Heavy industrial LED lighting

CROUSE-HINDS SERIES

Champ PVML

High lumen LED lighting for heavy industrial



Safe. Reliable. Efficient.

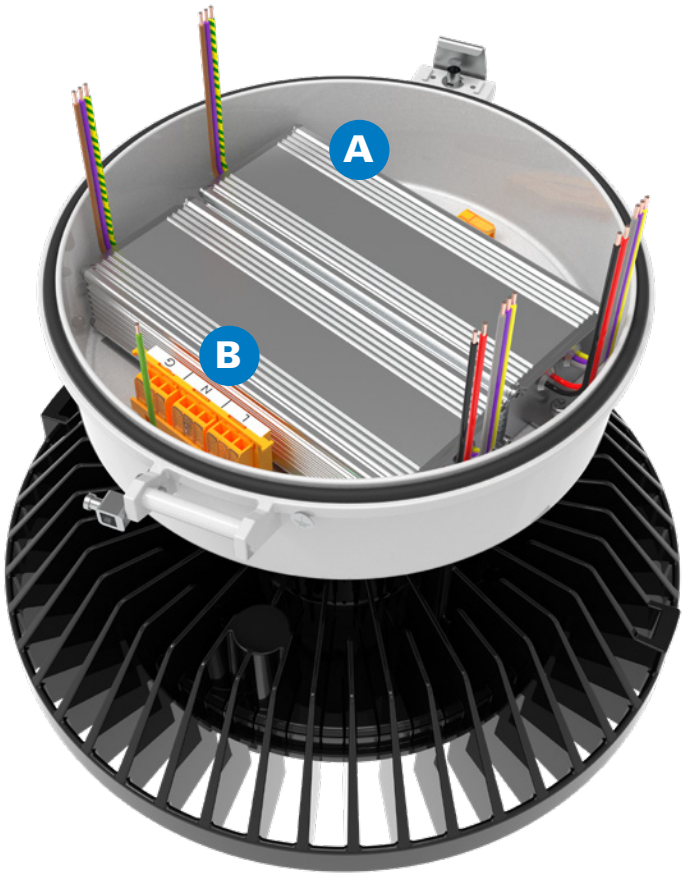
17,000 to 25,000 lumens

EATON

Powering Business Worldwide

Design features

Our Champ PVML high lumen LED is a field-proven design that helps ensure safety, reliability and performance in harsh and heavy industrial areas.



INSTALLATION EASE

A Easy access

- Separate driver compartment enables faster installation, access to wiring and field maintenance

B Lever lock connectors and terminal blocks

- Plug and play wiring simplifies and speeds installations



C Versatile mounting options

- Seven mounting options and four mounting adapters ensure that the fixtures are installed in the correct location to properly light your facility

C

Mounting modules



Stanchion - straight



Ceiling



Pendant



Stanchion - 25° angled



Wall



Cone pendant

Mounting adapters



Appleton MercMaster III



Appleton MercMaster II



Thomas & Betts HazLux



GE H2 Filtr-Gard

RELIABLE PERFORMANCE

D Thermal management

- Heat fins help ensure proper air flow and facilitate dust-shedding for effective heat dissipation and thermal management of LED engine



E Performance in extreme environments

- Operating ambient: -40°C to 55°C
- Type 4X, IP66
- 6kV surge protection
- Corrosion-resistant aluminum housing with Corro-free™ epoxy powder coating
- Vibration tested to withstand up to 3-axis 3G vibration
- Impact tested in accordance with section 17.41 of UL1598



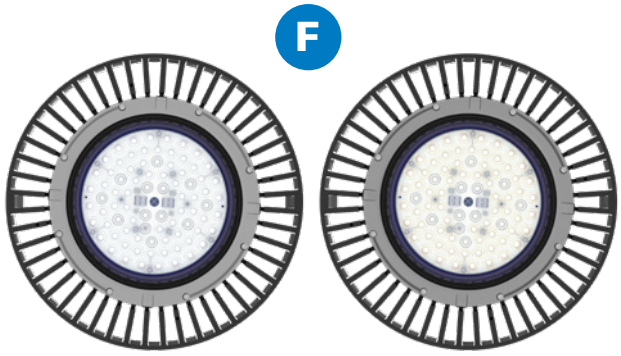
OPTIMIZED LIGHT & QUALITY

F Custom optics & colors

- Type V optics with wide, medium and narrow beam pattern options engineered for flexibility without requiring clocking
- Directs light where you need it, helping eliminate gaps and dark spots
- Precision optics match to your application to reduce the number of light fixtures required
- 3000K–WARM, 4000K–NEUTRAL and 5000K–COOL color options available



Wide **Medium** **Narrow**



5000K – COOL
Crisp, bright white with a blue hue.

3000K – WARM
Warm white with a yellow hue.

