

Champ Pro PVM LED Luminaires

UL/cUL Listed
Type 4X; IP66

2L

Ideal for general high bay/low bay illumination

The Champ Pro PVM LED family:

Champ® Pro PVM LED luminaires are designed to provide full-spectrum, crisp, white light with custom IES Type I, III and V distribution. Nine versions of the VMV LED are available, providing ideal solutions for a wide range of applications.

Model	Typical lumens (Type V) ^A	Watts	Lumens per watt	Equivalent HID luminaire	Typical energy savings / lifetime
PVM3L	3,531	29	122	70W-100W	Up to 77%
PVM5L	5,335	43	124	100W-150W	Up to 67%
PVM7L	7,195	62	116	150W-175W	Up to 67%
PVM9L	9,266	85	109	250W-320W	Up to 74%
PVM11L	11,440	113	101	320W-400W	Up to 74%
PVM13L	13,226	130	102	400W	Up to 68%
PVM17L	18,793	168	112	400W-600W	Up to 72%
PVM21L	22,110	196	113	600W-750W	Up to 74%
PVM25L	26,531	232	114	750W-1000W	Up to 77%

Applications:

- Ordinary non-hazardous locations with mounting heights up to 60 feet
- Heavy industrial, mine site processing areas, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and areas requiring frequent on-and-off of lights
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Type 4X, marine, wet locations and hose down environments

Features:

- Instant illumination and restrike
- Better visibility with crisp, white light
- Cold temperature operation/no warm-up required
- Option for redundancy in drivers with multiple series circuits connected to each driver to avoid complete loss of illumination
- Easy installation – compact modular fixture attaches onto existing Champ mounting module
- Energy-efficient technology – up to 64% 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
- Operating ambient: -40°C to 65°C (PVM3L-PVM11L models); -40°C to 55°C (PVM13L-PVM25L models)
- Full cut-off with no wasted light above the fixture
- 5 year fixture warranty^B

Certifications and compliances:

- DesignLights Consortium® Qualified (some models are not DLC qualified)^C

NEC/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

Standard materials:

- Lamp housing and adapter – die cast aluminum with Corro-free epoxy powder coat
- Lens – heat- and impact-resistant glass
- Gaskets – silicone
- External hardware – stainless steel
- Factory sealed, no external seals required

Photometrics:

- Complete photometrics can be found at www.crouse-hinds.com/photometrics

^ATolerance +/- 10%.

^BRefer to page 2 of the most current authorized distributor price book for Eaton's Crouse-Hinds Division's standard Terms and Conditions.

^CApproved models include: PVM3L/UNV1; PVM5L/UNV1; PVM7L/UNV1; PVM9L/UNV1; PVM11L/UNV1; PVM13L/UNV1; PVM17L/UNV1; PVM21L/UNV1; PVM25L/UNV1; PVM3L/UNV34; PVM5L/UNV34; PVM7L/UNV34; PVM9L/UNV34; PVM11L/UNV34. 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 system:

- High intensity discrete power emitters
- Cool white (5000K, 70 CRI) (standard); warm white, (3000K, 80 CRI) (optional)
- Custom Type I, III and V optics available
- Optics clocking in field to align Type I and Type III light patterns to illumination path for PVM13L-PVM25L

Drivers:

Option	Voltage
/UNV1	120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz
/UNV34	347-480 VAC, 50/60 Hz

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Custom optics:

Three optical options to maximize light distribution and intensity:



TYPE I

Long and rectangular for hallways, walkways, loading docks, catwalks.

Ideal for:

- Mining conveyor belts
- Aisleways and hallways
- Catwalks and walkways
- Ramps and loading docks
- Tunnels with overhead mounts



TYPE III

Wall mount light distribution, minimizing spillover on the wall.

Ideal for:

- Narrow crosswalks or passages with wall mounted fixtures
- Tunnels with wall mount
- Wall or stanchion mount requiring 180° forward throw beam patterns



TYPE V

Regular circular distribution pattern for high/low bay indoor and outdoor ceiling or pendant mount lighting.

Ideal for:

- Pendant, ceiling or stanchion mount overhead building mounts
- Processing mills, industrial plants, large buildings, warehouses, etc.



