









Section L



General Suitability —
See catalog pages for details











General Suitability —
See catalog pages for details

PRODUCT	PAGE	Wet / Damp Location (or N3)	NEMA 4 (or 4X, or IP6x)	Class I, Div. 2 / Zone 2	Class I, Zone 2 Ex nR (option)	Class I, Div. 2 / Zone 1	Class II / III Div. 1	Class II / III Div. 2	Class I, Div. 1 C, D / Zone I	Class I, Div. 1 A, B, C, D / Zone I	CENELEC Zone 2	CENELEC Zone 1
HID AND INDUCTION FIXTURES												
												
MB Series												
Medium Base HID	17,19-21	X	X	X			X					
Ex nR version	22-23	X	X	X	X		X					
Accessories	24-25											
Temperature Data	26											
Photometrics	27-33											
												
CERTILITE V Series												
Mogul Base HID	42-71	X	X	X			X					
Induction System	72-74	X	X	X			X					
Introduction	36-41											
Quick Selector	37											
"3rd Hand" Accessories	38											
Restricted Breathing	39	X	X	X	X		X					
Food Optics	40											
Accessories	75-77											
Temperature Data	84-89											
Dimensions	80-83											
Photometrics	91-108											
												
VM Series												
Mogul Base HID	109-117	X	X	X			X					
Accessories	118											
Cross Reference VM to Certilite®V	119											
												
EM Series												
Medium Base HID	120-122											
Accessories	123-124	X	X				X		X			
Temperature Data	127-128											
Photometric	129-138											
Cenelec Option	127	X	X				X		X			X
												
EZ Series												
Mogul Base HID	139-143	X	X				X		X			
Accessories	144-146											
Temperature Data	148-149											
Photometrics	150-155											
Cenelec Option	148	X	X				X		X			X

PRODUCT	PAGE	Wet / Damp Location (or N3)	NEMA 4 (or 4X, or IP6x)	Class I, Div. 2 / Zone 2	Class I, Zone 2 Ex nR (option)	Class I, Div. 2 / Zone 1	Class II / III Div. 1	Class II / III Div. 2	Class I, Div. 1 C, D / Zone I	Class I, Div. 1 A, B, C, D / Zone I	CENELEC Zone 2	CENELEC Zone 1
LINEAR FLUORESCENT												
												
DBF Series												
Fluorescent												
Class I, Div. 2	156	X	X	X						X		
												
LZ2S Series												
Fluorescent Stainless Steel	157	X	X	X						X		
												
LZ2N Series												
Linear Lite Non-Metallic												
Class I, Div. 2												
Class II, Div. 1	158-161	X	X	X						X		
												
HFX-T Series												
BIAXIAL Fluorescent												
Class I, Div. 1	162-163	X	X							X		X
												
HFX Series												
Hazardous Location												
Paint Spray Suitable	164-169	X	X							X		X
												
LLC Series												
Task or Exit Fixture	170	X	X	X						X		
												
LLC Series												
Accessories	171											



General Suitability —
See catalog pages for details

PRODUCT	PAGE NO.	Wet / Damp Location (or N3)	NEMA 4 (or 4X, or IP6x)	Class I, Div. 2 / Zone 2	Class I, Zone 2 Ex nR (option)	Class I, Div. 2 / Zone 1	Class II / III Div. 1	Class II / III Div. 2	Class I, Div. 1 C,D / Zone I	Class I, Div. 1 A,B,C,D / Zone I	CENELEC Zone 2	CENELEC Zone 1
FITTINGS & ADAPTERS												
 FKA & FHC	195	X										
 HOOK/LOOP	195	X										
 FH HOOK	196	X										
 V Series Fixture Hangers	196	X										
 HXB & XFH	197	X					X		X			
 EKF Series Flexible Couplings	197	X					X		X	X		
 JL & JAL	198	X					X		X			
 ENY-2SET Pendant Seals	198	X					X		X	X		
 VMCHVM Adapter	199	X	X	X	X		X					
 EAC Adapters	200	X	X				X		X			





Pendant



Ceiling



Wall Mount

NEMA 3, 4X

UL Listed - Files E227731 and E91793

FEATURES-SPECIFICATIONS

ENVIRO[®]RITE[®]

Applications

Designed specifically for corrosive environments.

Typical applications include manufacturing plants, chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dock-side installations, agricultural, commercial/industrial, mining and marine facilities.

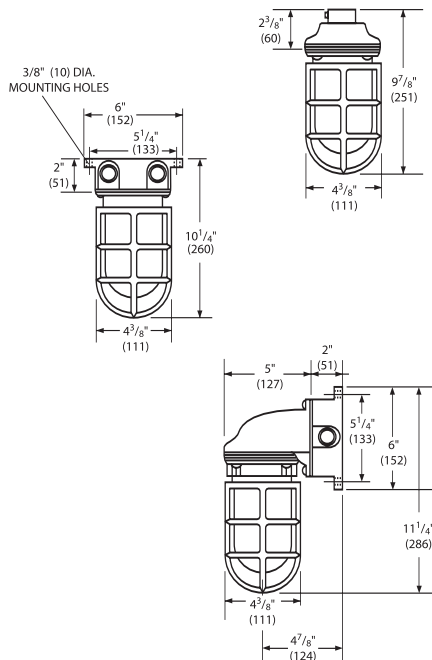
Features

- Series NV non-metallic light fixtures combine an outstanding balance of strength, stiffness, toughness and electrical properties

- Molded from 30% glass-filled thermo-plastic polyester for high strength
- Resists corrosive effects of most chemicals, hydrocarbons and solvents
- Designed for indoor and outdoor applications. Molded threads will not “freeze”—components are easy to remove, even after long exposure to corrosive environments.
- Accepts up to 150 watt, size A-21 lamp
- Compact size

Compliances

- UL-1571 standard
- UL Marine type fixtures
- Suitable for wet locations
- NEMA 3, 4X
- Material meets U.L. 94-V-O standards for flame retardancy



PENDANT NON-METALLIC INCANDESCENT ① ②							
FIXTURE TYPE	LAMP	HUB SIZE	CATALOG NUMBER FIXTURE W/GLOBE & GUARD	CONSISTS OF			
				MOUNTING BOX	FIXTURE BODY	GLOBE*	GUARD
Clear globe	150 A	3/4"	NVA15GG ③	NVA	NVFC	VCG-100	NVG
Heat resistant	150 A	3/4"	NVA15GHG ④	NVA	NVFC	VCGP-100	NVG

CEILING NON-METALLIC INCANDESCENT ① ②							
FIXTURE TYPE	LAMP	HUB SIZE	CATALOG NUMBER FIXTURE W/GLOBE & GUARD	CONSISTS OF			
				MOUNTING BOX	FIXTURE BODY	GLOBE*	GUARD
Clear globe	150 A	3/4"	NVX15GG ③	NVX	NVFC	VCG-100	NVG
Heat resistant	150 A	3/4"	NVX15GHG ④	NVX	NVFC	VCGP-100	NVG

WALL MOUNT NON-METALLIC INCANDESCENT ① ②							
FIXTURE TYPE	LAMP	HUB SIZE	CATALOG NUMBER FIXTURE W/GLOBE & GUARD	CONSISTS OF			
				MOUNTING BOX	FIXTURE BODY	GLOBE*	GUARD
Clear globe	150 A	3/4"	NVB15GG ③	NVX+NVB	NVFC	VCG-100	NVG
Heat resistant	150 A	3/4"	NVB15GHG ④	NVX+NVB	NVFC	VCGP-100	NVG

① Maximum 150 watt lamp type A for standard GG models. Suitable for wet and damp locations when supplied with heat resistant glass globes.
 ② Pendant and ceiling fixtures are unit packed. Wall fixture supplied as ceiling mount unit with all necessary components to make bracket conversion. Elbow bracket adapter shipped separately.
 ③ Standard GG incandescent marked supply wire is 125°C at 25°C ambient. For suitability with 90°C minimum supply wire, add suffix LT to catalog number. Example: NVA15GG-LT.
 ④ GHG models are suitable for marine applications with maximum 100 watt lamp and are marked for 90°C wire.
 * Clear globe furnished. For other colors, order globes and fixture components separately See page L4.



