

Description	Page No.
Application/Selection	780
Class I Hazardous Area Lighting	
Integrally Ballasted Luminaires	
EVLP Lo-Pro™ Hazard•Gard® Series	781-791
EVM Hazard•Gard® Series	792-800
HPS, Pulse Start MH, MH, MV	
Class II Hazardous Area Lighting	
Integrally Ballasted Luminaires	
EVLP Lo-Pro™ Hazard•Gard® Series	781-791
EVM Hazard•Gard® Series	792-800
HPS, Pulse Start MH, MH, MV	

High Intensity Discharge (H.I.D.) Luminaires

Hazardous Application and Selection Quick Selector Chart

Application:

Luminaires contained in this section are for use:

- in indoor or outdoor hazardous locations
- as general area or spot lighting applications
- where longer lamp life provides desirable maintenance cost savings and return on investment through use of fewer luminaires, circuits and ancillary apparatus
- where relamping and maintenance difficulties require longer lamp life

Table 500-3(d) Identification Numbers.

Maximum Temperature		Identification Number
Deg. C	Deg. F	
450	842	T1
300	572	T2
280	536	T2A
260	500	T2B
230	446	T2C
215	419	T2D
200	392	T3
180	356	T3A
165	329	T3B
160	320	T3C
135	275	T4
120	248	T4A
100	212	T5
85	185	T6

Considerations for Selection:

Environmental:

- Make sure luminaire meets NEC/CEC requirements for area in which it will be used

Lighting levels required:

- Can luminaire accept lamp of sufficient size to yield desired light level (see Lighting Selector Guide to determine the number and location of luminaires required)

NOTE: For details on luminaire selection and methods for determining number and location luminaires, see Lighting Selector Guide, pages 665 to 689.

Quick Selector Chart

Series	NEC Compliance	Electrical Characteristics		Ballast
		Watts	Volts	
EVM <i>Hazard•Gard™</i>	Cl. I, Groups B, C, D	50, 70, 100, 150, 175, 200, 250, 320, 400 (Mogul base)	120, 208, 240, 277, 347, 480, 600, MT	High power factor, constant wattage, reactor or autotransformer integral
	Cl. II, Groups E, F, G	50, 70, 100, 150, 175 (Mogul base)	120, 208, 240, 277, 347, 480, 600, MT	
Champ® Series (see Section 3L)	Cl. II, Groups E, F, G	70, 100, 150, 175 (Mogul base)	120, 208, 240, 277, 347, 480, 600, MT	High power factor, constant wattage integral
EVLP <i>Hazard•Gard™</i>	Cl. I, Groups B, C, D	70, 100, 150, 175 (Medium base) 70, 100, 150, 175, 200, 250 (Mogul base)	120, 208, 240, 277, 347, 480, MT, TT	High power factor, constant wattage, reactor or autotransformer, integral.
	Cl. II, Groups E, F, G Cl. III	70, 100 (Medium base) 70, 100, 150, 175 (Mogul base)	120, 208, 240, 277, 347, 480, MT, TT	

EVLP Low Profile Hazard•Gard® (H.I.D.) Luminaires

Medium and Mogul Base

- Cl. I, Div. 1, Groups B (GB suffix), C, D
- Cl. I, Zone 1 Groups IIB + H2
(with suffix – GB), IIB, IIA
- Cl. II, Div. 1 Groups E, F, G; Class III,
Simultaneous Presence (175W max)
- Marine & Wet
Locations
- 3,3R, 4,4X; IP66

4L

Application:

Cooper Crouse-Hinds Low Profile Hazard•Gard® luminaires are used in:

- areas where flammable or explosive vapors or gases are present
- hazardous areas, both indoors and outdoors, where long life and low maintenance costs are desired
- petroleum refineries, chemical, petrochemical and pharmaceutical plants, oil terminals, gas plants and other heavy process industry facilities
- waste treatment facilities
- drilling platforms and other coastal and offshore hazardous areas

Features - Benefits:

- Small compact size is perfect where low mounting restrictions are a concern.
- Two start Acme threaded construction allows for easier assembly, installation and maintenance.
- Light weight copper-free aluminum housing with powdered epoxy finish for superior corrosion resistance.
- All exterior hardware is corrosion-resistant stainless steel.
- Four mounting arrangements; pendant, ceiling, wall bracket and stanchion suit any lighting layout.
- Wide range of light sources and wattages to meet specific lighting needs.
- Marine and Nema 4X construction suitable for outdoor, hose down, marine and corrosive environments.
- Integral ballast for lowest installed cost.
- High power factor (90%+) ballasts allows more fixtures per circuit.
- Uses same mounting modules as the standard Hazard•Gard® for easy retrofitting when the Lo-Pro™ is the preferred choice.
- Internally fluted glass globe reduce glare and distributes light evenly – ideal for adverse environments typical of industrial facilities.
- Krydon® construction dome and angle reflectors – won't rust, corrode, dent, chip or peel
- Now available in components – luminaire body, mounting module, guard, reflectors – allowing for easy stocking for Quick Ship requirements.

Standard Materials:

- Mounting modules, cover, ballast housing, globe holder – copper free aluminum
- Globe – heat and impact resistant glass
- Exterior hardware – stainless steel
- Reflectors (dome & angle) – Krydon™ fiberglass-reinforced polyester

* When ordering fuses for luminaires, option S658, you must specify the operating voltage. S658 cannot be ordered with /MT in the catalog number.



Standard Finishes:

- Copper-free aluminum – *Corro-free™*
powdered epoxy
- Krydon – *white*
 - Stainless steel guard

Ratings (Electrical/Size):

- Sources/wattage:
- Medium Base 70-150W HPS, 70-175W MH
 - Mogul Base 70-150W HPS, 70-250W MH
- Voltages:
- Medium & Mogul H.I.D.
 - 120V 60Hz
 - Multi-tap (120, 208, 240, 277V 60Hz)
 - Tri-tap (120, 277, 347V 60Hz)
 - 480V 60Hz
 - Other voltages – consult Cooper Crouse-Hinds
- Conduit entries:
- ¾", 1" NPT – pendant, wall bracket, ceiling
 - 1¼" NPT – stanchion

Options:

Description	Suffix to be added to Cat. #
Group B suitability	GB
BallastGard (HPS only)	BG
Instant restrike (Mogul Base only)	IR
70-150W LX HPS	
Cannot use with BG Option	
Fused	S658*
Quartz auxiliary lighting (Mogul Base only)	QTZ
Cannot use with IR option	
Uses 100W single ended double contract lamp	
Quartz lamp not included	
Factory assembled with lamps	FA

Accessories:

Description	Cat. #
Dome reflector	RD739
Angle reflector	RA739

Certification & Compliances:

- NEC and CEC:
 - Class I, Division 1, Groups B (with suffix GB), C, D – All Wattages
 - Class I, Zone 1 Groups IIB + H2 (with suffix GB), IIB, IIA – All Wattages
 - Class II, Class III & Simultaneous Presence – (medium base 100 watt max., Mogul Base 175 watt max.)
- UL Standards:
 - 844, Hazardous (Classified) Locations
 - 1598 Luminaires
 - 1598A Marine Locations
- CSA Standards
 - C22.2 No. 137

4L
H.I.D.
Fixtures

4L

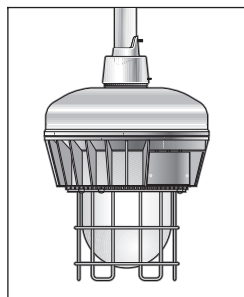
EVLP Low Profile Hazard•Gard®

Medium Base

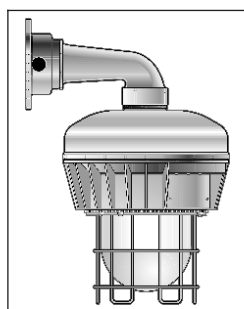
- Cl. I, Div. 1, Groups B(GB suffix),C,D
- Cl. I, Zone 1 Groups IIB + H2 (With Suffix GB), IIB, IIA
- Cl. II, Div. 1, Groups E, F, G; Class III, Simultaneous Presence (100W max)

- Marine & Wet Locations
- 3, 3R, 4, 4X; IP66

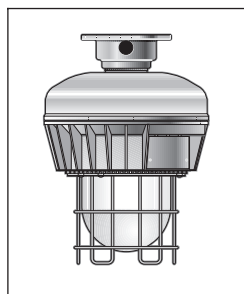
Medium Base Ordering Information



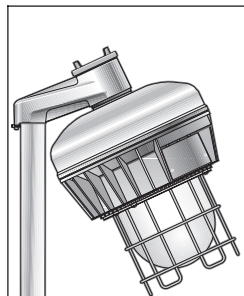
Pendant Mount



†Wall Bracket Mount



†Ceiling Mount



Stanchion Mount

†Ceiling and bracket mounts have 4 hubs: 3 are plugged.

						Luminaire Body Less Mounting Module & Guard
		Pendant	Wall Brckt	Ceiling	Stanchion	
Watt	Hub Size	With Guard Catalog #	With Guard Catalog #	With Guard Catalog #	With Guard Catalog #	Catalog #
High Pressure Sodium						
70W	¾	EVLPA142071	EVLBPBX142071	EVLPCX142071		EVLPA14070
	1	EVLPA143071	EVLBPBX143071	EVLPCX143071		
	1¼				EVLJP144071	
100W	¾	EVLPA142101	EVLBPBX142101	EVLPCX142101		EVLPA14100
	1	EVLPA143101	EVLBPBX143101	EVLPCX143101		
	1¼				EVLJP144101	
150W	¾	EVLPA142151	EVLBPBX142151	EVLPCX142150		EVLPA14151
	1	EVLPA143151	EVLBPBX143151	EVLPCX143151		
	1¼				EVLJP144151	
Pulse Start Metal Halide						
150W	¾	EVLPA192151-S828	EVLBPBX192151-S828	EVLPCX192151-S828		EVLPA19150-S828
	1	EVLPA193151-S828	EVLBPBX193151-S828	EVLPCX193151-S828		
	1¼				EVLJP194151-S828	
175W	¾	EVLPA192171-S828	EVLBPBX192171-S828	EVLPCX192171-S828		EVLPA19175-S828
	1	EVLPA193171-S828	EVLBPBX193171-S828	EVLPCX193171-S828		
	1¼				EVLJP194171-S828	
Metal Halide						
70W	¾	EVLPA192071	EVLBPBX192071	EVLPCX192071		EVLPA19070
	1	EVLPA193071	EVLBPBX193071	EVLPCX193071		
	1¼				EVLJP194071	
100W	¾	EVLPA192101	EVLBPBX192101	EVLPCX192101		EVLPA19100
	1	EVLPA193101	EVLBPBX193101	EVLPCX193101		
	1¼				EVLJP194101	
175W	¾	EVLPA192171	EVLBPBX192171	EVLPCX192171		EVLPA19175
	1	EVLPA193171	EVLBPBX193171	EVLPCX193171		
	1¼				EVLJP194171	

Complete Catalog Number as follows:

1.		Standard Voltage Ballasts – 60HZ NEC/UL				CEC/CSA (cUL)		
Voltage Suffix		Multi-tap /MT		120V /120	480V /480	Tri-tap /TT		120V /120
Optional Voltage Ballasts– 50 Or 60HZ								
*CEC/CSA (cUL)– CWI Isolated Ballasts					Export			
Voltage Suffix	208V CWI /208CWI	240V CWI /240CWI	600V CWI /600CWI	220V 60HZ /220	220V 50HZ /220 50	230V 50HZ /230 50	240V 50HZ /240 50	

2. 150W HPS Luminaires Only
- 55V lamps – add suffix "LX"
 - 100V lamps – add suffix "CE"

* CWI Isolated Ballasts are only available for high pressure sodium and 175W metal halide (non pulse start) luminaires.

