

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

Applications

- Enclosed and gasketed fixtures suitable for use in:
 - Marine and wet locations
 - A wide range of industrial, chemical processing and other areas where flammable gases and vapors or combustible dusts are present under conditions defined by the National Electrical Code as Class I, Division 2; Class II, Division 1 and 2; and Class III
 - Areas of low clearance, low ceiling heights or where fixture weights must be minimized
 - For Zone 2, the method of protection is AEx nA nR – Restricted Breathing/Nonsparking or AEx nR – Restricted Breathing
 - Non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmosphere or high ambient temperatures are encountered
 - Ambient temperature range:
 - Incandescent: -40°C to +65°C (-40°F to +149°F)
 - HPS: -40°C to +65°C (-40°F to +149°F)
 - PSHM: -30°C to +65°C (-22°F to +149°F)
- Typical applications include:
 - Pulp and paper mills
 - Processing plants
 - Chemical plants
 - Oil refineries
 - Foundries
 - Manufacturing plants
 - Storage areas
 - Waste and sewage treatment
 - Parking garages
 - Other areas where dust, water, dirt and rough usage are a problem

Features

- Compact light weight low profile design is suited for low mounting heights in conjunction with lower wattage fixtures.
- Modular design allows scores of fixture component combinations to meet installation and lighting needs. Uses same mounting hoods and optical accessories as Mercmaster III.
- A choice of heat-resistant prismatic glass refractors (NEMA Type II and III), heat-resistant globes, or prismatic polymeric refractors (NEMA Type II, III, IV and V) which thread directly into ballast housing. Photometrics available upon request – contact your local sales representative.
- Standard dome or 30° angle reflectors made of fiberglass reinforced white polyester. Highly resistant to corrosive atmospheres.
- Accommodates medium base lamps.
- A wide range of voltages available (120 to 600 Volt) and ballast types (Reactor, CWA and Super CWA).
- Medium base lamp type and watts: ①
 - HPS 50 W-150 W
 - PSMH 175 W
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on ballast housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies servicing.
- All Mercmaster III mounting hoods have provision for easy field installation of fuses in fixtures (see fuse kits).



- Fixtures are for use in Class I, Zone 2 hazardous locations.
- The AEx nA nR factory sealed Mercmaster III prevents vapors and gases from entering the globe chamber. There are no seals or putty required which will reduce installation time and installation errors.

Standard Materials

- Mounting hoods, bodies and guard: cast copperfree (4/10 of 1% max.) aluminum
- All hardware and catch assemblies: stainless steel
- Reflectors: Fiberglass reinforced white polyester
- Globes and Refractors: heat-resistant prismatic glass
- Polymeric refractor: spun aluminum reflector and a lens made of an engineered thermoplastic

Standard Finishes

- Mounting hoods, bodies and guards: baked gray epoxy-clad finish, electrostatically applied for complete uniform protection

Options

- Guards with gray epoxy painted to match fixtures, supplied with stainless steel screws. Add suffix **-G** before voltage suffix.
- AEx nA nR fixtures, add suffix **-Z2**. Only available for certain ballast types.
- AEx/Ex nR fixtures, add suffix **-ZB**.
- Reflectors are available as standard dome and 30° angle polyester. Order separately.

NEC/CEC Certifications and Compliances ②

- cULus Listed: E10444
- UL Standard: ANSI/UL 844, 1598, 60079-0, 60079-15, 1598A
- CSA Certified: 025428
- CSA Standard: CSA C22.2 No. 250.0, C22.2 No. 137; CAN/CSA E60079-0, E60079-15

① Please note, there is a max lamp height of 141 mm (14.1 cm) when using the VPGL-1HR globe.

② Compliance data varies for specific fixtures. Consult Appleton regarding suitability of specific fixtures for a particular application.

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Illustrated Features



High Temperature Sockets

Medium base high-temperature porcelain sockets.

Aluminum Inner Reflector

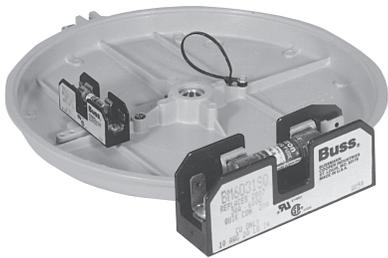
Solid aluminum inner reflector (for refractor ballast housings only) improves photometric efficiency.

Globe Chamber

Completely sealed from the ballast housing and outside vapors/air (nR).

Electrical Protection

Ground wire provided to bond mounting hood to ballast housing.



Fuses

Two screws secure fuse kit to mounting boss in any Mercmaster mounting hood. Fuse included.

Photocell

Available for all fixtures except cone and ceiling mount. Installs through knock-out in mounting hood. Provides continuous ON-OFF dusk-to-dawn control.



Vented Reflectors

Reflectors are thick, tough fiberglass-reinforced white polyester, vented for cooler operation. Quickly attach with furnished stainless steel screws.

Stainless Steel Inserts

Ballast bodies have stainless steel threaded inserts to receive stainless steel screws for reflectors and guard. Prevents "freezing", allowing guards and reflectors to be easily removed and replaced at any time, without damage to the housing.

Epoxy Finish

Ballast housing, hoods and guards are copperfree aluminum with epoxy powder coat finish.

Prismatic Glass Globes and Refractors

Heat-resistant globes and refractors thread directly into ballast housing and seal against a high-temperature silicone rubber gasket.



"Safety" High Hinge

Extra-high hinge provides additional protection against accidental ballast housing disengagement during installation or maintenance.



Ballast Assembly

Utilizing non-sparking components avoiding the ignition of gases or vapors that may be present (nA).

Mounting Hood and Globe Gaskets

Silicone rubber gaskets seals out moisture, dirt and dust. Stays flexible, withstands high temperatures. Closure design assures uniform gasket compression.

Terminal Blocks (Zone 2)

A seven-point terminal block is provided to facilitate wiring. Terminal block accommodates wire size ranging from #8 to #24 AWG.



Cooler Operating Cone Hood

Larger sloped surface sheds dusts, dirt and combustible fibers providing better heat dissipation.



