

DESCRIPTION

The McGraw Edison Envoy (EPL) is a unique presentation of form, function and unmatched versatility, making it the right choice for complex garage lighting applications. A toolless accessible housing, lens and electrical access is standard. Envoy offers solutions addressing primary and egress lighting needs for garages, canopies and other installations where maintenance, performance and longevity are required. UL and C-UL US listed for wet locations under UL1598. IP66 Rated.

SPECIFICATION FEATURES

Construction

Low copper, one-piece aluminum die-cast electrical housing features heavy cast walls designed for effective heat dissipation and resistance to corrosion. Toolless aluminum die-cast latches securely hold lens in place and aid in efficient installation and maintenance. A tamper resistant option is available to prevent unauthorized access. Envoy is IP66 rated, promoting long term optical efficiency allowing for fast efficient cleaning by power washing. All gaskets contained within Envoy are silicone material including lens gasket and housing wire grommet.

Optical

Lens: Lens employs a 2 part system (upper and lower) by which the reflector is accurately located and securely locked in place. Injection molded, virgin Acrylic material is standard due to its ability to resist radiation from UV and for its superior clarity (polycarbonate is available). Lens is attached via two (2) toolless die-cast latches. When released, lens will hinge off housing and remain captive to allow for easy, obstruction free lamp placement or electrical access. Lens perimeter is completely sealed at housing junction using a one-piece extruded, vulcanized silicone gasket.

Reflectors: Envoy reflectors use premium materials and a durable finish process to ensure longevity of optical performance. The 3-part reflector system

employs a bright specular Alzak® anodized aluminum hydro-formed main reflector, a diffuse anodized aluminum hydro-formed upper reflector and die-formed premium 95% reflective, specular pre-anodized sheet aluminum inserts. A choice of three (3) different optical distributions with a variety of light controlling media may be used to optimize your lighting layout and comply with lighting ordinances.

Electrical

Each fixture includes all electrical components hard mounted to electrical housing for efficient operation. All HID units use medium-base type lamps with standard magnetic, high power factor ballasts (minimum starting -30°C (-22°F) MH-MP/-40°C (-40°F) HPS). Compact Fluorescent (CF) units use 4-pin lamp sockets with standard high power factor electronic ballast (minimum starting -18°C (0°F). Induction lamp features a high frequency, high power factor generator (available in 100-120V or 200-277V, minimum starting -25°C (-13°F) The electrical reflector cover is keyed and accessed via two (2) toolless thumbscrews.

Mounting

Standard fixture mounts to a square or octagonal 4" surface or recessed mounted j-box via electro-zinc plated, heavy-gauge "quick mount" bracket system, complete with stainless steel hanger allowing "hands-free"

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Project		
Comments		Date
Prepared by		

wiring connection. Enables efficient fixture mounting, wiring connection inspection and fixture removal. Quick mount plate features stainless steel springs that help absorb vibration and aid fixture to slide and lock in place. A variety of other mounting options and accessories including free swinging balanced pendant box/bird guard, trunnion mount and wall mount arm are available.

Egress Options

Envoy offers multiple egress lamp sources including quartz halogen, compact fluorescent and MR16, available in multiple circuit options. Compact fluorescent battery packs are available integral within fixture or remote mount in various wattage configurations.

Finish

Housing is finished in 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Envoy is supplied standard in grey and available in black, white and bronze. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.



EPL ENVOY

7 0 - 2 0 0 W

**High Pressure Sodium
Pulse Start Metal Halide
Metal Halide**

8 4 - 1 6 8 W

Compact Fluorescent

8 5 W

Induction

**PARKING GARAGE
LUMINAIRE**

ENERGY DATA

Hi-Reactance Ballast Input Watts

70W HPS HPF (95 Watts)
70W MP HPF (90 Watts)
100W HPS HPF (130 Watts)
100W MP HPF (129 Watts)
150W HPS HPF (190 Watts)
150W MP HPF (185 Watts)

CWA Ballast Input Watts

175W MH HPF (210 Watts)
175W MP HPF (208 Watts)
200W MP HPF (240 Watts)