H.I.D.
4L Fixtures

EVLP Low Profile Hazard•Gard®

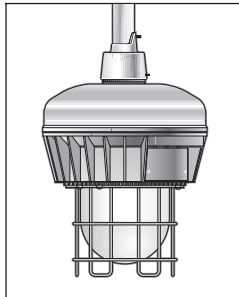
Mogul Base

- Cl. I, Div 1, Groups B (GB suffix), C, D
- Cl. I, Zone 1 Groups IIB + H2 (with suffix GB), IIB, IIA
- Cl. II, Div. 1, Groups E, F, G; Class III, Simultaneous Presence (175W max)

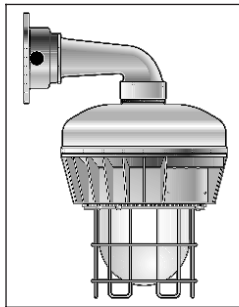
- Marine & Wet Locations
- 3, 3R, 4, 4X; IP66

4L

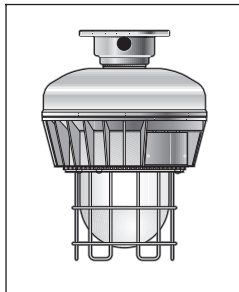
Mogul Base Ordering Information



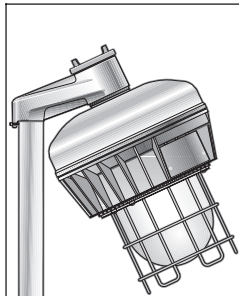
Pendant Mount



†Wall Bracket Mount



†Ceiling Mount



Stanchion Mount

†Ceiling and wall bracket mounts have 4 hubs: 3 are plugged.

Luminaire Body Less Mounting Module & Guard					
	Pendant	Wall Bracket	Ceiling	Stanchion	
Watt	Hub Size	With Guard Catalog #	With Guard Catalog #	With Guard Catalog #	Catalog #
High Pressure Sodium					
70W	¾ 1 1¼	EVLPA042071 EVLPA043071	EVLPBX042071 EVLPBX043071	EVLPCX042071 EVLPCX043071 EVLJP044071	EVLPA04070
100W	¾ 1 1¼	EVLPA042101 EVLPA043101	EVLPBX042101 EVLPBX043101	EVLPCX042101 EVLPCX043101 EVLJP044101	EVLPA04100
150W	¾ 1 1¼	EVLPA042151 EVLPA043151	EVLPBX042151 EVLPBX043151	EVLPCX042151 EVLPCX043151 EVLJP044151	EVLPA04150
Pulse Start Metal Halide					
150W	¾ 1 1¼	EVLPA092151S828 EVLPA093151S828	EVLPBX092151S828 EVLPBX093151S828	EVLPCX092151S828 EVLPCX093151S828 EVLJP094151S828	EVLPA09150S828
175W	¾ 1 1¼	EVLPA092171S828 EVLPA093171S828	EVLPBX092171S828 EVLPBX093171S828	EVLPCX092171S828 EVLPCX093171S828 EVLJP094171S828	EVLPA09170S828
200W	¾ 1 1¼	EVLPA092201S828 EVLPA093201S828	EVLPBX092201S828 EVLPBX093201S828	EVLPCX092201S828 EVLPCX093201S828 EVLJP094201S828	EVLPA09201S828
250W	¾ 1 1¼	EVLPA092251S828 EVLPA093251S828	EVLPBX092251S828 EVLPBX093251S828	EVLPCX092251S828 EVLPCX093251S828 EVLJP094251S828	EVLPA09250S828
Metal Halide					
70W	¾ 1 1¼	EVLPA092071 EVLPA093071	EVLPBX092071 EVLPBX093071	EVLPCX092071 EVLPCX093071 EVLJP094071	EVLPA09070
100W	¾ 1 1¼	EVLPA092101 EVLPA093101	EVLPBX092101 EVLPBX093101	EVLPCX092101 EVLPCX093101 EVLJP094101	EVLPA09100
175W	¾ 1 1¼	EVLPA092171 EVLPA093171	EVLPBX092171 EVLPBX093171	EVLPCX092171 EVLPCX093171 EVLJP094171	EVLPA09170
250W	¾ 1 1¼	EVLPA092251 EVLPA093251	EVLPBX092251 EVLPBX093251	EVLPCX092251 EVLPCX093251 EVLJP094251	EVLPA09250

Complete Catalog Number as follows:

1.	Standard Voltage Ballasts – 60HZ NEC/UL				CEC/CSA (cUL)		
	Voltage Suffix	Multi-tap /MT	120V /120	480V /480	Tri-tap /TT	120V /120	
	Optional Voltage Ballasts– 50 Or 60HZ						
	*CEC/CSA (cUL)– CWI Isolated Ballasts			Export			
Voltage Suffix	208V CWI /208CWI	240V CWI /240CWI	600V CWI /600CWI	220V 60HZ /220	220V 50HZ /220 50	230V 50HZ /230 50	240V 50HZ /240 50

2. 150W HPS Luminaires Only
- 55V lamps – add suffix "LX"
 - 100V lamps – add suffix "CE"
- Example: **EVLPA043151/MT-LX**

* CWI Isolated Ballasts are only available for high pressure sodium and 175W–250W metal halide (non pulse start) luminaires.

4L
H.I.D.
Fixtures

EVLP Luminaires are available in components. A complete luminaire consists of:

- Mounting Module
- Luminaire Body
- Guard, Dome Reflector or Angle Reflector

Mounting Modules

Type	Conduit	Catalog Number
Pendant	¾	EVMP2
	1	EVMP3
Ceiling & Wall Box	¾	EV22
	1	EV33
Wall Bracket Arm	Use EV22 or EV33 box with EV87	EV87
Stanchion	1¼	EVMJ4
Guards		
Medium		EV511
Mogul		EV512
Reflectors		
Dome		RD739
Angle		RA739

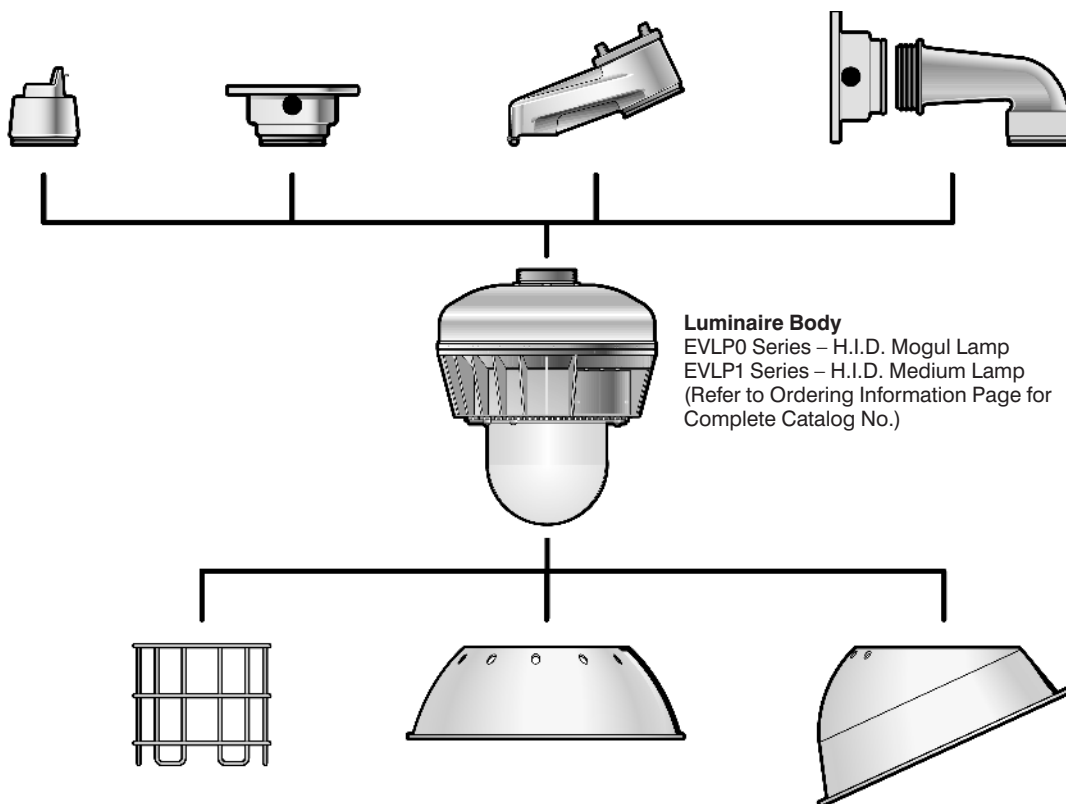
Pendant
EVMP2
EVMP3

Ceiling
EV22
EV33

Stanchion
EVMJ4

Ceiling
EV22
EV33

Wall Bracket
EV87 & EV22 or EV33



Luminaire Body
EVLP0 Series – H.I.D. Mogul Lamp
EVLP1 Series – H.I.D. Medium Lamp
(Refer to Ordering Information Page for Complete Catalog No.)

Guards
EV511
EV512

Dome Reflector
RD739

Angle Reflector
RA739

Medium Base Lamp Luminaires

Maximum Ambient	Watts	Class I, Group B (w/GB suffix) Groups C, D			Class II, Groups E, F, G Class III Simultaneous Presence 40°C	Supply Wire °C
		40°C	55°C	65°C		
High Pressure Sodium	70W	T5	T4A	T4A	T4A	90°C
	100W	T4A	T4A	T4	T4	90°C
	150W	T4	T3C	—	—	90°C
Metal Halide (including pulse start)	70W	T5	T4A	T4A	T4	85°C
	100W	T3C	T3C	—	—	90°C
	150W	T3C	T3B	—	—	90°C
	175W	T3C	T3B	—	—	90°C

Mogul Base Lamp Luminaires

Maximum Ambient	Watts	Class I, Group B (w/GB suffix) Groups C, D			Class II, Groups E, F, G Class III Simultaneous Presence 40°C	Supply Wire °C
		40°C	55°C	65°C		
High Pressure Sodium	70W	T6	T5	T5	T5	90°C
	100W	T5	T4A	—	T4A	90°C
	150W	T4A	T4	—	T4	90°C
Metal Halide (including pulse start)	70W	T6	T5	T5	T5	85°C
	100W	T5	T4A	T4A	T4A	90°C
	150W	T4	T3C	—	T3C	90°C
	175W	T4	T3C	—	T3C	90°C
	200W	T3C	—	—	—	90°C
	250W	T3C	—	—	—	90°C