Colored LED options:

- Available in green and amber[Ⓧ]
- Reduction in light pollution for night space observation and sky glow due to isolating blue wavelength in red and amber colors
- Wildlife-friendly
- Improves visibility for telescopes in observatories during night sky space exploration

Electrical ratings:

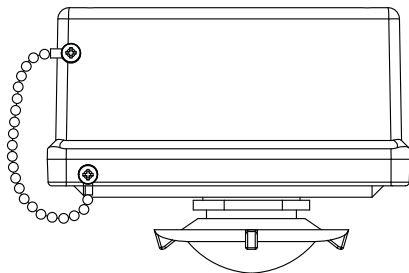
	PVM3L	PVM5L	PVM7L	PVM9L	PVM11L	PVM13L	PVM17L	PVM21L	PVM25L
Voltage range, VAC	120-277	120-277	120-277	120-277	120-277	120-277	120-277	120-277	120-277
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input power (watts)	29	43	62	85	113	131	168	196	232
Input amps at 120-277 VAC	0.24 - 0.11	0.35 - 0.16	0.52 - 0.23	0.71 - 0.31	0.95 - 0.41	1.08 - 0.48	1.40 - 0.62	1.64 - 0.73	1.94 - 0.87
Voltage range, VDC	108-250	108-250	108-250	108-250	108-250	108-250	108-250	108-250	108-250
Power factor	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90
Total harmonic distortion (THD)	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%
Nominal lumens (Type V) [Ⓧ]	3,531	5,335	7,195	9,266	11,440	13,226	18,793	22,110	26,531

Occupancy sensor (ordered separately):

Description

- ¾" NPT entry, 100-277 VAC **ORDC/UNV1**
- M20 entry, 100-277 VAC **ORDC20/UNV1**
- M25 entry, 100-277 VAC **ORDC25/UNV1**

Cat.



Occupancy sensor accessories (ordered separately):

Description

- TECK non-armored cable (5 ft.) with TECK glands (¾") **Cable Kit Ord 1**
- Type P non-armored cable (5 ft.) with ADE-1F glands (¾") **Cable Kit Ord 2**
- Metal-clad non-armored cable (5 ft.) with TMC glands (¾") **Cable Kit Ord 3**
- SO cable (5 ft.) with ADE-1F glands (¾") **Cable Kit Ord 4**
- Wall mount kit **ORDC WKIT**
- Pendant mount kit **ORDC PKIT**
- Stanchion mount kit **ORDC SKIT**
- Remote control for programming sensor **REMOTE CONTROL 1**

Cat.

[Ⓧ] Custom optics not available with colored LEDs. One model per color; see catalog numbering system on next page.

[Ⓧ] Tolerance +/- 10%.

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Ordering information:

Part number example
PVM17LW2AR1G/UNV1 S890

PVM 17L W 2A R1 G /UNV1 S890

Lamp / function	
3L	3,531 lumen LED
5L	5,335 lumen LED
7L	7,195 lumen LED
9L	9,226 lumen LED
11L	11,440 lumen LED
13L	13,226 lumen LED
17L	18,793 lumen LED
21L	22,110 lumen LED
25L	26,531 lumen LED
GL	Green (4,300 lumen LED)
AL	Amber (5,000 lumen LED)

Color temperature	
BLANK	Cool (5000K) or colored
W	Warm (3000K)

Mounting style	
BLANK	No cover
J	1-1/2" stanchion, 25° angled
P	1-1/2" Stanchion, straight
2A	3/4" pendant
3A	1" pendant
20A	20mm pendant
25A	25mm pendant
2B	3/4" cone pendant
3B	1" cone pendant
2C	3/4" ceiling
3C	1" ceiling
20C	20mm ceiling
25C	25mm ceiling
2HA	3/4" flexible pendant
2TW	3/4" wall
3TW	1" wall
20TW	20mm wall
25TW	25mm wall

Options	
S812	Trunnion mount kit with pin
S831	Safety cable
S890	Quick clip
S891	Diffused lens
S892	Redundant driver
S896	Teflon coated lens
S903	Polycarbonate lens
TB6	Six-pole terminal block

Voltage	
/UNV1	120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz
/UNV34	347-480 VAC, 50/60 Hz

