

Champ VMVL uplight LED lighting for hazardous areas

Rugged solutions for complex environments.

Champ VMVL LED luminaires are now available with an uplight refractor which maximizes light dispersion. The new refractor is perfect for low bay ceilings, suspended pendant mounts, areas with elevated infrastructure or areas which require dispersed side and uplight illumination.

Model	Nominal lumens*	Watts	Efficacy	Equivalent HID
VMVL-3	3,250	26	123 lm/W	70W
VMVL-5	5,537	43	127 lm/W	100W
VMVL-7	7,442	59	127 lm/W	175W
VMVL-9	9,234	73	126 lm/W	250W
VMVL-11	11,114	91	122 lm/W	320W

*Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Wattage measured at 120 VAC. Uplight refractor reduces downlight ~10%.

Applications:

- For areas with mounting heights of up to 30 feet
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, indoor/outdoor spotlighting, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Classified and hazardous locations

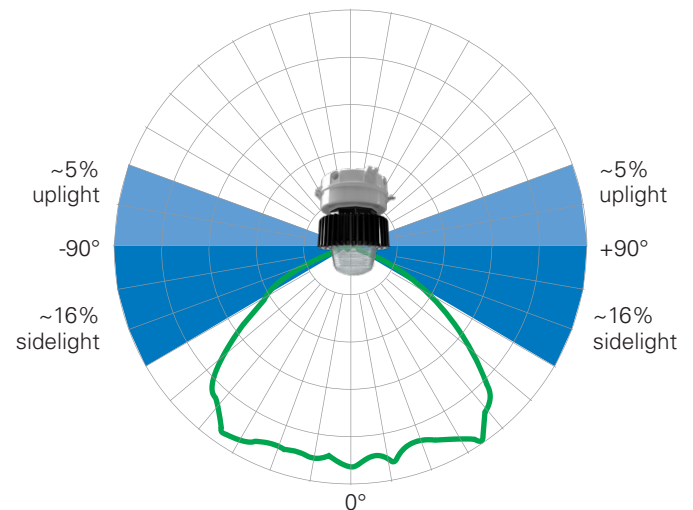
Champ VMVL benefits:

- Instant illumination and restrike; 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 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
- Operating ambient: -40°C to 65°C
- Up to 60,000 hours lifetime at 55°C
- 5 year fixture warranty†

†Refer to page 2 of the authorized distributor price book for Crouse-Hinds standard Terms and Conditions.



Refractor directs light to sides and above fixture



Uplight refractor lens benefits:

- ~5% uplight and ~16% sidelight for better visibility
- High impact resistance – meets or exceeds 4 joule impact testing



Powering Business Worldwide

Ordering information

Part number example: **VMVL-3-N-2A-G-UNV1-S831-UPLT**

Champ VMVL, 3,000 lumens, 4000K neutral white, ¾" pendant mount, Type V optics, wire guard, 100-277 VAC driver, safety cable, diffused glass lens

VMVL - 3 - N - 2A - G - UNV1 - S831 - UPLT

Light source/intensity

3	3,250 nominal lumens
5	5,537 nominal lumens
7	7,442 nominal lumens
9	9,234 nominal lumens
11	11,114 nominal lumens
A	Amber - 5,200 lumens
G	Green - 4,300 lumens

Color temperature

BLANK	5000K, 70 CRI (cool white)
N*	4000K, 70 CRI (neutral white)
W	3000K, 80 CRI (warm white)

*Consult factory for lead time.

