LUMARK

Indoor/Outdoor
Product Catalog

Industrial
Commercial
Floodlighting
Wall Mount
Outdoor Area / Site
Motion Activated
Worklights

ENERGY INDEPENDENCE
& SECURITY ACT (EISA)
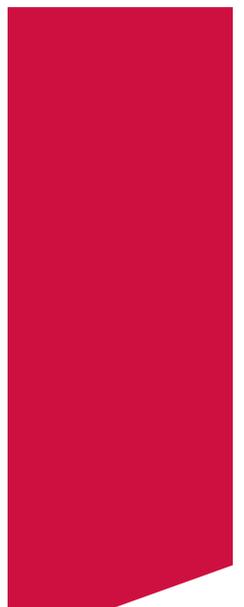
COOPER Lighting

COOPER LIGHTING
LUMARK®

LUMARK combines craftsmanship and affordability in its full line of commercial and industrial high intensity discharge (HID) and compact fluorescent lighting products.

HID lighting applications often involve tasks, environments and surfaces of varying and demanding degrees.

LUMARK has the experience and product line to properly illuminate such complex applications; providing superior lighting for supermarkets, factories, warehouses and other industrial and commercial applications.

From industrial products to flood, motion activated, worklights and area lighting, Lumark answers difficult illumination problems with a wide range of quality products and superior technical support.

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Federal Energy Independence & Security Act (EISA)
Benefits of Pulse Start Metal Halide

The Federal Energy Independence & Security Act (EISA) signed into law in late 2007 states that all 150W – 500W metal halide lamp luminaires manufactured on or after January 1, 2009, must meet the following ballast efficiency ratings:

- 88% for magnetic or electronic pulse start ballasts
- 94% for magnetic probe-start ballasts
- 90% for electronic non-pulse start ballasts of 250W or less
- 92% for electronic non-pulse start ballasts greater than 250W

ENERGY INDEPENDENCE & SECURITY ACT (EISA)

In addition to improved operating efficiency, there are several benefits to pulse start metal halide technology including:

More Lumens Per Watt:
Pulse start metal halide systems improve lamp efficacy (lumens per watt) by up to 45%, resulting in more useable light per watt consumed.


25-45% Improvement in Lumens Per Watt
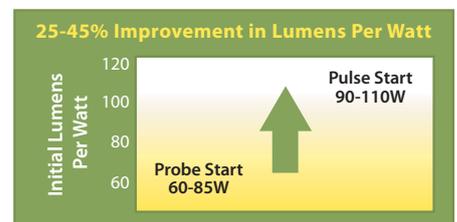
Longer Life:
Pulse start lamps offer substantially higher life ratings—up to 20,000-30,000 hours, or an improvement of up to 50%.

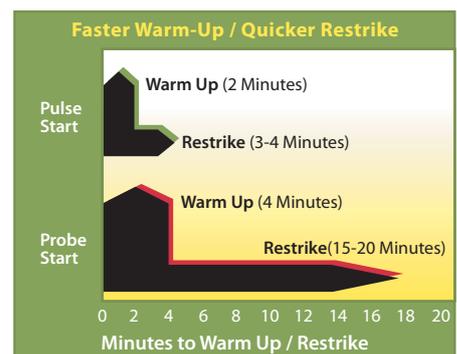| Probe vs. Pulse Start Metal Halide Benefits		
Features	**Probe MH**	**Pulse MH**
Color	White	Brighter White
Efficacy (Lumens per Watt)	60-85	90-110
Lumen Maintenance	65%	70-75%
Lamp Wattages	175-1000	35-1000
Lamp Life (kHrs)	6-16	6-30

Better Lumen Maintenance:
With a lumen maintenance rating of up to 75%, pulse start lamps reduce light loss over life by up to 15% when compared to probe start metal halide lamps. Fewer watts per square foot are required to illuminate an area as a result of consistently higher light levels throughout lamp life.

Increased Lumen Maintenance
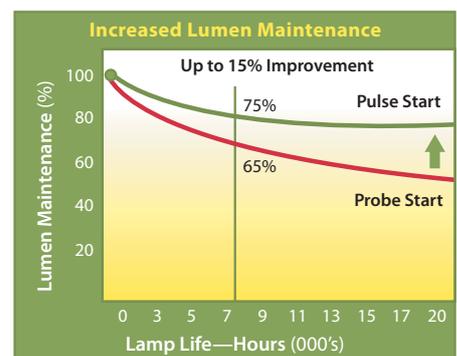
Faster Warm-Up / Quicker Restrike:
Warm up time is cut in half to 2 minutes for pulse start systems versus 15-20 minutes for probe start metal halide. Restrike times after an outage are reduced to 3 to 4 minutes for pulse start lamps.

Faster Warm-Up / Quicker Restrike

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| COMMERCIAL

QC Quadra-Mark
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QP Quadra-Lume
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QF Quadra-Lume
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QD Quadra-Lume
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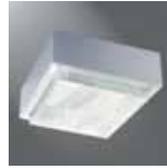
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CL/CS Canopy
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| FLOODLIGHTING

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LP Low-Profile
Floodlight
p.61

XL Eagle
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OPTIONS +
ACCESSORIES
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COOPER LIGHTING - LUMARK

| WALL MOUNT

COOPER LIGHTING - LUMARK

COOPER LIGHTING - LUMARK

AII
AVID MINI

20-39W
Pulse Start Metal Halide

7-13W
Compact Fluorescent

25W
Incandescent

DECORATIVE HIGH-BAY LUMINAIRE

- Cast aluminum top can be specified for pendant or suspension mounting

- Pendant mounting comes with 3/8" pipe with internal locking screw

- Suspension mounting has two (2) stainless steel suspension cables with quick adjustment enabling the luminaire to be quickly leveled

- Integral ballast housing consists of heat dissipating aluminum finned construction

- Cast aluminum midsection is designed to dissipate the heat energy away from the lamp compartment separating the optical cavity from the integral ballast housing assuring a cool operation

- Optical construction is designed to remain flexible providing multiple distributions and optical types

- Approximate net weight: 8 lbs. (3.6 kgs.)

DESCRIPTION

AVID Series delivers a scalable aesthetically pleasing family of luminaires that combines the needs of lighting designers, architects, and building owners of architectural form providing great lighting performance in interior spaces. This rugged luminaire design considers multiple mounting configurations integrating a vast array of lamp sources and ballast technologies allowing specifications to combine one style for many interior application needs.

DIMENSIONS

INTEGRAL MOUNT

36"*
[279mm]

3 3/4"
[95mm]

6 7/8"
[176mm]

11"
[279mm]

9/16"
[15mm]

8 1/16" [205mm]

NOTE: * See accessories for ordering information for pendant kit. Pendant kit dimension based on distance from mounting plane to the bottom of the fixture.

ORDERING INFORMATION

SAMPLE NUMBER: AII-39-MH-120-G7-N-I-SC-GM

Product Family
AII=Avid Series Mini [1]

Lamp Wattage
HID [2]
20=20WT4.5 G8.5
39=20WT4.5 G8.5
Compact Fluorescent
7=7W
13=13W
Incandescent
25=25

Lamp Type
MP=Pulse Start Metal Halide
CF=Compact Fluorescent
IN=Incandescent

Voltage
120=120V
X=Incandescent

Optical System
Borosilicate Glass
G7=7" Glass Refractor
SG7=7" Shroud w/Glass Refractor
Aluminum
A7=7" Performance Reflector [3]
S7=7" Shroud

Distribution [4]
N=Narrow
W=Wide
X=Fixed Position [5]

Ballast Housing
I=Integral

Mounting Options
Pendant [6]
P=Pendant Mount [7]
Cable
SC=Cable Mount w/ Straight Power Cord (Standard Length 120") [8]
CC=Cable Mount w/ Coiled Power Cord (Standard Length 4'-10') [8]

Finish
BK=Black
AP=Grey
BZ=Bronze
WH=White
DP=Dark Platinum
GM=Graphite Metallic

Options
F1=Single Fuse
LL=Lamp Included
FGS=Frosted Glass Lens
CGL=Clear Glass Lens
DFR=Decorative Frosted Ring

Accessories
AII-I-PXX-XX=Mini Pendant Kit for Integral Ballast Housing [9]

NOTES: 1 Avid Series Mini "AII" is 120V only. **2** Must specify FGS or CGL. **3** Shroud comes standard with Performance Reflector. **4** Mini available only in Narrow and Wide distributions. **5** Specify X for lamp type CF. **6** Pendant dimensions refer to the distance from the mounting plane to the bottom of the fixture. **7** Must order pendant kit separately, see accessories for ordering information. **8** Specify W for white cord, example: SCW. **9** Specify distance from mounting plane to the bottom of the fixture and finish. (Example: AII-I-P24-GM). **10** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	20, 39W
Compact Fluorescent (CF)	7, 13W
Incandescent (IN)	25W

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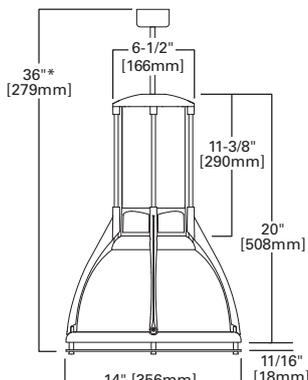
DIMENSIONS

INTEGRAL MOUNT

6-1/2"
[166mm]

36"*
[279mm]

11-3/8"
[290mm]

20"
[508mm]

14" [356mm]

11/16"
[18mm]

NOTE: * See accessories for ordering information for pendant kit. Pendant kit dimension based on distance from mounting plane to the bottom of the fixture.

DESCRIPTION

AVID Series delivers a scalable aesthetically pleasing family of luminaires that combines the needs of lighting designers, architects, and building owners of architectural form providing great lighting performance in interior spaces. This rugged luminaire design considers multiple mounting configurations integrating a vast array of lamp sources and ballast technologies allowing specifications to combine one style for many interior application needs.

AIS
AVID SMALL

39-100W
Pulse Start Metal Halide

26-84W
Compact Fluorescent

250W
Quartz Halogen

200W
Incandescent
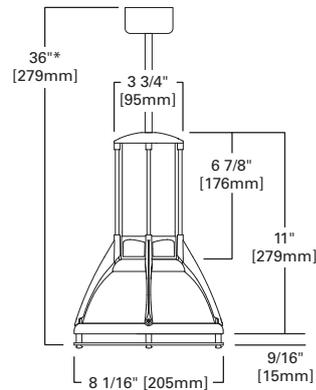
DECORATIVE HIGH-BAY LUMINAIRE

- Cast aluminum top can be specified for pendant or suspension mounting

- Pendant mounting comes with 1/2" pipe with internal locking screw

- Suspension mounting has two (2) stainless steel suspension cables with quick adjustment enabling the luminaire to be quickly leveled

- Integral ballast housing consists of heat dissipating aluminum finned construction

- Cast aluminum midsection is designed to dissipate the heat energy away from the lamp compartment separating the optical cavity from the integral ballast housing assuring a cool operation

- Optical construction is designed to remain flexible providing multiple distributions and optical types

- Approximate net weight: 28 lbs. (12.7 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: AIS-100-MH-120-A12-M-I-SC-GM

Product Family
AIS=Avid Series Small

Lamp Wattage
HID
39=39W T6 G12
50=50W Medium-Base
70=70W Medium-Base
100=100W Medium-Base
Compact Fluorescent
X=Number of Lamps
X26=(1 or 2) 26W
X32=(1 or 2) 32W
X42=(1 or 2) 42W
Quartz Halogen [1]
250=250W
Incandescent [1]
200=200W

Lamp Type
MP=Pulse Start Metal Halide
CF=Compact Fluorescent
IN=Incandescent
QZ=Quartz Halogen

Voltage
120=120V
208=208V
240=240V
277=277V
UNV=120-277V

Optical System
Borosilicate Glass
G12=12" Glass Refractor
SG12=12" Shroud w/Glass Refractor
Aluminum
A12=12" Performance Reflector [2]
Acrylic
AC12=12" Clear Acrylic
SAC12=12" Shroud w/ Clear Acrylic

Distribution
N=Narrow
M=Medium
W=Wide
X=Fixed Position [3]

Ballast Housing
I=Integral

Mounting Options
Pendant [4]
P=Pendant Mount [5]
Cable
SC=Cable Mount w/ Straight Power Cord (Standard Length 120") [6]
CC=Cable Mount w/ Coiled Power Cord (Standard Length 4'-10') [6]

Finish
BK=Black
AP=Grey
BZ=Bronze
WH=White
DP=Dark Platinum
GM=Graphite Metallic

Options
F1=Single Fuse
F2=Double Fuse
LL=Lamp Included
FGS=Frosted Glass Lens
CGL=Clear Glass Lens
DFR=Decorative Frosted Ring
OR=Open Rated Socket

Accessories
AIS-I-PXX-XX=Small Pendant Kit for Integral Ballast Housing [7]

NOTES: 1 Cannot be used with AC12 Optic. **2** Shroud comes standard with Performance Reflector. **3** Specify X for lamp type CF. **4** Pendant dimension refers to the distance from the mounting plane to the bottom of the fixture. **5** Must order pendant kit separately, see accessories for ordering information. **6** Specify W for white cord, example: SCW. **7** Specify distance from mounting plane to the bottom of the fixture and finish (Example: AIS-I-P24-GM). **8** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	39, 50, 70, 100W
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42W
	(2) 26, (2) 32, (2) 42W
Quartz Halogen (QZ)	250W
Incandescent (IN)	200W

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AIM
AVID MEDIUM

150-250W
Pulse Start Metal Halide
Metal Halide

52-168W
Compact Fluorescent

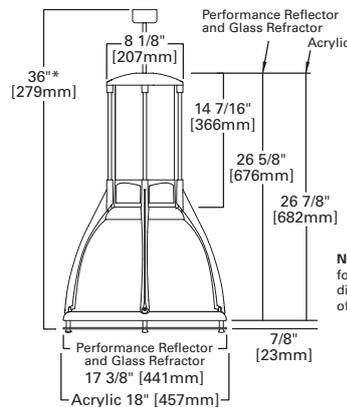**DECORATIVE HIGH-BAY LUMINAIRE**

- Cast aluminum top can be specified for pendant or suspension mounting

- Pendant mounting comes with 1/2" pipe with internal locking screw. Requires 4" octagonal J-box with fixture rating that exceeds 45 lbs

- Suspension mounting has two (2) stainless steel suspension cables with quick adjustment enabling the luminaire to be quickly leveled

- Integral ballast housing consists of heat dissipating aluminum finned construction

- Cast aluminum midsection is designed to dissipate the heat energy away from the lamp compartment separating the optical cavity from the integral ballast housing assuring a cool operation

- Field adjustable socket bracket has three settings concentrated, medium, and wide

- Optical construction is designed to remain flexible providing multiple distributions and optical types

- HPF ballast with class H insulation minimum starting temperature is -30°C (-20°F) for MH, and MP

- Approximate net weight: 45 lbs. (20.5 kgs.)

COOPER LIGHTING

DESCRIPTION

AVID Series delivers a scalable aesthetically pleasing family of luminaires that combines the needs of lighting designers, architects, and building owners of architectural form providing great lighting performance in interior spaces. This rugged luminaire design considers multiple mounting configurations integrating a vast array of lamp sources and ballast technologies allowing specifications to combine one style for many interior application needs.

DIMENSIONS

INTEGRAL MOUNT

Performance Reflector and Glass Refractor
Acrylic

8 1/8" [207mm]
36"* [279mm]
14 7/16" [366mm]
26 5/8" [676mm]
26 7/8" [682mm]

NOTE: *See accessories for ordering information for pendant kit. Pendant kit dimension based on distance from mounting plane to the bottom of the fixture.

Performance Reflector and Glass Refractor 17 3/8" [441mm]
Acrylic 18" [457mm]
7/8" [23mm]

ORDERING INFORMATION

SAMPLE NUMBER: AIM-175-MH-MT-A16-M-I-P-GM

Product Family
AIM=Avid Series Medium

Lamp Wattage
HID
150=150W Medium-Base
175=175W Mogul-Base
250=250W Mogul-Base
Compact Fluorescent
X=Number of Lamps
X26=(2 or 4) 26W
X32=(2 or 4) 32W
X42=(2 or 4) 42W

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
CF=Compact Fluorescent

Voltage
120=120V
208=208V
240=240V
277=277V
347=347V
480=480V

Optical System
Borosilicate Glass
G16=16" Glass Refractor
SG16=16" Shroud w/Glass Refractor
Aluminum
A16=16" Performance Reflector [1]
Acrylic
AC16=16" Clear Acrylic [2]

Distribution
N=Narrow
M=Medium
W=Wide
X=Fixed Position [3]

Ballast Housing
I=Integral

Mounting Options
Pendant [4]
P=Pendant Mount [5]
Cable
SC=Cable Mount w/ Straight Power Cord (Standard Length 120") [6]
CC=Cable Mount w/ Coiled Power Cord (Standard Length 4'-10') [6]

Finish
BK=Black
AP=Grey
BZ=Bronze
WH=White
DP=Dark Platinum
GM=Graphite Metallic

Options
Q=Quartz Restrike (Hot Strike Only) [7]
EM=Quartz Restrike w/ "Delay Relay" (Quartz lamp Strikes at both hot and cold starts) [7]
EM/SC=Emergency Separate Circuit [7]
F1=Single Fuse
F2=Double Fuse
LL=Lamp Included
OR=Open Rated Socket
FGS=Frosted Glass Lens [8]
CGL=Clear Glass Lens [8]
DFR=Decorative Frosted Ring

Accessories
AIM-I-PXX-XX=Medium Pendant Kit for Integral Ballast Housing [9]

NOTES: 1 Shroud comes standard with Performance Reflector. **2** Rated for 25°C ambient environments. **3** Specify X for lamp type CF. **4** Pendant dimension refers to the distance from the mounting plane to the bottom of the fixture. **5** Must order pendant kit separately, see accessories for ordering information. **6** Specify W for white cord, example: SCW. **7** Quartz lamp 150W max. **8** Lens not available with Acrylic option. **9** Specify distance from mounting plane to the bottom of the fixture and finish (Example: AII-I-P24-GM). **10** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 250W
Metal Halide (MH)	150, 175, 250W
Compact Fluorescent (CF)	(2) 26, (2) 32, (2) 42W
	(4) 26, (4) 32, (4) 42W

Ⓔ COOPER LIGHTING - LUMARK
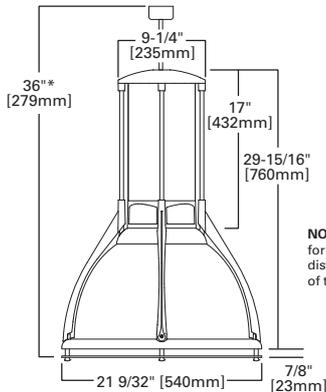
DIMENSIONS

INTEGRAL MOUNT

9-1/4" [235mm]

36"* [279mm]

17" [432mm]

29-15/16" [760mm]

21 9/32" [540mm]

7/8" [23mm]

NOTE: * See accessories for ordering information for pendant kit. Pendant kit dimension based on distance from mounting plane to the bottom of the fixture.

DESCRIPTION

AVID Series delivers a scalable aesthetically pleasing family of luminaires that combines the needs of lighting designers, architects, and building owners of architectural form providing great lighting performance in interior spaces. This rugged luminaire design considers multiple mounting configurations integrating a vast array of lamp sources and ballast technologies allowing specifications to combine one style for many interior application needs.

AIL
AVID LARGE

250-400W
Pulse Start Metal Halide
Metal Halide

104-252W
Compact Fluorescent

DECORATIVE HIGH-BAY LUMINAIRE

- Cast aluminum top can be specified for pendant or suspension mounting

- Pendant mounting comes with 1/2" pipe with internal locking screw. Requires 4" octagonal J-box with fixture rating that exceeds 60 lbs

- Suspension mouting has two (2) stainless steel suspension cables with quick adjustment enabling the luminaire to be quickly leveled

- Integral ballast housing consists of heat dissipating aluminum finned construction

- Cast aluminum midsection is designed to dissipate the heat energy away from the lamp compartment separating the optical cavity from the integral ballast housing assuring a cool operation

- Field adjustable socket bracket has three settings concentrated, medium, and wide

- Optical construction is designed to remain flexible providing multiple distributions and optical types

- HPF ballast with class H insulation minimum starting temperature is -30°C (-20°F) for MH, and MP

- Approximate net weight: 30 lbs. (29.5 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: AIL-400-MH-MT-G19-M-I-P-GM

Product Family
AIL=Avid Series Large

Lamp Wattage
HID
250=250W Mogul-Base
320=320W Mogul-Base
350=350W Mogul-Base
400=400W Mogul-Base
Compact Fluorescent
X=Number of Lamps
X26=(4 or 6) 26W
X32=(4 or 6) 32W
X42=(4 or 6) 42W

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
CF=Compact Fluorescent

Voltage
120=120V
208=208V
240=240V
277=277V
347=347V
480=480V

Optical System
Borosilicate Glass
G19=19" Glass Refractor
SG19=19" Shroud w/Glass Refractor
Aluminum
A19=19" Performance Reflector [1]

Distribution
N=Narrow
M=Medium
W=Wide
X=Fixed Position [2]

Ballast Housing
I=Integral

Mounting Options
Pendant [3]
P=Pendant Mount [4]
Cable
SC=Cable Mount w/ Straight Power Cord (Standard Length 120") [5]
CC=Cable Mount w/ Coiled Power Cord (Standard Length 4'-10') [5]

Finish
BK=Black
AP=Grey
BZ=Bronze
WH=White
DP=Dark Platinum
GM=Graphite Metallic

Options
Q=Quartz Restrike (Hot Strike Only) [6]
EM=Quartz Restrike w/ "Delay Relay" (Quartz lamp Strikes at both hot and cold starts) [6]
EM/SC=Emergency Separate Circuit [6]
F1=Single Fuse
F2=Double Fuse
LL=Lamp Included
OR=Open Rated Socket
FGS=Frosted Glass Lens [7]
CGL=Clear Glass Lens [7]
DFR=Decorative Frosted Ring

Accessories
AIL-I-PXX-XX=Large Pendant Kit for Integral Ballast Housing [8]

NOTES: 1 Shroud comes standard with Performance Reflector. **2** Specify X for lamp type CF. **3** Pendant dimension refers to the distance from the mounting plane to the bottom of the fixture. **4** Must order pendant kit separately, see accessories for ordering information. **5** Specify W for white cord, example: SCW. **6** Quartz lamp 150W max. **7** Lens not available with Acrylic option. **8** Specify distance from mounting plane to the bottom of the fixture and finish (Example: AIL-I-P24-GM). **9** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	250, 320, 350, 400W
Metal Halide (MH)	250, 400W
Compact Fluorescent (CF)	(4) 26, (4) 32, (4) 42W
	(6) 26, (6) 32, (6) 42W

(E) COOPER LIGHTING - LUMARK

DESCRIPTION

The Steeler combines computerized design, durable cold-rolled steel and a field-adjustable reflector to provide a degree of versatility unmatched in other industrials. U.L. listed and labeled for damp location. CSA Certified.

The Steeler is perfect for high-bay applications such as gymnasiums, hangars, manufacturing, assembly and auto service areas.

DIMENSIONS

Maximum Height is
15"=24 1/8" [613mm]
18"=26 7/8" [683mm]
23"=31 3/4" [806mm]
See ordering information for details

15" [381mm]
18" [487mm]
23" [584mm]

SS
15", 18" & 23" STEELER

70-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

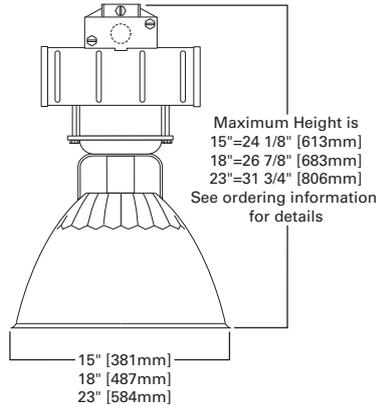**HIGH-BAY INDUSTRIAL LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40° F) for HP and -30°C (-20° F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass

- Mogul-base porcelain socket. 150W and below is medium-base

- Computer-designed, field-adjustable reflector mounts easily and allows multiple distribution patterns for precise control

- Approximate net weight: 30-37 lbs. (13-17 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPSS-SA18-M-150-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SS**=Steeler	**SA**=Anodized Spun Aluminum	**15**=15"	**C**=Concentrated	**MP**	**MH**	**120**V	(See Pages 42-46)
MH=Metal Halide [1]			**18**=18"	**M**=Medium	**70**=70W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]			**23**=23"	**W**=Wide	**100**=100W	**250**=250W	**240**V	
HP=High Pressure Sodium					**175**=175W	**400**=400W	**277**V	
					200=200W	**1000**=1000W	**347**V	
					250=250W	**HP**	**480**V	
					320=320W	**70**=70W	**MT**=Multi-Tap wired 277V	
					350=350W	**100**=100W	**TT**=Triple-Tap wired 347V	
					400=400W	**150**=150W	**5T**=5-Tap [5]	
					450=450W	**250**=250W		
					750=750W	**400**=400W		
					1000=1000W	**600**=600W		
						750=750W		

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER: MPSS40

Lamp Type	Series	Lamp Wattage	Option
MP=Pulse Start Metal Halide (CWA)	**SS**=Steeler	**25**=250W	**5T**=5-Tap Ballast [1]
MH=Metal Halide		**32**=320W	**OR**=Open Rated
HP=High Pressure Sodium		**35**=350W	
		40=400W	
		40Q=400W and Quartz Restrike	
		408=400W (Canada, Triple-Tap Ballast)	

NOTES: 1 88% EISA complaint MP fixtures not available in 5-tap voltages. Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
SA15	70-450W	**55°C** (450W + Up)	**90°C**
SA18	70-450W	**65°C** (70-400W)	
SA23	400-1000W		

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	70, 100, 150, 250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

Maximum Height is
15"=27 11/16" [703mm]
18"=29 3/16" [741mm]
23"=32 13/16" [833mm]
See ordering information
for details

15" [381mm]
18" [457mm]
23" [584mm]
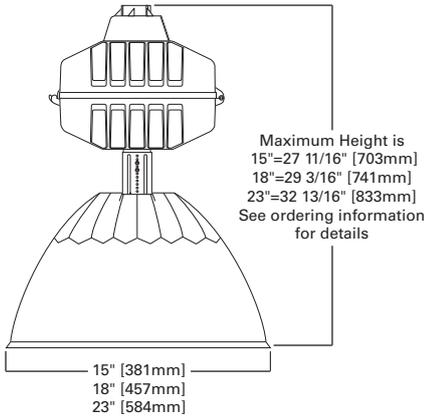
DESCRIPTION

The Benchmark HB utilizes a durable heavy-duty die-cast aluminum ballast housing and computer aided designed reflector system for specification-level performance at higher mounting heights. U.L. listed and CSA certified. Damp location standard.

The Benchmark HB is perfect for high-bay applications such as gymnasiums, hangars, manufacturing, assembly and auto service areas.

HB
HIGH-BAY BENCHMARK

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM
HIGH-BAY HEAVY-DUTY
INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40° F) for HP and -30°C (-20° F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass

- Mogul-base porcelain socket

- Approximate net weight: 35 lbs. (15 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPHB-SA18-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**HB**=High-Bay Benchmark	**SA**=Anodized Spun Aluminum	**15**=15"	**C**=Concentrated	**MP**	**MH**	**120**V	(See Pages 42-46)
MH=Metal Halide [1]			**18**=18"	**M**=Medium	**175**=175W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]			**23**=23"	**W**=Wide	**200**=200W	**250**=250W	**240**V	
					250=250W	**400**=400W	**277**V	
HP=High Pressure Sodium					**320**=320W	**1000**=1000W	**347**V	
					350=350W	**HP**	**480**V	
					400=400W	**250**=250W	**MT**=Multi-Tap wired 277V	
					450=450W	**400**=400W		
					750=750W	**600**=600W	**TT**=Triple-Tap wired 347V	
					1000=1000W	**750**=750W	**5T**=5-Tap [5]	

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** Not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
SA15	175-450W		
SA18	175-450W	**55°C** (450W + Up) **65°C** (175-400W)	**105°C**
SA23	400-1000W		

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

SE
18" & 23"
E&G STEELER

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

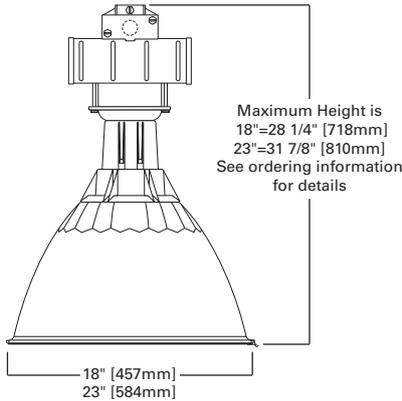**ENCLOSED & GASKETED
HIGH-BAY INDUSTRIAL
LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Clear tempered glass lens in an extruded aluminum door frame with stainless steel latches allows access for relamping without tools

- Mogul-base porcelain socket

- Approximate net weight: 38-50 lbs. (17-23 kgs.)

DESCRIPTION

The E & G Steeler utilizes the SA18 and SA23 reflector system for maximum performance. It features a die-cast aluminum neck for superior strength and an extruded aluminum hinged and latched door frame for access to the lamp without tools. The E & G is fully enclosed and gasketed at three (3) separate points to prevent entry of external contaminants. U.L. listed and labeled for damp location. CSA Certified.

The E & G Steeler is perfect for textile mills, gymnasiums, hangars, assembly and auto service areas.

DIMENSIONS

Maximum Height is
18"=28 1/4" [718mm]
23"=31 7/8" [810mm]
See ordering information
for details

18" [457mm]
23" [584mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPSE-ENSA18-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SE**=E&G Steeler	**ENSA**=Enclosed & Gasketed Spun Aluminum	**18**=18" **23**=23"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W **750**=750W **1000**=1000W	**MH** **175**=175W **250**=250W **400**=400W **1000**=1000W **HP** **250**=250W **400**=400W **600**=600W **750**=750W	**120**V **208**V **240**V **277**V **347**V **480**V **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1] **ML**=Pulse Start Metal Halide (Linear Reactor) [1, 2] **HP**=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENSA18	175-400W	**55°C** (450W + Up)	**90°C**
ENSA23	400-1000W	**65°C** (175-400W)	

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

DIMENSIONS

Maximum Height is
18"=29 7/16 [748mm]
23"=31 7/8 [810mm]
See ordering information
for details

18" [457mm]
23" [584mm]

(E) COOPER LIGHTING - LUMARK

DESCRIPTION

The Benchmark EB utilizes a durable heavy-duty die-cast aluminum ballast housing and the SA18 and SA23 reflector system for maximum performance. It features a die-cast aluminum neck for superior strength and an extruded aluminum door frame with stainless steel latches for access to the lamp without tools. The EB is fully enclosed and gasketed at three (3) separate points to prevent entry of external contaminants. U.L. listed and CSA certified for damp locations standard. Wet location optional.

The Benchmark EB is perfect for textile mills, gymnasiums, hangars, assembly and auto service areas.

EB
18" & 23"
E&G
BENCHMARK

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**DIE-CAST ALUMINUM
ENCLOSED & GASKETED
HIGH-BAY HEAVY-DUTY
LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Clear tempered glass lens in an extruded aluminum door frame with stainless steel latches allows access for relamping without tools

- Approximate net weight: 34-47 lbs. (15-21 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPEB-ENSA18-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**EB**=E&G Benchmark	**ENSA**=Enclosed & Gasketed Spun Aluminum	**18**=18"	**C**=Concentrated	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]			**23**=23"	**M**=Medium	**175**=175W	**175**=175W	**208V**	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]				**W**=Wide	**200**=200W	**250**=250W	**240V**	
HP=High Pressure Sodium					**250**=250W	**400**=400W	**277V**	
					320=320W	**1000**=1000W	**347V**	
					350=350W	**HP**	**480V**	
					400=400W	**250**=250W	**MT**=Multi-Tap wired 277V	
					450=450W	**400**=400W	**TT**=Triple-Tap wired 347V	
					750=750W	**600**=600W	**5T**=5-Tap [5]	
					1000=1000W	**750**=750W		

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.
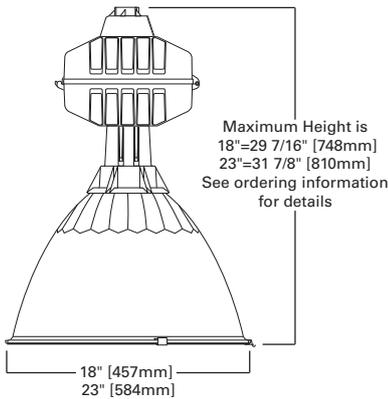
Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENSA18	175-400W	**55°C** (450W + Up)	**105°C**
ENSA23	400-1000W	**65°C** (175-400W)	

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

COOPER LIGHTING

(E) COOPER LIGHTING - LUMARK

UB
BENCHMARK
UPLIGHT

175-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

HEAVY-DUTY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Cast aluminum neck with heat- and impact-resistant glass lenses creates uplight that helps illuminate high-ceiling spaces

- Clear tempered glass lens in an extruded aluminum door frame with stainless steel latches allows access for relamping without tools

- Mogul-base porcelain socket

- Approximate net weight: 47 lbs. (21 kgs.)

DESCRIPTION

The Benchmark UB utilizes a durable heavy-duty die-cast aluminum ballast housing and the SA18 reflector system for maximum performance.
It features a cast aluminum neck for superior strength and a hinged and latched extruded aluminum door frame for access to the lamp without tools U.L. listed for and CSA certified damp location standard.

The Benchmark UB is perfect for retail stores, gymnasiums, hangars, assembly and auto service areas.

DIMENSIONS

28" 15/16" [734mm]

18" [457mm]
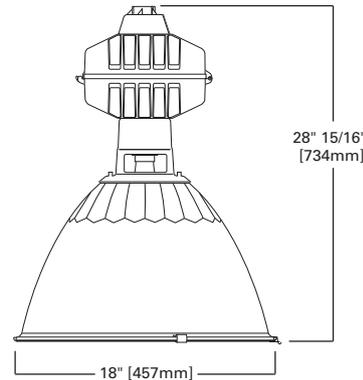
ORDERING INFORMATION

SAMPLE NUMBER: HPUB-ENSA18-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**UB**=Benchmark Uplight	**ENSA**=Enclosed & Gasketed Spun Aluminum	**18**=18"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W	**MH** **175**=175W **250**=250W **400**=400W **HP** **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENSA18	175-400W	**65°C** (175-400W)	105°C

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

250W HPS & MP, MH
400W HPS
24" [610mm]
400W MP & MH
26 1/8" [664mm]

— 18" [457mm] —

DESCRIPTION

The Econoliter utilizes the SA18 reflector system. Anodized reflector baffles combine with the SA18 reflector to kick light into the desired distribution for narrow aisle environments. U.L. listed and labeled for damp location. CSA Certified.

Econoliter provides optimum visual conditions in warehouses by redirecting light to achieve high vertical lighting levels on stacks and maximum horizontal footcandles in the aisles.

SS
ECONOLITER

175-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

AISLE LIGHT INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Mogul-base porcelain socket

- Computer designed, faceted SA18 reflector and anodized baffles provide maximum photometric performance and beam efficiency

- Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass

- Approximate net weight: 30 lbs. (14 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPSS-EL18-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution[3]	Lamp Wattage		Voltage[4]	Options & Accessories
MP=Pulse Start Metal Halide[1]	**SS**=Steeler	**EL**=Econoliter	**18**=18"	**C**=Concentrated **M**=Medium **W**=Wide	**MP**	**MH**	**120V** **208**V **240V** **277V** **347V** **480V**	(See Pages 42-46)
MH=Metal Halide[1]					**175**=175W	**175**=175W		
ML=Pulse Start Metal Halide (Linear Reactor)[1, 2]					**200**=200W **250**=250W	**250**=250W **400**=400W	**MT**=Multi-Tap wired 277V	
HP=High Pressure Sodium					**320**=320W **350**=350W **400**=400W **450**=450W	**HP** **250**=250W **400**=400W	**TT**=Triple-Tap wired 347V **5T**=5-Tap[5]	

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) or lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.
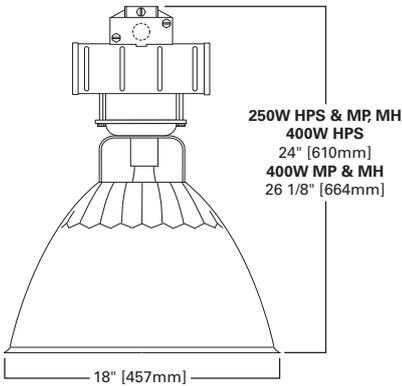
Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
EL18	175-400W	**65°C**	**90°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

SS VERTX

150-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**VERTICAL AISLE LIGHTER**
HIGH-BAY LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass

- Mogul-base porcelain socket

- Computer-designed, reflector mounts easily and allows multiple distribution patterns for precise control

- Approximate net weight: 33-40 lbs. (15-18 kgs.)

DESCRIPTION

The SS VertX combines durable cold-rolled steel housing with a hydroform aluminum field-adjustable reflector to provide superior aisleway illumination. U.L. listed and labeled for damp location. CSA certified.

The SS VertX aisle lighter is ideal for warehouse applications. Its unique distribution pattern delivers high horizontal illumination while reducing "scallops" or hot spots for a more uniform vertical surface.

DIMENSIONS

26 7/8" [683mm]

19" [483mm]
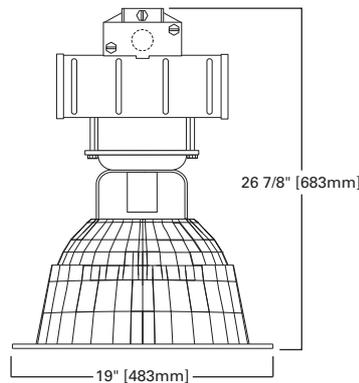
ORDERING INFORMATION

SAMPLE NUMBER: MHSS-AV19-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SS**=Steeler	**AV**=VertX	**19**=19"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W	**MH** **175**=175W **250**=250W **400**=400W **HP** **150**=150W **250**=250W **400**=400W	**120**V **208**V **240**V **277**V **347**V **480**V **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
AV19	175-450W	**55°C** (450W) **65°C** (175-400W)	**90°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	150, 250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

27" [686mm]

19" [483mm]

DESCRIPTION

The HB VertX utilizes a durable heavy-duty die-cast aluminum ballast housing with a hydroformed aluminum reflector to provide superior aisleway illumination. U.L. listed and labeled for damp location.

The HB VertX aisle lighter is ideal for warehouse applications. Its unique distribution pattern delivers high horizontal illumination while reducing "scallops" or hot spots for a more uniform vertical surface.

HB
VERTX

175-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**HEAVY-DUTY VERTICAL
AISLE LIGHTER
HIGH-BAY LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass

- Mogul-base porcelain socket

- Computer aided designed, reflector mounts easily and allows multiple distribution patterns for precise control

- Approximate net weight: 35 lbs. (15 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPHB-AV19-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [5]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**HB**=High-Bay Benchmark	**AV**=VertX	**19**=19"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W [4]	**MH** **175**=175W **250**=250W **400**=400W **HP** **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [6]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Standard 55°C ambient environments. **5** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **6** 88% EISA complaint MP fixtures not available in 5-tap voltages. **7** Specifications and dimensions subject to change without notice.
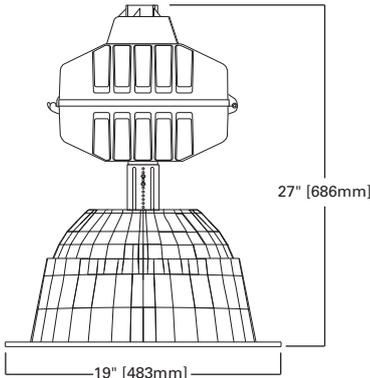
Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
AV19	175-450W	**55°C** (400W + Up) **65°C**	**105°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

(E) COOPER LIGHTING - LUMARK

SE E&G VERTX

175-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**ENCLOSED & GASKETED
VERTICAL AISLE LIGHTER
HIGH-BAY LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Computer-designed, reflector mounts easily and allows multiple distribution patterns for precise control

- Clear tempered glass lens in an extruded aluminum door frame with easy latches to allow access for relamping without tools

- Mogul-base porcelain socket

- Approximate net weight: 38-50 lbs. (17-23 kgs.)

COOPER LIGHTING

DESCRIPTION

The SE E&G VertX utilizes the AV19 reflector system for maximum performance. It features a die-cast aluminum neck for superior strength and an extruded aluminum hinged door frame with latches for access to the lamp without tools. The SE E&G VertX is fully enclosed and gasketed at three separate points to prevent entry of external contaminants. U.L. listed and labeled for damp location. CSA Certified.

The SE E&G VertX aisle lighter is ideal for higher mounting height warehouse applications. Its unique distribution pattern delivers high horizontal illumination while reducing "scallops" or hot spots for a more uniform vertical surface.

DIMENSIONS

31 3/16" [792mm]

19" [483mm]
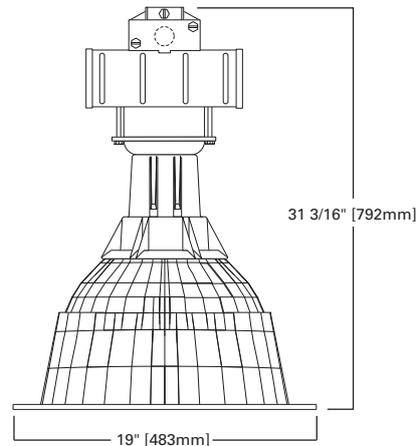
ORDERING INFORMATION

SAMPLE NUMBER: HPSE-ENAV19-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SE**=E&G VertX	**ENAV**=Enclosed & Gasketed VertX	**19**=19"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W	**MH** **175**=175W **250**=250W **400**=400W **HP** **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.
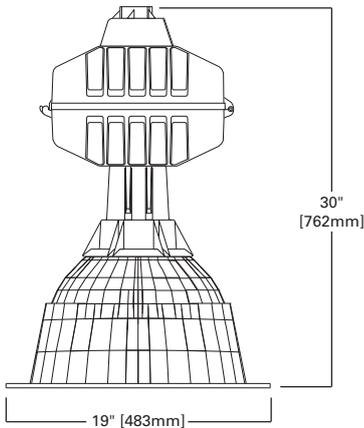
Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENAV19	150-450W	**55°C** (450W + Up) **65°C** (175-400W)	**90°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

30" [762mm]

19" [483mm]

DESCRIPTION

The EB E&G VertX utilizes the AV19 reflector system for maximum performance. It features a die-cast aluminum neck for superior strength and an extruded aluminum hinged door frame with latches for access to the lamp without tools. The EB E&G VertX is fully enclosed and gasketed at three separate points to prevent entry of external contaminants. U.L. listed and labeled for damp location. CSA Certified.

The EB E&G VertX aisle lighter is ideal for higher mounting height warehouse applications. Its unique distribution pattern delivers high horizontal illumination while reducing "scallops" or hot spots for a more uniform vertical surface.

EB
E&G VERTX

175-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**HEAVY-DUTY
ENCLOSED & GASKETED
VERTICAL AISLE LIGHTER
HIGH-BAY LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Computer aided designed, reflector mounts easily and allows multiple distribution patterns for precise control

- Clear tempered glass lens in an extruded aluminum door frame with latches to allow easy access for relamping without tools

- Approximate net weight: 34 lbs. (15 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPEB-ENAV19-M-400-MT-Q

Lamp Type	Series	Reflector Type	Reflector Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**EB**=E&B VertX	**ENAV**=Enclosed & Gasketed VertX	**19**=19"	**C**=Concentrated **M**=Medium **W**=Wide	**MP**	**MH**	**120V** **208V**	(See Pages 42-46)
MH=Metal Halide [1]					**175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W	**175**=175W **250**=250W **400**=400W	**240V** **277V** **347V** **480V**	
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]						**HP** **250**=250W **400**=400W	**MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENAV19	175-450W	**55°C** (450W + Up) **65°C** (175-400W)	**105°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

EP
ENTERPRISE
22 & 28

70-450W

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

**LOW-BAY INDUSTRIAL
LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Enclosed and gasketed optics seal out dirt and other contaminants

- Mogul-base porcelain socket

- Computer designed, faceted reflector provides maximum photometric performance

- Trunk latches secure the reflector to the housing, allowing toolless entry, while internal hangers hold reflector / refractor for hands-free relamping

- Approximate net weight: 32-35 lbs. (15-16 kgs.)

DESCRIPTION

The Enterprise 22" and 28" industrial low-bay luminaire combines a round, faceted reflector with an injection-molded lens to provide an efficient, symmetrical beam pattern. U.L. listed and labeled for damp location. CSA Certified.

The Enterprise 22" and 28" combines durable construction with precise optics for mounting heights below 20'. Perfect for warehouses, foundries, gyms, assembly areas, manufacturing plants and hangars.

DIMENSIONS

R22
26" [660mm]
23 1/8" [587mm]

R28
24" [610mm]
28 3/5" [720mm]
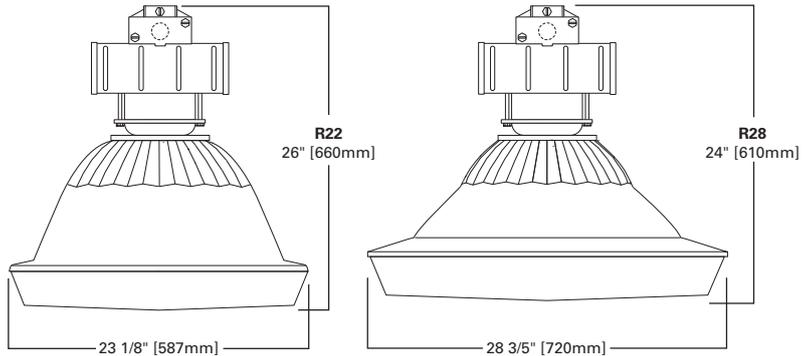
ORDERING INFORMATION

SAMPLE NUMBER: HPEP-R22-250-MT-Q

Lamp Type	Series	Reflector Size	Reflector Type	Lamp Wattage		Voltage [3]	Options & Accessories
MP=Pulse Start Metal Halide	**EP**=Enterprise	**R22**=22" **R28**=28"	__=Acrylic **PL**=Polycarbonate [2]	**MP** **70**=70W **100**=100W **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W	**MH** **175**=175W **250**=250W **400**=400W **HP** **70**=70W **100**=100W **150**=150W **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [4]	(See Pages 42-46)
MH=Metal Halide							
ML=Pulse Start Metal Halide (Linear Reactor) [1]							
HP=High Pressure Sodium							

NOTES: 1 277V only, not available with HSW, Q, EM, HL or HC options. **2** Not recommended for use with MH lamps due to rapid yellowing typical of polycarbonate material. **3** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** 88% EISA complaint MP fixtures not available in 5-tap voltages. **5** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER: FM40

Series	Lamp Type	Lamp Wattage	Options
F=Enterprise	**P**=Pulse Start Metal Halide **M**=Metal Halide **S**=High Pressure Sodium	**25**=250W **32**=320W **35**=350W **40**=400W **40Q**=400W and Quartz Restrike **258**=250W (Canada, Triple-Tap Ballast) **408**=400W (Canada, Triple-Tap Ballast)	**5T**=5-Tap [1] **NL**=No Lamp Included

NOTES: 1 88% EISA complaint MP fixtures not available in 5-tap voltages.. Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories.
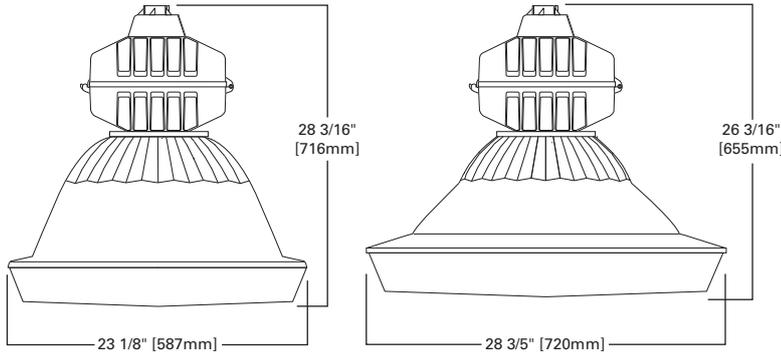
Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
RP22	70-450W	**40°C** (R22)	**90°C**
RP28	70-450W	**55°C** (R28)	

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

28 3/16" [716mm]

23 1/8" [587mm]

26 3/16" [655mm]

28 3/5" [720mm]

DESCRIPTION

The Benchmark RB utilizes a durable heavy-duty die-cast aluminum ballast housing, a round, faceted reflector and an injection-molded lens to provide an efficient, symmetrical beam pattern. U.L. listed and CSA certified for damp location standard. Wet location optional.

The Benchmark RB is perfect for warehouses, gyms, assembly areas, manufacturing plants and hangars.

