

# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

### NEC/CEC:

Class I, Division 2, Groups A, B, C, D  
 Class II, Division 1 & 2, Group E, F, G  
 Class III  
 Class I Zone 2 AEx ec IIC  
 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

### NEC/CEC:

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)

### IECEX:

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
 IP66  
 IK08

### ATEX/IECEX:

Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 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
  - 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 7 ft., up to 30 ft.
- Seven light outputs provide up to 17,500 lumens.

Nominal Lumens ①	HID Equivalent	Model Number
3500	70-100W	MLGL3
5500	100-150W	MLGL5
7500	175-250W	MLGL7
9500	250-350W	MLGH9
11,500	350-400W	MLGH1
14,500	400W	MLGH3
17,500	400-600W	MLGH6

① Nominal lumen value for 5000K, clear glass globe  
 Type V wide. Detailed lumen information is provided in tables.

- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide.
- Choice of color temperature (CCT): 5000K cool white, 4000K neutral white or 3000K warm white.
- Customize to the application requirements with four different globe options: clear and diffused polycarbonate, clear glass, or prismatic glass refractor.
- Six standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster™ III.
- Retrofit adapters for Crouse-Hinds™ hoods available. See Mercmaster™ CH Adapters.
- Retrofit adapters for Mercmaster™ II hoods available. See Mercmaster™ II Adapters.
- 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.



MLGL



MLGH

- Luminaire housing has wiring compartment with terminal block separate for easy wiring access.
- Standard screw-type terminal block can accept UL/CSA 26-10 AWG wire.
- Standard 6 kV surge protection.
- Heavy duty, high temperature silicone gaskets.
- Photometric data and electronic drawings available upon request.
- Ambient Temperature: -40 °C to +65 °C (-40 °F to +149 °F)
- Standard NPT threads with M20 option.
- LED L70 reported at 60,000 hours.
- Field replaceable globes and LED driver.

## Options

- Globe and refractor guards available, purchase separately
- Safety cable available, purchase separately
- All Mercmaster™ luminaires have provision for fusing; add suffix -F at the end of the catalog number.
- Photocontrols are available and are configured to your operating voltage. Add suffix -1 for 120V, -2 for 208V, -3 for 240V, -4 for 277V.
- Drain is available to divert water existing in the conduit system, purchase separately.

## Standard Materials

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max.) aluminum
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Refractor: heat-resistant prismatic glass
- Glass globe guard and safety cable: stainless steel wire
- Glass refractor guard: die cast aluminum

## Standard Finishes

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

## Related Products

- Industrial Mercmaster™ LED Generation 3 Luminaires
- Mercmaster™ LED Low Profile Luminaires
- Mercmaster™ LED Mounting Adapters

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA

Appleton

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### NEC/CEC Certifications and Compliances

- UL Standard: UL 844; UL 1598; UL 50E; UL1598A; UL 8750; UL 60079-0; UL 60079-7; UL 60079-31
- CSA Standard: C22.2 No. 0; C22.2 No. 94.2; C22.2 No. 137; C22.2 No. 250.0; C22.2 No. 250.13; C22.2 No. 60529; C22.2 No. 60079-0; C22.2 No. 60079-7; C22.2 No. 60079-31; CSA E60598-1
- NEMA ANSI/IEC Standards: 60529
- cCSAus: 164460, Certificate Number: 70112879

### ATEX/IECEX Certifications and Compliances

- Ex Standards: EN/IEC 60079-0; E/IECN 60079-7; EN/IEC 60079-31; EN/IEC 60598-1; EN/IEC 60529; EN/IEC 62262
- ATEX
  - Gas: Zone 2
  - Conforming to ATEX 2014/34/EU : CE 0518 II 3 G
  - ATEX Protection: Ex ec IIC Gc
  - Dust: Zone 21/22
  - Conforming to ATEX 2014/34/EU : CE 0518 II 2 D
  - ATEX Protection: Ex tb IIIC Db; Ex op is IIIC Db; Ex tc IIC Dc
  - ATEX Certificate: TBD
  - Index of Protection: IP66
  - IK08
- IECEX
  - Gas: Zone 2
  - IEC Protection: Ex ec IIC Gc
  - Dust: Zone 21/22
  - IEC Protection: Ex tb IIIC Db; Ex op is IIIC Db; Ex tc IIC Dc
  - IECEX Certificate: TBD
  - Index of Protection: IP66
  - IK08

### Design Lights™ Consortium

- Pending.

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



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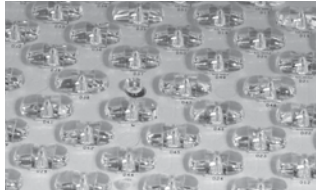
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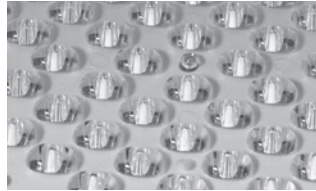
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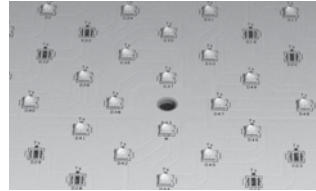
### LED Flexibility and Modular Design



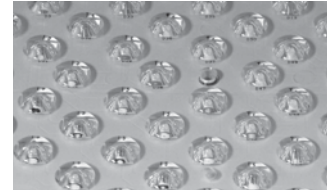
**Type I** - Long and narrow distribution pattern designed with walkways in mind.



**Type III** - Wall mounted distribution pattern designed where you need good forward light projection.



**Type V** - Symmetrical circle distribution pattern ideal when you need even coverage in all directions.



**Type V Wide** - Like the Type V distribution pattern with more vertical lumens designed to help spread the light quicker and more outwards.

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

**Four light distribution patterns:** Type I, Type III, Type V and Type V wide for application flexibility.

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

**Four globes;** clear and diffused polycarbonate, clear glass globe, and prismatic refractor provide just the right level of diffusion.

### Safety Features



**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.

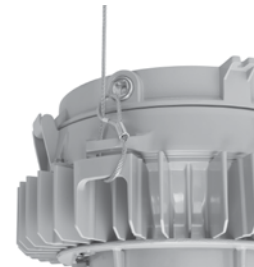
The efficient thermal design ensures reliable heat transfer from the LED assembly out via the heatsink and the cast, epoxy powder coat, aluminum body.

### Type I & Type III Hinge System



Type I & Type III light distribution patterns use a multiple hinged housing design which allows you to correctly line up the beam pattern in your desired direction. By using one of the three available hinges you can position the fixture for optimal light output.

