

Industrial Mercmaster™ LED Low Profile Luminaires

For Ordinary Locations

NEC/CEC:
cULus Listed
Type 3R, 4, 4X
IP66
Suitable for Use in Wet Locations
Marine Outside Type (Salt Water) For USA ONLY

Applications

- Ordinary location fixtures suitable for use in:
 - Heavy industrial locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmospheres, or high ambient temperatures are encountered.
 - Marine and wet locations
 - Areas of low clearance, low ceiling heights or where fixture weights must be minimized
- Typical applications include:
 - Manufacturing plants
 - Storage area/warehouse
 - Platforms
 - Loading docks
 - Food processing
 - Parking garages

Features

- Compact light weight low profile design is suited for low mounting heights.
- Six standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster III.
- Customize to the application requirements with four different globe options: clear and diffused polycarbonate, clear glass, or prismatic glass refractor.
- Three light output levels for retrofit of HID fixtures up to 150 W.
- 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 servicing.
- Ambient Temperature: BU: -40 °C to +55 °C (-40 °F to +131 °F)
BH: -30 °C up to +55 °C (-22 °F up to +131 °F)
- Standard NPT threads.
- Lamp life rated at 60,000 Hours.

Options

- Glass globe guard is stainless steel wire. Glass refractor guard is die cast aluminum with gray epoxy powder coating.
- All Mercmaster mounting hoods have provision for fusing; add suffix **-F** at the end of the catalog number.
- Photocontrols are available with all except ceiling and pendant cone mounting hoods, and are configured to your operating voltage. ①

Standard Materials

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max.) aluminum
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Refractor: heat-resistant prismatic glass
- Glass globe guard: stainless steel wire
- Refractor guard: die cast aluminum
- Reflectors: fiberglass reinforced white polyester



Standard Finishes

- Mounting hoods, bodies and glass refractor guard: baked gray epoxy powder coat finish, electrostatically applied for complete uniform protection

NEC/CEC Certifications and Compliances

- UL Standard: UL 50/50E, UL 1598, UL 1598A, UL 8750
- CSA Standard: C22.2 No. 0; C22.2 No. 0.4; C22.2 No. 0.5; C22.2 No. 94.1/94.2; C22.2 No. 60529; C22.2 No. 250.0
- ANSI/IEC Standard: 60529
- cULus Listed: E279986
- DLC Qualified Products Listed

Related Products

- Photocells are available, see *PC Series*.
 - Mounting hoods with photocontrols are not rated IP66, Type 4X or Marine Outside Type (Salt Water)

① Available for 120-277 Vac models only.

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Illustrated Features

Heatsink

Reliable heat transfer via the cast, epoxy powder coat aluminum body. Provides maximum heat dissipation from the LED assembly to the outside environment.



Fuses (optional)

Two screws secure fuse kit to mounting boss in any Mercmaster mounting hood. Fuse included. ① Use of fuse voids Marine Outside type (salt water) rating.

Photocell (optional)

Available for all fixtures ② except cone and ceiling mount. Provides continuous ON-OFF dusk-to-dawn control. *Note: Fixtures with photocontrols are not rated IP66, Type 4X, Marine Outside Type (Salt Water), or Class II.*

Prismatic Refractors

Heat-resistant refractor threads directly into fixture housing and seal against a high-temperature silicone rubber gasket.



Vented Reflectors

Reflectors are thick, tough fiberglass reinforced white polyester. Quickly attach with furnished stainless steel screws.



Epoxy Finish

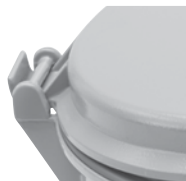
Fixture housing, hoods and guards are copperfree aluminum with epoxy powder coat finish.

Electrical Protection

Ground wire provided to bond mounting hood to fixture housing.

"Safety" High Hinge

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



LED Chamber

Protected by polycarbonate or glass globe, allows for easy maintenance access.



Cooler Operating Cone Hood

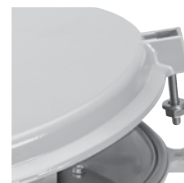
Larger sloped surface sheds dusts and dirt providing better heat dissipation.

Mounting Hood and Globe Gaskets

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

Stainless Steel Latch Assembly

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



① Factory installed.

