

Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

Enclosed and Gasketed Fixtures

NEC/CEC: Class I, Zone 1 AEx/Ex eb mb Group IIC Gb | Class I, Zone 21 AEx/Ex tb Group IIC Db
ATEX/IECEx: Zone 1, 2, 21, 22 | Ex eb mb op is IIC | II 2 GD | IP66/67 | IK08

Applications

- Enclosed and gasketed fixtures suitable for use in:
 - A wide range of industrial, chemical processing and other areas where flammable gases and vapors or combustible dusts are present
 - Marine and wet locations
 - Areas of low clearance, low ceiling heights or where fixture weights must be minimized
 - Suitability includes use where there may be simultaneous exposure to flammable gases and vapors or combustible dusts
- Typical applications include:
 - Power plants
 - Processing plants
 - Chemical plants
 - Oil refineries
 - Waste and sewage treatment
 - Hydrogen and Biofuels plants
 - LNG (Liquid Natural Gas) plants
 - Other areas where dust, water, dirt and rough usage are a problem

Features

- Modular design provides thousands of combinations for maximum versatility.
- Design is suited for low mounting heights, from 2 m up to 9 m (7 ft up to 30 ft).
- Seven light outputs provide up to 17,800 lumens.

Nominal Lumens ①	HID Equivalent	Model Number
3800	75-100W	MGZL3
5600	150-175W	MGZL5
7900	175-250W	MGZL7
10,000	300-350W	MGZL9
12,400	400W	MGZH1
14,800	450-500W	MGZH3
17,800	600W	MGZH6

- Optically integrated silicone encapsulant provides Zone 1 protection and an symmetrical IES Type V Wide light distribution.
- Choice of color temperature (CCT): 5000K cool white, 4000K neutral white or 3000K warm white.
- Customize to the application requirements with three different globe options: clear and diffused polycarbonate, or clear glass.
- Six standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster™ III and Mercmaster LED.
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation.
- Rugged housing with superior thermal design translates to long luminaire life.
- Luminaire housing has wiring compartment with terminal block separate for easy wiring access.
- Spring-loaded screw-type terminal block can accept 0.14 - 6 mm² (26 - 10 AWG) wire.
- Standard 6 kV surge protection.
- Heavy duty, high temperature silicone gaskets.
- Photometric data and electronic drawings available online.
- Ambient Temperature: -40 °C to +65 °C (-40 °F to +149 °F).
- Standard NPT threads with M20 adapters.
- LED L70B10 reported at 60,000 hours.
- Field replaceable globes and LED driver.
- 5 year standard warranty.



MGZL



MGZH

Options

- Globe guard available, *purchase separately*.
- Safety cable available, *purchase separately*.
- Drain is available to divert water existing in the conduit system or from condensation, *purchase separately*.

Standard Materials

- Mounting hoods and housings: cast copperfree (4/10 of 1% max. aluminum).
- Gaskets: silicone rubber.
- All hardware and catch assemblies: stainless steel.
- Globe: polycarbonate or glass.
- Globe guard and safety cable: stainless steel wire.

Standard Finishes

- Mounting hoods and housings: gray epoxy powder coat finish, electrostatically applied for complete uniform protection.

NEC/CEC Certifications and Compliances

- UL Standards: UL 1598; UL 60079-0; UL 60079-7; UL 60079-18; UL 60079-31
- CSA Standards: CSA C22.2 No. 250.0; CAN/CSA C22.2 No. 60079-0; CAN/CSA C22.2 No. 60079-7; CAN/CSA C22.2 No. 60079-18; CAN/CSA C22.2 No. 60079-31
- ETL Report Number: 103764069DAL-001

ATEX/IECEx Certifications and Compliances

- Certification Type: Mercmaster Generation 3 LED Zone 1
 - Gas: Zone 1 and 2
 - Conforming to ATEX 2014/34/EU: II 2G
 - Type of Protection: Ex eb mb op is IIC Gb
 - Temperature Class: T6 to T4
 - Dust: Zones 21 and 22
 - Conforming to ATEX 2014/34/EU: II 2D
 - Type of Protection: Ex op is tb IIIC Db
 - Surface Temperature: +75 °C to +100 °C (+167 °F to +212 °F)
- Ambient Temperature: -40 °C to +65 °C (-40 °F to +149 °F)
- ATEX Certificate: ITS18ATEX303680X
- IECEx Certificate: IECEx ITS 18.0041X_0
- Index of Protection according to EN/IEC 60529: IP66/67
- Impact Resistance (shock): IK08
- Photobiological Safety, IEC 62778 and IEC 62471: RG0 with diffused polycarbonate, RG1 with clear glass or polycarbonate

Related Products

- Industrial Mercmaster LED Generation 3 Series Luminaires
- Mercmaster LED Generation 3 Series Luminaires
- Mercmaster LED Low Profile Luminaires

① Nominal lumen value for 5000K, clear glass globe. Type V Wide. Detailed lumen information is provided in the "Lumen Output (Efficacy)" tables.

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Illustrated Features

LED Flexibility and Modular Design



Encapsulated LED Components
- Ex mb encapsulation method provides Zone 1 protection with low weight and superior component reliability.

Safety Features



Choose from **three color temperatures** (CCT): 3000K, 4000K, and 5000K.

Six mounting hoods allow one fixture to be configured for ceiling, pendant, stanchion, or wall applications.

Three globes; clear and diffused polycarbonate, or clear glass globe provide just the right level of diffusion.