Stainless Steel Latch Assembly

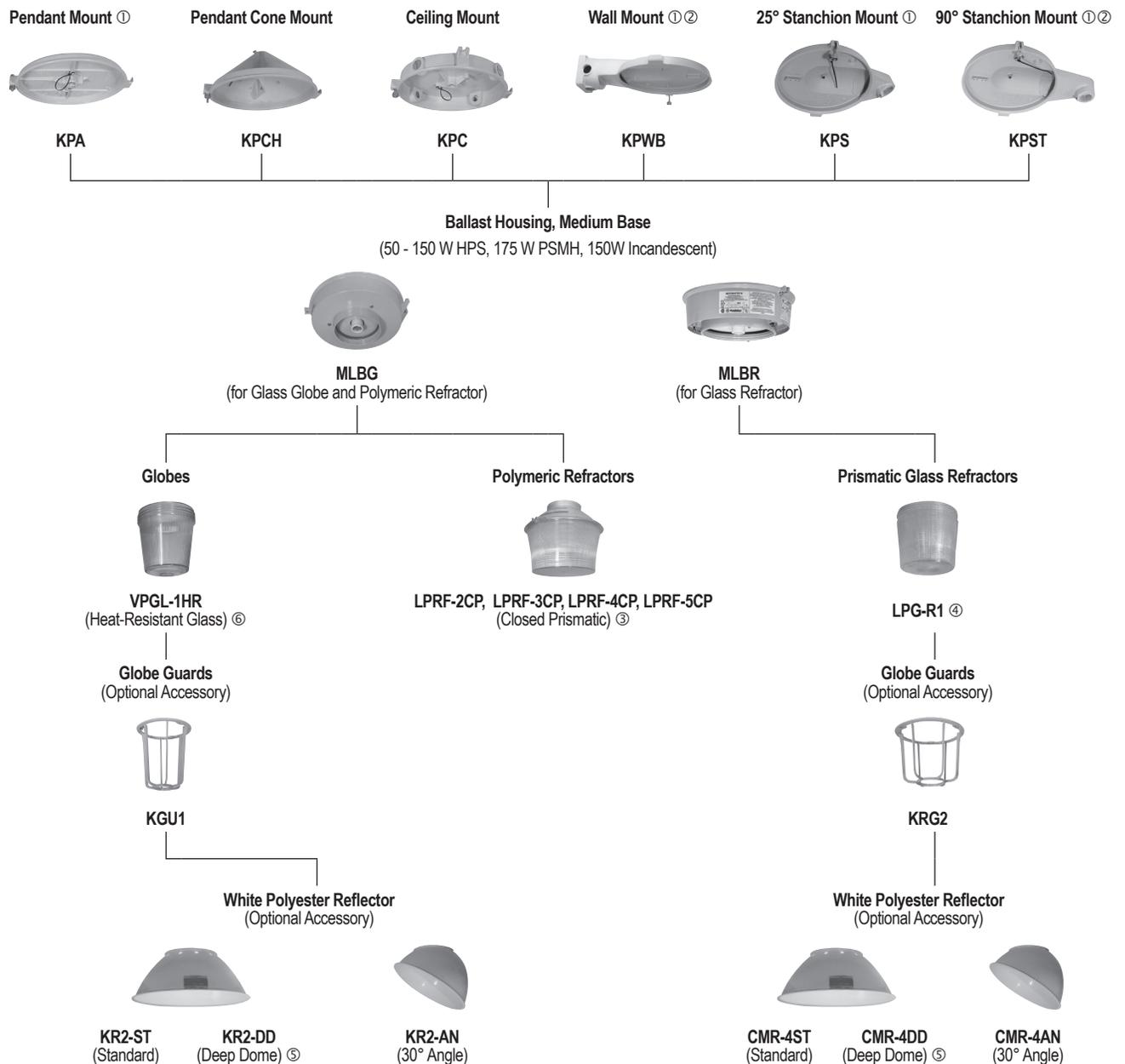
Captive, stainless steel latch assembly bolt and nut closes securely, resists attack of corrosive atmospheres. Swing-away design simplifies servicing.

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Family Tree — Mercmaster™ III Low Profile Luminaires



① Mounting hood with a 120 V or 208-277 V factory installed photocell is available.

② Standard and deep dome reflectors may interfere with bottom conduit entry if used with KPST and KPWB mounting hoods.

③ Available in NEMA Type II, III, IV and V. Polymeric Refractor suitable for Class II, Groups F and G, NEMA 4X and Marine Type Electric Fixtures Outside Type (Salt Water) only (100 W HPS Max.).

④ Available in NEMA Type I.

⑤ Fixtures when used with Deep Dome Refractors are NOT UL Listed.

⑥ Please note, there is a max lamp height of 141 mm (14.1 cm) when using the VPGL-1HR globe.

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Order Using Catalog Numbering Guide — Mercmaster™ III Low Profile Hazardous Location Luminaires

<p>ML</p> <p>Series: ML - Mercmaster III Low Profile</p>	<p>A</p> <p>Mounting: A - Pendant (rigid mounting) C - Ceiling D - Pendant Cone Hood F - Pendant (flexible mounting) R - 90° Stanchion S - 25° Stanchion W - Wall</p>	<p>L</p> <p>Lamp Type: I - Incandescent L - High Pressure Sodium P - Pulse Start Metal Halide</p>	<p>15</p> <p>Wattage: 10 - 100 W HPS 15 - 150 W HPS ④ and 60-150 W max. Incandescent 17 - 175 W PSMH 50 - 50 W HPS 70 - 70 W HPS</p>	<p>2</p> <p>Hub Size: 2 - 3/4" NPT 3 - 1" NPT 4 - 1-1/4" NPT stanchion 5 - 1-1/2" NPT stanchion</p>	<p>G1</p> <p>Optical Assembly: ② G1 - Globe ⑥ J1 - NEMA I Glass Refractor P2 - NEMA II Polymeric Refractor P3 - NEMA III Polymeric Refractor P4 - NEMA IV Polymeric Refractor P5 - NEMA V Polymeric Refractor</p>	<p>G</p> <p>Guard Options: G - Cast Guard N - No Guard</p>	<p>MT</p> <p>Voltage: ① LB - Incandescent, 120, 60 Hz MT - 120/208/240/277, 60 Hz 48 - 480, 60 Hz 125 - 120, 50 Hz 225 - 225, 50 Hz 226 - 220, 60 Hz 236 - 230, 60 Hz 245 - 240, 50 Hz 246 - 240, 60 Hz GP - 120/220-240, 50 Hz GK - 220/240, 50 Hz</p>	<p>R</p> <p>Options: F - Fuse Kit (Specify Voltage) H1 - Photocontrol 120 V H2 - Photocontrol 208 V H3 - Photocontrol 240 V H4 - Photocontrol 277 V D - E-27 Export Socket</p> <p>Optional Fusing ③ FN - 120 V FP - 208 V FS - 240 V FT - 277 V FF - 480 V</p>	<p>Z2</p> <p>Suffix: Z2 - Zone 2 suffix (required for AEx nA nR rating) ⑤ ZB - Zone 2 suffix (required for AEx/Ex nR)</p>
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Lamp Type	Lamp Watts	Voltage Suffixes											
		LB	MT	48	125	225	226	236	245	246	GP	GK	
Inc.	150 Max.	X	—	—	—	—	—	—	—	—	—	—	—
HPS	50	—	—	—	—	X	X	—	X	—	—	—	X
HPS	70	—	X	—	—	—	X	X	—	X	—	—	—
HPS	100	—	X	—	—	—	X	X	—	X	—	—	—
HPS	150	—	X	X	X	X	X	X	X	X	X	—	—
PSMH	175	—	X	X	—	—	—	—	—	—	—	—	—