G Multiple lens options

- Clear glass lens standard
- Diffused glass, Teflon coated glass and clear polycarbonate lenses optional



Clear **Diffused**

Specifications

Certifications and compliances:

NEC and CEC
- Wet Locations, Type 4X, IP66

UL Standards
- UL1598 Luminaires, UL1598A Marine

CSA Standard
- cUL Listed to CSA Standard CSA C22.2 No. 250

IEC Standard
- CE

Additional Champ PVML design features:

- Installation flexibility - seven mounting module styles help ensure that the fixtures are installed in the correct location to properly light your facility
- Energy-efficient technology - up to 77% energy savings over HID fixtures
- Contains no mercury or other hazardous substances
- Shock and vibration-resistant solid-state luminaires have no filaments or glass components that could break - greatly reduces the risk of premature failure
- Dimmable driver, 0-10V
- Operating ambient: -40°C to 55°C
- Up to 60,000 hours lifetime at 55°C
- 5 year fixture warranty*

*Refer to terms & conditions on Eaton.com for Crouse-Hinds series solutions.

Accessories (ordered separately):

- Photocell, 120V, 50/60 Hz
- Photocell, 208-277V
- Occupancy sensor with photocell, 120/277 VAC
- Trunnion mount kit with redundant pin locking mechanism (ceiling mount required)
- Remote control for customizing occupancy sensor performance

LED system:

- High intensity discrete power emitters
- Standard: cool white (5000K, 70 CRI); optional: warm white, (3000K, 80 CRI) or neutral white (4000K, 70 CRI)
- Custom Type V optics with wide, medium and narrow patterns

Enhanced Surge Protection:

- Standard: 6kV IEC rated (6 kV/3kA L-L, 10 kV/0.83kA L-G)
- SG1 option: 6kV IEC & ANSI rated (6kV/3kA L-L & L-G)

Standard materials:

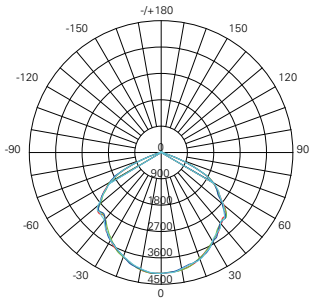
- Lamp housing and adapter - die cast aluminum with Corro-free™ epoxy powder coat
- Lens - heat and impact-resistant glass in clear or diffused options; also available in clear polycarbonate
- Gaskets - silicone
- External hardware - stainless steel
- Factory-sealed, no external seals required



Shown with dust shedding cone pendant mount.

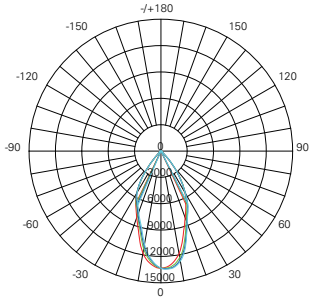
Polar curves – Type V beam patterns:

Wide



Average beam angle (50%): 118.9°

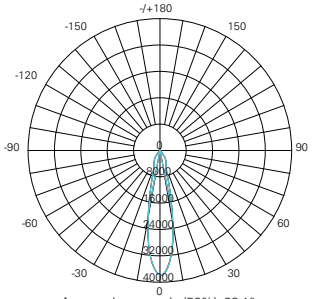
Medium



Average beam angle (50%): 50.8°



Narrow



Average beam angle (50%): 22.1°

Photometrics:

For IES photometric files, please refer to the resource tab of the PVML LED product page on Eaton.com

Electrical ratings:

Model	Weight lbs. (kg.)	Nominal lumens	Efficacy	Wattage	Voltage	Amps	Power factor	THD	Surge protection
PVML-17-UNV1	22.30 (10.11)	17,800	132 lm/W	134.42	100-277 VAC, 50/60 Hz; 127-250 VDC	0.487-1.351 VAC 0.531-1.048 VDC	0.90	< 20%	6 kV
PVML-21-UNV1	22.30 (10.11)	21,500	128 lm/W	168.23	100-277 VAC, 50/60 Hz; 127-250 VDC	0.600-1.687 VAC 0.567-1.309 VDC	0.90	< 20%	6 kV
PVML-25-UNV1	22.30 (10.11)	25,171	122 lm/W	204.40	100-277 VAC, 50/60 Hz; 127-250 VDC	0.719-2.050 VAC 0.789-1.582 VDC	0.90	< 20%	6 kV
PVML-17-UNV34	22.30 (10.11)	17,800	132 lm/W	133.40	347-480 VAC, 50/60 Hz	0.281-0.384 VAC	0.90	< 20%	6 kV
PVML-21-UNV34	22.30 (10.11)	21,500	128 lm/W	165.64	347-480 VAC, 50/60 Hz	0.348-0.477 VAC	0.90	< 20%	6 kV
PVML-25-UNV34	22.30 (10.11)	25,171	122 lm/W	199.43	347-480 VAC, 50/60 Hz	0.417-0.576 VAC	0.90	< 20%	6 kV

More Champ solutions available





Ordering information

Part number example

PVML-17-W-2A-R5M-G-UNV1-S831-M2

PVML - 17 - W - 2A - R5M - G - UNV1 - - S831 - M2

Lamp/function

17	17,800 lumen LED
21	21,500 lumen LED
25	25,171 lumen LED

Color temperature

BLANK	Cool (5000K)
W	Warm (3000K)
N*	Neutral (4000K)

*Consult customer service for lead time information.