Electronic CF Ballast Input Watts

84W CF HPF (93 Watts)
114W CF HPF (127 Watts)
126W CF HPF (139 Watts)
140W CF HPF (154 Watts)
168W CF HPF (186 Watts)

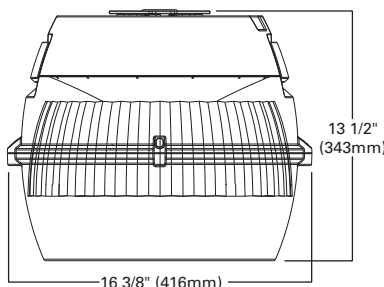
SHIPPING DATA

Approximate Net Weight:
21.5 lbs. (9.8 kgs.)



ADH080511

DIMENSIONS



COOPER LIGHTING

LAMP TYPE	WATTAGE
Metal Halide	175W
Pulse Start Metal Halide	70, 100, 150, 175, 200W
High Pressure Sodium	70, 100, 150W
Compact Fluorescent	(2) 42, (2) 57, (3) 42, (2) 70, (4) 42W
Induction	85W

CERTIFICATIONS

IP66 Rated	2G Vibration Tested
U.L. 1598 (Wet Locations)	40°C Ambient *
C-UL (Wet Locations)	

NOTES: * Varies by model.

Patents Pending

ORDERING INFORMATION

SAMPLE NUMBER: EPL-175-MP-MB-MT-TG-AP-L-EM/SC

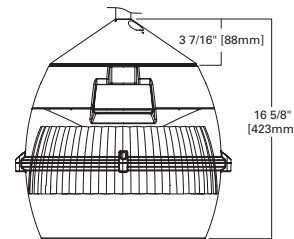
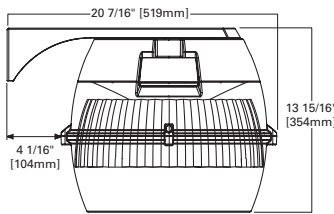
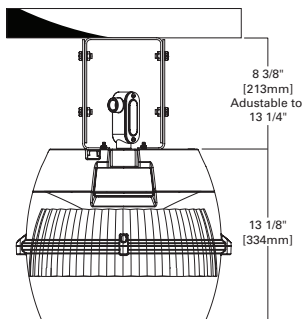
EPL									
Product Family EPL=Envoy Parking Garage Luminaire		Voltage ⁵ 120=120V 208=208V 240=240V 277=277V 480=480V		Options (add as suffix) ⁷ CD=Concentrated Downlight (Restricts Uplight 360°) ⁸ CT=Conduit Taps (Qty (2) 3/4" NPSM) ⁹ F=Single Fuse (Specify 120, 277 OR 347 in "Voltage" column). FF=Double Fuse (Specify 208, 240 OR 480 in "Voltage" column) HA=40° C Ambient ¹⁰ HL=Hi/Low Dimming ¹¹ L=Lamp Included, HID LC=Lamp Included, Compact Fluorescent LQ=Lamp Included, Quartz Halogen DCB PH=Upper Polycarbonate Lens (Near Aluminum Back Housing) PL=Lower Polycarbonate Lens QD=Quick Disconnect(s) (between reflector cover/electrical housing) TMB=Trunnion Mount with Connection Box (some assembly required) TMC=Trunnion Mount with Power Cord (some assembly required) TR=Tamper Resistant (Torx T15 CPR) WL=24" Lead Wires		Standby + Egress Options (See Below)		Accessories ²⁵ (order separately/replace XX with color designation) EPL/PBG-XX=Balanced Pendant Box/Bird Guard EPL/WM-XX=Wall Mount Arm ²⁶ EPL/HS=House Side Shield Up and Downlight 120° Coverage (HID Lamps Only) ²⁷ EPL/HSCF=House Side Shield Up and Downlight 120° Coverage (CF Lamps Only) ²⁷ EPL/DLS=Drive Lane Shield ²⁸ VRBT15=T15 Torx CPR Tamper Resistant Driver Bit VRST15=T15 Torx CPR Tamper Resistant Screwdriver EPL/TL=Task Light Field Install Kit for 120V MR16 lamp (GU10 Base) EPL/TL12V=Task Light Field Install Kit for 12V MR16 lamp (GU5.3 Base)	
Lamp Wattage MH ¹ CF 175=175W 84=(2) 42W MP ² 114=(2) 57W 70=70W 126=(3) 42W 100=100W 140=(2) 70W 150=150W 168=(4) 42W 175=175W Induction 200=200W 85=85W HPS 70=70W 100=100W 150=150W		Distribution RD=Round SQ=Square TG=Rectangular		Colors (add as suffix/must specify) AP=Grey BZ=Bronze BK=Black WH=White					
Lamp Type MH=Metal Halide MP=Pulse Start Metal Halide HPS=High Pressure Sodium CF=Compact Fluorescent QL=Induction									
Ballast Type MB=Magnetic ³ EB=Electronic ⁴									