### 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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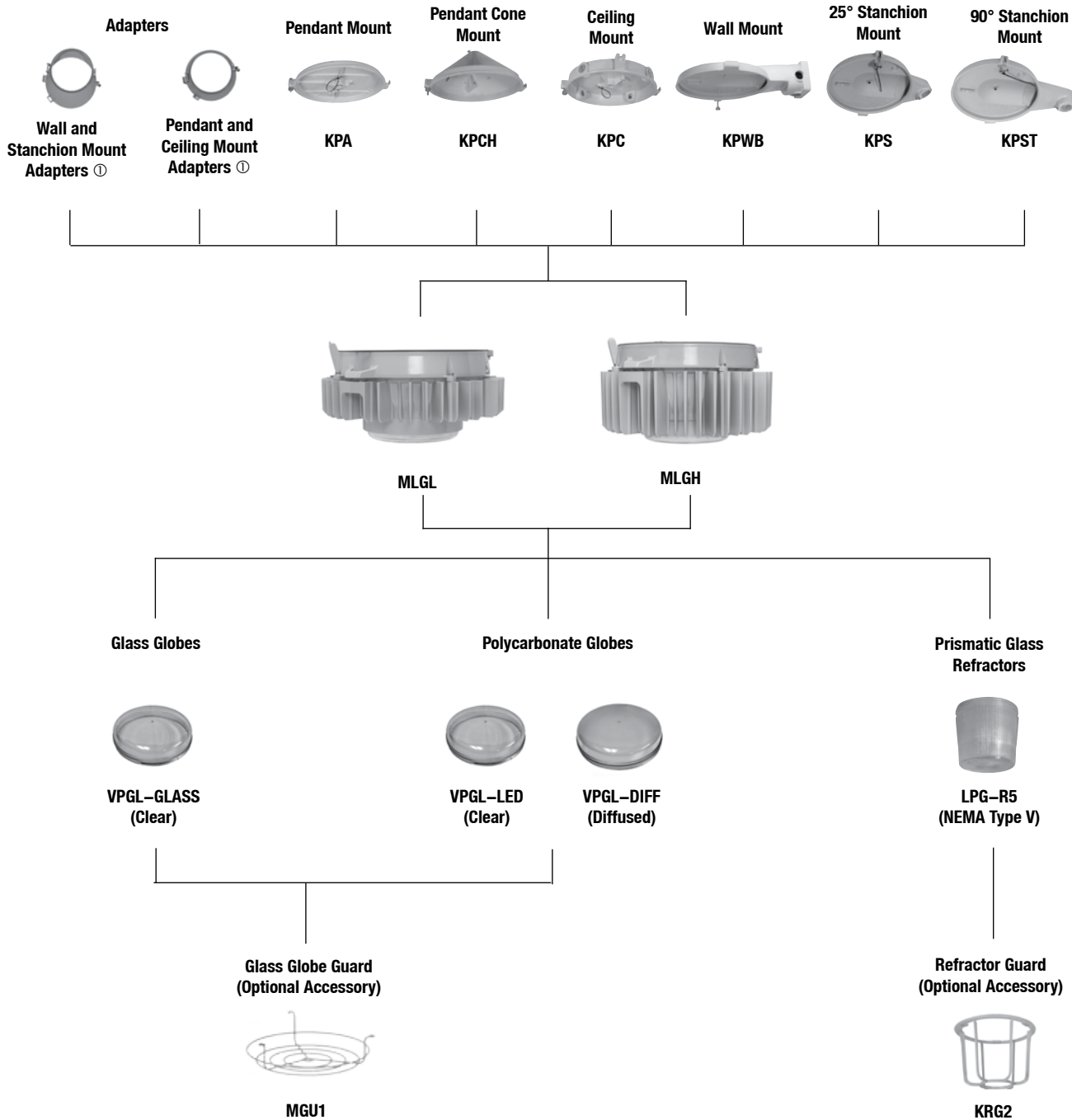
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**Mercmaster™ LED Family Tree**



① See mounting hood section for part numbers.

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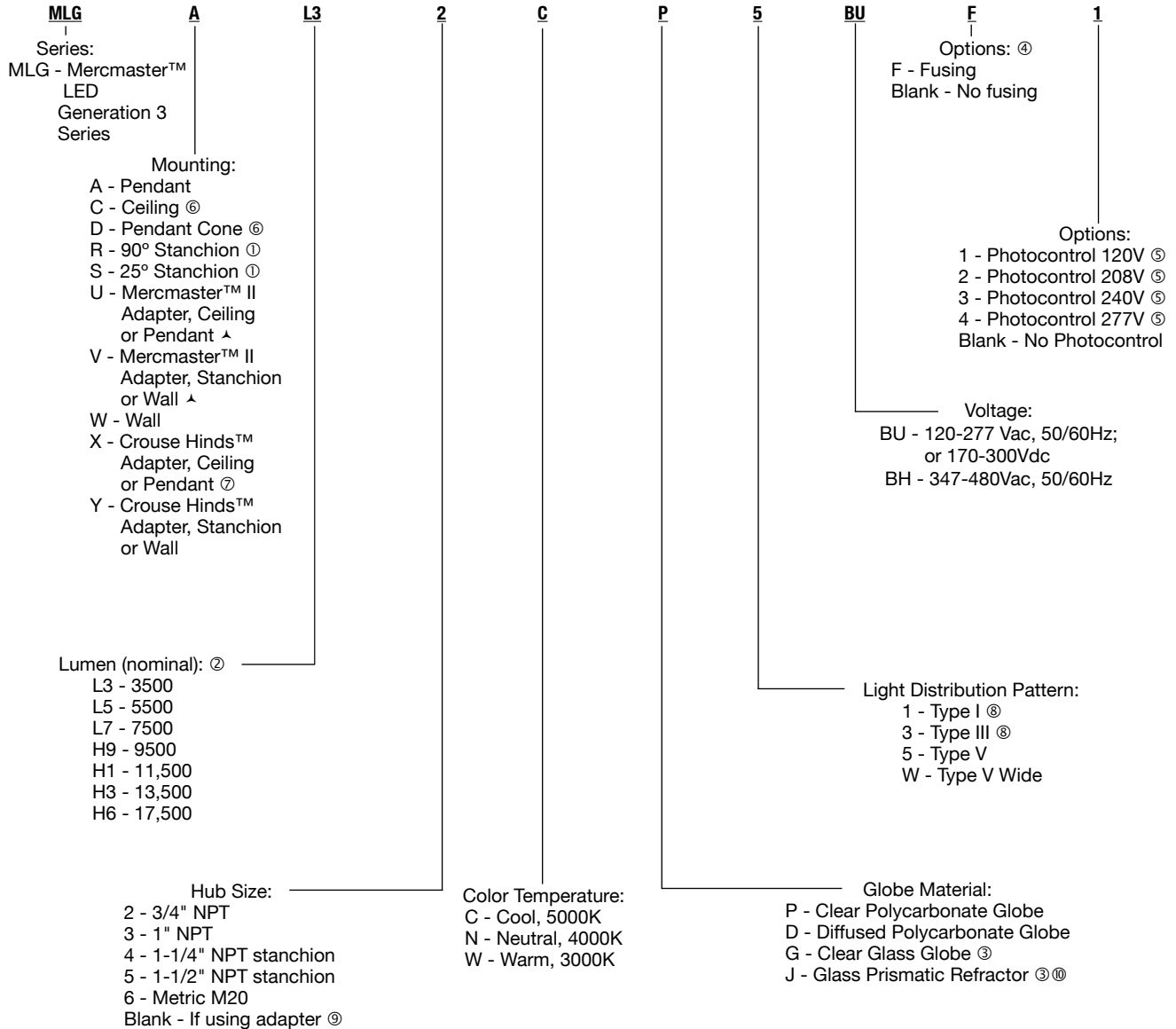
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Order using catalog numbering guides below or select catalog number from tables on following pages.



NEC/CEC ENCLOSED AND GASKETED CLASS /ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED - AREA



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 Values Table.  
 ③ Guards for the glass refractors and globes are ordered separately. See the Accessories for more information.  
 ④ Fusing only permitted for cCSAus rating. Factory installed. Use of fuse voids Marine Outside Type (Salt Water) rating. Fusing is mounted in the driver housing. For retrofit applications, fusing must be removed from the mounting hood and ordered in the luminaire.  
 ⑤ Luminaires with photocontrol are not rated IP66/67, Class II, 3R, 4, 4X, or Marine Outside Type (Salt Water). Photocontrol available for 120-277 Vac only. Factory installed in the mounting hood.  
 ⑥ Ceiling-mount and pendant cone luminaires and adapters are not designed to use the photocontrol. Ceiling and pendant cone mounts must use an FS/FD box with photocontrol. Contact your local sales rep for more information.  
 ⑦ Only allowed for Type V and Type V wide light distribution.  
 ⑧ Type I and Type III use a multiple hinge housing.  
 ⑨ Hub size does not apply to luminaires ordered with adapters.  
 ⑩ J-Glass prismatic refractor is only available in light distribution pattern, Type V. Refractor is not rated for ATEX/IECEX.  
 ▲ Adapters only certified for cCSAus.