Latch Assembly and Hinge: Captive, stainless steel latch assembly (bolt and nut) closes securely while providing resistance to corrosive atmospheres.

Swing-away design simplifies wiring and installation. Extra high hinge provides additional protection against accidental driver housing disengagement during installation or maintenance.

Designed for the Environment



Driver housing design incorporates separate sections for the terminal block and driver.

The efficient **thermal design** ensures reliable heat transfer from the LED assembly out via the heatsink and the cast, epoxy powder coat, aluminum housings.

Safety Cable



Safety cable is slipped around the housing through retention points that are casted in. Safety cable has built in loops combined with a locking carabiner to allow for a quick and secure installation.

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LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

Family Tree — Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

Trunnion Mount Pendant Mount Ceiling Mount Wall Mount 25° Stanchion Mount 90° Stanchion Mount



KPCT



KPA



KPC



KPWB



KPS



KPST

Driver Housing

(3500 - 9500 Lumens)



MGZL

(9500 - 24,000 Lumens)



MGZH

Glass Globe



VPGL-GLASS
(Clear)

Polycarbonate Globes



VPGL-LED
(Clear)



VPGL-DIFF
(Diffused)

Globe Guards
(Optional Accessory)



MGU1

Gray Aluminum Visor
(Optional Accessory)



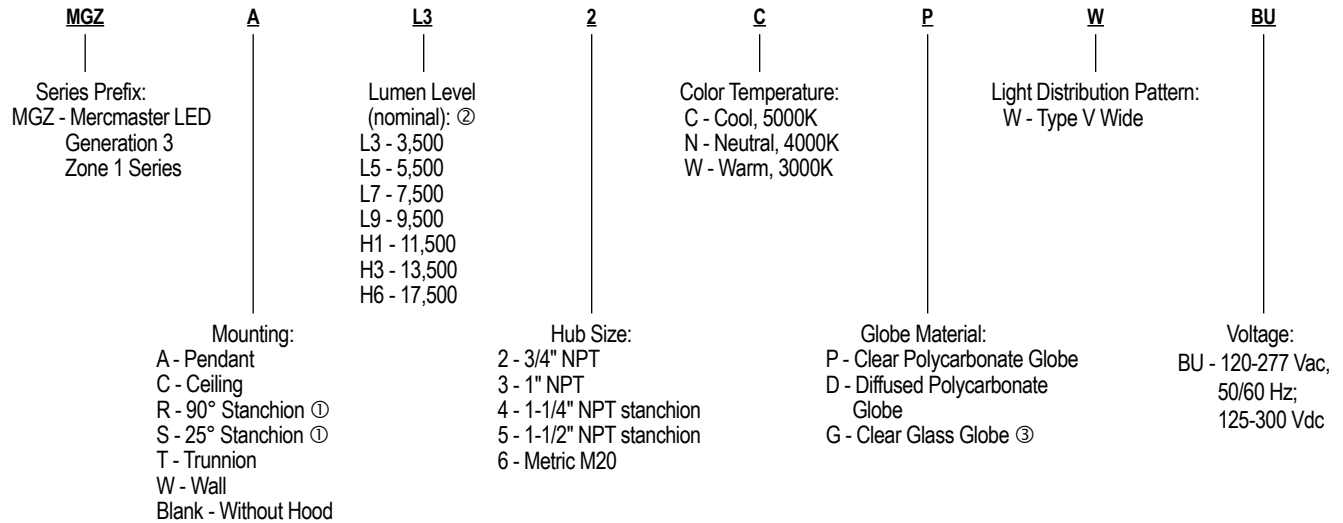
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Order Using Catalog Numbering Guide — Mercmaster™ LED Generation 3 Series Zone 1 Luminaires



① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered in this mounting option.

② For lumen output information, see Lumen Output (Efficacy) Table in catalog pages.

③ Guards for the glass globes are ordered separately. See the Accessories section in the catalog pages for more information.

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LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