Beam pattern

BLANK	Wide
R5M	Medium
R5N	Narrow

Guard

BLANK	No wire lens guard
G	Wire lens guard

Voltage (50/60 Hz)

UNV1	120-277 VAC; 108-250 VDC
UNV34	347-480 VAC

Lens type

BLANK	Clear glass lens
S891*	Diffused lens
S896*	Teflon coated lens
S903	Polycarbonate lens

*Not available for IEC.

Additional options

S812	Trunnion mount kit w/ pin *(available with ceiling mount only)*
S831*	Safety cable
SG1**	Enhanced ANSI compliant surge rating
TB6	Six-pole terminal block

*Not available for IEC.
**Not available on UNV34 models.

Mounting style

BLANK	No mounting module	25A	25mm pendant	25C	25mm ceiling
J	1-½" stanchion, 25° angled	2B	¾" cone pendant	2HA	¾" flexible pendant
P	1-½" stanchion, straight	3B	1" cone pendant	2TW	¾" wall
2A	¾" pendant	2C	¾" ceiling	3TW	1" wall
3A	1" pendant	3C	1" ceiling	20TW	20mm wall
20A	20mm pendant	20C	20mm ceiling	25TW	25mm wall

Accessories *(ordered separately)*

Mounting modules

Hub size	Stanchion – straight	Stanchion – angled	Pendant	Offset pendant	Wall	Ceiling	Cone pendant
3/4"	–	–	APM2	HPM2	TWM2	CM2	BPM2
1"	–	–	APM3	–	TWM3	CM3	BPM3
1-1/2"	PM5	JM5	–	–	–	–	–
20mm	–	–	APM20	–	–	–	–
25mm	–	–	APM25	–	TWM25	–	–

Mounting module	lbs.	kg.
Pendant	1.25	0.57
Cone pendant	4.00	1.81
Flexible pendant	1.50	0.68
Ceiling	2.75	1.25
Wall	4.50	2.04
Angled stanchion	3.50	1.59
Straight stanchion	4.50	2.04

Mounting adapters

CHMM1	Mounting adapter for Appleton MercMaster III mounts
CHMM2	Mounting adapter for Appleton MercMaster II mounts
CHMM3	Mounting adapter for Thomas & Betts HazLux mounts
CHMM4	Mounting adapter for GE H2 Filtr-Gard mounts

Mounting kits & hardware

VMVL S812 K1	Trunnion mount kit with pin*
VMVL S812 K1 DBR	PVC coated trunnion mount kit with pin*
VMVL S831 K1	Safety cable
VMVL S890 K1	Quick Clip

*Available with ceiling mounted modules only.

Lens guard

P3002	Wire guard

Replacement driver kits – UNV1*

VMVL-17L-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for PVML-17 M2 fixtures
VMVL-21-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for PVML-21 M2 fixtures
VMVL-25-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for PVML-25 M2 fixtures

*Replacement UNV1 driver kits are sold as single units.

Replacement driver kits – UNV34*

VMVL-17L-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for PVML-17 M2 fixtures
VMVL-21-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for PVML-21 M2 fixtures
VMVL-25-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for PVML-25 M2 fixtures

*Replacement UNV34 driver kits are sold as single units.

Photocells

D2S20	Photocell, 120V
D2S208 277	Photocell, 208-277V

Occupancy sensors

ORDC/UNV1	¾" NPT entry, 100-277 VAC
347/480 K1	Step down transformer for 347-480

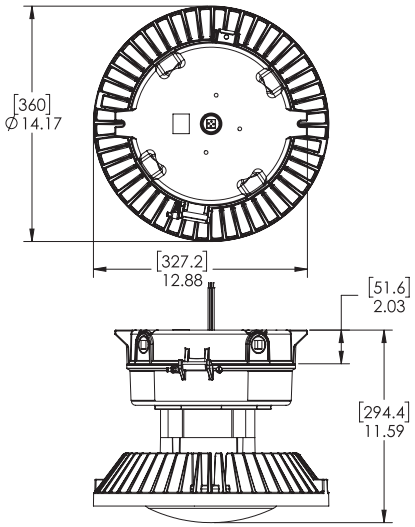
Occupancy sensor accessories

CABLE KIT ORD 1	TECK armoured cable (5ft) with TECK glands (¾")
CABLE KIT ORD 2	P Type non-armoured cable (5ft) with ADE1F glands (¾")
CABLE KIT ORD 3	Metal-clad armoured cable (5ft) with TMC glands (¾")
CABLE KIT ORD 4	SO cable (5ft) with ADE1F glands (¾")