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Lumen Values Table ①②

		Lumen Output (Efficacy) for Clear Polycarbonate Globe						
		MLGL3	MLGL5	MLGL7	MLGH9	MLGH1	MLGH3	MLGH6
Type I	5000K CCT, 70 CRI	3200 (107)	4800 (104)	7500 (132)	9400 (125)	11500 (124)	13800 (120)	16900 (117)
Type III	5000K CCT, 70 CRI	3500 (117)	5200 (113)	7900 (139)	9800 (131)	12000 (129)	14500 (126)	17500 (121)
Type V	5000K CCT, 70 CRI	3800 (127)	5700 (124)	8500 (149)	10800 (144)	13200 (142)	15900 (138)	19100 (132)
Type V Wide	5000K CCT, 70 CRI	3300 (110)	5000 (109)	7700 (135)	9700 (129)	11800 (127)	14300 (124)	17400 (120)
Type I	4000K CCT, 80 CRI	2800 (93)	4200 (91)	6600 (116)	8400 (112)	10200 (110)	12300 (107)	15100 (104)
Type III	4000K CCT, 80 CRI	3000 (100)	4600 (100)	7000 (123)	8800 (117)	10700 (115)	12900 (112)	15600 (108)
Type V	4000K CCT, 80 CRI	3300 (110)	5000 (109)	7500 (132)	9700 (129)	11800 (127)	14200 (123)	17100 (118)
Type V Wide	4000K CCT, 80 CRI	2900 (97)	4400 (96)	6800 (119)	8700 (116)	10500 (113)	12700 (110)	15500 (107)
Type I	3000K CCT, 80 CRI	2600 (87)	3800 (83)	6000 (105)	7800 (104)	9500 (102)	11400 (99)	13900 (96)
Type III	3000K CCT, 80 CRI	2800 (93)	4100 (89)	6300 (111)	8100 (108)	9900 (106)	11900 (103)	14400 (99)
Type V	3000K CCT, 80 CRI	3000 (100)	4500 (98)	6800 (119)	8900 (119)	10900 (117)	13100 (114)	15700 (108)
Type V Wide	3000K CCT, 80 CRI	2700 (90)	4000 (87)	6200 (109)	8000 (107)	9700 (104)	11700 (102)	14000 (97)

		Lumen Output (Efficacy) for Clear Glass Globe						
		MLGL3	MLGL5	MLGL7	MLGH9	MLGH1	MLGH3	MLGH6
Type I	5000K CCT, 70 CRI	3500 (117)	5300 (115)	8000 (140)	9900 (132)	12000 (129)	14500 (126)	17700 (122)
Type III	5000K CCT, 70 CRI	3700 (123)	5400 (117)	8300 (146)	10400 (139)	12600 (135)	15300 (133)	18400 (127)
Type V	5000K CCT, 70 CRI	4000 (133)	6000 (130)	9100 (160)	11200 (149)	13600 (146)	16400 (143)	19900 (137)
Type V Wide	5000K CCT, 70 CRI	3600 (120)	5400 (117)	8200 (144)	10300 (137)	12500 (134)	15100 (131)	18200 (126)
Type I	4000K CCT, 80 CRI	3100 (103)	4600 (100)	7100 (125)	8800 (117)	10700 (115)	12900 (112)	15700 (108)
Type III	4000K CCT, 80 CRI	3200 (107)	4800 (104)	7300 (128)	9300 (124)	11300 (122)	13600 (118)	16400 (113)
Type V	4000K CCT, 80 CRI	3600 (120)	5300 (115)	8100 (142)	10100 (135)	12300 (132)	14900 (130)	18000 (124)
Type V Wide	4000K CCT, 80 CRI	3200 (107)	4800 (104)	7300 (128)	9200 (123)	11200 (120)	13500 (117)	16300 (112)
Type I	3000K CCT, 80 CRI	2800 (93)	4200 (91)	6400 (112)	8100 (108)	9900 (106)	12000 (104)	14500 (100)
Type III	3000K CCT, 80 CRI	2900 (97)	4400 (96)	6600 (116)	8600 (115)	10400 (112)	12600 (110)	15100 (104)
Type V	3000K CCT, 80 CRI	2800 (93)	4800 (104)	7500 (132)	9300 (124)	11400 (123)	13700 (119)	17000 (117)
Type V Wide	3000K CCT, 80 CRI	2900 (97)	4300 (93)	6600 (116)	8500 (113)	10300 (111)	12500 (109)	15000 (103)

		Lumen Output (Efficacy) for Diffused Polycarbonate Globe						
		MLGL3	MLGL5	MLGL7	MLGH9	MLGH1	MLGH3	MLGH6
Type V	5000K CCT, 70 CRI	3700 (123)	5500 (120)	8300 (146)	10300 (137)	12500 (134)	15100 (131)	18200 (126)
Type V	4000K CCT, 80 CRI	3200 (107)	4800 (104)	7300 (128)	9200 (123)	11200 (120)	13500 (117)	16300 (112)
Type V	3000K CCT, 80 CRI	2900 (97)	4400 (96)	6600 (116)	8500 (113)	10300 (111)	12500 (109)	15000 (103)

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

② Diffused polycarbonate globe can be used with Type I, III and V wide. Refer to photometric files for lumen output information.

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### Electrical Ratings ①

	Voltage	Input Power	Input Current (amp)	Power Factor	THD	Model	
BU	120 Vac	30	0.26	>0.9	< 20%	MLGL3	
	277 Vac	30	0.12				
	170 Vdc	30	0.18				
	300 Vdc	31	0.10	N/A	N/A		
BH	347 Vac	33	0.10	>0.9	< 20%		
	480 Vac	33	0.07				
BU	120 Vac	46	0.39	>0.9	< 20%		MLGL5
	277 Vac	46	0.17				
	170 Vdc	46	0.27				
	300 Vdc	46	0.16	N/A	N/A		
BH	347 Vac	49	0.14	>0.9	< 20%		
	480 Vac	49	0.11				
BU	120 Vac	57	0.48	>0.9	< 20%	MLGL7	
	277 Vac	57	0.23				
	170 Vdc	57	0.34				
	300 Vdc	57	0.19	N/A	N/A		
BH	347 Vac	60	0.18	>0.9	< 20%		
	480 Vac	60	0.14				
BU	120 Vac	75	0.64	>0.9	< 20%		MLGH9
	277 Vac	75	0.29				
	170 Vdc	75	0.45				
	300 Vdc	75	0.25	N/A	N/A		
BH	347 Vac	79	0.23	>0.9	< 20%		
	480 Vac	79	0.17				
BU	120 Vac	93	0.79	>0.9	< 20%	MLGH1	
	277 Vac	93	0.35				
	170 Vdc	93	0.55				
	300 Vdc	93	0.31	N/A	N/A		
BH	347 Vac	97	0.28	>0.9	< 20%		
	480 Vac	97	0.21				
BU	120 Vac	115	0.99	>0.9	< 20%		MLGH3
	277 Vac	115	0.44				
	170 Vdc	115	0.68				
	300 Vdc	115	0.38	N/A	N/A		
BH	347 Vac	118	0.34	>0.9	< 20%		
	480 Vac	118	0.25				
BU	120 Vac	145	1.24	>0.9	< 20%	MLGH6	
	277 Vac	145	0.54				
	170 Vdc	145	0.86				
	300 Vdc	145	0.48	N/A	N/A		
BH	347 Vac	145	0.42	>0.9	< 20%		
	480 Vac	145	0.31				

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



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**Technical Data**

Max. Ambient Temperature °C (°F)	Min. Supply Wire °C (°F)	Class I Division 2 Groups A, B, C and D	Class I, Zone 2, Group IIC	Class II, Division 1, Groups E, F and G	Zone 21, Group IIIC	Class I, Division 2 & Class II, Division 1	Model Number
40 (104)		T6	T6	T6	T6	T5	MLGL3
55 (131)	90 (194)	T5	T5	T6	T6	T5	
65 (149)		T4A	T4	T6	T6	T4A	
40 (104)		T5	T5	T6	T6	T5	MLGL5
55 (131)	90 (194)	T4A	T4	T6	T6	T4A	
65 (149)		T4A	T4	T6	T6	T4A	
40 (104)		T6	T6	T6	T6	T5	MLGL7
55 (131)	90 (194)	T5	T5	T6	T6	T5	
65 (149)		T4A	T4	T5	T5	T4A	
40 (104)		T4A	T4	T6	T6	T4A	MLGH9
55 (131)	90 (194)	T4	T4	T6	T6	T4	
65 (149)		T4	T4	T6	T6	T4	
40 (104)		T4	T4	T6	T6	T4	MLGH1
55 (131)	90 (194)	T3C	T3	T6	T6	T3C	
65 (149)		T3C	T3	T6	T6	T3C	
40 (104)		T4	T4	T6	T6	T4	MLGH3
55 (131)	90 (194)	T3C	T3	T6	T6	T3C	
65 (149)		T3C	T3	T5	T5	T3C	
40 (104)		T3C	T3	T6	T6	T3C	MLGH6
55 (131)	90 (194)	T3C	T3	T6	T6	T3C	
65 (149)		T3A	T3	T5	T5	T3A	