Lumen Output (Efficacy) ①

Model	HID Equivalency	Light Distribution Pattern	CCT (Correlated Color Temperature)	CRI (Color Rendering Index)	Lumen Output	Efficacy (lm/W)	CCT	CRI	Lumen Output	Efficacy (lm/W)	CCT	CRI	Lumen Output	Efficacy (lm/W)
Clear Polycarbonate Globe														
MGZL3	75-100W	Type V Wide	3000K	80	3,258	109	4000K	80	3,356	112	5000K	70	3,636	121
MGZL5	150-175W	Type V Wide	3000K	80	4,843	105	4000K	80	4,989	108	5000K	70	5,405	118
MGZL7	175-250W	Type V Wide	3000K	80	6,748	118	4000K	80	7,426	130	5000K	70	7,616	134
MGZL9	300-350W	Type V Wide	3000K	80	8,705	116	4000K	80	9,580	128	5000K	70	9,826	131
MGZH1	400W	Type V Wide	3000K	80	10,537	115	4000K	80	11,596	126	5000K	70	11,893	129
MGZH3	450-500W	Type V Wide	3000K	80	12,514	113	4000K	80	13,771	124	5000K	70	14,124	127
MGZH6	600W	Type V Wide	3000K	80	15,174	108	4000K	80	16,698	119	5000K	70	17,126	122
Diffused Polycarbonate Globe														
MGZL3	75-100W	Type V Wide	3000K	80	3,130	104	4000K	80	3,225	108	5000K	70	3,494	116
MGZL5	150-175W	Type V Wide	3000K	80	4,653	101	4000K	80	4,794	104	5000K	70	5,193	113
MGZL7	175-250W	Type V Wide	3000K	80	6,486	114	4000K	80	7,138	125	5000K	70	7,321	128
MGZL9	300-350W	Type V Wide	3000K	80	8,345	111	4000K	80	9,184	122	5000K	70	9,419	126
MGZH1	400W	Type V Wide	3000K	80	10,101	110	4000K	80	11,116	121	5000K	70	11,401	124
MGZH3	450-500W	Type V Wide	3000K	80	11,998	108	4000K	80	13,204	119	5000K	70	13,542	122
MGZH6	600W	Type V Wide	3000K	80	14,538	104	4000K	80	15,998	114	5000K	70	16,409	117
Clear Glass Globe														
MGZL3	75-100W	Type V Wide	3000K	80	3,411	114	4000K	80	3,514	117	5000K	70	3,807	127
MGZL5	150-175W	Type V Wide	3000K	80	5,070	110	4000K	80	5,223	114	5000K	70	5,659	123
MGZL7	175-250W	Type V Wide	3000K	80	7,059	124	4000K	80	7,768	136	5000K	70	7,967	140
MGZL9	300-350W	Type V Wide	3000K	80	9,100	121	4000K	80	10,014	134	5000K	70	10,270	137
MGZH1	400W	Type V Wide	3000K	80	11,012	120	4000K	80	12,118	132	5000K	70	12,429	135
MGZH3	450-500W	Type V Wide	3000K	80	13,078	118	4000K	80	14,392	130	5000K	70	14,761	133
MGZH6	600W	Type V Wide	3000K	80	15,836	113	4000K	80	17,427	124	5000K	70	17,874	128

① All lumen values are typical (tolerance +/-10%).

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Electrical Specifications ①					
Model	Voltage	Input Power (Watts)	Input Current (Amps)	Power Factor (PF)	Total Harmonic Distortion (THD)
MGZL3	120 Vac	33	0.3	0.97	<20
	277 Vac	33	0.1	0.90	<20
	170 Vdc	33	0.2	N/A	N/A
	300 Vdc	33	0.1	N/A	N/A
MGZL5	120 Vac	46	0.4	0.98	<20
	277 Vac	45	0.2	0.94	<20
	170 Vdc	46	0.3	N/A	N/A
	300 Vdc	46	0.2	N/A	N/A
MGZL7	120 Vac	65	0.6	0.98	<20
	277 Vac	64	0.3	0.90	<20
	170 Vdc	64	0.4	N/A	N/A
	300 Vdc	64	0.2	N/A	N/A
MGZL9	120 Vac	82	0.7	0.98	<20
	277 Vac	80	0.3	0.93	<20
	170 Vdc	81	0.5	N/A	N/A
	300 Vdc	80	0.3	N/A	N/A
MGZH1	120 Vac	101	0.9	0.99	<20
	277 Vac	98	0.4	0.94	<20
	170 Vdc	99	0.6	N/A	N/A
	300 Vdc	98	0.3	N/A	N/A
MGZH3	120 Vac	121	1	0.98	<20
	277 Vac	116	0.5	0.90	<20
	170 Vdc	118	0.7	N/A	N/A
	300 Vdc	117	0.4	N/A	N/A
MGZH6	120 Vac	141	1.2	0.99	<20
	277 Vac	135	0.5	0.92	<20
	170 Vdc	138	0.8	N/A	N/A
	300 Vdc	136	0.5	N/A	N/A

① All values are typical (tolerance +/-10%).

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LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

Temperature Codes ①

Model	Gas — T Rating			Dust — Surface T°		
	Ta= +40 °C (+104 °F)	Ta= +55 °C (+131 °F)	Ta= +65 °C (+149 °F)	Ta= +40 °C (+104 °F)	Ta= +55 °C (+131 °F)	Ta= +65 °C (+149 °F)
NEC/CEC (AEx/Ex)						
MGZL3	T6	T6	T5	T6	T6	T6
MGZL5	T6	T6	T5	T6	T6	T5
MGZL7	T6	T5	T5	T6	T6	T6
MGZL9	T6	T5	T4	T6	T6	T6
MGZH1	T5	T4	T4	T6	T6	T5
MGZH3	T4	T4	T4	T6	T5	T5
MGZH6	T4	T4	T4	T6	T5	T5
ATEX/IECEX						
MGZL3	T6	T6	T5	+75 °C (+167 °F)	+75 °C (+167 °F)	+85 °C (+185 °F)
MGZL5	T6	T6	T5	+75 °C (+167 °F)	+75 °C (+167 °F)	+100 °C (+212 °F)
MGZL7	T6	T5	T5	+75 °C (+167 °F)	+85 °C (+185 °F)	+85 °C (+185 °F)
MGZL9	T6	T5	T4	+75 °C (+167 °F)	+85 °C (+185 °F)	+85 °C (+185 °F)
MGZH1	T5	T4	T4	+85 °C (+185 °F)	+85 °C (+185 °F)	+100 °C (+212 °F)
MGZH3	T4	T4	T4	+85 °C (+185 °F)	+100 °C (+212 °F)	+100 °C (+212 °F)
MGZH6	T4	T4	T4	+85 °C (+185 °F)	+100 °C (+212 °F)	+100 °C (+212 °F)

"T" Numbers Represent the Maximum Internal Temperature ② or Maximum Surface Temperature ③

"T" #	T1	T2	T3	T4	T5	T6
Temp. Range °C (°F)	+301 to +450 (+547 to +842)	+201 to +300 (+394 to +572)	+136 to +200 (+277 to +392)	+101 to +135 (+214 to +275)	+86 to +100 (+187 to +212)	+85 (+185)

① Ambient Temperature Range: -40 °C to +65 °C (-40 °F to +149 °F).








