: 6VA

## eLLK linear LED luminaires

### **PRIMARY APPLICATIONS**

Designed for use in outdoor and indoor hazardous and non-hazardous areas where moisture or corrosion may be a problem, such as offshore oil platforms, pharmaceutical plants, oil refineries and industrial locations.

### **LUMINAIRE MODELS**

Model number	Equivalent luminaire	Battery	Typical energy savings/ lifetime
eLLK LED 400	2x18W fluorescent	No	Up to 20%
eLLK LED 800	2x36W fluorescent	No	reduction in energy costs and 60,000
eLLK LED 400 NiB	2x18W fluorescent	Yes	hours of
eLLK LED 800 NiB	2x36W fluorescent	Yes	operation!

### **CERTIFICATIONS & COMPLIANCES**

- Il 2G Ex de mb IIC T4 Gb
- 🕲 II 2D Ex tb IIIC T80 °C Db IP66
- BVS 09 ATEX E 034
- Ex de mb IICT4 Gb/Ex tb IIICT80 °C
- IECEx BVS 09.0033
- CSAus, Zone 1 (Division 2)

### **ELECTRICAL RATINGS**

- Voltages: 110-254 VAC, 110-250 VDC; 50/60 Hz
- Input power: 2x13W, 2x26W

### **OPTIONS AND ACCESSORIES**

- LED module 400 (2x13W) for eLLK/M 92 018/18
- LED module 800 (2x26W) for eLLK/M 92 036/36
- Through wiring single/double ended
- Cable glands
  - Ex-e M25 x 1.5 (plastic) for cables 8-17mm in diameter
  - M20 x 1.5 metal threaded



Saves on energy consumption and easily retrofit existing luminaires in hazardous and corrosive environments

- A High output Illuminance (lux/Fc) equivalent to related fluorescent tubes at measurement plane.
- **B** Non-metallic design Fiberglass-reinforced polyester construction for extreme durability.
- Retrofit friendly Retrofits to existing eLLK/nLLK fixtures with existing EVG 09 ballast or as a complete unit.
- Better visibility Glare minimized by indirect emission from luminaire's built-in reflector.
- **Emergency battery pack** (NiB versions only)











A long-life, energy-efficient luminaire for general area lighting in hazardous IEC applications

### **DESIGN FEATURES**

- Robust construction This corrosion-proof fixture offers high quality, shock- and vibration-resistant LEDs, copper-free aluminum housing and an impact-resistant glass globe.
- **B** Excellent thermal management Provides over 50,000 hours of life.
- **C** Lead-free and environmentally-friendly.

### Hazardous area

## LPL LED luminaires

### **PRIMARY APPLICATIONS**

Suitable for Zone 1 and Zone 2 Ex-Gas and Zone 21/22 Ex-Dust hazardous areas, such as heavy industrial, chemical, petrochemical or pharmaceutical facilities, platforms, shipyards, electric power, loading docks, wastewater treatment plants and paper mills.

### **LUMINAIRE MODELS**

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
LPL06-C57-5L	70W-100W	Up to 40%
LPL06-C57-7L	150W	reduction in energy costs and
LPL06-C57-9L	175W	60,000 hours of
LPL06-C57-10L	250W	continuous operation!

### **CERTIFICATIONS & COMPLIANCES**

- Ex d e IICT6/T5 Gb
- Ex tb IIIc T80°C/T100°C
- EC-type Exam Certification: DNV 11 ATEX 06805X
- IECEx Certificate of Conformity: IECEx-CM 12.0007X
- IP66
- Zones 1 and 2 (Ex-Gas)
- Zones 21 and 22 (Ex-Dust)
- CE

### **ELECTRICAL RATINGS**

• Voltage: 100-277 VAC

- Warm white color temperature (3300K)
- Pole mount accessories



### EV35 LED luminaire

### **PRIMARY APPLICATIONS**

Indoors or outdoors in process and storage areas, corridors, bridges and stairs.

### **LUMINAIRE MODELS**

Model number	Equivalent luminaire	Typical energy savings/lifetime
EV35	100W-150W Incandescent	78%
	50W HID 40%	40%
60,000 hours of continuous operation!		

### **CERTIFICATIONS & COMPLIANCES**

• Group II 2 GD (Zone 1)

• Gas: Ex d IIC T6 Gb

• Dust: Ex t IIIC T85°C Db

• Certificate: LOM 10 ATEX 2075

IP66

### **ELECTRICAL RATINGS**

Voltages: 220-240VInput power: 32W

### **OPTIONS AND ACCESSORIES**

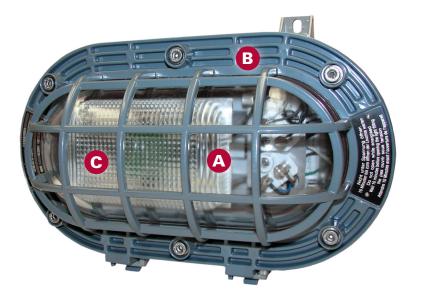
- Internal high polished aluminum reflector for down light applications
- Direct entries or indirect entries via connection box



Up to 78% more energy-efficient than a 150 watt incandescent and over 20 times the rated life

- Wide ambient temperature range from -40°C to +55°C Allows installation and safe use in nearly every climatic condition.
- **B** High power LED module Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.
- © Safe, reliable heat transfer Heat sink connected to copper-free aluminum housing to safely and effectively remove heat from the LED module and driver, therefore offering a T-rating of T6.





# Up to 6 times longer life and 65% reduction in power consumption compared to equivalent HID floodlights

### **DESIGN FEATURES**

- Shock- and vibration-resistant Durable vibration-resistant LEDs decrease maintenance costs.
- B Lightweight enclosure Robust light alloy enclosure weighs only 7.0 kg, allowing the user to mount in areas where the available space is restricted, and making installation fast and easy.
- Instant illumination and restrike Decreases facility downtime; no warm-up time required.



## Hazardous area

## AB05 marine LED luminaire

### **PRIMARY APPLICATIONS**

Perfect for confined or restricted spaces, such as stairwells, storage areas and corridors that require consistent light.

### **LUMINAIRE MODELS**

Model number	Equivalent luminaire	Typical energy savings/lifetime
AB05	150W incandescent	Up to 80%
60	) NNN hours of continuou	is operation!

### **CERTIFICATIONS & COMPLIANCES**

- Zone 1, 2, 21, 22
- Ex d IIB T6
- W II 2 G Ex d IIB T6/T5 Gb
- W II 2 D Ex tb IIIC T80°C/T100°C Db
- Certificate BVS 09 ATEX E 014 X
- IP66

### **ELECTRICAL RATINGS**

Voltage: 120-240 VACInput power: 32W

Notes:			

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