“T” Numbers Represent the Maximum Internal Temperature or Maximum Surface Temperature ①②

**NEC/CEC**

“T” #	T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
Temp. Range °C (°F)	351–450 (664–842)	326–350 (619–662)	301–325 (574–617)	281–300 (538–572)	261–280 (502–536)	231–260 (448–500)	216–230 (421–446)	201–215 (394–419)	181–200 (358–392)	166–180 (322–348)	161–165 (322–329)	136–160 (277–320)	121–135 (250–275)	101–120 (214–248)	86–100 (187–212)	85 (185)

**ATEX/IECEX**

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

① T numbers represent the maximum internal temperature for Class I, Division 2 and Class I, Zone 2 locations designated by the NEC.

② T numbers represent the maximum surface temperature under a dust blanket for Class II, Division 1 and Class I, Zone 2 as designated by the NEC or Zone 2 (Gas) and 22 (Dust) locations as designated by the IEC.

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA





# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

### NEC/CEC:

Class I, Division 2, Groups A, B, C, D  
Class II, Division 1 & 2, Group E, F, G  
Class III  
Class I Zone 2 AEx ec IIC  
Zone 21 AEx tb IIIC  
Class I Zone 2 Ex ec IIC

### NEC/CEC:

Zone 21 Ex tb IIIC  
Type 3R, 4, 4X  
IP66/IP67  
Simultaneous Exposure  
Suitable for Use in Wet Locations  
Marine Outside Type (Salt Water)

### IECEX:

Zone 2 and 21/22  
Ex ec IIC  
Ex tb IIIC  
Ex op is IIIC  
IP66  
IK08

### ATEX/IECEX:

Zone 2 and 21/22  
II 3 G  
II 2 GD  
IP66  
IK08

### Catalog Number for Driver Housing and Globe or Refractor

Lumen Level	CCT	Optics	Clear Polycarbonate Globe ①②③④	Polycarbonate Diffused Globe ①②③④	Clear Glass Globe ①②③④	Refractor ①②③④
3K	5000K	Type I	MLGL3CP1	MLGL3CD1	MLGL3CG1	-
		Type III	MLGL3CP3	MLGL3CD3	MLGL3CG3	-
		Type V	MLGL3CP5	MLGL3CD5	MLGL3CG5	MLGL3CJ5
		Type V Wide	MLGL3CPW	MLGL3CDW	MLGL3CGW	-
5K	5000K	Type I	MLGL5CP1	MLGL5CD1	MLGL5CG1	-
		Type III	MLGL5CP3	MLGL5CD3	MLGL5CG3	-
		Type V	MLGL5CP5	MLGL5CD5	MLGL5CG5	MLGL5CJ5
		Type V Wide	MLGL5CPW	MLGL5CDW	MLGL5CGW	-
7K	5000K	Type I	MLGL7CP1	MLGL7CD1	MLGL7CG1	-
		Type III	MLGL7CP3	MLGL7CD3	MLGL7CG3	-
		Type V	MLGL7CP5	MLGL7CD5	MLGL7CG5	MLGL7CJ5
		Type V Wide	MLGL7CPW	MLGL7CDW	MLGL7CGW	-
9K	5000K	Type I	MLGH9CP1	MLGH9CD1	MLGH9CG1	-
		Type III	MLGH9CP3	MLGH9CD3	MLGH9CG3	-
		Type V	MLGH9CP5	MLGH9CD5	MLGH9CG5	MLGH9CJ5
		Type V Wide	MLGH9CPW	MLGH9CDW	MLGH9CGW	-
11K	5000K	Type I	MLGH1CP1	MLGH1CD1	MLGH1CG1	-
		Type III	MLGH1CP3	MLGH1CD3	MLGH1CG3	-
		Type V	MLGH1CP5	MLGH1CD5	MLGH1CG5	MLGH1CJ5
		Type V Wide	MLGH1CPW	MLGH1CDW	MLGH1CGW	-
13K	5000K	Type I	MLGH3CP1	MLGH3CD1	MLGH3CG1	-
		Type III	MLGH3CP3	MLGH3CD3	MLGH3CG3	-
		Type V	MLGH3CP5	MLGH3CD5	MLGH3CG5	MLGH3CJ5
		Type V Wide	MLGH3CPW	MLGH3CDW	MLGH3CGW	-
17K	5000K	Type I	MLGH6CP1	MLGH6CD1	MLGH6CG1	-
		Type III	MLGH6CP3	MLGH6CD3	MLGH6CG3	-
		Type V	MLGH6CP5	MLGH6CD5	MLGH6CG5	MLGH6CJ5
		Type V Wide	MLGH6CPW	MLGH6CDW	MLGH6CGW	-

- 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 For other CCT options, change the 6th digit in part number from "C" to "W" for Warm 3000K CCT or "N" for Neutral 4000K CCT.  
 Example: **MLGL7CP5BU** to "W" for Warm, **MLGL7WP5BU**.  
 ③ Guards are available for fixtures with globe or refractor. See following pages for accessory ordering information.  
 ④ For fusing add "F" to end of catalog number. Example: **MLGL7CP5BUF**.  
 Use of fuse voids Marine Outside Type (Salt Water) rating. Only available for cCSAus rating.

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED - AREA



# Mercmaster™ LED Generation 3 Series Luminaires

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 Class II, Division 1 & 2, Group E, F, G  
 Class III  
 Class I Zone 2 AEx ec IIC  
 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

**NEC/CEC:**

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)







**IECEX:**

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
 IP66  
 IK08



**ATEX/IECEX:**

Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

### Mounting Hoods

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

### Mounting Hood Adapters

	Manufacturer	Installed Mounting Hood	Appleton Adapter Catalog Number
	Crouse-Hinds™ Champ	APM2/3 - Pendant CM2/3 - Ceiling HPM2 - Flexible Pendant	MMADCHVS
	Appleton™ Mercmaster™ II	LPA75/100 - Pendant LPC75/100 - Ceiling	MMADIIS
	Crouse-Hinds™ Champ	TWM2/3 - Wall JM5 - 25° Angle Stanchion PM5 - 90° Straight Stanchion	MMADCHVA
	Appleton™ Mercmaster™ II	LPWB75, LPWB100 - Wall LPS125, LPS150 - 25° Angle Stanchion	MMADIIA

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED - AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

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 IP66  
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**ATEX/IECEX:**

Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

**Accessories and Replacement Parts**

	Description Weight in kg (lbs)	Catalog Number NEC/CEC
<b>Globes and Gaskets</b>		
	Clear Globe (polycarbonate) 0.2 (0.5)	VPGL-LED
	Diffused Globe (polycarbonate) 0.2 (0.5)	VPGL-DIFF
	Glass Globe — Clear 0.8 (1.7)	VPGL-GLASS
	Glass Refractor — NEMA Type V Light Distribution 2.3 (5.2)	LPG-R5
<b>Globe Guards and Safety Chain</b>		
	Globe Guard 0.2 (0.4)	MGU1
	Refractor Guard 0.4 (0.9)	KRG2
	Safety Cable 0.2 (0.4)	LEDSC
<b>Drain Plug</b>		
	3" long, 1/2" trade size drain assembly used to divert water existing in the conduit system 0.4 (0.9)	LEDDR3

NEC/CEC ENCLOSED AND GASKETED CLASS /ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