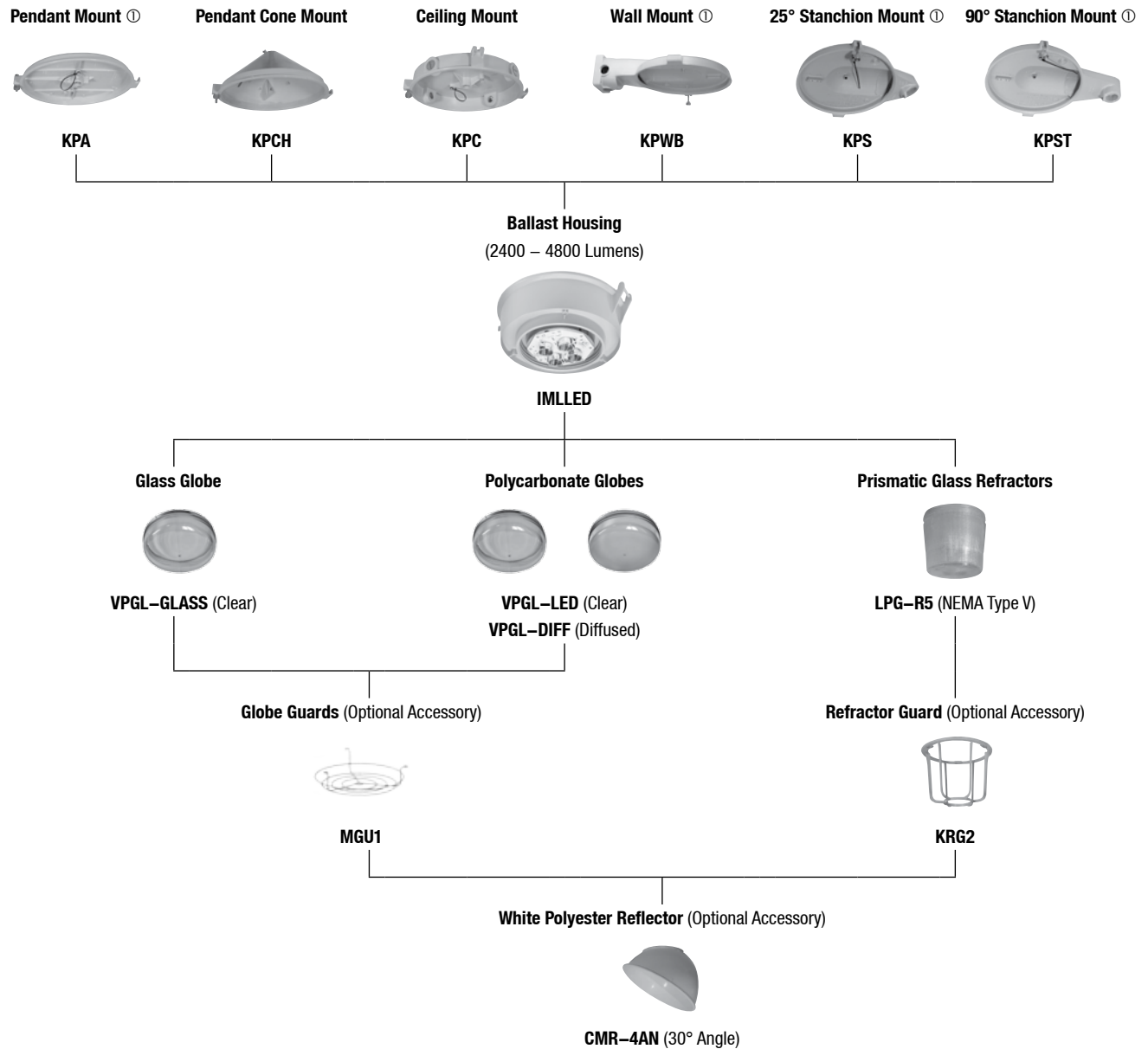
② For 120-277 Vac models.

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Industrial Mercmaster LED Low Profile Family Tree



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

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Order using catalog numbering guides below or select catalog number from tables on following pages.