Pendant



Ceiling



Wall Mount

Class I, Div. 2, Groups A,B,C,D^③
Class I, Zone 2, Groups IIC, IIB, IIA
NEMA 3, 4X

Listed - Files E227731 and E91793

FEATURES-SPECIFICATIONS

Applications

Designed specifically for corrosive environments.

Typical applications include manufacturing plants, chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dock-side installations, agricultural, commercial/industrial, mining and marine facilities.

Features

- Series NVQ non-metallic light fixtures combine an outstanding balance of strength, stiffness, toughness and electrical properties
- Molded from 30% glass-filled thermo-plastic polyester for high strength

- Resists corrosive effects of most chemicals, hydrocarbons and solvents
- Designed for indoor and outdoor applications. Molded threads will not “freeze”—components are easy to remove, even after long exposure to corrosive environments

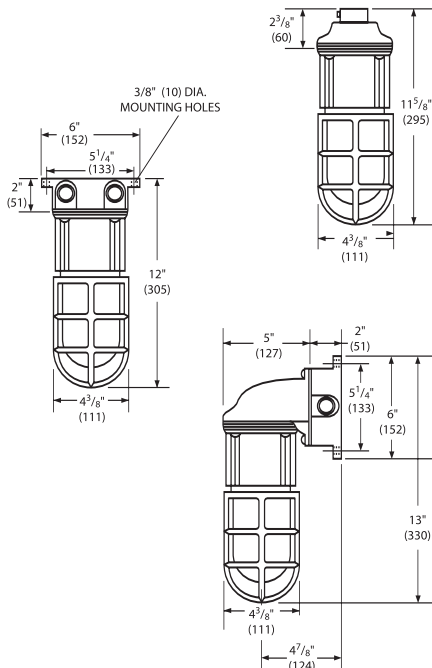
Compliances

- UL-1570 standard
- UL Marine type fixtures
- Suitable for wet locations
- NEMA 3, 4X
- Material meets U.L. 94-V-O standards for flame retardancy

NVQ Fluorescent Fixture Enclosed and Gasketed

Special Features

- Electronic ballast and lamp combination reduces energy consumption up to 70%
- Lamp life rated 10,000 hours with minimum starting temperature of -25°C (-13°F)
- Rated for use with 60° minimum supply wire
- Furnished with 18W compact fluorescent lamp



PENDANT NON-METALLIC FLUORESCENT ① ④							
FITTURE TYPE	LAMP ①	HUB SIZE	CATALOG NUMBER FITTURE W/GLOBE & GUARD	CONSISTS OF			
				MOUNTING BOX	FITTURE BODY	GLOBE*	GUARD
Clear globe	PL-18	3/4"	NVQA18GG	NVA	NVQFC	VCG-100	NVG
Heat resistant	PL-18	3/4"	NVQA18GHG	NVA	NVQFC	VCGP-100	NVG

CEILING NON-METALLIC FLUORESCENT ① ④							
FITTURE TYPE	LAMP ①	HUB SIZE	CATALOG NUMBER FITTURE W/GLOBE & GUARD	CONSISTS OF			
				MOUNTING BOX	FITTURE BODY	GLOBE*	GUARD
Clear globe	PL-18	3/4"	NVQX18GG	NVX	NVQFC	VCG-100	NVG
Heat resistant	PL-18	3/4"	NVQX18GHG	NVX	NVQFC	VCGP-100	NVG

WALL MOUNT NON-METALLIC FLUORESCENT 90° ① ② ④							
FITTURE TYPE	LAMP ①	HUB SIZE	CATALOG NUMBER FITTURE W/GLOBE & GUARD ②	CONSISTS OF			
				MOUNTING BOX	FITTURE BODY	GLOBE*	GUARD
Clear globe	PL-18	3/4"	NVQB18GG	NVX+NVB	NVQFC	VCG-100	NVG
Heat resistant	PL-18	3/4"	NVQB18GHG	NVX+NVB	NVQFC	VCGP-100	NVG

① Fixtures are unit packed and supplied with OSRAM® DuLux® D/E 18 watt Quad-Pin fluorescent lamp.
 ② Wall fixture supplied as ceiling mount unit with all necessary components to make bracket conversion. Elbow bracket adapter shipped separately.
 ③ Applications in Class I Div. 2 governed by NEC article 501.130(B)(1). 80% rule. NVQ maximum labeled operating temperature is 162°C at 25°C ambient. Minimum ignition temperature of hazardous gas or vapor is 203°C. Not UL listed or labeled for hazardous locations.
 ④ Listed catalog numbers are 120V AC. Order components for 277V or insert a 4 after the 18 for 277 assemblies; example NVQA184GG (assemblies are unit packed - not UL listed).
 * Clear globe furnished. For other colors, order globes and fixture components separately. See page L4.



Mounting Splice Boxes For NVQ/NV Series

For replacement or to make assemblies with special globes or voltages. Supplied complete with silicone gasket and brass screws. Pendant splice box includes a 316 stainless steel set screw at the conduit connection

Splice Boxes



Pendant



Ceiling



Wall Bracket

VGA SPLICE BOXES - INCLUDES SILICONE GASKETS & BRASS SCREWS		
CATALOG NUMBER	DESCRIPTION	
NVA	Pendant	Pendant splice box includes a 316 stainless steel set screw at the conduit connection
NVX	Ceiling	Direct ceiling mount or use with NVB for wall mount
NVB	Wall bracket	Use with NVX for wall mount



NVQFC
120V Fluorescent
NVQFC184
277V Fluorescent



NVFC
Incandescent

NVQ/NV FIXTURE BODIES		
CAT. NO.	DESCRIPTION	
NVQFC	Fluorescent 120V	Quad-pin lamp socket, 18 watt electronic ballast, silicon gasket and brass screws
NVQFC184	Fluorescent 277V	
NVFC	Incandescent	Includes heat resistant medium base socket, silicon gasket and brass screws

Note: NVQFC rated for use with 60°C minimum supply wire. NVFC rated for use with 125°C minimum supply wire. For suitability with 90°C minimum supply wire, add suffix LT to catalog number (NVFC-LT)

NVQ/NV GLASS GLOBES		
CATALOG NUMBER	DESCRIPTION	
VCG-100	Clear	150 watt max. Lamp size A-21
VCGP-100*	Clear. Tempered	
VAMG-100	Amber	
VGG-100	Blue Green	
VBG-100	Blue	
VRG-100	Ruby	
VRSG-100	Green	

* Thermal and shock resistant tempered glass. See "V" 100 series globes for other available colors



VCG-100



VPLCG-100

NVQ/NV POLYCARBONATE GLOBES	
VPLCG-100	Polycarbonate 75 watt max. Lamp size A-19. Not UL Listed

Cannot be used with guard



NVQ/NV GUARD	
NVG	Replacement guard



NVQ FLUORESCENT LAMP	
NVQ-18	18 watt Quad-pin lamp



NVQ/NV COVER COMPONENTS	
NVBC	Blank cover supplied with gasket and screws
NVSG	Replacement gasket - fits between splice box and fixture body





Pendant Incandescent



Pendant Fluorescent



Ceiling Incandescent



Ceiling Fluorescent

NEW!