Guard	
BLANK	No guard
G	P3001 wire guard

Optics	
BLANK	Type V optic standard (all mounts)
R1	Type I optic (all mounts minus ceiling for 3L-11L, available with mounts for 13L-25L models)
R1A	Type I optic (ceiling with conduit 45° counterclockwise or 135° clockwise from hinge)
R1B	Type I optic (ceiling with conduit 45° clockwise or 135° counterclockwise from hinge)
R3	Type III optic (all mounts minus ceiling)
R3AP	Type III optic (select when using Appleton top hat adapter with Champ fixture)
R3A1	Type III optic (ceiling with conduit 45° counterclockwise from top hat hinge)
R3A2	Type III optic (ceiling with conduit 135° clockwise from top hat hinge)
R3B1	Type III optic (ceiling with conduit 45° clockwise from top hat hinge)
R3B2	Type III optic (ceiling with conduit 135° counterclockwise from top hat hinge)

Accessories (ordered separately):

Description	Cat. #
• Photocell, 120V, 50/60 Hz	D2S20
• Photocell, 208-277V	D2S208 277
• Trunnion mount kit with pin	VMVL S812 K1
• Wire guard with captive mounting hardware	P3001
• Top hat adapter	CHMM1

For retrofitting Appleton MercMaster III top hats to Champ Pro PVM Luminaires



CHMM1

- Ⓜ Custom optics not available with colored LEDs.
- Ⓞ For PVM3L-PVM11L only.
- Ⓢ Order with ceiling mount only.
- Ⓣ Available for PVM5L and PVM7L only. Redundant driver standard on PVM9L-PVM25L models. 7L = 6,616 lumens with S892 suffix.

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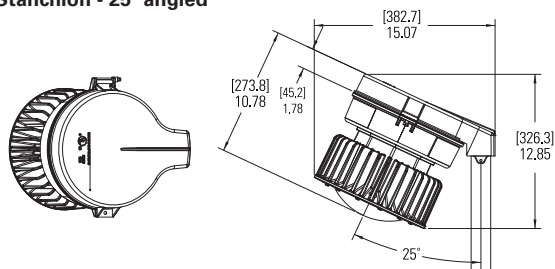
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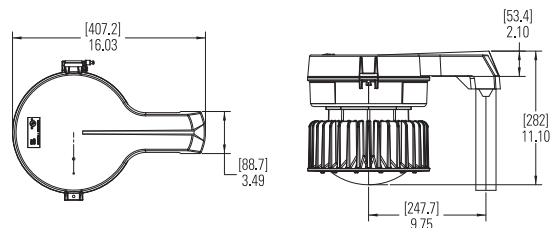
2L

Dimensions:

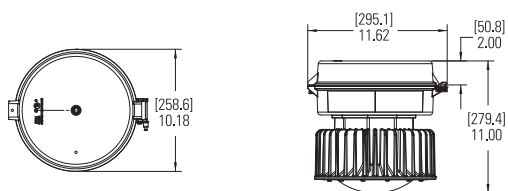
Stanchion - 25° angled



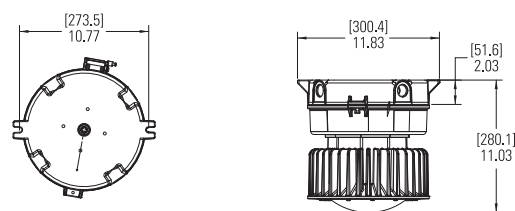
Stanchion - straight



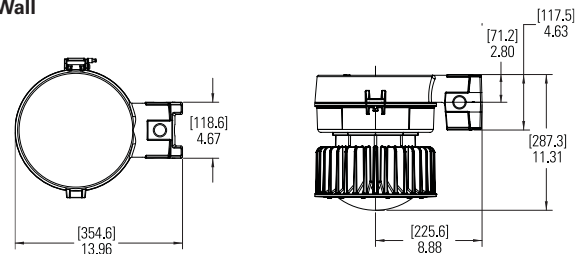
Pendant



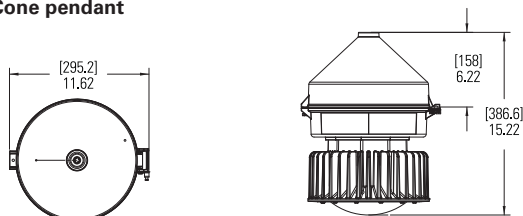
Ceiling



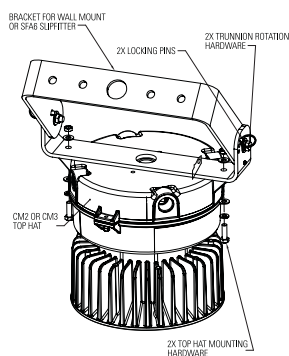
Wall



Cone pendant



Trunnion



Net luminaire weights:

Model	Lbs.	Kg.
PVM3L-PVM11L	21.80	8.07
PVM13L & PVM17L	36.00	16.32
PVM21L & PVM25L	44.00	19.95
Add mounting modules:		
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 ①	3.50	1.59
Straight stanchion	4.50	2.04

① Angled stanchion for PVM3L-PVM11L models only.