Voltages:

LB - Incandescent, 120 V 60 Hz	125 - 120 V 50 Hz	236 - 230 V 60 Hz
MT - 120/208/240/ 277 V 60 Hz	225 - 225 V 50 Hz	245 - 240 V 50 Hz
48 - 480 V 60 Hz	226 - 220 V 60 Hz	GP - 120/220-240 V 50 Hz
		GK - 120/220-240 V 50 Hz

① Other voltages, frequencies available – contact your local sales representative. Voltages shown are limited to specific combinations; refer to following pages.
 ② Polymeric Refractor suitable for Class II, Groups F and G, NEMA 4X and Marine Type Electric Fixtures Outside Type (Salt Water) only (100 W HPS Max.). Reflectors ordered separately.
 ③ Optional fusing is available for use with MT and 48 voltage suffixes ONLY.
 ④ For 150 W HPS fixtures, use S-55 lamp type only.
 ⑤ The **-Z2** suffix (AEx nA nR) is available for use with MT, 48 and 246 voltage suffixes ONLY.
 ⑥ Please note, there is a max lamp height of 141 mm (14.1 cm) when using the VPGL-1HR globe.

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Electrical Specifications

Lamp Watts	Lamp Type	Line Voltage	Starting Amps	Operating Amps	Total Watts
50 Watt	HPS	120	0.65	0.61	66
		208	0.37	0.35	66
		240	0.32	0.31	66
		277	0.30	0.26	66
70 Watt	HPS	120	0.90	0.82	94
		208	0.50	0.48	94
		240	0.44	0.41	94
		277	0.35	0.36	94
		480	0.21	0.21	94
100 Watt	HPS	120	1.30	1.15	130
		208	0.76	0.67	130
		240	0.66	0.60	130
		277	0.60	0.52	130
		480	0.33	0.31	135
150 Watt	HPS ①	120	2.00	1.70	188
		208	1.15	0.95	188
		240	1.00	0.85	188
		277	0.85	0.72	188
		480	0.50	0.47	189
175 Watt	PSMH	120	0.80	1.80	198
		208	0.50	1.00	198
		240	0.40	0.90	198
		277	0.40	0.80	198
		480	0.15	0.45	196

① 150 W HPS units equipped with ballasts to operate 55 V lamps only.

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HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Temperature Codes | Class I, Division 2; Class II, Division 1; Simultaneous exposure to hazardous conditions in both classifications

Lamp Watts	Lamp Type	Supply Wire Min. Temp. °C (°F)	Ambient Temp. °C (°F)	Class I, Division 2			Class II, Division 1 Groups E, F and G			Simultaneous Exposure Class I, Division 2 / Class II, Division 1		
				Globe	Globe & Reflector	Reflector	Globe	Globe & Reflector	Reflector	Globe	Globe & Reflector	Reflector
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3B	T4A	T4A	T5	T3	T3	T3
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3A	T4A	T4A	T4A	T2D	T2D	T2D
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3A	T4	T4	T4A	T2C	T2C	T2C
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T4	T4	T5	T2B	T2B	T2D
		90 °C (194 °F)	55 °C (131 °F)	T2D	T2D	T3	T3C	T3C	T4A	T2B	T2B	T2C
		90 °C (194 °F)	65 °C (149 °F)	—	—	T3	—	—	T4	—	—	T2B
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T2C	T2C	T2D	T4	T4	T4A	T2B	T2B	T2B
		90 °C (194 °F)	55 °C (131 °F)	T2B	T2B	T2C	T3C	T3C	T4	T2A	T2A	T2A
		90 °C (194 °F)	65 °C (149 °F)	—	—	—	—	—	—	—	—	—
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T2A	T2A	T2B	T3A ①	—	T4	325	—	T2
175	PSMH	105 °C (221 °F)	40 °C (104 °F)	350	350	325	—	—	T3B	—	—	T1
60	Inc.	90 °C (194 °F)	40 °C (104 °F)	T3B	T3B	T3C	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T3A	T3A	T3C	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T3A	T3A	T3C	—	—	—	—	—	—
100	Inc.	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T2D	T2D	T3	—	—	—	—	—	—
150	Inc.	90 °C (194 °F)	40 °C (104 °F)	T2D	T2D	T3	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T2B	T2B	T2D	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T2B	T2B	T2D	—	—	—	—	—	—

“T” Numbers Represent the Maximum Lamp Temperature for Class I, Division 2 Locations and Maximum Surface Temperature Under Dust Blanket for Class II, Division 1 Locations.

“T” #	T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
Temp. Range °C (°F)	+351 to +450 (+664 to +842)	+326 to +350 (+619 to +662)	+301 to +325 (+574 to +617)	+281 to +300 (+538 to +572)	+261 to +280 (+502 to +536)	+231 to +260 (+448 to +500)	+216 to +230 (+421 to +446)	+201 to +215 (+394 to +419)	+181 to +200 (+358 to +392)	+166 to +180 (+331 to +356)	+161 to +165 (+322 to +329)	+136 to +160 (+277 to +320)	+121 to +135 (+250 to +275)	+101 to +120 (+214 to +248)	+86 to +100 (+187 to +212)	+85 (+185)

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Temperature Codes | Class I, Zone 2, AEx nA nR IIC, AEx nR IIC IP66, NEMA 4X