For original NV Series see PDF cat. page L2A at www.hubbell-killark.com

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 2, Groups F,G
Class III
Marine
NEMA 3, 4, 4X, IP66

Certified - File LR11713

ABS Type Approval

FEATURES-SPECIFICATIONS

ENVIRORITE® II

Applications

Designed specifically for corrosive & wet NEMA 4X and hazardous environments. Typical applications include manufacturing plants, chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, agricultural, commercial/industrial, mining and marine facilities.

Features

- NV2 Series non-metallic light fixtures combine an outstanding balance of strength, stiffness, toughness and electrical properties
- Energy and labor saving fluorescent or incandescent models
- Accessories include polycarbonate dome reflectors and wall extension
- Molded from 30% glass-filled thermoset polyester for high strength
- Resists corrosive effects of most chemicals, hydrocarbons and solvents
- Designed for indoor and outdoor applications.

to the following standards:

- UL 1598 Standard for luminaires
- UL 1598A Marine type luminaires
- UL 844 Standard for lighting fixtures for hazardous locations
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X, IP66

Pendant 3/4" Fixture w/clear Globe & Guard*		
Type	Standard Globe	Tempered Globe
150A Incan.	NV2IG15ASG	NV2IG15AHG
13 W Fluor.	NV2FG13ASG	NV2FG13AHG
18 W Fluor.	NV2FG18ASG	NV2FG18AHG
26 W Fluor.	NV2FG26ASG	NV2FG26AHG
32 W Fluor.	NV2FG32ASG	NV2FG32AHG
42 W Fluor.	NV2FG42ASG	NV2FG42AHG

Ceiling 3/4" Fixture w/clear Globe & Guard*		
Type	Standard Globe	Tempered Globe
150A Incan.	NV2IG15XSG	NV2IG15XHG
13 W Fluor.	NV2FG13XSG	NV2FG13XHG
18 W Fluor.	NV2FG18XSG	NV2FG18XHG
26 W Fluor.	NV2FG26XSG	NV2FG26XHG
32 W Fluor.	NV2FG32XSG	NV2FG32XHG
42 W Fluor.	NV2FG42XSG	NV2FG42XHG

Wall 3/4" Fixture w/clear Globe & Guard*		
Type	Standard Globe	Tempered Globe
150A Incan.	NV2IG15BSG	NV2IG15BHG
13 W Fluor.	NV2FG13BSG	NV2FG13BHG
18 W Fluor.	NV2FG18BSG	NV2FG18BHG
26 W Fluor.	NV2FG26BSG	NV2FG26BHG
32 W Fluor.	NV2FG32BSG	NV2FG32BHG
42 W Fluor.	NV2FG42BSG	NV2FG42BHG

***Notes:**

- Tempered Globes are required for Wet Location applications
- All assemblies are unit packed with required components (not assembled)
- **Fluorescent unit pack models (only) include the lamp**
- Reflector is sold separately. For wall mounting with reflector, the NVEXTG extension is required and sold separately
- Fluorescent models use "world voltage" ballasts for 120VAC through 277VAC 50/60Hz applications
- Incandescent models 277VAC max.
- For M20 ceiling units change "X" in part # to "M". For wall units change "B" to "W". M20 Pendant not available.

Colored Globe Options**

Example: NV2IG15ASG-R for Ruby Standard Globe or NV2IG15AHG-R for Ruby Tempered Globe

Suffix and available combinations		
Color	Standard Globe	Tempered Globe
Amber	A	A
Blue	B	B
Ruby	R	R
Green	G	NA
Purple	P	NA
Blue-Green	BG	BG

**Tempered globes are required for wet locations.

T-codes @ 40°C Max; with or without Reflector

Globe Type	Class I Div.2 Clear		Class II Div.2 Clear		Minimum Start	
	Color	Color	Color	Color	°C	°F
75A	T2C	T2B	T3C	-	-	-
100A	T2A	T2	T3C	-	-	-
150A	T2B	T2	-	-	-	-
13 Fluor	T3C	T3C	T4A	T4A	-15	5
18 Fluor	T3C	T3C	T4A	T4A	-15	5
26 Fluor	T3B	T3A	T4A	T4A	-15	5
32 Fluor	T3B	T3A	T4A	T4A	-15	5
42 Fluor	T2D	T2C	T4A	T4A	-15	5

Min. supply wire Fluor. 60°C, Incan. 90°C

Fluorescent Operating Max. Amps		
Type	120 VAC	277 VAC
13W Fluor	.144	.067
18W Fluor	.158	.073
26W Fluor	.22	.097
32W Fluor	.285	.128
42W Fluor	.38	.166



Wall Mount
Incandescent



Wall Mount
Fluorescent



Wall Mount with
Extension and Dome
Reflector accessories

NEW!

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 2, Groups F,G
Class III
Marine
NEMA 3, 4, 4X, IP66

Certified - File LR11713

ABS Type Approval

COMPONENT PARTS



Pendant



Ceiling/Wall



Wall Elbow



Ceiling/Wall
(Interior Detail)



Incandescent



Fluorescent



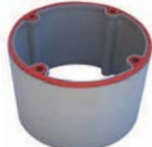
Globe



Guard



Reflector



Extension



Gray Blank



Clear

NV2 SPLICE BOXES - INCLUDES SILICONE GASKETS & BRASS SCREWS			
CATALOG NUMBER	DESCRIPTION		
NV2AG	Pendant	3/4" NPT	Pendant splice box includes a 316 stainless steel set screw at the conduit connection
NV2XG [Ⓢ]	Ceiling Box	3/4" NPT	Ceiling box vol. 24 cu. inches
NV2MG [Ⓢ]		M20	
NV2BG	Wall Bracket		Use with NV2XG or NV2MG for wall mount

NV2 BODIES	
CATALOG NUMBER	DESCRIPTION
NV2IG15	Incandescent Body with E-26 medium base socket; fixture rated voltage 277VAC max.
NV2FG13	13 W Fluorescent Body World Voltage 120V - 277V 50/60Hz
NV2FG18	18 W Fluorescent Body World Voltage 120V - 277V 50/60Hz
NV2FG26	26 W Fluorescent Body World Voltage 120V - 277V 50/60Hz
NV2FG32	32 W Fluorescent Body World Voltage 120V - 277V 50/60Hz
NV2FG42	42 W Fluorescent Body World Voltage 120V - 277V 50/60Hz