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Applications:

- Ordinary non-hazardous locations with mounting heights up to 60 feet
- Heavy industrial, mine site processing areas, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and areas requiring frequent on-and-off of lights
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Type 4X, marine, wet locations and hose down environments

Features:

- Instant illumination and restrike
- Better visibility with crisp, white light
- Cold temperature operation/no warm-up required
- Option for redundancy in drivers with multiple series circuits connected to each driver to avoid complete loss of illumination
- Easy installation – compact modular fixture attaches onto existing Champ mounting module
- Energy-efficient technology – up to 64% 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
- Operating ambient: -40°C to 65°C (PVM3L-PVM11L models); -40°C to 55°C (PVM13L-PVM25L models)
- Full cut-off with no wasted light above the fixture
- 5 year fixture warranty^B

Certifications and compliances:

- DesignLights Consortium® Qualified (some models are not DLC qualified)^C

NEC/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

Standard materials:

- Lamp housing and adapter – die cast aluminum with Corro-free epoxy powder coat
- Lens – heat- and impact-resistant glass
- Gaskets – silicone
- External hardware – stainless steel
- Factory sealed, no external seals required

Photometrics:

- Complete photometrics can be found at www.crouse-hinds.com/photometrics

^ATolerance +/- 10%.

^BRefer to page 2 of the most current authorized distributor price book for Eaton's Crouse-Hinds Division's standard Terms and Conditions.

^CApproved models include: PVM3L/UNV1; PVM5L/UNV1; PVM7L/UNV1; PVM9L/UNV1; PVM11L/UNV1; PVM13L/UNV1; PVM17L/UNV1; PVM21L/UNV1; PVM25L/UNV1; PVM3L/UNV34; PVM5L/UNV34; PVM7L/UNV34; PVM9L/UNV34; PVM11L/UNV34. 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 system:

- High intensity discrete power emitters
- Cool white (5000K, 70 CRI) (standard); warm white, (3000K, 80 CRI) (optional)
- Custom Type I, III and V optics available
- Optics clocking in field to align Type I and Type III light patterns to illumination path for PVM13L-PVM25L

Drivers:

Option	Voltage
/UNV1	120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz
/UNV34	347-480 VAC, 50/60 Hz

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Custom optics:

Three optical options to maximize light distribution and intensity:



TYPE I

Long and rectangular for hallways, walkways, loading docks, catwalks.

Ideal for:

- Mining conveyor belts
- Aisleways and hallways
- Catwalks and walkways
- Ramps and loading docks
- Tunnels with overhead mounts



TYPE III

Wall mount light distribution, minimizing spillover on the wall.

Ideal for:

- Narrow crosswalks or passages with wall mounted fixtures
- Tunnels with wall mount
- Wall or stanchion mount requiring 180° forward throw beam patterns



TYPE V

Regular circular distribution pattern for high/low bay indoor and outdoor ceiling or pendant mount lighting.

Ideal for:

- Pendant, ceiling or stanchion mount overhead building mounts
- Processing mills, industrial plants, large buildings, warehouses, etc.



Colored LED options:

- Available in green and amber[Ⓞ]
- Reduction in light pollution for night space observation and sky glow due to isolating blue wavelength in red and amber colors
- Wildlife-friendly
- Improves visibility for telescopes in observatories during night sky space exploration

Electrical ratings:

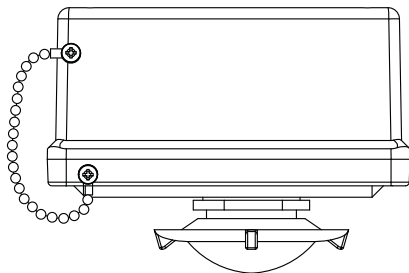
	PVM3L	PVM5L	PVM7L	PVM9L	PVM11L	PVM13L	PVM17L	PVM21L	PVM25L
Voltage range, VAC	120-277	120-277	120-277	120-277	120-277	120-277	120-277	120-277	120-277
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input power (watts)	29	43	62	85	113	131	168	196	232
Input amps at 120-277 VAC	0.24 - 0.11	0.35 - 0.16	0.52 - 0.23	0.71 - 0.31	0.95 - 0.41	1.08 - 0.48	1.40 - 0.62	1.64 - 0.73	1.94 - 0.87
Voltage range, VDC	108-250	108-250	108-250	108-250	108-250	108-250	108-250	108-250	108-250
Power factor	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90	>0.90
Total harmonic distortion (THD)	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%
Nominal lumens (Type V) [Ⓔ]	3,531	5,335	7,195	9,266	11,440	13,226	18,793	22,110	26,531

Occupancy sensor (ordered separately):

Description

- ¾" NPT entry, 100-277 VAC **ORDC/UNV1**
- M20 entry, 100-277 VAC **ORDC20/UNV1**
- M25 entry, 100-277 VAC **ORDC25/UNV1**

Cat.



Occupancy sensor accessories (ordered separately):

Description

- TECK non-armored cable (5 ft.) with TECK glands (¾") **Cable Kit Ord 1**
- Type P non-armored cable (5 ft.) with ADE-1F glands (¾") **Cable Kit Ord 2**
- Metal-clad non-armored cable (5 ft.) with TMC glands (¾") **Cable Kit Ord 3**
- SO cable (5 ft.) with ADE-1F glands (¾") **Cable Kit Ord 4**
- Wall mount kit **ORDC WKIT**
- Pendant mount kit **ORDC PKIT**
- Stanchion mount kit **ORDC SKIT**
- Remote control for programming sensor **REMOTE CONTROL 1**

Cat.

[Ⓞ] Custom optics not available with colored LEDs. One model per color; see catalog numbering system on next page.

[Ⓔ] Tolerance +/- 10%.

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Ordering information:

Part number example
PVM17LW2AR1G/UNV1 S890

PVM 17L W 2A R1 G /UNV1 S890

Lamp / function	
3L	3,531 lumen LED
5L	5,335 lumen LED
7L	7,195 lumen LED
9L	9,226 lumen LED
11L	11,440 lumen LED
13L	13,226 lumen LED
17L	18,793 lumen LED
21L	22,110 lumen LED
25L	26,531 lumen LED
GL	Green (4,300 lumen LED)
AL	Amber (5,000 lumen LED)

Color temperature	
BLANK	Cool (5000K) or colored
W	Warm (3000K)

Mounting style	
BLANK	No cover
J	1-1/2" stanchion, 25° angled
P	1-1/2" Stanchion, straight
2A	3/4" pendant
3A	1" pendant
20A	20mm pendant
25A	25mm pendant
2B	3/4" cone pendant
3B	1" cone pendant
2C	3/4" ceiling
3C	1" ceiling
20C	20mm ceiling
25C	25mm ceiling
2HA	3/4" flexible pendant
2TW	3/4" wall
3TW	1" wall
20TW	20mm wall
25TW	25mm wall

Options	
S812	Trunnion mount kit with pin
S831	Safety cable
S890	Quick clip
S891	Diffused lens
S892	Redundant driver
S896	Teflon coated lens
S903	Polycarbonate lens
TB6	Six-pole terminal block

Voltage	
/UNV1	120-277 VAC, 50/60 Hz; 108-250 VDC, 50/60 Hz
/UNV34	347-480 VAC, 50/60 Hz

Guard	
BLANK	No guard
G	P3001 wire guard

Optics	
BLANK	Type V optic standard (all mounts)
R1	Type I optic (all mounts minus ceiling for 3L-11L, available with mounts for 13L-25L models)
R1A	Type I optic (ceiling with conduit 45° counterclockwise or 135° clockwise from hinge)
R1B	Type I optic (ceiling with conduit 45° clockwise or 135° counterclockwise from hinge)
R3	Type III optic (all mounts minus ceiling)
R3AP	Type III optic (select when using Appleton top hat adapter with Champ fixture)
R3A1	Type III optic (ceiling with conduit 45° counterclockwise from top hat hinge)
R3A2	Type III optic (ceiling with conduit 135° clockwise from top hat hinge)
R3B1	Type III optic (ceiling with conduit 45° clockwise from top hat hinge)
R3B2	Type III optic (ceiling with conduit 135° counterclockwise from top hat hinge)