RB
LOW-BAY
BENCHMARK

70-450W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM
ROUND LOW-BAY
HEAVY-DUTY INDUSTRIAL
LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Enclosed and gasketed optics seal out dirt and other contaminants

- Trunk latches secure the reflector to the housing, allowing toolless entry, while internal hangers hold reflector / refractor for hands-free relamping

- Mogul-base porcelain socket

- Approximate net weight: 33 lbs. (15 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPRB-RP22-400-MT-LL

Lamp Type	Series	Reflector Type	Reflector Diameter	Lamp Wattage		Voltage³	Options & Accessories
MP=Pulse Start Metal Halide	**RB**=Round Low-Bay Benchmark	**RP**=Round White Reflector	**22**=22"	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide		**RA**=Round Anodized Reflector	**28**=28"	**70**=70W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor)¹			**28PL**=28" w/ Polycarbonate Lens²	**100**=100W	**250**=250W	**240**V	
				175=175W	**400**=400W	**277**V	
HP=High Pressure Sodium				**200**=200W	**HP**	**347**V	
				250=250W	**70**=70W	**480**V	
				320=320W	**100**=100W	**MT**=Multi-Tap wired 277V	
				350=350W	**150**=150W	**TT**=Triple-Tap wired 347V	
				400=400W	**250**=250W	**5T**=5-Tap⁴	
				450=450W	**400**=400W		

NOTES: 1 277V only, not available with HSW, Q, EM, HL or HC options. **2** Not recommended for use with MH lamps due to rapid yellowing typical of polycarbonate material. **3** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** 88% EISA complaint MP fixtures not available in 5-tap voltages. **5** Specifications and dimensions subject to change without notice.

Reflector Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
RP22	70-450W	**55°C** (70-450W)	**105°C**
RP28	70-450W		

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

Voltage Chart

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

VF
VERTIMARK

150-400W
High Pressure Sodium
Pulse Start Metal Halide
**Metal Halide**

LOW-BAY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy-access wiring chamber cover with 3/4" IPS threaded hub for quick fixture mounting

- Ballast and electrical components are mounted to die-cast aluminum top for cooler operation. High power factor ballast with class H insulation. U.L. Listed for 55° C (131° F) ambient temperature operation. Minimum starting temperature is -40° C (-40° F) for HP and -30° C (-20° F) for MH and MP

- Spun aluminum reflector has internally hinged door for toolless entry into electrical compartment

- Hinged refractor/door assembly has full perimeter silicone gasketing with easy-access thumb screws

- Computer-designed optical system combines a translucent diffuser at the top with a prismatic lens at the bottom for maximum vertical illumination

- Approximate net weight: 45 lbs. (20 kgs.)

DESCRIPTION

Vertimark is an advanced concept in industrial lighting. Combining a durable die-cast aluminum top and spun-aluminum housing with a computer-designed optical system, the Vertimark is an excellent choice for lighting any area requiring excellent vertical light distribution.

DIMENSIONS

23 3/4" [603mm]

26 1/2" [673mm]
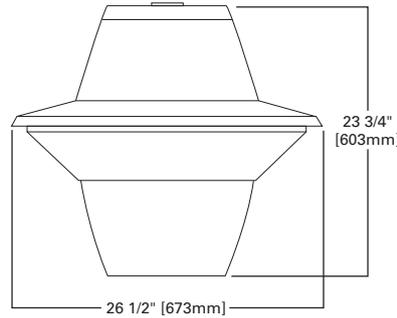
ORDERING INFORMATION

SAMPLE NUMBER: HPVF-AL-250-MT-Q

Lamp Type	Series	Lens Type	Lamp Wattage		Voltage [1]	Options & Accessories
MP=Pulse Start Metal Halide	**VF**=Vertimark	**AL**=Prismatic Acrylic Lens	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide			**175**=175W	**175**=175W	**208V**	
HP=High Pressure Sodium			**200**=200W	**250**=250W	**240V**	
			250=250W	**400**=400W	**277V**	
			320=320W	**HP**	**347V**	
			350=350W	**150**=150W	**480V**	
			400=400W	**250**=250W	**MT**=Multi-Tap wired 277V	
				400=400W	**TT**=Triple-Tap wired 347V	

NOTES: 1 Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **2** Specifications and dimensions subject to change without notice.
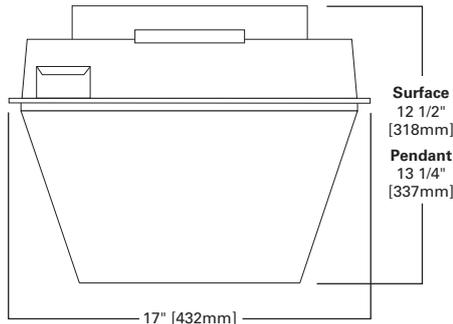
Series	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
Vertimark	150-400W	**55°C** (150-400W)	**105°C**

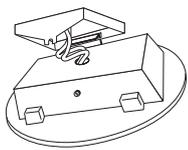| Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	150, 250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

DIMENSIONS

Surface
12 1/2"
[318mm]

Pendant
13 1/4"
[337mm]

— 17" [432mm] —

ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The Vertimark II delivers horizontal and vertical footcandles to evenly illuminate low mounting areas such parking garages or storage facilities areas. The combination die-cast reflector/ ballast housing makes Vertimark II economical. Modular assembly makes installation easy and quality construction ensures years of consistent performance. U.L. listed and labeled for damp location. CSA Certified. Wet location optional.

BE
VERTIMARK II

100-250W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

LOW-BAY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Standard quick mounting plate for 3/4" IPS conduit frees both hands to complete wiring

- Die-cast aluminum housing has durable white polyester powder coat finish

- Hinged refractor permits relamping without removal of refractor

- Acrylic prismatic refractor controls light for high vertical and horizontal footcandles

- Removable ballast compartment cover provides easy internal access

- Optional "P" mounting bracket fits a standard 4" J-Box or outlet box for surface mounting

- Approximate net weight: 7 lbs. (8 kgs.)

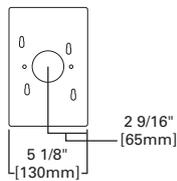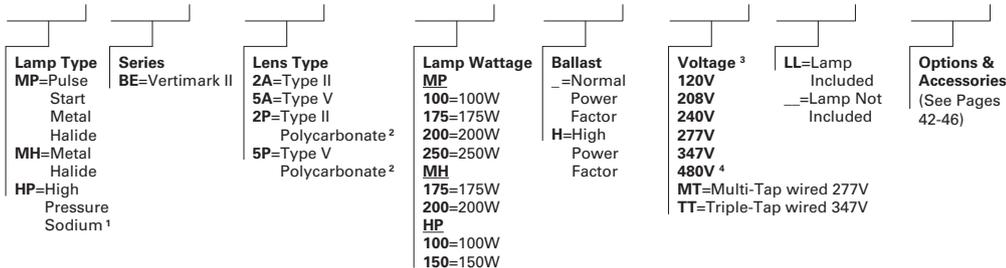## MOUNTING

Once in place, the EZ123 readily accepts the mating half of the hinge and the fixture is easily attached.

2 9/16" [65mm]
5 1/8" [130mm]

P=Mounting Bracket for Surface Mounting or Mounting to 4" J-Box.

ORDERING INFORMATION

SAMPLE NUMBER: HPBE-5A-100H-MT-LL

Lamp Type	Series	Lens Type	Lamp Wattage	Ballast	Voltage ³	LL=Lamp Included __=Lamp Not Included	Options & Accessories
MP=Pulse Start Metal Halide	**BE**=Vertimark II	**2A**=Type II	**MP**	_ =Normal Power Factor	**120V**		(See Pages 42-46)
MH=Metal Halide		**5A**=Type V	**100**=100W	**H**=High Power Factor	**208V**		
HP=High Pressure Sodium ¹		**2P**=Type II Polycarbonate ²	**175**=175W		**240V**		
		5P=Type V Polycarbonate ²	**200**=200W		**277V**		
			250=250W		**347V**		
			MH		**480V** ⁴		
			175=175W		**MT**=Multi-Tap wired 277V		
			200=200W		**TT**=Triple-Tap wired 347V		
			HP				
			100=100W				
			150=150W				

NOTES: 1 150W is maximum. **2** Not recommended for use with MH lamps due to to rapid yellowing typical of polycarbonate material. **3** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** Not available with 200 or 250W MP. **5** Specifications and dimensions subject to change without notice.

Series	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
Vertimark II	100-250W	**40°C** (100-250W)	**90°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	100, 175, 200, 250W
Metal Halide (MH)	175, 250W
High Pressure Sodium (HP)	100, 150W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

Ⓔ COOPER LIGHTING - LUMARK

SG
16" & 21" PRISMATIC GLASS HIGH-BAY

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

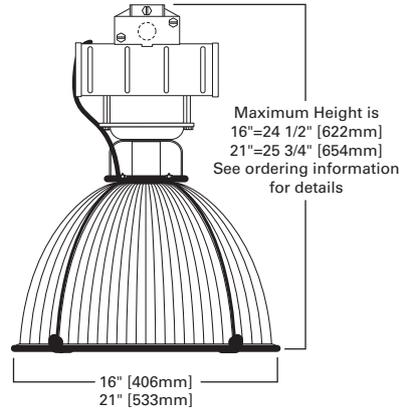**PRISMATIC GLASS HIGH-BAY INDUSTRIAL LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Safety cable attached from housing to refractor standard

- Universal ladder brackets allow for the flexibility to change out with other reflectors / refractors available in acrylic or aluminum

- Field adjustable shock- and impact-resistant borosilicate glass refractor. Zinc-plated wire form with optional safety glass bottom for durable performance

- Approximate net weight: 51 lbs. (23 kgs.)

DESCRIPTION

The Steeler SG Prismatic Glass Series combines the popular Steeler ballast housing with shock- and impact-resistant prismatic borosilicate glass reflectors for maximum durability and photometric performance. U.L. listed and labeled for damp location. CSA Certified.

The Steeler SG is perfect for manufacturing and assembly areas, retail stores, wholesale warehouses, grocery chains, malls and auto service areas, where up light is desired.

DIMENSIONS

Maximum Height is
16"=24 1/2" [622mm]
21"=25 3/4" [654mm]
See ordering information
for details

16" [406mm]
21" [533mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPSG-GR16-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SG**=Steeler Glass	**GR**=Glass Refractor	**16**=16" **21**=21"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W **750**=750W **1000**=1000W	**MH** **175**=175W **250**=250W **400**=400W **1000**=1000W **HP** **250**=250W **400**=400W **600**=600W **750**=750W	**120**V **208**V **240**V **277**V **347**V **480**V **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
GR16	150-400W	**55°C** (450W + Up) **65°C** (150-400W)	**90°C**
GR21	400-1000W*		

NOTES: * 1000W requires BT37 lamp.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

COOPER LIGHTING

ⒺCOOPER LIGHTING - LUMARK

DIMENSIONS

Maximum Height is
16"=25 11/16" [652mm]
21"=28 7/16" [722mm]
See ordering information
for details

16" [406mm]
21" [533mm]

DESCRIPTION

The Benchmark GB Prismatic Glass Series utilizes a durable heavy-duty die-cast aluminum ballast housing and shock- and impact-resistant borosilicate glass reflector system for specification-level performance. U.L. listed and CSA certified. Damp location standard.

The Benchmark GB Prismatic Glass Series is perfect for high-bay applications such as manufacturing, gymnasiums, hangars, assembly, auto service areas and retail stores where up light is desired.

GB
16" & 21" PRISMATIC GLASS BENCHMARK

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM PRISMATIC GLASS HIGH-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors /refractors available in acrylic or spun aluminum

- Field adjustable shock- and impact-resistant borosilicate glass refractor. Zinc-plated wire form with optional safety glass bottom for durable performance

- Approximate net weight: 68 lbs. (31 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPGB-GR16-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage			Voltage [5]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**GB**=Glass Benchmark	**GR**=Glass Refractor	**16**=16"	**C**=Concentrated	**MP**	**MH**		**120**V	(See Pages 42-46)
			21=21"	**M**=Medium	**175**=175W	**175**=175W		**208**V	
MH=Metal Halide [1]				**W**=Wide	**200**=200W	**250**=250W		**240**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]					**250**=250W	**400**=400W		**277**V	
					320=320W	**1000**=1000W [4]		**347**V	
					350=350W			**480**V	
HP=High Pressure Sodium					**400**=400W	**HP**		**MT**=Multi-Tap wired 277V	
					450=450W	**250**=250W		**TT**=Triple-Tap wired 347V	
					750=750W	**400**=400W		**5T**=5-Tap [6]	
					1000=1000W [4]	**600**=600W			
						750=750W			

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Requires reduced envelope BT-37 lamp for MH. **5** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **6** 88% EISA complaint MP fixtures not available in 5-tap voltages. **7** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
GR16	150-400W	**55°C** (450W + Up)	**105°C**
GR21	400-1000W*	**65°C** (150-400W)	

NOTES: * 1000W requires BT37 lamp.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

SE
16" & 21"
E&G GLASS STEELER

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

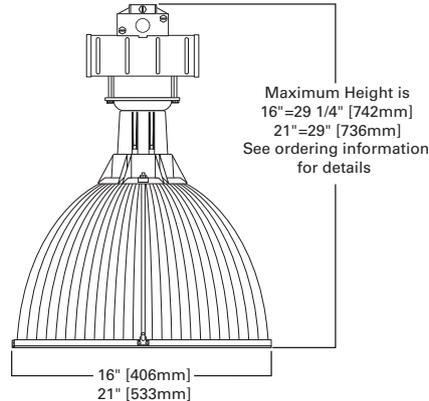**ENCLOSED & GASKETED
GLASS HIGH-BAY
INDUSTRIAL LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Field adjustable shock- and impact-resistant borosilicate glass refractor. Zinc-plated wire form with optional safety glass bottom for durable performance

- Mogul-base porcelain socket

- Approximate net weight: 77 lbs. (35 kgs.)

DESCRIPTION

The Enclosed and Gasketed Glass Steeler utilizes a 16" and 21" borosilicate glass refractor system for maximum performance. It features a cast aluminum neck for superior strength and a hinged door frame with latches for access to the lamp without tools. The Enclosed and Gasketed Glass Steeler is fully enclosed and gasketed at three (3) separate points to prevent entry of external contaminant's. U.L. listed and CSA Certified for damp locations.

The Enclosed and Gasketed Glass Steeler is perfect for textile mills, hangars, assembly and auto service areas.

DIMENSIONS

Maximum Height is
16"=29 1/4" [742mm]
21"=29" [736mm]
See ordering information
for details

16" [406mm]
21" [533mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPSE-ENGR16-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [5]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SE**=E&G Steeler	**ENGR**=Enclosed & Gasketed Glass Refractor	**16**=16" **21**=21"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W **750**=750W **1000**=1000W [4]	**MH** **175**=175W **250**=250W **400**=400W **1000**=1000W [4] **HP** **250**=250W **400**=400W **600**=600W **750**=750W	**120V** **208**V **240**V **277**V **347**V **480**V **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [6]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Requires reduced envelope BT-37 lamp for MH. **5** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **6** 88% EISA complaint MP fixtures not available in 5-tap voltages. **7** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENGR16	175-400W	**55°C** (450W + Up) **65°C** (175-400W)	**90°C**
ENGR21	400-1000W*		

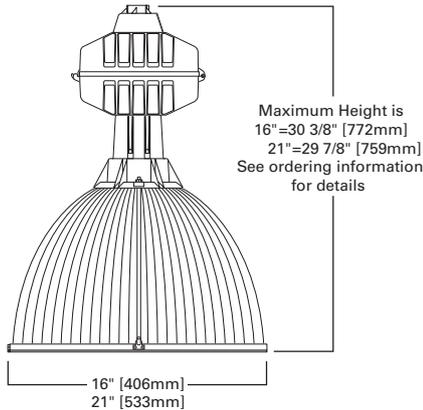**NOTES: *** 1000W requires BT37 lamp.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

DIMENSIONS

Maximum Height is
16"=30 3/8" [772mm]
21"=29 7/8" [759mm]
See ordering information
for details

16" [406mm]
21" [533mm]

Ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The Enclosed and Gasketed Glass Benchmark utilizes a 16" and 21" borosilicate glass refractor system for maximum performance. It features a cast aluminum neck for superior strength and a hinged door frame with latches for access to the lamp without tools.
The Enclosed and Gasketed Glass is fully enclosed and gasketed at three (3) separate points to prevent entry of external contaminant's. U.L. listed and CSA Certified for damp locations with optional wet location.

The Enclosed and Gasketed Glass Benchmark is perfect for textile mills, hangars, assembly and auto service areas.

EB
16" & 21"
E&G GLASS
BENCHMARK

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

ENCLOSED & GASKETED GLASS HIGH-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Field adjustable shock- and impact-resistant borosilicate glass refractor. Zinc-plated wire form with optional safety glass bottom for durable performance

- Approximate net weight: 79 lbs. (36 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPEB-ENGR16-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [2]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide	**EB**=E&G Benchmark	**ENGR**=Enclosed & Gasket Glass Refractor	**16**=16" **21**=21"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W **450**=450W **750**=750W **1000**=1000W [3]	**MH** **175**=175W **250**=250W **400**=400W **1000**=1000W [3] **HP** **250**=250W **400**=400W **600**=600W **750**=750W	**120**V **208**V **240**V **277**V **347**V **480**V **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide								
ML=Pulse Start Metal Halide (Linear Reactor) [1]								
HP=High Pressure Sodium								

NOTES: 1 277V only, not available with HSW, Q, EM, HL or HC options. **2** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **3** Requires reduced envelope BT-37 lamp for MH. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENGR16	175-400W	**55°C** (450W + Up)	**105°C**
ENGR21	400-1000W*	**65°C** (175-400W)	

NOTES: * 1000W requires BT37 lamp.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

(E) COOPER LIGHTING - LUMARK

SS
16", 22" & 25" PRISMATIC HIGH-BAY

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide
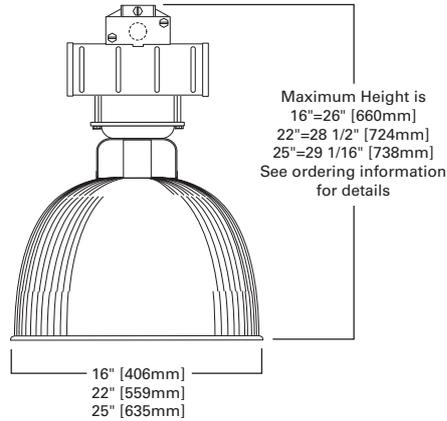
PRISMATIC HIGH-BAY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors / refractors available in aluminum or glass

- Mogul-base porcelain socket

- Easily mounted prismatic acrylic refractor has multiple field-adjustable distribution patterns for precision control

- Approximate net weight: 30 lbs. (14 kgs.)

DESCRIPTION

The Prismatic high-bay combines the popular Steeler ballast housing with an acrylic reflector for maximum durability and photometric performance. U.L. listed and labeled for damp location. CSA Certified.

The Prismatic high-bay is perfect for retail stores, wholesale warehouses, grocery chains, malls and auto showrooms.

DIMENSIONS

Maximum Height is
16"=26" [660mm]
22"=28 1/2" [724mm]
25"=29 1/16" [738mm]
See ordering information for details

16" [406mm]
22" [559mm]
25" [635mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPSS-PD16-M-250-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution[3]	Lamp Wattage		Voltage[4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SS**=Steeler	**PD**=Prismatic Acrylic	**16**=16"	**C**=Concentrated	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]			**22**=22"	**M**=Medium	**175**=175W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]			**25**=25"	**W**=Wide	**200**=200W	**250**=250W	**240V**	
HP=High Pressure Sodium					**250**=250W	**400**=400W	**277V**	
					320=320W	**1000**=1000W	**347V**	
					350=350W	**HP**	**480V**	
					400=400W	**250**=250W	**MT**=Multi-Tap wired 277V	
					450=450W	**400**=400W	**TT**=Triple-Tap wired 347V	
					750=750W	**600**=600W	**5T**=5-Tap [5]	
					1000=1000W	**750**=750W		

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347 and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
PD16	175-400W	**40°C** (Enclosed)* **55°C** (Open)	**90°C**
PD22	175-450W		
PD25	400-1000W		

NOTES: * PD16 enclosed is 250W maximum. PD25 enclosed is 400W only.
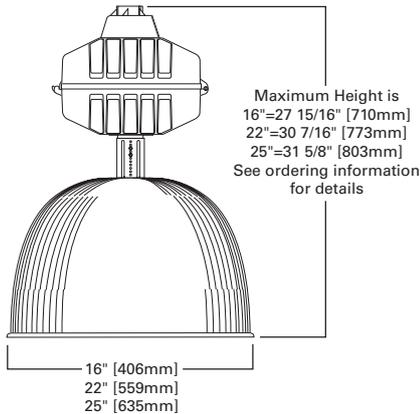
Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

DIMENSIONS

Maximum Height is
16"=27 15/16" [710mm]
22"=30 7/16" [773mm]
25"=31 5/8" [803mm]
See ordering information
for details

16" [406mm]
22" [559mm]
25" [635mm]

(E) COOPER LIGHTING - LUMARK

DESCRIPTION

The BenchMark HB prismatic high-bay utilizes a durable heavy-duty die-cast aluminum ballast housing and prismatic acrylic reflector for maximum durability and photometric performance. U.L. listed and CSA certified. Damp location standard.

The BenchMark HB prismatic high-bay is perfect for retail stores, wholesale warehouses, grocery chains, malls and auto showrooms.

HB
16", 22" & 25" PRISMATIC BENCHMARK

175-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM PRISMATIC HIGH-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors / refractors available in aluminum or glass

- Mogul-base porcelain socket

- Easily mounted prismatic acrylic refractor has multiple field-adjustable distribution patterns for precision control

- Approximate net weight: 37 lbs. (17 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPHB-PD16-M-250-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**HB**=High-Bay BenchMark	**PD**=Prismatic Acrylic	**16**=16"	**C**=Concentrated	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]			**22**=22"	**M**=Medium	**175**=175W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]			**25**=25"	**W**=Wide	**200**=200W	**250**=250W	**240**V	
					250=250W	**400**=400W	**277**V	
					320=320W	**1000**=1000W	**347**V	
HP=High Pressure Sodium					**350**=350W	**HP**	**480**V	
					400=400W	**250**=250W	**MT**=Multi-Tap wired 277V	
					450=450W	**400**=400W	**TT**=Triple-Tap wired 347V	
					750=750W	**600**=600W	**5T**=5-Tap [5]	
					1000=1000W	**750**=750W		

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
PD16	175-400W	**55°C** (Open) or **40°C** (Enclosed)*	**105°C**
PD22	175-450W		
PD25	400-1000W		

NOTES: * PD16 enclosed is 250W only. PD25 enclosed is 400W only.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400, 450, 750, 1000W
Metal Halide (MH)	175, 250, 400, 1000W
High Pressure Sodium (HP)	250, 400, 600, 750W

Voltage Chart

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

SE
22"
E&G PRISMATIC ACRYLIC STEELER

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**ENCLOSED & GASKETED PRISMATIC ACRYLIC HIGH-BAY INDUSTRIAL LUMINAIRE**

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Prismatic acrylic refractor provides maximum photometric performance and beam efficiency. The system is completely enclosed and gasketed at three (3) points: door to refractor, refractor to neck, and neck to housing

- Clear tempered glass or prismatic acrylic drop lens

- Approximate net weight: 48 lbs. (18 kgs.)

COOPER LIGHTING

29

DESCRIPTION

The Enclosed and Gasketed Prismatic Acrylic Steeler utilizes a refractor system for maximum performance. It features a cast aluminum neck for superior strength and a hinged door frame with latches for access to the lamp without tools. The unit is fully enclosed and gasketed at three separate points to prevent entry of external contaminants. U.L. listed and CSA Certified for damp locations.

The Enclosed and Gasketed Prismatic Acrylic Steeler is perfect for retail, hangars, assembly and auto service areas.

DIMENSIONS

Maximum Height is 28 3/4" [730mm] Drop Bottom Adds 3 1/2" to Overall Height

22" [559mm]
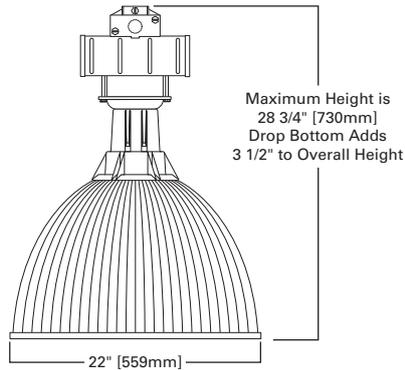
ORDERING INFORMATION

SAMPLE NUMBER: HPSE-ENPD22-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SE**=E&G Steeler	**ENPD**=Enclosed & Gasketed Prismatic Acrylic Refractor	**22**=22"	**C**=Concentrated **M**=Medium **W**=Wide	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]					**175**=175W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]					**200**=200W	**250**=250W	**240V**	
HP=High Pressure Sodium					**250**=250W	**400**=400W	**277V**	
					320=320W	**HP**	**347V**	
					350=350W	**250**=250W	**480V**	
					400=400W	**400**=400W	**MT**=Multi-Tap wired 277V	
							TT=Triple-Tap wired 347V	
							5T=5-Tap [5]	

NOTES: **1** Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.
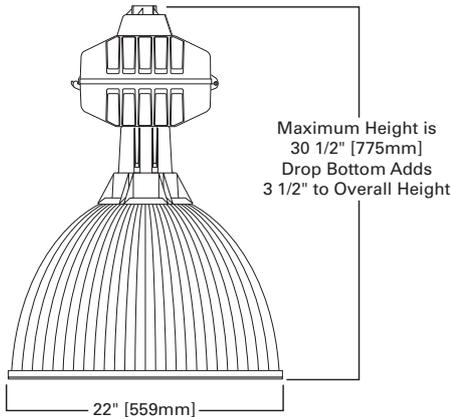
Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENPD22	175-400W	40°C	**90°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

Maximum Height is
30 1/2" [775mm]
Drop Bottom Adds
3 1/2" to Overall Height

22" [559mm]

DESCRIPTION

The Enclosed and Gasketed Prismatic Acrylic Benchmark utilizes a refractor system for maximum performance. It features a cast aluminum neck for superior strength and a hinged door frame with latches for access to the lamp without tools. The unit is fully enclosed and gasketed at three separate points to prevent entry of external contaminants. U.L. listed and CSA Certified for damp locations.

The Enclosed and Gasketed Prismatic Acrylic Benchmark is perfect for retail, hangars, assembly and auto service areas.

EB
22"
E&G PRISMATIC ACRYLIC BENCHMARK

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

ENCLOSED & GASKETED PRISMATIC HIGH-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Die-cast aluminum neck with staggered mounting bosses for eight-position adjustability of the socket which provides a variety of distributions from concentrated to wide

- Clear tempered glass lens in an extruded aluminum hinged door frame with latches allows access for relamping without tools

- Approximate net weight: 48 lbs. (21 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPEB-ENPD22-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**EB**=E&G Benchmark	**ENPD**=Enclosed & Gasketed Prismatic Acrylic Refractor	**22**=22"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W	**MH** **175**=175W **250**=250W **400**=400W **HP** **250**=250W **400**=400W	**120V** **208**V **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [5]	(See Pages 42-46)
MH=Metal Halide [1]								
ML=Pulse Start Metal Halide (Linear Reactor) [1, 2]								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor Type	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ENPD22	175-400W	40°C	**105°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

SS
22" ENHANCED REFRACTOR HIGH-BAY

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

ENHANCED REFRACTOR HIGH-BAY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Mogul-base porcelain socket

- Universal ladder brackets allow for the flexibility to change out with other reflectors / refractors available in spun aluminum

- Easily mounted microcellular prismatic acrylic refractor has multiple field adjustable distribution patterns for precision control without the glare of traditional clear acrylics

- Approximate net weight: 29 lbs. (13 kgs.)

DESCRIPTION

The Enhanced Refractor high-bay combines the popular Steeler ballast housing with a microcellular translucent white acrylic refractor. This technology provides architectural appeal and improved lighting performance at higher ambient ratings. U.L. Listed and CSA certified for damp locations.

The Enhanced Refractor high-bay is perfect for architectural applications like retail stores, wholesale warehouses, grocery chains, malls, and auto show rooms.

DIMENSIONS

Maximum Height is 28 1/2" [724mm]
Drop Bottom Adds 3 1/2" to Overall Height

22" [559mm]
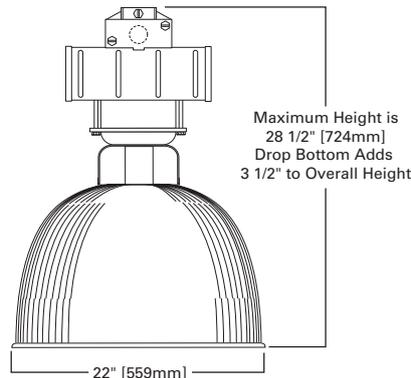
ORDERING INFORMATION

SAMPLE NUMBER: HPSS-ER22-M-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution [3]	Lamp Wattage		Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**SS**=Steeler	**ER**=Enhanced Prismatic Refractor	**22**=22"	**C**=Concentrated **M**=Medium **W**=Wide	**MP**	**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]					**175**=175W	**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]					**200**=200W	**250**=250W	**240V**	
HP=High Pressure Sodium					**250**=250W	**400**=400W	**277V**	
					320=320W	**HP**	**347V**	
					350=350W	**250**=250W	**480V**	
					400=400W	**400**=400W	**MT**=Multi-Tap wired 277V	
							TT=Triple-Tap wired 347V	
							5T=5-Tap [5]	

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ER22	175-400W	40°C * 55°C ** 65°C (Open)	**90°C**

NOTES: * Drop Acrylic Bottom.
** Enclosed Bottom.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

Maximum Height is
29 11/16" [754mm]
Drop Bottom Adds
3 1/2" to Overall Height

— 22" [559mm] —
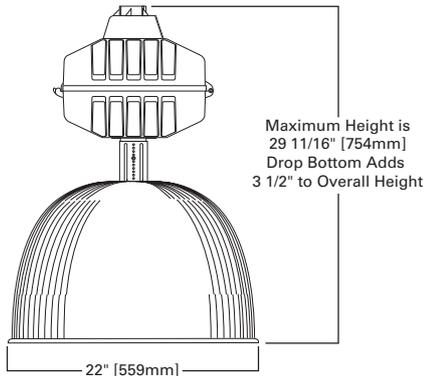
DESCRIPTION

The Enhanced Refractor Benchmark high-bay utilizes a durable heavy-duty die-cast aluminum ballast housing and a microcellular translucent white acrylic refractor providing maximum durability. This technology provides architectural appeal and improved lighting performance at higher ambient ratings. U.L. Listed and CSA certified for damp locations.

The Benchmark Enhanced Refractor high-bay is perfect for architectural applications like retail stores, wholesale warehouses, grocery chains, malls, and auto show rooms.

HB
22" ENHANCED REFRACTOR BENCHMARK

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM ENHANCED REFRACTOR HIGH-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE
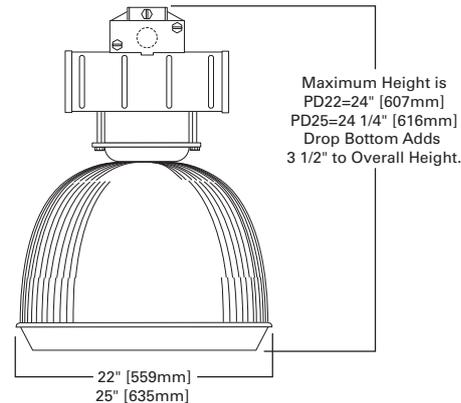
- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Universal ladder brackets allow for the flexibility to change out with other reflectors / refractors available in spun aluminum

- Easily mounted microcellular prismatic acrylic refractor has multiple field adjustable distribution patterns for precision control without the glare of traditional clear acrylics

- Approximate net weight: 29 lbs. (13 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: H P H B - E R 2 2 - M - 4 0 0 - M T - Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Distribution ³	Lamp Wattage		Voltage ⁴	Options & Accessories
MP=Pulse Start Metal Halide ¹	**HB**=High-Bay Benchmark	**ER**=Enhanced Prismatic Refractor	**22**=22"	**C**=Concentrated **M**=Medium **W**=Wide	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W	**MH** **175**=175W **250**=250W **400**=400W **HP** **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap ⁵	(See Pages 42-46)
MH=Metal Halide ¹								
ML=Pulse Start Metal Halide (Linear Reactor) ¹, ²								
HP=High Pressure Sodium								

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Factory set for concentrated, medium or wide distributions only if P (factory pre-set) is in the nomenclature of the fixture. Otherwise shipped in medium setting. **4** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **5** 88% EISA complaint MP fixtures not available in 5-tap voltages. **6** Specifications and dimensions subject to change without notice.

Refractor	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
ER22	175-400W	**55°C** (Enclosed) **65°C** (Open)	**105°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

Ⓔ COOPER LIGHTING - LUMARK

LX
PRISMATIC DIRECT- MOUNT STEELER

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIRECT MOUNT PRISMATIC HIGH-BAY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Mogul-base porcelain socket

- Acrylic refractor system mounts directly to housing and provides full, even illumination

- Approximate net weight: 46 lbs. (21 kgs.)

DESCRIPTION

The Steeler LX utilizes a heavy-duty formed steel ballast housing and prismatic acrylic refractor and drop refractor system for excellent photometric performance. U.L. listed and labeled for damp location. CSA Certified.

The Steeler LX is perfect for applications requiring vertical and horizontal illumination on multiple surfaces, including fabrication, manufacturing, assembly areas and retail / commercial / industrial warehousing where height restrictions must be considered.

DIMENSIONS

Maximum Height is
PD22=24" [607mm]
PD25=24 1/4" [616mm]
Drop Bottom Adds
3 1/2" to Overall Height.

22" [559mm]
25" [635mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPLX-DB25-400-MT-Q

Lamp Type	Series	Refractor Type	Refractor Diameter	Lamp Wattage		Voltage [3]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**LX**=Prismatic Direct Mount Benchmark	**PD**=Prismatic Acrylic Refractor	**22**=22" **25**=25"	**MP** **175**=175W **200**=200W **250**=250W **320**=320W **350**=350W **400**=400W	**MH** **175**=175W **250**=250W **400**=400W **HP** **70**=70W **100**=100W **150**=150W **250**=250W **400**=400W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V **5T**=5-Tap [4]	(See Pages 42-46)
MH=Metal Halide [1] **ML**=Pulse Start Metal Halide (Linear Reactor) [1, 2] **HP**=High Pressure Sodium		**DB**=Prismatic Acrylic Refractor with Drop Acrylic Refractor					

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** 88% EISA complaint MP fixtures not available in 5-tap voltages. **5** Specifications and dimensions subject to change without notice.
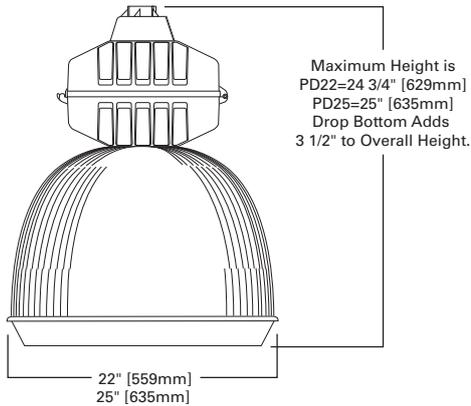
Refractor	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
LX	175-400W	40°C	**90°C**

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W		MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	175, 250, 400W		TT=Triple-Tap	120/277/347V (wired 347V)
High Pressure Sodium (HP)	70, 100, 150, 250, 400W		5T=5-Tap	120/208/240/277/480V (wired 277V)

DIMENSIONS

Maximum Height is
PD22=24 3/4" [629mm]
PD25=25" [635mm]
Drop Bottom Adds
3 1/2" to Overall Height.

22" [559mm]
25" [635mm]

DESCRIPTION

The BenchMark XB utilizes a durable heavy-duty die-cast aluminum ballast housing and prismatic acrylic refractor and drop refractor system for specification-level performance. U.L. listed and CSA certified. Standard damp location.

The BenchMark XB is perfect for applications requiring vertical and horizontal illumination on multiple surfaces, including fabrication, manufacturing, assembly areas and retail/commercial/industrial warehousing where height restrictions must be considered and durability is desired.

XB
PRISMATIC DIRECT-MOUNT BENCHMARK

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

DIE-CAST ALUMINUM PRISMATIC LOW-BAY HEAVY-DUTY INDUSTRIAL LUMINAIRE

- U.L. listed for damp locations. CSA certified. EISA Complaint

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Durable heavy-duty die-cast aluminum housing for lasting performance in the harshest environments. Integrally hinged for ease of maintenance with optional toolless entry. Finished in a standard white polyester powder paint

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH, MP and ML

- Mogul-base porcelain socket

- Acrylic refractor system mounts directly to housing and provides full, even illumination

- Approximate net weight: 45 lbs. (20 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPXB-DB25-400-120V

Lamp Type	Series	Refractor Type	Refractor Diameter	Lamp Wattage			Voltage [3]	Options & Accessories
MP=Pulse Start Metal Halide [1]	**XB**=Prismatic Direct-Mount Benchmark	**PD**=Prismatic Acrylic Refractor	**22**=22"	**MP**		**MH**	**120V**	(See Pages 42-46)
MH=Metal Halide [1]		**DB**=Prismatic Acrylic Refractor with Drop Acrylic Refractor	**25**=25"	**175**=175W		**175**=175W	**208**V	
ML=Pulse Start Metal Halide (Linear Reactor) [1,2]				**200**=200W		**250**=250W	**240V**	
HP=High Pressure Sodium				**250**=250W		**400**=400W	**277V**	
				320=320W		**HP**	**347V**	
				350=350W		**250**=250W	**480V**	
				400=400W		**400**=400W	**MT**=Multi-Tap wired 277V	
							TT=Triple-Tap wired 347V	
							5T=5-Tap [4]	

NOTES: 1 Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp. **2** 277V only, not available with HSW, Q, EM, HL or HC options. **3** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Lighting Representative for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** 88% EISA complaint MP fixtures not available in 5-tap voltages. **5** Specifications and dimensions subject to change without notice.

Refractor	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
XB	175-400W	40°C (175-400W)	**105°C**

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 277V)

COOPER LIGHTING - LUMARK

DESCRIPTION

The AXIO Series Luminaire offers unmatched photometric performance with an updated housing style. A wide range of lamp, ballast and optical choices gives the DP series unmatched flexibility and performance capabilities. U.L. listed and CSA certified for damp location standard.

The AXIO Series is perfect for school gymnasiums, multi-purpose rooms, retail stores, auto showrooms, and manufacturing assembly areas.

DIMENSIONS

Maximum Height is 27 7/8" [708mm] Drop Bottom Adds 3 1/2" to Overall Height

22" [559mm]

DP
AXIO SERIES

192-336W
Compact Fluorescent

COMPACT FLUORESCENT HIGH-BAY LUMINAIRE

- U.L. listed for damp locations. CSA certified

- Mounting hub is tapped with an opening for 3/4" conduit. Ballast cover is easily removed for easy wiring and installation

- The heavy-duty, spun aluminum housing is finished in a white polyester powder coat standard. Other finish colors available

- Compact Fluorescent electronic ballast in 1 or lamp configuration provides up to four (4) switch level control or optional dimming ballast. Compact Fluorescent ballast are electronic, universal voltage 120-277V, less than 10% harmonic distortion, with minimum starting temperature of 0°C for 32, 42W and -30°C (-22°F) for 60 and 120W

- Compact Fluorescent sockets are rotary lock high temperature PBT material and incorporate: 32W GX24q3 or 42W GX24q4. 60 and 120W is a 2G8

- Available with high-efficiency 22" prismatic acrylic refractor or 22" high-reflectance white spun aluminum reflector

- Optional drop bottom and conical bottom refractor or safety glass bottom door

- Approximate net weight: 37 lbs. (16.82 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: CFDP-PC22-3/120-E-LL

Lamp Type
CF=Compact Fluorescent

Series
DP=AXIO Series

Refractor Type
PC22=22" Prismatic Acrylic
SC22=22" Spun Aluminum

Lamp Wattage
6/32=(6) 32W Triple Tube
8/32=(8) 32W Triple Tube
6/42=(6) 42W Triple Tube
8/42=(8) 42W Triple Tube

Voltage [1]
120V
208V
240V
277V
E=Electronic (120-277V)

Options & Accessories
(See Below)

Options [2]
FH-1=Die-cast Aluminum Fixture Hook (with 3/4" threads for easy installation)
FL-1=Malleable Iron Plated Fixture Loop (with 3/4" threads for easy installation)
SCF=3' Aircraft Safety Cable secures Housing to Ceiling (Alternative lengths available. Example: SCF6 = 6' Cable)
LL=Lamp Included (Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted) [3]
C3=3' Cord with no plug (Must use with FH-1 or FL-1, or SHK) [4]
PC3=3' Cord with NEMA Plug (120V-L5-15P, 208V-L6-15P, 347V-L37-20P, AND 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' Cord) Requires FH-1 or FL-1, or SHK. Example: PC3-120V Use with TPPH-NEMA. Specify [4]
PC3/4C=3' Cord with NEMA Plug (Dual Switching) [4]
PC3/5C=3' Cord with NEMA Plu (Triple Switching) [4]
PHC-NEMA=Power Cord and NEMA Plug (18" Power Cord and 20 AMP NEMA plug configuration). Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook)
DS=Dual Switching [4]
TS=Triple Switching [4]
QS=Quad Switching [4]

Accessories [5]
PC3=3' Cord with NEMA Plug - (120V-L5, 208V-L6-15P, 347V-L37-20P and 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' cord). Requires FH-1 or FL-1, or SHK. Use with TPPH-NEMA. Specify Voltage
PHC-NEMA=Power Cord and NEMA plug - 18" Power Cord and 20 Amp NEMA plug configuration. Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook)
SGB22=Safety Glass Bottom for 22" Refractor (Not Compatible with WG22 - 400W max.) [6]
FWG22/WDB=Wire Guard with DB22 Drop Lens for PD 22" Refractor - DB22 not included [6]
WG22=Wire Guard for PD 22" Refractor (Not compatible with SGB) [6]
WGD22=Wire Guard for PD or PC 22" Refractor (Not Compatible with SGB22) [6]
WG22/SGB=Wireguard with Glass Lens for 22" Reflector (400W Max.) [6]
DB22=Drop Acrylic Refractor for 22" (400W max.)
CB22=Conical Bottom for 22'' Refractor (Maximum 400W)
FH-1=Fixture Hook
FL-1=Fixture Loop

NOTES: 1 Specify voltage with emergency ballast, plug or MWS options. **2** Add as suffix in the order shown. **3** Specified for lamp to ship with order. Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. **4** Non-switched products provided with standard 3' cord and NEMA plug (120V-L5-15P, 208V-L6-15P, 240V-L6-15P, 347V-L37-20P and 480V-L8-20P). Dual and Triple switching available with cord and plug option in 120 or 277V only. "TS" switching (120V-L21-20P and 277V-L22-20P), "DS" switching (120V-L15-20P and 277-L16-20P). Consult your Cooper Lighting representative for wiring and circuit details. **5** Order separately. **6** Wire guards and lens enclosures

Refractor	Lamp Wattage	Ambient Environment	Supply Wire (Min.)
DP	192-336W	25°C	90°C

COOPER LIGHTING

COOPER LIGHTING - LUMARK

DIMENSIONS

Ceiling Mount   **Pendant Mount**   **Wall Mount**

1 5/8" [41mm]
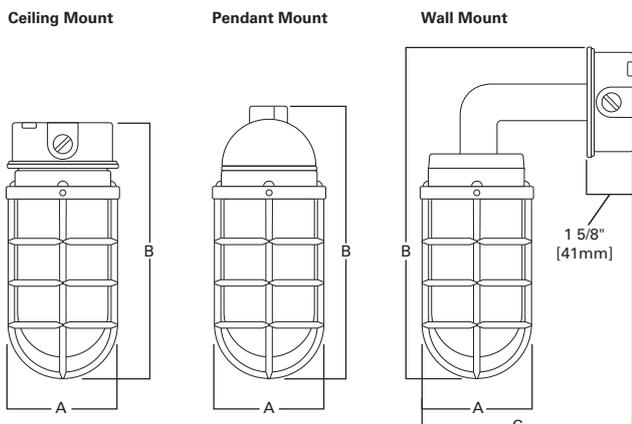
Ceiling Mount	A	B	C
Small	4 1/4" [108mm]	9 3/4" [248mm]	
Large	5 11/16" [145mm]	11 1/2" [293mm]	
Pendant Mount			
Small	4 1/4" [108mm]	10 1/4" [261mm]	
Large	5 11/16" [145mm]	12 1/8" [308mm]	
Wall Mount			
Small	4 1/4" [108mm]	12 5/8" [321mm]	9 1/2" [242mm]
Large	5 11/16" [145mm]	14 1/4" [362mm]	10 9/16" [269mm]

ORDERING INFORMATION

SAMPLE NUMBER: ICVC1G

| Lamp Type	Mounting	Lamp Wattage [1]	Guard	Accessories [4, 5, 6]
IC=Incandescent	**VC**=Ceiling **VW**=Wall **VP**=Pendant	**1**=200W [2] **2**=300W [3]	**G**=Guard	**DC1**=Concentric Dome 200 **DC2**=Concentric Dome 300 **DA1**=Angle Dome 200 **DA2**=Angle Dome 300

NOTES: 1 Care must be taken in selecting lamps due to size variations by manufacturers. **2** A21 lamp maximum. Lamp not included. **3** PS30 lamp maximum. Lamp not included. **4** Standard finish is polyester powder coat grey with inside painted white. **5** Guard required to install. **6** Order separately.

Concentric Dome (DC1, DC2)   **Angle Dome** (DA1, DA2)

35
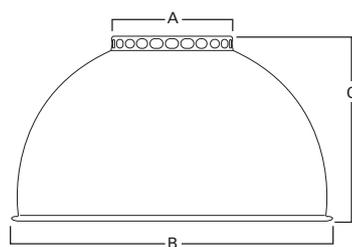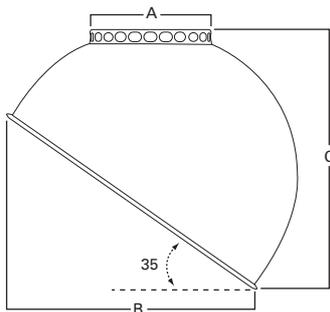
Concentric Dome	A	B	C
DC1	4 3/8" [111mm]	11 3/4" [298mm]	6 7/8" [175mm]
DC2	4 3/8" [111mm]	14 11/16" [373mm]	8 11/16" [221mm]
Angle Dome			
DA1	5 13/16" [148mm]	11 3/16" [285mm]	12 3/4" [324mm]
DA2	5 13/16" [148mm]	13 3/4" [349mm]	10" [254mm]

Series	Ambient Environment	Supply Wire (Min.)
Small ICVC1 ICVP1 ICVW1*	40°C	**90°C** **75°C***
Large ICVC2 ICVP2 ICVW2	40°C	**90°C**

DESCRIPTION

Lumark's Vaportight fixtures are designed for heavy-duty, non-corrosive environments. Applications include processing plants, cold storage, foundries, factories, loading docks and retail applications. U.L and CUL listed for non-classified wet locations. For use in 40°C ambient environments.

IC
VAPORTIGHT

200-300W
Incandescent

INDUSTRIAL SAFETY AND SECURITY LUMINAIRE

- Housings and threaded guard are die-cast aluminum. Small housing utilizes 1/2" NPS entry while large housing use 3/4" NPS entry. Standard construction includes thru-way wiring for ceiling and wall mount units. Guard is one piece and features stainless steel locking screw for vandal resistance

- Optional pendant mount, wall or ceiling mounting. Wall mount fits 4" round or octagonal J-Box. Pendant mount utilizes 1/2" NPS for small and 3/4" NPS for large

- Sockets are medium-base, porcelain exterior with 150°C wire

- Globe is heat- and impact-resistant glass and accepts up to 200W incandescent in small housing and 300W incandescent in the large housing

- Silicone gasket provides long life vapor seal

- Standard finish is polyester powder coat grey

- IP65 Rated

- Approximate net weight: 5 lbs. (2 kgs.)