NV2 GLASS GLOBES & GUARDS [Ⓢ]		
CATALOG NUMBER	DESCRIPTION	
VCG-100	Clear	150 watt Lamp size A-21 max.
VCGP-100	Clear, Tempered	
NV2GG		Guard

NV2 REFLECTORS AND EXTENSION	
CATALOG NUMBER	DESCRIPTION
NVPSD12	White Polycarbonate Reflector (secured by guard)
NVEXTG	Extension (for wall mount fixture with reflector)

BLANK COVERS FOR NV2XG CEILING BOXES	
CATALOG NUMBER	DESCRIPTION
NV2CG	Gray Cover
NV2CC [Ⓢ]	Clear Cover

NV2F FLUORESCENT REPLACEMENT LAMPS AND BALLASTS		
CATALOG NUMBER	LAMP	BALLAST
MLQ13	13 W Quad-Pin Lamp 900 Lumens	BKF131830 13/18 Watt Rep. Ballast
MLQ18	18 W Quad-Pin Lamp 1200 Lumens	
MLQ26	26 W Quad-Pin Lamp 1800 Lumens	BKF263230 26/32 Watt Rep. Ballast
MLQ32	32 W Quad-Pin Lamp 2400 Lumens	BKF324230 32/42 Watt Rep. Ballast
MLQ42	42 W Quad-Pin Lamp 3200 Lumens	

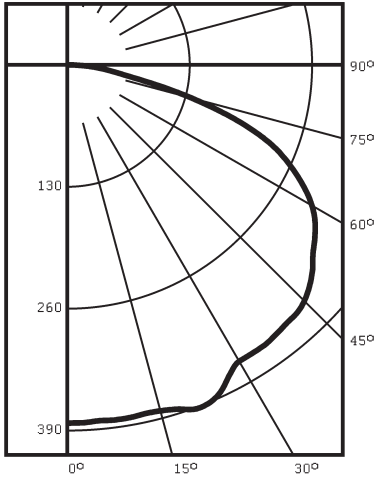
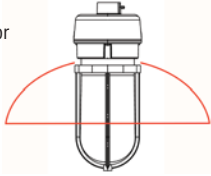
Ⓢ NV2 ceiling (wall) boxes have 4 10-32 brass inserts with 2 ground screws. May be used for wet locations, as terminal/junction, boxes, or instruments using 'clear' blank cover.

Ⓢ See page L12 for colored globes; use tempered for wet locations.



Photometrics

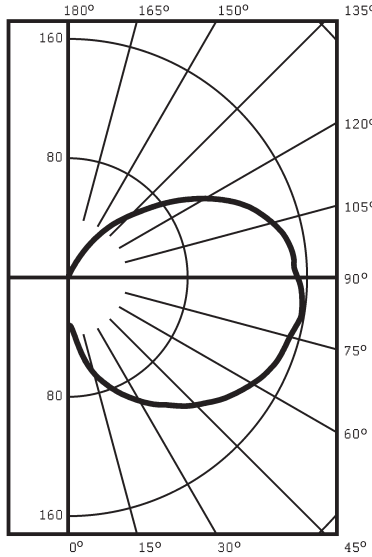
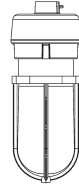
NV2IG15 Incandescent
With Globe, Guard & Reflector
Candlepower - 150 Watt
A-21 lamp 2850 lumens
For 75 Watt multiply by .42
For 100 Watt multiply by .61



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	322	11.3	20.7
0- 40	550	19.3	35.5
0- 60	1112	39.0	71.7
0- 90	1550	54.4	100.0
* 90-180	0	0.0	0.0
0-180	1550	54.4	100.0

TOTAL LUMINAIRE EFFICIENCY = 54.4 %

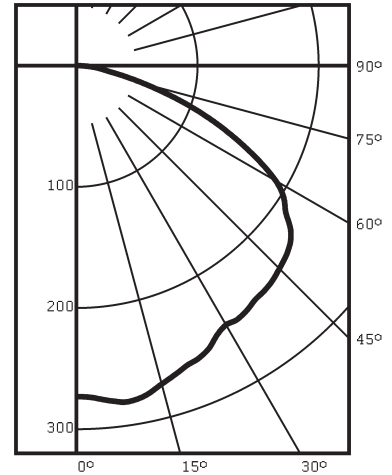
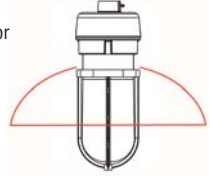
NV2FG26 Fluorescent
With Globe & Guard
Candlepower - 26 Watt
CF26 lamp 1800 lumens
For 13 Watt multiply by .50
For 18 Watt multiply by .67
For 32 Watt multiply by 1.33
For 42 Watt multiply by 1.78



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	63	3.5	4.5
0- 40	128	7.1	9.1
0- 60	344	19.1	24.4
0- 90	825	45.8	58.5
90-120	434	24.1	30.8
90-130	515	28.6	36.5
90-150	582	32.3	41.2
90-180	586	32.5	41.5
0-180	1411	78.4	100.0

TOTAL LUMINAIRE EFFICIENCY = 78.4 %

NV2FG26 Fluorescent
With Globe, Guard & Reflector
Candlepower - 26 Watt
CF26 lamp 1800 lumens
For 13 Watt multiply by .50
For 18 Watt multiply by .67
For 32 Watt multiply by 1.33
For 42 Watt multiply by 1.78



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0- 30	222	12.3	22.8
0- 40	376	20.9	38.5
0- 60	750	41.7	76.9
0- 90	976	54.2	100.0
* 90-180	0	0.0	0.0
0-180	976	54.2	100.0

TOTAL LUMINAIRE EFFICIENCY = 54.2 %

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0					
0	65	65	65	65	63	63	63	63	60	60	60	58	58	58	55	55	55	54	54	54	54	54	54	54	54					
1	58	58	53	51	57	54	52	50	52	50	48	50	48	47	48	47	45	44	44	44	44	44	44	44	44					
2	53	48	43	40	51	47	43	40	45	41	39	43	40	38	41	39	37	36	36	36	36	36	36	36	36					
3	47	41	36	32	46	40	36	32	39	35	31	37	34	31	36	33	30	29	29	29	29	29	29	29	29					
4	43	36	31	27	42	35	30	27	34	29	26	32	29	26	31	28	25	24	24	24	24	24	24	24	24					
5	39	32	26	23	38	31	26	22	30	25	22	29	25	22	28	24	21	20	20	20	20	20	20	20	20					
6	36	28	23	19	35	28	23	19	27	22	19	26	22	19	25	21	19	17	17	17	17	17	17	17	17					
7	33	25	20	17	32	25	20	17	24	20	17	23	19	16	23	19	16	15	15	15	15	15	15	15	15					
8	31	23	18	15	30	23	18	15	22	18	15	21	17	14	21	17	14	13	13	13	13	13	13	13	13					
9	29	21	16	13	28	21	16	13	20	16	13	19	16	13	19	15	13	12	12	12	12	12	12	12	12					
10	27	19	15	12	26	19	15	12	18	14	12	18	14	12	17	14	12	11	11	11	11	11	11	11	11					