Lamp Watts	Lamp Type	Supply Wire Temp. °C (°F)	Ambient Temp. °C (°F)	Class I, Zone 2 AEx nA nR IIC			Class I, Zone 2 AEx nR IIC		
				Globe	Globe w/ Reflector	Refractor	Globe	Globe w/ Reflector	Refractor
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T5	T5	T6
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T4	T4	T5
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3	T4	T4	T5
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T5	T5	T5
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T4	T4	T4
		90 °C (194 °F)	65 °C (149 °F)	—	—	T3	—	—	T4
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T4	T4	T4
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T4	T4	T4
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T4	T4	T4
175	PSMH	105 °C (221 °F)	40 °C (104 °F)	T3	T3	T3	T3	T3	T4
60	Inc.	75 °C (167 °F)	40 °C (104 °F)	T3	T3	T3	T6	T6	T6
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T5	T5	T6
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3	T4	T4	T5
100	Inc.	90 °C (194 °F)	40 °C (104 °F)	T2	T2	T2	T3	T3	T4
		90 °C (194 °F)	55 °C (131 °F)	T2	T2	T2	T4	T4	T4
		110 °C (230 °F)	65 °C (149 °F)	T2	T2	T2	T4	T4	T4
150	Inc.	110 °C (230 °F)	40 °C (104 °F)	T2	T2	T2	T4	T4	T6
		110 °C (230 °F)	55 °C (131 °F)	T2	T2	T2	T3	T3	T5
		110 °C (230 °F)	65 °C (149 °F)	T2	T2	T2	T3	T3	T4

“T” Numbers represent the maximum surface temperature for luminaires with AEx nA nR and AEx nR rating:

“T” number is established by separately determining the maximum temperature of the globe surface and ballast compartment. The hotter of the two is taken to determine the “T” number for the overall fixture.

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

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HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Fuse Kit for Field Installation				
Lamp Watts	Volts	Fuse Quantity Required	Catalog Number HPS	Catalog Number PSMH
50W	120	1	F5	—
	208	2	F3	—
	240	2	F3	—
	277	1	F2	—
70W	120	1	F5	—
	208	2	F3	—
	240	2	F3	—
	277	1	F2	—
	480	2	F2	—
100W	120	1	F8	—
	208	2	F5	—
	240	2	F5	—
	277	1	F3	—
	480	2	F3	—
150W	120	1	F10	—
	208	2	F5	—
	240	2	F5	—
	277	1	F5	—
	480	2	F3	—
175W	120	1	—	F5
	208	2	—	F3
	240	2	—	F3
	277	1	—	F2
	480	2	—	F3

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Catalog Number for Ballast Body and Globe

High Pressure Sodium | High Power Factor (Min. P.F. 90%)

Pulse Start Metal Halide | Super Constant Wattage Autotransformer (Min. P.F. 90%)



Ballast Body for Glass Refractor



Ballast Body for Glass Globe or Polymeric Refractor

Lamp Type	Lamp Watts	Catalog Number		Voltage Suffixes												
		For Globe ①	For Refractor	LB	MT	48	125	225	226	236	245	246	GP	GK		
Inc.	150 Max.	MLBG15I	MLBR15I	X	—	—	—	—	—	—	—	—	—	—	—	—
HPS	50	MLBG50L	MLBR50L	—	—	—	—	X	X	—	X	—	—	—	—	X
HPS	70	MLBG70L	MLBR70L	—	X	—	—	—	X	X	—	X	—	—	—	—
HPS	100	MLBG10L	MLBR10L	—	X	—	—	—	X	X	—	X	—	—	—	—
HPS	150	MLBG15L	MLBR15L	—	X	X	X	X	X	X	X	X	X	X	—	—
PSMH	175	MLBG17P	MLBR17P	—	X	X	—	—	—	—	—	—	—	—	—	—

Voltages:

LB - Incandescent, 120 V 60 Hz

MT - 120/208/240/277 V 60 Hz ②

48 - 480 V 60 Hz ②

125 - 120 V 50 Hz

225 - 225 V 50 Hz

226 - 220 V 60 Hz

236 - 230 V 60 Hz

245 - 240 V 50 Hz

246 - 240 V 60 Hz ②

GP - 120/200-240 V 50 Hz

GK - 220/240 V 50 Hz

① Please note, there is a max lamp height of 141 mm (14.1 cm) when using the VPGL-1HR globe.

② Add -Z2 suffix for factory sealed non-sparking/restricted breathing protection (AEx nA nR). The -Z2 suffix (AEx nA nR) is only available on these ballast types. Add -ZB suffix for restricted breathing protection (AEx/Ex nR).

Mercmaster™ III Low Profile Luminaires

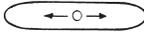
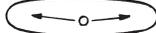
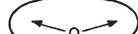
High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Accessories and Replacement Parts

	Light Distribution	IES/NEMA Distribution Curves	Catalog Number
Clear Prismatic Glass Globes — Heat-Resistant			
	—	—	VPGL-1HR ⑤
Closed Prismatic Glass Refractors — All Heat-Resistant			
	NEMA Type I		LPG-R1
Closed Prismatic Polymeric Refractors — For Use with PSMH Lamps Only 100 W max. +40 °C (+104 °F) max. ambient temperature. Suitable for Class II, Division 1 and 2, Groups F, G; NEMA 4X, UL 1598A Marine Type Electric Fixtures Outside Type (Salt Water)			
	NEMA Type II		LPRF-2CP
	NEMA Type III		LPRF-3CP
	NEMA Type IV		LPRF-4CP
	NEMA Type V		LPRF-5CP
White Polyester Reflectors			
	For Globe Fixtures	Standard Dome	KR2-ST
		Deep Dome	KR2-DD ①④
	For Glass Refractor Fixtures	30° Angle	KR2-AN
		Standard Dome	CMR-4ST ②
		Deep Dome	CMR-4DD ①④
		30° Angle	CMR-4AN
Guards			
	For Globe Fixtures	Globe Guard	KGU1
		For Glass Refractor Fixtures	KRG2 ③
		30° Angle Refractor Guard	
Replacement Globe Gaskets — Silicone Rubber			
		Globe Gasket	VPGL-GK
		Refractor Gasket	KRF-GK

① Dark Skies Compliant.

② Standard and deep dome reflectors may interfere with bottom conduit entry if used with KPST and KPWB mounting hoods.

③ Not for use with CMR-4ST or CMR-400, only CMR-4AN refractor.

④ Fixtures when used with Deep Dome Reflectors are NOT UL Listed.

⑤ Please note, there is a max lamp height of 141 mm (14.1 cm) when using the VPGL-1HR globe.