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 IK08

### Replacement Drivers

	Voltage	Driver Wattage	Luminaire Model	Constant Current Settings	Catalog Number
	BU	50 Watt	MLGL3	500mA	APMS050C135UD50
	BH			500mA	APMS050C135HD50
	BU	50 Watt	MLGL5	780mA	APMS050C135UD78
	BH			780mA	APMS050C135HD78
	BU	100 Watt	MLGL7	360mA	APMS100C105UD36
	BH			360mA	APMS100C105HD36
	BU	100 Watt	MLGH9	480mA	APMS100C105UD48
	BH			480mA	APMS100C105HD48
	BU	100 Watt	MLGH1	595mA	APMS100C105UD59
	BH			595mA	APMS100C105HD59
	BU	150 Watt	MLGH3	720mA	APMS150C105UD72
	BH			720mA	APMS150C105HD72
	BU	150 Watt	MLGH6	900mA	APMS150C105UD90
	BH			900mA	APMS150C105HD90

### Luminaire Weights

Model Number	Lumen Outputs	Weight in kg (lbs)
MLGL3	3500	9.2 (20.3)
MLGL5	5500	9.2 (20.3)
MLGL7	7500	9.2 (20.3)
MLGH9	9500	12.0 (26.4)
MLGH1	11,500	12.0 (26.4)
MLGH3	14,500	12.0 (26.4)
MLGH6	17,500	12.0 (26.4)

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

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**ATEX/IECEX:**

Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

Factory Installed Photocontrol

To order photocontrol already installed on luminaire use the catalog numbering guide.

To only order the photocontrol and mounting hood together use the part numbers below.

	Voltage Range	Max VA	Max Current Amps	Suffix Designation Catalog Number
<b>Photocontrol in FS Cover for Use with FS/FD Box</b>				
Supplied with two stainless steel screws. For neoprene gasket, order catalog number <b>FS-GKR-1N</b> .				
	120V, 50/60 Hz	1000	8.3 Amp	<b>FSKA-PC120D2</b>
	208 V, 50/60 Hz	1000	4.8 Amp	
	240 V, 50/60 Hz	1000	4.2 Amp	<b>FSKA-PC247D2</b>
	277 V, 50/60 Hz	1000	3.6 Amp	

**Photocontrol Top Hats**

Mounting Hood	Hub Size	Photocontrol Option	Catalog Number
Pendant	3/4" NPT	120V	<b>KPA75PC12D2</b>
Pendant	3/4" NPT	208V, 240V, 277V	<b>KPA75PC24D2</b>
Pendant	1" NPT	120V	<b>KPA100PC12D2</b>
Pendant	1" NPT	208V, 240V, 277V	<b>KPA100PC24D2</b>
Wall	3/4" NPT	120V	<b>KPWB75PC12D2</b>
Wall	3/4" NPT	208V, 240V, 277V	<b>KPWB75PC24D2</b>
Wall	1" NPT	120V	<b>KPWB100PC12D2</b>
Wall	1" NPT	208V, 240V, 277V	<b>KPWB100PC24D2</b>
25 Stanchion	1-1/4" NPT stanchion	120V	<b>KPS125PC12D2</b>
25 Stanchion	1-1/4" NPT stanchion	208V, 240V, 277V	<b>KPS125PC24D2</b>
25 Stanchion	1-1/2" NPT stanchion	120V	<b>KPS150PC12D2</b>
25 Stanchion	1-1/2" NPT stanchion	208V, 240V, 277V	<b>KPS150PC24D2</b>
90 Stanchion	1-1/4" NPT stanchion	120V	<b>KPST125PC12D2</b>
90 Stanchion	1-1/4" NPT stanchion	208V, 240V, 277V	<b>KPST125PC24D2</b>
90 Stanchion	1-1/2" NPT stanchion	120V	<b>KPST150PC12D2</b>
90 Stanchion	1-1/2" NPT stanchion	208V, 240V, 277V	<b>KPST150PC24D2</b>

NEC/CEC ENCLOSED AND GASKETED CLASS /ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

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Class I, Division 2, Groups A, B, C, D  
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 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

**NEC/CEC:**

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)

**IECEX:**

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
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 IK08

**ATEX/IECEX:**

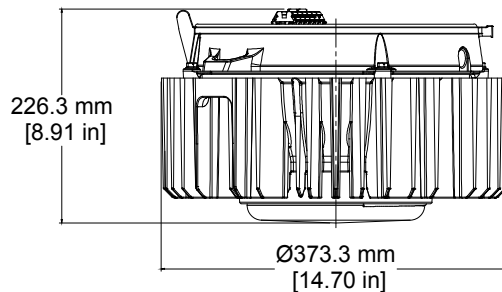
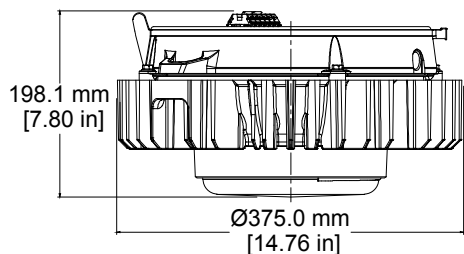
Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

**Dimensional Drawings**

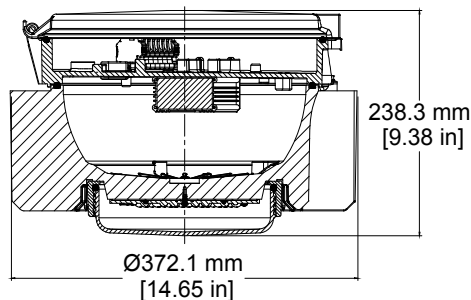
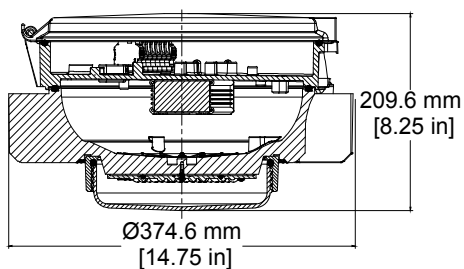
MLGL3 to MLGL7

MLGH9 to MLGH6

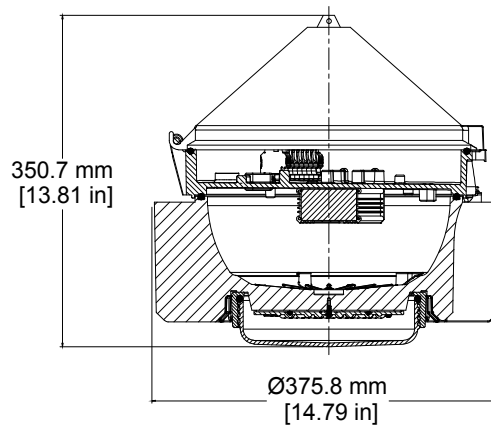
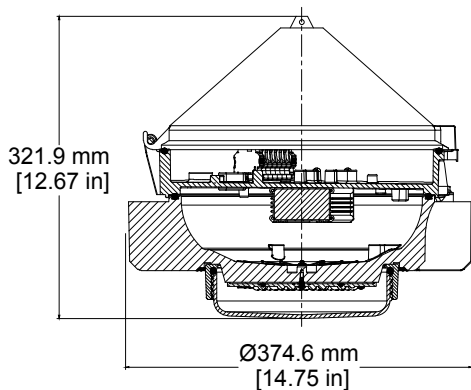
**Driver Housing**



**Pendant**



**Pendant Cone**



NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



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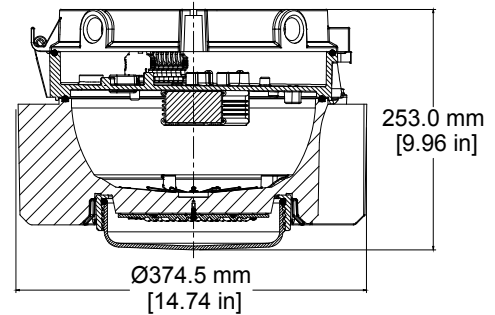
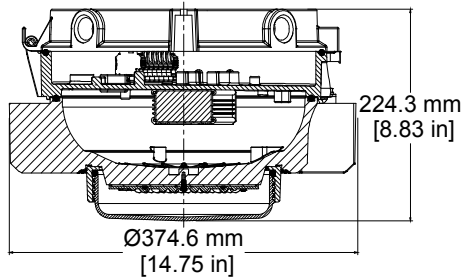
Zone 2 and 21/22  
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**Dimensional Drawings**