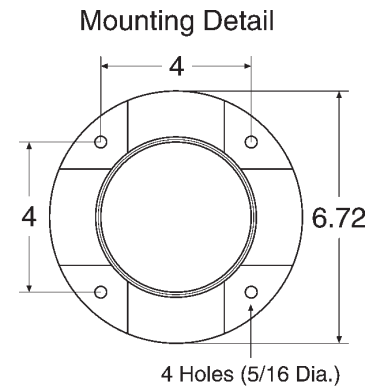
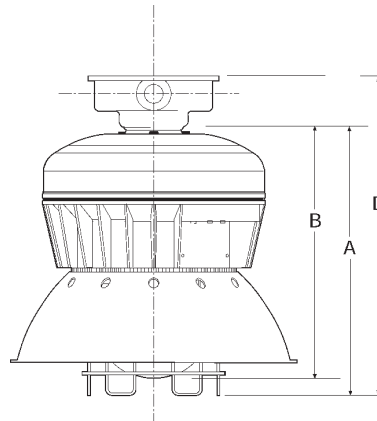
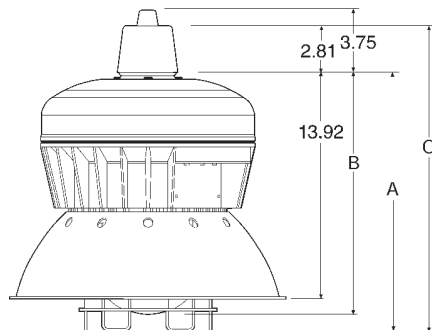
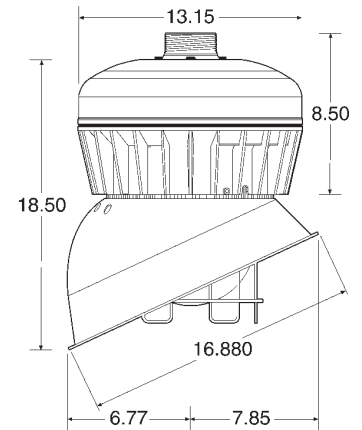
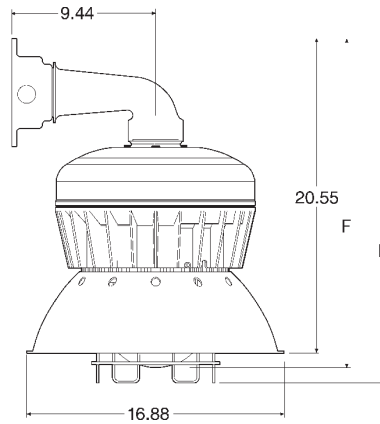
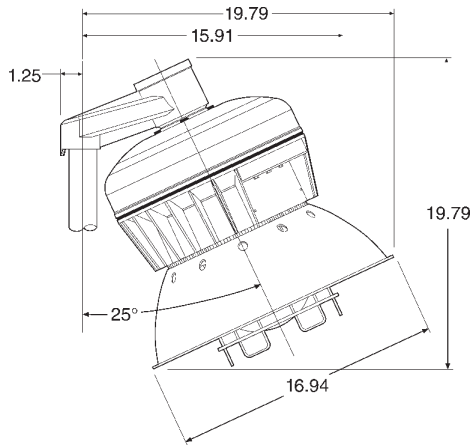
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EVLP Low Profile Hazard•Gard®

Dimensions and Weights

Dimensions (inches):

	A	B	C	D	E	F
Medium Base	13.92	12.73	16.50	16.71	20.59	19.36
Mogul Base	15.69	14.69	18.25	18.46	22.34	21.30



Wall & Ceiling Mount

Weights (lbs)

Source	Watts	Luminaire w/guard	
		Medium	Mogul
High Pressure Sodium	70	34	36.5
	100	36	38.5
	150	36.5	39
Metal Halide	70	33.5	36
	100	34.5	37
	150	36	38.5
	175	36	38.5
	200	—	40.5
	250	—	40.5
Add Mounting Modules:			
Pendant		1	1
Ceiling		2	2
Bracket		4.5	4.5
Stanchion		2.5	2.5
Add For Reflectors			
RA739		1	1
RD739		1	1
Deduct for Wire Guard		0.5	0.5

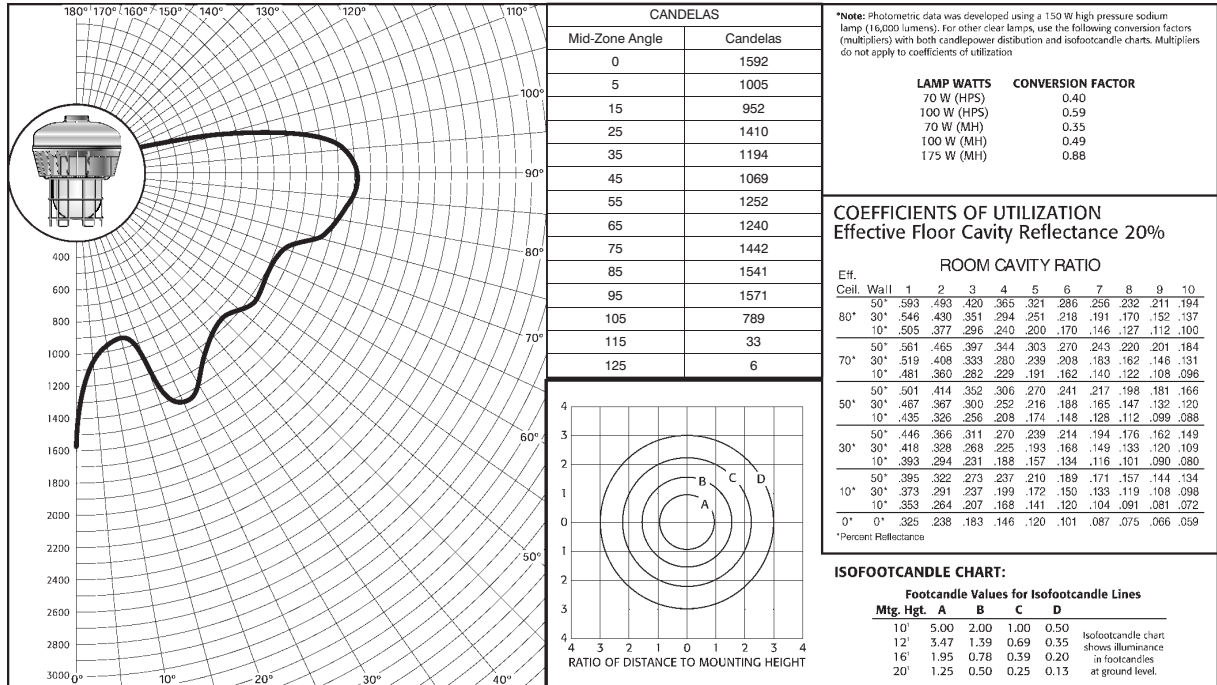
EVLP Low Profile Hazard•Gard® Medium Base

Photometric Data

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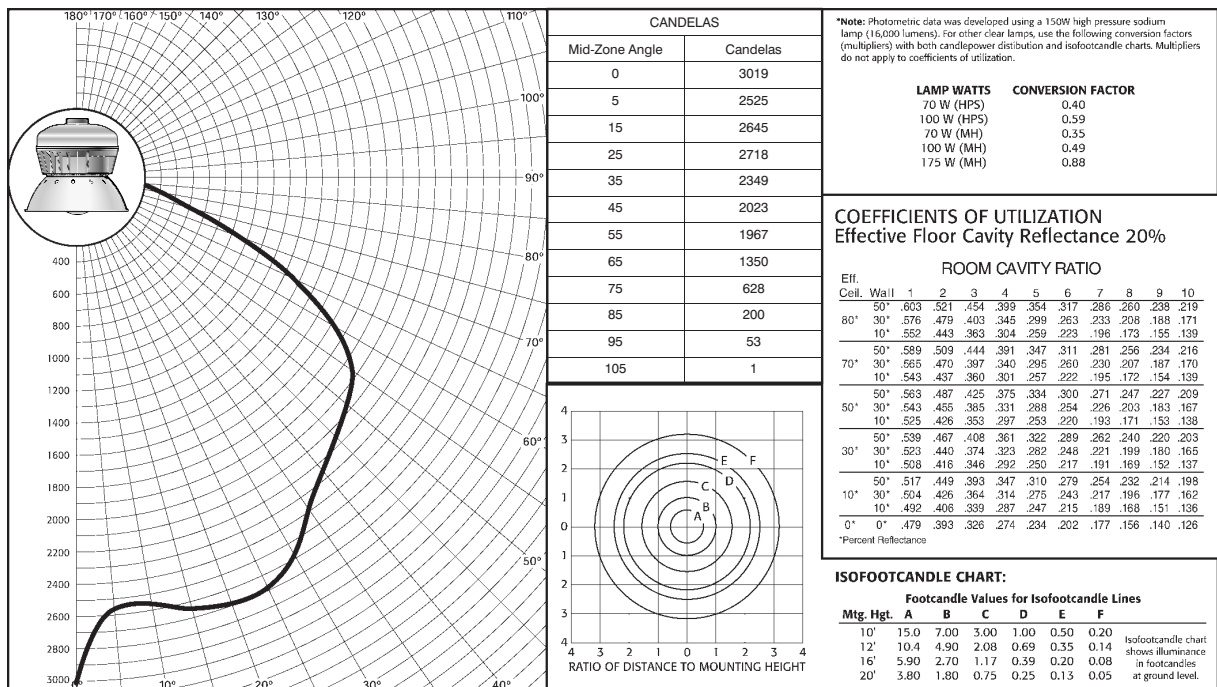
Medium Base

Luminaire with Globe and Guard
EVLP143151 Lamp: 150W/B17 High Pressure Sodium (HPS)



Medium Base

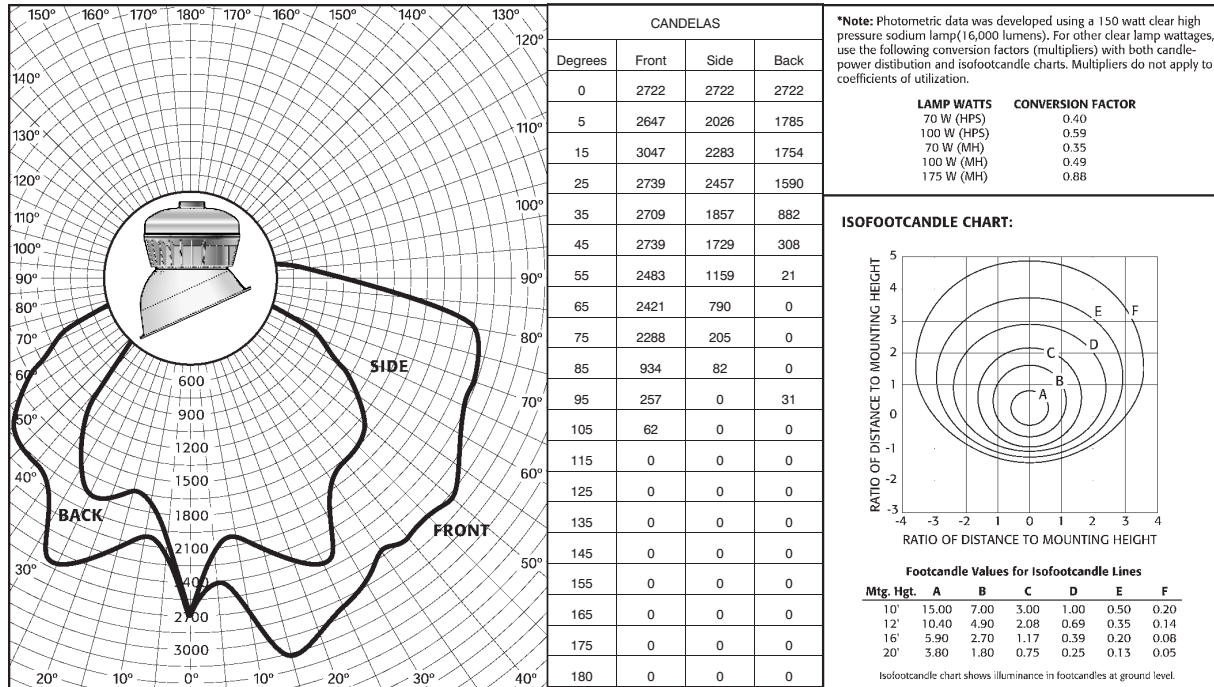
Luminaire with Globe and Dome Reflector (Less Guard)
EVLP143150RD Lamp: 150W/B17 High Pressure Sodium (HPS)