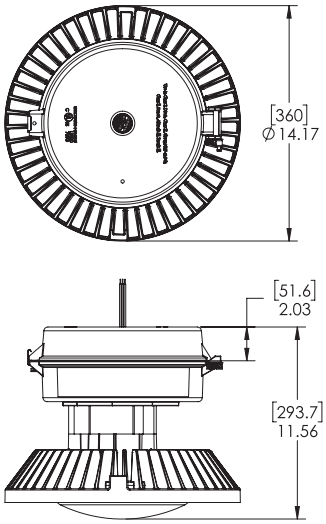
ORDC WKIT	Wall mount kit
ORDC PKIT	Pendant mount kit
ORDC SKIT	Stanchion mount kit
REMOTE CONTROL 1	Remote control for programming sensor

Dimensions

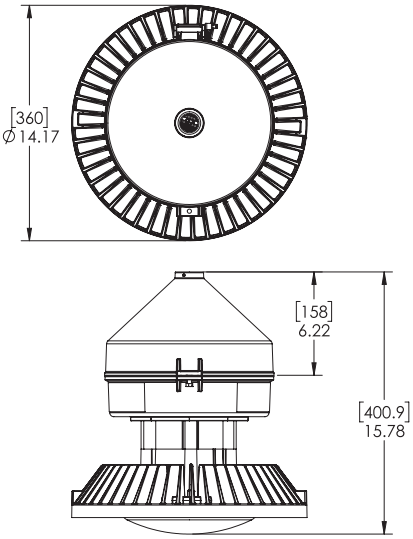
Ceiling



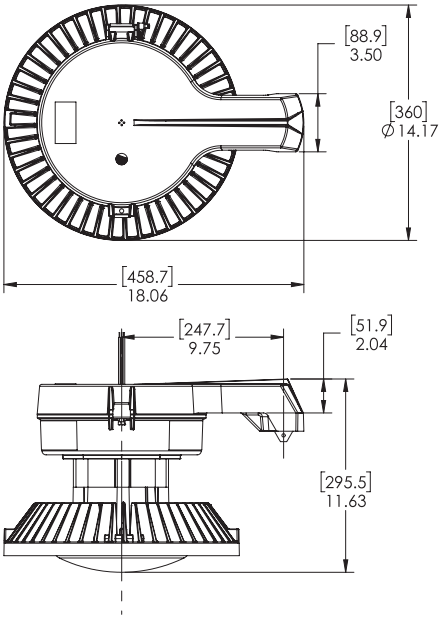
Pendant



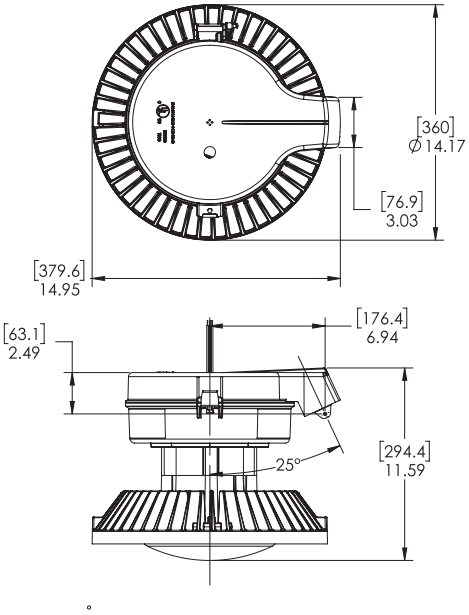
Cone pendant



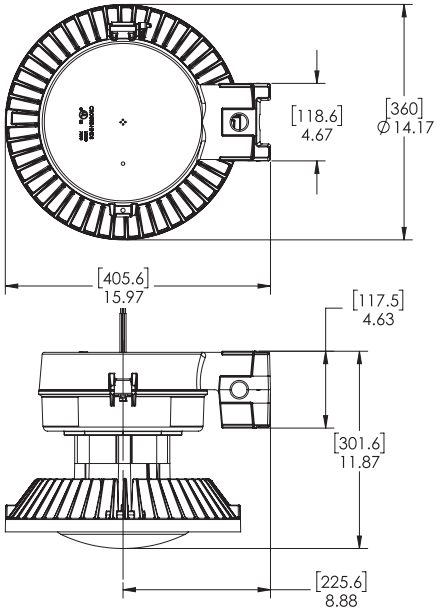
Stanchion - straight



Stanchion - 25° angled



Wall



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