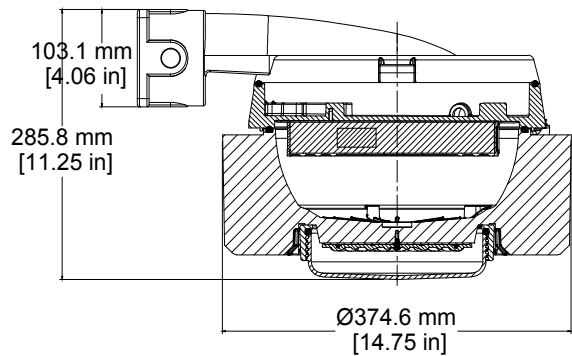
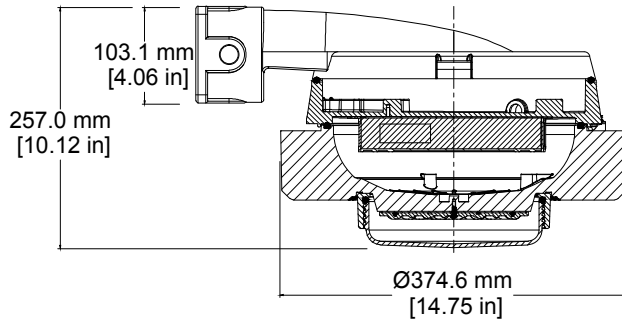
MLGL3 to MLGL7

MLGH9 to MLGH6

**Ceiling**



**Wall Mount**



NEC/CEC ENCLOSED AND GASKETED CLASS /ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

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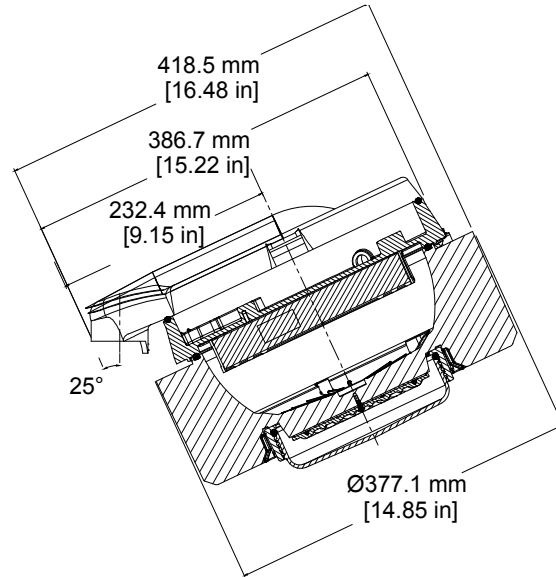
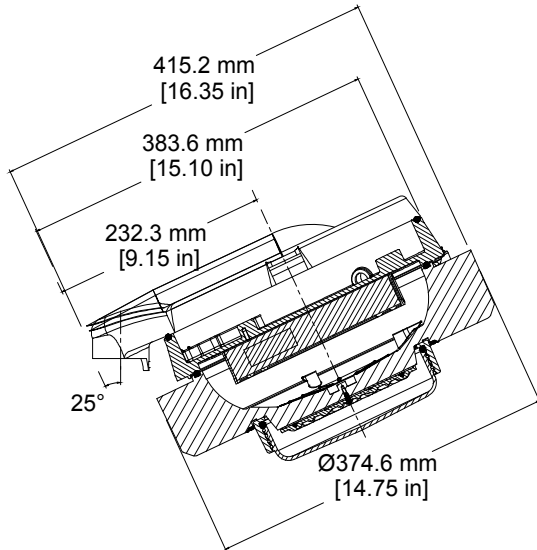
Zone 2 and 21/22  
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**Dimensional Drawings**

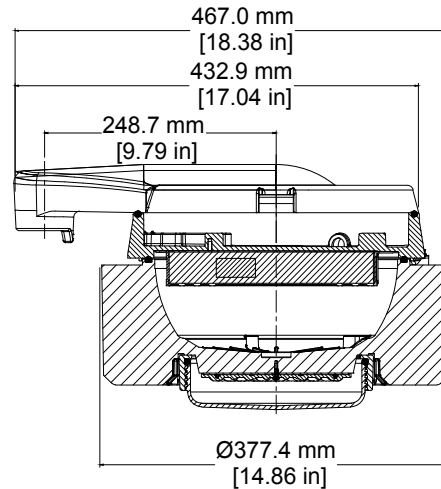
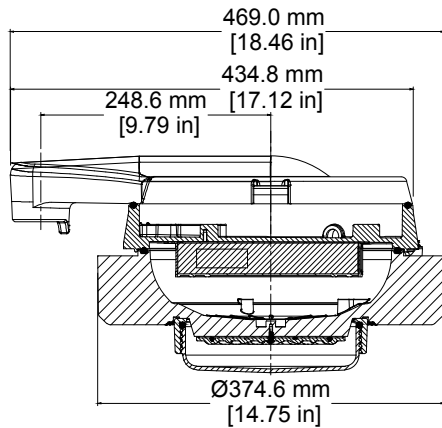
MLGL3 to MLGL7

MLGH9 to MLGH6

**25 Degree Stanchion**



**90 Degree Stanchion**



NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA



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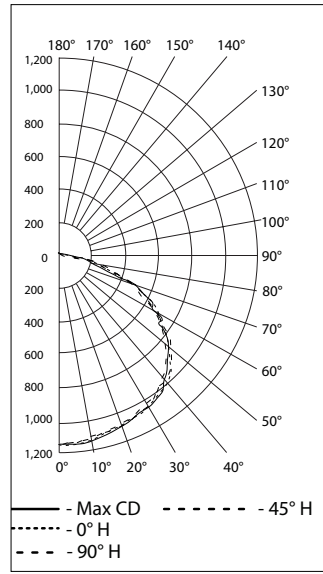
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**Type V, Clear Polycarbonate 5000K CCT**

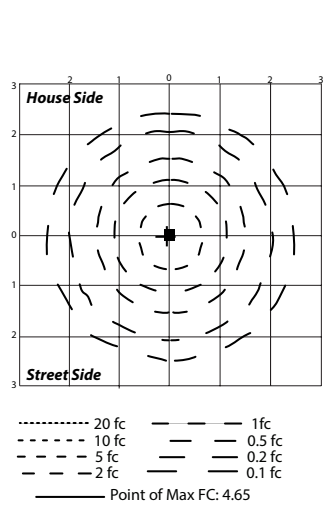
REPORT NUMBER: **MLGAL33CP5**

Luminaire Lumens 3,783

**POLAR CANDELA DISTRIBUTION**



**ISOFOOT CANDLE PLOT**



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	942.7	24.9%
0-40	1,591.7	42.1%
0-60	2,979.8	78.8%
60-90	788.2	20.8%
70-100	271.6	7.2%
90-120	13.9	0.4%
0-90	3,768.1	99.6%
90-180	15.1	0.4%
0-180	3,783.2	100%

**LUMENS PER ZONE**

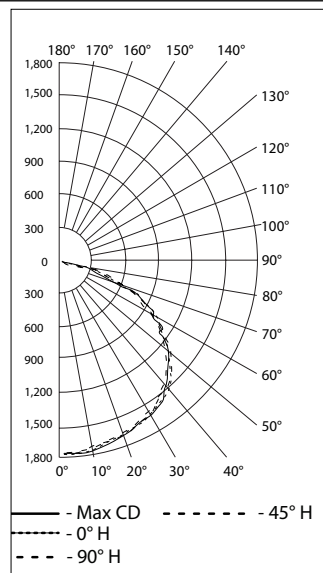
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	111.3	2.9%	90-100	5.9	0.2%
10-20	322.9	8.5%	100-110	4.8	0.1%
20-30	508.4	13.4%	110-120	3.2	0.1%
30-40	649.0	17.2%	120-130	0.8	0%
40-50	713.0	18.8%	130-140	0.1	0%
50-60	675.1	17.8%	140-150	0.1	0%
60-70	522.5	13.8%	150-160	0.2	0%
70-80	221.7	5.9%	160-170	0.1	0%
80-90	44.1	1.2%	170-180	0.0	0%