EVLP Low Profile Hazard•Gard® Medium and Mogul Base

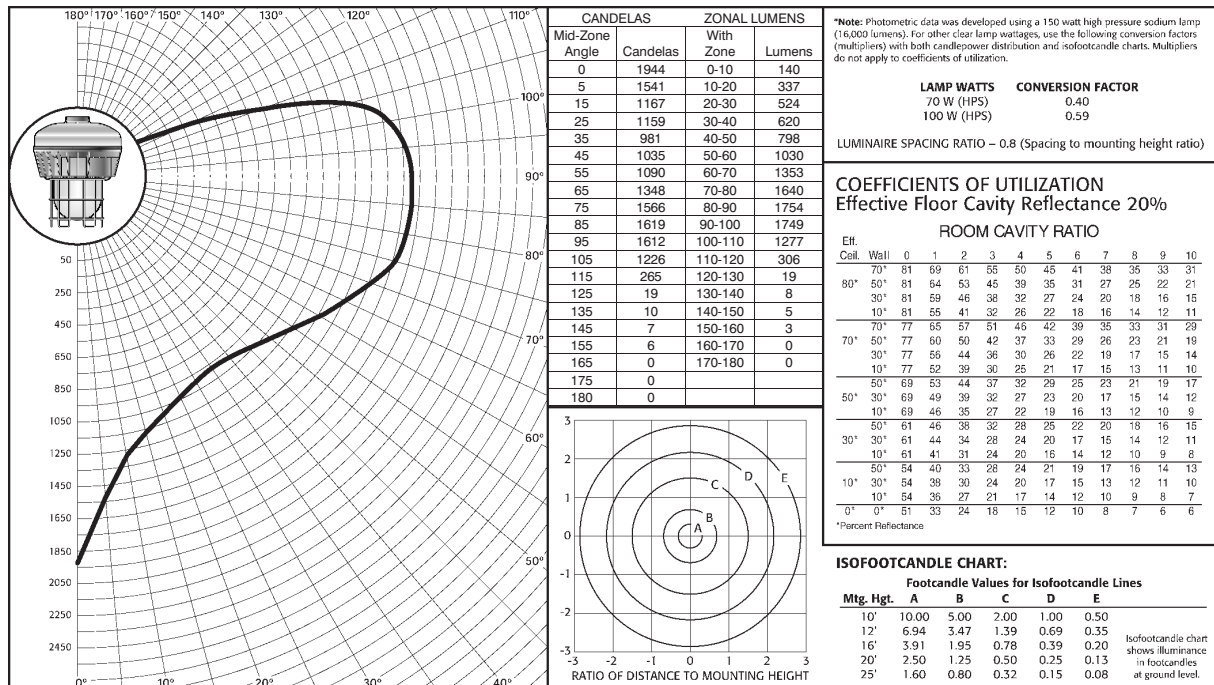
Medium Base

Luminaire with Globe and 30° Angle Reflector (Less Guard)
EVLPA143150RA Lamp: 150W/B17 High Pressure Sodium (HPS)



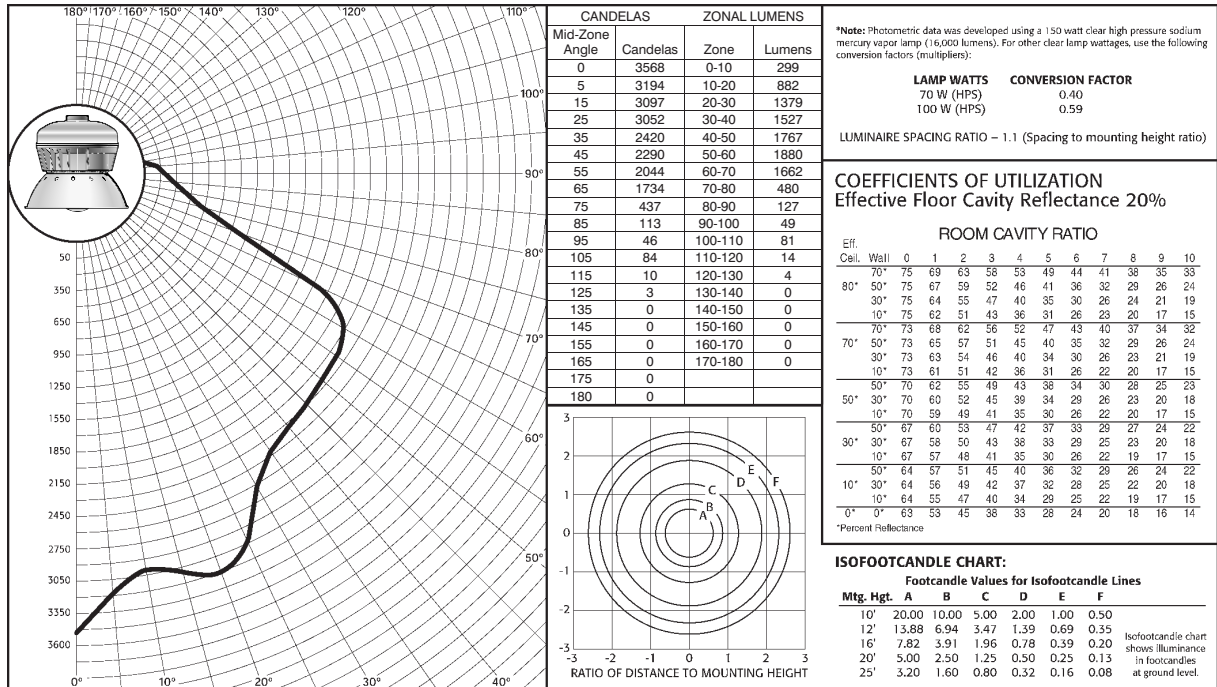
Mogul Base

Luminaire with Globe and Guard
EVLPA043151 Lamp: 150W/E23½ High Pressure Sodium (HPS)



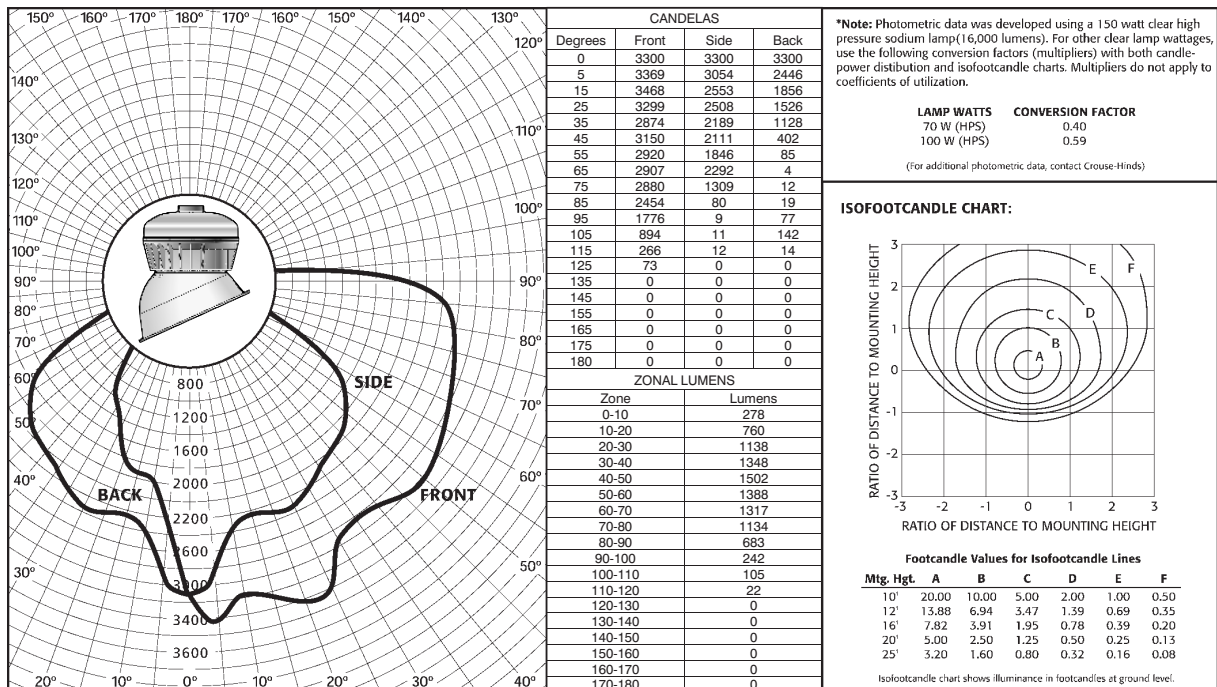
Mogul Base

Luminaire with Globe and Dome Reflector (Less Guard)
EVLP A043150RD Lamp: 150W/E23½ High Pressure Sodium (HPS)



Mogul Base

Luminaire with Globe and 30° Angle Reflector (Less Guard)
EVLP A043150RA Lamp: 150W/E23½ High Pressure Sodium (HPS)