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

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
	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

Luminaire Specifications

Watts	Globe Housing Ballast Wt. kg (lb)		Refractor Housing Ballast Wt. kg (lb)		Mounting Hoods	Weight kg (lb)	Refractors, Globes, Guards and Reflectors	Weight kg (lb)
	HPS	PSMH	HPS	PSMH				
50	3.3 (7.28)	—	3.5 (7.72)	—	Pendant	1.0 (2.20)	8" Glass Refractor	2.4 (5.29)
70	3.7 (8.16)	—	4.0 (8.82)	—	Pendant Cone	1.1 (2.43)	Glass Globe	1.7 (3.75)
100	4.4 (9.70)	—	4.6 (10.14)	—	Ceiling	1.4 (3.09)	Refractor Guard	0.5 (1.10)
150	4.9 (10.80)	—	5.1 (11.24)	—	Wall	1.8 (3.97)	Globe Guard	0.5 (1.10)
175	—	5.0 (11.02)	—	5.2 (11.46)	25° Stanchion	1.5 (3.31)	Standard Dome	1.1 (2.43)
					90° Stanchion	1.7 (3.75)	Deep Dome ①	2.3 (5.07)
							30° Angle	1.1 (2.43)
							Polymeric Refractor	1.1 (2.43)

① Fixtures when used with Deep Dome Reflectors are NOT UL Listed.

PCD2 Series Factory Sealed Hazardous Location Photocontrol

For use in Class I, Division 2, Groups A, B, C, D locations

Maintains Class I, Division 2 rating for Mercmaster III – Low Profile, Mercmaster III, and Mercmaster III – 400 Series Luminaires, Mercmaster LED

NEC/CEC: Class I, Division 2, Groups A, B, C, D | NEMA 4X

Applications

- Encapsulated photocontrol provides automatic dusk-to-dawn lighting control in Class I, Division 2 locations.
- Typical applications include walkways, security areas and any other outdoor lighting application.
- For use with Mercmaster III – Low Profile, Mercmaster III, and Mercmaster III – 400 Series Luminaires.
- For remote mounting in FS Boxes.

- Available for 120, 208, 240, or 277 volts.
- 50-400 W HID, incandescent or fluorescent, 50/60 Hz.
- 1000 V.A. Voltage/Ampere
- Minimum time delay: 15 seconds to eliminate nuisance tripping.
- Provided with (3) 18 AWG stranded leads 152.4 mm (6.00 in) in length.
- Will fit through standard 1/2" knockout.
- Supplied with locknut and gasket.

Features

- Factory sealed design eliminates the need for an explosionproof enclosure.
- Can be easily installed in the field.
- Solid state design for performance and reliability.

Materials

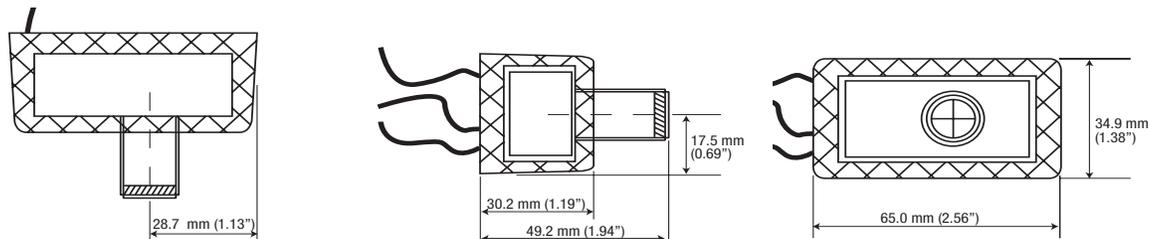
- Encapsulated with epoxy sealing compound
- FS: aluminum

NEC/CEC Certifications and Compliances

- UL Standard: 1604 – Hazardous (Classified) Locations
- cULus Recognized

	Voltage Range	Max VA	Max Current Amps	Suffix Designation / Catalog Number
Factory-Installed Photocontrol - Not for ceiling or pendant cone.				
<i>Add to fixture catalog after voltage; i.e.: KPWB11075MTH1.</i>				
 <p>Mercmaster III wall mounting hood with photocontrol installed shown</p>	120 V, 50/60 Hz	1000	—	H1
	208 V, 50/60 Hz	1000	—	H2
	240 V, 50/60 Hz	1000	—	H3
	277 V, 50/60 Hz	1000	—	H4
Photocontrol for Field Installation				
	120 V, 50/60 Hz	1000	8.3 Amp	PC120D2
	208 V, 50/60 Hz	1000	4.8 Amp	PC247D2
	240 V, 50/60 Hz	1000	4.2 Amp	
	277 V, 50/60 Hz	1000	3.6 Amp	
Photocontrol in FS Cover for Use with FS/FD Box				
<i>Photocontrol assembly supplied with two stainless steel screws and one neoprene gasket. For additional neoprene gaskets, order catalog numbers FS-GKR-1N.</i>				
	120 V, 50/60 Hz	1000	8.3 Amp	FSKA-PC120D2
	208, 50/60 Hz	1000	4.8 Amp	FSKA-PC247D2
	240 V, 50/60 Hz	1000	4.2 Amp	
	277 V, 50/60 Hz	1000	3.6 Amp	

Dimensions in Millimeters (Inches)



Mercmaster™ III Low Profile Luminaires

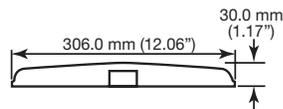
High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

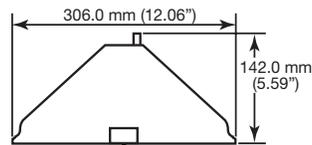
NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

Dimensions in Millimeters (Inches)

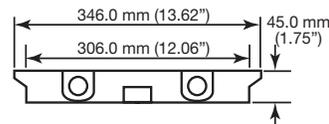
Pendant (Rigid or Flex)



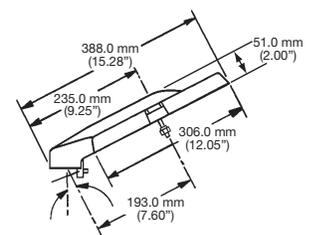
Pendant Cone



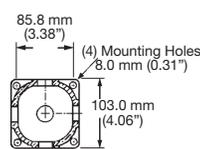
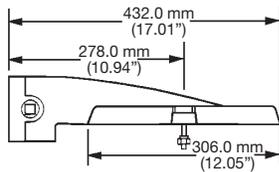
Ceiling



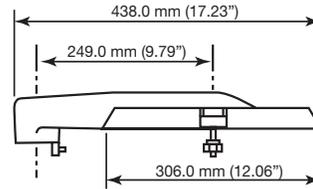
25° Stanchion



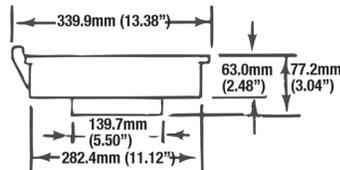
Wall Mount



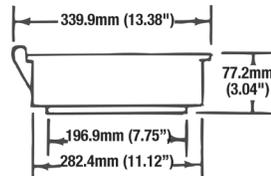
90° Stanchion



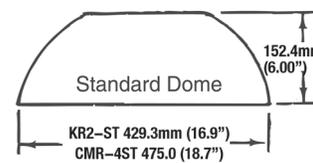
Globe or Polymeric Refractor Ballast Housing