COOPER LIGHTING - LUMARK

VS VAPORTIGHT SMALL

50-100W
Pulse Start Metal Halide
High Pressure Sodium

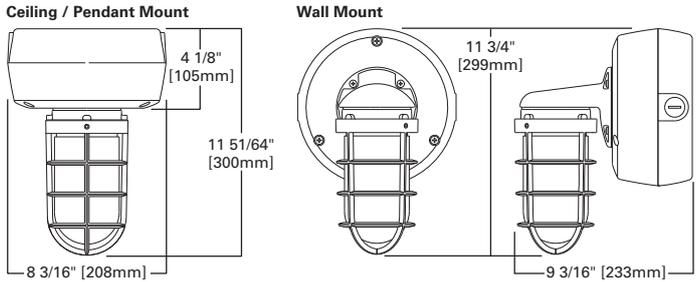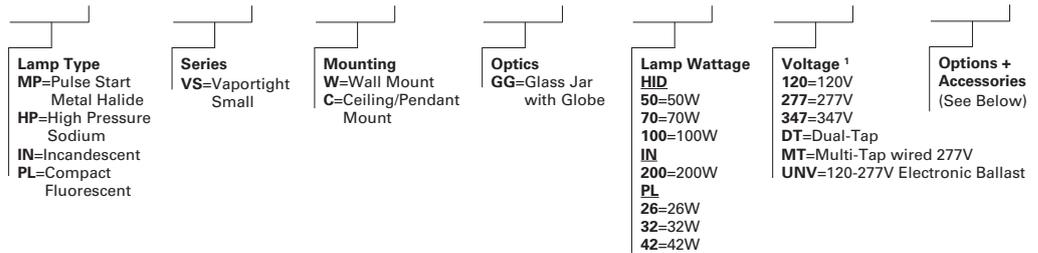**26-42W**
Compact Fluorescent

200W
Incandescent

INDUSTRIAL
SAFETY AND SECURITY
LUMINAIRE

- Housing and threaded guard are die-cast aluminum with 3/4" NPS entry. Standard construction includes thru-way wiring for ceiling or wall mount units. Guard is one piece construction and features stainless steel locking screw for vandal resistance

- Pendant, surface or wall mounting available. Ceiling mount fits 4" round or octagonal J-Box. Pendant mount utilizes a 3/4" NPS

- Sockets are 4kv pulse-rated medium-base porcelain lamp socket for HID applications or Gx24 base for 42W CFL. Lamp included stock packages

- Globe is heat- and impact-resistant glass and accepts up to 200W incandescent in small housing and 300W incandescent in the large housing

- Silicone gasket provides long life vapor seal in housing

- Approximate net weight: 6-14 lbs. (2.73-6.36 kgs.)

COOPER LIGHTING

DESCRIPTION

Lumark's Vaportight fixtures are designed for heavy-duty, non-corrosive environments. Applications include accent, entrance/eaves, pathway, recreation, retail, security and transportation applications. U.L and CUL listed for non-classified wet locations.

DIMENSIONS

Ceiling / Pendant Mount

4 1/8" [105mm]

11 51/64" [300mm]

8 3/16" [208mm]

Wall Mount

11 3/4" [299mm]

9 3/16" [233mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPVS-W-GG-100-120

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium
IN=Incandescent
PL=Compact Fluorescent

Series
VS=Vaportight Small

Mounting
W=Wall Mount
C=Ceiling/Pendant Mount

Optics
GG=Glass Jar with Globe

Lamp Wattage
HID
50=50W
70=70W
100=100W
IN
200=200W
PL
26=26W
32=32W
42=42W

Voltage [1]
120=120V
277=277V
347=347V
DT=Dual-Tap
MT=Multi-Tap wired 277V
UNV=120-277V Electronic Ballast

Options + Accessories
(See Below)

Options [2]
__=Grey (Standard)
BK=Black
SY=Silver
WH=White
LL=Lamp Included [3]
UP10=10% Uplight
F1=Single Fuse (120, 277 or 347V only)

Accessories [4]
DC1=Concentric Dome 200 [5]
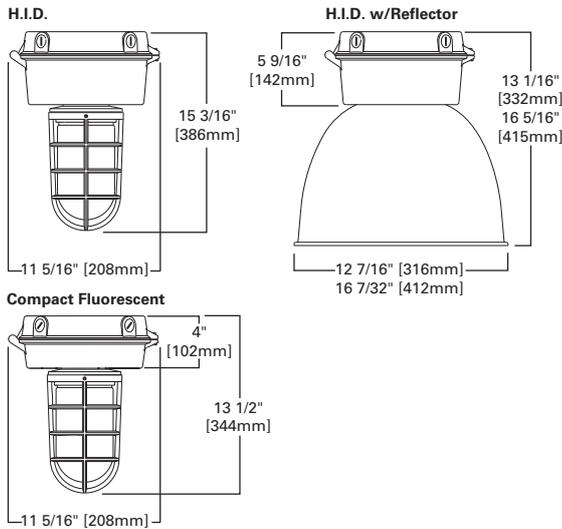DA1=Angle Dome 200 [5]

NOTES: 1 Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Lighting Representative for availability and ordering information. **2** Add as suffix in the order shown. **3** Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted. **4** Order separately. **5** DC1 and DA1 not available with wall mount. **6** Specifications and dimensions subject to change without notice.

Lamp Type	Ambient Environment	Supply Wire (Min.)
INC	40°C	90°C*
CFL (26-42W)	40°C	90°C*
HID (50-100W)	40°C (HPS) 25°C (MH)	150°C*

NOTES: * Internal Wiring. Wiring in External J-Box is 90°C.

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

H.I.D.

15 3/16" [386mm]

11 5/16" [208mm]

H.I.D. w/Reflector

5 9/16" [142mm]

13 1/16" [332mm]
16 5/16" [415mm]

12 7/16" [316mm]
16 7/32" [412mm]

Compact Fluorescent

4" [102mm]

13 1/2" [344mm]

11 5/16" [208mm]

DESCRIPTION

Lumark's Vaportight fixtures are designed for heavy-duty, non-corrosive environments. Applications include accent, entrance/eaves, pathway, recreation, retail, security and transportation applications. U.L and CUL listed for non-classified wet locations.

VL
VAPORTIGHT LARGE

70-175W
Pulse Start Metal Halide
High Pressure Sodium

300W
Incandescent

42-57W
Compact Fluorescent

**INDUSTRIAL
SAFETY AND SECURITY
LUMINAIRE**

- U.L. and cUL listed for non-classified wet locations. EISA Complaint

- Housing and threaded guard are die-cast aluminum with 3/4" NPS entry. Standard construction includes thru-way wiring for ceiling or wall mount units. Guard is one piece construction and features stainless steel locking screw for vandal resistance

- Pendant, surface or wall mounting available. Ceiling mount fits 4" round or octagonal J-Box. Pendant mount utilizes a 3/4" NPS

- Sockets are 4kv pulse-rated medium-base porcelain lamp socket for HID applications or Gx24 base for 42W CFL. Lamp included stock packages

- Globe is heat- and impact-resistant glass and accepts up to 200W incandescent in small housing and 300W incandescent in the large housing

- Silicone gasket provides long life vapor seal in housing

- Approximate net weight: 6-14 lbs. (2.73-6.36 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPVL-C-GG-175-120

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium
IN=Incandescent
PL=Compact Fluorescent

Series
VL=Vaportight Large

Mounting
C=Ceiling / Pendant Mount

Optics
GG=Glass Jar
PV12=12" Direct Mount Prismatic Lens [1]
PV16=16" Direct Mount Prismatic Lens [1]
SV16=16" Direct Mount Spun Aluminum Reflector [1]

Lamp Wattage
HID
70=70W
100=100W
150=150W
175=175W
IN
300=300W
CF
42=42W
57=57W

Voltage [2]
120=120V
277=277V
347=347V
DT=Dual-Tap
MT=Multi-Tap wired 277V
UNV=120-277V Electronic Ballast

Options + Accessories
(See Below)

Options [3]
__=Grey (Standard)
SY=Silver
WH=White
BZ=Bronze
F1=Single Fuse (120, 277 or 347V only)
LL=Lamp Included [4]
UP10=10% Uplight
Q=Quartz Restrike (Hot Strike Only) [5]
FH-1=Die-cast Aluminum Fixture Hook (w/ 3/4" threads for easy installation)
FL-1=Malleable Iron Plated Fixture Loop (w/ 3/4" threads for easy installation)
SHK=Die-cast Aluminum Fixture Hook (w/safety screws and 3/4" threads for easy installation)
PC3=3' Cord with NEMA Plug ((120V-L5-15P, 208V-L6-15P, 347V-L37-20P, and 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' Cord) Requires FH-1 or FL-1, or SHK. Example: PC3-120V Use with TPPH-NEMA. Specify Voltage.

Accessories [6]
SGB16=Safety Glass Bottom for 16" Refractor (Not compatible with "WG") (250W maximum)
WG16/SGB=Gym Wire Guard with Safety Glass Bottom for 16" Refractor
WGD16=Wire Guard for DB16
DB16=Drop Bottom Lens (250W maximum)
CB12=Conical Bottom Lens for 12" Refractor
CB16=Conical Bottom Lens for 16" Refractor
DC2=Concentric Dome 300 [7]
DA2=Angle Dome 300 [7]

NOTES: 1 Damp location listed. **2** Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Lighting Representative for availability and ordering information. **3** Add as suffix in the order shown. **4** Lamp shipped separately. **5** Not for use with "GG" optics. **6** Order separately. **7** Requires "GG" optics. **8** Specifications and dimensions subject to change without notice.

Lamp Type	Ambient Environment	Supply Wire (Min.)
CFL (42-57W)	40°C	90°C *
HID (70-175W)	40°C (100W) 25°C (150 & 175W)	105°C *

NOTES: * Internal Wiring. Wiring in External J-Box is 90°C.

COOPER LIGHTING - LUMARK

CML
LUMAWATT INDUSTRIAL HID DIMMING SYSTEM

Controls all LumaWatt Equipped Lumark HID Industrial Luminaires
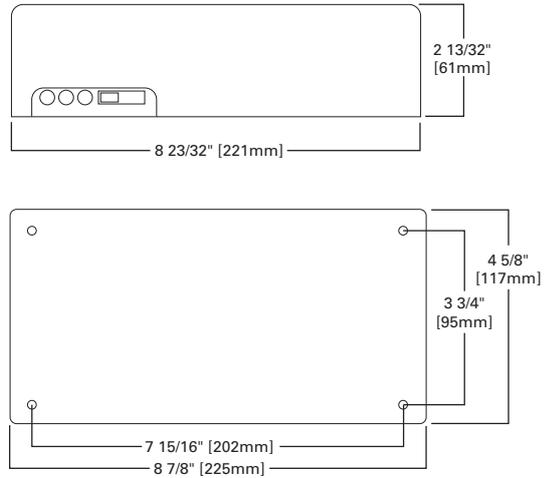
CONTROL MODULE

- Low voltage output controls up to 25 LumaWatt-equipped fixtures

- Allow daisy-chaining of multiple controllers

- Terminal block provides input connections for one to six passive infrared motion sensors

- Input terminal allows use of user-supplied dry-contact switch. Switch overrides motion sensors, putting system into high brightness mode

- Standard transformer accepts 120V or 277V user-configurable input. 208V, 240V, 347V and 480V are also available

- Three front panel lights show system status: amber indicates that the controller is receiving power, red indicates that output from the controller is at full brightness and green indicates that output is at low brightness

- Front panel test switch provides same function as remote dry-contact switch

- CMOS timer maintains system in full brightness mode for a 15 minute warm-up period when power is applied

- Operating temperature 2°C (35°F)—55°C (131°F)

COOPER LIGHTING

DESCRIPTION

The LumaWatt controller accepts inputs from up to four remote-mounted motion detectors and provides a low-voltage output capable of controlling up to 25 fixtures. Upon receiving a 24 volt DC signal from an attached motion sensor or dry contact switch, it switches connected fixtures from low intensity to high, providing maximum light when an area is occupied and lowered energy usage when the area is empty. U.L. listed and CSA certified.

DIMENSIONS

ORDERING INFORMATION

SAMPLE NUMBER: SAMPLE NUMBER: CML-120/277

Product Family
CML=LumaWatt Control Module

Input Voltage [1, 2]
120/277V=User-selectable 120V or 277V input voltage
208V
240V
347V
480V
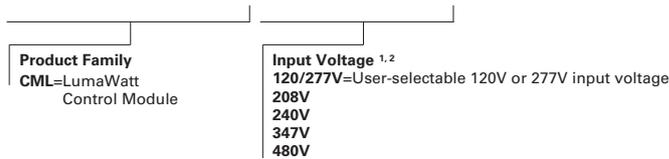
LumaWatt Lamp Input Watts

Wattage	High (HW)	Low	Change (PC)	Wattage	High (HW)	Low	Change (PC)
Metal Halide				**High Pressure Sodium**			
1000W	1080	666	38%	1000W	1100	616	44%
400W	455	238	48%	400W	465	215	54%
250W	295	162	45%	250W	300	151	50%
175W	209	101	52%	150W	196	118	40%
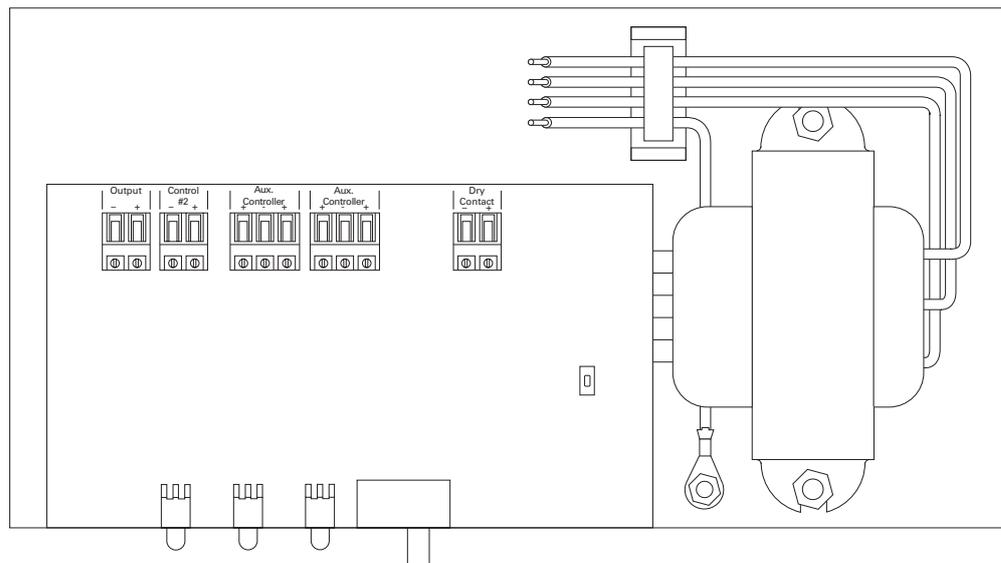
COOPER LIGHTING - LUMARK

DIMENSIONS

4" [102mm]

2 1/4" [57mm]   2" [51mm]   2" [51mm]

3 5/16" [84mm]

3 5/16" [84mm]

4" [102mm]

ORDERING INFORMATION

SAMPLE NUMBER: SAMPLE NUMBER: IRMD-N-24V

Product Family
IRMD=LumaWatt Infrared Motion Detector

Coverage
A=Aisleway
N=Narrow
W=Wide

Input Voltage [1]
24V=24V
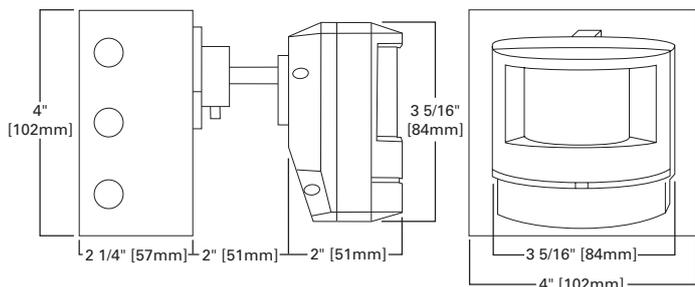
DESCRIPTION

LumaWatt motion detectors work in conjunction with the LumaWatt controller and fixture dimmers to provide bi-level lighting control based upon an area's occupancy. Motion detectors are passive infrared type and react to changes in infrared energy (heat) within the coverage area.

Excellent for controlling energy costs in any area occupied less than 100% of the time. Rated for use in 55°C (131°F) ambient environment (performance will degenerate at ambient temperatures above 35°C (95°F), requiring higher sensitivity settings and shortening coverage areas).

IRMD
LUMAWATT INDUSTRIAL HID DIMMING SYSTEM

INFRARED MOTION DETECTOR

- Power to the motion detector (24V DC) is supplied by the control module. The Detector uses a standard galvanized steel 4x4 J-box with (1) 3/4" and (2) 1/2" knockouts on all four sides for DC control circuit connection exit. Can be mounted flush to wall or ceiling, or suspended from conduit

- Provides aiming flexibility when positioning motion detector

- Available in three coverage patterns, for aisleways, narrow areas or wide areas

- Provides visual indication of when the sensor is detecting motion

- Bank of five DIP switches controls amount of time that system stays at full brightness after motion in an area ceases

- Up to four motion detectors can be daisey chained together per controller

- Use in conjunction with "HL" or "HC" option on luminaires

FIG. 1
IRMD-A / IRMD-A-24V
Infrared Motion Detector / Aisleway Coverage / Ceiling Mounted / 30' Mounting Height (Dotted lines indicate coverage area for 15' mounting height)
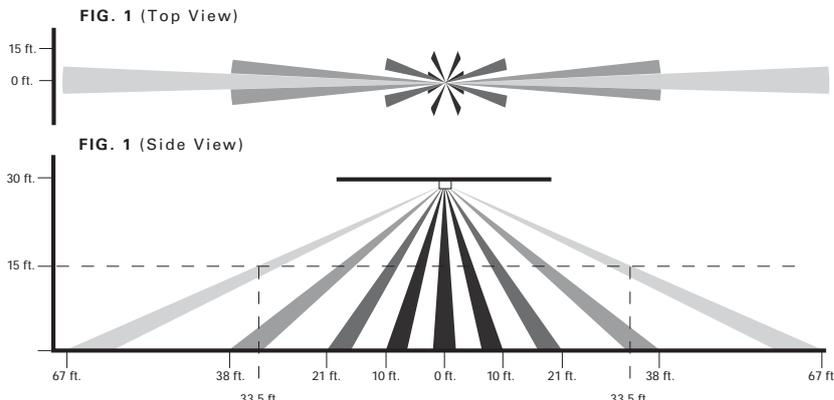
FIG. 2
IRMD-W / IRMD-W-24V
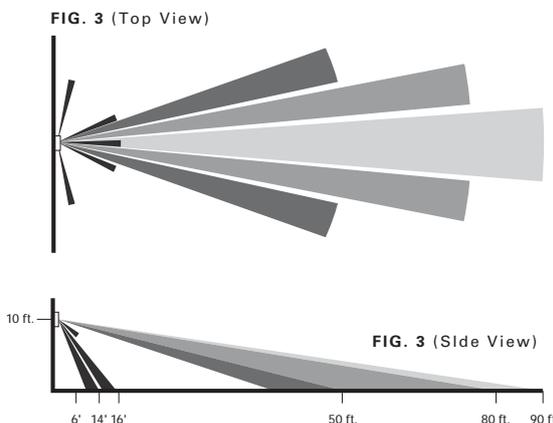Infrared Motion Detector / Wide Coverage / Wall Mounted / 10' Mounting Height
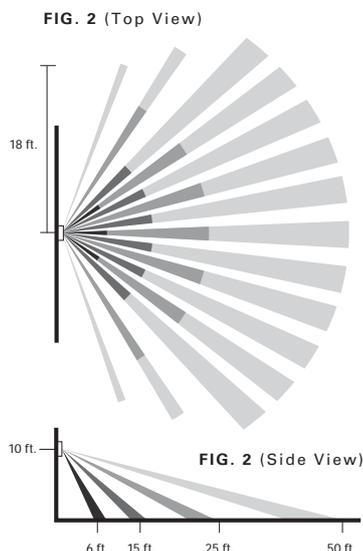
FIG. 3
IRMD-N / IRMD-N-24V
Infrared Motion Detector / Narrow overage / Wall Mounted / 10' Mounting Height

FIG. 1 (Top View)

15 ft.
0 ft.

FIG. 1 (Side View)

30 ft.

15 ft.

67 ft.   38 ft.   21 ft.   10 ft.   0 ft.   10 ft.   21 ft.   38 ft.   67 ft.
33.5 ft.   33.5 ft.

FIG. 2 (Top View)

18 ft.

FIG. 3 (Top View)

FIG. 2 (Side View)

10 ft.

6 ft.   15 ft.   25 ft.   50 ft.

FIG. 3 (Side View)

10 ft.

6'   14' 16'   50 ft.   80 ft.   90 ft.

NOTES: 1 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. **2** Add as suffix to any Lumark indoor industrial fixture. **3** 30 second time delay when switching from bright to dim. **4** Order separately. **5** See separate cut sheet for full details on control module. **6** Specifications and dimensions are subject to change without notice.

COOPER LIGHTING - LUMARK

IRMS
INDIVIDUAL FIXTURE CONTROL OPTION

INFRARED INTEGRAL MOTION SENSOR

- Sensor is wired directly to the luminaire and operates on 120V with Magnetic CWA HID ballast systems. The detector is pre-wired and mounted to junction box. Ballast assembly shipped with wiring compartment for connection to ballast. Specify "HSW" options for Magnetic H.I.D. luminaires and open and enclosed Steeler and Benchmark luminaires

- Unit comes with all necessary hardware to mount to a wide variety of open or enclosed optical assemblies. Consult individual specification sheets for compatibility and ordering logic

- 360° viewing allows coverage between luminaires. Ideal for mounting heights from 15-45 feet

- Green LED provides visual indication of when the sensor is detecting motion

- Luminaire ships with 15 minute start up timer. Sensors can be adjusted from 30 seconds to 20 minutes

- Standard sensor operates from -10°C to 55°C. Low Temperature option (LT) operates from -40°C to 55°C. Relative humidity of 20%-90%, non-condensing

DESCRIPTION

LumaWatt motion detector works in conjunction with fixture dimmers to provide bi-level control based on an area's occupancy. Motion detector is passive infrared type and reacts to changes in infrared energy (heat) within the coverage area.
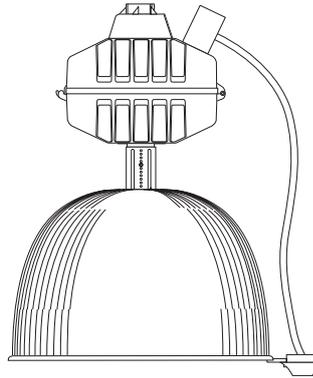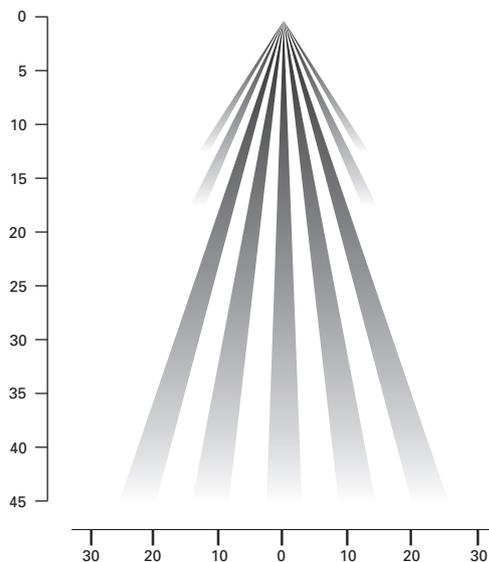
ORDERING INFORMATION [1]

SAMPLE NUMBER: SAMPLE NUMBER: MHSS-SA18-M-400-MT-HSW

OPTIONS
HSW=Integral LumaWatt Sensor and with Wide Distribution Control for CWA Magnetic Ballast

COVERAGE PATTERN

NOTES: 1 Consult individual luminaire specification sheets for compatibility and ordering information.
2 Specifications and dimensions are subject to change without notice.

COOPER LIGHTING - LUMARK

OPTION DESCRIPTIONS

Lumark offers a full complement of options and accessories that allow the products to be customized to particular applications or installations. Options should be listed in the order shown at end of the part number and separated by dashes. See Steeler and Benchmark chart for housing/optical compatibility.

PS [Protective Starter] Prevents damage to the ballast or related system wiring by disconnecting the ignitor if a lamp has failed or is missing. Operates with High Pressure Sodium and Pulse Start Metal Halide lamps up to 1000W.

P [Pre-set Socket Position from the factory] Shipped pre-set for specified distribution from factory.

OR [Open Rated Socket] Required in applications where open rated restricted base lamps must be used. Socket is "Pink" to denote open rated lamp base only. See lamp manufactures for additional information.

SS [Space Saver] Same as remote mount but optical shipped with loop and 3' cord with for easy connection to ballast housing.

QB [Quiet Ballast] Potted ballast eliminates ballast noise associated with traditional Magnetic Core and Coil ballast. Ideal for applications where elimination of secondary noise is needed such as gymnasiums and multi-purpose areas. Available on the Benchmark ballast housing only. Available on 250-1000W ballast only.

DL100 [100% Downlight] Available on SA18 or SA23 aluminum reflectors only.

QD [Quick Disconnect] Die-cast Pendant Mount Box—Specify Single Voltage (not compatible with PC3, PHC, C3, MWS, RM or HC). Full Load Disconnect module allows for removal of luminaire while circuit is still energized. U.L. listed as a load-break device.

RM [Remote Mount] Ballast and reflector mounting bracket can be hard wired and installed separate. Allows the ballast to be mounted at further distance or allow for overall reduction in luminaire height. Distance my be limited for certain ballast types and wattages.

TE [Toolless Entry] Available for Benchmark ballast housing only.

HL [LumaWatt Fixture Control Module] Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems.

HC [LumaWatt Fixture Control Module] Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit.

HSW [LumaWatt Integrated Sensor Control] Allows use with CWA magnetic ballast and integrated 120V sensor.

Q [Quartz Restrike DC Bayonet Base] Lamp strikes after momentary power interruption that causes the main HID lamp to extinguish. Lamp will stay on until HID lamp restrikes. Quartz lamp will not come on at initial cold start.

EM [Quartz Restrike with "Delay Relay"] Same as "Q" option but lamp strikes at both hot and cold starts. Lamp stays on for two minutes to allow lamp to get to full brightness.

EM/SC [Quartz Restrike wired for Separate Circuit] Allow quartz lamp socket to be wired to separate 120V emergency power system.

F1 [Single Fuse (120, 277 or 347V only)] In-line fusing isolates inoperative luminaires from circuit and protects luminaires from in-rush current flow. All fusing on industrial luminaires is external for easy access and maintenance.

F2 [Double Fuse (208, 240 or 480V only)] In-line fusing isolates inoperative luminaires from circuit and protects luminaires from in-rush current flow. All fusing on industrial luminaires is external for easy access and maintenance.

VI [Visual Indicator] Externally mounted LED signal allows quick diagnostic from ground to determine lamp or ballast failure. The LED will flash which indicates lamp failure. The LED does not light which indicates probable ballast failure. Available in 175-400W Metal Halide, 50-400W High Pressure Sodium and 50-450W Pulse Start Metal Halide.

FILT [Sintered Bronze Filter] Allows Enclosed and Gasketed luminaires to breathe during start-up and shutdown times. Sintered bronze filter prevents the entrance of contaminants. Not offered with "WL" option.

FH-1 [Die-cast Aluminum Fixture Hook] with 3/4" threads for easy installation. Can also be ordered separately as an accessory.

FL-1 [Malleable Iron Plated Fixture Loop] with 3/4" threads for easy installation. Can also be ordered separately as an accessory.

SHK [Die-cast Aluminum Fixture Hook] with safety screw and 3/4" threads for easy installation. Can also be ordered separately as an accessory.

PC3-XXXV [3' cord with NEMA plug] (120V-L5-15P, 208V-L6-15P, 240V-L6-15P, 277V-L7-15P 347V-L37-20P, AND 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' cord). Requires FH-1, SHK or FL-1. EXAMPLE: PC3-120V. Can also be ordered separately as an accessory.

PHC-XXXV [Power Cord and Plug] 18" Power Cord and Non-NEMA plug configuration. Must be used with FL-1, SHK and TPPH (Thru-Way Pendant Power Hook). Can also be ordered separately as an accessory.

COOPER LIGHTING - LUMARK

OPTION DESCRIPTIONS

PHC-XXX-NEMA [Power Cord and NEMA Plug] 18" Power Cord and 20 Amp NEMA plug configuration. Must be used with FL-1, SHK and TPPH-NEMA (Thru-Way Pendant Power Hook). EXAMPLE: PHC-120V-NEMA. Can also be ordered separately as an accessory.

C3 [3' Cord with no plug] Must use with FH-1, SHK or FL-1. Can also be ordered separately as an accessory.

MWS [Modular Wiring Systems] Can also be ordered separately as an accessory.

SCF 3' Aircraft Safety Cable secures housing to ceiling. Alternative lengths available. EXAMPLE: SCF6=6' Cable.

SCR Aircraft Safety Cable for housing to reflector.

L/TCB [Less Top Connector box] Housing shipped less top connector box. Used when using TWMBS (Steeler Family) and TW (Benchmark Family) accessories.

LL [Lamp Included] Specified for lamp to ship with order. Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted.

QLL [Quartz Lamp Included] Can be specified when Q, EM or EM/SC option is included. Specified for lamp to ship with order. Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted.

WL [Wet Location Listed Luminaires] U.L. listed and CSA certified for wet locations. Check chart for availability. Not available with all options and accessories. Consult product specification sheets for more details.

WLB U.L. Labeled for Wet Locations with Die-Cast Box for 3/4" Conduit Entry (Vertimark II Only).

WLD U.L. Labeled for Wet Locations with Quick Disconnect (Vertimark II Only).

WLP U.L. Labeled for Wet Locations Suitable for Surface or 4" J-Box Mounting (Vertimark II Only).

WG [Wire Guard] Wire Guard factory installed. Available on ENGR16 & ENGR21 only. Must be specified with the fixture.

WG18 [Wire Guard] Wire Guard factory installed. Available on ENSA18 only. Must be specified with the fixture.

WG23 [Wire Guard] Wire Guard factory installed. Available on ENSA23 only. Must be specified with the fixture.

Lenses + Wire Guard Accessories [order separately] [1]

Aluminum [High-Bays]

SGB15 Safety Glass Bottom for SA15 (not compatible with "WG15") [2]

SGB18 Safety Glass Bottom for SA18 (not compatible with "WG18") [2]

SGB19 Safety Glass Bottom for AV19 (not compatible with "WG19") [2]

SGB23 Safety Glass Bottom for SA23 (not compatible with "WG23") [2]

WG15 Wire Guard for SA15 (not compatible with "SGB15")

WG18 Wire Guard for SA18 (not compatible with "SGB18")

WG19 Wire Guard for AV19 (not compatible with "SGB19")

WG23 Wire Guard for SA23 (not compatible with "SGB23")

WG15/GLC Gym Wire Guard w/ Safety Glass for SA15 [2]

WG18/GLC Gym Wire Guard w/ Safety Glass for SA18 [2]

WG19/GLC Gym Wire Guard w/ Safety Glass for AV19 [2]

WG23/GLC Gym Wire Guard w/ Safety Glass for SA23 [2]

Aluminum [Low-Bays]

WG22/EP Wire Guard for 22" Enterprise

WG28/EP Wire Guard for 28" Enterprise

WG/LM Wire Guard for Apollo

Borosilicate Glass

GFWG16/WG Glass Full Wire Guard for Open GR16 (SGB not Included)

GFWG21/WG Glass Full Wire Guard for Open GR21 (SGB not Included)

GTWG16 Top Full Wire Guard 16" Refractor for GR16 & ENGR16

GTWG21 Top Full Wire Guard 21" Refractor for GR21 & ENGR21

SGB16/GR 16" Safety Glass Bottom for Open GR16 [2]

SGB21/GR 21" Safety Glass Bottom for Open GR21 [2]

WG16/GR Wire Guard for 16" Refractor for Open GR16

WG21/GR Wire Guard for 21" Refractor for Open GR21

WG16/GLC/GR Wire Guard with Safety Glass Bottom for Open 16" Refractor

WG21/GLC/GR Wire Guard with Safety Glass Bottom for Open 21" Refractor

NOTE: 1 Wire guards and lens enclosures should be used for any application needing additional protection such as gymnasiums. **2** Approved lamp containment barrier required when enclosed rated MP/ML/MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an Open rated socket (OR) and lamp.

COOPER LIGHTING - LUMARK

OPTION DESCRIPTIONS

Lenses + Wire Guard Accessories [order separately] [1]

Prismatic Acrylic

CB22 Conical Bottom Lens for 22" Refractor for PD22 and ER22 (400W maximum)

DB16 Drop Lens for 16" Refractor for PD16 (250W maximum)

DB22 Drop Lens for 22" Refractor for PD22 and ER22 (400W maximum)

DB25 Drop Lens for 25" Refractor for PD25 (400W maximum)

FWG16/WG16 Full Wire Guard for PD16 ("SGB" not included)

FWG22/WG22 Full Wire Guard for PD22 and ER22 ("SGB" not included)

FWG25/WG25 Full Wire Guard for PD25 ("SGB" not included)

FWG16/WG16/SGB16 Full Wire Guard for 16" Refractor & SGB16 lens

FWG22/WG22/SGB22 Full Wire Guard for 22" Refractor & SGB22 lens

FWG25/WG25/SGB25 Full Wire Guard for 25" Refractor & SGB25 lens

FWG22/WG22/WDB [Full Wire Guard] Full Wire Guard for use with DB22 Drop Lens for PD 22" Refractor ("DB22" not included)

FWG25/WG25/WDB [Full Wire Guard] Full Wire Guard for use with DB25 Drop Lens for PD 25" Refractor ("DB25" not included)

SGB16 Safety Glass Bottom for 16" Refractor (not compatible with "WG") (250W maximum) [1]

SGB22 Safety Glass Bottom for 22" Refractor (not compatible with "WG") (400W maximum) [1]

SGB25 Safety Glass Bottom for 25" Refractor (not compatible with "WG") (400W maximum) [1]

WG16 Wire Guard for 16" Refractor (not compatible with "SGB")

WG22 Wire Guard for 22" Refractor (not compatible with "SGB")

WG25 Wire Guard for 25" Refractor (not compatible with "SGB")

WGD16 Wire Guard for DB16

WGD22 Wire Guard for DB22

WGD25 Wire Guard for DB25

WG16/SGB Gym Wire Guard with Safety Glass Bottom for 16" Refractor (250W maximum) [1]

WG22/SGB Gym Wire Guard with Safety Glass Bottom for 22" Refractor (400W maximum) [1]

WG25/SGB Gym Wire Guard with Safety Glass Bottom for 25" Refractor (400W maximum) [1]

Mounting Accessories [order separately]

TWMBS Thru-way Mounting Box (Steeler Only)

TW Thru-way Mounting Box (Benchmark Only)

MBT Twin Mount Bracket (Fixtures must be same voltage and without hooks, loops or plugs)

TPPH-XXXV-NEMA Thru-way Pendant Power Hook. Requires FL-1, SHK and PHC-XXXV-NEMA. Specify Voltage

TPPH-XXXV Thru-Way Pendant Power Hook Requires FL-1, SHK and PHC. Specify Voltage

TPPH-F-XXXV Thru-Way Pendant Power Hook–Single Fuse, 120, 277 or 347 Volt. Requires FL-1, SHK and PHC. Specify Voltage

TPPH-F2-XXXV Thru-Way Pendant Power Hook–Double Fused, 208, 240 or 480 Volt. Requires FL-1, SHK and PHC. Specify Voltage

TPPH-F-QD-XXXV Thru-Way Pendant Power Hook–Single Fuse, Quick Disconnect. Requires FL-1, SHK and PHC. Specify Voltage

TPPH-F2-QD-XXXV Thru-Way Pendant Power Hook–Double Fused, Quick Disconnect. Requires FL-1, SHK and PHC. Specify Voltage

Decorative Shades [order separately]

Catalog Number Size	Shade Description	(A) Inches	(A) Metric	(B) Inches	(B) Metric	Fixture Reflector
S51003	Round Decorative	17 1/2"	44.45 cm	17"	43.18 cm	15"
S51004	Round Decorative	17 1/2"	44.45 cm	27 1/2"	69.85 cm	15"
S51005	Round Decorative	20 1/2"	52.07 cm	27 1/2"	69.85 cm	18"
S51006	Round Decorative	25 1/2"	64.77 cm	34 1/2"	87.63 cm	23"
S51103	Square Decorative	17 1/2"	44.45 cm	17"	43.18 cm	15"
S51104	Square Decorative	17 1/2"	44.45 cm	27 1/2"	69.85 cm	15"
S51105	Square Decorative	20 1/2"	52.07 cm	27 1/2"	69.85 cm	18"
S51106	Square Decorative	25 1/2"	64.77 cm	34 1/2"	87.63 cm	23"
S51203	Hexagon Decorative	17 1/2"	44.45 cm	17"	43.18 cm	15"
S51204	Hexagon Decorative	17 1/2"	44.45 cm	27 1/2"	69.85 cm	15"
S51205	Hexagon Decorative	20 1/2"	52.07 cm	27 1/2"	69.85 cm	18"
S51206	Hexagon Decorative	25 1/2"	64.77 cm	34 1/2"	87.63 cm	23"

NOTE: Has to be installed when fixture is installed. Specify color. **EXAMPLE:** S51003BLK

NOTE: 1 Wire guards and lens enclosures should be used for any application needing additional protection such as gymnasiums.

COOPER LIGHTING - LUMARK

OPTIONS CAPABILITY MATRIX [ORDER SEPARATELY]

STEELER HOUSING	PS	P	OR	SS¹	HL²	HSW	D	EM	EM/SC³	F1 (120, 277, 347V)	F2 (208, 240, 480V)	WG	QD⁴	FH-1	FL-1	SHK	PC3	PHC	C3	HC²·⁵	DL100⁶	SCF	SCR	L/TCB⁸	LL	OLL	RM⁹	VI	WG18	WG23	FILT	MWS
SS Steeler Aluminum High-Bay	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•				•
SE E&G Aluminum High-Bay	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SS Econoliter	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•		•				•
SS VertX	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•				•
SE VertX	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•				•
EP Enterprise 22	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•		•				•
EP Enterprise 28	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•		•			•	•
SG Prismatic Glass High-Bay	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•		•			•	•
SE E&G Gasketed Glass	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•⁷	•	•	•	•	•				•
SS Prismatic	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•		•	•	•	•	•	•	•			•	•
SE E&G Gasketed Acrylic	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•				•
SS Enhanced Refractor	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•		•	•	•	•	•			•	•
LX Prismatic Direct Mount	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•		•		•	•	•		•				•

NOTES: **1** Distance may be limited by ballast type. **2** 30 second time delay when switching from bright to dim. Consult individual lamp manufactures recommendations for compatible lamps. For use with CWA ballast only. **3** Not available with HL or HC option. **4** Not available with FH-1, FL-1 or SHK. **5** Not available with QD PC3, C3, PHC or MWS. Not available with single circuit MWS special order. **6** Available SA18 and SA23 only. **7** Standard. **8** Specify when using the TWMBS or TW accessory. **9** Not available with QD, W, WL option. **10** Hinged and latched reflector assembly required.

SS 16", 22" & 25" Prismatic High-Bay p.26

SE 16" & 21" E&G Glass Steeler p.25

SG 16" & 21" Prismatic Glass High-Bay p.23

EP Enterprise 22 & 28 p.19

SE E&G VertX p.17

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LX 22" & 25" Prismatic Direct-Mount Steeler p.33

SE 18" & 23" E&G Steeler p.11

SS 22" Enhanced Refractor High-Bay Steeler p.31

SS 15", 18" & 23" Steeler p.9

SE 22" E & G Prismatic Acrylic Steeler p.29

COOPER LIGHTING - LUMARK

OPTIONS CAPABILITY MATRIX [ORDER SEPARATELY]

BENCHMARK HOUSING	PS	P	OR	SS¹	QB	HL²	HSW	D	EM	EM/SC³	F1 (120, 277, 347V)	F2 (208, 240, 480V)	VI	QD⁴	FH-1	FL-1	SHK	PC3	PHC	C3	HC²·⁵	DL100⁶	SCF	SCR⁷	L/TCB⁸	LL	OLL	WL	WLB	WLD	WLP	TE	RM⁹	WG	WG18	WG23	FLT	MWS	P [Vertimark II]
HB Benchmark	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					•	•					•	
EB E&G Aluminum High-Bay	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•				•	•		•	•	•	•	
UB Benchmark Uplight	•		•	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•		•	•	•	•						•	•					•	
HB VertX	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•		•	•	•	•						•	•				•	•	
EB VertX	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•		•		•	•						•	•					•	
RB Low-Bay	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•		•	•⁷	•	•		•				•	•					•	
GB Prismatic Glass High-Bay	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•				•					•	•	
EB E&G Gasketed Glass	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•				•	•	•			•	•	
HB Prismatic Acrylic	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•		•		•	•	•					•	•					•	
EB E&G Gasketed Acrylic	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•		•		•	•	•					•	•					•	
HB Enhanced Refractor	•	•	•	•	•	•	•	•	•	•					•	•	•	•	•	•	•		•		•	•						•	•					•	
XB Prismatic Direct-Mount	•		•	•	•	•	•	•	•	•					•	•	•	•	•	•	•		•		•	•	•					•						•	
OTHER HOUSINGS																																							
VF Vertimark			•	•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•		•	•	•	•							•	
BE Vertimark II		•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•		•		•	•			•	•	•							•	•

NOTES: 1 Distance may be limited by ballast type. **2** 30 second time delay when switching from bright to dim. Consult individual lamp manufactures recommendations for compatible lamps. For use with CWA ballast only. **3** Not available with HL or HC option. **4** Not available FH-1, FL-1 or SHK. **5** Not available with QD PC3, C3, PHC or MWS. Not available with single circuit MWS special order. **6** Available SA18 and SA23 only. **7** Standard. **8** Specify when using the TWMBS or TW accessory. **9** Not available with QD, W, WL option.

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Ⓔ COOPER LIGHTING - LUMARK

QC
QUADRA-MARK

175-400W
Pulse Start Metal Halide
Metal Halide

RECESSED COMMERCIAL

- UL Listed. CSA Certified. EISA Compliant

- Heavy-duty die-cast aluminum socket housing, finished with white polyester powder coat, allows full adjustment of socket assembly for a variety of distributions from concentrated to wide

- Computer-designed spun aluminum faceted reflector offers maximum light output with minimum voltage rise

- The thermally protected, high power factor 60Hz Metal Halide ballast is U.L. listed

- Prime cold-rolled steel pan is die-formed for maximum rigidity and has a 45° angled lip around the reflector opening to help reduce glare. It is finished with a white polyester powder coat and mounts easily into inverted T-bar ceilings

- Approximate net weight: 42 lbs. (19 kgs.)

DESCRIPTION

The Lumark Quadra-Mark is designed for easy installation on main T-bars or can be hung by wires in lay-in ceilings with 2' x 2' tiles.

The Quadra-Mark provides excellent distribution with minimal glare for use in supermarkets, hardware stores, auto showrooms, airport terminals, shopping malls and other areas with high ceilings requiring performance and aesthetics.

DIMENSIONS

19 3/32" [485mm]

24" [610mm] Sq.
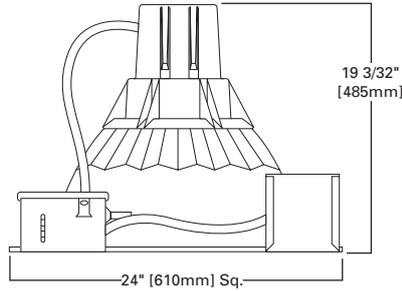
ORDERING INFORMATION

SAMPLE NUMBER: MHQC-QCSA18-C-175-T-120V-QMGL

Lamp Type ¹	Series	Reflector Type	Distribution	Lamp Wattage	Mounting	Voltage ²	Options
MP=Pulse Start Metal Halide	**QC**=Quadra-Mark	**QCSA18**=18"	**C**=Concentrated	**MP**	**T**=T Bar	120V	(See Below)
MH=Metal Halide			**M**=Medium	**175**=175W		208V ³	
			W=Wide	**200**=200W		240V ³	
				250=250W		277V	
				320=320W		347V	
				350=350W		480V ³	
				400=400W			
				MH			
				175=175W			
				250=250W			
				400=400W			

Options ⁴
OR=Open Rated Socket for MH Lamps
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with ''Delay Relay'' (Quartz lamp strikes at both hot and cold starts) ⁵
EM/SC=Emergency Separate Circuit
LL=Lamp Included ⁶
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
HL=LumaWatt Fixture Control Module (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems) ⁷
HC=LumaWatt Fixture Control Module (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit) ⁷
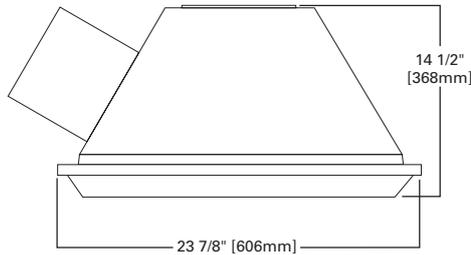**DL**=U.L. Labeled for Damp Locations
QMGL=Safety Glass Lens ⁸
WG/QC=Wire Guard
QMGL/WG=Safety Glass Lens with Wire Guard ⁸

NOTES: **1** Approved lamp containment barrier required when enclosed rated MP and MH lamps are used. 2005 NEC code requires that open luminaires must utilize a safety glass bottom (SGB) accessory or an open rated socket (OR) and lamp. **2** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 88% EISA compliant MP fixtures not available in 347V. **3** Not available in Canada. **4** Add as suffix in the order shown. **5** Not available with HC or HL. **6** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **7** Not available with EM or EM/SC. **8** Requires relamping of unit from above ceiling plane. **9** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W

DIMENSIONS

14 5/8" [371mm]

23 7/8" [606mm]

Ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Quadra-Lume is perfect for applications which call for reliable, affordable illumination with minimal maintenance. Quadra-Lume is designed for easy installation on main T-bars or can be hung by wires in lay-in ceilings with 2' x 2' tiles.

The Quadra-Lume provides minimum surface brightness, excellent uniformity and gentle diffusion. It is ideal for use in department stores, banks, auto showrooms, schools, libraries, office buildings and auditoriums.

QP
QUADRA-LUME

70-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

RECESSED COMMERCIAL WITH SPECULAR LOUVERS

- UL Listed. CSA Certified. EISA Compliant

- Die-formed heavy-duty housing is made of cold-rolled steel and finished in highly reflective white polyester powder coat. Stamped steel ballast mounting bracket is integral part of housing

- Die-formed steel reflector has removable panels for easy ballast access from below

- Die-formed heavy-gauge steel frame can be hinged and latched from either side. Stamped steel retaining clips assure flush fit of lens with frame

- Nine- or 16-cell, 4" deep, regressed specular louvers

- Approximate net weight: 49 lbs. (22 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHQP-S4/9-400-120-Q

Lamp Type	Series	Louver Color	Louver Size	Lamp Wattage [3]	Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1, 2]	**QP**=Quadra-Lume w/ Specular Louvers	**S4**=Silver Louver, 4" Deep	**/9**=Nine-cell Louver	**MP**	**120V**	(See Below)
MH=Metal Halide [1]			**/9/GL**=Nine-cell Louver with Glass Overlay	**70**=70W	**208V**	
HP=High Pressure Sodium			**/16**=16-cell Louver	**100**=100W	**240V**	
			/16/GL=16-cell Louver with Glass Overlay	**175**=175W	**277V**	
				200=200W	**347V**	
				250=250W	**480V**	
				320=320W		
				350=350W		
				400=400W		
				MH		
				175=175W		
				250=250W		
				400=400W		
				HP		
				70=70W		
				100=100W		
				150=150W		
				250=250W		
				400=400W		

Options [5]
OR=Open Rated Socket for MH Lamps
QB=Quiet Ballast [6]
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with ''Delay Relay'' (Quartz lamp strikes at both hot and cold starts) [7]
EM/SC=Emergency Separate Circuit
LL=Lamp Included [8]
SCF=3' Aircraft Safety Cable Secures Housing to Ceiling (Alternative lengths available. Ex: SCF6=6' Cable)
BDF=Black Door Frame
G2=Double Gasketing Doors (Door to Lens, Lens to Door)
VL=Vertical Lamp [9]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
HL=LumaWatt Fixture Control Module (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems) [10, 11]
HC=LumaWatt Fixture Control Module (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit) [10, 11]
DL=U.L. Labeled for Damp Locations

Accessories [12]
WGQF=Wire Guard [13]
FTA=Flush Drywall Frame Kit, Natural Anodized Aluminum
FTB=Flush Drywall Frame Kit, Black
FTW=Flush Drywall Frame Kit, White

NOTES: 1 Fixtures with Metal Halide lamps MUST have glass overlay (GL). **2** 150, 175, 200, 250, 320, 350 and 400W only. **3** All lamps are mogul-base. 150W-MH are available medium-base. **4** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 88% efficient EISA compliant MP fixtures not available in 347V. **5** Add as suffix in the order shown. **6** 120/277V Metal Halide only. **7** Not available with HC or HL. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Adds 3 1/4" to overall fixture height. **10** Requires vertical lamp option (VL). **11** Not available with EM or EM/SC. **12** Order separately. **13** Not available with FTA, FTB or FTW. **14** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

Ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Quadra-Lume is perfect for applications which call for reliable, affordable illumination with minimal maintenance. Quadra-Lume is designed for easy installation on main T-bars or can be hung by wires in lay-in ceilings with 2' x 2' tiles.

The Quadra-Lume provides minimum surface brightness, excellent uniformity and gentle diffusion. It is ideal for use in department stores, banks, auto showrooms, schools, libraries, office buildings and auditoriums.