**Type V, Clear Polycarbonate 5000K CCT**

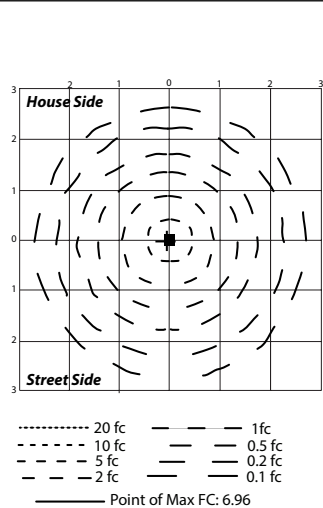
REPORT NUMBER: **MLGAL53CP5**

Luminaire Lumens 5,660

**POLAR CANDELA DISTRIBUTION**



**ISOFOOT CANDLE PLOT**



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	1,410.3	24.9%
0-40	2,381.3	42.1%
0-60	4,457.9	78.8%
60-90	1,179.2	20.8%
70-100	406.4	7.2%
90-120	20.7	0.4%
0-90	5,637.2	99.6%
90-180	22.7	0.4%
0-180	5,659.8	100%

**LUMENS PER ZONE**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	166.5	2.9%	90-100	8.8	0.2%
10-20	483.1	8.5%	100-110	7.1	0.1%
20-30	760.6	13.4%	110-120	4.8	0.1%
30-40	971.0	17.2%	120-130	1.2	0%
40-50	1,066.7	18.8%	130-140	0.1	0%
50-60	1,010.0	17.8%	140-150	0.2	0%
60-70	781.6	13.8%	150-160	0.2	0%
70-80	331.7	5.9%	160-170	0.2	0%
80-90	65.9	1.2%	170-180	0.1	0%

# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

**NEC/CEC:**

Class I, Division 2, Groups A, B, C, D  
 Class II, Division 1 & 2, Group E, F, G  
 Class III  
 Class I Zone 2 AEx ec IIC  
 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

**NEC/CEC:**

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)

**IECEX:**

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
 IP66  
 IK08

**ATEX/IECEX:**

Zone 2 and 21/22  
 II 3 G  
 II 2 G  
 IP66  
 IK08

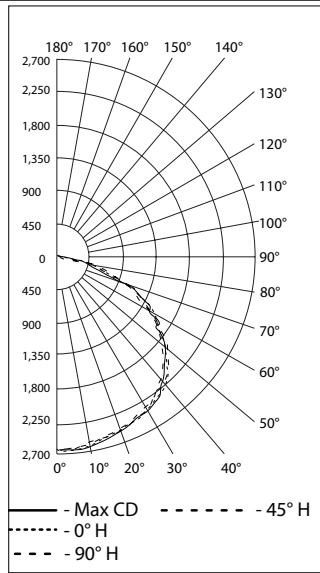
**Photometric Data — DATA SHOWN IS ABSOLUTE**

**Type V, Clear Polycarbonate 5000K CCT**

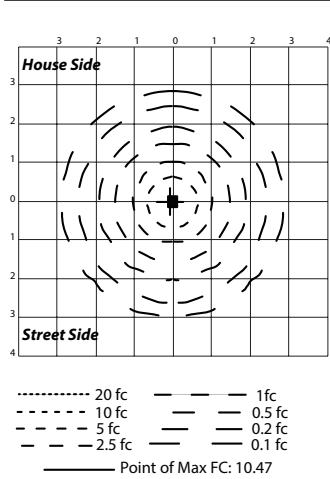
REPORT NUMBER: **MLGAL73CP5**

Luminaire Lumens 8,524

**POLAR CANDELA DISTRIBUTION**



**ISOFOOT CANDLE PLOT**



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	2,123.9	24.9%
0-40	3,586.2	42.1%
0-60	6,713.7	78.8%
60-90	1,775.9	20.8%
70-100	612.0	7.2%
90-120	31.2	0.4%
0-90	8,489.6	99.6%
90-180	34.1	0.4%
0-180	8,523.7	100%

**LUMENS PER ZONE**

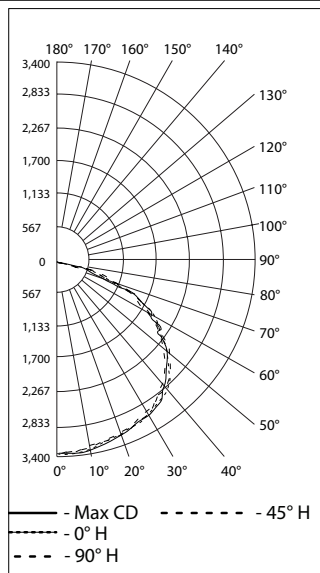
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	250.8	2.9%	90-100	13.2	0.2%
10-20	727.6	8.5%	100-110	10.8	0.1%
20-30	1,145.5	13.4%	110-120	7.2	0.1%
30-40	1,462.3	17.2%	120-130	1.7	0%
40-50	1,606.4	18.8%	130-140	0.1	0%
50-60	1,521.0	17.8%	140-150	0.3	0%
60-70	1,177.1	13.8%	150-160	0.4	0%
70-80	499.5	5.9%	160-170	0.3	0%
80-90	99.3	1.2%	170-180	0.1	0%

**Type V, Clear Polycarbonate 5000K CCT**

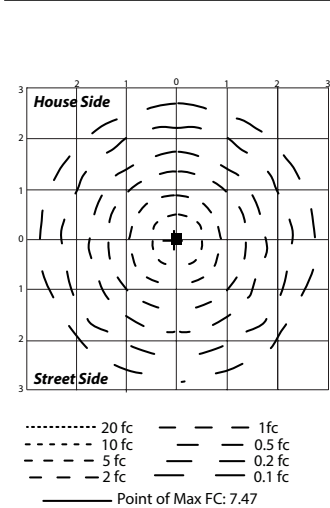
REPORT NUMBER: **MLGAH93CP5**

Luminaire Lumens 10,845

**POLAR CANDELA DISTRIBUTION**



**ISOFOOT CANDLE PLOT**



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	2,709.1	25%
0-40	4,571.0	42.1%
0-60	8,535.2	78.7%
60-90	2,272.7	21%
70-100	806.0	7.4%
90-120	33.3	0.3%
0-90	10,808.0	99.7%
90-180	37.2	0.3%
0-180	10,845.2	100%

**LUMENS PER ZONE**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	319.9	2.9%	90-100	17.5	0.2%
10-20	928.5	8.6%	100-110	9.9	0.1%
20-30	1,460.7	13.5%	110-120	5.9	0.1%
30-40	1,861.9	17.2%	120-130	1.6	0%
40-50	2,042.3	18.8%	130-140	0.7	0%
50-60	1,922.0	17.7%	140-150	0.6	0%
60-70	1,484.2	13.7%	150-160	0.5	0%
70-80	649.2	6.0%	160-170	0.3	0%
80-90	139.3	1.3%	170-180	0.1	0%

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED — AREA



# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

**NEC/CEC:**

Class I, Division 2, Groups A, B, C, D  
 Class II, Division 1 & 2, Group E, F, G  
 Class III  
 Class I Zone 2 AEx ec IIC  
 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

**NEC/CEC:**

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)