② T numbers represent the maximum internal temperature for Class I, Zone 1 locations designated by the NEC, and Zone 1 (Gas) locations as designated by the IEC.

③ T numbers and surface temperatures represent the maximum surface temperature under a dust blanket for Class I, Zone 21 as designated by the NEC, and Zone 21 (Dust) locations as designated by the IEC.

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Mounting Hoods			
	Hub Size	Weight in kg (lbs)	Catalog Number
Pendant — One Hub, Rigid Mounting			
	3/4" NPT	1.0 (2.3)	KPA-75
	1" NPT		KPA-100
	M20		KPA-M20
Pendant Cone — One Hub, Rigid Mounting			
	3/4" NPT	1.1 (2.5)	KPCH-75
	1" NPT		KPCH-100
	M20		KPCH-M20
Trunnion — Five Hubs, Four Close-Up Plugs			
	3/4" NPT	6.1 (13.4)	KPCT-75
	1" NPT		KPCT-100
	M20		KPCT-M20
Ceiling — Five Hubs, Four Close-Up Plugs			
	3/4" NPT	1.4 (3.0)	KPC-75
	1" NPT		KPC-100
	M20		KPC-M20
Wall — Five Hubs, Four Close-Up Plugs			
	3/4" NPT	1.8 (4.0)	KPWB-75
	1" NPT		KPWB-100
	M20		KPWB-M20
25° Stanchion — One Hub			
	1-1/4" NPT	1.5 (3.3)	KPS-125
	1-1/2" NPT		KPS-150
90° Stanchion — One Hub			
	1-1/4" NPT	1.7 (3.8)	KPST-125
	1-1/2" NPT		KPST-150








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LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

Accessories and Replacement Parts

Description	Weight in kg (lbs)	Catalog Number
Globes		
 Clear Globe — Polycarbonate	0.2 (0.5)	VPGL-LED
 Diffused Globe — Polycarbonate	0.2 (0.5)	VPGL-DIFF
 Clear Globe — Glass	0.8 (1.7)	VPGL-GLASS
Guard		
 Globe Guard	0.2 (0.4)	MGU1
Visor		
 Electrostatically applied gray epoxy powder coat finish on Aluminum Visor	0.4 (0.9)	MMVISOR
Safety Cable		
 Stainless steel	0.2 (0.4)	LEDSC
Drain Plug		
 76 mm (3") long, 1/2" NPT trade size drain assembly used to divert water existing in the conduit system	0.4 (0.9)	LEDDR3

Replacement Drivers

Model	Voltage	Driver Wattage	Constant Current Setting	Catalog Number
MGZL3	BU	30 Watt	500mA	APMZ050C135UD50
MGZL5	BU	46 Watt	780mA	APMZ050C135UD78
MGZL7	BU	57 Watt	360mA	APMZ100C090UD36
MGZL9	BU	75 Watt	480mA	APMZ100C090UD48
MGZH1	BU	92 Watt	595mA	APMZ100C090UD59
MGZH3	BU	111 Watt	720mA	APMZ150C135UD72
MGZH6	BU	140 Watt	900mA	APMZ150C135UD90

Luminaire Weights

Description	Weight in kg (lbs)
MGZL Housing	9.5 (21.0)
MGZH Housing	12.5 (27.5)

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Enclosed and Gasketed Fixtures

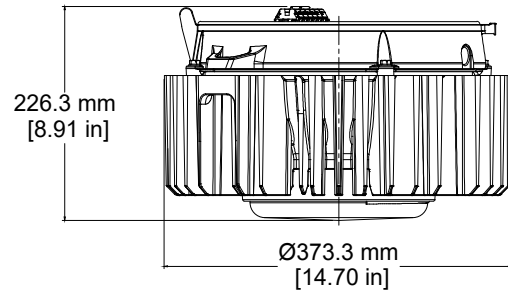
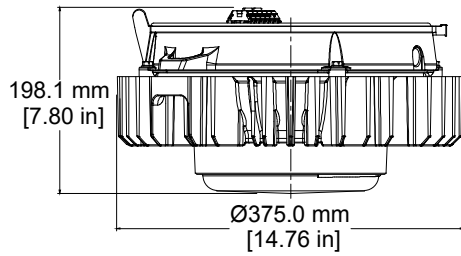
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Dimensional Drawings

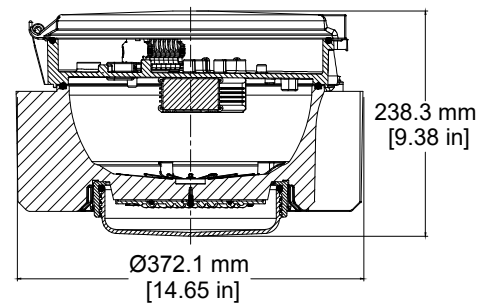
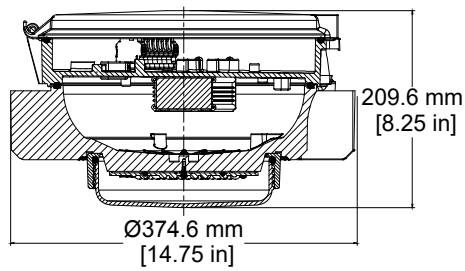
MGZL