Catalog Numbering Guide For Ordinary Locations:

IMLLED	A	2	2	P5	BU	5
IMLLED - Industrial Mercmaster LED Low Profile Series		Lumen Output ④: 2 - 2K Lumens, 5700K CCT 3 - 3K Lumens, 5700K CCT 4 - 4K Lumens, 5700K CCT		P5 - NEMA Type V Clear Polycarbonate Globe D5 - NEMA Type V Diffused Polycarbonate Globe G5 - NEMA Type V Glass Globe ③ J5 - NEMA Type V Glass Refractor ③		Options: F -Fusing 5 - Photocontrol 120V ② 6 - Photocontrol 208V ② 7 - Photocontrol 240V ② 8 - Photocontrol 277V ②
	Mounting: A - Pendant C - Ceiling ① D - Pendant Cone Hood ① R - 90° Stanchion S - 25° Stanchion W - Wall		Hub Size: 2 - 3/4" NPT 3 - 1" NPT 4 - 1-1/4" NPT stanchion 5 - 1-1/2" NPT stanchion		Voltage: BU - 120-277 Vac, 50/60Hz BH - 347-480 Vac, 50/60Hz	

Electrical Specification

Lumens ⑤											
Model	Line Current Amps (50/60Hz)	Input Power	Power Factor	THD	Polycarbonate Clear Globe	Polycarbonate Diffused Globe	Glass Clear Globe	Type V Prismatic Glass Refractor	CRI	Color Temp CCT	Equivalent HID Luminaire
NEMA Type V											
IMLLED2	.21 @120V	26	> .97	< 20%	2400	2300	2500	2200	>70	5700K	70 W
	.10 @277V	26									
	.69 @347V	26									
IMLLED3	.53 @480V	26	> .97	< 20%	3400	3300	3600	3100	>70	5700K	100 W
	.29 @120V	35									
	.13 @277V	35									
IMLLED4	.99 @347V	35	> .90	< 20%	2300	2200	2400	2100	>70	5700K	70 W
	.74 @480V	35									
	.41 @120V	48									
IMLLED4	.20 @277V	48	> .90	< 20%	3500	3300	3600	3100	>70	5700K	x100 W
	.15 @347V	48									
	.12 @480V	48									

Surge protection common/differential mode:
1000kHz Ring Wave (w/t 30ohm)

BU:6kv

BH: 2.5kv

1.2/50 μ s combination wave (w/t 2 Ω)

	BU	BH
IMLLED2	4kv	3kv
IMLLED3	4kv	3kv
IMLLED4	3kv	3kv

① Ceiling and pendant cone hood mounted luminaires are not designed to use the PC photocontrol. Ceiling mounts must use an FS/FD box with a photocontrol. Contact your local sales representative for more information.

② Luminaires with photocontrol are not rated IP66 or Marine Outside Type (Salt Water). Photocontrol available for 120-277 Vac only.

③ Guards for the glass refractors and globes are ordered separately. See the list of accessories for more information.

④ For specific lumen output information, see Lamp Comparison Chart.

⑤ All lumen values are typical (+/- 10%)

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Fixture Unit — Ballast Body and Globe or Refractor



Catalog Number ①							
Lumen Level	LED Wattage	Light Level Equivalent	NEMA Type	For Polycarbonate Globe	For Polycarbonate Diffused Globe	Glass Globe ②	For Refractor ②
cULus Listed Fixture Housing - For Ordinary Locations							
2K	26	70W HPS	Type V	IMLLED2P5	IMLLED2D5	IMLLED2G5	IMLLED2J5
3K	35	100W HPS	Type V	IMLLED3P5	IMLLED3D5	IMLLED3G5	IMLLED3J5
4K	48	150W HPS	Type V	IMLLED4P5	IMLLED4D5	IMLLED4G5	IMLLED4J5

Mounting Hoods

Meaning of Hubs		Description	Hub Size	Catalog Number
Pendant				
	One Hub	3/4	KPA-75	
		1	KPA-100	
Pendant Cone				
	One Hub, Rigid Mounting	3/4	KPCH-75	
		1	KPCH-100	
Ceiling				
	Five Hubs, Four Close-Up Plugs	3/4	KPC-75	
		1	KPC-100	
Wall				
	Five Hubs, Four Close-Up Plugs	3/4	KPWB-75	
		1	KPWB-100	
25° Stanchion				
	One Hub	1-1/4	KPS-125	
		1-1/2	KPS-150	
90° Stanchion				
	One Hub	1-1/4	KPST-125	
		1-1/2	KPST-150	

① For 120-277 Vac, 50/60Hz, add suffix **-BU** to catalog number. For 347-480 Vac, 50/60Hz, add suffix **-BH** to catalog number.
② Guards for the glass refractors and globes are ordered separately. See following pages for accessory ordering information.