SPACING CRITERION = 1.5

TEST NO. 1717

*Full cutoff distribution

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0					
0	86	86	86	86	80	80	80	80	69	69	69	59	59	59	50	50	50	46	46	46	46	46	46	46	46					
1	73	68	63	58	68	63	58	54	53	50	47	45	42	39	37	35	33	29	29	29	29	29	29	29	29					
2	65	57	50	44	60	52	46	41	44	39	35	36	33	29	30	27	24	20	20	20	20	20	20	20	20					
3	58	48	41	34	53	44	38	32	37	32	27	31	26	23	25	21	18	15	15	15	15	15	15	15	15					
4	52	42	34	28	48	38	31	26	32	27	22	27	22	18	21	18	15	12	12	12	12	12	12	12	12					
5	48	37	29	23	44	34	27	21	28	23	18	23	19	15	19	15	12	09	09	09	09	09	09	09	09					
6	44	32	25	19	40	30	23	18	25	19	15	21	16	13	17	13	10	08	08	08	08	08	08	08	08					
7	40	29	22	16	37	27	20	15	22	17	13	19	14	11	15	11	08	06	06	06	06	06	06	06	06					
8	37	26	19	14	34	24	18	13	20	15	11	17	12	09	14	10	07	05	05	05	05	05	05	05	05					
9	34	24	17	12	32	22	16	11	18	13	10	15	11	08	12	09	06	05	05	05	05	05	05	05	05					
10	32	21	15	11	30	20	14	10	17	12	09	14	10	07	11	08	06	04	04	04	04	04	04	04	04					

SPACING CRITERION = 3.5

TEST NO. 1720

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0					
0	64	64	64	63	63	63	63	60	60	60	58	58	58	55	55	55	54	54	54	54	54	54	54	54	54					
1	59	56	54	52	57	55	53	51	53	51	49	50	49	48	48	47	46	45	45	45	45	45	45	45	45					
2	53	48	45	41	52	47	44	41	45	42	40	44	41	39	42	40	38	37	37	37	37	37	37	37	37					
3	48	42	37	34	47	41	37	34	40	36	33	38	35	32	37	34	32	31	31	31	31	31	31	31	31					
4	44	37	32	28	42	36	32	28	35	31	28	34	30	27	32	29	27	26	26	26	26	26	26	26	26					
5	40	33	28	24	39	32	27	24	31	27	23	30	26	23	29	26	23	22	22	22	22	22	22	22	22					
6	37	29	24	21	36	29	24	20	28	23	20	27	23	20	26	23	20	19	19	19	19	19	19	19	19					
7	34	26	21	18	33	26	21	18	25	21	18	24	20	18	23	20	17	16	16	16	16	16	16	16	16					
8	32	24	19	16	31	24	19	16	23	19	16	22	18	16	21	18	15	14	14	14	14	14	14	14	14					
9	29	22	17	14	29	22	17	14	21	17	14	20	17	14	20	16	14	13	13	13	13	13	13	13	13					
10	27	20	16	13	27	20	16	13	19	15	13	19	15	13	18	15	12	11	11	11	11	11	11	11	11					

SPACING CRITERION = 1.4

TEST NO. 1724

*Full cutoff distribution



Enclosed & Gasketed

Listed - File E27731

Certified - File LR11851

INTRODUCTION AND ORDERING INFORMATION

V Series Enclosed & Gasketed

Applications

Locations requiring durable, protected lighting fixtures

Wet and dirt laden locations

Industrial environments requiring enclosed and gasketed (vapor tight) fixtures

Fixtures intended for base-up mounting

Heat resistant glass globes recommended for wet locations

Features

- Electrostatically applied epoxy/polyester finish
- Modular design
- Hubs are threaded for attachment to conduit
- Set screws in pendant fixtures
- Copper-free aluminum (less than 4/10 of 1%)

Class I, Div. 2, NEMA 4 models available - see VXFC Series lighting assemblies & components, pages L9-L12. Dimensions page L13.



PENDANT MOUNT WITH VGA SPLICE BOX								
FITURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VUAG-1-100 ⊕	VUAGG-1-100 ⊕	VGA-1	VFC-100	VCG-100	VAG-100
		3/4"	VUAG-2-100 ⊕	VUAGG-2-100 ⊕	VGA-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VUAG-1-200 ⊕	VUAGG-1-200 ⊕	VGA-1	VFC-200	VCG-200	VAG-200
		3/4"	VUAG-2-200 ⊕	VUAGG-2-200 ⊕	VGA-2	VFC-200	VCG-200	VAG-200

CEILING MOUNT WITH FEET USING VBC SPLICE BOX AND VBA ADAPTER								
FITURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX/ADAPTER	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VUXBG-1-100 ⊕	VUXBGG-1-100 ⊕	VBC-1 + VBA	VFC-100	VCG-100	VAG-100
		3/4"	VUXBG-2-100 ⊕	VUXBGG-2-100 ⊕	VBC-2 + VBA	VFC-100	VCG-100	VAG-100
200	300	1/2"	VUXBG-1-200 ⊕	VUXBGG-1-200 ⊕	VBC-1 + VBA	VFC-200	VCG-200	VAG-200
		3/4"	VUXBG-2-200 ⊕	VUXBGG-2-200 ⊕	VBC-2 + VBA	VFC-200	VCG-200	VAG-200

CEILING MOUNT WITH VGX SPLICE BOX								
FITURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VUXG-1-100 ⊕	VUXGG-1-100 ⊕	VGX-1	VFC-100	VCG-100	VAG-100
		3/4"	VUXG-2-100 ⊕	VUXGG-2-100 ⊕	VGX-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VUXG-1-200 ⊕	VUXGG-1-200 ⊕	VGX-1	VFC-200	VCG-200	VAG-200
		3/4"	VUXG-2-200 ⊕	VUXGG-2-200 ⊕	VGX-2	VFC-200	VCG-200	VAG-200

CEILING MOUNT WITH VGC SPLICE BOX - FEED THROUGH								
FITURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VUCG-1-100 ⊕	VUCGG-1-100 ⊕	VGC-1	VFC-100	VCG-100	VAG-100
		3/4"	VUCG-2-100 ⊕	VUCGG-2-100 ⊕	VGC-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VUCG-1-200 ⊕	VUCGG-1-200 ⊕	VGC-1	VFC-200	VCG-200	VAG-200
		3/4"	VUCG-2-200 ⊕	VUCGG-2-200 ⊕	VGC-2	VFC-200	VCG-200	VAG-200

*For other colors, order globes and fixture components separately.

⊕ Fixture supplied as component unit pack when ordered by this catalog number.

⊗ Catalog number for ordering convenience; fixture is shipped as components as listed in catalog number table.





Enclosed & Gasketed

Listed - File E27731
 Certified - File LR11851

ORDERING INFORMATION



CEILING MOUNT WITH VGH SPLICE BOX - DEAD END								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VUHG-1-100 ②	VUHGG-1-100 ②	VGH-1	VFC-100	VCG-100	VAG-100
		3/4"	VUHG-2-100 ②	VUHGG-2-100 ②	VGH-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VUHG-1-200 ②	VUHGG-1-200 ②	VGH-1	VFC-200	VCG-200	VAG-200
		3/4"	VUHG-2-200 ②	VUHGG-2-200 ②	VGH-2	VFC-200	VCG-200	VAG-200



CEILING MOUNT WITH VXA DEEP 5-HUB SPLICE BOX								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VXAG-110 ②	VXAGG-110 ①	VXA-1	VFC-100	VCG-100	VAG-100
		3/4"	VXAG-210 ②	VXAGG-210 ②	VXA-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VXAG-120 ②	VXAGG-120 ②	VXA-1	VFC-200	VCG-200	VAG-200
		3/4"	VXAG-220 ②	VXAGG-220 ②	VXA-2	VFC-200	VCG-200	VAG-200



CEILING MOUNT WITH VBA ADAPTER FOR ROUND OUTLET BOX								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	BOX ADAPTER	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VOB-100 ①	VOBG-100 ①	VBA	VFC-100	VCG-100	VAG-100
200	300	3/4"	VOB-200 ②	VOBG-200 ①	VBA	VFC-200	VCG-200	VAG-200

NOTES: Mounts directly to VJ ,VB or steel 3-1/2" or 4" outlet boxes. Supplied with gasket.