**5700K and 6500K are available upon request; consult factory.

***Not available for Amber or Green LED.

Mounting

BLANK	No mounting module
J	1-½" stanchion, 25° angled
P	1-½" stanchion, straight
2A	¾" pendant
3A	1" pendant
20A	20mm pendant

25A	25mm pendant
2B	¾" cone pendant
3B	1" cone pendant
2HA	¾" flexible pendant
2C	¾" ceiling
3C	1" ceiling

20C	20mm ceiling
25C	25mm ceiling
2TW	¾" wall
3TW	1" wall
20TW	20mm wall
25TW	25mm wall

Lens guard

BLANK	No guard
G	Wire guard

Optics

BLANK	Type V optic standard
R1	Type I optic (all mounts minus ceiling)
R1A*	Type I optic (ceiling with conduit 45° counterclockwise from top hat hinge)
R1B*	Type I optic (ceiling with conduit 135° clockwise from top hat 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)

*Available with ceiling mount modules only.

Accessories & options†

S812	Trunnion mount kit with pin (available with ceiling mount only)
S831	Safety cable
S890	Quick clip
S892*	Redundant driver
TB6**	Six-pole terminal block

†Ordered with fixture or available separately.

*Available for VMVL7, 9 and 11 only

**For NEC/CEC only.

Voltage†

UNV1	100-277 VAC, 50/60 Hz; 127-250 VDC
UNV34	347-480 VAC, 50/60 Hz

†IEC voltage; 100-240 VAC at 50/60 Hz.

Lens material

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

*For NEC/CEC only.

**Recommended for use with Type V optic

Accessories (ordered separately)

Replacement driver kits

VMVL-3-5-7L-UNV1-DRIVER KIT	UNV1 replacement driver kit for VMVL-3, -5 and -7
VMVL-9-11L-UNV1-DRIVER KIT	UNV1 replacement driver kit for VMVL-9 and -11
VMVL-3L-5L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-3 and -5
VMVL-7L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-7
VMVL-9L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-9
VMVL-11L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-11
VMVL-7L-S892-UNV1-DRIVER-KIT	UNV1 replacement redundant driver kit for VMVL-7
VMVL-9L-11L-S892-UNV1-DRIVER-KIT	UNV1 replacement redundant driver kit for VMVL-9 and 11
VMVL-7L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for VMVL-7
VMVL-9L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for VMVL-9
VMVL-11L-S892-UNV34-DRIVER-KIT	UNV34 replacement redundant driver kit for VMVL-11
VMVL-AL-GL-UNV1-DRIVER-KIT	UNV1 replacement driver kit for amber or green models

Refractor kit

PVML-UPLT-KIT	Uplight refractor lens
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Mounting & 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.

Mounting adapters

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

Photocells

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

Lens guard

P3001	Wire guard
P3003	UPLT wire guard

Certifications and compliances:

NEC, CEC & IEC

- Class I, Division 2, Groups A, B, C, D
- Class II, Groups E, F, G
- Class III
- Class I, Zone 2 AEx ec mb IICT*GC
- Zone 21 tb IIIC
- Simultaneous Presence
- Wet Locations, Type 4X

UL standards

- UL 844 Hazardous (Classified)
- UL1598 Luminaires, UL1598A Marine

CSA standard

- CSA C22.2 No. 137

IEC/ATEX standards*

- IEC 60079-0:2011, 6th Edition / EN 60079-0:2012
- IEC 60079-7:2010, 5.1 Edition / EN 60079-7:2015
- IEC 60079-31:2008, 2nd Edition / EN 60079-31:2014
- IEC 60529:2001 / EN 60529:2001
- IEC 60598-1:2008 / EN 60598-1:2008
- IEC 60598-2:2008 / EN 60598-2:2008
- IEC 60079-18:2017, 4.1 Edition / EN 60079-18:2015 + A1:2017

*IEC/ATEX certifications applicable for voltage ranges: 100-277VAC, 127-250 VDC.