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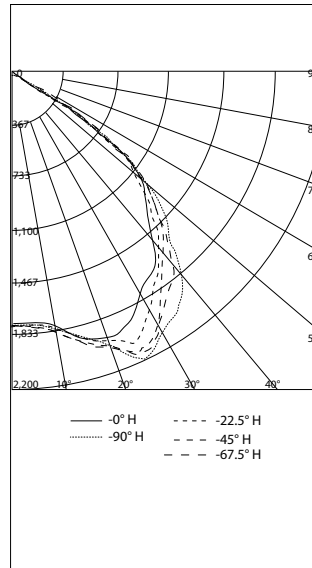
Photometric Data — DATA SHOWN IS ABSOLUTE

IMLLED4G5BH 4K Lumen 5700K CCT with Glass Globe

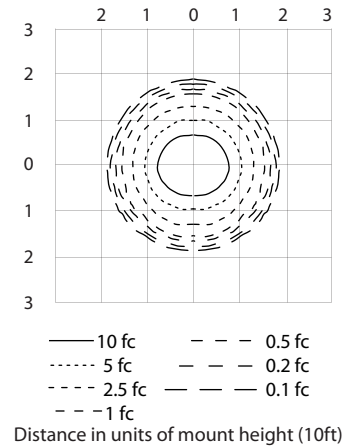
Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire	Zone	Lumens	% Luminaire
0-30	1658	35.3	0-10	169.1	3.6
0-40	2799	59.6	10-20	544.3	11.6
0-60	4634	98.6	20-30	944.5	20.1
60-90	64.7	1.4	30-40	1141	24.3
70-100	15.3	0.3	40-50	1111	23.6
90-120	0.2	0.0	50-60	724	15.4
0-90	4699	100.0	60-70	49.7	1.1
90-180	0.2	0.0	70-80	11.5	0.2
0-180	4699	100.0	80-90	3.5	0.1
			90-100	0.2	0.0

Polar Candela Distribution



Isoillumination Plot

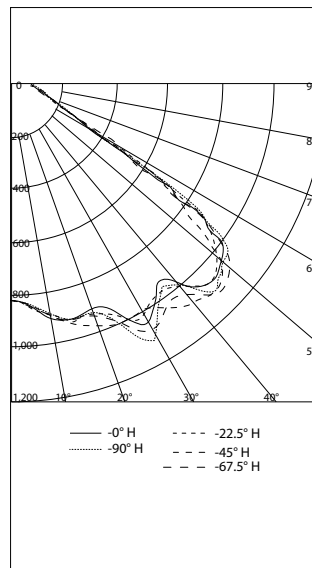


IMLLED4J5BH 4K Lumen 5700K CCT with Glass Refractor

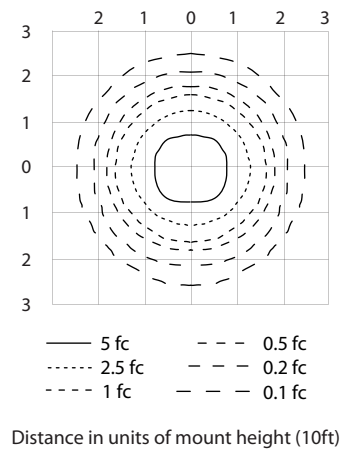
Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire	Zone	Lumens	% Luminaire
0-30	804.6	20.1	0-10	81.7	2.0
0-40	1440	35.9	10-20	262.3	6.5
0-60	3021	75.3	20-30	460.6	11.5
60-90	515.6	12.9	30-40	635.1	15.8
70-100	323.7	8.1	40-50	829.5	20.7
90-120	261.1	6.5	50-60	752.0	18.8
0-90	3637	88.2	60-70	271.1	6.8
90-180	473.4	11.8	70-80	145.6	3.6
0-180	4010	100.0	80-90	99.0	2.5
			90-100	79.2	2.0
			100-110	82.5	2.1
			110-120	99.4	2.5
			120-130	106.3	2.7
			130-140	74.5	1.9
			140-150	28.7	0.7
			150-160	2.7	0.1
			160-170	0.0	0.0

Polar Candela Distribution



Isoillumination Plot



Appleton®

LED/AREA: NEC/CEC, ATEX/IECEx ENCLOSED AND GASKETED