CEILING MOUNT WITH VFPS ADAPTER FOR SQUARE OR OCTAGON OUTLET BOX								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	BOX ADAPTER	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VFCA-100 ②	VFCA-100 ②	VFPS	VFC-100	VCG-100	VAG-100
200	300	3/4"	VFCA-200 ②	VFCA-200 ②	VFPS	VFC-200	VCG-200	VAG-200

NOTES: Mounts directly to steel 4" square and 3-1/2" or 4" octagon outlet box. Supplied with gasket.

*For other colors, order globe and fixture components separately.

① Fixture supplied as component unit pack when ordered by this catalog number.

② Catalog number for ordering convenience; fixture is shipped as components as listed in catalog number table.



Enclosed & Gasketed

UL Listed - File E27731

SF Certified - File LR11851

ORDERING INFORMATION



WALL MOUNT WITH FEET USING VBC SPLICE BOX AND VB ELBOW								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING BOX/ELBOW	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VFBG-1-100 ①	VFBGG-1-100 ①	VBC-1+VB-1	VFC-100	VCG-100	VAG-100
		3/4"	VFBG-2-100 ①	VFBGG-2-100 ①	VBC-2+VB-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VFBG-1-200 ②	VFBGG-1-200 ②	VBC-1+VB-1	VFC-200	VCG-200	VAG-200
		3/4"	VFBG-2-200 ②	VFBGG-2-200 ②	VBC-2+VB-2	VFC-200	VCG-200	VAG-200



WALL MOUNT WITH VB ELBOW TO MOUNT TO 4" OUTLET BOX								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING ELBOW	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1/2"	VFBG-110 ②	VFBGG-110 ①	VB-1	VFC-100	VCG-100	VAG-100
		3/4"	VFBG-210 ②	VFBGG-210 ①	VB-2	VFC-100	VCG-100	VAG-100
200	300	1/2"	VFBG-120 ②	VFBGG-120 ②	VB-1	VFC-200	VCG-200	VAG-200
		3/4"	VFBG-220 ②	VFBGG-220 ②	VB-2	VFC-200	VCG-200	VAG-200

Mounts directly to VJ or VB Series or 4" steel outlet boxes. One hub in back, supplied with gasket.



WALL MOUNT-WITH VFL ELBOW FOR DIRECT MOUNT TO V SERIES SPLICE BOXES								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING ELBOW	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	—	VOBL-100 ②	VOBLG-100 ①	VFL	VFC-100	VCG-100	VAG-100
200	300	—	VOBL-200 ②	VOBLG-200 ②	VFL	VFC-200	VCG-200	VAG-200

Mounts directly to V Series splice boxes, not to VBC box.



STANCHION MOUNT FOR 1-1/4" THREADED PIPE								
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER		CONSISTS OF			
			FIXTURE W/ GLOBE	FIXTURE W/ GLOBE & GUARD	MOUNTING ARM	FIXTURE BODY	CLEAR GLOBE*	GUARD (if selected)
100	150	1-1/4"	VD-410G ①	VD-410GG ①	VD-4	VFC-100	VCG-100	VAG-100
200	300	1-1/4"	VD-420G ②	VD-420GG ②	VD-4	VFC-200	VCG-200	VAG-200

*For other colors, order globe and fixture components separately.

① Fixture supplied as component unit pack when ordered by this catalog number.

② Catalog number for ordering convenience; fixture is shipped as components as listed in catalog number table.





Pendant



Ceiling

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC,IIB,IIA
NEMA 3, 4*

-  Listed - File E10514
 UL-1571 Standard for incandescent fixtures
 UL-844 Standard for hazardous location fixtures
-  Certified - File LR11713

FEATURES-SPECIFICATIONS

Applications

Killark "V" Series Vaportight fixtures are now available Third Party Certified for use in certain hazardous as well as wet locations which require durable, protected lighting fixtures.

Wet and dirt laden industrial environments such as walkways, tunnels, loading docks, stairwells, etc. made hazardous by the presence of flammable vapors as defined by the NEC.

Fixtures intended for base-up mounting only.

Heat resistant (tempered) glass globes recommended for wet locations.

* Wet location when used with tempered glass.

Features

Killark Vaportight assemblies using VXFC bodies & tempered glass have all the features & advantages of "V" Enclosed & Gasketed" models plus:

- Heavy-duty silicone gasketing for NEMA 4 requirements
- Third party tested & labeled for use in C1D2 areas
- Modular design permits selection of splice box, fixture body, globe, guard and reflector for specific or custom applications
- Existing V Series mounting boxes may be retrofitted to upgrade to NEMA 4; C1D2 suitability

Copper-free aluminum construction with electrostatically applied epoxy/polyester finish resists corrosion

APPLICATION DATA ①			
FIXTURE TYPE	LAMP SIZE	GLOBE TYPE	TEMPERATURE CODE @ 40°C
100	A-19 60W	colored & clear	T2C (230°C)
100	A-19 70W	colored & clear	T2D (215°C)
100	A-19 100W	colored & clear	T2A (280°C)
100	A-21 100W	colored & clear	T2B (260°C)
100	A-21 150W	colored & clear	T2 (300°C)
200	A-23 150W	colored & clear	T2A (280°C)
200	PS-25 150W	colored & clear	T2B (260°C)
200	A-23 200W	colored & clear	T2 (300°C)
200	PS-25 200W	colored & clear	T2A (280°C)
200	PS-25 300W	colored & clear	(350°C)

① Suitability based on base up installation

See dimensions page L13.