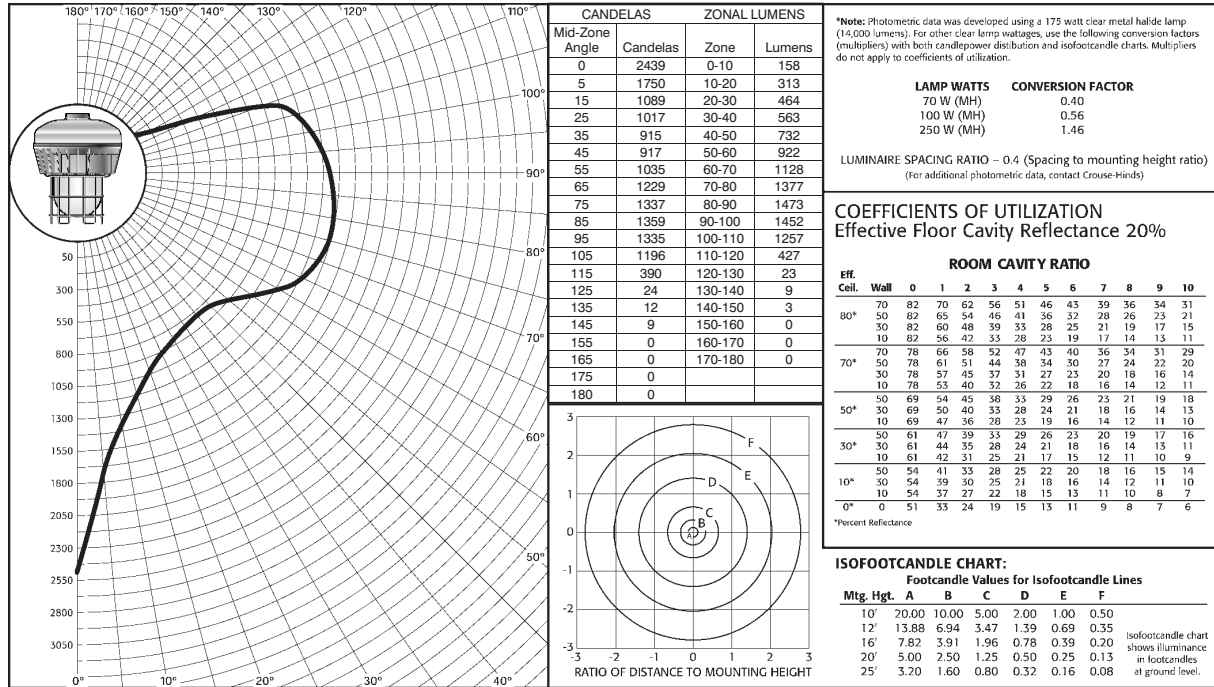


EVLP Low Profile Hazard•Gard® Mogul Base

Mogul Base

Luminaire with Globe and Guard

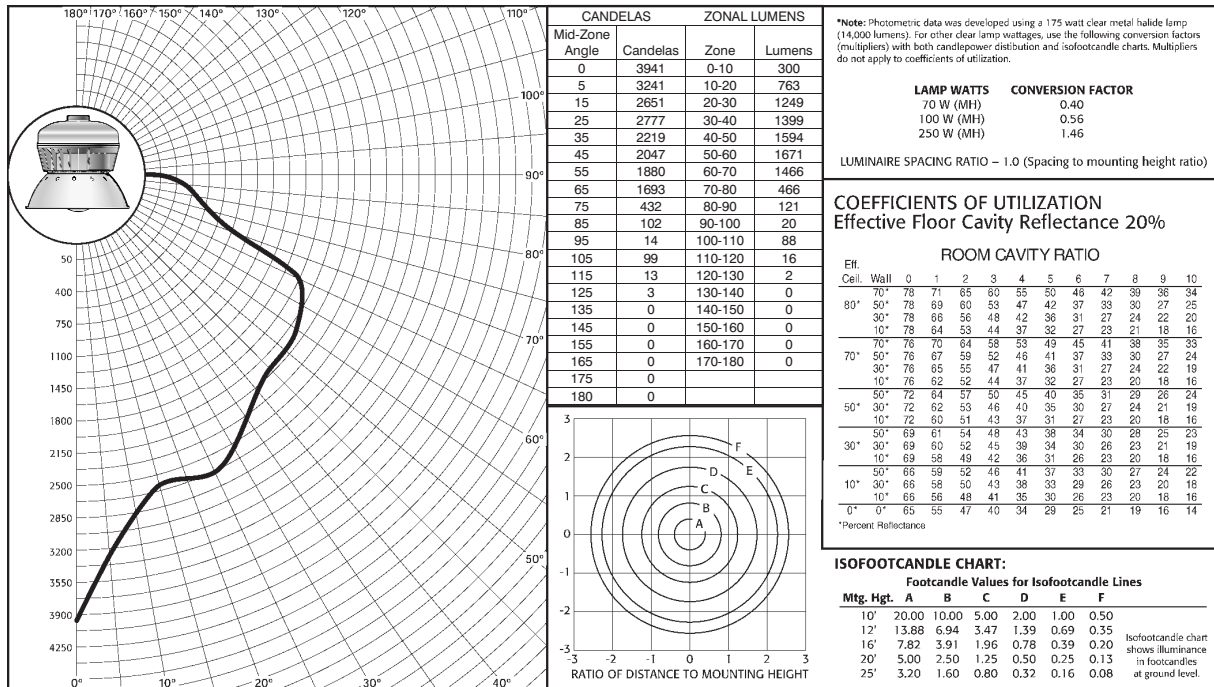
EVLP093171 Lamp: 175W/ED28 Metal Halide (MH)



Mogul Base

Luminaire with Globe and Dome Reflector (Less Guard)

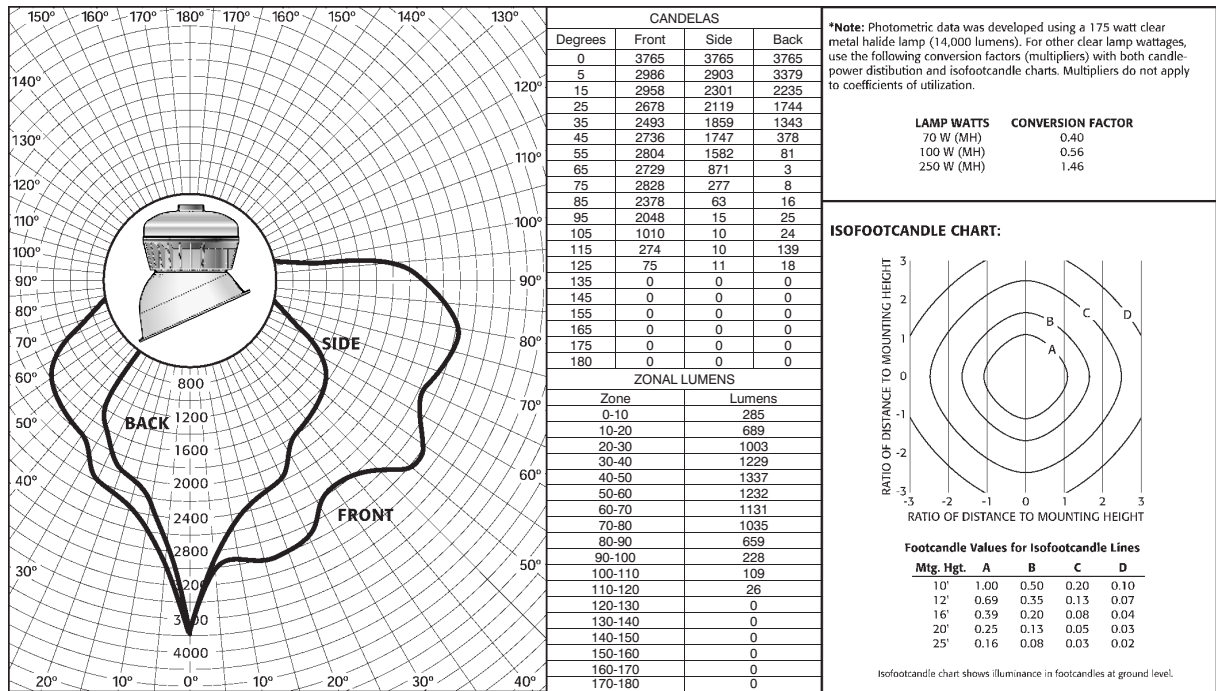
EVLP093170RD Lamp: 175W/ED28 Metal Halide (MH)



Mogul Base

Mogul Base

Luminaire with Globe and 30° Angle Reflector (Less Guard)
EVLP A093170RA Lamp: 175W/ED28 Metal Halide (MH)



EVM Hazard•Gard® H.I.D. Luminaires

Mogul Base

Factory Sealed (Groups C.D)

- Cl. I, Div. 1 Groups B (GB suffix), C, D
- Cl. I, Zone 1 Groups IIB + H2 (with suffix – GB), IIB IIA
- Cl. II, Div. 1, Groups E, F, G; Class III, Simultaneous Presence (175W max)
- Paint Spray (100W max)
- Marine & Wet Locations
- 3, 3R, 4, 4X; IP66

Application:

Hazard•Gard® luminaires are used in:

- heavy process industries where flammable or explosive vapors, gases or combustible dusts are present
- hazardous areas, both indoors and outdoors where long life and low maintenance costs are desired
- petroleum refineries, chemical, petrochemical and other heavy process industry facilities
- paint spray facilities
- hazardous locations requiring elevated ambient capability

Features:

- Luminaire is factory wired; power is fed through “wireless” connection block which serves as a mechanical seal between conduit and ballast compartments, eliminating the need for an external, field installed seal. The result is fast, easy installation.
- Dome and 30° angle reflectors made of *Krydon*® material – won’t rust, corrode, dent, chip or peel (order separately – page 796).
- High bay reflectors of Alzak® aluminum for high wattage applications
- Internally fluted glass globes reduce glare and provide comfortable viewing light.
- Wide range of light sources and wattages to meet specific lighting needs – 50 – 400W high pressure sodium (HPS); 100 – 400W mercury vapor (MV); 70 – 400W metal halide (MH).
- High power factor (90%+) ballasts reduce power costs – allow more luminaires per circuit.
- Four mounting arrangements to suit any lighting layout – pendant, ceiling, wall bracket and stanchion.
- Paint spray booth suitability on 50 to 100 watt luminaires provides efficient, economical H.I.D. lighting for areas where paint residue may accumulate on luminaires.
- Elevated ambient capability permits reliable operation at high ambient temperature. Selected luminaires are suitable for ambient temperature up to 75°C.
- Integral ballasts – separate ballasts are not required. Lowest installed cost.
- Factory sealed, porcelain, mogul base socket.

Standard Materials:

- Mounting modules, cover, ballast housing, guard, globe ring – copper-free aluminum
- Globe – heat and impact resistant glass
- Exterior hardware – stainless steel
- Lamp socket – porcelain with stainless steel screw shell
- Reflectors – dome and angle: *Krydon* fiberglass-reinforced polyester material; high bay: Alzak aluminum

Alzak is a registered trademark of ALCOA.

* IR and BG options cannot be used together.

** Can be used with BG option.

* CSA Certified luminaires are not available with multi-tap ballast or S658 fuse option.

† When ordering fuses for luminaires, option S658, you must specify the operating voltage. S658 cannot be ordered with /MT in the catalog number.



Standard Finishes:

- Copper-free aluminum – epoxy powder coat
- *Krydon* – high reflectance white
- Alzak – natural (anodized)

Options:

- Fused – to protect ballast and capacitor against abnormal line conditions. Add suffix **S658** to Cat. No.★†
- Instant restrike – enables a hot HPS lamp to immediately restrike after a momentary loss of arc due to voltage fluctuation or power outage. It has no effect on the warm-up period of a cold lamp (50-150W LX HPS only). Add suffix **IR** to Cat. No.*
- Quartz auxiliary lighting – quartz lamp comes to full brightness instantly upon restoration of power to provide emergency illumination during the normal restrike period of the H.I.D. lamp (for use with ED28 lamp). Add suffix **QTZ** to Cat. No.** (Note: Quartz lamp not included; use 100 W single-ended lamp – Q100DC, Q100CL/DC, or 100Q/CL/DC.)
- Ballast•Gard – to eliminate the normally continuous high voltage pulsing in the event of a cycling lamp, inoperative lamp, or no lamp in the socket extending the life of the ballast. (For use with 50-400W HPS lamps.) Add suffix **BG** to Cat. No.*
- Group B suitability – luminaires suitable for use in Class I, Group B hazardous (classified) locations. Add suffix **GB** to Cat. No.