MGZH

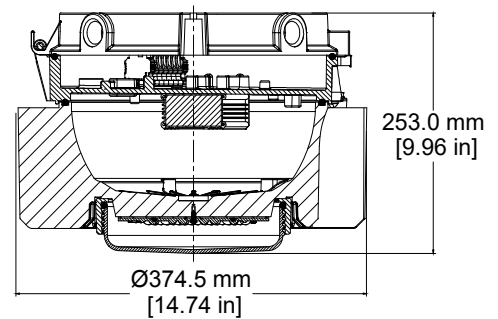
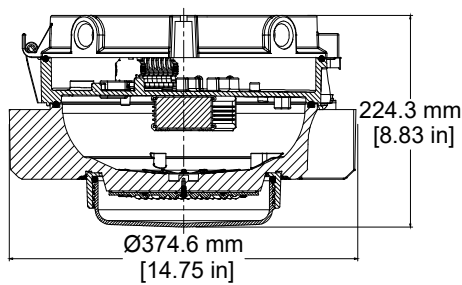
Driver Housing



Pendant Mount



Ceiling Mount



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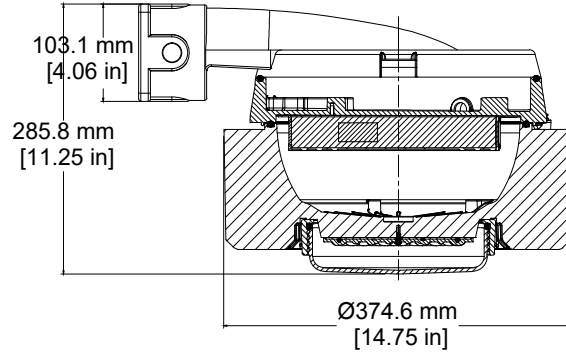
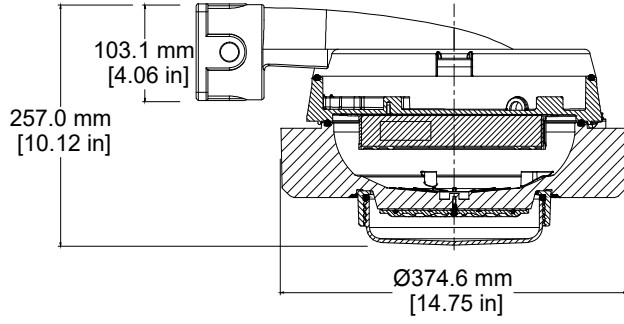
LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

Dimensional Drawings

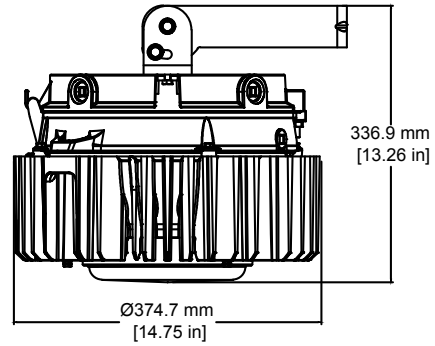
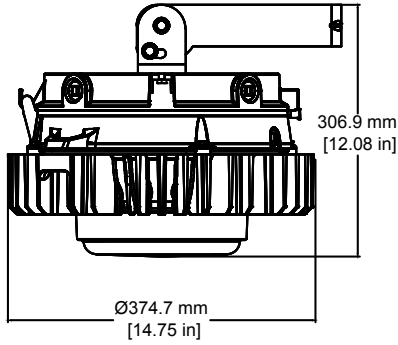
MGZL

MGZH

Wall Mount



Trunnion Mount



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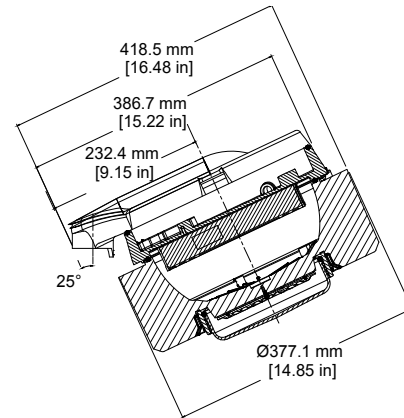
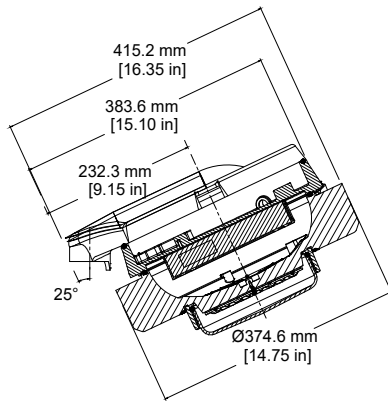
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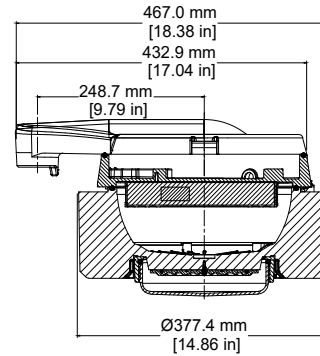
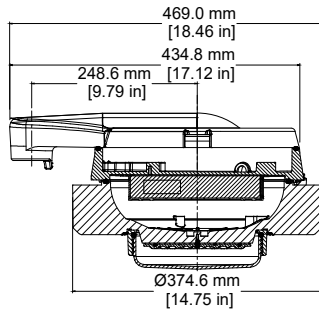
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25° Stanchion Mount