**Class I, Div. 2, Groups A,B,C,D®
Class I, Zone 2, Groups IIC,IIB,IIA
NEMA 3, 4**

- Listed - File E10514
UL-1571 Standard for incandescent fixtures
UL-844 Standard for hazardous location fixtures
- Certified - File LR11713

FEATURES-SPECIFICATIONS



PENDANT MOUNT WITH VGA SPLICE BOX							
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER	CONSISTS OF			
			FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD
100	150	1/2"	VUAGG-1-100PX ⊕	VGA-1	VXFC-100 N34	VCGP-100	VAG-100
		3/4"	VUAGG-2-100PX ⊕	VGA-2	VXFC-100 N34	VCGP-100	VAG-100
200	300	1/2"	VUAGG-1-200PX ⊕	VGA-1	VXFC-200 N34	VCGP-200	VAG-200
		3/4"	VUAGG-2-200PX ⊕	VGA-2	VXFC-200 N34	VCGP-200	VAG-200



CEILING FIXTURE WITH VGX SPLICE BOX							
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER	CONSISTS OF			
			FIXTURE W/ GLOBE & GUARD	MOUNTING BOX	FIXTURE BODY	CLEAR GLOBE*	GUARD
100	150	1/2"	VUXGG-1-100PX ⊕	VGX-1	VXFC-100 N34	VCGP-100	VAG-100
		3/4"	VUXGG-2-100PX ⊕	VGX-2	VXFC-100 N34	VCGP-100	VAG-100
200	300	1/2"	VUXGG-1-200PX ⊕	VGX-1	VXFC-200 N34	VCGP-200	VAG-200
		3/4"	VUXGG-2-200PX ⊕	VGX-2	VXFC-200 N34	VCGP-200	VAG-200



CEILING FIXTURE WITH MOUNTING FEET USING VBC SPLICE BOX & VBA ADAPTER							
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER	CONSISTS OF			
			FIXTURE W/ GLOBE & GUARD	MOUNTING BOX/ADAPTER	FIXTURE BODY	CLEAR GLOBE*	GUARD
100	150	1/2"	VUXBGG-1-100PX ⊕	VBC-1+VBA	VXFC-100 N34	VCGP-100	VAG-100
		3/4"	VUXBGG-2-100PX ⊕	VBC-2+VBA	VXFC-100 N34	VCGP-100	VAG-100
200	300	1/2"	VUXBGG-1-200PX ⊕	VBC-1+VBA	VXFC-200 N34	VCGP-200	VAG-200
		3/4"	VUXBGG-2-200PX ⊕	VBC-2+VBA	VXFC-200 N34	VCGP-200	VAG-200



WALL FIXTURE WITH MOUNTING FEET USING VBC SPLICE BOX & VB ELBOW							
FIXTURE TYPE	LAMP WATT	HUB SIZE	CATALOG NUMBER	CONSISTS OF			
			FIXTURE W/ GLOBE & GUARD	MOUNTING BOX/ELBOW	FIXTURE BODY	CLEAR GLOBE*	GUARD
100	150	1/2"	VFBGG-1-100PX ⊕	VBC-1 + VB-1	VXFC-100 N34	VCGP-100	VAG-100
		3/4"	VFBGG-2-100PX ⊕	VBC-2 + VB-2	VXFC-100 N34	VCGP-100	VAG-100
200	300	1/2"	VFBGG-1-200PX ⊕	VBC-1 + VB-1	VXFC-200 N34	VCGP-200	VAG-200
		3/4"	VFBGG-2-200PX ⊕	VBC-2 + VB-2	VXFC-200 N34	VCGP-200	VAG-200

*For other colors, order globes and mounting components separately.

⊕ Fixture supplied as component unit pack when ordered by this catalog number.

⊙ See page L9 for temperature codes; NEMA 3, 4 when used with tempered glass.



KILLARK®

 Listed - File E27731

 Certified - File LR11851

VFC Fixture Bodies

Fixture bodies contain lamp receptacle and are threaded to accept globes, guards and reflectors. These fixture bodies are designed for metallic boxes and mount directly to V Series splice

boxes. They may also be mounted to VJ Series, VB Series or other 4" outlet boxes with the use of the appropriate adapter plate. Each fixture body is supplied with gaskets.



VFC-100
VXFC-100[Ⓢ]



VFC-200
VXFC-200[Ⓢ]

V FIXTURE BODIES	
CATALOG NUMBER	DESCRIPTION
VFC-100	150W max. Enclosed & Gasketed Fixture Body
VFC-200	300W max. Enclosed & Gasketed Fixture Body
VXFC-100 N34	150W max. NEMA 3,4 - Class I, Div. 2 Fixture Body [Ⓢ]
VXFC-200 N34	300W max. NEMA 3,4 - Class I, Div. 2 Fixture Body [Ⓢ]

[Ⓢ] Use VXFC body with tempered globe for NEMA 3, 4 - Class I, Div. 2 applications. VXFC body is Class I, Div. 2 only (not N3, N4) when used with standard globes. Consult temperature table, page L9 for suitability.



VGA



VGH



VGC



VGX



VXA



VBC

V Splice Boxes

For use with types 100 and 200 fixture bodies

V SPLICE BOXES		
CATALOG NUMBER	HUB SIZE & QTY.	DESCRIPTION
VGA-1	1/2" 1	Pendant mount
VGA-2	3/4" 1	
VGH-1	1/2" 1	Ceiling mount
VGH-2	3/4" 1	
VGC-1	1/2" 2	Ceiling mount
VGC-2	3/4" 2	
VGX-1	1/2" 4	Ceiling mount
VGX-2	3/4" 4	
VXA-1	1/2" 5	Ceiling mount, deep box
VXA-2	3/4" 5	
VBC-1	1/2" 4	Ceiling mount, with 3 close-up plugs (requires VBA Adapter)
VBC-2*	3/4" 4	
VXAB	- -	Blank close-up plate (less gasket)

* Volume cu. in. is 18.



VBA



VFPS

V ADAPTER MOUNTING PLATES	
CATALOG NUMBER	DESCRIPTION
VBA	Adapts fixture body to VB, VJ or steel 3-1/2" & 4" splice boxes. Supplied with gasket.
VFPS	Adapts fixture body to steel 4" square outlet boxes or 3-1/2" or 4" octagon boxes



VB




VFL



VD

V MOUNTING BRACKETS			
CATALOG NUMBER	HUB SIZE	QTY.	DESCRIPTION
VB-1	1/2"	1	Wall mount to VJ or VB boxes
VB-2	3/4"	1	Wall mount to VJ or VB boxes
VFL	—	—	Wall mount to V boxes directly or to VJ, VB boxes with VBA adapter
VD-4	1-1/4"	1	Stanchion mount



 Listed - File E27731

 Certified - File LR11851



150 W Max.
Lamp Size A-21



300 W Max.
Lamp Size PS-25



Polycarbonate



500 W Max.
Lamp Size PS-35

V GLASS GLOBES		
CATALOG NUMBER		DESCRIPTION
150 W A-21 LAMP	300 W PS-25 LAMP	
VCG-100	VCG-200	Clear
VCGP-100	VCGP-200	Clear Tempered. Thermal and shock resistant [Ⓢ]
VCGPT-100	—	Clear Tempered with Tuffskin [®] coating [Ⓢ]
VAMG-100	VAMG-200	Amber
VMAGP-100	—	Amber Tempered [Ⓢ]
VGG-100	VGG-200	Blue Green
VGGP-100	VGGP-200	Blue Green Tempered [Ⓢ]
VBG-100	VBG-200	Blue
VBGP-100	—	Blue Tempered [Ⓢ]
VRG-100	VRG-200	Ruby
VRGP-100	VRGP-200	Ruby Tempered [Ⓢ]
VRSG-100	—	Green
VPG-100	—	Purple
75 W A-19 LAMP		Polycarbonate. Cannot be used with guard or in high ambient temperature locations (40°C/104°F max.) Not UL Listed.
VPLCG-100	VPLCG-200	
500 W PS-35 LAMP		
VCG-500		Clear (for replacement) Formerly DCG-20
VCGP-500		Tempered. Thermal and shock resistant (for replacement).

[Ⓢ] Recommended for use with VXFC fixture basis.

[Ⓢ] TM Thomas Manufacturing.