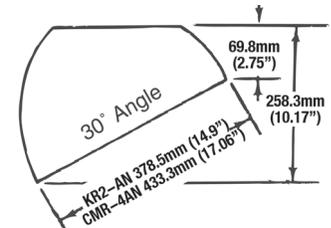
8" Glass Refractor Ballast Housing



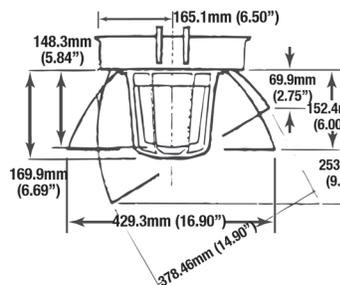
Standard Polyester Reflector



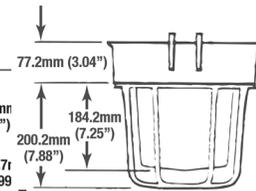
30° Angle Polyester Reflector



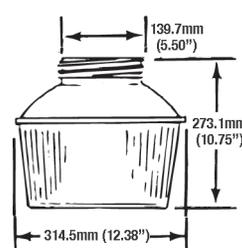
Globe, Guard and Refractors



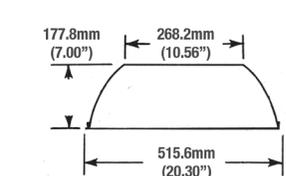
Refractor Body, Refractor and Guard



Polymeric Refractor



Deep Dome



Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Photometric Data

* Photometric data is based on a fixture with a 150-watt clear High Pressure Sodium lamp (16,000 lumen). For candlepower values of fixtures with other HPS lamps, use the following multipliers: for a 100 W (9,500 lumen) HPS lamp – 0.594; for a 70 W (6,400 lumen) HPS lamp – 0.40; for a 50 W (4,000 lumen) HPS lamp – 0.25. For candlepower values of fixture with guard, multiply by – 0.95.

REPORT NUMBER: ML15LG

Lamps: 150 W High Pressure Sodium with Globe only *

Zone	Lumens	Total Luminaire Efficiency = 83%			
0-10	28.58	CIE TYPE – SEMI-DIRECT 			
10-20	123.97				
20-30	304.16				
30-40	513.64				
40-50	889.19	0-180	3.9		
50-60	1299.53	90-270	3.9		
60-70	1506.73	Diagonal	3.7		
70-80	1706.16	ZONAL LUMEN SUMMARY			
80-90	1800.53				
90-100	1791.58	Zone	Lumens	% Lamp	% Fixture
100-110	1652.69	0-30	4563.72	2.9	3.4
110-120	1311.22	0-40	970.35	6.1	7.3
120-130	351.25	0-60	3159.07	19.7	23.8
130-140	5.14	0-90	8172.49	51.1	61.5
140-150	0.00	90-120	4755.49	29.7	35.8
150-160	0.00	90-130	5106.74	31.9	38.4
160-170	0.00	90-150	5111.87	31.9	38.4
170-180	0.00	90-180	5111.87	31.9	38.5
		0-180	13284.37	83.0	100.0

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling	Rcc	80				70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10				
0	0	91	91	91	91	85	85	85	85	75	75	75	65	65	65	55	55	55	51			
1	1	77	71	66	61	72	66	61	57	57	53	49	48	45	42	40	37	35	31			
2	2	68	59	51	45	63	55	48	42	46	41	36	39	34	31	32	28	25	21			
3	3	61	50	42	35	56	46	39	33	39	33	28	32	27	23	26	22	19	16			
4	4	55	43	35	28	50	40	32	26	34	27	22	28	23	18	22	18	15	12			
5	5	50	38	29	23	46	35	27	21	29	23	18	24	19	15	19	15	12	9			
6	6	46	33	25	19	42	31	23	18	26	20	15	21	16	12	17	13	10	7			
7	7	42	30	22	16	38	27	20	15	23	17	13	19	14	10	15	11	8	6			
8	8	39	27	19	14	36	25	18	13	21	15	11	17	12	9	14	10	7	5			
9	9	36	24	17	12	33	22	16	11	19	13	9	16	11	8	13	9	6	4			
10	10	33	22	15	11	31	20	14	10	17	12	8	15	10	7	12	8	5	4			

REPORT NUMBER: ML15LST

Lamps: 150 W High Pressure Sodium with Standard Dome Reflector *

Zone	Lumens	TOTAL LUMINAIRE EFFICIENCY = 73.2%			
0-10	219.96	CIE TYPE – DIRECT 			
10-20	683.41				
20-30	1267.92				
30-40	1613.68				
40-50	1967.79	0-180	1.64		
50-60	2333.86	90-270	1.64		
60-70	2328.33	Diagonal	1.88		
70-80	1118.52	ZONAL LUMEN SUMMARY			
80-90	174.91				
90-100	1.23	Zone	Lumens	% Lamp	% Fixture
100-110	0.00	0-30	2171.29	13.6	18.5
110-120	0.00	0-40	3784.97	23.7	32.3
120-130	0.00	0-60	8086.62	50.5	69.1
130-140	0.00	0-90	11708.37	73.2	100.0
140-150	0.00	90-120	1.23	0.0	0.0
150-160	0.00	90-130	1.23	0.0	0.0
160-170	0.00	90-150	1.23	0.0	0.0
170-180	0.00	90-180	1.23	0.0	0.0
		0-180	11709.6	73.2	100.0

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling	Rcc	80				70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10				
0	0	87	87	87	87	85	85	85	85	81	81	81	78	78	78	75	75	75	73			
1	1	79	75	71	68	77	73	70	67	70	67	65	67	65	63	64	62	61	59			
2	2	70	63	58	53	68	62	57	52	59	55	51	57	53	50	55	52	49	47			
3	3	63	54	48	42	61	53	47	42	51	46	41	49	44	40	47	43	40	38			
4	4	57	47	40	35	55	46	39	34	44	38	34	42	37	33	41	36	33	31			
5	5	52	41	34	29	50	41	34	29	39	33	28	37	32	28	36	31	28	26			
6	6	48	37	30	24	46	36	29	24	35	29	24	33	28	24	32	27	24	22			
7	7	44	33	26	21	42	32	26	21	31	25	21	30	25	21	29	24	20	19			
8	8	41	30	23	18	39	29	23	18	28	22	18	27	22	18	26	22	18	16			
9	9	38	27	21	16	37	27	20	16	26	20	16	25	20	16	24	19	16	14			
10	10	35	25	19	15	34	24	18	14	24	18	14	23	18	14	22	18	14	13			

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

Photometric Data

* Photometric data is based on a fixture with a 150-watt clear High Pressure Sodium lamp (16,000 lumen). For candlepower values of fixtures with other HPS lamps, use the following multipliers: for a 100 W (9,500 lumen) HPS lamp – 0.594; for a 70 W (6,400 lumen) HPS lamp – 0.40; for a 50 W (4,000 lumen) HPS lamp – 0.25. For candlepower values of fixture with guard, multiply by – 0.95.