90° Stanchion Mount



Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

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NEC/CEC: Class I, Zone 1 AEx/Ex eb mb Group IIC Gb | Class I, Zone 21 AEx/Ex tb Group IIC Db
ATEX/IECEX: Zone 1, 2, 21, 22 | Ex eb mb op is IIC | II 2 GD | IP66/67 | IK08

LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

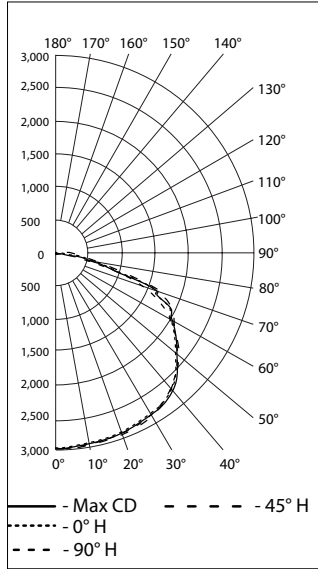
Photometric Data — DATA SHOWN IS ABSOLUTE

Type V Wide, Diffused Polycarbonate 5000K CCT

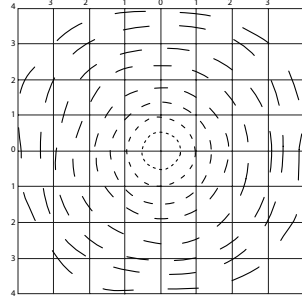
REPORT NUMBER: MGZH1CDWBU

Luminaire Lumens 11,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



LUMENS PER ZONE

Zone	Lumens	% Luminaire
0-30	2,404.5	21.1%
0-40	4,135.8	36.3%
0-60	8,126.6	71.3%
60-90	3,104.4	27.2%
70-100	1,339.0	11.7%
90-120	162.1	1.4%
0-90	11,231.0	98.5%
90-180	169.6	1.5%
0-180	11,400.7	100%

LUMENS PER ZONE

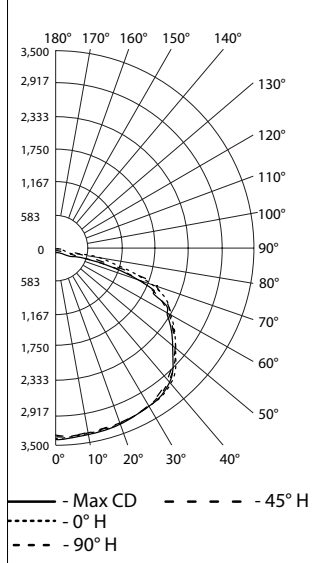
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	277.9	2.4%	90-100	82.4	0.7%
10-20	815.0	7.1%	100-110	59.3	0.5%
20-30	1,311.6	11.5%	110-120	20.4	0.2%
30-40	1,731.3	15.2%	120-130	5.3	0%
40-50	1,987.5	17.4%	130-140	1.2	0%
50-60	2,003.4	17.6%	140-150	0.4	0%
60-70	1,847.8	16.2%	150-160	0.3	0%
70-80	1,012.8	8.9%	160-170	0.2	0%
80-90	243.8	2.1%	170-180	0.1	0%

Type V Wide, Diffused Polycarbonate 5000K CCT

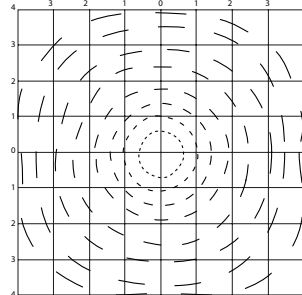
REPORT NUMBER: MGZH3CDWBU

Luminaire Lumens 13,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	2,863.8	21.1%
0-40	4,925.4	36.4%
0-60	9,671.4	71.4%
60-90	3,669.1	27.1%
70-100	1,577.1	11.6%
90-120	192.4	1.4%
0-90	13,340.5	98.5%
90-180	201.6	1.5%
0-180	13,542.1	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	330.9	2.4%	90-100	97.8	0.7%
10-20	970.8	7.2%	100-110	70.4	0.5%
20-30	1,562.1	11.5%	110-120	24.2	0.2%
30-40	2,061.6	15.2%	120-130	6.4	0%
40-50	2,364.8	17.5%	130-140	1.5	0%
50-60	2,381.3	17.6%	140-150	0.6	0%
60-70	2,189.7	16.2%	150-160	0.4	0%
70-80	1,191.8	8.8%	160-170	0.3	0%
80-90	287.6	2.1%	170-180	0.1	0%

Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

Enclosed and Gasketed Fixtures

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ATEX/IECEX: Zone 1, 2, 21, 22 | Ex eb mb op is IIC | II 2 GD | IP66/67 | IK08

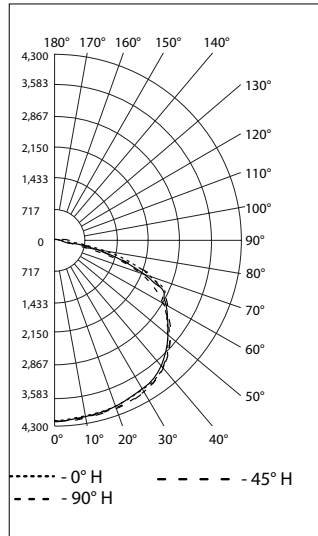
Photometric Data — DATA SHOWN IS ABSOLUTE