DIMENSIONS

11" [279mm]

23 7/8" [606mm]

QF
QUADRA-LUME

70-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

RECESSED COMMERCIAL WITH FLAT LENS

- UL Listed. CSA Certified. EISA Compliant

- Die-formed heavy-duty housing is made of cold-rolled steel and finished in highly reflective white polyester powder coat. Stamped steel ballast mounting bracket is integral part of housing

- Die-formed steel reflector has removable panels for easy ballast access from below

- Die-formed heavy-gauge steel frame can be hinged and latched from either side. Stamped steel retaining clips assure flush fit of lens with frame

- Gasketed flat prismatic acrylic, acrituf or C73 glass lens

- Approximate net weight: 39 lbs. (18 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHQF-GS-C73-400-120V-Q

Lamp Type	Series	Door Frame	Lens Type [1]	Lamp Wattage [3]	Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide [1, 2]	**QF**=Quadra-Lume w/ Flat Lens	**GS/**=Flat Steel	**A**=Acrylic	**MP**	**120V**	(See Below)
MH=Metal Halide [1]		**GO/GAS/**=Flat Aluminum	**A/GL**=Acrylic with Glass Overlay	**70**=70W	**208V**	
HP=High Pressure Sodium		**GMXF/**=Flat, Non-floating Aluminum Door Frame	**ACTF.140**=Acrituf, .140" thick	**100**=100W	**240V**	
		GMXR/=3/8" Regressed Non-floating Aluminum Door Frame	**ACTF.187**=Acrituf, .187" thick	**175**=175W	**277V**	
			H8246=Holophane 8246	**200**=200W	**347V**	
			C73=Prismatic Tempered Glass Lens	**250**=250W		
			PL=Polycarbonate	**320**=320W		
				350=350W		
				400=400W		
				MH		
				175=175W		
				250=250W		
				400=400W		
				HP		
				70=70W		
				100=100W		
				150=150W		
				250=250W		
				400=400W		

Options [5]
OR=Open Rated Socket for MH Lamps
QB=Quiet Ballast [6]
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with ''Delay Relay'' (Quartz lamp strikes at both hot and cold starts) [7]
EM/SC=Emergency Separate Circuit
LL=Lamp Included [8]
SCF=3' Aircraft Safety Cable Secures Housing to Ceiling (Alternative lengths available. Ex: SCF6=6' Cable)
BDF=Black Door Frame
G2=Double Gasketing Doors (Door to Lens, Lens to Door)
VL=Vertical Lamp [9]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
HL=LumaWatt Fixture Control Module (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems) [10, 11]
HC=LumaWatt Fixture Control Module (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit) [10, 11]
DL=U.L. Labeled for Damp Locations

Accessories [12]
WGQF=Wire Guard [13]
FTA=Flush Drywall Frame Kit, Natural Anodized Aluminum
FTB=Flush Drywall Frame Kit, Black
FTW=Flush Drywall Frame Kit, White

NOTES: 1 Fixtures with Metal Halide lamps MUST have protective glass lens (C73) or glass overlay (GL). **2** 200, 250, 320, 350 and 400W only. **3** All lamps are mogul-base. 150W-MH and lower are available medium-base. **4** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V. **5** Add as suffix in the order shown. **6** 120/277V Metal Halide only. **7** Not compatible with HC or HL. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Adds 3 1/4" to overall fixture height. **10** Requires vertical lamp option (VL). **11** Not compatible with EM or EM/SC. **12** Order separately. **13** Not available with FTA, FTB or FTW. **14** Specifications and dimensions subject to change without notice.

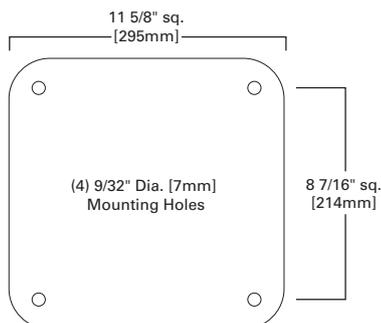| Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

DIMENSIONS

14 1/2" [368mm]

23 7/8" [606mm]

(E) COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Quadra-Lume is perfect for applications which call for reliable, affordable illumination with minimal maintenance. Quadra-Lume is designed for easy installation on main T-bars or can be hung by wires in lay-in ceilings with 2' x 2' tiles.

The Quadra-Lume provides minimum surface brightness, excellent uniformity and gentle diffusion. It is ideal for use in department stores, banks, auto showrooms, schools, libraries, office buildings and auditoriums.

QD
QUADRA-LUME

70-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

**RECESSED COMMERCIAL
WITH DROP LENS**

- UL Listed. CSA Certified. EISA Compliant

- Die-formed heavy-duty housing is made of cold-rolled steel and finished in highly reflective white polyester powder coat. Stamped steel ballast mounting bracket is integral part of housing

- Die-formed steel reflector has removable panels for easy ballast access from below

- Die-formed heavy-gauge steel frame can be hinged and latched from either side. Stamped steel retaining clips assure flush fit of lens with frame

- Virgin acrylic prismatic drop lens with UV inhibitor

- Approximate net weight: 43 lbs. (20 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHQD-GO/GAS/A-400-120V-Q

Lamp Type	Series	Door Frame	Lens Type [1]	Lamp Wattage [3]	Voltage [5]	Options & Accessories
MP=Pulse Start Metal Halide [1, 2]	**QD**=Quadra-Lume w/ Drop Lens	**GO/GAS/**=Flat Aluminum	**A**=Acrylic Lens	**MP**	**120V**	(See Below)
MH=Metal Halide [1]			**A/GL**=Acrylic Lens with Glass Overlay	**70**=70W	**208V**	
HP=High Pressure Sodium			**P**=Polycarbonate Lens	**100**=100W	**240V**	
			P/GL=Polycarbonate Lens with Glass Overlay	**175**=175W	**277V**	
				200=200W	**347V**	
				250=250W		
				320=320W		
				350=350W		
				400=400W		
				MH		
				175=175W		
				250=250W		
				400=400W		
				HP		
				70=70W		
				100=100W		
				150=150W		
				250=250W		
				400=400W		

Options [6]
OR=Open Rated Socket for MH Lamps
QB=Quiet Ballast [7]
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with ''Delay Relay'' (Quartz lamp strikes at both hot and cold starts) [8]
EM/SC=Emergency Separate Circuit
LL=Lamp Included [9]
SCF=3' Aircraft Safety Cable Secures Housing to Ceiling (Alternative lengths available. Ex: SCF6=6' Cable)
BDF=Black Door Frame
G2=Double Gasketing Doors (Door to Lens, Lens to Door)
VL=Vertical Lamp [10]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
HL=LumaWatt Fixture Control Module (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems) [11, 12]
HC=LumaWatt Fixture Control Module (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit) [11, 12]
DL=U.L. Labeled for Damp Locations

Accessories [13]
FTA=Flush Drywall Frame Kit, Natural Anodized Aluminum
FTB=Flush Drywall Frame Kit, Black
FTW=Flush Drywall Frame Kit, White

NOTES: 1 Fixtures with Metal Halide lamps MUST have glass overlay (GL). 2 200, 250, 320, 350 and 400W only. 3 All lamps are mogul-base. 150W MH and lower are available medium-base. 4 Pulse Start Metal Halide only. 5 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 88% EISA complaint MP fixtures not available in 347V. 6 Add as suffix in the order shown. 7 120/277V Metal Halide only. 8 Not compatible with HC or HL. 9 Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. 10 Adds 3 1/4" to overall fixture height. 11 Requires vertical lamp option (VL). 12 Not compatible with EM or EM/SC. 13 Order separately. 14 Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

(E) COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Canopy Light combines lasting durability and excellent photometrics. CSA certified for wet locations.

The Canopy Light mounts quickly to a variety of surfaces, making it ideal for covered walkways, convenience store/service station canopies and enclosed parking areas.

DIMENSIONS

10" [254mm]

20 15/16" [532mm]
Square

CL/CS
CANOPY LIGHT

100-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

CANOPY LIGHT
AREA/SITE LIGHT

- UL Wet Location Listed. CSA Certified. EISA Compliant

- CL housing is constructed of heavy-gauge aluminum with welded corners providing good heat dissipation. CS housing is constructed of durable steel welded construction

- Weather- and abrasion-resistant white polyester powder coat finish

- Fully gasketed door frame seals out contaminants

- High power factor ballast with class H insulation. CL construction is listed for 40°C ambient environments. CS construction is listed for 25°C ambient environments

- Optical system features an injection-molded prismatic lens with internal prisms and white highly reflective internal surface

- Hinged door provides easy access for maintenance and relamping and door can be removed to simplify installation

- Approximate net weight: 44 lbs. (20 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPCL-400-MT-Q

Lamp Type
MP=Pulse Start Metal Halide [1]
MH=Metal Halide
HP=High Pressure Sodium

Series
CL=Canopy Light (Aluminum Housing) [2]
CS=Canopy Light (Steel Housing) [3]

Lamp Wattage [4]
MP
100=100W
150=150W
200=200W
250=250W
320=320W
350=350W
400=400W
MH
175=175W
250=250W
400=400W
HP
100=100W
150=150W
250=250W
400=400W

Voltage [6]
120V=120V
208V=208V
240V=240V
277V=277V
347V=347V [7]
480V=480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [7]

Options [8]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
Q=Quartz Restrike (Hot strike only)
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)
C73=Flat Prismatic Tempered Glass Lens
LL=Lamp Included [9]
POM=Position Oriented Socket

NOTES: 1 150, 200, 250, 320, 350, and 400W. **2** 40°C Ambient environment, except 400W HP is 25°C ambient. **3** 25°C Ambient environment. **4** All lamps are mogul-base except 100W MP and below are medium-base. **5** 175W, 250W, 400W MH is available for non-US markets only. **6** Products also available in non-US voltages and 50HZ for international markets. **7** 88% Efficient EISA Compliant MP fixtures not available in 347 and TT voltages. **8** Add as suffix in the order shown. **9** Lamp is shipped separately from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER

SAMPLE NUMBER: MPCL-400-MT-LL

Lamp Type
MP

Series
CL

Lamp Wattage
150
250
320 [1]
400 [1]

Voltage
MT

Options
LL (Lamp Included)

NOTES: Standard Multi-Tap. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information and options.
1 Available without lamp MPCL-320-MT or MPCL-400-MT.

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	100, 150, 200, 250, 320, 350, 400W		MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	175, 250, 400W		TT=Triple-Tap	120/277/347V (wired 347V)
High Pressure Sodium (HP)	100, 150, 250, 400W			

COOPER LIGHTING - LUMARK

DIMENSIONS

3 3/16"
[81mm]

7 "
[178mm]

MOUNTING DIMENSIONS

11 5/8" sq.
[295mm]

8 7/16" sq.
[214mm]

(4) 9/32" Dia. [7mm]
Mounting Holes
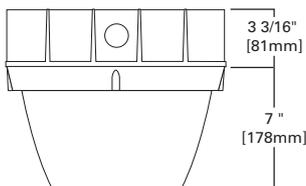
DESCRIPTION

The Lumark Parker combines strength-gaining architecture with energy-saving technology. U.L. listed for wet locations and CSA certified. Mount on non-combustible surface.

The durable, versatile Parker is perfect for use in parking bays, entrances and stairwells, as well as rapid transit stations and loading docks.

PR
PARKER

70-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

CLEAR PRISMATIC POLYCARBONATE PARKING GARAGE LUMINAIRE

- UL Wet Location Listed. CSA Certified

- One-piece injection-molded UV stabilized polycarbonate lens is a minimum of 0.130" thick. All light-control prisms and blondels are on the inside surface of the lens, reducing dirt build-up and making cleaning easier

- Lens is held with four stainless steel screws. Fasteners are captive in the lens and sealed by means of a neoprene O-ring

- Die-cast aluminum with reinforcing ribs on exposed sidewalls. Thickened areas occur at lens junction and at mounting/fastening holes. Four 1/2" NPT conduit entries in sides and one in back of housing. Black polyester powder coat is standard

- One-piece die-cut closed-cell silicone mounting gasket

- Copper-wound NPF ballast standard. Ballast is available in high power factor with some lamps. Consult ordering information

- Porcelain medium-base socket with nickel-plated brass screw shell

- Approximate net weight: 20 lbs. (9 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPPR-70N-120V-Q

Lamp Type	Series	Lamp Wattage	Ballast	Voltage [4]	Options [5]	Accessories [7]
MP=Pulse Start Metal Halide	**PR**=Parker	**MP**	**H**=High Power Factor	**120V**=120V	**F1**=Single Fuse (120, 277 or 347V only)	**TK**=Trunnion Kit
MH=Metal Halide		**70**=70W	**N**=Normal Power Factor	**208V**=208V	**F2**=Double Fuse (208, 240 or 480V only)	**VRSD**=Tamper-Resistant Screwdriver
HP=High Pressure Sodium		**100**=100W	**W**=HPF CWA [3]	**240V**=240V	**TR**=Tamper Resistant Screws	**VRSB**=Tamper-Resistant Bit
		150=150W		**277V**=277V	**Q**=Quartz Restrike DC Bayonet Base (Quartz lamp will not come on at initial cold start)	
		MH		**347V**=347V		
		175=175W [1]		**480V**=480V		
		HP		**MT**=Multi-Tap wired 277V	**LL**=Lamp Included [6]	
		70=70W		**TT**=Triple-Tap wired 347V	**QM**=Quick Mount	
		100=100W				
		150=150W [2]				

NOTES: 1 Uses S-55 (55 Volt) lamp only. **2** 175W MH is available for non-US markets only. **3** HPF CWA not available in 70W and 100W MP or HP. High Power Factor is required for all MH and MP products. **4** Products also available in non-US voltages and 50HZ for international markets. **5** Add as suffix in the order shown. **6** Lamp is shipped separately from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **7** Order separately. **8** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPPR-100H-MT-LL

Lamp Type	Series	Lamp Wattage	Voltage	Options
MP	**PR**	**100H**	**MT**	**LL** (Lamp Included)

NOTES: Options not available with stock products. Refer to standard order information and options. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100,150W
Metal Halide (MH)	175W
High Pressure Sodium (HP)	70, 100, 150W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

PD
PARK-KING

35-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

PARKING GARAGE LUMINAIRE

- UL Wet Location Listed. CSA Certified

- One-piece die-cast aluminum housing has soft-corner design and is finished in polyester powder coat

- Clear polycarbonate lens standard. Optional flat tempered glass lens available. Standard and tamper-proof lens screws included

- Hydroformed polished aluminum reflector provides sharp cutoff in symmetrical square or asymmetrical forward throw designs

- Sealed feed-through wiring compartment with quick-release clamps and hubs on housing sides and top for 3/4" NPT surface ceiling conduit

- Closed-cell, gas-filled, high-temperature silicone gasketing seals out water and other external contaminants

- Approximate net weight: 14 lbs. (6 kgs.)

DESCRIPTION

Lumark's Park-King sets the standard for parking facility lighting. CSA certified and U.L. listed for wet locations, the Park King's self-contained design and vandal-proofing contribute to a long service life and low maintenance costs.

By controlling glare and providing excellent uniformity, the Park-King improves vehicular movement and pedestrian safety in parking garage facilities.

DIMENSIONS

3 7/8" [98mm]

1 3/4" [44mm]

15" [381mm]

11" [279mm]
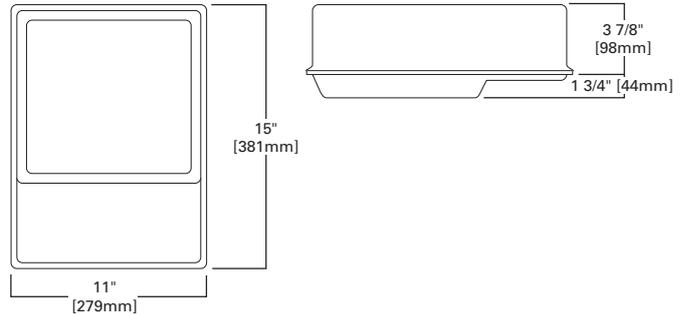
ORDERING INFORMATION

SAMPLE NUMBER: MPPD-A-F-150-120V

Lamp Type	**Series**	**Distribution**	**Mounting**	**Lamp Wattage**	**Voltage [1]**	**Options & Accessories**
MP=Pulse Start Metal Halide	**PD**=Park-King	**S**=Symmetric	**F**=Flush	**MP**	**120**=120V	(See Below)
MH=Metal Halide		**A**=Asymmetric		**50**=50W	**208**=208V	
HP=High Pressure Sodium				**70**=70W	**240**=240V	
				100=100W	**277**=277V	
				150=150W	**347**=347V	
				HP	**480**=480V	
				175=175W [1]	**MT**=Triple-Tap wired 277V	
				MH	**TT**=Multi-Tap wired 347V	
				35=35W		
				50=50W		
				70=70W		
				100=100W		
				150=150W		

Options [2]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
Q=Quartz Restrike (Hot strike only) [3]
LL=Lamp Included [4]
G=Tempered Flat Glass Lens (Clear) [5]

Accessories [6]
PDA200=Wire Vandal Guard
PDA100XX=Cast Mounting Bracket for Wall or Pole Mounting
PDA300=Concrete Pour Kit for Recessed Mounting
PDA400XX=Quick-mount Slide Box Over Standard 4" Junction Box [7]
PB120V=Button-type Photocontrol Field Installed (120V only)
PB-208/240V=Button-type Photocontrol Field Installed (208/240V only)
PB-277V=Button-type Photocontrol Field Installed (277V only)
SD2925PK=Screwdriver for Tamper-Resistant Screws

NOTES: 1 175W MH is available for non-US markets only. **2** Add as suffix in the order shown. **3** 150W maximum quartz lamp. Lamp not included. **4** Lamp is shipped separately from luminaire. Lamp is Cooper designated product-based on luminaire requirements. Specified lamps must be ordered as a separate line item. **5** Fixtures with MP or MH lamps must have glass overlay (G). **6** Order separately. **7** Adds 1-3/4" to fixture height. **8** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	150, 70, 100, 150W
Metal Halide (MH)	175W
High Pressure Sodium (HP)	35, 50, 70, 100, 150W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark QZ Wedge is a compact, economical alternative to traditional outdoor floodlighting. The black or white finishes provide lasting durability with optics that deliver optimum beam control. U.L. listed and labeled for wet locations. CSA certified.

SPECIFICATION FEATURES

- Die-cast aluminum housing finished in black or white paint for lasting durability

- Adjustable stem mounting arm fits 1/2" NPS outlet box cover

- Anodized aluminum reflector provides maximum beam control and efficiency

- Porcelain lamp sockets for 300-500W quartz lamp

- Heat- and weather-resistant gasketing seals out external contaminants

- Hinged door frame has toolless entry latch

- U.L. listed for wet locations. CSA certified

- Approximate net weight: 3 lbs. (1 kgs.)

6 1/4"
[159mm]

9" [229mm]

4"
[102mm]
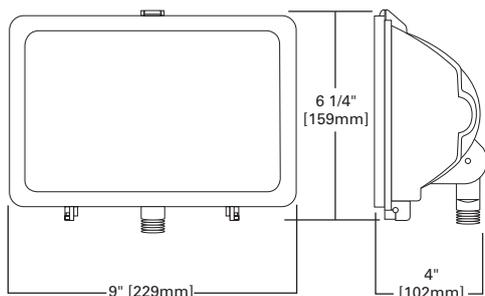
OZ
WEDGE

300-500W
Quartz

FLOODLIGHT

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: QZ5L

Lamp Type	**Fixture**	**Lamp Wattage**	**Lamp**	**Options** (add as suffix)
Q=Quartz	**Z**=Wedge	**3**=300W **5**=500W	**L**=Lamp Included	**W**=White

Accessories (order separately)
NKS-BZ=2" Slipfitter (Bronze)
NKS-WHT=2" Slipfitter (White)
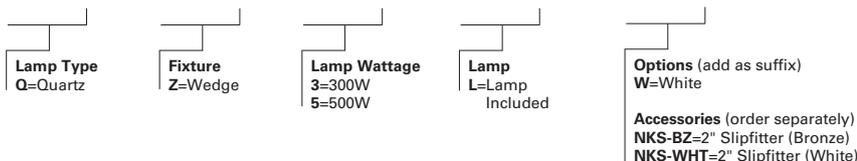
NOTES: 1 Standard unit has 1/2" NPT threaded knuckle for mounting. 2" slipfitter is available as an accessory. **2** 120 Volt operation only. **3** Specifications and dimensions subject to change without notice. **4** Products also available in non-US voltages and 50Hz for international markets.

DESCRIPTION

The Lumark LQL1500 has a heat- and impact-resistant clear glass lens, mounted in a gasketed, die-cast hinged aluminum door with captive screw fasteners for positive latching. U.L. listed and labeled for wet locations. CSA certified.

SPECIFICATION FEATURES

- Captive screw fasteners provide positive weatherproof seal

- Finished in dark bronze paint

- Clear tempered glass lens is heat- and impact-resistant

- Quartz lamp provides white light for excellent color rendition

- Die-cast aluminum door is sealed with full-circumference gasketing to die-cast aluminum housing installation to J-box and can be wall or eaves mounted

- Integral hinge design permits hands-free relamping and easy door removal

- Adjustable stem mounting arm fits 1/2" NPT outlet box cover

- U.L. listed for wet locations. CSA certified

- Approximate net weight: 4.5 lbs. (2.5 kgs.)

8 1/4"
[210mm]

14 1/2" [362mm]

8 3/4"
[222mm]
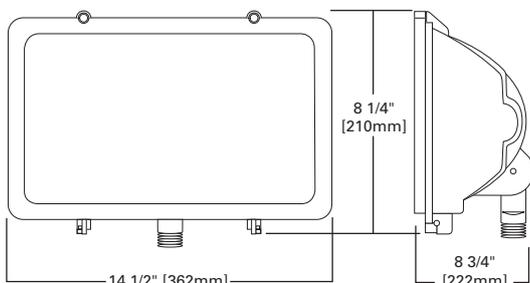
LQL1500
QUARTZ FLOOD

1500W (Max.)
Quartz

FLOODLIGHT

[240V LAMP INCLUDED]

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: LQL1500WL240

Catalog Number	Lamp Wattage	Lamp Type	Voltage	Color
LQL1500WL240	1500W	T3 Quartz	240V	Bronze

NOTES: 1 240V T3 lamp included. **2** Specifications and dimensions subject to change without notice. **3** Products also available in non-US voltages and frequencies for international markets. **4** Consult your Cooper Lighting Representative for availability and ordering information.

COOPER LIGHTING - LUMARK

SF
FALCON

35-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-70W
Compact Fluorescent

LOW WATTAGE FLOODLIGHT

- UL Wet Location Listed

- Tempered glass lens is impact and thermal shock resistant. Easily released die-cast aluminum doorframe with stainless steel toolless latch

- Die-cast aluminum housing is finished in weather and abrasion resistant dark bronze polyester powder paint. Optional colors are available

- Full-circumference silicone gasket seals out external contaminants

- Pulse rated, 4KV, medium-base porcelain lamp socket standard for HID. Electronic compact 4-pin fluorescent sockets standard for CF lamp options

- Formed aluminum hammered reflector optimized beam efficiency and control

- Adjustable ANSI 1G rated stem mounting arm fits 1/2" NPS outlet box cover. (RBC round outlet box cover not included, order separately). Optional heavy-gauge steel adjustable trunnion mounting provides additional durability when required
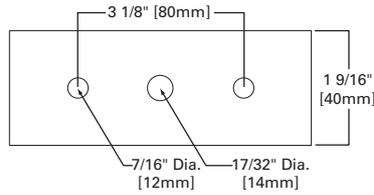
- Approximate net weight: 18 lbs. (8 kgs.)

COOPER LIGHTING

DESCRIPTION

The Lumark Falcon is a stylish and rugged luminaire that combines value and performance with a soft, architecturally appealing form. This soft rounded corner, die-cast construction is excellent for applications that have a high visibility and where a uniform beam distribution is desired.

The Falcon floodlight can be wall or pole mounted, making it ideal for all commercial, industrial and residential low wattage floodlighting applications.

DIMENSIONS

10 11/16" [272mm]

10 1/2" [267mm]

7 1/2" [189mm]

ORDERING INFORMATION

SAMPLE NUMBER: MPSF-T-100H-240V-F2-TR-PE-BZ-LL

Lamp [1]
MP=Pulse Start Metal Halide
MH=Metal Halide
HP=High Pressure Sodium
CF=Compact Fluorescent

Series
SF=Falcon

Mounting
K=Knuckle
T=Trunnion

Lamp Wattage [1]

MP	CF
50=50W	**26**=(1) 26W
70=70W	**32**=(1) 32W
100=100W	**42**=(1) 42W
150=150W [4]	**52**=(2) 26W
MH	**57**=(1) 57W
175=175W [1]	**60**=(1) 60W
HP	**64**=(2) 32W
35=35W [2, 3]	**70**=(1) 70W
50=50W	
70=70W	
100=100W	
150=150W	

Ballast
__=Normal Power Factor
H=High Power Factor [4]

Voltage [5]
120V [6]
208V [7]
240V [7]
277V
347V [8]
480V
DT=Dual-Tap
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [8]
E=Electronic (120-277V) [9]

Options & Accessories
(See Below)

Options [10]
LL=Lamp Included (Must Specify Single Wattage with Fluorescent)
TR=Tamper-Resistant Screws
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol
F1=Single Fuse (120, 277 or 347V. Specify Voltage) [11]
F2=Double Fuse (208, 240 or 480V. Specify Voltage) [11]
BZ=Bronze
BK=Black
WH=White
AP=Grey

Accessories [12]
FA5-XX=2" Slipfitter for Trunnion Fixture
RAB-XX=Right Angle Pipe Bracket for Slipfitters
SAB-XX=Steel Angle Bracket for Trunnion
PE/MT=Field-Installed Photocontrol
RBC-XX=Round Outlet Box Cover
SF/VS=Vandal Shield
SF/WG=Wire Guard
TRSD-6/32=Tamper-Resistant Screwdriver
SF/TR=Tamper-Resistant Screw
SF/V-XX=Visor
SPK=Landscape Post (Standard Color Dark Grey)

NOTES: 1 All HID lamps are medium-base 175W MH is available for non-US markets only. **2** HP only. **3** 120V only. **4** 150W MP available in High Power Factor Ballast only. High Power Factor Ballast required on all MP, MH and CF products. **5** Products also available in non-US voltages and 50Hz for international markets. **6** Reactor ballasts used for HP lamps when specified. **7** Not available in Canada. **8** Canada only. **9** Compact fluorescent only. In cold temperatures, Compact Fluorescent lamps produce lower level illumination levels. **10** Add as suffix in the order shown. **11** 100W MP maximum. **12** Order separately, replace XX with color suffix. **13** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED): High Pressure Sodium & Pulse Start Metal Halide

SAMPLE NUMBER: MPSF10K-MT

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium

Series
SF=Falcon

Lamp Options
70=70W
10=100W
15=150W

Mounting
K=Knuckle
T=Trunnion

Wiring Options
DT=Dual Tap (120/277V)
MT=Multi-Tap

NOTE: Refer to In-Stock Guide for availability.

STOCK SAMPLE NUMBER (LAMP INCLUDED): Compact Fluorescent

SAMPLE NUMBER: CFSF-K-42-E-LL

Lamp Type
CFSF=Compact Fluorescent Falcon

Mounting
K=Knuckle

Lamp Options
42=42W

Wiring Options
E=Electronic Ballast

Lamp Included
LL=Lamp Included

NOTES: Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150W
Metal Halide (MH)	175W
High Pressure Sodium (HP)	35, 50, 70, 100, 150W
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42 (2) 26 (1) 57W (1) 60, (2) 32, (1) 70W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
E=Electronic (CF only)	120-277V (wired 277V (50/60 Hz)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

10 1/8" [265mm]

14 6/8" [377mm]

13 5/8" [340mm]

TRUNNION-MOUNT DRILL PATTERN

1" [25mm]

1 1/2" [38mm]
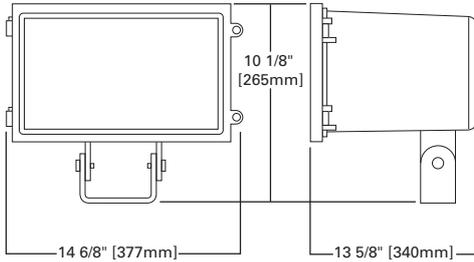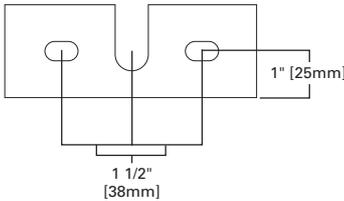
EPA-Effected Projected Area: .87 Square Feet

ORDERING INFORMATION

SAMPLE NUMBER: MPXF25T

Lamp Type	Series [2]	Lamp Wattage (Lamp Included)	Mounting	Options [3]	Accessories [4]
MP=Pulse Start Metal Halide	**XF**=Falcon	**MP**	**T**=Trunnion	**W**=White Housing Finish	**XF/WG**=Wire Guard
MH=Metal Halide [1]		**25**=250W			**XF/SFXX**=Slipfitter
HP=High Pressure Sodium		**32**=320W			**XF/FCXX**=Side and Top Visor
		35=350W			**XF/GSXX**=Glass Replacement Door
		40=400W			
		MH [1]			
		25=250W			
		40=400W			
		HP			
		25=250W			
		40=400W			
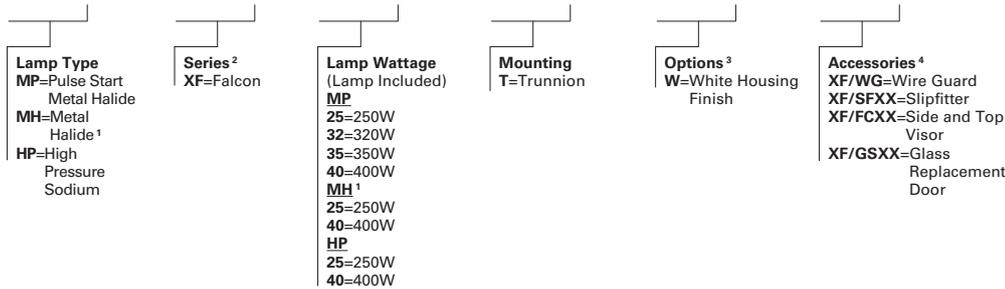
NOTES: 1 MH available in non-US markets only. **2** Supplied with multi-tap voltages (120/208/240/277V). **3** Add "W" to the end of catalog number for white finish. **4** Order separately. Add "WHT" to the end of accessory number for white finish. (Example: XF/WG-WHT). **5** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPXF25T

Lamp Type	Series	Lamp Wattage	Mounting
MP=Pulse Start Metal Halide	**XF**=Falcon	**25**=250W	**T**=Trunnion
HP=High Pressure Sodium		**32**=320W [1]	
		40=400W	
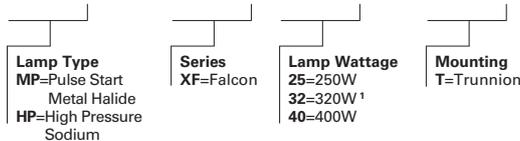
NOTE: 1 320W available in MP only.
Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

DESCRIPTION

The compact die-cast aluminum Falcon floodlight blends well in almost any setting. It features an adjustable trunnion which allows exceptional mounting flexibility and light control. U.L. listed and labeled for wet locations. CSA certified.

The Falcon floodlight can be wall or pole mounted, making it perfect for all commercial, industrial and residential low wattage floodlighting applications.

XF
FALCON

2 5 0 - 4 0 0 W

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

FLOODLIGHT

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Tempered glass lens is impact- and thermal shock-resistant. Four point door connection provides positive seal to housing

- Die-cast aluminum housing is finished in weather- and abrasion-resistant dark bronze polyester powder coat

- Full-circumference silicone gasket seals out external contaminants

- 5KV pulse-rated mogul-base porcelain lamp socket for HID lamps

- Mogul-base lamp included and available up to 400W HP, MP or MH

- Formed-aluminum reflector optimizes beam efficiency and control

- Polyester powder coated steel trunnion mount provides stability and adjustable aiming. Optional slipfitter available (order separately)

- Approximate net weight: 33 lbs. (15 kgs.)

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	250, 320, 350, 400W
Metal Halide (MH)	250, 400W
High Pressure Sodium (HP)	250, 400W

COOPER LIGHTING - LUMARK

MS
IMPACT FLOOD SMALL

50-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-42W
Compact Fluorescent

ARCHITECTURAL FLOOD LUMINAIRE

- UL Wet Location Listed. CSA Certified

- Rugged one-piece die-cast aluminum housing. One-piece extruded silicone gasket seals the optical and electrical compartment from external contaminants

- Die-cast aluminum door is secured via two (2) tamper resistant stainless steel allen head fasteners

- Impact resistant, clear flat tempered glass sealed to door with a one-piece silicone gasket

- Available in horizontal or vertical lamp orientation. Optics feature medium-base lamp holders for HID

- High power factor ballast are heat sunk to housing for cooler operation and longer life

- Heavy-duty die-cast aluminum knuckle mount utilizes tooth-lock adjustment mechanism for solid engagement and ease of aiming. Optional heavy-gauge adjustable steel trunnion mount provides additional durability when required

- Approximate net weight: 25 lbs. (11.36 kgs.)

DESCRIPTION

Impact Flood's cylindrical form blends effortlessly to architectural and landscape environments. Available in wattages up to 175W Metal Halide and High Pressure Sodium, and up to 42W Compact Fluorescent. Impact Flood offers properly scaled solutions for any floodlighting application.

DIMENSIONS

Knuckle Mount

13 7/8" [352 mm]
15 1/8" [385 mm]
6 11/16" [171 mm]

Trunnion Mount

12 5/8" [322 mm]
15 1/8" [385 mm]
6 11/16" [171 mm]

TRUNNION DRILL PATTERN

3 1/8" [80mm]
1 9/16" [40mm]
7/16" Dia. [12mm]
17/32" Dia. [14mm]
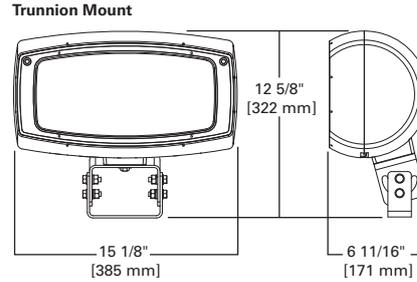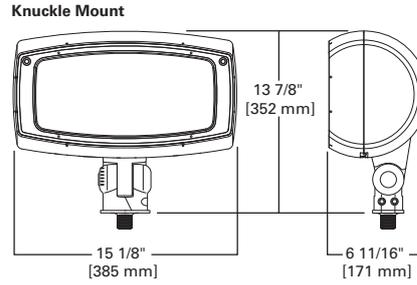
EPA-Effected Projected Area: 1.12

ORDERING INFORMATION

SAMPLE NUMBER: MPMS-K-HF-150-MT-LL

Lamp Type [1]
MP=Pulse Start Metal Halide
MH=Metal Halide [2]
HP=High Pressure Sodium
CF=Compact Fluorescent

Series
MS=Impact Flood Small

Mounting
K=Knuckle
T=Trunnion

Distribution
HF=Horizontal Flood
VF=Vertical Flood

Lamp Wattage
MP
50=50W
70=70W
100=100W
150=150W
MH
175=175W [2]
HP
50=50W
70=70W
100=100W
150=150W
CF
26=26W
32=32W
42=42W

Voltage [3]
120V
208V
240V
277V
347V
480V
DT=Dual-Tap
MT=Multi-Tap
TT=Triple-Tap
E=Electronic [4]

Options [5]
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)
EM/SC=Emergency Separate Circuit
LL=Lamp Included (Must Specify Single Wattage with Fluorescent)
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol
F1=Single Fuse (120, 277 or 347V. Specify Voltage)
F2=Double Fuse (208, 240 or 480V. Specify Voltage)

Color [6]
___=Bronze (Standard)
WH=White
BK=Black
AP=Grey

Accessories [7]
MS/JB-XX=Architectural J-Box
MS/SF-XX=Slipfitter
MS/TMA-XX=Twin Mount Arm (EPA .35)
MS/WMA-XX=Wall Mount Arm (EPA .22)
MS/WM-XX=Wall Mount
MS/BD-XX=Barn Doors (EPA 1.03)
MS/TV-XX=Top Visor (EPA .51)
MS/4V-XX=Four Sided Shield (EPA .87)
MS/VS=Vandal Shield
MS/WG=Wire Guard

NOTES: 1 All HID lamps are medium-base. 2 175W MH is available for non-US markets only. 3 Products also available in non-US voltages and 50Hz for international markets. 4 Compact Fluorescent lamps only, 120-277V with internal fusing. In cold temperatures compact fluorescent lamps produce lower illumination levels. 5 Add as suffix in the order shown. 6 Other finish colors available. Consult your Cooper Lighting representative. 7 Order separately, replace XX with color suffix. 8 Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (Lamp Included)

SAMPLE NUMBER: MPMS15

Lamp Type
MP=Pulse Start Metal Halide

Series
MS=Impact Flood Small

Lamp Wattage
70=70W
10=100W
15=150W

Accessories (order separately)
MS/TV-BZ=Top Visor
MS/4V-BZ=Four Sided Shield
MS/BD-BZ=Barn Doors
MS/WG=Wire Guard
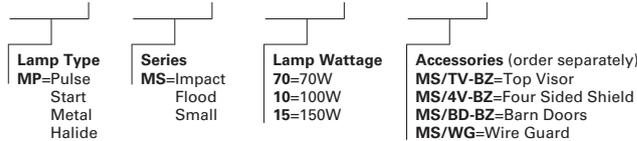
NOTES: Horizontal flood optics, knuckle mount, multi-tap ballast and bronze paint are standard for stock products. Add "W" to the end of the catalog logic to specify white finish (available on small housing 150W only). Stock accessories only available in bronze finish. Options not available with stock products. Refer to standard ordering information. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150W
Metal Halide (MH)	175W
High Pressure Sodium (HP)	50, 70, 100, 150W
Compact Fluorescent (CF)	26, 32, 42W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
E=Electronic (CF only)	120-277V (wired 277V (50/60 Hz)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

22"
[358 mm]

19 1/2"
[495 mm]

10"
[254 mm]
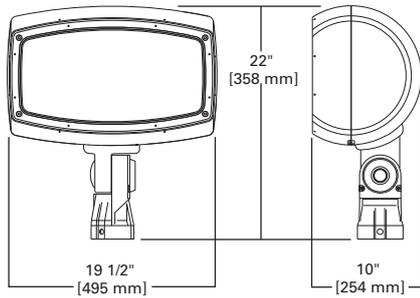
DESCRIPTION

Impact Flood's cylindrical form blends effortlessly to architectural and landscape environments. Available in wattages up to 400W Pulse Start Metal Halide, Metal Halide and High Pressure Sodium, and up to 70W Compact Fluorescent. Impact Flood offers properly scaled solutions for any floodlighting application.

MM
IMPACT FLOOD MEDIUM

150-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

57-70W
Compact Fluorescent

ARCHITECTURAL FLOOD LUMINAIRE

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Rugged one-piece die-cast aluminum housing. One-piece extruded silicone gasket seals the optical and electrical compartment from external contaminants

- Die-cast aluminum door is secured via four (4) tamper resistant stainless steel allen head fasteners

- Impact resistant, clear flat tempered glass sealed to door with a one-piece silicone gasket

- Available in horizontal or vertical lamp orientation. Optics feature mogul-base lamp holders

- High power factor ballast are heat sunk to housing for cooler operation and longer life

- Heavy-duty die-cast aluminum knuckle mount utilizes tooth-lock adjustment mechanism for solid engagement and ease of aiming. Knuckle fits over standard 2 3/8" O.D. pipe tenon

- Approximate net weight: 40 lbs. (18.18 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPMM-K-HF-400-MT-LL

Lamp Type [1]
MP=Pulse Start Metal Halide
MH=Metal Halide [2]
HP=High Pressure Sodium
CF=Compact Fluorescent

Series
MM=Impact Flood Medium

Mounting
K=Knuckle

Distribution
HF=Horizontal Flood
VF=Vertical Flood

Lamp Wattage
MP
150=150W
200=200W
250=250W
320=320W [2]
400=400W
MH
175=175W [2]
250=250W
400=400W
HP
150=150W
250=250W
400=400W
CF
57=57W
70=70W

Voltage
120V
208V
240V
277V
347V [4]
480V
DT=Dual-Tap
MT=Multi-Tap
TT=Triple-Tap [4]
E=Electronic [5]

Options [6]
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)
EM/SC=Emergency Separate Circuit
LL=Lamp Included (Must Specify Single Wattage with Fluorescent)
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol
F1=Single Fuse (120, 277 or 347V. Specify Voltage)
F2=Double Fuse (208, 240 or 480V. Specify Voltage)

Color [6]
__=Bronze (Standard)
WH=White
BK=Black
AP=Grey

Accessories [7]
MM/SMT-XX=Surface Mount Tenon
MM/ST-XX=Stanchion Mount
MM/TMT-XX=Twin Mount Tenon (EPA .35)
MM/WMT-XX=Wall Mount Tenon (EPA .22)
MM/BD-XX=Barn Doors (EPA 2.49)
MM/TV-XX=Top Visor (EPA 1.30)
MM/4V-XX=Four Sided Shield (EPA 2.21)
MM/VS=Vandal Shield
MM/WG=Wire Guard

NOTES: 1 150W MP is medium-base. **2** 350W available in HF distribution only. **3** 175, 250 and 400W MH available for non-US markets only. **4** 88% efficient EISA Compliant fixtures not available in 347V or Triple-Tap voltages. **5** Compact Fluorescent lamps only, 120-277V with internal fusing. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **6** Add as suffix in the order shown. **7** Order separately, replace XX with color suffix. **8** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPMM40

Lamp Type
MP=Pulse Start Metal Halide

Series
MM=Impact Flood Medium

Lamp Wattage
25=250W
32=320W
40=400W

Accessories (order separately)
MM/TV-BZ=Top Visor
MM/4V-BZ=Four Sided Shield
MM/BD-BZ=Barn Doors
MM/WG=Wire Guard

NOTES: Horizontal flood optics, multi-tap ballast and bronze paint are standard for stock products. Options not available with stock products. Refer to standard ordering information. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	150, 200, 250, 320, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	150, 250, 400W
Compact Fluorescent (CF)	57, 70W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

COOPER LIGHTING

(E) COOPER LIGHTING - LUMARK

WR
WARRIOR

100-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SLIPFITTER-, TRUNNION-, OR YOKE-MOUNTED FLOODLIGHT

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Corrosion-resistant captive retaining screws

- Watertight die-cast aluminum housing door is finished in dark bronze polyester powder coat. Cast ridge for water tight seal against gasketing

- Full circumference, high-temperature foam-in-place silicone gasketing seals out external contaminants

- Mogul-base porcelain socket, except 150W and below has medium-base

- High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40° F) for HP and -30°C (-20° F) for MH and MP

- Variable mountings of either 3/16" galvanized steel trunnion (shown below) or integral die-cast aluminum slipfitter (shown in photo to right). Slipfitter fits 2 3/8" - 3" O.D. tenon. Heavy-duty steel yoke provides flexibility in mounting and aiming from a variety of surfaces

- Class I Div 2 Rated

- Approximate net weight: 35 lbs. (16 kgs.)

DESCRIPTION

The Lumark Warrior offers a variety of lamp and mounting options in high pressure sodium and metal halide, and can be installed, lamped and serviced with the most basic tools. U.L. listed and labeled for wet locations. CSA certified.

DIMENSIONS

Slipfitter Mount

6" [152mm]

Trunnion Mount

13" [330mm]

15" [381mm]   4" [102mm]   7" [178mm]
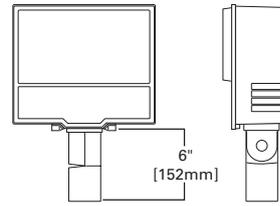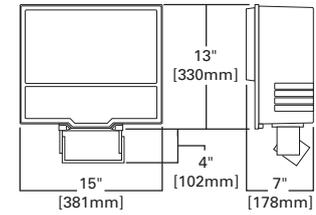
TRUNNION YOKE MOUNT DRILL PATTERN

1" [25mm]

9/16" [14mm] dia. hole (2)   7/8" [22mm] dia. hole

1 7/8" [48mm]

3 3/4" [95mm]

Yoke Mount

14 7/8" [378mm]

15 3/4" [400mm]   2" [51mm]
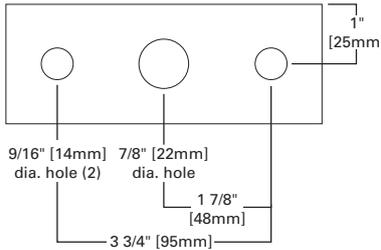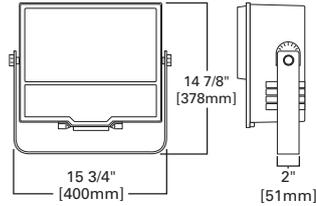
EPA-Effected Projected Area: 1.3 @ 45°

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: MPWR-65S-400-MT

Lamp Type	Series	Distribution	Mounting	Lamp Wattage [2]		Voltage [3]	Options & Accessories
MP=Pulse Start Metal Halide	**WR**=Warrior	**65**=6 x 5 Beam Spread	**S**=Slipfitter	**MP**	**HP**	**120V**	(See Below)
MH=Metal Halide			**T**=Trunnion	**100**=100W	**100**=100W	**208V**	
HP=High Pressure Sodium			**Y**=Yoke	**150**=150W	**150**=150W	**240V**	
				200=200W	**250**=250W	**277V**	
				250=250W	**400**=400W	**347V** [3]	
				320=320W		**480V**	
				350=350W		**MT**=Multi-Tap	
				400=400W		**TT**=Triple-Tap [3]	
				MH [1]		**5T**=5-Tap [4]	
				175=175W			
				250=250W			
				400=400W			
				250/400=250/400W (wired 250W)			

Options [5]
HAZ=Hazardous Location (Class 1 Division 2 rating) [6]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay"
    (Quartz lamp strikes at both hot and cold starts)
EM/SC=Emergency Separate Circuit
LL=Lamp Included
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol
C23=3' of 12-3 Cord, Prewired (Specify Single Voltage)
C42=2' of 14-3 Cord, Prewired (Specify Single Voltage)
C43=3' of 14-3 Cord, Prewired (Specify Single Voltage)
C63=3' of 16-3 Cord, Prewired (Specify Single Voltage)

Accessories
TYS-XX=Trunnion or Yoke Slipfitter for 2 3/8", 3", or 3 1/2" O.D. Tenon
WG/WR=Wire Guard
VG/WR=Vandal Shield
RAB-XX=Right Angle Pipe Bracket for Slipfitter
SAB-XX=Steel Angle Bracket for Trunnion
OA/RA1014=Photoelectric Control, 120 Volt NEMA Type
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
PB120V=Button Type Photocontrol, Field Installed (120V only)
TV/WR-XX=Top Visor

NOTES: 1 Metal Halide available for non-US markets only. **2** Medium-base socket for MP 150W and lower. **3** Products also available in non-us voltages & 50Hz for international markets. 88% efficient EISA MP fixtures not available in 347V and Triple-Tap voltages. **4** 5-Tap ballast available in 400W Metal Halide only. **5** Add as suffix in the order shown. **6** Class I Division 2 rating. Not available with NEMA Photocontrol, fusing or Quartz option. Slipfitter only. **7** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: XS15

Series	Lamp Type	Lamp Wattage
X=Slipfitter	**S**=High Pressure Sodium	**15**=150W [1]
W=Trunnion	**P**=Pulse Start Metal Halide	**25**=250W
		32=320W
		40=400W

NOTES: 1 150W available in MP only. Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. 320W available in MP only. Refer to In-Stock Guide for availability.

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	100, 150, 200, 250, 320, 350, 400W		MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	175, 250, 400, 250/400W		TT=Triple-Tap	120/277/347V (wired 347V)
High Pressure Sodium (HP)	100, 150, 250, 400W		5T=5-Tap	120/208/240/277/480V (wired 480V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

Slipfitter Mount

27 1/2" [699mm]
18 1/2" [470mm]
20 1/2" [521mm]
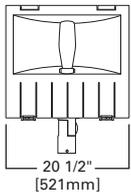
150-400W HPS & MH,
1000W HPS 9 1/2" [241mm]
1000W MH 10 1/2" [267mm]

Yoke Mount

22 1/2" [572mm]
18 1/2" [470mm]
20 1/2" [521mm]
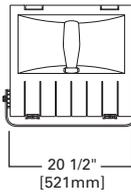
150-400W HPS & MH,
1000W HPS 9 1/2" [241mm]
1000W MH 10 1/2" [267mm]

Trunnion Mount

24" [610mm]
18 1/2" [470mm]
20 1/2" [521mm]
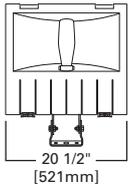
150-400W HPS & MH,
1000W HPS 9 1/2" [241mm]
1000W MH 10 1/2" [267mm]

YOKE- AND TRUNNION-MOUNT DRILL PATTERN

1" [25mm]
9/16" [14mm] dia. hole (2)
7/8" [22mm] dia. hole
1 7/8" [48mm]
3 3/4" [95mm]
1 1/2" [38mm]
3 1/2" [89mm]
2" [51mm]
5 3/8" [137mm]

EPA-Effected Projected Area: 2.7

For Pole Information Refer to Cooper Lighting Pole Section.