REPORT NUMBER: **ML15LAN**

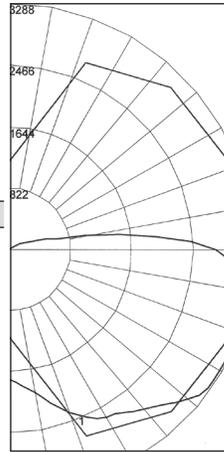
Lamps: 150 W High Pressure Sodium with 30° Angle Dome Reflector *

TOTAL LUMINAIRE EFFICIENCY = 68.4%

CIE TYPE – DIRECT	
Plane	Spacing Criteria
0-180	2.3
90-270	2.0
Diagonal	1.8

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-10	168.01		
10-20	536.92		
20-30	972.38		
30-40	1342.99		
40-50	1625.08		
50-60	1721.88		
60-70	1586.98		
70-80	1369.71		
80-90	995.76		
90-100	461.94		
100-110	127.24		
110-120	27.54		
120-130	4.31		
130-140	2.68		
140-150	0.00		
150-160	0.00		
160-170	0.00		
170-180	0.00		
0-30	1677.30	10.5	15.3
0-40	3020.29	18.9	27.6
0-60	6367.25	39.8	58.2
0-90	10319.70	64.5	94.3
90-120	616.71	3.9	5.6
90-130	621.02	3.9	5.7
90-150	623.70	3.9	5.7
90-180	623.70	3.9	5.7
0-180	10943.41	68.4	100.0



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling	Rcc	80				70				50				30				10				0
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10				
0		80	80	80	80	78	78	78	78	74	74	74	70	70	70	66	66	66	64			
1		70	66	62	58	68	64	60	57	60	57	54	57	54	52	54	52	50	48			
2		63	56	50	45	60	54	49	44	51	46	42	48	44	41	45	42	39	37			
3		56	48	41	36	54	46	40	35	44	38	34	41	37	33	39	35	32	30			
4		51	42	35	29	49	40	34	29	38	32	28	36	31	27	34	30	26	24			
5		47	37	30	24	45	36	29	24	34	28	23	32	27	23	30	26	22	20			
6		43	33	26	21	41	32	25	20	30	24	20	28	23	19	27	22	19	17			
7		39	29	23	18	38	28	22	18	27	21	17	26	21	17	24	20	16	15			
8		37	26	20	16	35	26	20	15	24	19	15	23	18	15	22	18	14	13			
9		34	24	18	14	33	23	18	14	22	17	13	21	17	13	20	16	13	11			
10		32	22	16	12	31	22	16	12	21	15	12	20	15	12	19	15	11	10			

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Photometric Data

* Photometric data is based on a fixture with a 150-watt clear High Pressure Sodium lamp (16,000 lumen). For candlepower values of fixtures with other HPS lamps, use the following multipliers: for a 100 W (9,500 lumen) HPS lamp – 0.594; for a 70 W (6,400 lumen) HPS lamp – 0.40; for a 50 W (4,000 lumen) HPS lamp – 0.25. For candlepower values of fixture with guard, multiply by – 0.95.

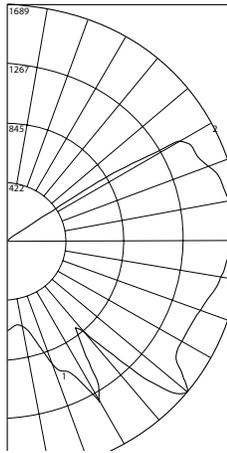
REPORT NUMBER: **ML17PG**

Lamps: 175 W Pulse Start Metal Halide with Globe only *

Total Luminaire Efficiency = 80.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	Zone	Lumens	% Lamp	% Fixture
0-10	58.11	0-20	273.15	1.60	2.00
10-20	215.04	0-30	778.21	4.40	5.60
20-30	505.06	0-40	1403.32	8.00	10.10
30-40	625.11	0-60	3819.52	21.80	27.40
40-50	1058.31	0-80	6857.15	39.20	49.10
50-60	1357.89	0-90	8591.61	49.10	61.50
60-70	1439.44	10-90	8533.55	48.80	61.10
70-80	1598.2	20-40	1130.17	6.50	8.10
80-90	1734.46	20-50	2188.48	12.50	15.70
90-100	1770.13	40-70	3855.64	17.40	21.80
100-110	1678.73	60-80	3037.64	17.40	21.80
110-120	1474.6	70-80	1598.2	9.10	11.40
120-130	436.54	80-90	1734.46	9.90	12.40
130-140	6.39	90-110	3448.86	19.70	24.70
140-150	1.68	90-120	4923.47	28.10	35.30
150-160	0.74	90-130	5360.01	30.60	38.40
160-170	0.16	90-150	5368.08	30.70	38.50
170-180	0.15	90-180	5369.13	30.70	38.50
		110-180	1920.27	11.00	13.80
		0-180	13960.74	79.80	100.00



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling % Walls	Rcc Rw	80			70			50			30			10			0		
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0		88	88	88	88	82	82	82	82	72	72	72	62	62	62	53	53	53	49
1		75	69	64	60	70	65	60	56	55	52	49	47	44	42	39	37	25	31
2		66	58	51	45	61	54	48	42	46	41	37	39	35	31	32	29	26	22
3		60	49	42	35	55	46	39	33	39	33	29	33	28	24	27	23	20	17
4		54	43	35	29	49	40	32	27	34	28	23	28	23	20	23	19	16	13
5		49	38	30	24	45	35	28	22	30	24	19	25	20	16	20	16	13	11
6		45	33	26	20	41	31	24	19	26	20	16	22	17	14	18	14	11	9
7		41	30	22	17	38	28	21	16	24	18	14	20	15	12	16	12	9	7
8		38	27	20	15	35	25	18	14	21	16	12	18	13	10	15	11	8	6
9		35	24	17	13	33	23	16	12	19	14	10	16	12	9	13	10	7	5
10		33	22	16	11	30	21	15	11	18	13	9	15	11	8	12	9	6	5