Standby + Egress Lamp Options
T4 Quartz Halogen + Compact Fluorescent Egress Options (For use with HID as primary lamp source)

- Q=Quartz Restrike (hot restrike only, 120v T4 DCB quartz lamp)¹²
- EM=Quartz Time Delay (hot and cold restrike, 120v T4 DCB quartz lamp)¹²
- EM/SC=Emergency Separate Circuit (120v T4 DCB quartz lamp)¹²
- __CFSC=CF (1) Separate Circuit (Specify 52, 64 or 84, supplied with 120-277v electronic ballast)¹³
- __CFHR=CF Hot Restrike Relay (Specify 52, 64 or 84, supplied with 120-277v electronic ballast)¹³
- __CFTR=CF Time Delay Relay (Hot and Cold Restrike) (Specify 52, 64 or 84, supplied with 120-277v electronic ballast)¹³
- CFRB=CF Remote Battery Pack, sockets accommodate 26-42w CF lamps (Battery Pack specified/supplied/wired by Others)¹³
- 36CFIB=CF Integral Battery Pack operates (2) 18w CFL¹⁴
- CFRBT=CF Remote Battery Pack with Time Delay Relay, sockets accommodate 26-42w CF lamps (Battery Pack specified/supplied/wired by Others)¹³
- 36CFIBT=CF Integral Battery Pack operates (2) 18w CFL with Time Delay Relay¹⁴

Compact Fluorescent Egress Options (For use with CF as primary lamp source)

- RBP=Remote Battery Pack, sockets accommodate 26-42w CF lamps (CF units only; Battery Pack specified/supplied/wired by Others)¹⁵
- 42IBP=Integral Battery Pack, (1) 42w CF lamp standby¹⁶
- 42ICB=Integral Cold Weather Battery Pack, (1) 42w CF lamp standby¹⁷
- 4CF3=4 CF lamps wired as 3 independent circuits, 3 electronic ballasts (2 lamps/1 lamp/1 lamp)¹⁸
- 4CF2=4 CF lamps wired as 2 independent circuits, 2 electronic ballasts (2 lamps/2 lamps)¹⁸
- 3CF2=3 CF lamps wired as 2 independent circuits, 2 electronic ballasts (2 lamps/1 lamp)¹⁹
- 2CF2=2 CF lamps wired as 2 independent circuits, 2 electronic ballasts (1 lamp/1 lamp)²⁰
- MR16 Quartz Halogen Egress Options (For use with HID or CF as primary lamp source)**
- TL__=Task Light 120v MR16 (GU10 Twist Lock Base)²¹
- 2TL__=(2) Task Lights 120v MR16 (GU10 Twist Lock Base)²¹
- TLQ__=Task Light 120v MR16 wired to Hot Restrike Relay (GU10 Twist Lock Base)²²
- 2TLQ__=(2) Task Lights 120v MR16 wired to Hot Restrike Relay (GU10 Twist Lock Base)²²
- TLEM__=Task Light, 120v MR16 wired to Time Delay Relay (GU10 Twist Lock Base)²²
- 2TLEM__=(2) Task Lights, 120v MR16 wired to Time Delay Relay (GU10 Twist Lock Base)²²
- TL12V__=Task Light, 12v MR16 (GU5.3 Bi-Pin Base)²³
- 2TL12V__=(2) Task Lights, 12v MR16 (GU5.3 Bi-Pin Base)²³
- TL__MR__=Task light with transformer (GU5.3 Bi-Pin Base, specify 50 or 75w lamp, specify 120 or 277v transformer)²⁴