DESCRIPTION
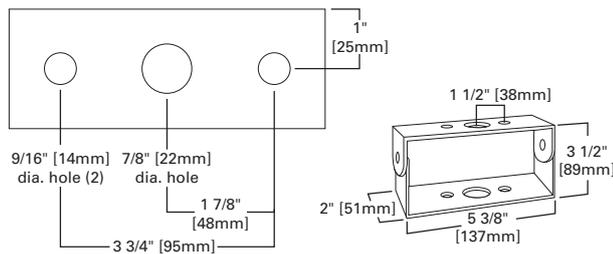
The Lumark Nighthawk III utilizes a soft-cornered aerodynamic design to provide excellent EPA ratings and an aesthetically pleasing appearance. Dark bronze polyester powder coat finish assures corrosion resistance and long-lasting aesthetics.

NK
NIGHTHAWK III

150-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SLIPFITTER-, TRUNNION-, OR YOKE-MOUNTED FLOODLIGHT

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Aerodynamically designed die-cast aluminum housing has low EPA rating

- Flush, draw-action latches offer easy access to lamp compartment without tools and maintain integrity of seal when closed

- Die-cast aluminum door with integral cast hinges for removal without tools

- Heat- and impact-resistant tempered glass. Lens is mounted flush with door surface to reduce wind drag and prevent dirt or moisture from accumulating

- Door gasket is foam-in-place silicone, providing maximum protection of interior components from the elements

- Available in three (3) mounting variations. **Slipfitter**: Die-cast aluminum integral slipfitter mounts on 2 3/8" to 3" O.D. tenon. **Yoke**: Heavy-duty steel yoke provides flexibility in mounting from a variety of surfaces. **Trunnion**: Die-formed steel trunnion is easily adapted to many areas and allows easy fixture aiming

- Approximate net weight: 59 lbs. (27 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPNK-S76-400-MT-Q

Lamp Type	Series	Mounting Type	Distribution	Lamp Wattage			Voltage [2]	Options & Accessories
MP=Pulse Start Metal Halide	**NK**=Nighthawk III	**S**=Slipfitter	**76**=7H x 6V Beam Spread	**MP**	**MH**	**HP**	**120V**	(See Below)
		T=Trunnion		**150**=150W	**175**=175W	**150**=150W	**208V**	
MH=Metal Halide		**Y**=Yoke		**250**=250W	**250**=250W	**250**=250W	**240V**	
				320=320W	**400**=400W	**400**=400W	**277V**	
HP=High Pressure Sodium				**400**=400W	**1000**=1000W	**600**=600W	**347V** [5]	
				750=750W		**750**=750W	**480V**	
				1000=1000W		**1000**=1000W	**MT**=Multi-Tap wired 277V	
							TT=Triple-Tap wired 347V [6]	

NOTES: 1 175, 250 and 400W MH available for non-US markets only. **2** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. **3** 88% efficient EISA MP fixtures not available in 347V and Triple-Tap voltages. **4** Add as suffix in the order shown. **5** Not available in 1000W. **6** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **7** Order separately, replace XX with color suffix. **8** Not available with slipfitter-mount. **9** Specifications and dimensions subject to change without notice.

Options [4]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts) [5]
LL=Lamp Included [6]
T=Removable Quick-Disconnect Power Tray [5]
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Accessories [7]
TYS-XX=Trunnion or Yoke Slipfitter for 2 3/8", 3", or 3 1/2" O.D. Tenon [8]
VS/NK=Vandal Shield
WG/NK=Wire Guard
VS/NK/1000=Vandal Shield for 1000W Units
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1201=Photoelectric Control, 347 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
OA/RA1028=Field Installed NEMA Twistlock Photocontrol Receptacle (Order Photocontrol Separately)
TV/NK-XX=Top or Bottom Visor
SV1/NK-XX=Single Side Visor
SV/NK-XX=Double Side Visor
OA/RA1013=Shorting Cap for NEMA Twistlock Photocontrol Receptacle

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPNKS32

Lamp Type	Series	Mounting Type	Lamp Wattage	Accessories
MP=Pulse Start Metal Halide	**NK**=Nighthawk III [1]	**S**=Slipfitter	**25**=250W [2]	**TYS**=Trunnion or Yoke Slipfitter for 2 3/8", 3", or 3 1/2" O.D. Tenon
MH=Metal Halide		**Y**=Yoke	**32**=320W [3]	
HP=High Pressure Sodium			**40**=400W	
			1K=1000W [4]	

NOTES: 1 Multi-tap ballast, 7Hx6V beam spread, bronze finish, and lamp are standard for stock product. **2** 250W stock product only available with MP lamp and slipfitter mount. **3** 250, 320 and 400W available in MP only. **4** 1000W available in MH and HPS only.

Refer to In-Stock Guide for Availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	150, 250, 320, 350, 400, 750, 1000W
Metal Halide (MH)	175, 250, 400, 750, 1000W
High Pressure Sodium (HP)	150, 250, 400, 600, 750, 1000W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

LP
LOW-PROFILE FLOODLIGHT

250-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

FLOODLIGHT

- UL Wet Location Listed. CSA Certified. EISA Compliant

- One-piece, hinged asymmetrical reflector with kick auxiliary reflector. Reflectors are anodized for premium performance and durability. Support rod holds reflector open for hands free relamping

- High temperature silicone rubber door gasket

- Die-cast aluminum door frame holds glass lens and is finished in bronze polyester powder coat

- Slipfitter fits 2 3/8" O.D. tenon (Optional Trunnion mount available)

- Optional internally mounted louver blades are designed to provide excellent glare control for such applications as airport ramps and taxiways. When ordering 250/400W units are supplied with 16 louver blades, 1000W supplied with 18 louver blades

- CWA HPF ballast with Class H insulation with optional CWI. Minimum starting temperature is -40°C (-40°F) for HP and -30°C (-20°F) for MH and MP

- U.L. listed for wet locations. CSA certified

- Approximate net weight: 97 lbs. (44 kgs.)

COOPER LIGHTING

61

DESCRIPTION

The LP Low-Profile Floodlight utilizes an asymmetrical reflector to produce a highly defined rectangular pattern. A die-cast aluminum door frame forms a solid foundation for the electrical components and an anodized aluminum reflector. Ideal for low glare applications.

DIMENSIONS
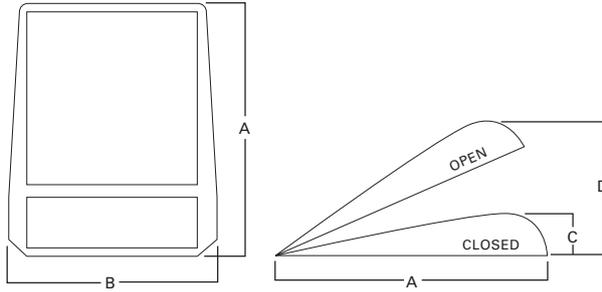
DIMENSION-INCHES

Lamp Source	A	B	C	D	EPA (sq. ft.) Front	Side	Shipping Volume (cu. ft.)
250/400W	26 1/2" [673mm]	22 1/8" [562mm]	7 7/8" [200mm]	18" [457mm]	2.72	0.67	4.06
1000W	38 1/8" [968mm]	28 5/8" [727mm]	11 3/4" [298mm]	22" [559mm]	4.62	1.31	11.06

NOTE: EPA ratings at recommended 30° aiming angle.

EPA-Effected Projected Area: 2.72 (250/400W) 4.62 (100W)   For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: MPLP-RC-1000-120V

Lamp Type	Series [1,2]	Distribution	Lamp Wattage	Ballast Type	Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide	**LP**=Low-Profile	**RC**=Rectangular Cutoff	**MP**	__=CWA	**120V**	(See Below)
MH=Metal Halide			**250**=250W	**I**=CWI [3]	**208V**	
HP=High Pressure Sodium			**320**=320W		**240V**	
			350=350W		**277V**	
			400=400W		**347V** [5]	
			750=750W		**480V**	
			1000=1000W		**MT**=Multi-Tap wired 277V	
			MH [3]		**TT**=Triple-Tap wired 347V [5]	
			250=250W			
			400=400W			
			1000=1000W			
			HP			
			250=250W			
			400=400W			
			600=600W			
			750=750W			
			1000=1000W			

Options [6]
F1=Single Fuse (120, 277 or 277V only)
F2=Double Fuse (208, 240 or 480V only)
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol
VS=Vandal Shield [7]
N=Louver

Accessories [8]
OA1058=Base for Flat Surface Mount
OA/RA1016=Photoelectric Control 105V–285V NEMA Type
OA/RA1027=Photoelectric Control 480V NEMA Type
OA1059=Hood for 250/400W Units
OA1060=Hood for 1000W Units

NOTES: 1 Suitable for horizontal burn lamps only. **2** Bronze is standard color (*only door and slipfitter*). Other finish colors available. Consult your Cooper Lighting Representative. **3** 250 and 400W MH for non-US markets only CWI ballasts available for non-US markets. **4** Products also available in non-US voltages and frequencies for international markets. **5** 88% efficient EISA Compliant fixtures not available in 347V or Triple-Tap voltages. **6** Add as suffix in the order shown. **7** Vandal shield–1/8" thick polycarbonate external shield on large units (1000W), .187" thick polycarbonate lens in place of standard lens on small units (250-400W). **8** Order separately. **9** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage	Voltage Chart	
Pulse Start Metal Halide (MP)	250, 320, 350, 400, 750, 1000W	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	250, 400, 1000W	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	250, 400, 600, 750, 1000W	TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING - LUMARK

DIMENSIONS

4"
[102mm]

11"
[279mm]

11"
[279mm]

21"
[533mm]

22"
[559mm]

9 1/4"
[235mm]

4 3/4"
[121mm]

2 3/4"
[70mm]

EPA-Effected Projected Area: 2.45

For Pole Information Refer to Cooper Lighting Pole Section.

DESCRIPTION

Computer-designed optics and a precise aiming mechanism make the Eagle XL the right choice for amateur or professional sports facilities. U.L. listed for wet locations. CSA certified.

XL
EAGLE

1000-1500W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SPORTS FLOODLIGHTING

- UL Wet Location Listed. CSA Certified

- Rugged aluminum ballast housing is finished in corrosion-resistant dark bronze polyester powder coat

- Ballast/capacitor compartment provides cooler operation and extended component life.

- Vertical aiming quadrant with repositioning stop combines with horizontal aiming protractor to allow pre-aiming while pole is on the ground

- Die-cast socket housing has silicone gasket to keep out contaminants

- Computer-designed spun-aluminum reflector produces repeatable beam distributions blades (std.)

- 1/8" tempered, heat- and shock-resistant lens sealed with closed-cell neoprene gasketing protects optics from dust and contaminants and is hinged for easy access

- Approximate net weight: 45 lbs. (20 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: HPXL-T3-1000-MT

Lamp Type	Series	Distribution	Lamp Wattage [1]	Voltage [2]	Options & Accessories
MP=Pulse Start Metal Halide	**XL**=Eagle XL	**T2**=Type II	**1000**=1000W	**120V**	(See Below)
MH=Metal Halide		**T3**=Type III	**1500**=1500W	**208V**	
HP=High Pressure Sodium		**T4**=Type IV		**240V**	
		T5=Type V		**277V**	
		T6=Type VI		**347V**	
				480V	
				MT=Multi-Tap Wired 277V [3]	
				TT=Triple-Tap Wired 347V [4]	

Options [5]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [6]
C3=3' Cord with no plug (Must use with FH-1 or FL-1 or SHK) [7]

Accessories [8]
S/XL=Slipfitter Mount, Field Installed (Fits 2-3/8" O.D. Tenon pipe)
VS/XL=Vandal Shield
HD/XL=Heavy-duty Shroud
TV/XL=Top Visor
S2C2WP=Two-in-line Crossarm for Wood Pole (EPA .9)
S3C3WPM=Three-in-line Offset Crossarm for Wood Pole (EPA 3.6)
S4C4WP=Four-in-line Crossarm for Wood Pole (EPA 4.5)
WB/XL=Wood Crossarm Bolt

NOTES: 1 All lamps are mogul-base. Lamp not included. Pulse Start Metal Halide (MP) and Metal Halide (MH) available in 1000W only. **2** Products also available in non-US voltages and 50Hz for international markets. **3** Multi-Tap ballast is 120/208/240/277V wired 277V. **4** Triple-Tap ballast is 120/277/347V wired 347V. **5** Add as suffix in the order shown. **6** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **7** Specify desired length in unit of feet (Example: C6 for 6' cord). **8** Order separately. **9** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER

SAMPLE NUMBER: MHXL-3-1000-MT

Lamp Type	Series	Distribution [1]	Lamp Wattage	Voltage
MH=Metal Halide	**XL**=Eagle XL	**3**=Type III	**1000**=1000W	**MT**=Multi-Tap
		4=Type IV	**1500**=1500W	
		5=Type V		
		6=Type VI		

NOTES: 1 Type VI available in 1000W only.
Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

STOCK SAMPLE NUMBER (INCLUDES REFLECTOR AND DOOR)

SAMPLE NUMBER: MHXL-4-1000-480V

Lamp Type	Series	Distribution [1]	Lamp Wattage	Voltage
MH=Metal Halide	**XL**=Eagle XL	**4**=Type IV	**1000**=1000W	**480V**
		5=Type V	**1500**=1500W	

NOTES: 1 Type IV available in 1500W only.
Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

Lamp Type	Wattage	Voltage Chart	
Pulse Start Metal Halide (MP)	1000W	MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	1000W, 1500W	TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

AS
ALLSTAR

1000-1650W
Pulse Start Metal Halide
Metal Halide

SPORTS LIGHTING

- UL Wet Location Listed. CSA Certified

- Rugged die-cast aluminum ballast housing finished in corrosion resistant white polyester powder coat. Transverse mounting with cast-in horizontal aiming protractor and single bolt mounting

- Isolated components for coolest component operation and extended component life. Ballast is rated to start and operate lamp in ambient temperatures down to -20° C

- Stainless steel mounting arms feature separate vertical aiming pivot bolts and rear re-lamping hinge bolts prevent mis-aiming and provide permanent fixed aiming. Aiming degree markers on both sides of the optical allow for easy pre-aiming on the ground or after installation

- 1/8" tempered, heat- and shock-resistant glass lens is sealed with high temperature silicone gasket to protect optics from dirt and contaminants and is mounted in hinged stainless steel door frame with stainless steel latches

- Die-cast aluminum socket castings are sealed with a high temperature silicone gasket to keep out contaminants

- Approximate net weight: 73 lbs. (33 kgs.)

DESCRIPTION

The "state-of-the-art" All Star sports floodlight features industry leading computer designed horizontal optics with optional internal glare/spill light control, and is the perfect choice for both amateur field lighting and professional sports stadiums and arenas. U.L. Listed for wet location. CSA certified. Rated for 55° C indoor ambient temperature environments.

DIMENSIONS

22 7/8" [556mm]

25 3/4" [654mm]

23" [584mm]

28 1/2" [724mm]

2 3/4" [71mm]

2 3/8" [70mm]

10 1/2" [267mm]
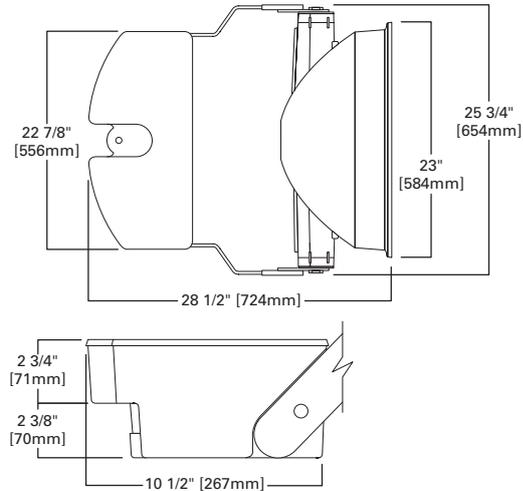
EPA-Effected Projected Area: 2.9

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: MHAS-MS-1500-480V-U3

Lamp Type	Series	Distribution	Internal Louvers	Lamp Wattage [1]	Voltage [2]	Options
MP=Pulse Start Metal Halide	**AS**=ALLSTAR Sports Floodlight	**N**=Narrow **M**=Medium **W**=Wide	**_**=None **S**=Spill Light Control Louvers	**1000**=1000W **1500**=1500W **1650**=1650W	**120V** **208V** **240V** **277V** **347V** **480V** **MT**=Multi-Tap wired 277V [3] **TT**=Triple Tap wired 347V [4] **220/50HZ**	(See Below)
MH=Metal Halide						

Options [5]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fused (208, 240 or 480V only)
HD=Heavy-Duty Shroud
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike Cold Start Time Delay
RQ=Remote Quartz [6]
RT=Remote Quartz Cold Start Time Delay [6]
HC=LumaWatt Fixture Module [7]
C3=3' Cord, Prewired with no plug (Must use with FH-1 or FL-1 or SHK)
C6=6' Cord, Prewired (Specify Voltage)
U3=3' USL Water Tight Cord & Plug for USL System (Specify Voltage)
TV=Top Visor (Black Polyester Powder Coated)

NOTES: 1 All lamps are mogul-base. Lamp not included. Pulse Start Halide (MP) and Metal Halide (MH) available in 1000W only. **2** Products also available in non-US voltages and 50 Hz for international markets. **3** Multi-Tap ballast 120/208/240/277V wired 277V. **4** Triple-Tap ballast 120/277/347V wired 347V. **5** Add as suffix in the order shown. **6** Wiring pulled for remote 1000W maximum Quartz Flood. **7** 1000 & 1500W MH only. **6** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	1000W		MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	1000, 1500, 1650W		TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING - LUMARK

IMPACT FLOOD ACCESSORIES [SMALL + MEDIUM]
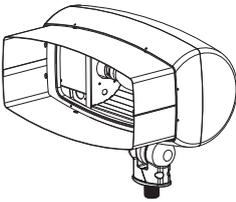
MS/4V + MM/4V
4-Sided Shield
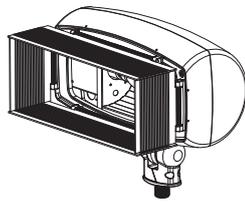
MS/BD + MM/BD
Barn Doors
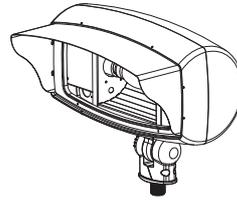
MS/TV + MM/TV
Top Visor
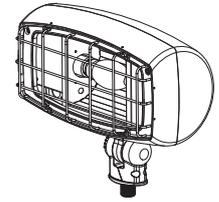
MS/WG + MM/WG
Wire Guard
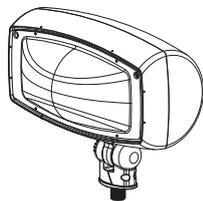
MS/VS + MM/VS
Vandal Shield

MS/JB
Junction Box

3/4" [20mm] Dia.
5" [127mm]
4 1/4" [108mm]

MS/SF
Slipfitter
(Fits 2 3/8" O.D. Tenon)

3/4" [20mm] Dia.
4 1/2" [115mm]
4" [102mm]

MS/WM
Wall Mount

6" [152mm] Dia.
3/4" [20mm] Dia.
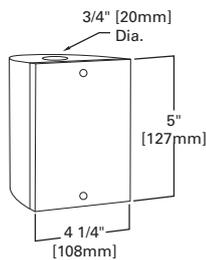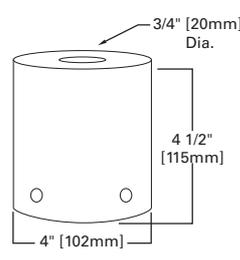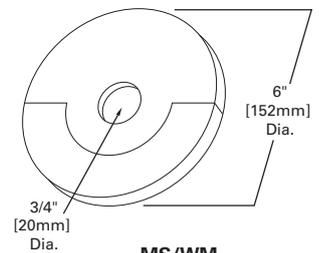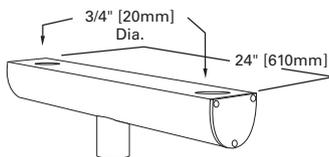
MS/TMA
Twin Mount Arm
(Fits 2 3/8" O.D. Tenon)

3/4" [20mm] Dia.
24" [610mm]

MS/WMA
Wall Mount Arm

5/16" [8mm] Dia.
15" [381mm]
6 1/2" [165mm] Sq.
3/4" [20mm] Dia.

MM/SMT
Surface Mount Tenon
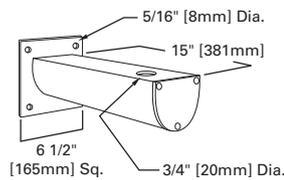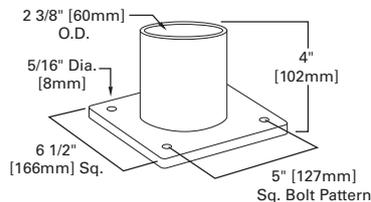
2 3/8" [60mm] O.D.
5/16" Dia. [8mm]
4" [102mm]
6 1/2" [166mm] Sq.
5" [127mm] Sq. Bolt Pattern
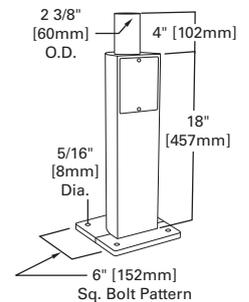
MM/ST
Stanchion Mount Tenon

2 3/8" [60mm] O.D.
4" [102mm]
5/16" [8mm] Dia.
18" [457mm]
6" [152mm] Sq. Bolt Pattern
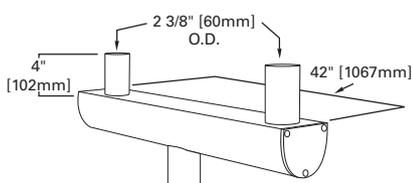
MM/TMT
Twin Mount Tenon
(Fits 2 3/8" O.D. Tenon)

2 3/8" [60mm] O.D.
4" [102mm]
42" [1067mm]

MM/WMT
Wall Mount Tenon

2 3/8" [60mm] O.D.
4" [102mm]
6 1/2" [165mm]
5" [127mm] Sq. Bolt Pattern
15" [381mm]
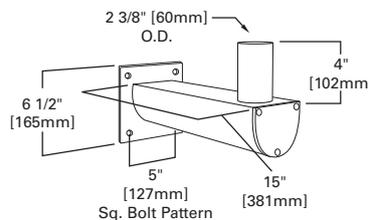
COOPER LIGHTING - LUMARK

NIGHTHAWK ACCESSORIES
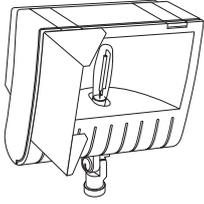
SV1/NK
Side Visor
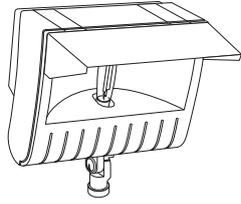
TV/NK
Top/Bottom Visor
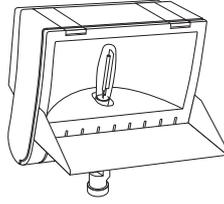
TV/NK
Top/Bottom Visor
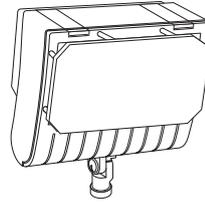
VS/NK
Vandal Shield
VS/NK/1000
Vandal Shield for 1000W Units
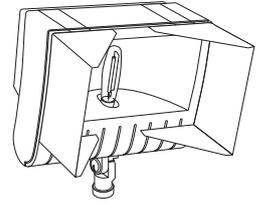
SV/NK
Double Side Visor

Each kit contains one visor only
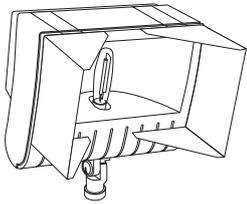
SV/NK
Double Side Visor
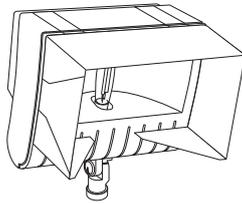
SV/NK Double Side Visor +
TV/NK Top Visor [Shown]
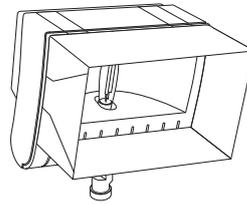
Double Side Visor [SV/NK] +
(2) Top/Bottom Visors [TV/NK]
Shown
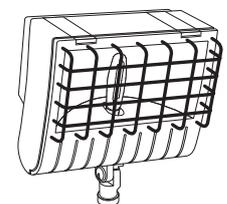
WG/NK
Wire Guard

WARRIOR ACCESSORIES
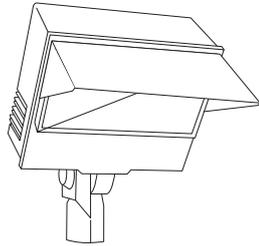
TV/WR
Top Visor

WG/WR
Wire Guard

VG/WR
Vandal Guard

FLOODLIGHTING ACCESSORIES

4" [101mm]

4 12/16" [122mm]
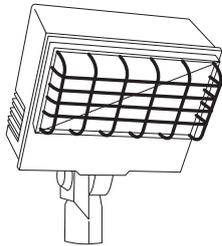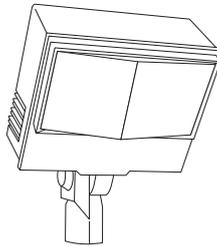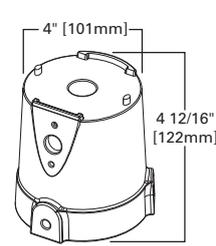
TYS
Slipfitter Adapter
(Fits 2 3/8", 3", 3 1/2" O.D. Tenon)

2 3/8" [60mm] O.D.

SPK
Landscape Post

3" [76mm]

1 1/2" [38mm]

15 1/2" [394mm]

20" [508mm]

45°

SAB
Steel Angle Bracket

5 5/8" [143mm]

5 5/8" [143mm]

8 1/2" [216mm]

8" [203mm]
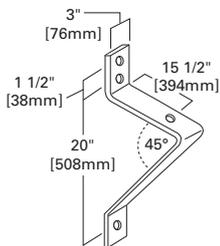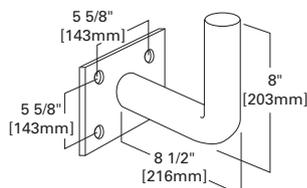
RAB
Right Angle Pipe Bracket
(2 3/8" O.D.)
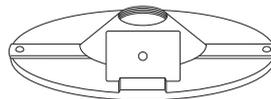
RBC
Outlet Box Cover
(1/2" Entry)
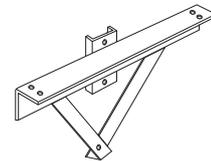
S2C2WP (EPA .9)
Two-in-line crossarm
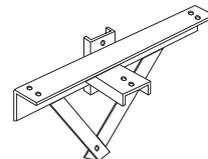
S3C3WP (EPA 3.6)
Three-in-line crossarm
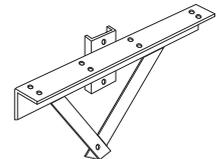
S4C4WP (EPA 4.5)
Four-in-line crossarm

COOPER LIGHTING - LUMARK

DIMENSIONS

9" [229mm]

16 1/2" [419mm]   8 1/4" [210mm]

DARK SKY COMPLIANT | FCO Full Cutoff

NOTE: In down light applications only.
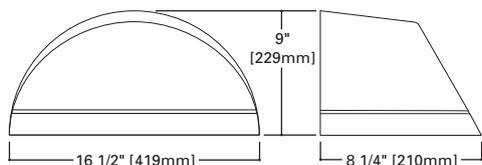
DESCRIPTION

The IMPACT Wedge full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

IP
IMPACT WEDGE

50-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-84W
Compact Fluorescent

**FULL CUTOFF
WALL MOUNT LUMINAIRE**

- U.L. listed for wet locations. CSA certified

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment fits directly to 4" J-Box or wall with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 18 lbs. (8 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHIP-W-150-MT-LL

Lamp Type [1]	Fixture Type	Fixture Shape	Lamp Wattage [1]			Voltage [2]	Options (See Below)
MP=Pulse Start Metal Halide	**IP**=Impact	**W**=Wedge	**MP**	**MH** [1]	**CF**	**120V**	
MH=Metal Halide [1]			**50**=50W	**175**=175W	**26**=(1) 26W	**208V**	
HP=High Pressure Sodium			**70**=70W	**HP**	**32**=(1) 32W	**240V**	
CF=Compact Fluorescent			**100**=100W	**50**=50W	**42**=(1) 42W	**277V**	
			150=150W	**70**=70W	**52**=(2) 26W	**347V**	
				100=100W	**64**=(2) 32W	**480V**	
				150=150W	**84**=(2) 42W	**DT**=Dual-Tap	
						MT=Multi-Tap wired 277V	
						TT=Triple-Tap wired 347V	
						E=Electronic 120-277V [4]	

Options

F1=Single Fuse, Specify Voltage (120, 277 or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Must Specify Voltage) [3]
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Screw (Door and Mounting Plate)
HS=House-side Shield Glass [4]
PL=Polycarbonate Lens [4, 5]
Q=Quartz Restrike (1) T4 Lamp [6]
EM=Emergency Quartz Restrike (1) T4 Lamp With Time Delay Relay [6]
EM/SC=Emergency Separate Circuit (1) T4 Lamp [6, 7]
QMR=Quartz Restrike (1) MR16 Lamp [8, 9]
2QMR=Quartz Restrike (2) MR16 Lamp [8, 9]
2QMR/SC=Quartz Restrike (2) MR16 Lamp and (1) Emergency Separate Circuit MR16 Lamp [7, 8, 9]

EMMR=Emergency Quartz Restrike (1) MR16 Lamp With Time Delay Relay [8, 9]
2EMMR=Emergency Quartz Restrike (2) MR16 Lamp With Time Delay Relay [8, 9]
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp [7, 9, 10]
2EM/SC/MR=Emergency Separate Circuit (2) MR16 Lamp [7, 9, 10]
2EMMR/SC=Emergency Quartz Restrike With Time Delay Relay (1) MR16 and (1) MR16 Emergency Separate Circuit Lamp [7, 8, 9]
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp [7, 11]
2EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamp [7, 11]
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage [12]
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage [13]

NOTES: 1 Lamp type not available in all wattages - see wattage table. HID lamps are medium-base. 480V not available in 50W or 70W. 175W MH is available for non-U.S. markets only. **2** Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Representative for availability and ordering information. **3** PE not available with 480V. **4** Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **5** Down lighting position only. **6** (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others. **7** Leads out of the back of the unit for auxiliary 120V. **8** Not available with CF lamps. **9** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **10** Not Available with 52, 64, 84 CF wattages. **11** (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others. **12** Specify 120 or 277V, (-18°C) minimum temperature. **13** Specify 120 or 277V, (0°C) minimum temperature. **14** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPIW15

Lamp Type	Fixture Type	Lamp Wattage
MP=Pulse Start Metal Halide	**IW**=IMPACT Wedge	**10**=100W
HP=Metal Halide		**15**=150W

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

Lamp Type	Wattage	Distribution		Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100, 150W	Type II		DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175W	Type II		MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	50, 70, 100, 150W	Type II		TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42W, (2) 26, (2) 32, (2) 42W	Type II		E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

**IP
IMPACT
TRAPEZOID**

50-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-84W
Compact Fluorescent

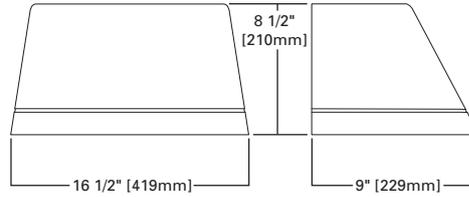**FULL CUTOFF
WALL MOUNT LUMINAIRE**

- U.L. listed for wet locations. CSA certified

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment fits directly to 4" J-Box or wall with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 18 lbs. (8 kgs.)

DESCRIPTION

The IMPACT Trapezoid full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

DIMENSIONS

8 1/2" [210mm]

16 1/2" [419mm]   9" [229mm]

DARK SKY COMPLIANT   FCO Full Cutoff

NOTE: In down light applications only.

ORDERING INFORMATION

SAMPLE NUMBER: MHIP-T-150-MT-LL

Lamp Type [1]
MP=Pulse Start Metal Halide
MH=Metal Halide [1]
HP=High Pressure Sodium
CF=Compact Fluorescent

Fixture Type
IP=Impact

Fixture Shape
T=Trapezoid

Lamp Wattage [1]

MP	MH [1]	CF
50=50W	175=175W	26=(1) 26W
70=70W	HP	32=(1) 32W
100=100W	50=50W	42=(1) 42W
150=150W	70=70W	52=(2) 26W
	100=100W	64=(2) 32W
	150=150W	84=(2) 42W

Voltage [2]
120V
208V
240V
277V
347V
480V
DT=Dual-Tap
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V
E=Electronic 120-277V [5]

Options
(See Below)

Options

F1=Single Fuse, Specify Voltage (120, 277 or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Must Specify Voltage) [3]
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Screw (Door and Mounting Plate)
UP10=10% Uplight [4]
HS=House-side Shield Glass [5]
PL=Polycarbonate Lens [5, 6]
Q=Quartz Restrike (1) T4 Lamp [7]
EM=Emergency Quartz Restrike (1) T4 Lamp With Time Delay Relay [7]
EM/SC=Emergency Separate Circuit (1) T4 Lamp [7, 8]
QMR=Quartz Restrike (1) MR16 Lamp [4, 9]
2QMR=Quartz Restrike (2) MR16 Lamp [4, 9]

2QMR/SC=Quartz Restrike (2) MR16 Lamp and (1) Emergency Separate Circuit MR16 Lamp [4, 8, 9]
EMMR=Emergency Quartz Restrike (1) MR16 Lamp With Time Delay Relay [4, 9]
2EMMR=Emergency Quartz Restrike (2) MR16 Lamp With Time Delay Relay [4, 9]
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp [8, 9, 10]
2EM/SC/MR=Emergency Separate Circuit (2) MR16 Lamp [8, 9, 10]
2EMMR/SC=Emergency Quartz Restrike With Time Delay Relay (1) MR16 and (1) MR16 Emergency Separate Circuit Lamp [4, 8, 9]
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp [8, 11]
2EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamp [8, 11]
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage [12]
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage [13]

NOTES: 1 Lamp type not available in all wattages - see wattage table. HID lamps are medium-base. 480V not available in 50W or 70W. 175W MH is available for non-U.S. markets only. **2** Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Representative for availability and ordering information. **3** PE not available with 480V. **4** Not available with CF lamps. **5** Available with CF Option. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **6** Down lighting position only. **7** (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others. **8** Leads out of the back of the unit for auxiliary 120V. **9** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **10** Not Available with 52, 64, 84 CF wattages. **11** (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others. **12** Specify 120 or 277V, (-18°C) minimum temperature. **13** Specify 120 or 277V, (0°C) minimum temperature. **14** Specifications and dimensions subject to change without notice.

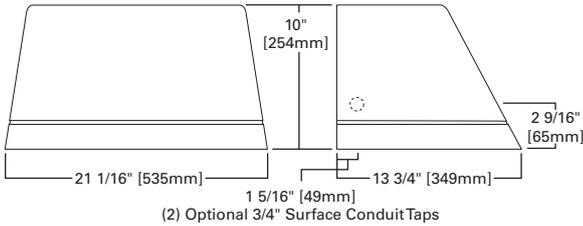## STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPIT15

Lamp Type
MP=Pulse Start Metal Halide
HP=Metal Halide

Fixture Type
IT=IMPACT Trapezoid

Lamp Wattage
10=100W
15=150W

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

Lamp Type	Wattage	Distribution	Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100, 150W	Type II	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175W	Type II	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	50, 70, 100, 150W	Type II	TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42W, (2) 26, (2) 32, (2) 42W	Type II	E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

DIMENSIONS

10"
[254mm]

2 9/16"
[65mm]

21 1/16" [535mm]

13 3/4" [349mm]

1 5/16" [49mm]
(2) Optional 3/4" Surface Conduit Taps

DARK SKY COMPLIANT FCO Full Cutoff

NOTE: In down light applications only.

Ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The IMPACT Trapezoid full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

IPTM
IMPACT TRAPEZOID MEDIUM

175-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

32-120W
Compact Fluorescent

FULL CUTOFF WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified. EISA Complaint

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment anchored directly to wall over 4" J-Box with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged removable door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 42 lbs. (19 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPIP-TM-400-4-MT-LL

Lamp Type [1]	Fixture Type	Fixture Shape	Lamp Wattage [2]		Distribution	Voltage [4, 5]	Options & Accessories
MP=Pulse Start Metal Halide	**IP**=Impact	**TM**=Trapezoid Medium	**MP**	**HP**	**HID**	**120V**	(See Below)
MH=Metal Halide [1]			**150**=150W	**250**=250W	**3**=Type III	**208V**	
HP=High Pressure Sodium			**200**=200W	**400**=400W	**4**=Type IV	**240V**	
CF=Compact Fluorescent			**250**=250W	**CF** [3]	**CF**	**277V**	
			320=320W	**60**=(1) 60W	**2**=Type II [3]	**347V** [4]	
			350=350W	**70**=(1) 70W	**4**=Type IV [3]	**480V**	
			400=400W	**85**=(1) 85W		**DT**=Dual-Tap	
			MH [1]	**96**=(3) 32W		**MT**=Multi-Tap wired 277V	
			175=175W	**114**=(2) 57W		**TT**=Triple-Tap wired 347V [4]	
			250=250W	**120**=(1) 120W		**E**=Electronic 120-277V	
			400=400W	**126**=(3) 42W			

Options

F1=Single Fuse, Specify Voltage (120, 277, or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Specify Voltage) [5]
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Hardware (2 Screws)
UP10=10% Uplight
UP30=30% Uplight [6]
HS=House-side Shield Glass [7]
SC=Surface Conduit Entry Taps (2) 3/4" NPT [8]
HAB=High Ambient 40°C Fixture (HID Lamp) [9]
CSW=Circuit Switching [10]
DIM=CF Dimming Ballast (CF Lamp/Must Specify Number of Lamps) [11]
FR=Frosted Glass [12]
Q=Quartz Restrike (1) T4 Lamp [13, 14]
EM=Emergency Quartz Restrike (1) T4 Lamp with Time Delay Relay [13, 14]
EM/SC=Emergency Separate Circuit (1) T4 Lamp [13, 14, 15]
QMR=Quartz Restrike (1) MR16 Lamp [14, 16]

2QMR=Quartz Restrike (2) MR16 Lamps [14, 16]
2QMR/SC=Quartz Restrike (1) MR16 Lamp and (1) Emergency Separate Circuit MR16 Lamp [14, 15, 16]
EMMR=Emergency Quartz Restrike (1) MR16 Lamp with Time Delay Relay [14, 16]
2EMMR=Emergency Quartz Restrike (2) MR16 Lamps with Time Delay Relay [14, 16]
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp [14, 15, 16]
2EM/SC/MR=Emergency Separate Circuit (2) MR16 Lamps [14, 15, 16]
2EMMR/SC=Emergency Quartz Restrike with Time Delay Relay (1) MR16 and (1) MR16 Emergency Separate Circuit Lamp [14, 15, 16]
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp [14, 15, 17]
2EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamps [14, 15, 17]
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage [18]
EMI40-2L=Emergency Cold Temperature (UL924 Listed) Power Pack (2) CF Lamps -18°C / 0 °F. (Specify Voltage) [19]
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage [20]
CF-EM/2L=Emergency CF Power Pack (UL924 Listed) (2) CF Lamps, 0°C / 32°F. Specify Voltage [21]

Accessories

WG/ITM=Wire Guard [22]
VS/ITM=Vandal Resistant Shield [23]

NOTES: 1 Lamp type not available in all wattages - see wattage table. 175W, 250W and 400W available for non-U.S. markets only. **2** All HID MP lamps are mogul-base, reduced envelope ED-28 except 200W MP is T15. All HID HP lamps are mogul-base ED-18. **3** Type II 60, 70, 85, 96, 114 or 126W CF only. Type IV - 60, 85 and 120W CF only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **4** Products also available in non-US voltages and 50HZ for international markets. 88% EISA Compliant MP fixtures not available in 347V and Triple-Tap voltages. **5** Not available with SC option teamed with 320-400W, not available with 480V. **6** Type III only. Not available with CF lamps. **7** Not available with 320 thru 400W. **8** Not available in Type IV 320V through 400W. Not available in Type III with F1, F2 with 320W through 400W. **9** Rated for 40°C for 250W and below fixture. Not available with CF lamps. **10** Each ballast independently wired. Available on 96, 114 or 126W CF wattages. **11** Specify CF option 96 or 126W, not available with HS, FR, or VS options. Must specify number of lamps. **12** Not available with 320W thru 400W or 114 or 126W CF options. **13** (1) 120V Lamp, 150W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. **14** Emergency lamps supplied by others. **15** Emergency lamp leads out of the back of the unit to auxillary 120V. **16** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **17** Power supplied by low voltage DC source (supplied by others). (1) or (2) 12V bi-pin socket GU5.3 base lamps, 35W maximum each. **18** Specify 120 or 277V, (-18°C) minimum temperature, not available with UP10 or CSW option, 70W CF maximum. **19** Specify 120 or 277V, (-18°C) minimum temperature, supports (2) 32W CF lamps, not available with UP10 or CSW option. **20** Specify 120 or 277V, (0°C) minimum, not available with UP10 or CSW option, 70W CF maximum. **21** Specify 120 or 277V, (0°C) minimum, not available with UP10 or CSW option, supports (2) 32W CF lamps. **22** Not available with 320 thru 400W. Not available with wire guard. **23** Not available with VS option. **24** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER
(LAMP INCLUDED)

SAMPLE NUMBER: MPITM25

Lamp Type	Fixture Type	Lamp Wattage
MP=Pulse Start Metal Halide	**ITM**=IMPACT Trapezoid Medium	**25**=250W **32**=320W **40**=400W

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

Lamp Type	Wattage	Distribution
Pulse Start Metal Halide (MP)	150, 200, 250, 320, 350, 400W	Type III, IV
Metal Halide (MH)	175, 250, 400W	Type III, IV
High Pressure Sodium (HP)	250, 400W	Type III, IV
Compact Fluorescent (CF)	(1) 60, (1) 70, (1) 85W, (2) 120, (2) 57, (3) 32, (3) 42W	Type II, IV

Voltage Chart

DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

COOPER LIGHTING

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COOPER LIGHTING - LUMARK

IP
IMPACT
CYLINDER

50-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-84W
Compact Fluorescent
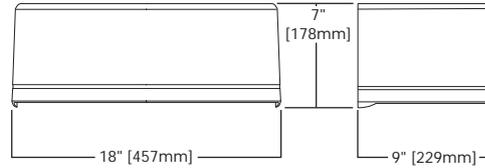
FULL CUTOFF
WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment fits directly to 4" J-Box or wall with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 18 lbs. (8 kgs.)

DESCRIPTION

The IMPACT Cylinder full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

DIMENSIONS

7" [178mm]

18" [457mm]

9" [229mm]

DARK SKY COMPLIANT | FCO Full Cutoff

NOTE: In down light applications only.

ORDERING INFORMATION

SAMPLE NUMBER: MHIP-C-150-MT-LL

Lamp Type [1]	**Fixture Type**	**Fixture Shape**	**Lamp Wattage** [1]			**Voltage** [2]	**Options**
MP=Pulse Start Metal Halide	**IP**=Impact	**C**=Cylinder	**MP**	**MH** [1]	**CF**	**120V**	(See Below)
MH=Metal Halide [1]			**50**=50W	**175**=175W	**26**=(1) 26W	**208V**	
HP=High Pressure Sodium			**70**=70W	**HP**	**32**=(1) 32W	**240V**	
CF=Compact Fluorescent			**100**=100W	**50**=50W	**42**=(1) 42W	**277V**	
			150=150W	**70**=70W	**52**=(2) 26W	**347V**	
				100=100W	**64**=(2) 32W	**480V**	
				150=150W	**84**=(2) 42W	**DT**=Dual-Tap	
						MT=Multi-Tap wired 277V	
						TT=Triple-Tap wired 347V	
						E=Electronic 120-277V [6]	

Options

F1=Single Fuse, Specify Voltage (120, 277 or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Must Specify Voltage) [3]
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Screw (Door and Mounting Plate)
UP10=10% Uplight [4]
UP50=50% Uplight [5]
HS=House-side Shield Glass [6]
PL=Polycarbonate Lens [6, 7]
Q=Quartz Restrike (1) T4 Lamp [8]

EM=Emergency Quartz Restrike (1) T4 Lamp With Time Delay Relay [8]
EM/SC=Emergency Separate Circuit (1) T4 Lamp [8, 9]
QMR=Quartz Restrike (1) MR16 Lamp [4, 10]
EMMR=Emergency Quartz Restrike (1) MR16 Lamp With Time Delay Relay [4, 10]
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp [9, 10, 11]
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp [9, 12]
2EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamp [9, 12]
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage [13]
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage [14]

NOTES: 1 Lamp type not available in all wattages - see wattage table. HID lamps are medium-base. 480V not available in 50W or 70W. 175W MH is available for non-U.S. markets only. **2** Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Representative for availability and ordering information. **3** PE not available with 480V. **4** Not available with CF lamps. **5** Not available with dual CF lamps. **6** Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **7** Down lighting position only. **8** (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others. **9** Leads out of the back of the unit for auxillary 120V. **10** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **11** Not Available with 52, 64, 84 CF wattages. **12** (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others. **13** Specify 120 or 277V, (-18°C) minimum temperature. **14** Specify 120 or 277V, (0°C) minimum temperature. **15** Specifications and dimensions subject to change without notice.

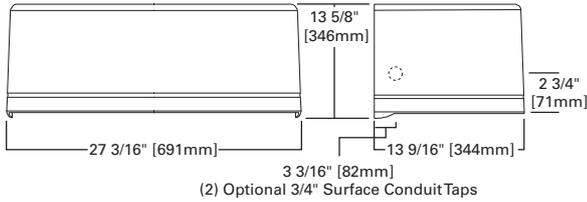## STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPIC15

Lamp Type	**Fixture Type**	**Lamp Wattage**
MP=Pulse Start Metal Halide	**IC**=IMPACT Cylinder	**10**=100W
HP=Metal Halide		**15**=150W

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

Lamp Type	Wattage	Distribution	Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100, 150W	Type II	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175W	Type II	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	50, 70, 100, 150W	Type II	TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42W, (2) 26, (2) 32, (2) 42W	Type II	E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

13 5/8" [346mm]

2 3/4" [71mm]

27 3/16" [691mm]

13 9/16" [344mm]

3 3/16" [82mm]
(2) Optional 3/4" Surface Conduit Taps

DARK SKY COMPLIANT | FCO Full Cutoff

NOTE: In down light applications only.