Type V Wide, Diffused Polycarbonate 5000K CCT

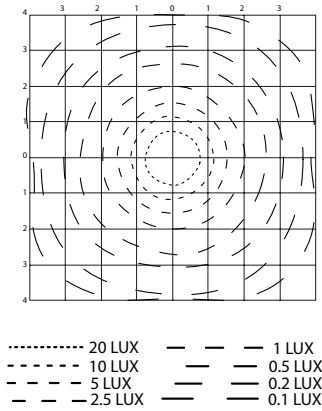
REPORT NUMBER: MGZH6CDWBU

Luminaire Lumens 17,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	3,482.0	21.2%
0-40	5,988.7	36.5%
0-60	11,750.1	71.6%
60-90	4,417.1	26.9%
70-100	1,885.8	11.5%
90-120	230.6	1.4%
0-90	16,167.1	98.5%
90-180	241.3	1.5%
0-180	16,408.5	100%

LUMENS PER ZONE

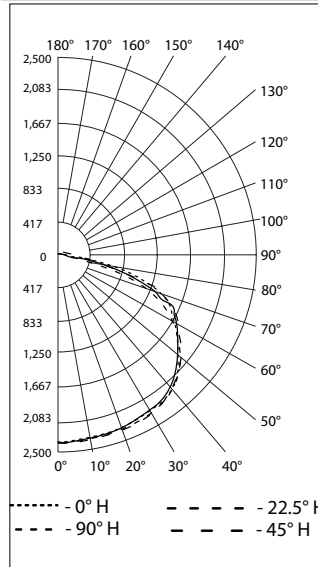
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	402.3	2.5%	90-100	116.9	0.7%
10-20	1,180.3	7.2%	100-110	84.7	0.5%
20-30	1,899.4	11.6%	110-120	29.0	0.2%
30-40	2,506.7	15.3%	120-130	7.6	0%
40-50	2,872.9	17.5%	130-140	1.7	0%
50-60	2,888.5	17.6%	140-150	0.6	0%
60-70	2,648.1	16.1%	150-160	0.5	0%
70-80	1,423.5	8.7%	160-170	0.3	0%
80-90	345.5	2.1%	170-180	0.1	0%

Type V Wide, Diffused Polycarbonate 5000K CCT

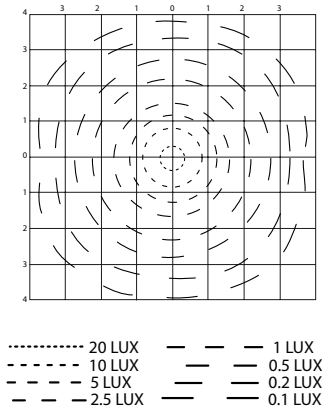
REPORT NUMBER: MGZL9CDWBU

Luminaire Lumens 9,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	1,980.9	21%
0-40	3,407.7	36.2%
0-60	6,699.8	71.1%
60-90	2,578.5	27.4%
70-100	1,115.4	11.8%
90-120	135.2	1.4%
0-90	9,278.3	98.5%
90-180	140.9	1.5%
0-180	9,419.2	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	228.9	2.4%	90-100	68.3	0.7%
10-20	671.6	7.1%	100-110	49.6	0.5%
20-30	1,080.5	11.5%	110-120	17.2	0.2%
30-40	1,426.7	15.1%	120-130	4.6	0%
40-50	1,638.8	17.4%	130-140	1.0	0%
50-60	1,653.2	17.6%	140-150	0.0	0%
60-70	1,531.4	16.3%	150-160	0.0	0%
70-80	845.4	9.0%	160-170	0.0	0%
80-90	201.7	2.1%	170-180	0.0	0%

Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

Enclosed and Gasketed Fixtures

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ATEX/IECEX: Zone 1, 2, 21, 22 | Ex eb mb op is IIC | II 2 GD | IP66/67 | IK08

LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEX

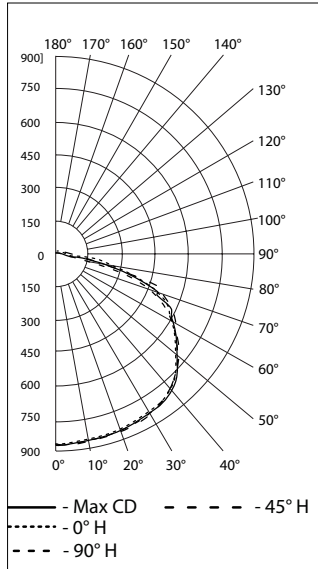
Photometric Data — DATA SHOWN IS ABSOLUTE

Type V Wide, Diffused Polycarbonate 5000K CCT

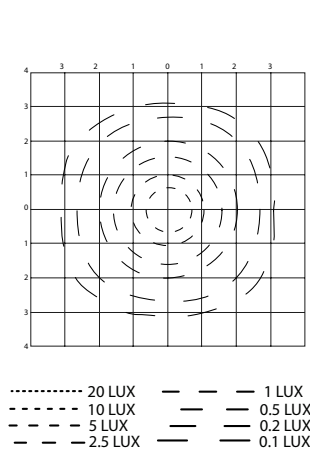
REPORT NUMBER: MGZL3CDWBU

Luminaire Lumens 3,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	733.6	21%
0-40	1,264.8	36.2%
0-60	2,467.5	70.6%
60-90	953.2	27.3%
70-100	429.7	12.3%
90-120	69.5	2%
0-90	3,420.7	97.9%
90-180	73.1	2.1%
0-180	3,493.7	100%