TRUNNION-MOUNT (TMB)

WALL MOUNT (WM)

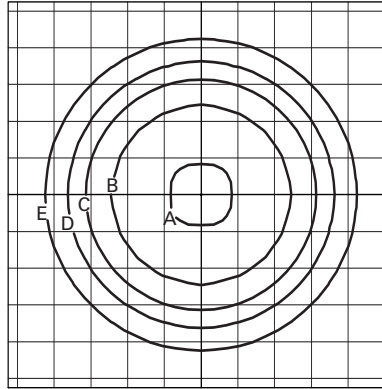
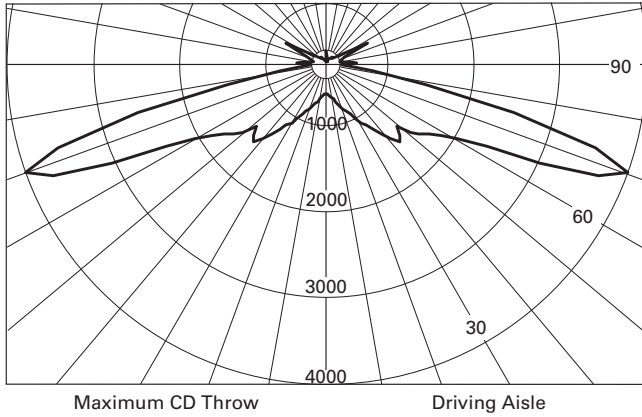
PENDANT BOX/BIRD GUARD (PBG)

NOTES: 1 Metal Halide lamps with probe start circuit. 2 Pulse Start Metal Halide circuit includes igniter. 3 HID lamps only. 4 Must specify voltage. EB standard on CF. Available integrally in HID 100w MP (max) and 85w QL. HID availability may vary by lamp source, wattage and voltage. For HID wattages higher than 100w, remote mount ballast possible within 5 feet of unit. Consult customer service. 5 Product also available in non-US voltages and 50Hz for international markets. Must specify voltages for battery packs. Consult your customer service representative for availability and ordering information. 6 Dual tap ballast is 120/277V wired 277V. Multi-tap ballast is 120/208/240/277V wired 277V. Triple tap ballast is 120/277/347 wired 347V. 7 Add as suffix in order shown. 8 Requires option PL for use in 40°C application with HID lamps 175-200w. 9 CT option required for through branch wiring. Through branch wiring is not available with specific configurations including HID CF egress options and fixtures with integral battery pack. 10 Not available with 85w QL and options using CF lamp sources. Requires option PH on 200-175w HID. 11 Available in 150-200w MP, 175w MH and 70-150w HPS. Operates on 24VDC type output control module. Circuit relay board is mounted internal to fixture housing with leads exiting back. Requires low voltage wires to control module to be routed in conduit. 12 For use with HID primary lamp only. Quartz lamp 100w maximum. 13 For use with 175w (max) or less HID primary lamp only. Uses (2) 4 pin CF lamps. CF minimum starting temperature 0°F (-18°C). Remote battery option requires "CT" option. 14 For use with 150w (max) or less HID primary lamp only. Uses (2) 18w 4 pin CF lamps. Battery rated minimum 32°F/0°C. Specify 120 or 277v in "VOLTAGE" column. 15 For use with 168, 126, 84 CF units only. Requires option "CT". Battery supplied by others. Standby lamp combination wired by others. 16 For use with 168, 126, 84 CF units only. Battery rated minimum 32°F/0°C. Specify 120 or 277v in "VOLTAGE" column. 17 For use with 168, 126, 84 CF units only. Battery rated minimum -4°F/-20°C. Specify 120 or 277v in "VOLTAGE" column. 18 For use with 126 CF only. 19 For use with 126 CF only. 20 For use with 84, 114, or 140 CF only. 21 Task Light(s) with separate leads through back of fixture. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 22 For use with HID lamps only. Task Light(s) supplied wired to relay. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 23 Task Light(s) supplied with separate leads through back of fixture for connection to 12v circuit or battery system. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 24 Task Light max quantity (1), supplied with transformer. Specify TL location by adding to back of option logic (ex.2TLA1A2)-see diagram. Some assembly required, order lamps separately. 25 Order separately, replace XX with color suffix 26 Luminaires require option (WL), 24" Lead Wires. 27 Order additional shield set for more coverage (ex. 2 sets for 180° shielding) Maximum of 2 sets total. 28 Placed towards side of oncoming traffic for 60° shielding coverage. Order (2) for 2-Way traffic lanes. 29 Some options and accessories are not available in all configurations. Consult your customer service representative for ordering information.