DESCRIPTION

The IMPACT Cylinder full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

IPCM
IMPACT CYLINDER MEDIUM

175-400W
High Pressure Sodium Pulse Start Metal Halide Metal Halide

32-120W
Compact Fluorescent

FULL CUTOFF WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified. EISA Complaint

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment anchored directly to wall over 4" J-Box with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged removable door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 48 lbs. (22 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPIP-CM-400-4-MT-LL

Lamp Type [1]
MP=Pulse Start Metal Halide
MH=Metal Halide [1]
HP=High Pressure Sodium
CF=Compact Fluorescent

Fixture Type
IP=Impact

Fixture Shape
CM=Cylinder Medium

Lamp Wattage [2]

MP	HP
150=150W	**250**=250W
200=200W	**400**=400W
250=250W	**CF [3]**
320=320W	**60**=(1) 60W
350=350W	**70**=(1) 70W
400=400W	**85**=(1) 85W
MH [1]	**96**=(3) 32W
175=175W	**114**=(2) 57W
250=250W	**120**=(1) 120W
400=400W	**126**=(3) 42W

Distribution
HID
3=Type III
4=Type IV
CF
2=Type II [3]
4=Type IV [3]

Voltage [4, 5]
120V
208V
240V
277V
347V [4]
480V
DT=Dual-Tap
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [4]
E=Electronic 120-277V

Options & Accessories
(See Below)

Options

F1=Single Fuse, Specify Voltage (120, 277, or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Specify Voltage) [5]
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Hardware (2 Screws)
UP10=10% Uplight
UP30=30% Uplight [6]
HS=House-side Shield Glass [7]
SC=Surface Conduit Entry Taps (2) 3/4" NPT [8]
HAB=High Ambient 40°C Fixture (HID Lamp) [9]
CSW=Circuit Switching [10]
DIM=CF Dimming Ballast (CF Lamp/Must Specify Number of Lamps) [11]
FR=Frosted Glass [12]
Q=Quartz Restrike (1) T4 Lamp [13, 14]
EM=Emergency Quartz Restrike (1) T4 Lamp with Time Delay Relay [13, 14]
EM/SC=Emergency Separate Circuit (1) T4 Lamp [13, 14, 15]
QMR=Quartz Restrike (1) MR16 Lamp [14, 16]

2QMR=Quartz Restrike (2) MR16 Lamps [14, 16]
2QMR/SC=Quartz Restrike (1) MR16 Lamp and (1) Emergency Separate Circuit MR16 Lamp [14, 15, 16]
EMMR=Emergency Quartz Restrike (1) MR16 Lamp with Time Delay Relay [14, 16]
2EMMR=Emergency Quartz Restrike (2) MR16 Lamps with Time Delay Relay [14, 16]
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp [14, 15, 16]
2EM/SC/MR=Emergency Separate Circuit (2) MR16 Lamps [14, 15, 16]
2EMMR/SC=Emergency Quartz Restrike with Time Delay Relay (1) MR16 and (1) MR16 Emergency Separate Circuit Lamp [14, 15, 16]
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp [14, 15, 17]
2EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamps [14, 15, 17]
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage [18]
EMI40-2L=Emergency Cold Temperature (UL924 Listed) Power Pack (2) CF Lamps -18°C / 0 °F. (Specify Voltage) [19]
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage [20]
CF-EM/2L=Emergency CF Power Pack (UL924 Listed) (2) CF Lamps, 0°C / 32°F. Specify Voltage [21]

Accessories

WG/ICM=Wire Guard [22]
VS/ICM=Vandal Resistant Shield [23]

NOTES: 1 Lamp type not available in all wattages - see wattage table. 175W, 250W and 400W available for non-U.S. markets only. **2** All HID MH lamps are mogul-base, reduced envelope ED-28 except 200W MP is T15. All HID HP lamps are mogul-base ED-18. **3** Type II 60, 70, 85, 96, 114 or 126W CF only. Type IV - 60, 85 and 120W CF only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **4** Products also available in non-US voltages and 50HZ for international markets. 88% EISA Compliant MP fixtures not available in 347V and Triple-Tap voltages. **5** Not available with SC option teamed with 320-400W, not available with 480V. **6** Type III only. Not available with CF lamps. **7** Not available with 320 thru 400W. **8** Not available in Type IV 320V through 400W. Not available in Type III with F1, F2 with 320W through 400W. **9** Rated for 40°C for 250W and below fixture. Not available with CF lamps. **10** Each ballast independently wired. Available on 96, 114 or 126W CF wattages. **11** Specify CF option 96 or 126W, not available with HS, FR, or VS options. Must specify number of lamps. **12** Not available with 320W thru 400W or 114 or 126W CF options. **13** (1) 120V Lamp, 150W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. **14** Emergency lamps supplied by others. **15** Emergency lamp leads out of the back of the unit to auxillary 120V. **16** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **17** Power supplied by low voltage DC source (supplied by others). (1) or (2) 12V bi-pin socket GU5.3 base lamps, 35W maximum each. **18** Specify 120 or 277V, (-18°C) minimum temperature, not available with UP10 or CSW option, 70W CF maximum. **19** Specify 120 or 277V, (-18°C) minimum temperature, supports (2) 32W CF lamps, not available with UP10 or CSW option. **20** Specify 120 or 277V, (0°C) minimum, not available with UP10 or CSW option, 70W CF maximum. **21** Specify 120 or 277V, (0°C) minimum, not available with UP10 or CSW option, supports (2) 32W CF lamps. **22** Not available with VS option. **23** Not available with 320 thru 400W. Not available with wire guard. **24** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage	Distribution	Voltage Chart	
Pulse Start Metal Halide (MP)	150, 200, 250, 320, 350, 400W	Type III, IV	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175, 250, 400W	Type III, IV	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	250, 400W	Type III, IV	TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	(1) 60, (1) 70, (1) 85W, (2) 120, (2) 57, (3) 32, (3) 42W	Type II, IV	E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

COOPER LIGHTING - LUMARK

IP
IMPACT
QUARTER
SPHERE

50-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

26-84W
**Compact Fluorescent**

**FULL CUTOFF
WALL MOUNT LUMINAIRE**

- U.L. listed for wet locations. CSA certified

- Two-piece die-cast aluminum housing

- Rigid steel mounting attachment fits directly to 4" J-Box or wall with "Hook-N-Lock" mechanism for quick installation

- HID luminaires supplied with high power factor ballast with Class H insulation. Minimum starting temperatures are -40°C (-40°F) for HP and -30°C (-22°F) for MP/MH. Compact Fluorescent luminaires feature electronic universal 120-277V high efficient 50/60Hz ballast with -18°C (0°F) minimum starting

- Die-cast door features 1/8" heat- and impact-resistant clear tempered glass lens. Hinged door secured in place via two (2) captive fasteners

- Durable polyester powder coat finish. Standard color is bronze. Other finish colors available

- Approximate net weight: 18 lbs. (8 kgs.)

DESCRIPTION

The IMPACT Quarter Sphere full cutoff wall luminaire makes an ideal complement to site design. U.L. Listed and CSA Certified for wet locations in down mount applications and damp locations in up mounted applications.

Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities.

DIMENSIONS

9" [229mm]

18" [457mm]   9" [229mm]

DARK SKY COMPLIANT   **FCO** Full Cutoff
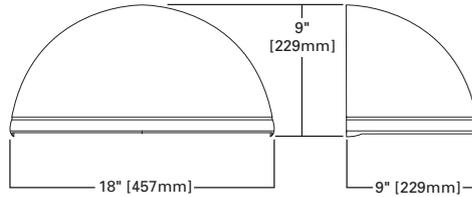
NOTE: In down light applications only.

ORDERING INFORMATION

SAMPLE NUMBER: MHIP-S-150-MT-LL

Lamp Type	Fixture Type	Fixture Shape	Lamp Wattage [1]		Voltage [2]	Options
MP=Pulse Start Metal Halide	**IP**=Impact	**S**=Quarter Sphere	**MP** **MH**	**CF**	**120V**	(See Below)
MH=Metal Halide			**50**=50W **175**=175W [1]	**26**=(1) 26W	**208V**	
HP=High Pressure Sodium			**70**=70W **HP**	**32**=(1) 32W	**240V**	
CF=Compact Fluorescent			**100**=100W **50**=50W	**42**=(1) 42W	**277V**	
			150=150W **70**=70W	**52**=(2) 26W	**347V**	
			100=100W	**64**=(2) 32W	**480V**	
			150=150W	**84**=(2) 42W	**DT**=Dual-Tap	
					MT=Multi-Tap wired 277V	
					TT=Triple-Tap wired 347V [4]	
					E=Electronic 120-277V [10]	

Options [12]

F1=Single Fuse, Specify Voltage (120, 277 or 347V)
F2=Double Fuse, Specify Voltage (208 or 240V)
PE=Button Photocontrol (Must Specify Voltage)
BK=Black
WH=White
AP=Grey
GM=Graphite Metallic
DP=Dark Platinum
LL=Lamp Included (Must Specify Wattage on CF)
TR=Tamper Resistant Screw (Door and Mounting Plate)
HS=House-side Shield Glass
PL=Polycarbonate Lens
Q=Quartz Restrike (1) T4 Lamp
EM=Emergency Quartz Restrike (1) T4 Lamp With Time Delay Relay

EM/SC=Emergency Separate Circuit (1) T4 Lamp
QMR=Quartz Restrike (1) MR16 Lamp
EMMR=Emergency Quartz Restrike (1) MR16 Lamp With Time Delay Relay
EM/SC/MR=Emergency Separate Circuit (1) MR16 Lamp
2EM/SC/MR=Emergency Separate Circuit (2) MR16 Lamp
2EMMR=Emergency Quartz Restrike (1) MR16 Lamp With Time Delay Relay and (1) MR16 Emergency Separate Circuit Lamp
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18°C / 0°F, (1) CF Lamp, Specify Voltage
CF-EM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C / 32°F. Specify Voltage

NOTES: 1 Lamp type not available in all wattages - see wattage table. HID lamps are medium-base. 480V not available in 50W or 70W. 175W MH is available for non-U.S. markets only. **2** Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information. **3** PE not available with 480V. **4** Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels. **5** Down lighting position only. **6** (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others. **7** Leads out of the back of the unit for auxiliary 120V. **8** Not available with CF lamps. **9** (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others. **10** Not Available with 52, 64, 84 CF wattages. **11** (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others. **12** Specify 120 or 277V, (-18°C) minimum temperature. **13** Specify 120 or 277V, (0°C) minimum temperature. **14** Specifications and dimensions subject to change without notice.

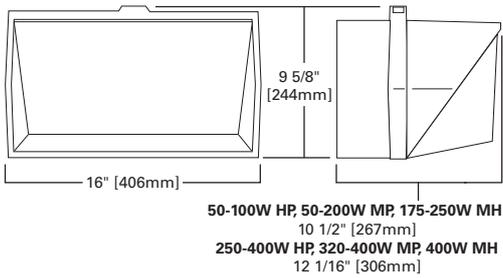### STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPIS15

Lamp Type	Fixture Type	Lamp Wattage [1]
MP=Pulse Start Metal Halide	**IS**=IMPACT Quarter Sphere	**10**=100W
HP=Metal Halide		**15**=150W

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Refer to standard order information to add options.

Lamp Type	Wattage	Distribution	Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100, 150W	Type II	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175W	Type II	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	50, 70, 100, 150W	Type II	TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	(1) 26, (1) 32, (1) 42W, (2) 26, (2) 32, (2) 42W	Type II	E=Electronic (CF only)	120-277V (wired 277V) (50/60 Hz)

DIMENSIONS

9 5/8"
[244mm]

16" [406mm]

50-100W HP, 50-200W MP, 175-250W MH
10 1/2" [267mm]
250-400W HP, 320-400W MP, 400W MH
12 1/16" [306mm]

Ⓔ COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Wal-Pak provides a durable and efficient exterior light source for any application requiring maximum performance and minimum maintenance. The rugged, die-cast aluminum housing, stainless steel hardware and gasket sealed optics compartment combine to make the Wal-Pak virtually impenetrable to contaminants.

WL
WAL-PAK

50-400W

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

**WALL MOUNT
LUMINAIRE**

- U.L. listed for wet locations. CSA certified. EISA Complaint

- Captive corrosion resistant, single point mounting screw

- Die-cast aluminum housing is finished in dark bronze polyester powder coat

- Impact resistant borosilicate prismatic glass or polycarbonate refractor with aluminum reflector that provides maximum photometric performance and beam efficiency

- High-temperature silicone gasketing seals out external contaminants

- Mogul-base porcelain socket, except 150W and below has medium-base

- Normal or High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HP and -30° C (-20°F) for MH and MP

- Door assembly is hinged at bottom for ease of maintenance

- 3/4" threaded entry on top for surface conduit entry or field installation of photocontrol

- Approximate net weight: 32-42 lbs. (15-19 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPWL-250-MT-LL

Lamp Type	Series	Lamp Wattage [3] [1]	Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide	**WL**=Wal-Pak/ Borosilicate Glass Lens/HPF	**MP**	**120V**	(See Below)
MH=Metal Halide [1]	**PL**=Wal-Pak/ Polycarbonate Lens/HPF [2]	**50**=50W **MH** [1]	**208V**	
HP=High Pressure Sodium	**WE**=Wal-Pak/ Borosilicate Glass Lens/NPF	**70**=70W **175**=175W	**240V**	
		100=100W **250**=250W	**277V**	
		150=150W **400**=400W	**347V** [5]	
		200=200W **HP**	**480V**	
		250=250W **50**=50W	**MT**=Multi-Tap wired 277V	
		320=320W **70**=70W	**TT**=Triple-Tap wired 347V [5]	
		350=350W **100**=100W	**5T**=5-Tap [6]	
		400=400W **150**=150W		
		250=250W		
		400=400W		

Options [7]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
TR=Tamper-resistant Screws
Q=Quartz Restrike (Hot Strike Only)
EM=Quartz Restrike with "Delay Relay"
   (Quartz lamp strikes at both hot and cold start)
EM/SC=Emergency Separate Circuit
LL=Lamp Included [8]
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol

Accessories [9]
WG/WL=Wire Guard [10]
VS/WL-XX=Visor Cutoff Shield [10]
FC/WL=Full Cutoff Shield
FSC/WL=Semi Cutoff Shield
WLR=Replacement Glass Lens
PLL=Replacement Polycarbonate Lens (150W maximum)
PE-347V=Field-installed Photocontrol, 347V
PE-480V=Field-installed Photocontrol, 480V
PE/MT=Field-installed Photocontrol
TRSD-1/4-20=Tamper-resistant Screwdriver
PCS=Polycarbonate Vandal Shield [12]
TWC=Thru-way Conduit

NOTES: 1 175W, 250W and 400 MH available for non-US markets only. **2** 150W maximum in HP and MP and 175W in MH. **3** Consult IES Photometric files for lamp information. **4** Products also available in non-US voltages and 50HZ for international markets. **5** 88% Efficient EISA MP fixtures not available in 347V and Triple-tap voltages. **6** 5-Tap ballast available in 400W MH only. **7** Add as suffix in the order shown. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Order separately. **10** Wire guard, visor and shields can not be used together on the same unit. **11** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: PS10

Series	Lamp Type	Lamp Wattage [1]
P=Wal-Pak	**S**=High Pressure Sodium	**10**=100W
	P=Pulse Start Metal Halide	**15**=150W
		25=250W
		32=320W
		40=400W

NOTES: 1 320W available in MP only. 100W available in HP only. **2** Shipped with multi-tap ballast, wired 277V. Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to in Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	50, 70, 100, 150, 250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/277/347/480V (wired 480V)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

MN
MON-2

35-150W
High Pressure Sodium
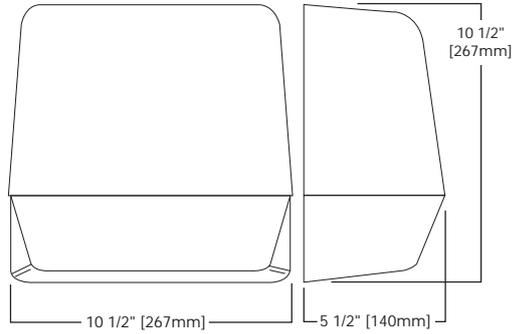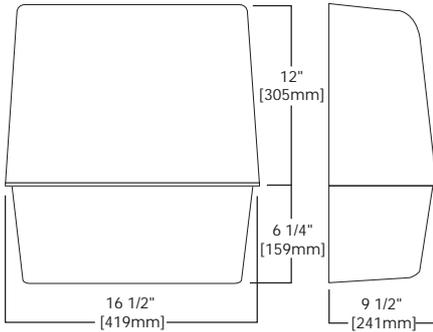**Pulse Start Metal Halide**

CUTOFF WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- One-piece, durable die-cast aluminum housing in a pleasing soft-corner design

- Dark bronze polyester powder coat (standard) finish is both weather- and abrasion-resistant

- Compact ballast core and coil assembly

- Pulse-rated medium-base porcelain lamp socket

- Specular polished aluminum reflectors provide sharp cutoff and minimum glare with maximum spacing between luminaires

- Standard and tamper-proof lens screws included with each fixture

- Closed-cell gas-filled high-temperature silicone gasketing

- Approximate net weight: 9 lbs. (4 kgs.)

DESCRIPTION

Energy-saving long-life HID lamps within a sealed and gasketed optics compartment reduce maintenance to a minimum. A polished-aluminum specular reflector system promotes maximum luminaire performance.

DARK SKY COMPLIANT **CO Cutoff**

DIMENSIONS

10 1/2" [267mm]

10 1/2" [267mm]

5 1/2" [140mm]

MOUNTING DETAILS

2 3/4" [70mm]

6 13/16" [173mm]

5" [129mm]

ORDERING INFORMATION

SAMPLE NUMBER: HPMN-70-120V-LL

Lamp Type	Series	Lamp Wattage [2]	Ballast	Voltage [5]	Options [6]	Accessories [9]
MP=Pulse Start Metal Halide [1]	**MN**=Mon-2	**MP**	**H**=High Power Factor [3, 4]	**120V**	**LL**=Lamp Included [7]	**WA1XX**=277V Adapter (Specify Color. Bronze is Standard)
HP=High Pressure Sodium		**50**=50W	**_**=Normal Power Factor		**F1**=Single Fuse (120, 277 or 347V only) [8]	**WA1347XX**=347V Adapter (Specify Color. Bronze is Standard)
		70=70W			**PE**=Internal Photocontrol (Specify Voltage)	**WA2**=Forward Throw Reflector
		100=100W			**PC**=Button Type Photocontrol	**WA3XX**=Pole Mount Adapter (Specify Color. Bronze is Standard)
		150=150W				**WA4XX**=Glare Shield (Specify Color. Bronze is Standard)
		HP				**SD2925PK**=Screwdriver for Tamper-Resistant Screws
		35=35W				
		50=50W				
		70=70W				
		100=100W				
		150=150W				

NOTES: 1 100W MP maximum. **2** All lamps are medium-base. **3** Not available in 100W MP. **4** High Power Factor ballast is required on all MP products. **5** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. **6** Add as suffix in the order shown. **7** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **8** Mon-2 F1 single fuse available in 120V only. **9** Order separately. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: HPMN70-120V-LL

Series/Lamp Type	Lamp Wattage	Voltage	Option
HPMN=High Pressure Sodium	**70**=70W	**120V**	**LL**=Lamp Included
	15=150W		

NOTES: 1 Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability. **3** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150W
High Pressure Sodium (HP)	35, 50, 70, 100, 150W

ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

12" [305mm]

6 1/4" [159mm]

16 1/2" [419mm]

9 1/2" [241mm]

MOUNTING DETAILS

2 3/4" [70mm]

6 13/16" [173mm]

5" [129mm]

ORDERING INFORMATION

SAMPLE NUMBER: MPM4-GL-250-MT-LL

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide [1,2]
HP=High Pressure Sodium

Series
M4=Mon-4

Lens Type
P=Polycarbonate [3]
GL=Borosilicate Glass

Lamp Wattage [2]
MP
70=70W
100=100W
150=150W
200=200W
250=250W
320=320W [4]
350=350W [4]
400=400W [4]
MH [2]
175=175W
250=250W
400=400W
HP
70=70W
100=100W
150=150W
250=250W
400=400W

Voltage [5]
120V
208V
240V
277V
347V [6]
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [6]
5T=5-Tap [7]

Options [8]
F1=Single Fuse (120, 277 or 347V only) [9]
F2=Double Fuse (208, 240 or 480V only) [9]
LL=Lamp Included [10]
Q=Quartz Restrike (Cold Start) [9]
EM=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts) [9]
QLL=Quartz Lamp Included [9,10]
PE=Internal Photocontrol (Specify Voltage) [9]

Accessories [11]
SD2925PK=Screwdriver for Tamper-resistant Screws

NOTES: 1 All lamps are mogul-base except 150W MP and lower are medium-base. Lamp included. **2** 175 and 250W MH available to non-US markets only. **3** Polycarbonate lens available from 70-250W HP, 70-150W MP and 175W MH. **4** Consult factory for availability. **5** Products also available in non-US voltages and 50Hz for international markets. **6** 88% efficient EISA compliant fixtures not available in 347V or Triple-tap voltages. **7** 5-Tap available in 400W MH only. **8** Add as suffix in the order shown. **9** 250W maximum MP or MH. **10** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **11** Order separately. **12** Specifications and dimensions subject to change without notice.
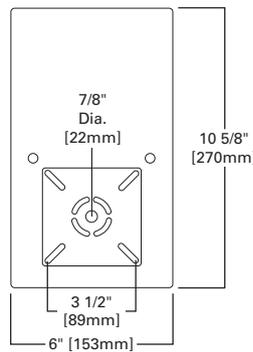
DESCRIPTION

The Lumark MON-4 features a injection-molded polycarbonate housing / lens and a die-cast aluminum back plate for rugged durability.

DARK SKY COMPLIANT | CO Cutoff

M4
MON-4

70-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

CUTOFF WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified. EISA Complaint
- One-piece, heavy-duty, die-cast aluminum housing is finished in dark bronze polyester powder coat
- Normal or high power factor compact coil and core ballast with class H insulation
- Anodized aluminum reflector is designed for optimum light control and sharp cutoff (adjustable from 70° to 86°)
- Mogul-base porcelain enclosed screw-shell socket, except 150W MP and lower which is medium-base
- Closed-cell high-temperature silicone gasketing seals out external contaminants
- Lens lowers on spring-loaded retaining wires for quick access to internal components during relamping and maintenance
- Approximate net weight: 47 lbs. (21 kgs.)

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 150, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/277/347/480V (wired 480V)

COOPER LIGHTING - LUMARK

WM
WAL-LITE

35-70W
High Pressure Sodium

42W
Compact Fluorescent

COMPACT WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum back plate

- Injection-molded polycarbonate housing. Standard color bronze. Optional white finish available

- Aluminum reflector and prismatic refractor directs light down and out, reducing glare and wasted light

- HID: HP up to 70W, lamp included. CF: 42W, lamp included with stock models

- HID: 4Kv medium 3PSE socket. CF: Gx24q-4 (4-pin)

- Housing is sealed and gasketed

- 1/2" NPS entry point for direct mount applications where internal wiring is desired

- Can be mounted to any vertical surface

- Approximate net weight: 4.6-7 lbs. (2.04-3 kgs.)

DESCRIPTION

The Lumark WAL-LITE features a injection-molded polycarbonate housing / lens and a die-cast aluminum back plate for rugged durability.

DIMENSIONS

11" [280mm]

6 3/4" [172mm]   5 3/8" [136mm]

MOUNTING DETAIL

7/8" Dia. [22mm]

10 5/8" [270mm]

3 1/2" [89mm]

6" [153mm]

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: HPWM70

Lamp Type	Series [1]	Lamp Wattage	Options [3]
HP=High Pressure Sodium	**WM**=Wal-Lite	**HP**	**W**=White Polycarbonate Housing [4]
CF=Compact Fluorescent		**35**=35W	**P**=Button Type Photocontrol (120V Only)
		50=50W	
		70=70W	
		CF	
		42=42W [2]	

NOTES: **1** HP 120V only. CF 120-277V electronic ballast. **2** In cold temperatures, compact fluorescent lamps produce lower illumination levels. **3** Add as suffix in the order shown. **4** Not available in 35W HP and 42W CF. **5** Products also available in non-US voltages for international markets. **6** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: HPWM70

Lamp Type	Series	Lamp Wattage [1, 2]	Options
HP=High Pressure Sodium	**WM**=Wal-Lite	**HP**	**P**=Button Type Photocontrol (120V Only)
CF=Compact Fluorescent		**35**=35W	
		50=50W	
		70=70W	
		CF	
		42=42W	

NOTES: **1** 42W available in CF only. **2** 35, 50, 70W fixtures are 120V. 42W CF without option without photocontrol option is 120-277V. **3** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
High Pressure Sodium (HP)	35, 50, 70W
Compact Fluorescent (CF)	42W

COOPER LIGHTING - LUMARK

DIMENSIONS

12" [305mm]

1/2" [13mm] NPS Conduit Hub
7 5/16" [186mm]

5 7/16" [138mm]

MOUNTING DETAIL

3/4" Dia. [20mm]

11 3/4" [299mm]

4" [102mm]

7 1/8" [181mm]
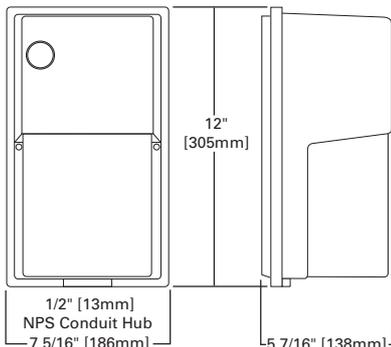
DESCRIPTION

The Lumark Wal-Lite Glass features a clear prismatic impact-resistant borosilicate glass lens and a die-cast aluminum back plate for rugged durability.

Wal-Lite Glass can be mounted to any vertical surface, and delivers excellent beam control for areas such as entrance/eaves, corridors, parking garages, pathways, recreational, retail, security, transportation and warehouse applications.

WM
WAL-LITE GLASS

50-100W
Pulse Start Metal Halide

COMPACT GLASS WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum back plate

- Die-cast aluminum housing finished in bronze polyester powder coat

- Formed aluminum reflector and prismatic borosilicate glass refractor

- 4KV pulse-rated medium-base porcelain socket

- Housing is sealed and gasketed

- 1/2" NPS entry point for direct mount applications where internal wiring is desired

- Flush-mount to vertical surface via die-cast aluminum back plate over recessed J-box or direct to wall and run supply wires through bottom 1/2" NPS entry

- Approximate net weight: 12 lbs. (5.4 kgs.)

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: MPWM10G

Lamp Type [1]	Series	Lamp Wattage	Lens Type	Accessories [2, 3]
MP=Pulse Start Metal Halide	**WM**=Wal-Lite	**50**=50W **70**=70W **10**=100W	**G**=Glass	**PB120V**=Button Type Photocontrol Field Installed (120V only) **PB-208/240V**=Button Type Photocontrol Field Installed (208/240V only) **PB-277V**=Button Type Photocontrol Field Installed (277V only) **PE/MT**=Field Installed Photocontrol

NOTES: 1 All lamps are medium-base. Lamp is included. **2** Order separately. **3** Products also available in non-US voltages and frequencies for international markets. **4** Specifications and dimensions subject to change without notice.

COOPER LIGHTING - LUMARK

WP
WAL-EYE

70-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

WALL MOUNT LUMINAIRE

- Die-cast aluminum base housing is U.L. listed for wet locations and CSA certified

- One-piece polycarbonate front cover with choice of prismatic or clear lens area

- Specially formulated finish on inside of unit for maximum weather resistance

- Formed, specular anodized aluminum reflector

- Cast-in gasket-retaining channel positively locates door gasket

- Molded-in latch for toolless entry

- Approximate net weight: 20 lbs. (9 kgs.)

DESCRIPTION

The Lumark WAL-Eye blends durable polycarbonate construction and efficient illumination with an exciting design to deliver lasting performance in virtually any architectural setting.

DIMENSIONS

16 1/8" [410mm]

15 3/4" [400mm]   9 1/2" [241mm]

MOUNTING DETAILS

4 7/8" [124mm]
2 7/16" [62mm]
5 9/16" [142mm]
7 3/16" [183mm]
10" [254mm]

ORDERING INFORMATION

SAMPLE NUMBER: MPWP-150H-MT-Q

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide [1]
HP=High Pressure Sodium

Series [2]
WP=WAL-Eye w/ Prismatic Polycarbonate
WC=WAL-Eye w/ Clear Polycarbonate

Lamp Wattage
MP
70=70W
100=100W
150=150W [3]
MH [1, 4]
175=175W [4]
HP
70=70W
100=100W
150=150W [3]

Ballast
H=High Power Factor [5]
_=Normal Power Factor

Voltage [6]
120V
208V
240V
277V
347V
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V

Options [7]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
TR=Tamper-Resistant Screws
Q=Quartz Restrike (Hot Restrike Only)
LL=Lamp Included [8]
R=Omit Hinge Pins and include Vandal-Proof Screws
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol

Accessories [9]
SPA=Square Pole Adapter
SCK Surf Cond Kit=Surface Conduit Kit

NOTES: 1 175W MH available in non-US markets only. **2** Standard lens is prismatic polycarbonate. To specify clear polycarbonate change "WP" in catalog number to "WC". **3** Uses S-55 (55 Volt) lamp only. **4** Uses coated lamp. **5** High Power Factor ballast is required on all MP and MH products. **6** Products also available in non-US voltages and 50Hz for international markets. **7** Add as suffix in the order shown. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Order separately. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER

SAMPLE NUMBER: MPWP-150H-MT

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium

Series
WP=Wal-Eye

Lamp Wattage
150H=150W

Voltage
MT=Multi-Tap

NOTES: Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Order accessories as separate item for field installation. Refer to standard ordering information to add options and accessories.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 150W
Metal Halide (MH)	175
High Pressure Sodium (HP)	70, 100, 150W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING - LUMARK

DIMENSIONS

7" [178mm]

10" [254mm]

6 3/4" [171mm]

MOUNTING DETAIL

2 1/2" square [64mm]

6 1/4" [159mm]

7/8" diameter [22mm]

9 3/16" [233mm]

DESCRIPTION

The Lumark Glass-Pak is constructed of premium die-cast aluminum and features a borosilicate glass lens.

GP
GLASS-PAK

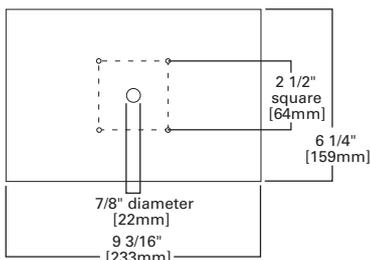**35-175W**
High Pressure Sodium
Pulse Start Metal Halide
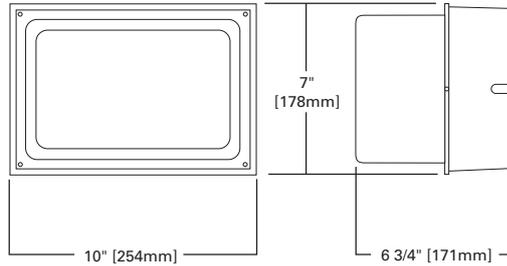**Metal Halide**

WALL MOUNT
LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in architectural dark bronze polyester powder coat

- Precision aluminum reflector/ visor system directs light down and out, eliminating glare and wasted light

- Optical system is sealed with foam-in-place silicone gasketing

- Can be mounted to any vertical surface. 1/2" knockouts on side of housing accommodate surface-mounted conduit, or back plate can be mounted to 4" octagonal J-box

- Prismatic borosilicate glass refractor provides excellent beam distribution without lens yellowing

- Approximate net weight: 18 lbs. (8 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPGP-150H-MT-LL

Lamp Type	Lamp Wattage [1]	Ballast [4]	Voltage [5]	Options [6]	Accessories [8]
MP=Pulse Start Metal Halide **MH**=Metal Halide [1] **HP**=High Pressure Sodium **Series** **GP**=Glass-Pak	**MP** **50**=50W **70**=70W **100**=100W **150**=150W **MH** **175**=175W [1] **HP** **35**=35W [3] **50**=50W [3] **70**=70W **100**=100W **150**=150W	**H**=High Power Factor **_**=Normal Power Factor	**120V** **208V** **240V** **277V** **347V** **480V** [3] **DT**=Dual-Tap **MT**=Multi-Tap wired 277V **TT**=Triple-Tap wired 347V	**LL**=Lamp Included [7] **TR**=Tamper Resistant Screws **F1**=Single Fuse (120, 277 or 347V only) **F2**=Double Fused (208, 240 or 480V only) **PE**=Internal Photocontrol (Specify Voltage) **PC**=Button Type Photocontrol	**UB-U Universal BKT**=Universal Mounting Bracket **WG/GP-GS**=Wire Guard **PE-480V**=Field Installed Photocontrol, 480V **PE-347V**=Field Installed Photocontrol, 347V **PE/MT**=Field Installed Photocontrol **TRSD-8/32**=Tamper-Resistant Screwdriver

NOTES: 1 All HID lamps are medium-base. 175W MH is available for non-US markets only. **2** 35W is HP only, 120V only. **3** 480V not available in 35 or 50W. **4** High Power Factor ballast required on all MP and MH products. **5** Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering. **6** Add as suffix in the order shown. **7** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **8** Order separately. **9** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPGP-70H-DT-LL

Lamp Type	Series	Lamp Wattage	Voltage	Options
MP=Pulse Start Metal Halide	**GP**=Glass Pak	**70H**=70W **100H**=100W **150H**=150W	**DT**=Dual-Tap [1] **MT**=Multi-Tap	**LL**=Lamp Included

NOTES: 1 Dual-Tap available on 70W.
Standard multi-tap and bronze. Refer to In-Stock Guide for availability. Options not available with stock products. Order accessories as separate item for field installation. Refer to standard ordering information to add options and accessories.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 150W
Metal Halide (MH)	175W
High Pressure Sodium (HP)	70, 100, 150W

Voltage Chart	
DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

GS
SUPER SMOKEY

35-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in architectural dark bronze polyester powder coat

- Prismatic borosilicate glass refractor and aluminum reflector provide excellent beam distribution without lens yellowing

- Foam-in-place door gasketing seals out external contaminants

- 1/2" K.O.s inside for surface mounted conduit and drill spots in back for mounting to 4" octagonal J-box

- Approximate net weight: 18 lbs. (8 kgs.)

DESCRIPTION

The Lumark Super Smokey is constructed of premium die-cast aluminum and features a borosilicate glass lens. The housing forms a solid foundation for the electrical components and an anodized aluminum reflector.

DIMENSIONS

7" [178mm]

10" [254mm]

6 3/4" [171mm]

MOUNTING DETAIL

6 1/4" [159mm] Sq.

7/8" [22mm]

2 1/2" [64mm] Sq.

9 3/16" [234mm]
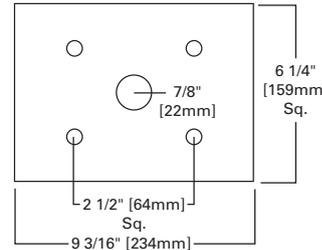
ORDERING INFORMATION

SAMPLE NUMBER: MPGS-150H-120V-LL

Lamp Type	Series	Lamp Wattage [1]	Ballast [5]	Voltage [6]	Options [7]	Accessories [10]
MP=Pulse Start Metal Halide	**GS**=Super Smokey	**MP**	**H**=High Power Factor	**120V**	**LL**=Lamp Included [8]	**UB-U Universal BKT**=Universal Mounting Bracket
MH=Metal Halide		**50**=50W [2]	**_**=Normal Power Factor	**120/277V** [4]	**TR**=Tamper Resistant Screws	
HP=High Pressure Sodium		**70**=70W		**208V**	**F1**=Single Fuse (120, 277 or 347V only)	**WG/GP-GS**=Wire Guard
		100=100W		**240V**	**F2**=Double Fused (208, 240 or 480V only)	**PE-347V**=Field Installed Photocontrol, 347V
		150=150W		**277V**		**PE-480V**=Field Installed Photocontrol, 480V
		MH		**347V**	**PE**=Internal Photocontrol (Specify Voltage) [9]	
		175=175W [4]		**480V**	**PC**=Button Type Photocontrol	**PE/MT**=Field Installed Photocontrol
		HP		**DT**=Dual-Tap		**TRSD-8/32**=Tamper-Resistant Screwdriver
		35=35W [2, 3]		**MT**=Multi-Tap wired 277V		
		50=50W [2]		**TT**=Triple-Tap wired 347V		
		70=70W				

NOTES: **1** All lamps are medium-base. **2** 480V not available in 35 or 50W. **3** 35W is HP, 120V only. **4** 175W MH available in non-US markets only. 175W available in 120/277V. **5** Ballast for 120V units are Normal Power Factor Reactor type. High Power Factor ballast is required on all MP and MH products. **6** Products also available in non-US voltages and 50Hz for international markets. **7** Add as suffix in the order shown. **8** Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Single voltage only. Not available in 175W MH. **10** Order separately. **11** Specifications and dimensions subject to change without notice.

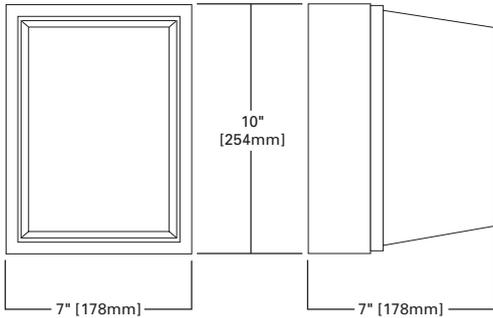**STOCK SAMPLE NUMBER** (LAMP INCLUDED)

SAMPLE NUMBER: MPGS-15-MT-LL

Lamp Type	Series	Lamp Wattage	Voltage	Options
MP=Pulse Start Metal Halide	**GS**=Super Smokey	**15**=150W	**MT**=Multi-Tap	**LL**=Lamp Included

NOTES: Options not available with stock products. Order accessories as separate item for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.
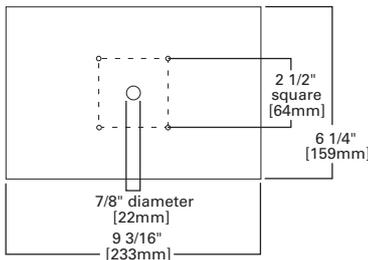
Lamp Type	Wattage	Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100, 150W	DT=Dual-Tap	120/277V (wired 277V)
Metal Halide (MH)	175W	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	35, 50, 70W	TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING - LUMARK

DIMENSIONS

10" [254mm]

7" [178mm]   7" [178mm]

MOUNTING DETAIL

2 1/2" square [64mm]

6 1/4" [159mm]

7/8" diameter [22mm]

9 3/16" [233mm]

DESCRIPTION

The Lumark Smokey combines contemporary design with a premium die-cast aluminum housing and sturdy injection-molded polycarbonate refractor, creating a fixture which is both durable and attractive.

VR
SMOKEY

35-100W
High Pressure Sodium
Pulse Start Metal Halide
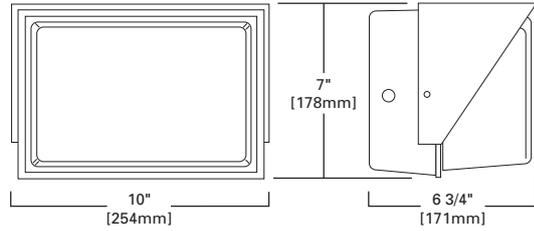
13-56W
Compact Fluorescent

COMPACT WALL MOUNT LUMINAIRE

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in architectural dark bronze polyester powder coat

- Optical system is sealed with closed-cell, gas-filled, high-temperature silicone gasketing

- Can be ceiling, wall or pole mounted in horizontal or vertical position. 1/2" knockouts on side of housing accommodate surface-mounted conduit, or back plate can be mounted to 4" octagonal J-box

- Injection-molded prismatic polycarbonate refractor is available in white or clear
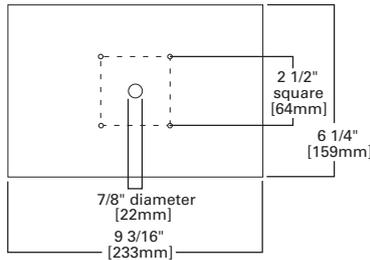
- Approximate net weight: 6 lbs. (3 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPVR-PC-50-120V-LL

Lamp Type	Refractor Type	Lamp Wattage [2]	Voltage [5]	Options [7]	Accessories [9]
MP=Pulse Start Metal Halide	**PC**=Clear Polycarbonate	**MP**	**120V**	**LL**=Lamp Included [8]	**UB-U** Universal BKT=Universal Mounting Bracket
HP=High Pressure Sodium	**PW**=White Polycarbonate [1]	**50**=50W [4]	**208V**	**TR**=Tamper Resistant Screws	
CF=Compact Fluorescent		**70**=70W	**240V**		**WG/GP-GS**=Wire Guard
		100=100W [3]	**277V**	**F1**=Single Fuse (120, 277 or 347V only)	**PE-347V**=Field Installed Photocontrol, 347V
		HP	**347V**	**F2**=Double Fused (208, 240 or 480V only)	**PE-480V**=Field Installed Photocontrol, 480V
Series		**35**=35W [3, 4]	**480V** [6]		**TRSD-8/32**=Tamper-Resistant Screwdriver
VR=Smokey		**50**=50W	**MT**=Multi-Tap wired 277V	**PE**=Internal Photocontrol (Specify Voltage)	**PE/MT**=Field Installed Photocontrol
		70=70W [4]	**TT**=Triple-Tap wired 347V	**PC**=Button Type Photocontrol	**HV/VR-XX**=Horizontal Visor
		100=100W			**VV/VR**=Vertical Visor
		CF	**E**=Electronic 120-277V [6]		
		13=13W			
		26=26W			
		52=(2) 26W			

NOTES: 1 70W maximum. **2** All HID lamps are medium-base. **3** 120V only. **4** 480V not available in 35 or 50W. **5** Products also available in non-US voltages and 50Hz for international markets. **6** Electronic ballast available on 26 and 52W CF units. **7** Add as suffix in the order shown. **8** Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Order separately, replace XX with color specification. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: BS10

Series	Lamp Type	Lamp Wattage
B=Smokey	**S**=High Pressure Sodium	**50**=50W
		70=70W
		10=100W

NOTES: Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

Lamp Type	Wattage	Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100W	MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	35, 50, 70W	TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	13, 26, (2) 26W	E=Electronic (CF only)	120/277V

COOPER LIGHTING - LUMARK

MP
MICRO-PAK

35-100W
High Pressure Sodium
Pulse Start Metal Halide

13-36W
Compact Fluorescent

COMPACT WALL MOUNT LUMINAIRE

- U.L. listed wet locations. CSA certified

- Die-cast aluminum housing finished in architectural dark bronze polyester powder coat

- Precision aluminum reflector / visor system directs light down and out, eliminating glare and wasted light

- Optical system is sealed with foam-in-place silicone gasketing

- Can be mounted to any vertical surface. 1/2" knockouts on side of housing accommodate surface-mounted conduit, or back plate can be mounted to 4" octagonal J-box

- Injection-molded polycarbonate refractor is available in white or clear prismatic

- Approximate net weight: 7 lbs. (3 kgs.)

DESCRIPTION

The Lumark Micro-Pak features premium die-cast aluminum construction for durability and precision-designed optics to throw light down and out and eliminate glare and wasted light.

DIMENSIONS

7"
[178mm]

10"
[254mm]

6 3/4"
[171mm]

MOUNTING DETAIL

2 1/2" square
[64mm]

6 1/4"
[159mm]

7/8" diameter
[22mm]

9 3/16"
[233mm]

ORDERING INFORMATION

SAMPLE NUMBER: MPMP-PC-50-120V-LL

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium
CF=Compact Fluorescent

Series
MP=Micro-Pak

Refractor Type
PC=Clear Polycarbonate
PW=White Polycarbonate [1]

Lamp Wattage [2]
MP
50=50W [5]
70=70W
100=100W [3]
HP
35=35W [4]
50=50W [5]
70=70W
100=100W
CF
13=13W
26=26W
52=(2) 26W

Voltage [5]
120V
208V
240V
277V
347V
480V
DT=Dual-Tap
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V
E=Electronic 120-277V [6]

Options [7]
LL=Lamp Included [8]
TR=Tamper Resistant Screws
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fused (208, 240 or 480V only)
PE=Internal Photocontrol (Specify Voltage)
PC=Button Type Photocontrol

Colors
___=Bronze (Standard)
WHT=White

Accessories [9]
PE-347V=Field Installed Photocontrol, 347V
PE-480V=Field Installed Photocontrol, 480V
PE/MT=Field Installed Photocontrol
TRSD-8/32=Tamper-Resistant Screwdriver
HV/VR-XX=Horizontal Visor

NOTES: 1 70W maximum. **2** All HID lamps are medium-base. **3** 120V only. **4** Not available in 480V. **5** Products also available in non-US voltages and 50Hz for international markets. **6** Electronic ballast available on 26 and 52W CF units. In cold temperature, compact fluorescent lamps produce lower illumination levels. **7** Add as suffix in the order shown. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Order separately. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (Lamp Included: High Pressure Sodium)

SAMPLE NUMBER: MS10

Series
M=Micro-Pak

Lamp Type
S=High Pressure Sodium

Lamp Wattage
50=50W
70=70W
10=100W

NOTES: Options not available with stock products. Order accessories as separate item for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

STOCK SAMPLE NUMBER (Lamp Included: Pulse Start Metal Halide)

SAMPLE NUMBER: MPMP-PC-70-120/277-LL

Series
MP=Micro-Pak

Lamp Type
MP=Pulse Start Metal Halide

Refractor Type
PC=Clear Polycarbonate

Lamp Wattage
70=70W

Voltage
120/277=120/277V

Lamp
LL=Lamp Included

NOTES: Options not available with stock products. Order accessories as separate item for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	50, 70, 100W		MT=Multi-Tap	120/208/240/277V (wired 277V)
High Pressure Sodium (HP)	35, 50, 70W		TT=Triple-Tap	120/277/347V (wired 347V)
Compact Fluorescent (CF)	13, 26, (2) 26W		E=Electronic (CF only)	120/277V

COOPER LIGHTING - LUMARK

DESCRIPTION

Lumark's Cutoff Wally is a cutoff classified wall luminaire. Combining compact, aerodynamic styling with higher wattage performance, it is ideal for areas where spill light and glare control must be managed effectively.

DARK SKY COMPLIANT | CO Cutoff

SPECIFICATION FEATURES

- U.L. listed for wet locations

- Die-cast aluminum housing finished standard bronze polyester powder coat

- HID: 4Kv medium-base socket. CFL: Gx24q-4 (4-pin)

- HID: Medium-base lamp included and available in 150W High Pressure Sodium or 100W Pulse Start Metal Halide. CFL: Supplied with 4-pin, 42W Compact Fluorescent lamp

- Special one-piece door design held in place with slot-head captive screws, provides low-glare cutoff lighting. Silicone gasketing seals out dirt and contaminants

- Patterned tempered glass lens minimizes direct lamp imaging

- Ships completely prewired and preassembled. Easily mounts to J-box, wall for quick installation

- Approximate net weight: 7-11 lbs. (3-5 kgs.)

WALLY CUTOFF

50-150W
High Pressure Sodium
Pulse Start Metal Halide

42W
Compact Fluorescent

WALL MOUNT LUMINAIRE

ORDERING INFORMATION (LAMP INCLUDED)

Catalog Number	Lamp Type	Lamp Wattage	Ballast Type	Voltage	Color
High Pressure Sodium					
LS50C	ED17	50	Reactor/NPF	120V	Bronze
LS70C	ED17	70	Reactor/NPF	120V	Bronze
LS10C	ED17	100	Reactor/NPF	120V	Bronze
LS15C	ED17	150	Reactor/NPF	120V	Bronze
Pulse Start Metal Halide					
LP70C	ED17	70	Hi. Reac/NPF	120V/277V	Bronze
LP10C	ED17	100	Hi. Reac/NPF	120V/277V	Bronze
Compact Fluorescent					
LC42C	Gx24q-4 (4-pin)	42	Electronic	120V/277V	Bronze

NOTE: Add "W" to the end of catalog number for white finish. Add "WHT" to the end of accessory for white finish (Example: WY/CO-WHT). Not available in 42W Compact Fluorescent. In cold temperatures, Compact Fluorescent lamps produce lower illumination levels.

Accessories (order separately)
WY/CO=Cutoff Replacement Door (Bronze). Not available in 42W Compact Fluorescent.
WY/FC/CO=Full Cutoff Visor for Cutoff (Bronze)

DESCRIPTION

The Lumark Wally Glass combines contemporary styling and optimum performance. A variety of mounting options add to the versatility of this compact fixture.

SPECIFICATION FEATURES

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in a durable bronze polyester powder coat finish

- HID: 4Kv medium-base socket. CFL: Gx24q-4 (4-pin)

- HID: Medium-base lamp included and available in 150W High Pressure Sodium or 100W Pulse Start Metal Halide. Supplied with 4-pin, 42W Compact Fluorescent lamp

- Special one-piece hinged door design held in place with slot-head captive screws. Silicone gasketing seals out dirt and contaminants

- Borosilicate glass lens or polycarbonate lens minimizes direct lamp imaging

- Ships completely prewired and preassembled. Easily mounts to J-box, wall for quick installation

- Approximate net weight: 7-11 lbs. (3-5 kgs.)

WALLY

50-150W
High Pressure Sodium
Pulse Start Metal Halide

42W
Compact Fluorescent

WALL MOUNT LUMINAIRE

ORDERING INFORMATION (LAMP INCLUDED)

Catalog Number	Lamp Type	Lamp Wattage	Ballast Type	Voltage	Color
High Pressure Sodium					
LS50G	ED17	50	Reactor/NPF	120V	Bronze
LS70G	ED17	70	Reactor/NPF	120V	Bronze
LS10G	ED17	100	Reactor/NPF	120V	Bronze
LS15G	ED17	150	Reactor/NPF	120V	Bronze
Pulse Start Metal Halide					
LP70G	ED17	70	Hi. Reac/NPF	120V/277V	Bronze
LP10G	ED17	100	Hi. Reac/NPF	120V/277V	Bronze
Compact Fluorescent					
LC42	Gx24q-4 (4-pin)	42	Electronic	120V/277V	Bronze

NOTE: Add "W" to the end of catalog number for white finish for Pulse Start Metal Halide or High Pressure Sodium models only. Add "WHT" to the end of accessory for white finish (Example: WY/WG-WHT). In cold temperatures, Compact Fluorescent lamps produce lower illumination levels.

Accessories (order separately)
WY/WG=Glass Wire Guard
WY/GS=Glass Door Replacement (Bronze)
WY/FC/GS=Full Cutoff Visor for Glass (Bronze)
WY/PC=Polycarbonate replacement lens. Not for use with WY/WG and WY/FC.

COOPER LIGHTING - LUMARK

Z-PAK CUTOFF

150-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

84W
Compact Fluorescent

**CUTOFF WALL MOUNT
LUMINAIRE**

DESCRIPTION

Lumark's cutoff Z-Pack is a low angle / low glare classified wall luminaire. Combining compact, aerodynamic styling with higher wattage performance, it is ideal for areas where spill light and glare control must be managed effectively.