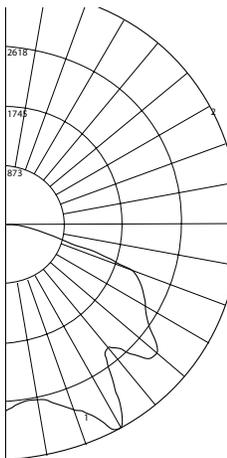
REPORT NUMBER: **ML17PST**

Lamps: 175 W Pulse Start Metal Halide with Standard Dome Reflector *

Total Luminaire Efficiency = 69.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	Zone	Lumens	% Lamp	% Fixture
0-10	252.99	0-20	1034.2	5.90	8.60
10-20	781.21	0-30	2520.47	14.40	20.90
20-30	1486.27	0-40	4264.36	24.40	35.30
30-40	1743.89	0-60	8714.99	49.80	72.10
40-50	2109.55	0-80	11917.14	68.10	98.60
50-60	2341.08	0-90	12081.71	69.00	100.00
60-70	2194.91	10-90	11828.72	67.60	97.90
70-80	1007.24	20-40	3230.16	18.50	26.70
80-90	164.57	20-50	5339.71	30.50	44.20
90-100	0.82	40-70	6645.54	38.00	55.00
100-110	0.00	60-80	3202.15	18.30	26.50
110-120	0.00	70-80	1007.24	5.80	8.30
120-130	0.00	80-90	164.57	0.90	1.40
130-140	0.00	90-110	0.82	0.00	0.00
140-150	0.00	90-120	0.82	0.00	0.00
150-160	0.00	90-130	0.82	0.00	0.00
160-170	0.00	90-150	0.82	0.00	0.00
170-180	0.00	90-180	0.82	0.00	0.00
		110-180	0.00	0.00	0.00
		0-180	12082.53	69.00	100.00



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling % Walls	Rcc Rw	80			70			50			30			10			0		
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0		82	82	82	82	80	80	80	80	77	77	77	73	73	73	70	70	70	69
1		74	71	68	65	73	69	66	64	66	64	62	64	62	60	61	60	58	57
2		67	61	56	51	65	59	55	51	57	53	49	55	51	48	52	50	47	46
3		60	52	46	41	59	51	46	41	49	44	40	47	43	39	45	42	39	37
4		55	46	39	34	53	45	39	34	43	38	33	41	37	33	40	36	32	31
5		50	40	34	29	48	39	33	28	38	32	28	36	32	28	35	31	27	26
6		46	36	29	24	44	35	29	24	34	28	24	33	28	24	31	27	24	22
7		42	32	26	21	41	32	25	21	30	25	21	29	24	21	28	24	21	19
8		39	29	23	19	38	29	23	19	28	22	18	27	22	18	26	21	18	17
9		36	27	21	16	35	26	20	16	25	20	16	25	20	16	24	19	16	15
10		34	24	19	15	33	24	18	15	23	18	15	23	18	15	22	18	14	13

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water) | Type 4X | IP66

Photometric Data

* Photometric data is based on a fixture with a 150-watt clear High Pressure Sodium lamp (16,000 lumen). For candlepower values of fixtures with other HPS lamps, use the following multipliers: for a 100 W (9,500 lumen) HPS lamp – 0.594; for a 70 W (6,400 lumen) HPS lamp – 0.40; for a 50 W (4,000 lumen) HPS lamp – 0.25. For candlepower values of fixture with guard, multiply by – 0.95.

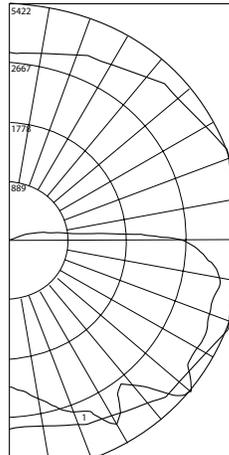
REPORT NUMBER: **ML17PAN**

Lamps: 175 W Pulse Start Metal Halide with 30° Angle Dome Reflector *

Total Luminaire Efficiency = 66.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	Zone	Lumens	% Lamp	% Fixture
0-10	205.50	0-20	855.80	4.90	7.50
10-20	650.30	0-30	2059.99	11.80	17.90
20-30	1204.19	0-40	3553.44	20.30	31.00
30-40	1493.45	0-60	7023.13	40.10	61.20
40-50	1718.01	0-80	9901.48	56.60	86.30
50-60	1751.68	0-90	10878.35	62.20	94.80
60-70	1549.56	10-90	10672.86	61.00	93.00
70-80	1328.79	20-40	2697.64	15.40	23.50
80-90	976.87	20-50	4415.65	25.20	38.50
90-100	426.94	40-70	5019.25	28.70	43.70
100-110	125.06	60-80	2878.35	16.40	25.10
110-120	26.96	70-80	1328.79	7.60	11.60
120-130	4.22	80-90	976.87	5.60	8.50
130-140	5.33	90-110	551.99	3.20	4.80
140-150	4.48	90-120	578.96	3.30	5.00
150-160	2.90	90-130	583.18	3.30	5.10
160-170	1.65	90-150	592.99	3.40	5.20
170-180	0.54	90-180	598.09	3.40	5.20
		110-180	46.09	0.30	0.40
		0-180	11476.44	65.60	100.00



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

% Ceiling % Walls	Rcc Rw	80			70			50			30			10			0		
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	0	77	77	77	77	75	75	75	75	71	71	71	67	67	67	64	64	64	62
1	1	68	64	60	57	66	62	59	55	58	56	53	55	53	51	52	50	49	47
2	2	61	54	49	44	59	53	48	43	50	45	42	47	43	40	44	41	39	37
3	3	55	47	40	36	53	45	40	35	43	38	34	41	36	33	38	35	32	30
4	4	50	41	34	29	48	40	34	29	38	32	28	36	31	27	34	30	27	25
5	5	46	36	30	25	44	35	29	24	33	28	24	32	27	23	30	26	23	21
6	6	42	32	26	21	40	31	25	21	30	24	20	28	24	20	27	23	20	18
7	7	39	29	23	18	37	28	22	18	27	22	18	26	21	17	24	20	17	16
8	8	36	26	20	16	35	26	20	16	24	19	16	23	19	15	22	18	15	14
9	9	33	24	18	14	32	23	18	14	22	17	14	21	17	14	21	16	13	12
10	10	31	22	17	13	30	22	16	13	21	16	13	20	15	12	19	15	12	11