NOTE: Specifications and dimensions subject to change without notice.



Test #: EPL-175-MH-RD / 175-Watt Metal Halide / 14,000-Lumen Clear Lamp

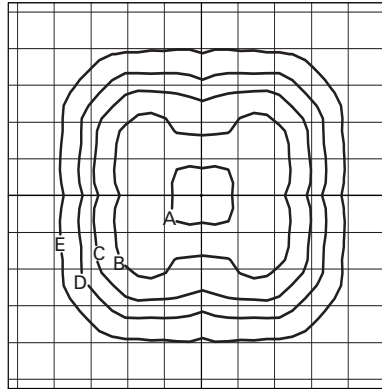
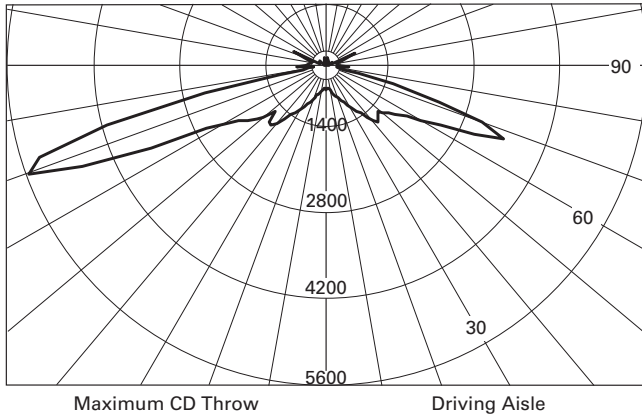


Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

Test #: EPL-175-MH-SQ / 175-Watt Metal Halide / 14,000-Lumen Clear Lamp

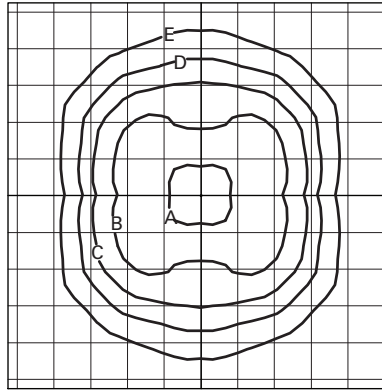
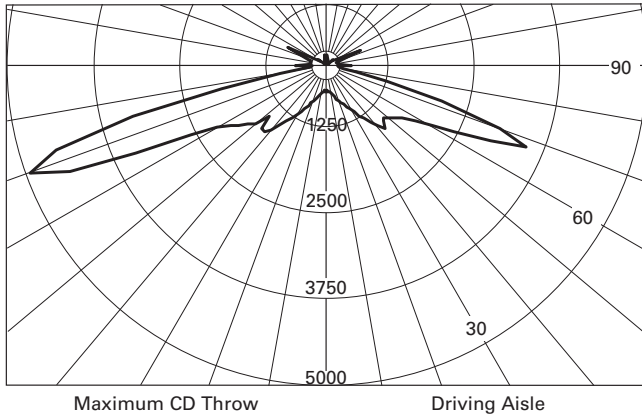


Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

Test #: EPL-175-MH-TG / 175-Watt Metal Halide / 14,000-Lumen Clear Lamp



Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	5.0	2.0	1.0	0.5	0.2
9'	6.2	2.5	1.2	0.6	0.2
8'	7.8	3.1	1.6	0.8	0.3

[60' Wide Bays, 8.5' LC mounting height] [175W Metal Halide, 14,000 lumens] [Reflectance: 20% Floor, 0% Walls, 20% Ceiling]

Fixture type	Layout	Spacing	Horizontal		Vertical	
			Ave. fc	Min.fc	Max./Min.	Min.fc @ 5'
	EPL-175-MH-RD Single Row	18' down driving lane / centered across driving lane	5.89	0.91	12.77	0.68
	EPL-175-MH-RD Double Row	36' down driving lane / 26' centered across driving lane	5.4	0.95	8.92	0.97
	EPL-175-MH-SQ Single Row	18' down driving lane / centered across driving lane	5.94	1.16	10.09	0.68
	EPL-175-MH-SQ Double Row	36' down driving lane / 26' centered across driving lane	5.45	1.37	7.16	1.15
	EPL-175-MH-TG Single Row	18' down driving lane / centered across driving lane	5.96	1.11	10.48	0.78
	EPL-175-MH-TG Double Row	36' down driving lane / 26' centered across driving lane	5.47	1.19	7.48	1.11

*Values are based on entire garage

EGRESS OPTIONS INFORMATION



Quartz Restrike

Utilizing a T4 double contact bayonet base (DCB), options (Q and EM) utilize a relay device to sense power supply conditions and extinguish the standby lamp when power is restored. Option (EM/SC) features the same lamp with no relay device, and is designed to connect directly to a backup power source via a separate circuit.



Compact Fluorescent

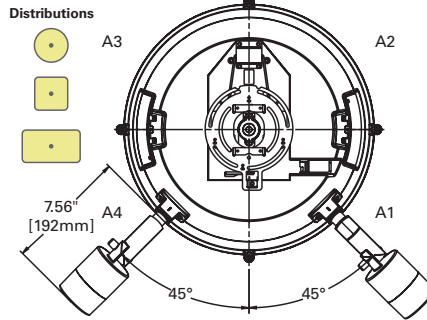
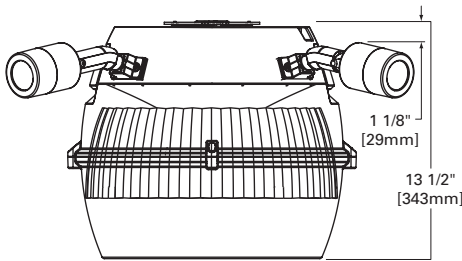
Compact fluorescent technology offers equivalent circuit options to quartz lamps. When using HID as the primary lamp, various compact fluorescent wattage options are available using two (2) CF lamps in standby mode. Integral and remote mounted battery pack options are available in multiple wattages when either HID or compact fluorescent lamps are used as the primary source.



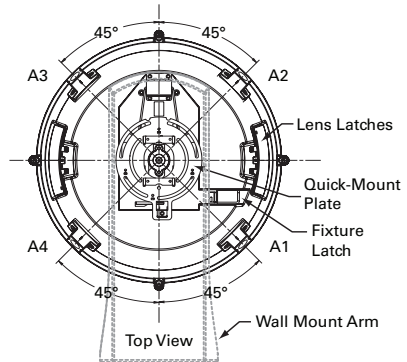
Task Light (TL) MR16

Using the MR16 lamp source, this option can be used as a primary means to light signage and retail entrances or as a standby means to illuminate pathways and stairwells in the event of power interruptions and outages. Task Light features a lamp head that can be rotated in both vertical and horizontal planes. 120V MR16 lamps can be used with restrike relays or can be placed on separate circuits to provide light while HID lamps are in restrike mode. 12V MR16 lamps can be used with remote mounted battery packs for power outage applications. Task Light is also available with a dedicated transformer contained within the Envoy housing that will operate 50 and 75W MR16 12V lamps. Envoy is available with up to four (4) task lights. Quantity of Task Lights and circuit options available is dependant upon primary lamp source and fixture options. Refer to ordering information for specific requirements.