SPECIFICATION FEATURES

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in a standard bronze polyester powder coat finish

- HID: 4Kv medium-base socket. CFL: Gx24q-4 (4-pin)

- HID: Medium-base lamp included and available in 150W High Pressure Sodium, 150W Pulse Start Metal Halide or 175W Metal Halide (*International Use Only*). CFL: (2) 42W CF lamps included

- Mounts to J-box or can be surface mounted through tapped openings

- Special one-piece door design provides low-glare cutoff lighting. Silicone gasketing seals out dirt and contaminants. Ships completely prewired and preassembled. Easily mounts to J-box, wall for quick installation

- Patterned tempered glass lens minimizes direct lamp imaging. Lens assembly is hinged on the side for easy relamping and maintenance

- Approximate net weight: 11-18 lbs. (5-8 kgs.)

ORDERING INFORMATION (LAMP INCLUDED)

Catalog Number	Lamp Type	Lamp Wattage	Ballast Type	Voltage	Color
High Pressure Sodium					
HPFZ15C	B17	150	Reactor/NPF	120V	Bronze
Pulse Start Metal Halide					
MPFZ15C	ED17	150	CWA	Multi-Tap	Bronze
Metal Halide (International Use Only)					
MHFZ17C	ED28	175	CWA	Multi-Tap	Bronze
Compact Fluorescent					
CFFZ84C	GX24q-4	84 (2-42W)	Electronic	120-277V	Bronze

NOTE: Add "W" to the end of catalog number for white finish. Not available in 84W Compact Fluorescent. In cold temperatures, Compact Fluorescent lamps produce lower illumination levels.

Accessories (order separately)
FZ/CO=Cutoff Door Replacement (Bronze)
FZ/FC/CO=Full Cutoff Visor for Cutoff (Bronze)

FZ/VS/CO=Vandal Shield for Cutoff (Bronze)

NOTE: Add "WHT" to the end of accessory for white finish (Example: FZ/CO-WHT).

Z-PAK

150-175W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

84W
Compact Fluorescent

**CUTOFF WALL MOUNT
LUMINAIRE**

DESCRIPTION

The Lumark Z-Pak provides a durable and efficient exterior light source for any application requiring maximum performance and minimum maintenance. The rugged, die-cast aluminum housing, stainless steel hardware and sealed and gasketed optics compartment combine to make the Z-Pak virtually impenetrable to contaminant's.

SPECIFICATION FEATURES

- U.L. listed for wet locations. CSA certified

- Die-cast aluminum housing finished in a durable bronze polyester powder coat

- HID: 4Kv medium-base socket. CFL: Gx24q-4 (4-pin)

- HID: Medium-base lamp included and available in 150W High Pressure Sodium, 150W Pulse Start Metal Halide or 175W Metal Halide (*International Use Only*). CFL: (2) 42W CF lamps included

- One-piece die-cast door assembly is hinged on the side for easy relamping and maintenance. A silicone gasket seals out dirt and contaminants

- Impact-resistant borosilicate glass refractor

- Mounts to J-box or can be surface mounted through tapped openings

- Approximate net weight: 11-18 lbs. (5-8 kgs.)

ORDERING INFORMATION (LAMP INCLUDED)

Catalog Number	Lamp Type	Lamp Wattage	Ballast Type	Voltage	Color
High Pressure Sodium					
HPFZ15	B17	150	Reactor/NPF	120V	Bronze
Pulse Start Metal Halide					
MPFZ15	ED17	150	CWA	Multi-Tap	Bronze
Metal Halide (International Use Only)					
MHFZ17	ED28	175	CWA	Multi-Tap	Bronze
Compact Fluorescent					
CFFZ84	Gx24q-4	84 (2-42W)	Electronic	120-277V	Bronze

NOTE: Add "W" to the end of catalog number for white finish. Not available in 84W Compact Fluorescent. In cold temperatures, Compact Fluorescent lamps produce lower illumination levels.

Accessories (order separately)
FZ/WG=Wire Guard
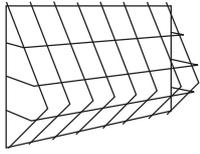**FZ/GS**=Glass Door Replacement (Bronze)

FZ/FC/GS=Full Cutoff Visor for Glass (Bronze)
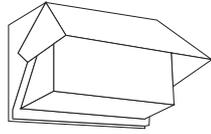**FZ/VS/GS**=Vandal Shield for Glass (Bronze)

NOTE: Add "WHT" to the end of accessory for white finish (Example: FZ/WG-WHT).
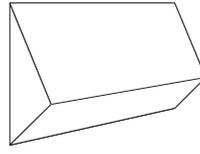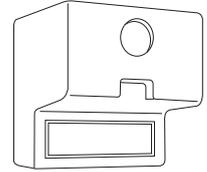
WALL-MOUNTED ACCESSORIES

WG/WL
Wire Guard for Wal-Pak
(Not compatible with PCS)

VS/WL
For Wal-Pak
Visor Cutoff Shield

PCS
Polycarbonate Shield
(Not Compatible with WG/WL)

UB
Universal Mounting Bracket

COOPER LIGHTING - LUMARK

ETERNALUME
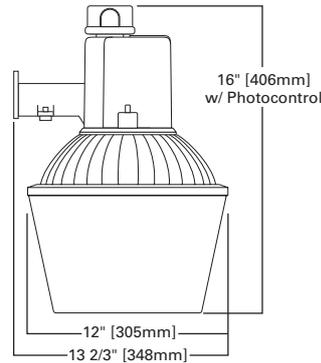### AREA LIGHT

70-150W
High Pressure Sodium
Pulse Start Metal Halide

**LOW WATTAGE
SECURITY LUMINAIRE**

- UL Wet Location Listed. CSA Certified

- NEMA twistlock style photocontrol for automatic dusk-to-dawn operation

- Precision die-cut aluminum housing with natural finish

- Reactor, NPF Core and coil ballast for durable operation

- Can be pole or wall mounted. 1 5/8" O.D. slipfitter hardware included

- HP: 120/60Hz, Reactor, NPF core and coil magnetic ballast. MP: 120/60Hz, High reactance (Hx) NPF core and coil magnetic ballast

- Porcelain mogul- or medium-base screw shell socket with spring loaded center contact HP: Mogul-base. MP: Medium-base (protected)

- Fluted, formed specular aluminum reflector fastens to main housing for secure fit

- 12" open bottom, acrylic refractor

- Pulse Start Metal Halide or High Pressure Sodium lamp included

- Approximate net weight: 11 lbs. (5 kgs.)

DESCRIPTION

The Lumark Eternalume is ideal for perimeter area lighting, residential and commercial security lighting, residential streets, parking areas, and loading platforms.

SPECIFICATION FEATURES

16" [406mm] w/ Photocontrol

12" [305mm]
13 2/3" [348mm]

DIRECT MOUNT **18" ARM**

2 1/8" [54mm]
2 3/4" [70mm]

13" [330mm]
18" [457mm]
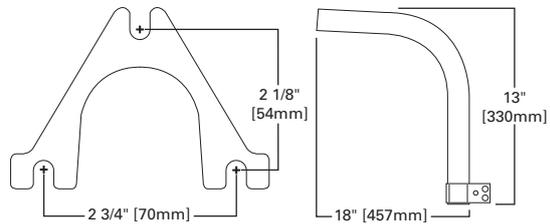
EPA-Effected Projected Area: 1.2

ORDERING INFORMATION

SAMPLE NUMBER: MPEL70

Lamp Type	Series [1]	Lamp Wattage	Accessories
MP=Pulse Start Metal Halide	**EL**=Eternalume	**70**=70W [2]	**EL/FSC**=Full Cutoff Shield (Dark Sky Complaint) [2]
HP=High Pressure Sodium		**10**=100W	**L-A24**=24" Arm with Hardware
		15=150W [2]	**OA/RA1013**=Shorting Cap for NEMA Twistlock Photocontrol Receptacle
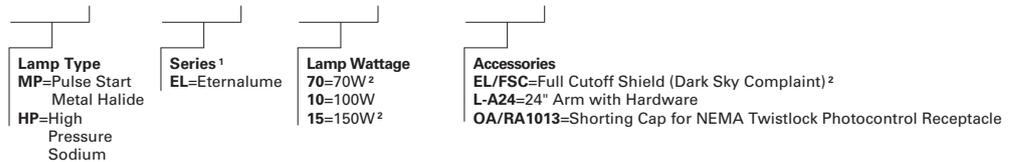
NOTES: 1 Includes 18" arm, lamp and 120V photocontrol. **2** HP only. **3** All products are 120V. **4** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPEL10

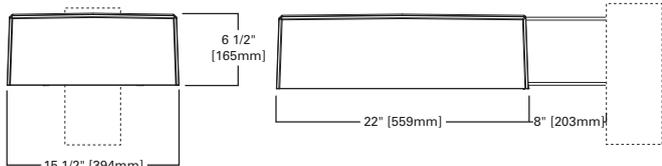| Lamp Type	Series	Lamp Wattage
MP=Pulse Start Metal Halide	**EL**=Eternalume	**70**=70W
HP=High Pressure Sodium		**10**=100W
		15=150W [1]
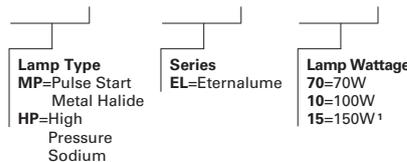
NOTES: 1 HP only. **2** All products are 120V. **3** Specifications and dimensions subject to change without notice.
Options not available with stock products. Refer to standard ordering information to add options and accessories.

Lamp Type	Wattage
Metal Halide (MP)	70, 100W
High Pressure Sodium (HP)	70, 100, 150W

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

6 1/2" [165mm]

22" [559mm]   8" [203mm]

15 1/2" [394mm]

DRILLING PATTERNS

TYPE "M"

2 5/16" [59mm]
3/4" [20mm] dia. hole
2 7/16" [124mm]
4 7/8" [124mm]
(2) 5/8" [16mm] dia. holes

WALL MOUNT

12" [305mm]
4 7/8" [124mm]
10 1/2" [267mm]
6 1/2" [165mm]
8" [203mm]
9/16" [14mm] Dia. Hole (4)

TRUNNION

1" [25mm]
9/16" [14mm] dia. hole (2)
7/8" [22mm] dia. hole
1 7/8" [48mm]
3 3/4" [95mm]

EPA-Effected Projected Area: 1.19 (without arm)

For Pole Information Refer to Cooper Lighting Pole Section.
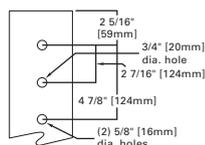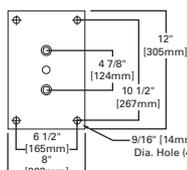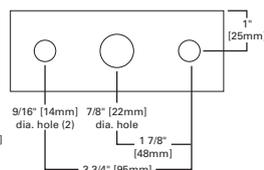
DESCRIPTION

The Lumark Tribute Series is the most versatile, functionally designed, universally adaptable outdoor luminaire available. The Tribute brings outstanding performance to walkways, parking lots, roadways, loading docks, building areas, and any security lighting application.

DARK SKY COMPLIANT | **FCO Full Cutoff**

TR
TRIBUTE

70-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

AREA LUMINAIRE

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Rugged one-piece die-cast aluminum housing and door

- One-piece silicone gasket protects the optical chamber from performance degrading contaminants

- One (1) stainless steel spring latch and two (2) stainless steel hinges allow toolless opening and removal of door frame

- Choice of nine high efficiency optical distributions (Formed, Segmented and Spill Light Eliminator)

- Optical modules are field rotatable in 90° increments

- Standard with mogul-base lampholders for 150-400W assemblies or medium-base for 100W and below

- Optional swing-down power tray with integral handle and quick-disconnect

- Optional internal mast arm mount accepts 1 1/4" to 2 3/8" O.D. horizontal tenon, while a 4-bolt clamping mechanism secures fixture

- Approximate net weight: 39 lbs. (17.73 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHTR-SL-400-MT-LL

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
HP=High Pressure Sodium

Series ¹
TR=Tribute

Distribution
2F=Type II Formed
2S=Type II Segmented
3F=Type III Formed
3S=Type III Segmented
4F=Type IV Formed
4S=Type IV Segmented
5F=Type V Formed
5S=Type V Segmented
SL=Spill Light Eliminator

Lamp Wattage ²

MP	MH ³
70=70W	**175**=175W
100=100W	**250**=250W
150=150W	**400**=400W
200=200W	**HP**
250=250W	**70**=70W
320=320W	**100**=100W
350=350W	**150**=150W
400=400W	**250**=250W
	400=400W

Voltage ⁵
120V
208V
240V
277V
347V ⁶
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V ⁶
5T=5-Tap wired 480V ⁵

Options & Accessories
(See Below)

Options ⁷, ⁸
F1=Single Fuse (120, 277 or 347V only) ⁹
F2=Double Fuse (208, 240 or 480V only) ⁹
Q=Quartz Restrike (Hot strike only) ¹⁰
LL=Lamp Included
EM=Quartz Restrike with "Delay Relay" (Quartz lamps strikes at both hot and cold starts) ¹⁰
EM/SC=Emergency Separate Circuit ¹⁰
LL=Lamp Included
S=1 1/4"-2 3/8" Internal Mast Arm Mount
TM=Trunnion Mount
PT=Electrical Power Tray
HS=House Side Cutoff ¹¹
LA=Less Arm (Order Mounting Separately)
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol
WH=White
BK=Black
AP=Grey
DP=Dark Platinum
GM=Graphite Metallic

Accessories ¹²
MA1201-XX=Direct Wall Mount Kit ¹
MA1218-XX=Direct Mount for Pole ¹
MA1219-XX=Wall Mount Plate
OA1090-XX=Adjustable Slipfitter Arm for Tenon Mount 2 3/8" O.D. ¹
MA1221-XX=External House Side Shield Kit [EPA=0.38]
MA1222=Internal House Side Shield Kit for 2S/3S
MA1223=Internal House Side Shield Kit for 4S
MA1224=Internal House Side Shield Kit for 2F/3F
MA1225=Internal House Side Shield Kit for 4F
MA1010-XX=Single Tenon Adapter for 3 1/2" O.D. Tenon
MA1011-XX=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
MA1012-XX=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1013-XX=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1014-XX=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1015-XX=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1016-XX=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
MA1018-XX=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
MA1019-XX=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
MA1045-XX=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1048-XX=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1049-XX=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
OA/RA1016=Photoelectric Control 105-285V NEMA Type
OA/RA1201=Photoelectric Control 347V NEMA Type
OA/RA1027=Photoelectric Control 480V NEMA Type
OA/RA1013=Shorting Cap
TR/VS=Field Installed Vandal Shield ¹³

NOTES: 1 8" arm and round pole adapter included with fixture. Specify Less Arm "LA" option when mounting accessory is ordered separately. **2** Standard with mogul-base socket for 150-400W and medium-base socket 100W and below. **3** 175, 250 and 400W MH available for non-US markets only. **4** Requires reduced envelope lamp. **5** Products also available in non-US voltages for international markets. Consult factory for availability and ordering information. **6** 88% efficient EISA compliant MP fixtures not available in 347V or Triple-tap. **7** Custom and RAL color matching available upon request. Consult Cooper Lighting Representative for further information. **8** Add as suffix. **9** Must specify voltage. **10** Quartz options not available with SL optic. **11** House side shield not available on 5S, 5F or SL optics. **12** Order separately/replace with color specification. **13** Not available with SL optic or House Side Shield. **14** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER (LAMP INCLUDED)

SAMPLE NUMBER: MPTR2340

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium ²

Series ¹
TR=Tribute

Distribution
23= Type II/III Formed
4F=Type IV Formed ³

Lamp Wattage
15=150W
25=250W
32=320W
40=400W

NOTES: 1 Short logic fixtures are finished bronze include multi-tap ballast, lamp, arm and round pole adapter. Other options not available. Refer to standard ordering logic. **2** Available in 150, 250 and 400W. **3** Available in 320 and 400W MP & HP. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	70, 100, 150, 200, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	70, 100, 150, 250, 400W

Voltage Chart

DT=Dual-Tap	120/277V (wired 277V)
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/277/347/480V (wired 480V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

PFT
TRIBUTE AND POLE COMBO (SINGLE)

150-400W
High Pressure Sodium
Pulse Start Metal Halide

15'-30'
Square Straight Steel Pole
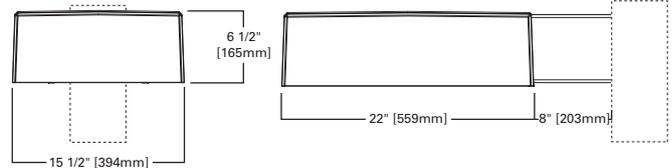
POLE AND FIXTURE COMBO

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Rugged one-piece die-cast aluminum housing and door

- One-piece silicone gasket protects the optical chamber from performance degrading contaminants

- One (1) stainless steel spring latch and two (2) stainless steel hinges allow toolless opening and removal of door frame

- Optical modules are field rotatable in 90° increments

- Standard with mogul-base lampholders

- Includes 8" arm complete with lamp, square straight steel pole and necessary anchorage

- Available in dual configuration

- Approximate net weight: 39 lbs. (17.73 kgs.)

DESCRIPTION

The Lumark Tribute Pole/Fixture Combo is an all inclusive package that allows for easy selection and installation of poles and fixtures. Each combo includes a, die-cast Tribute area luminaire, 8" arm, lamp, square straight steel pole and necessary anchorage. Available in single or dual fixture combinations.
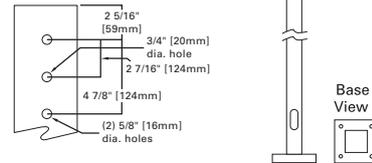
DARK SKY COMPLIANT | **FCO** Full Cutoff

DIMENSIONS

6 1/2" [165mm]
15 1/2" [394mm]
22" [559mm]
8" [203mm]

DRILLING PATTERN

TYPE "M"

2 5/16" [59mm]
3/4" [20mm] dia. hole
2 7/16" [124mm]
4 7/8" [124mm]
(2) 5/8" [16mm] dia. holes

Base View

EPA-Effected Projected Area: 1.62

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: PFT11523M15

Series	No. of Fixtures	Lamp Wattage	Distribution	Lamp Type [1] (Included)	Pole Height (ft.)	Zone [1]	Options [2]
PFT=Tribute	**1**=1	**15**=150W **25**=250W **32**=320W **40**=400W	**23**=Type II/III Formed **4F**=Type IV Formed	**P**=Pulse Start Metal Halide **H**=High Pressure Sodium	**15**=15' **20**=20' **25**=25' **30**=30'	**9**=90 mph **0**=100 mph	**N/AB**=No Anchor Bolts (Used when ordered separately)

NOTES: 1 8" arm and lamp included with fixture. **2** N/AB models available by specifying N/AB (Example: PFT11523P15N/AB). **3** Supplied with multi-tap ballast 120/208/240/277V (wired 277V) with square straight steel shaft, anchor bolts, template, base cover and hardware.
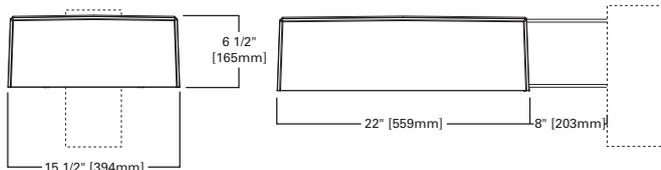
Lamp Source/Number of Fixtures	Pole Height	Wattage	Distribution	80 MPH	90 MPH [1]	100 MPH [1]
PULSE START METAL HALIDE						
Single Fixture	15' Pole	150W MP	Type II/III	PFT11523P15 [2]	PFT11523P15 [2]	PFT11523P15 [2]
			Type IV	PFT1154FP15 [2]	PFT1154FP15 [2]	PFT1154FP15 [2]
	20' Pole	250W MP	Type II/III	PFT12523P20 [2]	PFT12523P20 [2]	PFT12523P20 [2]
			Type IV	PFT1254FP20 [2]	PFT1254FP20 [2]	PFT1254FP20 [2]
		320W MP	Type II/III	PFT13223P20 [2]	PFT13223P20 [2]	PFT13223P20 [2]
			Type IV	PFT1324FP20 [2]	PFT1324FP20 [2]	PFT1324FP20 [2]
		400W MP	Type II/III	PFT14023P20 [2]	PFT14023P20 [2]	PFT14023P20 [2]
			Type IV	PFT1404FP20 [2]	PFT1404FP20 [2]	PFT1404FP20 [2]
	25' Pole	250W MP	Type II/III	PFT12523P25 [2]	PFT12523P25 [2]	PFT12523P25 [2]
			Type IV	PFT1254FP25 [2]	PFT1254FP25 [2]	PFT1254FP25 [2]
		320W MP	Type II/III	PFT13223P25 [2]	PFT13223P25 [2]	PFT13223P25 [2]
			Type IV	PFT1324FP25 [2]	PFT1324FP25 [2]	PFT1324FP25 [2]
		400W MP	Type II/III	PFT14023P25 [2]	PFT14023P25 [2]	PFT14023P25 [2]
			Type IV	PFT1404FP25 [2]	PFT1404FP25 [2]	PFT1404FP25 [2]
	30' Pole	250W MP	Type II/III	PFT12523P30 [3]	PFT12523P30 [3]	PFT12523P300 [4]
			Type IV	PFT1254FP30 [3]	PFT1254FP30 [3]	PFT1254FP300 [4]
		320W MP	Type II/III	PFT13223P30 [3]	PFT13223P30 [3]	PFT13223P300 [4]
			Type IV	PFT1324FP30 [3]	PFT1324FP30 [3]	PFT1324FP300 [4]
		400W MP	Type II/III	PFT14023P30 [3]	PFT14023P30 [3]	PFT14023P300 [4]
			Type IV	PFT1404FP30 [3]	PFT1404FP30 [3]	PFT1404FP300 [4]
HIGH PRESSURE SODIUM						
Single Fixture	15' Pole	150W HP	Type II/III	PFT11523H15 [2]	PFT11523H15 [2]	PFT11523H15 [2]
			Type IV	PFT1154FH15 [2]	PFT1154FH15 [2]	PFT1154FH15 [2]
	20' Pole	250W HP	Type II/III	PFT12523H20 [2]	PFT12523H20 [2]	PFT12523H20 [2]
			Type IV	PFT1254FH20 [2]	PFT1254FH20 [2]	PFT1254FH20 [2]
		400W HP	Type II/III	PFT14023H20 [2]	PFT14023H20 [2]	PFT14023H20 [2]
			Type IV	PFT1404FH20 [2]	PFT1404FH20 [2]	PFT1404FH20 [2]
	25' Pole	250W HP	Type II/III	PFT12523H25 [2]	PFT12523H25 [2]	PFT12523H25 [2]
			Type IV	PFT1254FH25 [2]	PFT1254FH25 [2]	PFT1254FH25 [2]
		400W HP	Type II/III	PFT14023H25 [2]	PFT14023H25 [2]	PFT14023H25 [2]
			Type IV	PFT1404FH25 [2]	PFT1404FH25 [2]	PFT1404FH25 [2]
	30' Pole	250W HP	Type II/III	PFT12523H30 [3]	PFT12523H30 [3]	PFT12523H300 [4]
			Type IV	PFT1254FH30 [3]	PFT1254FH30 [3]	PFT1254FH300 [4]
		400W HP	Type II/III	PFT14023H30 [3]	PFT14023H30 [3]	PFT14023H300 [4]
			Type IV	PFT1404FH30 [3]	PFT1404FH30 [3]	PFT1404FH300 [4]

NOTES: 1 0 or 9 are noted where needed to designate a heavier gauge pole. **2** Supplied with 4A Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 15' combo SSS4A15SFM4, 20' combo SSS4A20SFM4 and 25' combo SSS4A25SFM4. **3** Supplied with 5A Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 25' combo SSS5A25SFM4 and 30' combo SSS5A30SFM4. **4** Supplied with 5M Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 30' combo SSS5M30SFM4. **5** Supplied with 6M Square Straight Steel shaft (SSS), anchor bolts (AB3), template (TMP2) and base cover. 30' combo SSS6M30SFM4.

Lamp Type	Wattage
Pulse Start Metal Halide (P)	150, 250, 320, 400W
High Pressure Sodium (H)	150, 250, 400W

DIMENSIONS

6 1/2" [165mm]

22" [559mm] — 8" [203mm]

15 1/2" [394mm]

DRILLING PATTERN

TYPE "M"

2 5/16" [59mm]
3/4" [20mm] dia. hole
2 7/16" [124mm]
4 7/8" [124mm]
(2) 5/8" [16mm] dia. holes

Base View

EPA-Effected Projected Area: 3.24
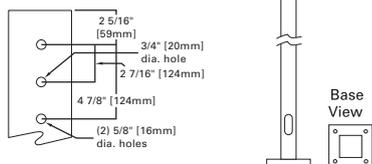

E COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark Tribute Pole/Fixture Combo is an all inclusive package that allows for easy selection and installation of poles and fixtures. Each combo includes a, die-cast Tribute area luminaire, 8" arm, lamp, square straight steel pole and necessary anchorage. Available in single or dual fixture combinations.

DARK SKY COMPLIANT **FCO** Full Cutoff

ORDERING INFORMATION (LAMP INCLUDED)

SAMPLE NUMBER: PFT21523M15

Series	No. of Fixtures	Lamp Wattage	Distribution	Lamp Type [1] (Included)	Pole Height (ft.)	Zone [1]	Options [2]
PFT=Tribute	**2**=2	**15**=150W **25**=250W **32**=320W **40**=400W	**23**=Type II/III Formed **4F**=Type IV Formed	**P**=Pulse Start Metal Halide **H**=High Pressure Sodium	**15**=15' **20**=20' **25**=25' **30**=30'	**9**=90 mph **0**=100 mph	**N/AB**=No Anchor Bolts (Used when ordered separately)

NOTES: 1 8" arm and lamp included with fixture. **2** N/AB models available by specifying N/AB (Example: PFT21523P15N/AB). **3** Supplied with multi-tap ballast 120/208/240/277V (wired 277V) with square straight steel shaft, anchor bolts, template, base cover and hardware.

Lamp Source/Number of Fixtures	Pole Height	Wattage	Distribution	80 MPH	90 MPH [1]	100 MPH [1]
PULSE START METAL HALIDE						
Dual Fixture	15' Pole	150W MP	Type II/III	PFT21523P15 [2]	PFT21523P15 [2]	PFT21523P15 [2]
			Type IV	PFT2154FP15 [2]	PFT2154FP15 [2]	PFT2154FP15 [2]
	20' Pole	250W MP	Type II/III	PFT22523P20 [2]	PFT22523P20 [2]	PFT22523P20 [2]
			Type IV	PFT2254FP20 [2]	PFT2254FP20 [2]	PFT2254FP20 [2]
		320W MP	Type II/III	PFT23223P20 [2]	PFT23223P20 [2]	PFT23223P20 [2]
			Type IV	PFT2324FP20 [2]	PFT2324FP20 [2]	PFT2324FP20 [2]
		400W MP	Type II/III	PFT24023P20 [2]	PFT24023P20 [2]	PFT24023P20 [2]
			Type IV	PFT2404FP20 [2]	PFT2404FP20 [2]	PFT2404FP20 [2]
	25' Pole	250W MP	Type II/III	PFT22523P25 [2]	PFT22523P25 [2]	PFT22523P250 [3]
			Type IV	PFT2254FP25 [2]	PFT2254FP25 [2]	PFT2254FP250 [3]
		320W MP	Type II/III	PFT23223P25 [2]	PFT23223P25 [2]	PFT23223P250 [3]
			Type IV	PFT2324FP25 [2]	PFT2324FP25 [2]	PFT2324FP250 [3]
		400W MP	Type II/III	PFT24023P25 [2]	PFT24023P25 [2]	PFT24023P250 [3]
			Type IV	PFT2404FP25 [2]	PFT2404FP25 [2]	PFT2404FP250 [3]
	30' Pole	250W MP	Type II/III	PFT22523P30 [3]	PFT22523P309 [4]	PFT22523P300 [5]
			Type IV	PFT2254FP30 [3]	PFT2254FP309 [4]	PFT2254FP300 [5]
		320W MP	Type II/III	PFT23223P30 [3]	PFT23223P309 [4]	PFT23223P300 [5]
			Type IV	PFT2324FP30 [3]	PFT2324FP309 [4]	PFT2324FP300 [5]
		400W MP	Type II/III	PFT24023P30 [3]	PFT24023P309 [4]	PFT24023P300 [5]
			Type IV	PFT2404FP30 [3]	PFT2404FP309 [4]	PFT2404FP300 [5]
HIGH PRESSURE SODIUM						
Dual Fixture	15' Pole	150W HP	Type II/III	PFT21523H15 [2]	PFT21523H15 [2]	PFT21523H15 [2]
			Type IV	PFT2154FH15 [2]	PFT2154FH15 [2]	PFT2154FH15 [2]
	20' Pole	250W HP	Type II/III	PFT22523H20 [2]	PFT22523H20 [2]	PFT22523H20 [2]
			Type IV	PFT2254FH20 [2]	PFT2254FH20 [2]	PFT2254FH20 [2]
		400W HP	Type II/III	PFT24023H20 [2]	PFT24023H20 [2]	PFT24023H20 [2]
			Type IV	PFT2404FH20 [2]	PFT2404FH20 [2]	PFT2404FH20 [2]
	25' Pole	250W HP	Type II/III	PFT22523H25 [2]	PFT22523H25 [2]	PFT22523H250 [3]
			Type IV	PFT2254FH25 [2]	PFT2254FH25 [2]	PFT2254FH250 [3]
		400W HP	Type II/III	PFT24023H25 [2]	PFT24023H25 [2]	PFT24023H250 [3]
			Type IV	PFT2404FH25 [2]	PFT2404FH25 [2]	PFT2404FH250 [3]
	30' Pole	250W HP	Type II/III	PFT22523H30 [3]	PFT22523H309 [4]	PFT22523H300 [5]
			Type IV	PFT2254FH30 [3]	PFT2254FH309 [4]	PFT2254FH300 [5]
		400W HP	Type II/III	PFT24023H30 [3]	PFT24023H309 [4]	PFT24023H300 [5]
			Type IV	PFT2404FH30 [3]	PFT2404FH309 [4]	PFT2404FH300 [5]

NOTES: 1 0 or 9 are noted where needed to designate a heavier gauge pole. **2** Supplied with 4A Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 15' combo SSS4A15SFM4, 20' combo SSS4A20SFM4 and 25' combo SSS4A25SFM4. **3** Supplied with 5A Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 25' combo SSS5A25SFM4 and 30' combo SSS5A30SFM4. **4** Supplied with 5M Square Straight Steel shaft (SSS), anchor bolts (AB1), template (TMP1) and base cover. 30' combo SSS5M30SFM4. **5** Supplied with 6M Square Straight Steel shaft (SSS), anchor bolts (AB3), template (TMP2) and base cover. 30' combo SSS6M30SFM4.

Lamp Type	Wattage
Pulse Start Metal Halide (P)	150, 250, 320, 400W
High Pressure Sodium (H)	150, 250, 400W

PFT
TRIBUTE AND POLE COMBO (DUAL)

150-400W
High Pressure Sodium Pulse Start Metal Halide

15'-30'
Square Straight Steel Pole

POLE AND FIXTURE COMBO

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Rugged one-piece die-cast aluminum housing and door

- One-piece silicone gasket protects the optical chamber from performance degrading contaminants

- One (1) stainless steel spring latch and two (2) stainless steel hinges allow toolless opening and removal of door frame

- Optical modules are field rotatable in 90° increments

- Standard with mogul-base lampholders

- Includes 8" arm complete with lamp, square straight steel pole and necessary anchorage

- Available in single configuration

- Approximate net weight: 39 lbs. (17.73 kgs.)

Ⓔ COOPER LIGHTING - LUMARK

**RY
ROADWAY
COBRAHEAD**

50-400W
**High Pressure Sodium
Pulse Start Metal Halide
Metal Halide**

SITE/ROADWAY LIGHT

- UL Wet Location Listed. EISA Compliant
- Die-cast aluminum housing and integrally cast door hinge finished in durable grey polyester powder coat
- The reflector is precision hydroformed anodized aluminum with a Dacron polyester filter
- Die-cast aluminum door frame has two-position latch to ensure door stays fastened under extreme conditions
- Removable prismatic refractor for use with high pressure sodium and metal halide lamp sources
- Hard mounted ballast with encapsulated starter and plastic terminal block for protection from environmental abuse
- Two-bolt/one clamp slipfitter for 1 1/4" or 2" mounting arms
- Approximate net weight: 49 lbs. (22 kgs.)

DESCRIPTION

Roadway Cobrahead fixtures feature durable die-cast aluminum construction and a computer-designed optical system for sturdiness and optimum photometric control.

DIMENSIONS
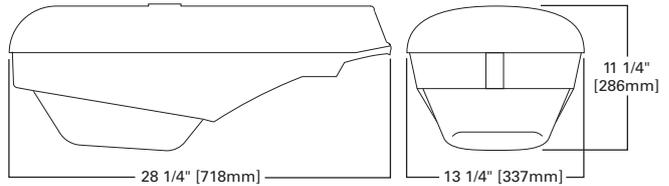
11 1/4" [286mm]
28 1/4" [718mm]
13 1/4" [337mm]

EPA-Effected Projected Area: .87

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: HPRY-GL-3-400-MT-LL

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
HP=High Pressure Sodium

Series
RY=Roadway Cobrahead

Lens Type
AL=Acrylic Refractor [1]
GL=Glass Refractor
PL=Polycarbonate Refractor [1]
FL=Flat Glass Lens [2]

Distribution
2=Type II
3=Type III

Lamp Wattage [3]

MP	HP
50=50W	**50**=50W
70=70W	**70**=70W
100=100W	**100**=100W
150=150W	**150**=150W
250=250W	**250**=250W
320=320W	**400**=400W
350=350W	
400=400W	
MH [4]	
175=175W	
250=250W	
400=400W	

Voltage [5]
120V
208V
240V
277V
347V [6]
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [6]

Options & Accessories
(See Below)
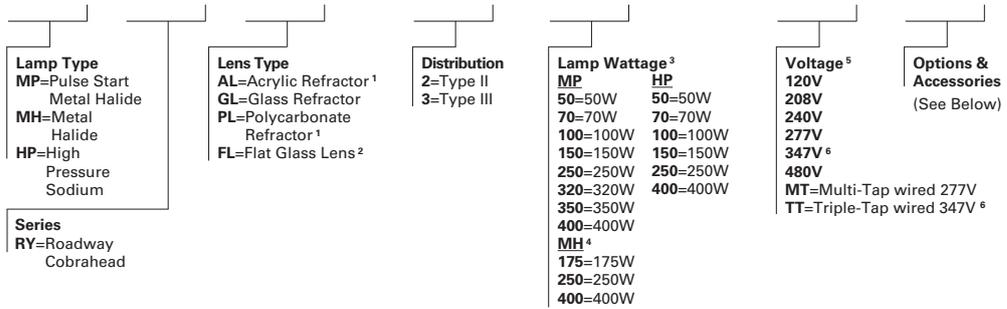
Options [7]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [8]
H=Plug-In Starter [4]
K=Leveling Indicator
T=Swing-Down Ballast
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Accessories [9]
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
OA1028=Field-installed NEMA Twistlock Photocontrol Receptacle (Order Photocontrol Separately)

NOTES: 1 Acrylic refractor for 175W maximum. Polycarbonate refractor for 250 maximum. **2** 400W MH requires reduced envelop lamp (ED28) for flat glass. **3** 100W and below MP is medium-base. All other lamps are mogul-base. Lamp not included. **4** 175, 250 and 400W MH for non-US markets. **5** Products also available in non-US voltages and 50Hz for international markets. **6** 88% efficient EISA compliant fixtures not available in 347V or Triple-tap voltages. **7** Add as suffix in the order shown. **8** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **9** Order separately. **10** Specifications and dimensions subject to change without notice.

STOCK SAMPLE NUMBER

SAMPLE NUMBER: HPRY-GL-3-400-MT-PER
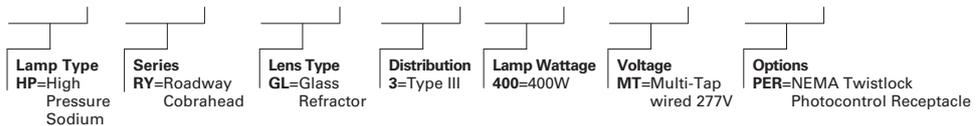
Lamp Type
HP=High Pressure Sodium

Series
RY=Roadway Cobrahead

Lens Type
GL=Glass Refractor

Distribution
3=Type III

Lamp Wattage
400=400W

Voltage
MT=Multi-Tap wired 277V

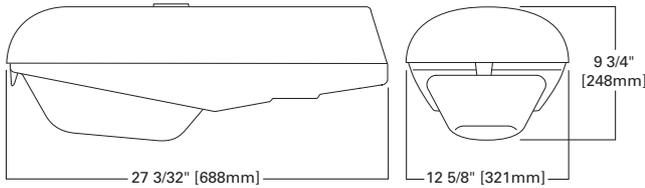**Options**
PER=NEMA Twistlock Photocontrol Receptacle

NOTES: Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options and accessories. Refer to In-Stock Guide for availability.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150, 250, 320, 350, 400W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HP)	50, 70, 100, 150, 250, 400W

Voltage Chart

MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

9 3/4" [248mm]

27 3/32" [688mm]

12 5/8" [321mm]

DESCRIPTION

Roadway Cobrahead fixtures feature durable die-cast aluminum construction and a computer-designed optical system for sturdiness and optimum photometric control.

RS
ROADWAY SMALL COBRAHEAD

50-250W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SITE/ROADWAY LIGHT

- UL Wet Location Listed. EISA Compliant

- Die-cast aluminum housing and integrally cast door hinge finished in durable grey polyester powder coat

- The reflector is precision hydroformed anodized aluminum with a Dacron polyester filter

- Die-cast aluminum door frame has two-position latch to ensure door stays fastened under extreme conditions

- Removable prismatic refractor for use with high pressure sodium and metal halide lamp sources

- Hard mounted ballast with encapsulated starter and plastic terminal block for protection from environmental abuse

- Two-bolt/one clamp slipfitter for 1 1/4" or 2" mounting arms
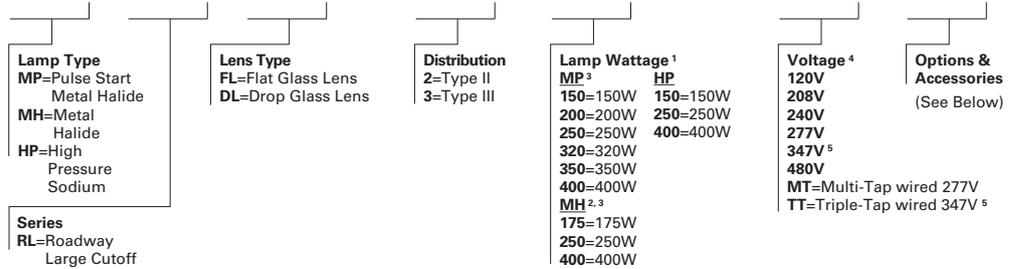
- Approximate net weight: 31 lbs. (14 kgs.)

EPA-Effected Projected Area: .85

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: HPRS-GL-3-400-MT-LL

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
HP=High Pressure Sodium

Series
RS=Roadway Small Cobrahead

Lens Type
AL=Acrylic Refractor [1]
GL=Glass Refractor
PL=Polycarbonate Refractor
FL=Flat Glass Lens

Distribution
2=Type II
3=Type III

Lamp Wattage [2]

MP	HP
50=50W	**50**=50W
70=70W	**70**=70W
100=100W	**100**=100W
150=150W	**150**=150W
200=200W	**250**=250W
250=250W	

MH [3]
175=175W
250=250W

Voltage
120V
208V
240V
277V
347V [4]
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [4]

Options & Accessories
(See Below)

Options [5]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [6]
H=Plug-In Starter [7]
K=Leveling Indicator
T=Swing-Down Ballast
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Accessories [8]
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1201=Photoelectric Control, 347 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
OA1028=Field-installed Photocontrol Receptacle, NEMA Type
(Order Photocontrol Separately)

NOTES: 1 Acrylic refractor for 175W maximum. 2 100W and below MP is medium-base. All other lamps are mogul-base. Lamp not included. 3 175 and 250W MH for non-US markets only. 4 88% efficient EISA compliant fixtures not available in 347V or Triple-tap voltages. 5 Add as suffix in the order shown. 6 Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. 7 HPS only. 8 Order separately. 9 Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150, 200, 250W
Metal Halide (MH)	175, 250W
High Pressure Sodium (HP)	50, 70, 100, 150, 250W

Voltage Chart		
MT=Multi-Tap		120/208/240/277V (wired 277V)
TT=Triple-Tap		120/277/347V (wired 347V)

COOPER LIGHTING

Ⓔ COOPER LIGHTING - LUMARK

RL
ROADWAY
LARGE CUTOFF
COBRAHEAD

150-400W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SITE/ROADWAY LIGHT

- UL Wet Location Listed. EISA Compliant

- Die-cast aluminum housing with stainless steel bail latch. Standard grey polyester powder coat finish

- The reflector is precision hydroformed anodized aluminum with a Dacron polyester filter

- Die-cast aluminum door frame has two-position latch to ensure door stays fastened under extreme conditions

- Removable tempered flat glass refractor for use with high pressure sodium, metal halide and mercury lamp sources. Optional drop lens available

- Hard mounted ballast with encapsulated starter for protection from environmental abuse

- Two-bolt/one clamp slipfitter for 1 1/4" or 2" mounting arms

- Approximate net weight: 40 lbs. (18 kgs.)

DESCRIPTION

Roadway Cobrahead fixtures feature durable die-cast aluminum construction and a computer-designed optical system for sturdiness and optimum photometric control.

DARK SKY COMPLIANT | **FCO** Full Cutoff

NOTE: In all flat glass configurations only.

DIMENSIONS
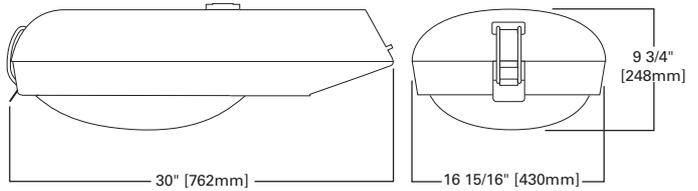
30" [762mm]

16 15/16" [430mm]

9 3/4" [248mm]

EPA-Effected Projected Area: .87

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: HPRL-FL-3-400-MT-LL

Lamp Type	Lens Type	Distribution	Lamp Wattage [1]	Voltage [4]	Options & Accessories
MP=Pulse Start Metal Halide	**FL**=Flat Glass Lens	**2**=Type II	**MP** [3]	**120V**	(See Below)
MH=Metal Halide	**DL**=Drop Glass Lens	**3**=Type III	**150**=150W **HP**	**208V**	
HP=High Pressure Sodium			**200**=200W **150**=150W	**240V**	
			250=250W **250**=250W	**277V**	
Series			**320**=320W **400**=400W	**347V** [5]	
RL=Roadway Large Cutoff Cobrahead			**350**=350W	**480V**	
			400=400W	**MT**=Multi-Tap wired 277V	
			MH [2, 3]	**TT**=Triple-Tap wired 347V [5]	
			175=175W		
			250=250W		
			400=400W		

Options [6]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [7]
H=Plug-In Starter
K=Leveling Indicator
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Accessories [8]
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1201=Photoelectric Control, 347 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
OA1028=Field-installed Photocontrol Receptacle, NEMA Type
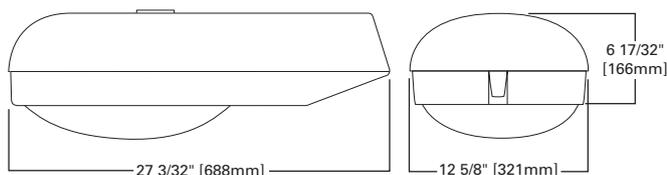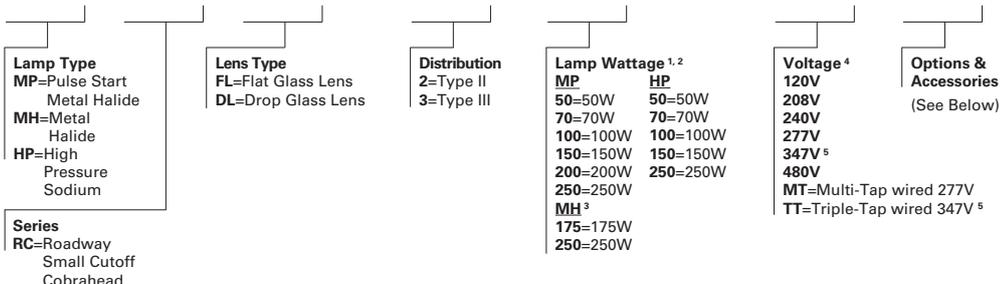(Order Photocontrol Separately)

NOTES: **1** All other lamps are mogul-base. Lamp not included. **2** 175, 250 and 400W MP & MH for non-US markets only. **3** 400W MH requires reduced envelope lamp (ED28). **4** Product also available in non-US voltages and 50Hz for international markets. **5** 88% efficient EISA compliant fixtures not available in 347V or Triple-tap voltages. **6** Add as suffix in the order shown. **7** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **8** Order separately. **9** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage		Voltage Chart	
Pulse Start Metal Halide (MP)	150, 200, 250, 320, 350, 400W		MT=Multi-Tap	120/208/240/277V (wired 277V)
Metal Halide (MH)	175, 250, 400W		TT=Triple-Tap	120/277/347V (wired 347V)
High Pressure Sodium (HP)	150, 250, 400W			

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

6 17/32" [166mm]

27 3/32" [688mm]   12 5/8" [321mm]

EPA-Effected Projected Area: .80

DESCRIPTION

Roadway Cobrahead fixtures feature durable die-cast aluminum construction and a computer-designed optical system for sturdiness and optimum photometric control.

DARK SKY COMPLIANT | **FCO** Full Cutoff

NOTE: In all flat glass configurations only.

RC
ROADWAY SMALL CUTOFF COBRAHEAD

150-250W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

SITE/ROADWAY LIGHT

- UL Wet Location Listed. EISA Compliant

- Die-cast aluminum housing and integrally cast door hinge finished in durable grey polyester powder coat

- The reflector is precision hydroformed anodized aluminum with a Dacron polyester filter

- Die-cast aluminum door frame with integral hinges for toolless, relamping and maintenance

- Removable tempered flat glass for use with high pressure sodium, metal halide lamp sources. Optional clear drop glass lens available

- Hard mounted ballast with encapsulated starter and plastic terminal block for protection from environmental abuse

- Two-bolt/one clamp slipfitter for 1 1/4" or 2" mounting arms

- Approximate net weight: 28 lbs. (13 kgs.)

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: HPRC-GL-3-400-MT-LL

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide
HP=High Pressure Sodium

Series
RC=Roadway Small Cutoff Cobrahead

Lens Type
FL=Flat Glass Lens
DL=Drop Glass Lens

Distribution
2=Type II
3=Type III

Lamp Wattage [1, 2]

MP	HP
50=50W	**50**=50W
70=70W	**70**=70W
100=100W	**100**=100W
150=150W	**150**=150W
200=200W	**250**=250W
250=250W	
MH [3]	
175=175W	
250=250W	

Voltage [4]
120V
208V
240V
277V
347V [5]
480V
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [5]

Options & Accessories
(See Below)

Options [6]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [7]
H=Plug-In Starter
K=Leveling Indicator
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Accessories [8]
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1201=Photoelectric Control, 347 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type
OA1028=Field-installed Photocontrol Receptacle, NEMA Type (Order Photocontrol Separately)

NOTES: 1 150W available in HP only. All HP and MP lamps 150W and above are mogul-base. Lamp not included. 2 All lamps are mogul-base except 150W MP and below are medium-base. Lamp not included. 3 175 and 250W MH for non-US markets only. 4 Products also available in non-US voltages and 50Hz for international markets. 5 88% efficient EISA compliant fixtures not available in 347V or Triple-tap voltages. 6 Add as suffix in the order shown. 7 Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. 8 Order separately. 9 Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	50, 70, 100, 150, 200, 250W
Metal Halide (MH)	175, 250W
High Pressure Sodium (HP)	50, 70, 100, 150, 250W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)

COOPER LIGHTING

(E) COOPER LIGHTING - LUMARK

MC
HIGH MAST INDUSTRIAL AREA LUMINAIRE

400-1000W
High Pressure Sodium
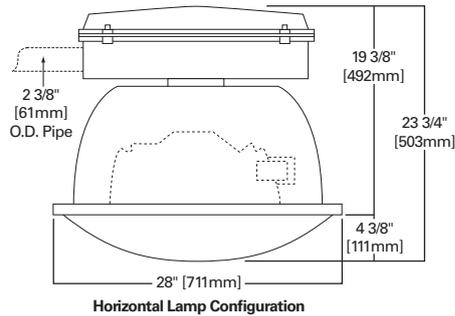**Pulse Start Metal Halide**
Metal Halide

INDUSTRIAL AREA LUMINAIRE

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Die-cast aluminum housing and cover. Standard bronze polyester powder coat finish

- Clamp type internal slipfitter for 2 3/8" O.D. pipe

- Anodized spun aluminum outer reflector housing. Light pattern can be oriented by rotating optical assembly (360°). A degree indicator is provided to identify the aiming position

- Inner hydroformed and anodized reflector

- Die-cast aluminum door with tempered convex glass lens, silicone rubber gasket and hinged and latched door assembly for easy maintenance

- Approximate net weight: 68 lbs. (30 kgs.)