LUMENS PER ZONE

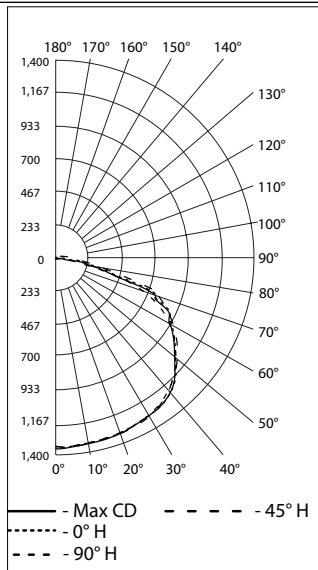
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	84.5	2.4%	90-100	26.2	0.8%
10-20	247.8	7.1%	100-110	29.1	0.8%
20-30	401.3	11.5%	110-120	14.2	0.4%
30-40	531.2	15.2%	120-130	3.1	0.1%
40-50	599.7	17.2%	130-140	0.4	0%
50-60	603.0	17.3%	140-150	0	0%
60-70	549.7	15.7%	150-160	0	0%
70-80	325.2	9.3%	160-170	0	0%
80-90	78.3	2.2%	170-180	0	0%

Type V Wide, Diffused Polycarbonate 5000K CCT

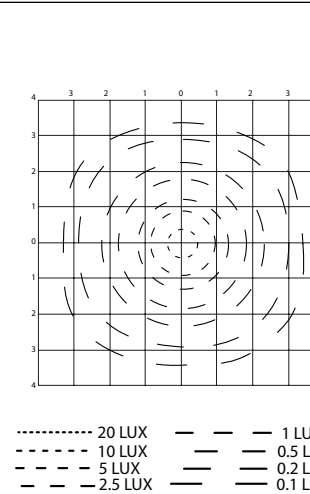
REPORT NUMBER: MGZL5CDWBU

Luminaire Lumens 5,500

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	1,093.7	21.1%
0-40	1,885.5	36.3%
0-60	3,675.4	70.8%
60-90	1,409.9	27.1%
70-100	632.9	12.2%
90-120	102.8	2%
0-90	5,085.3	97.9%
90-180	108.1	2.1%
0-180	5,193.4	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	126.0	2.4%	90-100	38.7	0.7%
10-20	369.4	7.1%	100-110	43.1	0.8%
20-30	598.3	11.5%	110-120	21.0	0.4%
30-40	791.8	15.2%	120-130	4.6	0.1%
40-50	892.5	17.2%	130-140	0.7	0%
50-60	897.4	17.3%	140-150	0	0%
60-70	815.7	15.7%	150-160	0	0%
70-80	478.8	9.2%	160-170	0	0%
80-90	115.4	2.2%	170-180	0	0%

Mercmaster™ LED Generation 3 Series Zone 1 Luminaires

Enclosed and Gasketed Fixtures

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LED Luminaires | Area / Task | Hazardous Location | NEC / CEC / ATEX / IECEx

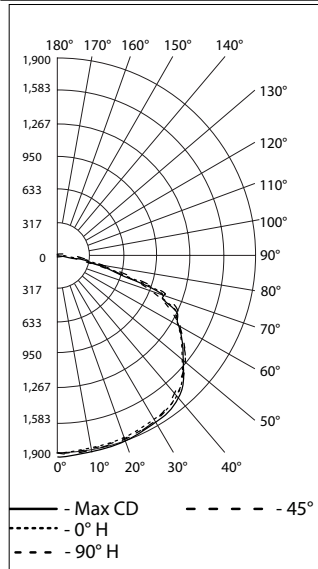
Photometric Data — DATA SHOWN IS ABSOLUTE

Type V Wide, Diffused Polycarbonate 5000K CCT

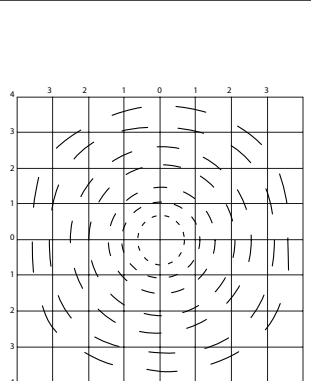
REPORT NUMBER: MGZL7CDWBU

Luminaire Lumens 7,000

POLAR CANDELA DISTRIBUTION



ISOLUX PLOT



..... 20 LUX - - - - - 1 LUX
 - - - - - 10 LUX - - - - - 0.5 LUX
 - - - - - 5 LUX - - - - - 0.2 LUX
 - - - - - 2.5 LUX - - - - - 0.1 LUX

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	1,532.5	20.9%
0-40	2,636.9	36%
0-60	5,185.5	70.8%
60-90	1,989.1	27.2%
70-100	860.7	11.8%
90-120	139.0	1.9%
0-90	7,174.6	98%
90-180	146.0	2%
0-180	7,320.6	100%

LUMENS PER ZONE

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	176.9	2.4%	90-100	54.1	0.7%
10-20	519.6	7.1%	100-110	58.2	0.8%
20-30	836.1	11.4%	110-120	26.7	0.4%
30-40	1,104.3	15.1%	120-130	6.0	0.1%
40-50	1,268.9	17.3%	130-140	1.0	0%
50-60	1,279.8	17.5%	140-150	0	0%
60-70	1,182.5	16.2%	150-160	0	0%
70-80	650.9	8.9%	160-170	0	0%
80-90	155.7	2.1%	170-180	0.0	0%