TASK LIGHT [TL] DIMENSIONS



TASK LIGHT MOUNTING DIAGRAM



STANDBY / EGRESS OPTIONS (SUMMARY)

Primary Lamp	Option	Egress Lamp(s)	Description/Circuit Application
70-200w HID	Q	100w T4 Quartz DCB	Quartz Restrike, operates through relay and HID ballast within fixture
70-200w HID	EM	100w T4 Quartz DCB	Quartz Time Delay, operates through relay and HID ballast within fixture
70-200w HID	EM/SC	100w T4 Quartz DCB	Emergency Separate Circuit, operates through connection to separate circuit
70-175w HID	CFSC	(2) 26-(2) 42w CFL 4PIN	Separate Circuit, operates through connection to separate circuit
70-175w HID	CFHR	(2) 26-(2) 42w CFL 4PIN	CF Hot Restrike Relay, operates through relay, CF ballast and HID ballast
70-175w HID	CFTR	(2) 26-(2) 42w CFL 4PIN	CF Time Delay Relay, operates through relay, CF ballast and HID ballast
70-175w HID	CFRB 1	(2) 26-(2) 42w CFL 4PIN	CF Remote Battery Pack, operates through remote mounted CF battery pack
70-150w HID	36CFIB	(2) 18w CFL 4PIN	CF Integral Battery Pack, operates through integrally mounted CF battery pack
70-175w HID	CFRBT 1	(2) 26-(2) 42w CFL 4PIN	CF Remote Battery Pack w/Time Delay Relay, remote mounted CF battery pack/integral relay
70-150w HID	36CFIBT	(2) 18w CFL 4PIN	CF Integral Battery Pack w/Time Delay Relay, integrally mounted CF battery pack/relay
84, 126 or 168w CF	RBP 1	42w CFL 4PIN	CF Remote Battery Pack, operates through remote mounted CF battery pack
84, 126 or 168w CF	42IBP	42w CFL 4PIN	Integral Battery Pack, operates through integrally mounted CF battery pack
84, 126 or 168w CF	42ICB	42w CFL 4PIN	Integral Cold Weather Battery Pack, operates through integrally mounted CF battery pack
168w CF	4CF3	42w CFL 4PIN	4 CF lamps wired as 3 independent circuits, operates through connection to separate circuit
168w CF	4CF2	42w CFL 4PIN	4 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
126w CF	3CF2	42w CFL 4PIN	3 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
84, 114 or 170w CF	2CF2	42, 57 or 70w CFL 4PIN	2 CF lamps wired as 2 independent circuits, operates through connection to separate circuit
70-200w HID/84-168w CF/85 QL	TL	50w MR16 120v, GU10 Base	Task Light, operates through connection to separate circuit
70-200w HID/84-168w CF/85 QL	2TL	(2) 50w MR16 120v, GU10 Base	Task Light, operates through connection to separate circuit
70-200w HID	TLQ	50w MR16 120v, GU10 Base	Task Light Restrike, operates through relay and HID ballast within fixture
70-200w HID	2TLQ	(2) 50w MR16 120v, GU10 Base	Task Light Restrike, operates through relay and HID ballast within fixture
70-200w HID	TLEM	50w MR16 120v, GU10 Base	Task Light Time Delay, operates through relay and HID ballast within fixture
70-200w HID	2TLEM	(2) 50w MR16 120v, GU10 Base	Task Light Time Delay, operates through relay and HID ballast within fixture
70-200w HID/84-168w CF/85 QL	TL12V	35-50w MR16 12v, GU5.3 Base	Task Light, operates through connection to 12v separate circuit
70-200w HID/84-168w CF/85 QL	2TL12V	(2) 35-50w MR16 12v, GU5.3 Base	Task Light, operates through connection to 12v separate circuit
70-200w HID/84-168w CF/85 QL	TL_MR	50 or 75w MR16 12, GU5.3 Base	Task Light, operates through integral dedicated magnetic transformer