- Hazard•Gard® supplied with trunnion arm for floodlighting applications. For use on pendant mount luminaires only. Add suffix **S812** to Cat. No. – See Floodlight Section

Size Ranges:

- ¾", 1" and 1¼" hubs (see ordering information – pages 793 to 795)

Electrical Rating Ranges:

- 120, 208, 240, 277, 347, 480, 600, multi-tap★.
- 50 to 400 watts

Certifications and Compliances:

- NEC and CEC:
Class I, Division 1, Groups B (with suffix GB), C, D
Class I, Zone 1, Groups IIB + H2 (with suffix GB), IIB, IIA
100W max – Paint Spray Suitability
175W max – Class II, Class III, + Simultaneous Presence
- UL Standards:
844 Hazardous (Classified) Locations
1598 Luminaires
1598A Marine Locations
- CSA Standards:
C22.2 No. 137

50-400W EVM
Hazard•Gard® H.I.D.
Luminaires
Mogul Base
Factory Sealed (Groups C,D)

- Cl. I, Div. 1, Groups B(GB suffix),C,D
- Cl. I, Zone 1 Groups IIB + H2 (with suffix GB), IIB, IIA
- Cl. II, Div. 1, Groups E,F,G; Class III, Simultaneous Presence (175W max)

- Paint Spray (100W max)
- Marine & Wet Locations
- 3,3R,4,4X; IP66

4L



Watts	Hub Size	Pendant Luminaires		Wall Bracket Luminaires		Ceiling Luminaires		Stanchion Luminaires (25°)	
		Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #
High Pressure Sodium									
50	¾	EVMA42050	EVMA42051	EVMBX42050	EVMBX42051	EVMCX42050	EVMCX42051	EVMJ44050	EVMJ44051
	1	EVMA43050	EVMA43051	EVMBX43050	EVMBX43051	EVMCX43050	EVMCX43051		
	1¼								
70	¾	EVMA42070	EVMA42071	EVMBX42070	EVMBX42071	EVMCX42070	EVMCX42071	EVMJ44070	EVMJ44071
	1	EVMA43070	EVMA43071	EVMBX43070	EVMBX43071	EVMCX43070	EVMCX43071		
	1¼								
100	¾	EVMA42100	EVMA42101	EVMBX42100	EVMBX42101	EVMCX42100	EVMCX42101	EVMJ44100	EVMJ44101
	1	EVMA43100	EVMA43101	EVMBX43100	EVMBX43101	EVMCX43100	EVMCX43101		
	1¼								
150	¾	EVMA42150	EVMA42151	EVMBX42150	EVMBX42151	EVMCX42150	EVMCX42151	EVMJ44150	EVMJ44151
	1	EVMA43150	EVMA43151	EVMBX43150	EVMBX43151	EVMCX43150	EVMCX43151		
	1¼								
200	¾	EVMA42200	EVMA42201	EVMBX42200	EVMBX42201	EVMCX42200	EVMCX42201	EVMJ44200	EVMJ44201
	1	EVMA43200	EVMA43201	EVMBX43200	EVMBX43201	EVMCX43200	EVMCX43201		
	1¼								
250	¾	EVMA42250	EVMA42251	EVMBX42250	EVMBX42251	EVMCX42250	EVMCX42251	EVMJ44250	EVMJ44251
	1	EVMA43250	EVMA43251	EVMBX43250	EVMBX43251	EVMCX43250	EVMCX43251		
	1¼								
400	¾	EVMA42400	EVMA42401	EVMBX42400	EVMBX42401	EVMCX42400	EVMCX42401	EVMJ44400	EVMJ44401
	1	EVMA43400	EVMA43401	EVMBX43400	EVMBX43401	EVMCX43400	EVMCX43401		
	1¼								

Complete the Catalog Number by Adding Voltage and Options Suffixes as Follows:

1. Standard Voltage Ballasts – 60HZ								
NEC/UL					CEC/CSA (cUL)			
Voltage Suffix	Multi-tap /MT	120V /120	480V /480		Tri-tap /TT	120V /120		
Optional Voltage Ballasts – 50 or 60HZ								
CEC/CSA (cUL)– CWI Isolated Ballasts					Export			
Voltage Suffix	208V CWI /208CWI	240V CWI /240CWI	480V CWI /480CWI	600V CWI /600CWI	220V 60HZ /220	220V 50HZ /220 50	230V 50HZ /230 50	240V 50HZ /240 50

2. 150W HPS Luminaires, 55V Lamps is Standard, for 100V lamps - Add suffix "CE"
3. Options - Add the Required Options Suffixes from page 792, in Alpha-numeric Order

4L
H.I.D.
Fixtures

4L

70-400W EVM Hazard•Gard® H.I.D. Luminaires Factory Sealed (Groups C,D)

- Cl. I, Div. 1, Groups B (GB suffix), C, D
- Cl. I, Zone 1 Groups IIB + H2
(with suffix GB), IIB, IIA
- Cl. II, Div. 1, Groups E, F, G; Class III,
Simultaneous Presence (175W max)

- Paint Spray (100W max)
- Marine & Wet Locations
- 3, 3R, 4, 4X; IP66



Watts	Hub Size	Pendant Luminaires		Wall Bracket Luminaires		Ceiling Luminaires		Stanchion Luminaires (25°)	
		Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #
Pulse Start Metal Halide									
150	¾	EVMA92150-S828	EVMA92151-S828	EVMBX92150-S828	EVMBX92151-S828	EVMCX92150-S828	EVMCX92151-S828	EVMJ94150-S828	EVMJ94151-S828
	1	EVMA93150-S828	EVMA93151-S828	EVMBX93150-S828	EVMBX93151-S828	EVMCX93150-S828	EVMCX93151-S828		
	1¼								
175	¾	EVMA92170-S828	EVMA921701-S828	EVMBX92170-S828	EVMBX921701-S828	EVMCX92170-S828	EVMCX921701-S828	EVMJ94170-S828	EVMJ94171-S828
	1	EVMA93170-S828	EVMA931701-S828	EVMBX93170-S828	EVMBX931701-S828	EVMCX93170-S828	EVMCX931701-S828		
	1¼								
200	¾	EVMA92200-S828	EVMA92201-S828	EVMBX92200-S828	EVMBX92201-S828	EVMCX92200-S828	EVMCX92201-S828	EVMJ94200-S828	EVMJ94201-S828
	1	EVMA93200-S828	EVMA93201-S828	EVMBX93200-S828	EVMBX93201-S828	EVMCX93200-S828	EVMCX93201-S828		
	1¼								
250	¾	EVMA92250-S828	EVMA92251-S828	EVMBX92250-S828	EVMBX92251-S828	EVMCX92250-S828	EVMCX92251-S828	EVMJ94250-S828	EVMJ94251-S828
	1	EVMA93250-S828	EVMA93251-S828	EVMBX93250-S828	EVMBX93251-S828	EVMCX93250-S828	EVMCX93251-S828		
	1¼								
320	¾	EVMA92320-S828	EVMA92321-S828	EVMBX92320-S828	EVMBX92321-S828	EVMCX92320-S828	EVMCX92321-S828	EVMJ94320-S828	EVMJ94321-S828
	1	EVMA93320-S828	EVMA93321-S828	EVMBX93320-S828	EVMBX93321-S828	EVMCX93320-S828	EVMCX93321-S828		
	1¼								
400	¾	EVMA92400-S828	EVMA92401-S828	EVMBX92400-S828	EVMBX92401-S828	EVMCX92400-S828	EVMCX92401-S828	EVMJ94400-S828	EVMJ94401-S828
	1	EVMA93400-S828	EVMA93401-S828	EVMBX93400-S828	EVMBX93401-S828	EVMCX93400-S828	EVMCX93401-S828		
	1¼								
Metal Halide									
70	¾	EVMA92070	EVMA92071	EVMBX92070	EVMBX92071	EVMCX92070	EVMCX92071	EVMJ94070	EVMJ94071
	1	EVMA93070	EVMA93071	EVMBX93070	EVMBX93071	EVMCX93070	EVMCX93071		
	1¼								
100	¾	EVMA92100	EVMA92101	EVMBX92100	EVMBX92101	EVMCX92100	EVMCX92101	EVMJ94100	EVMJ94101
	1	EVMA93100	EVMA93101	EVMBX93100	EVMBX93101	EVMCX93100	EVMCX93101		
	1¼								
175	¾	EVMA92170	EVMA92171	EVMBX92170	EVMBX92171	EVMCX92170	EVMCX92171	EVMJ94170	EVMJ94171
	1	EVMA93170	EVMA93171	EVMBX93170	EVMBX93171	EVMCX93170	EVMCX93171		
	1¼								
250	¾	EVMA92250	EVMA92251	EVMBX92250	EVMBX92251	EVMCX92250	EVMCX92251	EVMJ94250	EVMJ94251
	1	EVMA93250	EVMA93251	EVMBX93250	EVMBX93251	EVMCX93250	EVMCX93251		
	1¼								
400	¾	EVMA92400	EVMA92401	EVMBX92400	EVMBX92401	EVMCX92400	EVMCX92401	EVMJ94400	EVMJ94401
	1	EVMA93400	EVMA93401	EVMBX93400	EVMBX93401	EVMCX93400	EVMCX93401		
	1¼								

Complete the Catalog Number by Adding Voltage and Options Suffixes as Follows:

1. Standard Voltage Ballasts – 60HZ							
NEC/UL				CEC/CSA (cUL)			
Voltage Suffix	Multi-tap /MT	Dual-Tap /DT	120V /120	480V /480	Tri-tap /TT	Dual-Tap /DT	120V /120
Optional Voltage Ballasts – 50 or 60HZ							
CEC/CSA (cUL)– CWI Isolated Ballasts				Export			
Voltage Suffix	208V CWI /208CWI	240V CWI /240CWI	600V CWI /600CWI	220V 60HZ /220	220V 50HZ /220 50	230V 50HZ /230 50	240V 50HZ /240 50

2. 150W HPS Luminaires, 55V Lamps is Standard, for 100V lamps - Add suffix "CE"

3. Options - Add the Required Options Suffixes from page 792, In Alpha-numeric Order

* CWI Isolated Ballasts are only available for 175W–400W metal halide (non pulse start) luminaires.