Luminaire markings

- IECEx UL 13.0052X
- DEMKO 13 ATEX 1305741X
- DEMKO 13 ATEX 1475031X

100-277 VAC/127-250 VDC (UNV1 luminaire only)

- II 3 G EX ec mb IIC T5 Gc -40°C to +40°C
- II 3 G EX ec mb IIC T5 Gc -40°C to +55°C
- II 3 G EX ec mb IIC T4 Gc -40°C to +65°C
- II 2 D Ex tb IIIC T72°C Db -40°C to +40°C
- II 2 D Ex tb IIIC T87°C Db -40°C to +55°C
- II 2 D Ex tb IIIC T92°C Db -40°C to +65°C

Qualifications and compliances:

- DesignLights Consortium® Qualified (pending)*

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

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

Weights:

Model	lbs.	kg.	Mounting module	lbs.	kg.
VMVL-3 to VMVL-7	19.00	8.62	Pendant	1.25	0.57
VMVL-9 & VMVL-11	19.20	8.70	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

Electrical ratings:

UNV1 driver	Input power (watts)	Input amps at 100-277 VAC	UNV34 driver	Input power (watts)	Input amps at 347-480 VAC
VMVL-3	26	0.27-0.10	VMVL-3	27	0.08-0.06
VMVL-5	43	0.45-0.16	VMVL-5	44	0.13-0.09
VMVL-7	59	0.61-0.21	VMVL-7	57	0.16-0.12
VMVL-7-S892	60	0.60-0.23	VMVL-7-S892	61	0.18-0.13
VMVL-9	73	0.76-0.26	VMVL-9	75	0.20-0.14
VMVL-9-S892	80	0.80-0.29	VMVL-9-S892	73	0.22-0.15
VMVL-11	91	0.92-0.32	VMVL-11	91	0.24-0.17
VMVL-11-S892	97	0.97-0.35	VMVL-11-S892	86	0.25-0.18

UNV1

Voltage range, VAC*	100-277V at 50/60 Hz
Voltage range, VDC	127-250V

UNV34

Voltage range, VAC*	347-480V at 50/60 Hz
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*IEC voltage: 100-240 VAC @ 50/60 Hz.

**For VMVL3: PF>0.9 from 100-255 VAC.

EMC / CE compliance:

If the dimming interface of the LED driver is connected to an external dimmer which is not provided with the luminaire, a ferrite core must be used on the input and dimming lines.

Approved ferrite cores are: Fair-Rite P/N 0431167281.

Temperature codes, UNV1 driver:

VMVL-3 to VMVL-11	40°C	55°C	65°C
Class I, Division 2	T5	T5	T4A
Class II, Division 1	T5	T4A	T4A
Simultaneous rating Class I, Division 1 & 2	T3C	T3A	T3A
Class I, Zone 2 AEx nA nR; Ex nA nR	T5	T5	T4
Class III, Div. 1 Class II, Div. 1, Groups E, F, G Zone 21, AEx tb IIIC	T72	T72	T92

VMVL-7, 9 & 11-S892	40°C	55°C	65°C
Class I, Division 2	T5	T4A	T4A
Class II, Division 1	T6	T6	T5
Simultaneous rating Class I, Division 1 & 2	T4A	T4	T3C
Class I, Zone 2 AEx nA nR; Ex nA nR	T5A	T4	T3C
Class III, Div. 1 Class II, Div. 1, Groups E, F, G Zone 21 AEx tb IIIC	T72	T87	T92

Temperature codes, UNV34 driver:

VMVL-3 to VMVL-11	40°C	55°C	65°C
Class I, Division 2	T5	T5*	T4A
Class II, Division 1	T6	T6	T5
Simultaneous rating Class I, Division 1 & II	T4A	T4	T3C
Class I, Zone 2 AEx nA nR; Ex nA nR	T5	T5	T4

VMVL-7, 9 & 11-S892	40°C	55°C	65°C
Class I, Division 2	T5	T5*	T4A
Class II, Division 1	T6	T6	T5
Simultaneous rating Class I, Division 1 & II	T4A	T4	T3C
Class I, Zone 2 AEx nA nR; Ex nA nR	T5	T5	T4

* TCode is T4A for VMVL-11 and VMVL-11-S892 with R1, R3 Optics

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