**IECEX:**

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
 IP66  
 IK08

**ATEX/IECEX:**

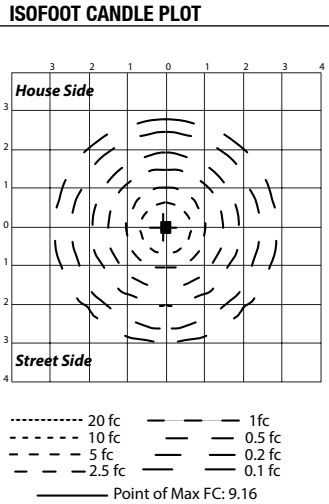
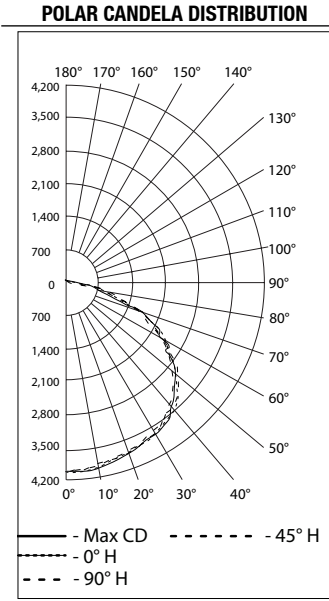
Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

**Photometric Data — DATA SHOWN IS ABSOLUTE**

Type V, Clear Polycarbonate 5000K CCT

REPORT NUMBER: MLGAH13CP5

Luminaire Lumens 13,204



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	3,298.3	25%
0-40	5,565.1	42.1%
0-60	10,391.5	78.7%
60-90	2,767.0	21%
70-100	981.3	7.4%
90-120	40.6	0.3%
0-90	13,158.5	99.7%
90-180	45.3	0.3%
0-180	13,203.8	100%

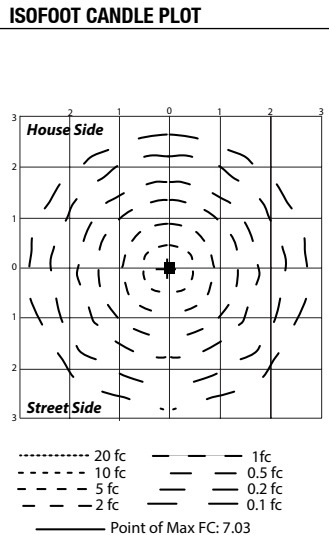
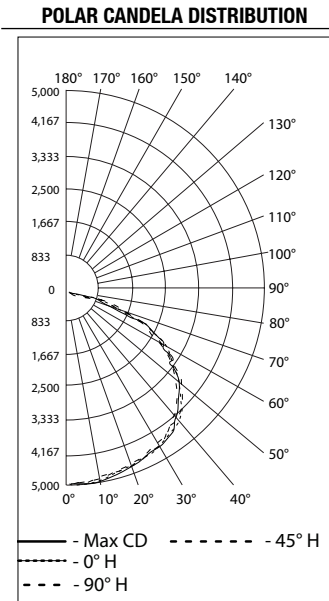
**LUMENS PER ZONE**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	389.5	2.9	90-100	21.3	0.2%
10-20	1,130.4	8.6	100-110	12.0	0.1%
20-30	1,778.4	13.5	110-120	7.2	0.1%
30-40	2,266.8	17.2	120-130	2.0	0%
40-50	2,486.4	18.8	130-140	0.8	0%
50-60	2,340.0	17.7	140-150	0.8	0%
60-70	1,807.0	13.7	150-160	0.6	0%
70-80	790.4	6.0	160-170	0.4	0%
80-90	169.6	1.3	170-180	0.1	0%

Type V, Clear Polycarbonate 5000K CCT

REPORT NUMBER: MLGAH33CP5

Luminaire Lumens 15,937



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-30	3,981.1	25%
0-40	6,717.3	42.1%
0-60	12,542.8	78.7%
60-90	3,339.8	21%
70-100	1,184.5	7.4%
90-120	49.0	0.3%
0-90	15,882.6	99.7%
90-180	54.7	0.3%
0-180	15,937.3	100%

**LUMENS PER ZONE**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	470.1	2.9%	90-100	25.7	0.2%
10-20	1,364.4	8.6%	100-110	14.5	0.1%
20-30	2,146.6	13.5%	110-120	8.7	0.1%
30-40	2,736.1	17.2%	120-130	2.4	0%
40-50	3,001.2	18.8%	130-140	1.0	0%
50-60	2,824.4	17.7%	140-150	0.9	0%
60-70	2,181.1	13.7%	150-160	0.7	0%
70-80	954.0	6.0%	160-170	0.5	0%
80-90	204.7	1.3%	170-180	0.2	0%

# Mercmaster™ LED Generation 3 Series Luminaires

## Enclosed and Gasketed Fixtures

**NEC/CEC:**

Class I, Division 2, Groups A, B, C, D  
 Class II, Division 1 & 2, Group E, F, G  
 Class III  
 Class I Zone 2 AEx ec IIC  
 Zone 21 AEx tb IIIC  
 Class I Zone 2 Ex ec IIC

**NEC/CEC:**

Zone 21 Ex tb IIIC  
 Type 3R, 4, 4X  
 IP66/IP67  
 Simultaneous Exposure  
 Suitable for Use in Wet Locations  
 Marine Outside Type (Salt Water)

**IECEX:**

Zone 2 and 21/22  
 Ex ec IIC  
 Ex tb IIIC  
 Ex op is IIIC  
 IP66  
 IK08

**ATEX/IECEX:**

Zone 2 and 21/22  
 II 3 G  
 II 2 GD  
 IP66  
 IK08

**Photometric Data – DATA SHOWN IS ABSOLUTE**

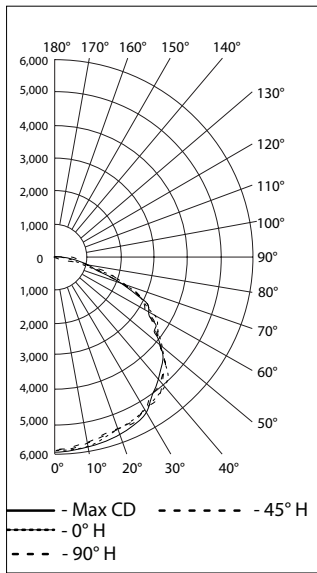
Type V, Clear Polycarbonate 5000K CCT

REPORT NUMBER: MLGAH63CP5

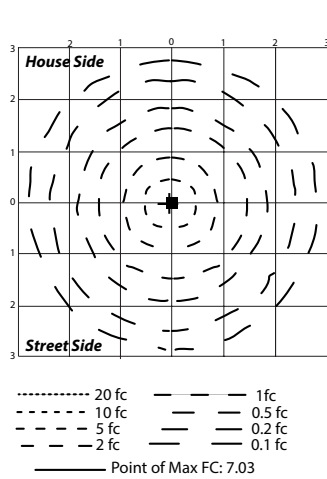
Luminaire Lumens 19,107

NEC/CEC ENCLOSED AND GASKETED CLASS/ZONE AND ATEX/IEC/NBR IEC ZONE 2 RATED – AREA

**POLAR CANDELA DISTRIBUTION**



**ISOFOOT CANDLE PLOT**



Zone	Lumens	% Luminaire
0-30	4,772.9	25%
0-40	8,053.1	42.1%
0-60	15,037.2	78.7%
60-90	4,004.0	21%
70-100	1,420.0	7.4%
90-120	58.7	0.3%
0-90	19,041.2	99.7%
90-180	65.7	0.3%
0-180	19,107.0	100%

**LUMENS PER ZONE**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	563.6	2.9%	90-100	30.8	0.2%
10-20	1,635.8	8.6%	100-110	17.4	0.1%
20-30	2,573.5	13.5%	110-120	10.5	0.1%
30-40	3,280.3	17.2%	120-130	2.9	0%
40-50	3,598.0	18.8%	130-140	1.3	0%
50-60	3,386.1	17.7%	140-150	1.2	0%
60-70	2,614.9	13.7%	150-160	0.9	0%
70-80	1,143.7	6.0%	160-170	0.6	0%
80-90	245.5	1.3%	170-180	0.2	0%



Complete IES files can be found on Appleton's website.  
 Visit [Masteringled.com](http://Masteringled.com) for more information on Mercmaster™ LED Generation 3 Series