70-400W EVM Hazard•Gard® H.I.D. Luminaires

Factory Sealed (Groups C,D)

- Cl. I, Div. 1, Groups B (GB suffix), C, D
- Cl. I, Zone 1 Groups IIB + H2 (with suffix GB), IIB, IIA
- Cl. II, Div. 1, Groups E, F, G; Class III, Simultaneous Presence (175W max)
- Paint Spray (100W max)
- Marine & Wet Locations
- 3, 3R, 4, 4X; IP66

4L



Watts	Hub Size	Pendant Luminaires		Wall Bracket Luminaires		Ceiling Luminaires		Stanchion Luminaires (25°)	
		Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #	Without Guard Cat. #	With Guard Cat. #
Mercury Vapor									
100	¾	EVMA82100	EVMA82101	EVMBX82100	EVMBX82101	EVMCX82100	EVMCX82101	EVMJ84100	EVMJ84101
	1	EVMA83100	EVMA83101	EVMBX83100	EVMBX83101	EVMCX83100	EVMCX83101		
	1¼								
175	¾	EVMA82170	EVMA82171	EVMBX82170	EVMBX82171	EVMCX82170	EVMCX82171	EVMJ84170	EVMJ84171
	1	EVMA83170	EVMA83171	EVMBX83170	EVMBX83171	EVMCX83170	EVMCX83171		
	1¼								
250	¾	EVMA82250	EVMA82251	EVMBX82250	EVMBX82251	EVMCX82250	EVMCX82251	EVMJ84250	EVMJ84251
	1	EVMA83250	EVMA83251	EVMBX83250	EVMBX83251	EVMCX83250	EVMCX83251		
	1¼								
400	¾	EVMA82400	EVMA82401	EVMBX82400	EVMBX82401	EVMCX82400	EVMCX82401	EVMJ84400	EVMJ84401
	1	EVMA83400	EVMA83401	EVMBX83400	EVMBX83401	EVMCX83400	EVMCX83401		
	1¼								

Complete the Catalog Number by Adding Voltage and Options Suffixes as Follows:

1. Standard Voltage Ballasts – 60HZ								
NEC/UL								
			CEC/CSA (cUL)					
Voltage Suffix	Multi-tap /MT	Dual-Tap /DT	120V /120	480V /480	Tri-tap /TT	Dual-Tap /DT	120V /120	
Optional Voltage Ballasts – 50 or 60HZ								
CEC/CSA (cUL)– CWI Isolated Ballasts					Export			
Voltage Suffix	208V CWI /208CWI	240V CWI /240CWI	480V CWI /480CWI	600V CWI /600CWI	220V 60HZ /220	220V 50HZ /220 50	230V 50HZ /230 50	240V 50HZ /240 50

2. Options - Add the Required Options Suffixes from page 792, in Alpha-numeric Order

4L
H.I.D.
Fixtures

Reflectors



Dome



30° Angle



High Bay

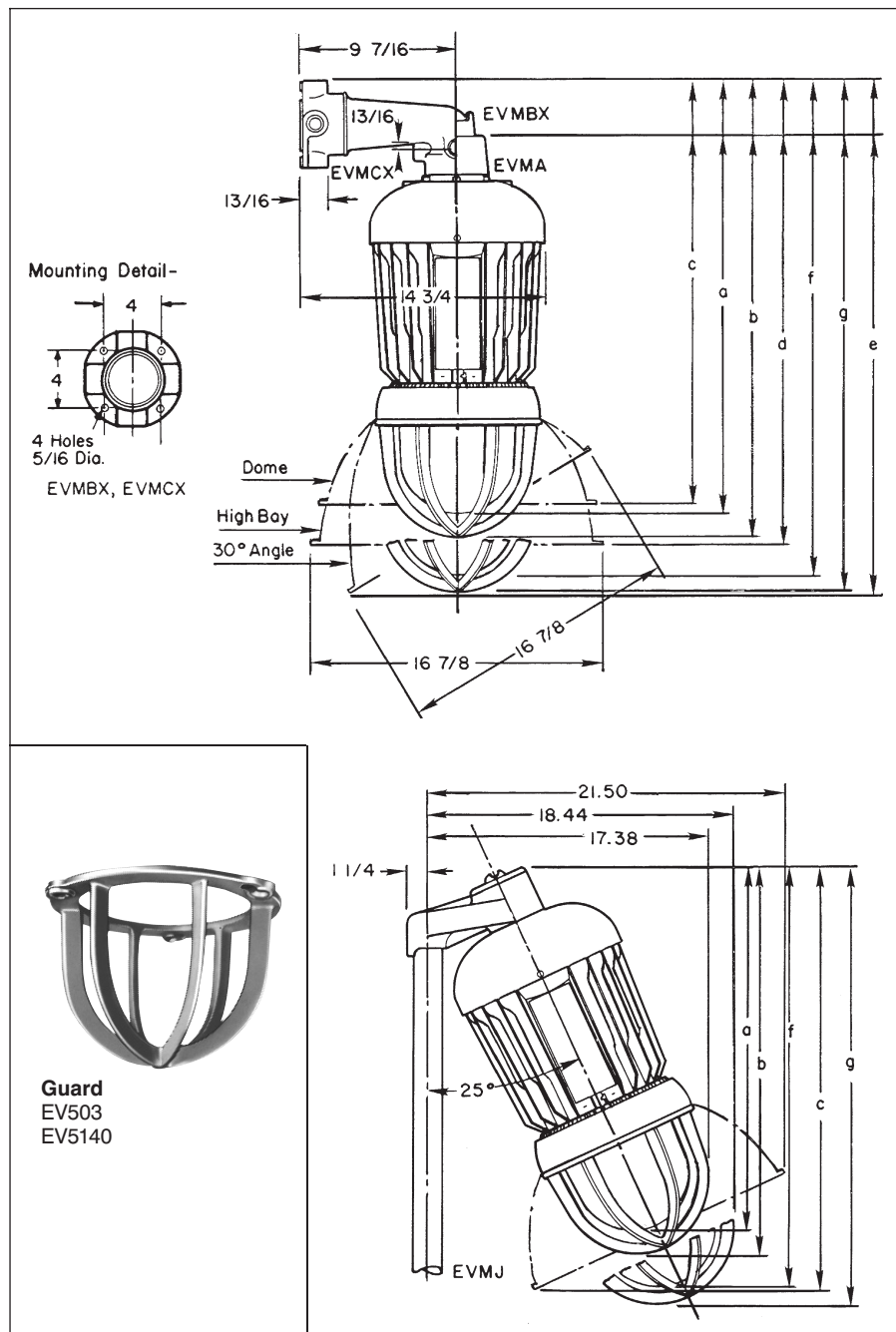
Type	Cat. #
Dome	RD739
30° Angle	RA739
High Bay	EV3912

Temperature Performance Data

		Maximum Ambient				Class II (E,F,G) 40°C	Simultaneous Presence 40°C	Paint Spray Booth 40°C	Supply Wire °C
Watts	40°C	55°C	Class I 65°C	75°C					
High Pressure Sodium									
50	T6	T6	T6	T5	T4	T4	T4A	90	
70	T6	T6	T5	T4A	T4	T4	T4A	90	
100	T5	T5	T4A	T4A	T4	T4	T4A	90	
150	T4A	T4A	T4	—	T3C	T3C	—	90	
200	T4A	T4A	T4	—	—	—	—	90	
250	T4	T3C	—	—	—	—	—	90	
400	T3C	—	—	—	—	—	—	90	
Mercury Vapor									
100	T5	T5	T4A	T4A	T3C	T3C	T4A	90	
175	T4A	T4	T4	—	T3C	T3C	—	90	
250	T3C	T3B	—	—	—	—	—	90	
400	T3	—	—	—	—	—	—	90	
Metal Halide (Including Pulse Start)									
70	T6	T6	T5	T3	T3C	T3C	T4A	90	
100	T5	T5	T4A	T3	T3C	T3C	T4A	90	
150	T4A	T4	T4	—	T3C	T3C	—	90	
175	T4A	T4	T4	—	T3C	T3C	—	90	
200	T4	T3C	—	—	—	—	—	90	
250	T4	T3C	—	—	—	—	—	90	
320	T3A	—	—	—	—	—	—	90	
400	T3A	—	—	—	—	—	—	90	

Dimensions and Weights

Dimensions



Luminaire Net Weights:

H.I.D. Source	Lamp Watts	Luminaire Only with Globe and Guard (Lbs.)
	50	40
	70	40
	100	44
High Pressure Sodium	150 (55V)	45
	150 (100V)	44
	200	46
	250	46
	400	55
Mercury Vapor	100	38
	175	41
	250	43
	400	49
Metal Halide	70	39
	100	39
	175	42
	250	43
	400	51

Add for Mounting Modules:

Pendant	1 lb.	Bracket	4 1/4 lbs.
Ceiling	2 lbs.	Stanchion	2 1/4 lbs.

Deduct:

Guard	1 1/2 lbs.
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Add for Reflectors:

RD739	1 1/4 lbs.
RA739	2 lbs.
EV3912	2 1/2 lbs.

Type	100, 175, 250W MV 50, 70, 100, 150W HPS 70, 100, 175, 250W MH	100, 175, 250W MV 50, 70, 100, 150W HPS 70, 100, 175, 250W MH	All luminaires with QTZ option and 200, 250, 400W HPS 400W MV & MH	All - Reflectors	Dome - c	High Bay - d	30° Angle - e
EVMA	25 1/16	26	27 5/16	28 1/4	23 7/8	26 7/16	28 9/16
EVMBX	27 7/8	28 13/16	30 1/8	31 1/16	26 1 1/16	29 3/4	31 3/8
EVMCX	24	24 15/16	26 1/4	27 3/16	22 3/4	25 3/8	27 1/2
EVMJ	22 11/16	24 1/8	25 1/4	26 1/8	25 3/8	27 1 1/16	28 3/4

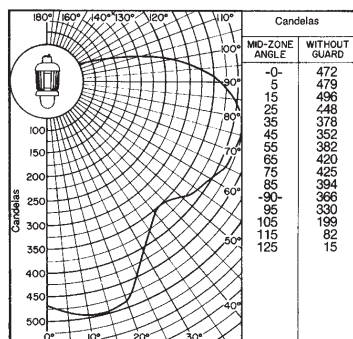
† Suitable for Class III when listed for Class II, Group G.

♦ See Options listing.

Lamp: 100W/E-23½ mercury vapor – (MV)
Total bare lamp lumens: 4200

To determine number and placement of luminaires, see Lighting Selector guide, pages 665 to 689

Luminaire With Globe and Without Guard



NOTE: Photometric data was developed using a 100 watt diffuse mercury vapor lamp (4,200 lumens). For other diffuse lamps, use the following conversion factors (multipliers): 175W MV – 2.05; 70W MH – 1.33; 100W MH – 1.85; 175W MH (metal halide) – 3.33. Multipliers are for use with candela curve only.

Luminaire spacing ratio is 1.30.

Coefficient of Utilization

Effective Floor Cavity Reflectance 20%

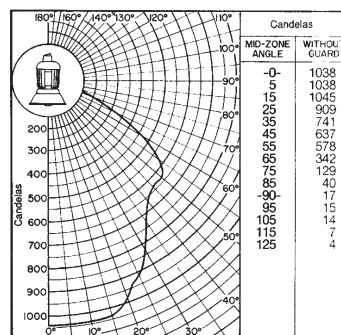
% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	1	2	3	4	5
80	50	.694	.584	.503	.439	.386
	30	.644	.516	.428	.361	.311
	10	.600	.459	.369	.302	.253
70	50	.660	.556	.479	.418	.368
	30	.615	.493	.410	.347	.297
	10	.572	.441	.355	.291	.244
50	50	.596	.501	.432	.377	.334
	30	.559	.450	.375	.317	.274
	10	.526	.405	.328	.270	.227
30	50	.538	.451	.389	.339	.302
	30	.509	.410	.342	.290	.250
	10	.481	.373	.302	.249	.210
10	50	.485	.405	.349	.305	.271
	30	.461	.371	.310	.263	.223
	10	.439	.341	.277	.228	.193
0	0	.410	.313	.251	.204	.171

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	6	7	8	9	10
80	50	.347	.312	.282	.259	.230
	30	.273	.241	.214	.192	.166
	10	.220	.192	.165	.147	.125
70	50	.331	.298	.270	.248	.220
	30	.262	.231	.206	.185	.162
	10	.211	.184	.160	.143	.121
50	50	.300	.272	.246	.227	.203
	30	.241	.212	.190	.172	.150
	10	.197	.171	.149	.134	.113
30	50	.272	.245	.225	.207	.185
	30	.222	.196	.175	.158	.138
	10	.183	.158	.139	.124	.105
10	50	.246	.224	.203	.188	.169
	30	.202	.180	.160	.146	.127
	10	.168	.147	.129	.115	.096
0	0	.148	.128	.111	.099	.082

Lamp: 100W/E23½ mercury vapor – (MV)
Total bare lamp lumens: 4200

To determine number and placement of luminaires, see Lighting Selector guide, pages 665 to 689

Luminaire With Globe, Dome Reflector and Without Guard



NOTE: Photometric data was developed using a 100 watt diffuse mercury vapor lamp (4,200 lumens). For other diffuse lamps, use the following conversion factors (multipliers): 175W MV – 2.05; 70W MH – 1.33; 100W MH – 1.85; 175W MH (metal halide) – 3.33. Multipliers are for use with candela curve only.