Accessories (ordered separately):

Description	Cat. #
• Photocell, 120V, 50/60 Hz	D2S20
• Photocell, 208-277V	D2S208 277
• Trunnion mount kit with pin	VMVL S812 K1
• Wire guard with captive mounting hardware	P3001
• Top hat adapter.....	CHMM1

For retrofitting Appleton MercMaster III top hats to Champ Pro PVM Luminaires



CHMM1

- Ⓜ Custom optics not available with colored LEDs.
- Ⓞ For PVM3L-PVM11L only.
- Ⓢ Order with ceiling mount only.
- Ⓣ Available for PVM5L and PVM7L only. Redundant driver standard on PVM9L-PVM25L models. 7L = 6,616 lumens with S892 suffix.

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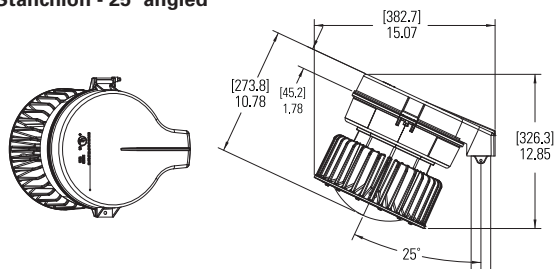
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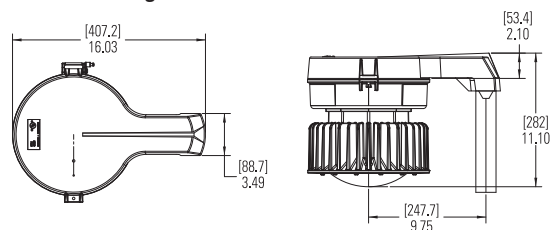
2L

Dimensions:

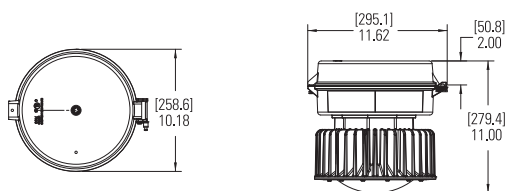
Stanchion - 25° angled



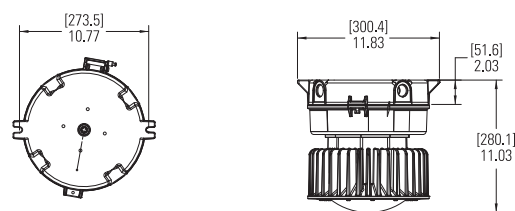
Stanchion - straight



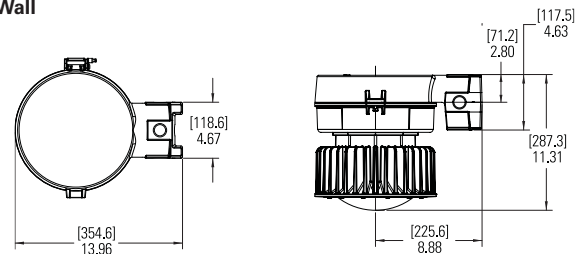
Pendant



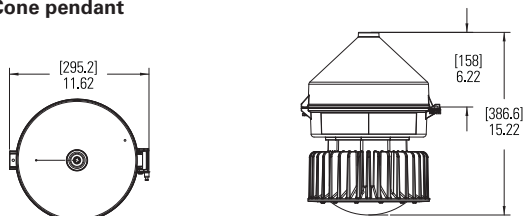
Ceiling



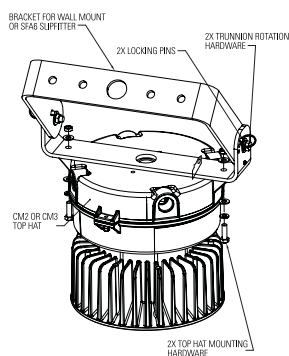
Wall



Cone pendant



Trunnion



Net luminaire weights:

Model	Lbs.	Kg.
PVM3L-PVM11L	21.80	8.07
PVM13L & PVM17L	36.00	16.32
PVM21L & PVM25L	44.00	19.95
Add mounting modules:		
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 ①	3.50	1.59
Straight stanchion	4.50	2.04

① Angled stanchion for PVM3L-PVM11L models only.