DESCRIPTION

The MC high mast area luminaire's asymmetric optics can be oriented by rotating the optical assembly 360°. The MC is ideal for use on areas requiring maximum spacing, such as areas below tall industrial mezzanines and interstate highways.

DIMENSIONS

2 3/8" [61mm] O.D. Pipe

19 3/8" [492mm]

23 3/4" [503mm]
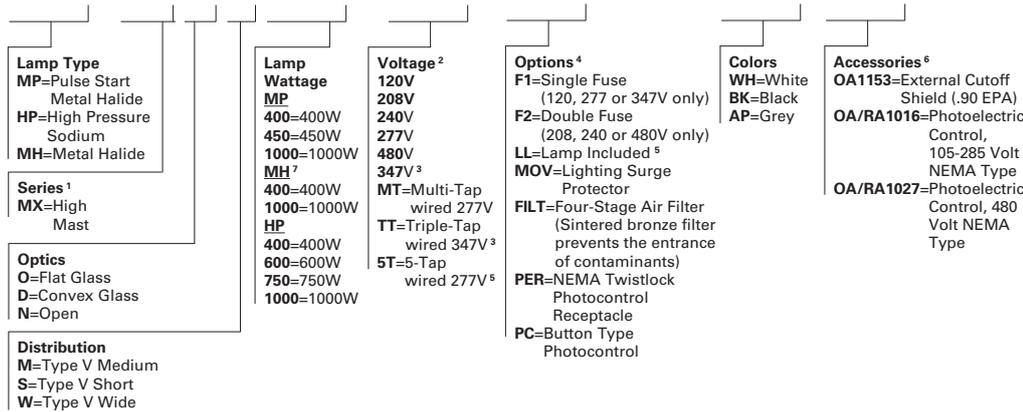
4 3/8" [111mm]

28" [711mm]

Horizontal Lamp Configuration

EPA-Effected Projected Area: 1.46

For Pole Information Refer to Cooper Lighting Pole Section.

ORDERING INFORMATION

SAMPLE NUMBER: MPMC-3-D-1000-120V

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium
MH=Metal Halide

Series [1]
MC=High Mast

Optics
1=Type I
2=Type II
3=Type III
4=Type IV

Distribution
A=SCO (Short Cutoff)
D=MCO (Medium Cutoff)
E=MSCO (Medium Semi Cutoff)
L=LMCO (Long Semi Cutoff)

Lamp Wattage
MP
400=400W
750=750W
1000=1000W
MH
400=400W
1000=1000W
HP
400=400W
600=600W
750=750W
1000=1000W

Voltage [2]
120V
208V
240V
277V
480V
347V [3]
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [3]
5T=5-Tap wired 277V [5]

Options [4]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [5]
MOV=Lighting Surge Protector
G=Tempered Flat Glass Lens (Clear)
FILT=Four-Stage Air Filter (Sintered bronze filter prevents the entrance of contaminants)
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Colors
WH=White
BK=Black
AP=Grey

Accessories [6]
OA1153=External Cutoff Shield (.90 EPA)
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type

NOTES: 1 Standard color is bronze, other finish colors available. Consult your Cooper Lighting Representative. **2** Products also available in non-US voltages and 50Hz for international markets. **3** 88% efficient EISA complaint MP fixtures not available in 347V and Triple-tap voltages. **4** Add suffix in the order shown. **5** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **6** Order separately. **7** 400W MH available in non-US markets only. 5T available in 400W MH only. **8** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	400, 750, 1000W
Metal Halide (MH)	400, 1000W
High Pressure Sodium (HP)	400, 600, 750, 1000W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 480V)

DIMENSIONS

2 3/8"
[61mm]
O.D. Pipe

19 3/8"
[492mm]

23 3/4"
[503mm]

4 3/8"
[111mm]

28" [711mm]

Vertical Lamp Configuration

EPA-Effected Projected Area: 1.46

For Pole Information Refer to Cooper Lighting Pole Section.

Ⓔ COOPER LIGHTING - LUMARK
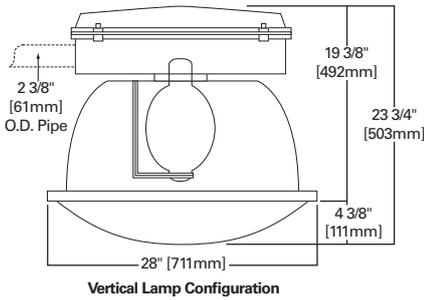
DESCRIPTION

The MX high mast area luminaire is ideal for use on areas requiring maximum spacing, such as areas below tall industrial mezzanines and interstate highways.

MX
HIGH MAST INDUSTRIAL AREA LUMINAIRE

400-1000W
High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

INDUSTRIAL AREA LUMINAIRE

- UL Wet Location Listed. CSA Certified. EISA Compliant

- Die-cast aluminum housing and cover. Standard bronze polyester powder coat finish. Other finish colors available

- Clamp type internal slipfitter for 2 3/8" O.D. pipe

- Anodized spun aluminum reflector housing

- Die-cast aluminum door with tempered convex glass lens, silicone rubber gasket and hinged and latched door assembly for easy maintenance

- Approximate net weight: 64 lbs. (29 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MPMX-3-D-1000-120V

Lamp Type
MP=Pulse Start Metal Halide
HP=High Pressure Sodium
MH=Metal Halide

Series [1]
MX=High Mast

Optics
O=Flat Glass
D=Convex Glass
N=Open

Distribution
M=Type V Medium
S=Type V Short
W=Type V Wide

Lamp Wattage
MP
400=400W
450=450W
1000=1000W
MH [7]
400=400W
1000=1000W
HP
400=400W
600=600W
750=750W
1000=1000W

Voltage [2]
120V
208V
240V
277V
480V
347V [3]
MT=Multi-Tap wired 277V
TT=Triple-Tap wired 347V [3]
5T=5-Tap wired 277V [5]

Options [4]
F1=Single Fuse (120, 277 or 347V only)
F2=Double Fuse (208, 240 or 480V only)
LL=Lamp Included [5]
MOV=Lighting Surge Protector
FILT=Four-Stage Air Filter (Sintered bronze filter prevents the entrance of contaminants)
PER=NEMA Twistlock Photocontrol Receptacle
PC=Button Type Photocontrol

Colors
WH=White
BK=Black
AP=Grey

Accessories [6]
OA1153=External Cutoff Shield (.90 EPA)
OA/RA1016=Photoelectric Control, 105-285 Volt NEMA Type
OA/RA1027=Photoelectric Control, 480 Volt NEMA Type

NOTES: 1 Standard color is bronze, other finish colors available. Consult your Cooper Lighting Representative. **2** Products also available in non-US voltages and 50Hz for international markets. **3** 88% efficient EISA compliant MP fixtures not available in 347V and Triple-tap voltages. **4** Add suffix in the order shown. **5** Lamp is shipped separate from luminaire. Lamp is Cooper designated product based on luminaire requirements. Specified lamps must be ordered as a separate line item. **6** Order separately. **7** 400W MH available in non-US markets only. 5T available in 400W MH only. **8** Specifications and dimensions subject to change without notice.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	400, 450, 1000W
Metal Halide (MH)	400, 1000W
High Pressure Sodium (HP)	400, 600, 750, 1000W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
TT=Triple-Tap	120/277/347V (wired 347V)
5T=5-Tap	120/208/240/277/480V (wired 480V)

COOPER LIGHTING

COOPER LIGHTING - LUMARK

DESCRIPTION

The Lumark MS35 and MS37 are ideal security lights for any residential motion activated lighting application. Lights can be used as standard floodlights. High impact weatherproof non-metallic construction. Infrared motion sensor with 110° coverage up to 70 feet. Adjustable time and sensitivity settings for precise control (no tools required). U.L. listed and CSA certified for wet locations.

SPECIFICATION FEATURES

- Durable metal lamp covers add a decorative look and help protect lamps from outside elements

- Durable die-cast aluminum lampholders and mounting plate for extra long life

- Large adjustment knobs for easy setup

- Wall or eaves mount

- Motion sensor turns lights on automatically when motion is detected and off after a preselected time delay (4 or 12 minutes) Night time-on setting allows lights to come on automatically at dusk (3 time settings). Lights can be turned on manually and reset at dawn. Photocell design prevents lights from turning on during daylight hours. Power outage protection resets at dawn

- Maximum (2)150W PAR 38 incandescent lamps. Lamps not included

ORDERING INFORMATION

Catalog Number	Lamp Type	Lamp Wattage	Voltage	Color	Master Net Wt. (lbs.)—Kg	Master Carton Qty.	Unit Wt. (lbs.)—Kg	Master Cube (lbs.)—Kg
MS35	Incandescent	(2) 150	120V-127V	Bronze	(1.12)—0.51	2	0.56—0.26	0.24—0.07
MS37	Incandescent	(2) 150	120V-127V	White	(1.12)—0.51	2	0.56—0.26	0.24—0.07

MS254R, MS245RW, MS35, MS37 MS240

(2) 150W Incandescent

WATCH GUARD MOTION ACTIVATED FLOODLIGHTS AND RETROFIT MOTION SENSORS

DESCRIPTION

The Lumark MS245R is the ideal security lighting for any commercial or residential application. Durable die-cast aluminum lampholders and mounting plate for extra long life. Night time ON setting allows light to come on automatically at dusk. 240° infrared sensor with extra wide design for maximum coverage. Lights can be turned on manually and reset at dawn. U.L. listed and CSA certified for wet locations.

SPECIFICATION FEATURES

- Maximum (2)150W PAR 38 incandescent lamps. Lamps not included

- Durable high-impact non-metallic construction is weather resistant

- Wall or eaves mount

- Convenient toolless lamp and sensor head adjustment with adjustable time and sensitivity settings. Detects motion at 110° and up to 70'. 23 motion detection zones

ORDERING INFORMATION

Catalog Number	Lamp Type	Voltage	Color	Master Pack	Net Weight	Shipping Volume (cu. ft.)	Package Dimensions (D x W x L)
MS245R	(2) 150W PAR38 Incandescent	120V	Bronze	2	2.3 lbs (1.0 kg)	0.21	11 1/4" x 6 1/16" x 4 15/16"
MS245RW	(2) 150W PAR38 Incandescent	120V	White	2	2.3 lbs (1.0 kg)	0.21	11 1/4" x 6 1/16" x 4 15/16"

DESCRIPTION

The Retrofit Lumark MS240 provides long range light control up to 70' and 240° degrees of coverage. Finished in bronze or bright white. Adjustable 4-12 minute time delay. Handles up to 300W of switching capacity. Motion sensor turns lights on automatically when motion is detected and off after a preselected time delay (4 or 12 minutes). Night time-on setting allows lights to come on automatically at dusk (3 time settings). Lights can be turned on manually and reset at dawn

SPECIFICATION FEATURES

- 240° coverage fully adjustable down to 180° for exacting coverage pattern

- Adjustable 4-12 minute time delay

- Handles up to 300W of switching capacity

- Motion sensor turns lights on automatically when motion is detected and off after a preselected time delay (4 or 12 minutes). Nighttime-on setting

allows lights to come on automatically at dusk (3 time settings). Lights can be turned on manually and reset at dawn

- Finished in bronze or bright white

ORDERING INFORMATION

Catalog Number	Switching Capacity	Voltage	Color	Master Pack	Net Weight	Shipping Volume (cu. ft.)	Package Dimensions (D x W x L)
MS240	300W	120V	Bronze	4	.56 lbs (0.2kg)	0.03	6" x 3 3/8" x 2 7/8"
MS240W	300W	120V	White	4	.56 lbs (0.2kg)	0.03	6" x 3 3/8" x 2 7/8"

NOTES: 1 Products also available in non-US voltages and frequencies for international markets. **2** Consult your Cooper Lighting Representative for availability and ordering information. **3** Specifications and dimensions subject to change without notice.

Ⓔ COOPER LIGHTING - LUMARK

DIMENSIONS

11 1/4" [286mm]

23 1/4" [591mm]

7" [178mm]
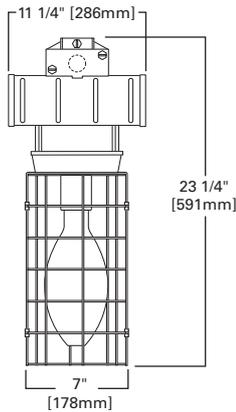
DESCRIPTION

The Steeler Worklight combines a durable cold-rolled steel housing and a construction wire guard to help protect the lamp at any construction site. U.L. listed and labeled for damp location. CSA Certified.
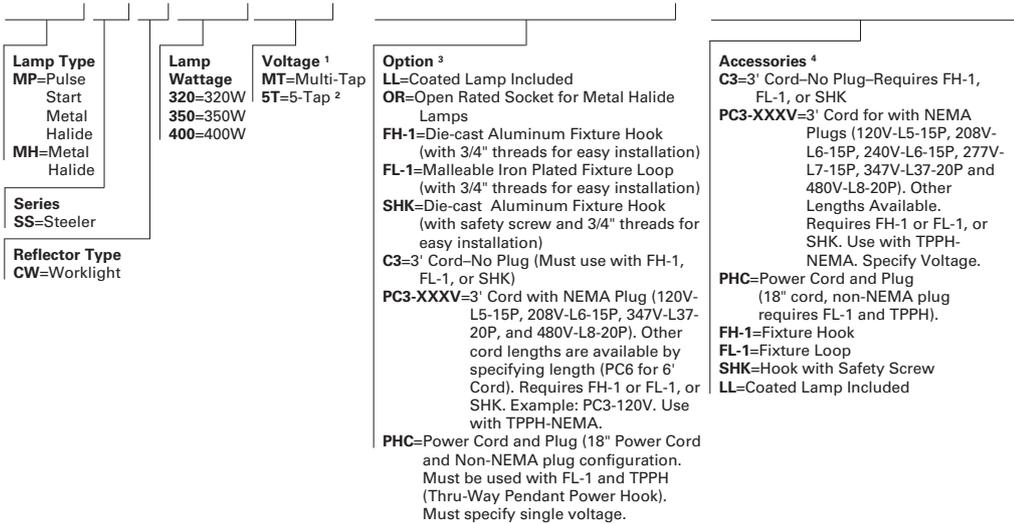
SS STEELER WORKLIGHT

320-400W
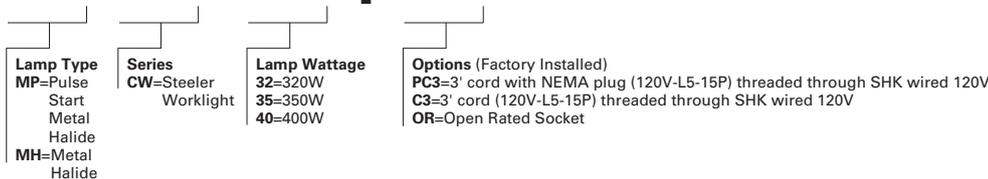**Pulse Start Metal Halide**
Metal Halide

CONSTRUCTION LUMINAIRE

- U.L. listed and CSA certified

- Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit

- Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a white polyester paint

- High power factor ballast with class H insulation. U.L. listed for 65°C (149°F) ambient temperature operation. Minimum starting temperature is -40°C (-40° F) for HP and -30°C (-20° F) for MH. CSA certified

- Mogul-base porcelain socket

- Durable formed and welded steel wire coated with a safety yellow polyester paint for easy visibility and safety

- Great replacement for temporary string lighting where mounting heights exceed 15'

- Approximate net weight: 30 lbs. (13 kgs.)

ORDERING INFORMATION

SAMPLE NUMBER: MHSS-CW-400-MT

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide

Series
SS=Steeler

Reflector Type
CW=Worklight

Lamp Wattage
320=320W
350=350W
400=400W

Voltage [1]
MT=Multi-Tap
5T=5-Tap [2]

Option [3]
LL=Coated Lamp Included
OR=Open Rated Socket for Metal Halide Lamps
FH-1=Die-cast Aluminum Fixture Hook (with 3/4" threads for easy installation)
FL-1=Malleable Iron Plated Fixture Loop (with 3/4" threads for easy installation)
SHK=Die-cast Aluminum Fixture Hook (with safety screw and 3/4" threads for easy installation)
C3=3' Cord–No Plug (Must use with FH-1, FL-1, or SHK)
PC3-XXXV=3' Cord with NEMA Plug (120V-L5-15P, 208V-L6-15P, 347V-L37-20P, and 480V-L8-20P). Other cord lengths are available by specifying length (PC6 for 6' Cord). Requires FH-1 or FL-1, or SHK. Example: PC3-120V. Use with TPPH-NEMA.
PHC=Power Cord and Plug (18" Power Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook). Must specify single voltage.

Accessories [4]
C3=3' Cord–No Plug–Requires FH-1, FL-1, or SHK
PC3-XXXV=3' Cord for with NEMA Plugs (120V-L5-15P, 208V-L6-15P, 240V-L6-15P, 277V-L7-15P, 347V-L37-20P and 480V-L8-20P). Other Lengths Available. Requires FH-1 or FL-1, or SHK. Use with TPPH-NEMA. Specify Voltage.
PHC=Power Cord and Plug (18" cord, non-NEMA plug requires FL-1 and TPPH).
FH-1=Fixture Hook
FL-1=Fixture Loop
SHK=Hook with Safety Screw
LL=Coated Lamp Included

NOTES: **1** Products also available in non-US voltages and frequencies for international markets. **2** 88% efficient EISA compliant MP fixtures not available in 5-Tap voltages. **3** Add as suffix in order shown. **4** Order separately. **5** Specifications and dimensions subject to change without notice.

STOCK SAMPLE SAMPLE (Coated Lamp Included)

SAMPLE NUMBER: MHCW40

Lamp Type
MP=Pulse Start Metal Halide
MH=Metal Halide

Series
CW=Steeler Worklight

Lamp Wattage
32=320W
35=350W
40=400W

Options (Factory Installed)
PC3=3' cord with NEMA plug (120V-L5-15P) threaded through SHK wired 120V
C3=3' cord (120V-L5-15P) threaded through SHK wired 120V
OR=Open Rated Socket

NOTES: Options not available with stock products. Order Accessories as separate items for field installation. Refer to standard ordering information to add options and accessories.

Lamp Type	Wattage
Pulse Start Metal Halide (MP)	320, 350, 400W
Metal Halide (MH)	400W

Voltage Chart	
MT=Multi-Tap	120/208/240/277V (wired 277V)
5T=5-Tap	120/208/240/277/480V (wired 480V)

COOPER LIGHTING - LUMARK

SD/DD/IR
DOCLIGHT

40W
Compact Fluorescent

200-300W
Incandescent

**WALL OR CEILING
MOUNTED DOCKLIGHT**

- Maximum (1) 300W PAR 38 incandescent lamp or (1) 40W Compact Fluorescent lamp

- Strong durable high impact composite material also available in polished chrome

- Available in single and double wall mount and ceiling mount configurations

- Finish on the arm is safety yellow polyester powder coat. Struts and brackets are black zinc. Composite lamp heads are black. Polycarbonate lamp heads are yellow and fluorescent lamp heads are polished chrome

- Approximate net weight: 17 lbs. (7.73 kgs.)

DESCRIPTION

The Lumark Docklight is ideal for illuminating the interior of tractor trailers during loading or unloading. The arms and struts are constructed of 1 1/2" cross section 12-gauge steel tubing. Arms and strut ends are provided with injection-molded end caps. Electrical cord is secured and allows for easy adjustment.

DIMENSIONS

Single Wall Mount (SD)
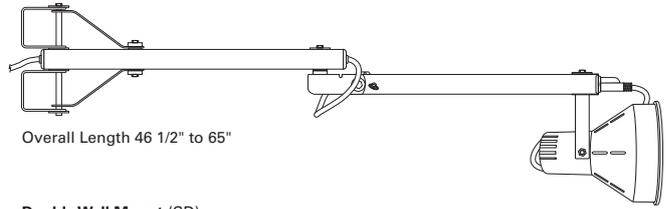
Overall Length 46 1/2" to 65"

Double Wall Mount (SD)
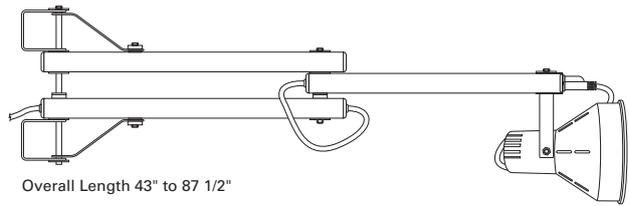
Overall Length 43" to 87 1/2"

ORDERING INFORMATION

SAMPLE NUMBER: INDD40-30R-300-WLG-120V

| **Lamp Type**
IN=Incandescent

Series
SD=Single Wall
Arm Docklight
DD=Double Wall
Arm Docklight
IR=Ceiling Mount
Docklight | **Arm Length**
24=24"
30=30" [1]
40=43"
60=63"
90=90" | **Lamp Head**
30R=Composite
Head (300W
Incandescent
Max.)

20P=Polycarbonate
Head (200W
Incandescent
Max.) | **Lamp Wattage**
200=200W
(Incandescent)
300=300W
(Incandescent) | **Lamp Guard**
WLG=Wire Lamp
Guard
CLG=Composite
Lamp Guard | **Voltage**
120V=120V | **Options** [2]
__=Yellow
(Standard
Color Finish)
LA=Locking Arm
AA=Spring Arm | **Accessories** [3]
FAN=18"
3-Speed
Fan |

NOTES: **1** Available with IR only. **2** Add as suffix in the order shown. **3** Order separately. **4** Specifications and dimensions subject to change without notice.

COOPER LIGHTING - LUMARK

Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
AIM/AIL Avid Series **p. 7 & 8**	AIM-250-MH	AIM-250-MP	Ⓔ
	AIL-250-MH	AIL-250-MP	Ⓔ
	AIL-320-MH	AIL-320-MP	Ⓔ
	AIL-350-MH	AIL-350-MP	Ⓔ
	AIL-400-MH	AIL-400-MP	Ⓔ
SS Steeler **p. 9**	MHSS-SA 150	MPSS-SA 175	Ⓔ
	MHSS-SA 175	MPSS-SA 175	Ⓔ
	MHSS-SA 250	MPSS-SA 250	Ⓔ
		MPSS-SA 320	Ⓔ
		MPSS-SA 350	Ⓔ
	MHSS-SA 400	MPSS-SA 400	Ⓔ
		MPSS-SA 450	Ⓔ
	MHSS-SA-40	MPSS32	Ⓔ
		MPSS35	Ⓔ
		MPSS40	Ⓔ
HB Benchmark **p. 10**	MHHB-SA 150	MPHB-SA 175	Ⓔ
	MHHB-SA 175	MPHB-SA 175	Ⓔ
	MHHB-SA 250	MPHB-SA 250	Ⓔ
		MPHB-SA 320	Ⓔ
		MPHB-SA 350	Ⓔ
	MHHB-SA 400	MPHB-SA 400	Ⓔ
		MPHB-SA 450	Ⓔ
SE E&G Steeler **p. 11**	MHSE-ENSA 150	MPSE-ENSA 175	Ⓔ
	MHSE-ENSA 175	MPSE-ENSA 175	Ⓔ
	MHSE-ENSA 250	MPSE-ENSA 250	Ⓔ
		MPSE-ENSA 320	Ⓔ
		MPSE-ENSA 350	Ⓔ
	MHSE-ENSA 400	MPSE-ENSA 400	Ⓔ
		MPSE-ENSA 450	Ⓔ
EB E&G Benchmark **p. 12**	MHEB-ENSA 150	MPEB-ENSA 175	Ⓔ
	MHEB-ENSA 175	MPEB-ENSA 175	Ⓔ
	MHEB-ENSA 250	MPEB-ENSA 250	Ⓔ
		MPEB-ENSA 320	Ⓔ
		MPEB-ENSA 350	Ⓔ
	MHEB-ENSA 400	MPEB-ENSA 400	Ⓔ
		MPEB-ENSA 450	Ⓔ
UB Benchmark Uplight **p. 13**	MHUB-ENSA 150	MPUB-ENSA 175	Ⓔ
	MHUB-ENSA 175	MPUB-ENSA 175	Ⓔ
	MHUB-ENSA 250	MPUB-ENSA 250	Ⓔ
		MPUB-ENSA 320	Ⓔ
		MPUB-ENSA 350	Ⓔ
	MHUB-ENSA 400	MPUB-ENSA 400	Ⓔ
		MPUB-ENSA 450	Ⓔ

COOPER LIGHTING - LUMARK

Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
SS Econoliter **p. 14**	MHSS-EL 150	MPSS-EL 175	Ⓔ
	MHSS-EL 175	MPSS-EL 175	Ⓔ
	MHSS-EL 250	MPSS-EL 250	Ⓔ
		MPSS-EL 320	Ⓔ
		MPSS-EL 350	Ⓔ
	MHSS-EL 400	MPSS-EL 400	Ⓔ
		MPSS-EL 450	Ⓔ
SS VertX **p. 15**	MHSS-AV 150	MPSS-AV 175	Ⓔ
	MHSS-AV 175	MPSS-AV 175	Ⓔ
	MHSS-AV 250	MPSS-AV 250	Ⓔ
		MPSS-AV 320	Ⓔ
		MPSS-AV 350	Ⓔ
	MHSS-AV 400	MPSS-AV 400	Ⓔ
		MPSS-AV 450	Ⓔ
HB VertX **p. 16**	MHHB-AV 150	MPHB-AV 175	Ⓔ
	MHHB-AV 175	MPHB-AV 175	Ⓔ
	MHHB-AV 250	MPHB-AV 250	Ⓔ
		MPHB-AV 320	Ⓔ
		MPHB-AV 350	Ⓔ
	MHHB-AV 400	MPHB-AV 400	Ⓔ
		MPHB-AV 450	Ⓔ
SE E&G VertX **p. 17**	MHSE-ENAV 150	MPSE-ENAV 175	Ⓔ
	MHSE-ENAV 175	MPSE-ENAV 175	Ⓔ
	MHSE-ENAV 250	MPSE-ENAV 250	Ⓔ
		MPSE-ENAV 320	Ⓔ
		MPSE-ENAV 350	Ⓔ
	MHSE-ENAV 400	MPSE-ENAV 400	Ⓔ
		MPSE-ENAV 450	Ⓔ
EB E&G VertX **p. 18**	MHEB-ENAV 150	MPEB-ENAV 175	Ⓔ
	MHEB-ENAV 175	MPEB-ENAV 175	Ⓔ
	MHEB-ENAV 250	MPEB-ENAV 250	Ⓔ
		MPEB-ENAV 320	Ⓔ
		MPEB-ENAV 350	Ⓔ
	MHEB-ENAV 400	MPEB-ENAV 400	Ⓔ
		MPEB-ENAV 450	Ⓔ
EP Enterprise **p. 19**	MHEP 150	MPEP 175	Ⓔ
	MHEP 175	MPEP 175	Ⓔ
	MHEP 250	MPEP 250	Ⓔ
		MPEP 320	Ⓔ
		MPEP 350	Ⓔ
	MHEP 400	MPEP 400	Ⓔ
		MPEP 450	Ⓔ
	FM25	FP25	Ⓔ
		FP32	Ⓔ
	FM40	FP40	Ⓔ

COOPER LIGHTING - LUMARK

Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
RB Benchmark Low-Bay **p. 20**	MHRB 150	MPRB 175	Ⓔ
	MHRB 175	MPRB 175	Ⓔ
	MHRB 250	MPRB 250	Ⓔ
		MPRB 320	Ⓔ
		MPRB 350	Ⓔ
	MHRB 400	MPRB 400	Ⓔ
		MPRB 450	Ⓔ
VF Vertimark **p. 21**	MHVF-AL 150	MPVF-AL 175	Ⓔ
	MHVF-AL 175	MPVF-AL 175	Ⓔ
	MHVF-AL 250	MPVF-AL 250	Ⓔ
		MPVF-AL 320	Ⓔ
		MPVF-AL 350	Ⓔ
	MHVF-AL 400	MPVF-AL 400	Ⓔ
BE Vertimark II **p. 22**	MHBE 150	MPBE 175	Ⓔ
	MHBE 175	MPBE 175	Ⓔ
	MHBE 250	MPBE 250	Ⓔ
SG Glass Steeler **p. 23**	MHSG-GR 150	MPSG-GR 175	Ⓔ
	MHSG-GR 175	MPSG-GR 175	Ⓔ
	MHSG-GR 250	MPSG-GR 250	Ⓔ
		MPSG-GR 320	Ⓔ
		MPSG-GR 350	Ⓔ
	MHSG-GR 400	MPSG-GR 400	Ⓔ
		MPSG-GR 450	Ⓔ
GB Glass Benchmark **p. 24**	MHGB-GR 150	MPGB-GR 175	Ⓔ
	MHGB-GR 175	MPGB-GR 175	Ⓔ
	MHGB-GR 250	MPGB-GR 250	Ⓔ
		MPGB-GR 320	Ⓔ
		MPGB-GR 350	Ⓔ
	MHGB-GR 400	MPGB-GR 400	Ⓔ
		MPGB-GR 450	Ⓔ
SE E&G Glass Steeler **p. 25**	MHSE-ENGR 150	MPSE-ENGR 175	Ⓔ
	MHSE-ENGR 175	MPSE-ENGR 175	Ⓔ
	MHSE-ENGR 250	MPSE-ENGR 250	Ⓔ
		MPSE-ENGR 320	Ⓔ
		MPSE-ENGR 350	Ⓔ
	MHSE-ENGR 400	MPSE-ENGR 400	Ⓔ
		MPSE-ENGR 450	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
EB E&G Glass Benchmark **p. 26**	MHEB-ENGR 150	MPEB-ENGR 175	Ⓔ
	MHEB-ENGR 175	MPEB-ENGR 175	Ⓔ
	MHEB-ENGR 250	MPEB-ENGR 250	Ⓔ
		MPEB-ENGR 320	Ⓔ
		MPEB-ENGR 350	Ⓔ
	MHEB-ENGR 400	MPEB-ENGR 400	Ⓔ
		MPEB-ENGR 450	Ⓔ
SS Prismatic High-Bay **p. 27**	MHSS-PD 150	MPSS-PD 175	Ⓔ
	MHSS-PD 175	MPSS-PD 175	Ⓔ
	MHSS-PD 250	MPSS-PD 250	Ⓔ
		MPSS-PD 320	Ⓔ
		MPSS-PD 350	Ⓔ
	MHSS-PD 400	MPSS-PD 400	Ⓔ
		MPSS-PD 450	Ⓔ
HB Prismatic Benchmark **p. 28**	MHHB-PD 150	MPHB-PD 175	Ⓔ
	MHHB-PD 175	MPHB-PD 175	Ⓔ
	MHHB-PD 250	MPHB-PD 250	Ⓔ
		MPHB-PD 320	Ⓔ
		MPHB-PD 350	Ⓔ
	MHHB-PD 400	MPHB-PD 400	Ⓔ
		MPHB-PD 450	Ⓔ
SE E&G Prismatic Acrylic Steeler **p. 29**	MHSE-ENPD 150	MPSE-ENPD 175	Ⓔ
	MHSE-ENPD 175	MPSE-ENPD 175	Ⓔ
	MHSE-ENPD 250	MPSE-ENPD 250	Ⓔ
		MPSE-ENPD 320	Ⓔ
		MPSE-ENPD 350	Ⓔ
	MHSE-ENPD 400	MPSE-ENPD 400	Ⓔ
		MPSE-ENPD 450	Ⓔ
EB E&G Prismatic Acrylic Benchmark **p. 30**	MHEB-ENPD 150	MPEB-ENPD 175	Ⓔ
	MHEB-ENPD 175	MPEB-ENPD 175	Ⓔ
	MHEB-ENPD 250	MPEB-ENPD 250	Ⓔ
		MPEB-ENPD 320	Ⓔ
		MPEB-ENPD 350	Ⓔ
	MHEB-ENPD 400	MPEB-ENPD 400	Ⓔ
		MPEB-ENPD 450	Ⓔ
SS Enhanced Refractor High-Bay Steeler **p. 31**	MHSS-ER 150	MPSS-ER 175	Ⓔ
	MHSS-ER 175	MPSS-ER 175	Ⓔ
	MHSS-ER 250	MPSS-ER 250	Ⓔ
		MPSS-ER 320	Ⓔ
		MPSS-ER 350	Ⓔ
	MHSS-ER 400	MPSS-ER 400	Ⓔ
		MPSS-ER 450	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
HB Enhanced Refractor High-Bay Benchmark **p. 32**	MHHB-ER 150	MPHB-ER 175	Ⓔ
	MHHB-ER 175	MPHB-ER 175	Ⓔ
	MHHB-ER 250	MPHB-ER 250	Ⓔ
		MPHB-ER 320	Ⓔ
		MPHB-ER 350	Ⓔ
	MHHB-ER 400	MPHB-ER 400	Ⓔ
		MPHB-ER 450	Ⓔ
LX Prismatic Direct-Mount Steeler **p. 33**	MHLX 150	MPLX 175	Ⓔ
	MHLX 175	MPLX 175	Ⓔ
	MHLX 250	MPLX 250	Ⓔ
		MPLX 320	Ⓔ
		MPLX 350	Ⓔ
	MHLX 400	MPLX 400	Ⓔ
XB Prismatic Direct-Mount Benchmark **p. 34**	MHXB 150	MPXB 175	Ⓔ
	MHXB 175	MPXB 175	Ⓔ
	MHXB 250	MPXB 250	Ⓔ
		MPXB 320	Ⓔ
		MPXB 350	Ⓔ
	MHXB 400	MPXB 400	Ⓔ
VL Large Vaportight **p. 38**	MHVL 150	MPVL 175	Ⓔ
	MHVL 175	MPVL 175	Ⓔ
QC Quadra-Mark **p. 47**	MHQC 175	MPQC 175	Ⓔ
	MHQC 250	MPQC 250	Ⓔ
		MPQC 320	Ⓔ
		MPQC 350	Ⓔ
	MHQC 400	MPQC 400	Ⓔ
QP Quadra-Lume **p. 48**	MHQP 175	MPQP 175	Ⓔ
	MHQP 250	MPQP 250	Ⓔ
		MPQP 320	Ⓔ
		MPQP 350	Ⓔ
	MHQP 400	MPQP 400	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
QF Quadra-Lume w/ Flat Lens **p. 49**	MHQF 175	MPQF 175	Ⓔ
	MHQF 250	MPQF 250	Ⓔ
		MPQF 320	Ⓔ
		MPQF 350	Ⓔ
	MHQF 400	MPQF 400	Ⓔ
QD Quadra-Lume w/ Drop Lens **p. 50**	MHQD 175	MPQD 175	Ⓔ
	MHQD 250	MPQD 250	Ⓔ
		MPQD 320	Ⓔ
		MPQD 350	Ⓔ
	MHQD 400	MPQD 400	Ⓔ
CL/CS Canopy Light **p. 51**	MHCL 100	MPCL 100	
	MHCL 150	MPCL 150	
	MHCL 175	MPCL 150	
		MPCL 200	Ⓔ
	MHCL 250	MPCL 250	Ⓔ
		MPCL 320	Ⓔ
		MPCL 350	Ⓔ
	MHCL 400	MPCL 400	Ⓔ
	MHCS 150	MPCS 150	
	MHCS 175	MPCS 150	
		MPCS 200	Ⓔ
	MHCS 250	MPCS 250	Ⓔ
		MPCS 320	Ⓔ
		MPCS 350	Ⓔ
	MHCS 400	MPCS 400	Ⓔ
PR Parker **p. 52**	MHPR 70	MPPR 70	
	MHPR 100	MPPR 100	
	MHPR 150	MPPR 150	
	MHPR 175	MPPR 150	
PD Park-King **p. 53**	MHPD 50	MPPD 50	
	MHPD 70	MPPD 70	
	MHPD 100	MPPD 100	
	MHPD 150	MPPD 150	
	MHPD 175	MPPD 150	

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
SF Falcon **p. 55**	MHSF 50	MPSF 50	
	MHSF 70	MPSF 70	
	MHSF 100	MPSF 100	
	MHSF 150	MPSF 150	
	MHSF 175	MPSF 150	
	MHSF50	MPSF50	
	MHSF70	MPSF70	
	MHSF10	MPSF10	
	MHSF17	MPSF15	
XF Falcon **p. 56**	MHXF25	MPXF25	Ⓔ
		MPXF32	Ⓔ
		MPXF35	Ⓔ
	MHXF40	MPXF40	Ⓔ
MS Impact Flood Small **p. 57**	MHMS 50	MPMS50	
	MHMS 70	MPMS70	
	MHMS 10	MPMS100	
	MHMS 150	MPMS150	
	MHMS 175	MPMS150	
	MHMS70	MPMS70	
	MHMS10	MPMS10	
	MHMS17	MPMS15	
MM Impact Flood Medium **p. 58**	MHMM 150	MPMM 150	
	MHMM 175	MPMM 150	
		MPMM 200	Ⓔ
	MHMM 250	MPMM 250	Ⓔ
		MPMM 320	Ⓔ
	MHMM 400	MPMM 400	Ⓔ
	MHMM25	MPMM25	Ⓔ
		MPMM32	Ⓔ
	MHMM40	MPMM40	Ⓔ
WR Warrior **p. 59**	MHWR 100	MPWR 100	
	MHWR 150	MPWR 150	
	MHWR 175	MPWR 150	
		MPWR 200	Ⓔ
	MHWR 250	MPWR 250	Ⓔ
		MPWR 320	Ⓔ
		MPWR 350	Ⓔ
	MHWR 400	MPWR 400	Ⓔ
	XM17	XP15	
	XM25	XP25	Ⓔ
		XP32	Ⓔ
	XM40	XP40	Ⓔ
	WM17	WP15	
	WM25	WP25	Ⓔ
		WP32	Ⓔ
	WM40	WP40	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
NK Nighthawk III **p. 60**	MHNK 150	MPNK 150	
	MHNK 175	MPNK 150	
	MHNK 250	MPNK 250	Ⓔ
		MPNK 320	Ⓔ
	MHNK 400	MPNK 400	Ⓔ
	MHNK 25	MPNK 25	Ⓔ
		MPNK 32	Ⓔ
	MHNK 40	MPNK 40	Ⓔ
LP Low-Profile Floodlight **p. 61**	MHLP 250	MPLP 250	Ⓔ
		MPLP 320	Ⓔ
		MPLP 350	Ⓔ
	MHLP 400	MPLP 400	Ⓔ
IP Impact Wedge **p. 66**	MHIP-W 50	MPIP-W 50	
	MHIP-W 70	MPIP-W 70	
	MHIP-W 100	MPIP-W 100	
	MHIP-W 150	MPIP-W 150	
	MHIP-W 175	MPIP-W 150	
IP Impact Trapezoid **p. 67**	MHIP-T 50	MPIP-T 50	
	MHIP-T 70	MPIP-T 70	
	MHIP-T 100	MPIP-T 100	
	MHIP-T 150	MPIP-T 150	
	MHIP-T 175	MPIP-T 150	
IPTM Impact Trapezoid Medium **p. 68**	MHIP-TM 150	MPIP-TM 150	
	MHIP-TM 175	MPIP-TM 150	
		MPIP-TM 200	Ⓔ
	MHIP-TM 250	MPIP-TM 250	Ⓔ
		MPIP-TM 320	Ⓔ
		MPIP-TM 350	Ⓔ
	MHIP-TM 400	MPIP-TM 400	Ⓔ
	MHIPTM25	MPIPITM25	Ⓔ
		MPIPITM32	Ⓔ
	MHIPITM40	MPIPITM40	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
IP Impact Cylinder **p. 69**	MHIP-C 50	MPIP-C 50	
	MHIP-C 70	MPIP-C 70	
	MHIP-C 100	MPIP-C 100	
	MHIP-C 150	MPIP-C 150	
	MHIP-C 175	MPIP-C 150	
IPCM Impact Cylinder Medium **p. 70**	MHIP-CM 150	MPIP-CM 150	
	MHIP-CM 175	MPIP-CM 150	
		MPIP-CM 200	Ⓔ
	MHIP-CM 250	MPIP-CM 250	Ⓔ
		MPIP-CM 320	Ⓔ
		MPIP-CM 350	Ⓔ
	MHIP-CM 400	MPIP-CM 400	Ⓔ
	MHIPICM25	MPIPICM25	Ⓔ
		MPIPICM32	Ⓔ
	MHIPICM40	MPIPICM40	Ⓔ
IP Impact Quarter Sphere **p. 71**	MHIP-S 50	MPIP-S 50	
	MHIP-S 70	MPIP-S 70	
	MHIP-S 100	MPIP-S 100	
	MHIP-S 150	MPIP-S 150	
	MHIP-S 175	MPIP-S 150	
WL Wal-Pak **p. 72**	MHWL 50	MPWL 50	
	MHWL 70	MPWL 70	
	MHWL 100	MPWL 100	
	MHWL 150	MPWL 150	
	MHWL 175	MPWL 150	
		MPWL 200	Ⓔ
	MHWL 250	MPWL 250	Ⓔ
		MPWL 320	Ⓔ
		MPWL 350	Ⓔ
	MHWL 400	MPWL 400	Ⓔ
	MHPL 150	MPPL 150	
	MHPL 175	MPPL 150	
		MPPL 200	Ⓔ
	MHPL 250	MPPL 250	Ⓔ
		MPPL 320	Ⓔ
		MPPL 350	Ⓔ
	MHPL 400	MPPL 400	Ⓔ
	MHWE 150	MPWE 150	
	MHWE 175	MPWE 150	
		MPWE 200	Ⓔ
	MHWE 250	MPWE 250	Ⓔ
		MPWE 320	Ⓔ
		MPWE 350	Ⓔ
	MHWE 400	MPWE 400	Ⓔ
	PM17	PM15	
	PM25	PM25	
		PM32	
	PM40	PM40	

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
MN Mon-2 **p. 73**	MHMN 50	MPMN 50	
	MHMN 70	MPMN 70	
	MHMN 100	MPMN 100	
M4 Mon-4 **p. 74**	MHM4 70	MPM4 70	
	MHM4 100	MPM4 100	
	MHM4 150	MPM4 150	
	MHM4 175	MPM4 150	
		MPM4 200	Ⓔ
	MHM4 250	MPM4 250	Ⓔ
		MPM4 320	Ⓔ
		MPM4 350	Ⓔ
	MHM4 400	MPM4 400	Ⓔ
WM Wal-Lite **p. 75**	MHWM50G	MPWM50G	
	MHWM70G	MPWM70G	
	MHWM10G	MPWM10G	
WP Wal-Eye **p. 77**	MHWP 70	MPWP 70	
	MHWP 100	MPWP 100	
	MHWP 150	MPWP 150	
	MHWP 175	MPWP 150	
	MHWC 150	MPWC 150	
	MHWC 175	MPWC 150	
GP Glass-Pak **p. 78**	MHGP 50	MPGP 50	
	MHGP 70	MPGP 70	
	MHGP 100	MPGP 100	
	MHGP 150	MPGP 150	
	MHGP 175	MPGP 150	
GS Super Smokey **p. 79**	MHGS 50	MPGS 50	
	MHGS 70	MPGP 70	
	MHGS 100	MPGS 100	
	MHGS 150	MPGS 150	
	MHGS 175	MPGS 150	

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
VR Smokey **p. 80**	MHVR 50	MPVR 50	
	MHVR 70	MPVR 70	
	MHVR 100	MPVR 100	
MP Micro-Pak **p. 81**	MHMP 50	MPMP 50	
	MHMP 70	MPMP 70	
	MHMP 100	MPMP 100	
Wally Cutoff **p. 82**	LM70C	LP70C	
	LM10C	LP10C	
Wally **p. 82**	LM70G	LP70G	
	LM10G	LP10G	
Z-Pak Cutoff **p. 83**	MHFZ17C	MPFZ15C	
Z-Pak **p. 83**	MHFZ17	MPFZ15	

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
EL Eternalume **p. 85**	MHEL10	MPEL10	
	MHEL70	MPEL70	
TR Tribute **p. 86**	MHTR 70	MPTR 70	
	MHTR 100	MPTR 100	
	MHTR 150	MPTR 150	
	MHTR 175	MPTR 150	
		MPTR 200	Ⓔ
	MHTR 250	MPTR 250	Ⓔ
		MPTR 320	Ⓔ
		MPTR 350	Ⓔ
	MHTR 400	MPTR 400	Ⓔ
	MHTR2317	MPTR2315	
	MHTR2325	MPTR2325	Ⓔ
		MPTR2332	Ⓔ
	MHTR2340	MPTR2340	Ⓔ
PFT Tribute and Pole Combo **p. 87-88**	PFT_17_M	PFT_15_P	
	PFT_25_M	PFT_25_P	Ⓔ
		PFT_32_P	Ⓔ
	PFT_40_M	PFT_40_P	Ⓔ
RY Roadway Cobrahead **p. 89**	MHRY 50	MPRY 50	
	MHRY 70	MPRY 70	
	MHRY 100	MPRY 100	
	MHRY 150	MPRY 150	
	MHRY 175	MPRY 150	
		MPRY 200	Ⓔ
	MHRY 250	MPRY 250	Ⓔ
		MPRY 320	Ⓔ
		MPRY 350	Ⓔ
	MHRY 400	MPRY 400	Ⓔ
RS Roadway Small Cobrahead **p. 90**	MHRS 50	MPRS 50	
	MHRS 70	MPRS 70	
	MHRS 100	MPRS 100	
	MHRS 150	MPRS 150	
	MHRS 175	MPRS 150	
		MPRS 200	Ⓔ
	MHRS 250	MPRS 250	Ⓔ

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Product	Probe Start Metal Halide (MH) Cat Logic Prefix String	Pulse Start Metal Halide (MP) Cross Reference	EISA Compliant
RL Roadway Large Cutoff Cobrahead **p. 91**	MHRL 150	MPRL 150	
	MHRL 175	MPRL 150	
		MPRL 200	Ⓔ
	MHRL 250	MPRL 250	Ⓔ
		MPRL 320	Ⓔ
		MPRL 350	Ⓔ
	MHRL 400	MPRL 400	Ⓔ
RC Roadway Small Cutoff Cobrahead **p. 92**	MHRC 50	MPRC 50	
	MHRC 70	MPRC 70	
	MHRC 100	MPRC 100	
	MHRC 150	MPRC 150	
	MHRC 175	MPRC 150	
		MPRC 200	Ⓔ
	MHRC 250	MPRC 250	Ⓔ
MC High Mast **p. 93**	MHMC 400	MPMC 400	Ⓔ
MX High Mast **p. 94**	MHMX 400	MPMX 400	Ⓔ
		MPMX 450	Ⓔ
SS Steeler Worklight **p. 96**		MPSS-CW 320	Ⓔ
		MPSS-CW 350	Ⓔ
		MPSS-CW 400	Ⓔ
	MHCW40	MPCW32	Ⓔ
		MPCW40	Ⓔ

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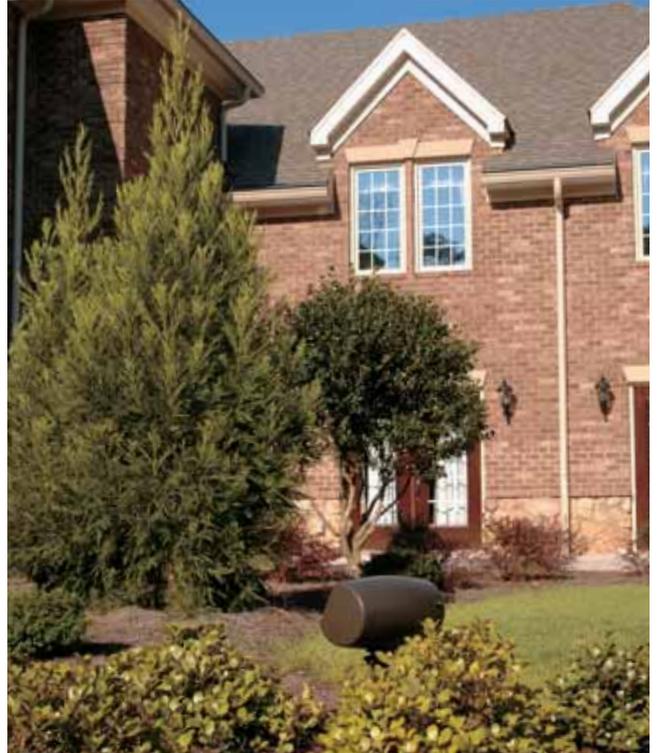
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