Luminaire spacing ratio is 1.25.

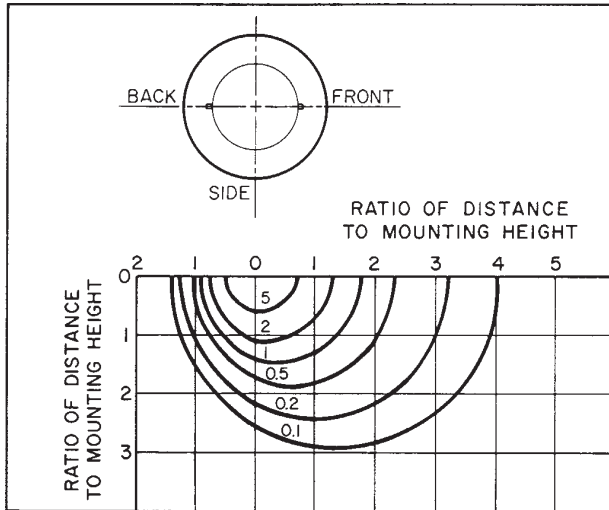
Coefficient of Utilization

Effective Floor Cavity Reflectance 20%

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	1	2	3	4	5
80	50	.715	.637	.570	.509	.458
	30	.688	.596	.521	.455	.401
	10	.665	.562	.483	.413	.359
70	50	.699	.624	.560	.500	.448
	30	.675	.586	.514	.450	.396
	10	.652	.556	.478	.410	.356
50	50	.668	.598	.539	.481	.434
	30	.648	.568	.500	.438	.388
	10	.631	.540	.468	.404	.353
30	50	.640	.576	.519	.465	.420
	30	.624	.550	.487	.428	.379
	10	.609	.527	.459	.398	.348
10	50	.615	.554	.502	.450	.407
	30	.602	.533	.474	.418	.372
	10	.589	.514	.450	.391	.343
0	0	.575	.500	.436	.377	.329

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	6	7	8	9	10
80	50	.414	.375	.340	.313	.275
	30	.358	.319	.286	.259	.222
	10	.318	.282	.247	.222	.187
70	50	.407	.369	.335	.308	.271
	30	.354	.315	.283	.256	.222
	10	.315	.278	.246	.221	.187
50	50	.394	.358	.325	.299	.264
	30	.347	.309	.278	.252	.217
	10	.312	.275	.244	.219	.185
30	50	.383	.346	.316	.292	.257
	30	.340	.304	.273	.248	.214
	10	.308	.272	.242	.217	.183
10	50	.371	.338	.307	.284	.251
	30	.333	.299	.268	.244	.210
	10	.304	.269	.240	.215	.181
0	0	.292	.257	.227	.204	.170

Isofootcandle Chart: Luminaire With Globe and 30° Angle Reflector, Without Guard



Lamp: 100W/E-23½ diffuse mercury vapor (MV)

Total bare lamp lumens: 4200

To determine number and placement of luminaires, see Lighting Selector Guide, pages 665 to 689.

Illumination in footcandles on work plane 10 feet below light center. Multiply by factor shown to convert to other mounting heights.

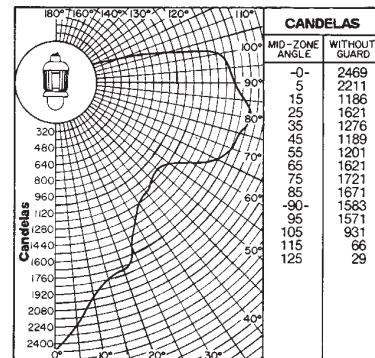
Height (Ft.)	Factor	Height (Ft.)	Factor
6	2.78	9	1.23
7	2.04	11	0.83
8	1.56	12	0.70

Lamp: 150W/E-23½ high pressure sodium (HPS)

Total bare lamp lumens: 16,000

To determine number and placement of luminaires, see Lighting Selector Guide, pages 665 to 689.

Luminaire With Globe and Without Guard



NOTE: Photometric data was developed using a 150 watt clear high pressure sodium lamp (16,000 lumens). For other clear lamps, use the following conversion factors (multipliers): 50W HPS - .25; 70W HPS - .40; 100W HPS - .59. Multipliers are for use with candela curve only.

Luminaire spacing ratio is 0.80.

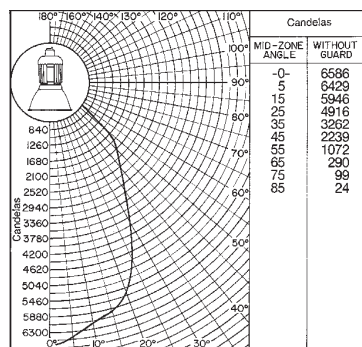
Coefficient of Utilization

Effective Floor Cavity Reflectance 20%

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	1	2	3	4	5
80	50	.695	.579	.494	.410	.382
	30	.644	.509	.417	.326	.305
	10	.599	.450	.356	.262	.246
70	50	.659	.549	.469	.387	.363
	30	.613	.484	.397	.311	.291
	10	.570	.431	.341	.251	.236
50	50	.592	.491	.419	.344	.327
	30	.555	.439	.360	.279	.265
	10	.522	.393	.312	.229	.218
30	50	.531	.438	.373	.304	.292
	30	.502	.396	.325	.250	.240
	10	.474	.358	.284	.207	.200
10	50	.476	.390	.331	.267	.260
	30	.451	.355	.291	.222	.217
	10	.429	.325	.257	.184	.181
0	0	.399	.295	.230	.159	.159
% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	6	7	8	9	10
80	50	.342	.306	.278	.265	.233
	30	.266	.234	.209	.198	.168
	10	.212	.184	.160	.153	.127
70	50	.324	.292	.265	.253	.222
	30	.254	.223	.201	.191	.163
	10	.202	.176	.155	.149	.123
50	50	.292	.263	.240	.231	.203
	30	.232	.203	.184	.177	.150
	10	.187	.162	.143	.139	.114
30	50	.262	.236	.218	.210	.185
	30	.211	.186	.167	.162	.138
	10	.172	.148	.132	.129	.105
10	50	.234	.213	.195	.191	.167
	30	.190	.169	.152	.149	.125
	10	.156	.135	.121	.118	.096
0	0	.135	.116	.103	.103	.081

Lamp: 150W/E-23½ high pressure sodium (HPS)**Total bare lamp lumens: 16000**

To determine number and placement of luminaires, see Lighting Selector Guide, pages 665 to 689.

Luminaire With Globe, Hi-Bay Reflector and Without Guard

NOTE: Photometric data was developed using a 150 watt clear high pressure sodium lamp (16,000 lumens). For other clear lamps, use the following conversion factors (multipliers): 50W HPS – .25; 70W HPS – .40; 100W HPS – .59. Multipliers are for use with candela curve only.

Luminaire spacing ratio is 1.00.

Coefficient of Utilization

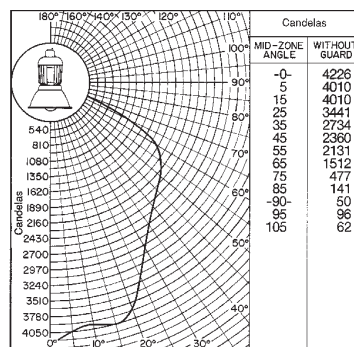
Effective Floor Cavity Reflectance 20%

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	1	2	3	4	5
80	50	.668	.618	.573	.531	.494
	30	.651	.592	.542	.495	.455
	10	.636	.569	.517	.468	.427
70	50	.655	.608	.566	.525	.487
	30	.639	.583	.536	.491	.452
	10	.625	.564	.513	.464	.425
50	50	.629	.587	.550	.511	.476
	30	.616	.568	.525	.482	.446
	10	.606	.550	.505	.459	.422
30	50	.606	.569	.535	.498	.466
	30	.597	.554	.514	.474	.438
	10	.588	.539	.497	.454	.418
10	50	.586	.553	.522	.487	.457
	30	.578	.539	.504	.466	.433
	10	.570	.528	.489	.449	.413
0	0	.560	.517	.479	.439	.404

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	6	7	8	9	10
80	50	.460	.427	.396	.369	.328
	30	.420	.388	.358	.330	.288
	10	.394	.361	.330	.303	.262
70	50	.455	.423	.392	.366	.325
	30	.418	.385	.356	.328	.288
	10	.391	.359	.329	.303	.262
50	50	.444	.414	.385	.360	.320
	30	.412	.380	.352	.325	.285
	10	.388	.357	.328	.301	.261
30	50	.436	.406	.379	.354	.315
	30	.407	.377	.348	.322	.282
	10	.385	.354	.326	.300	.259
10	50	.428	.400	.373	.348	.311
	30	.402	.373	.345	.319	.280
	10	.382	.352	.324	.298	.258
0	0	.373	.343	.315	.290	.249

Lamp: 150W/E-23½ high pressure sodium (HPS)**Total bare lamp lumens: 16000**

To determine number and placement of luminaires, see Lighting Selector Guide, pages 665 to 689.

Luminaire With Globe, Dome Reflector and Without Guard

NOTE: Photometric data was developed using a 150 watt clear high pressure sodium lamp (16,000 lumens). For other clear lamps, use the following conversion factors (multipliers): 50W HPS – .25; 70W HPS – .40; 100W HPS – .59. Multipliers are for use with candela curve only.

Luminaire spacing ratio is 1.20.

Coefficient of Utilization

Effective Floor Cavity Reflectance 20%

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	1	2	3	4	5
80	50	.716	.637	.568	.507	.455
	30	.689	.596	.519	.452	.398
	10	.666	.561	.480	.410	.355
70	50	.700	.624	.559	.498	.446
	30	.675	.585	.512	.447	.393
	10	.653	.555	.476	.407	.353
50	50	.668	.598	.538	.479	.432
	30	.648	.567	.498	.435	.385
	10	.631	.539	.466	.400	.349
30	50	.640	.575	.518	.463	.417
	30	.625	.549	.485	.425	.376
	10	.610	.526	.457	.394	.344
10	50	.615	.554	.500	.447	.404
	30	.602	.532	.472	.415	.369
	10	.590	.513	.448	.388	.339
0	0	.575	.498	.434	.373	.326

% Reflectance		Room Cavity Ratio				
Eff. Ceil.	Wall	6	7	8	9	10
80	50	.413	.373	.339	.312	.275
	30	.355	.318	.285	.258	.222
	10	.316	.280	.246	.221	.187
70	50	.405	.368	.334	.308	.271
	30	.352	.314	.283	.256	.222
	10	.312	.277	.245	.221	.187
50	50	.392	.356	.324	.299	.264
	30	.345	.307	.277	.252	.217
	10	.309	.274	.243	.219	.185
30	50	.380	.345	.316	.291	.257
	30	.338	.303	.272	.247	.214
	10	.306	.270	.241	.217	.183
10	50	.369	.337	.307	.283	.251
	30	.331	.298	.267	.244	.210
	10	.301	.267	.238	.215	.181
0	0	.289	.255	.226	.203	.170