V GUARDS	
CATALOG NUMBER	DESCRIPTION
VAG-100	100 Series Vaportite guard
VAG-200	200 Series Vaportite guard



V REFLECTORS		
CATALOG NUMBER	DESCRIPTION	
VPRSD-100	100 Series Reflector	16 3/8" Dia. 5 5/8" High. White polypropylene for pendant & ceiling applications. Not for use with wall or stanchion models.
VPRSD-200	200 Series Reflector	



Body To Splice Box
Gasket
100 or 200 Series
VTG Standard
VTG-S Silicone (pictured)

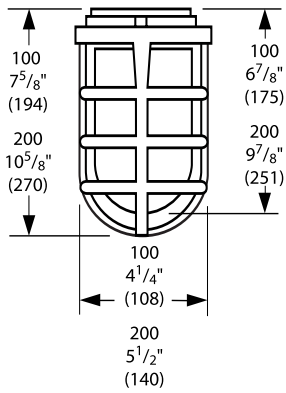
V SERIES GASKETS			
CATALOG NUMBER		TYPE	DESCRIPTION
100 SERIES	200 SERIES		
VTG		VFC	Fixture body to splice box
VTG-S		VXFC	Silicone, Fixture body to splice box
VBNB		—	Replacement Gaskets for VB-1/VB-2 and VBA
15871AABB	VTGG	VFC	Globe gasket
VTGG1-S	VTGG2-S	VFXC	Silicone, globe gasket



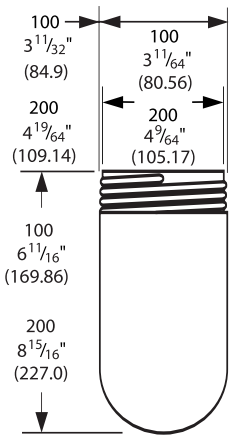
Globe Gasket
100 Series Standard - 15871AABB
200 Series Standard - VTGG (pictured)
100 Series Silicone - VTGG1-S
200 Series Silicone - VTGG2-S



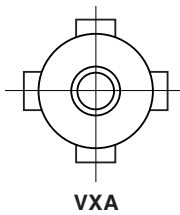
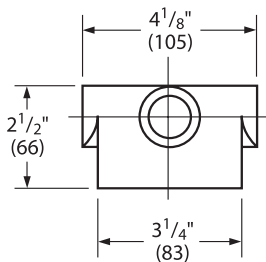
V LAMP SOCKET	
CATALOG NUMBER	DESCRIPTION
VRME	For fixture types 100 and 200



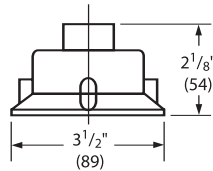
V Fixture
w/o Splice Box



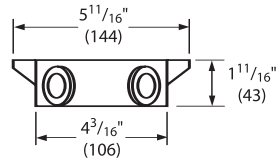
V Fixture
Globes



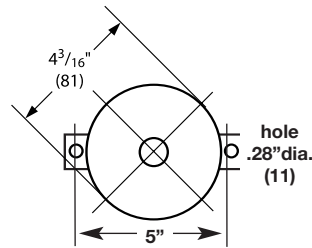
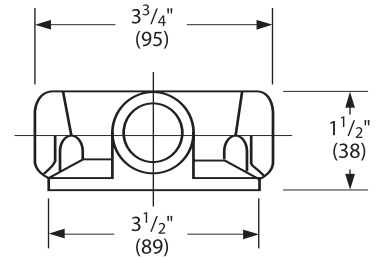
VXA



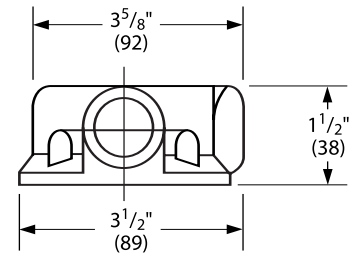
VGA



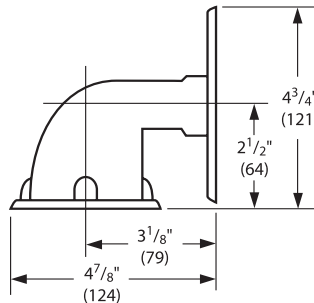
VGC VGX



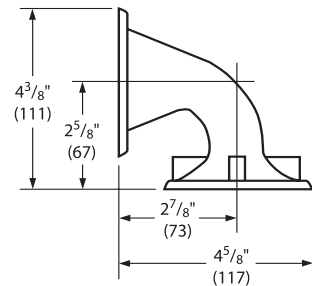
VBC-1 & VBC-2



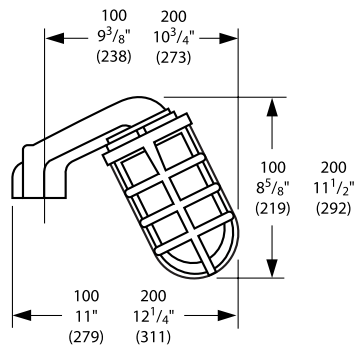
VGH



VB



VFL



V Stanchion



Class II, Div. 1 & 2 Groups E,F,G[Ⓢ]
Class III

 Listed - File E12976

 Certified - File LR11713

FEATURES-SPECIFICATIONS

DV DUST-IGNITION PROOF

Applications

For hazardous locations where suspended metal, carbon (coal, etc.) and grain dusts create explosive or ignitable mixtures with the air

Features

Cast of corrosion resistant aluminum alloy with electrostatically applied epoxy/polyester finish

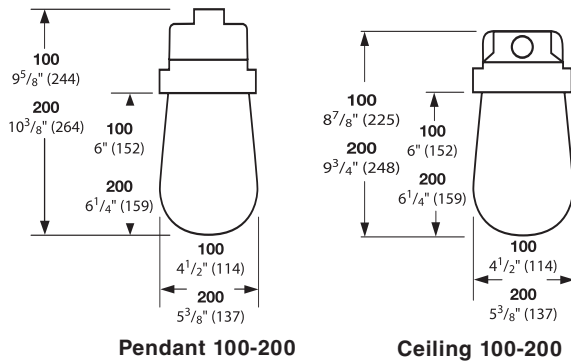
Ceiling mounted units supplied with 4 hubs.

DV 100/200				
MODEL SIZE	LAMP SIZE	HUB	CATALOG NUMBER	
			PENDANT	CEILING
TYPE 100	100 Watt A-21	1/2"	DVA-110	DVX-110
	150 Watt A-23	3/4"	DVA-210	DVX-210
TYPE 200	150 Watt PS-25	1/2"	DVA-120	DVX-120
	200 Watt PS-25	3/4"	DVA-220	DVX-220

ACCESSORIES/REPLACEMENT PARTS			
FITTURE TYPE	CATALOG NUMBER		
	GLASS GLOBE	WIRE GUARD	REPLACEMENT RECEPTACLE
100	DCGE-10	DAG-100	VRME
200	DCGE-20	DAG-200	VRME

[Ⓢ] Temperature code T3B, use supply wire suitable for 150° C.

Dimensions



DAG Guard



HPG-2-500F



HXG-2-500F



HBG-2-500F

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G

Listed* - File E12976

Certified* - File LR11713

*Complete assemblies only

See Hazardous location application data

FEATURES-SPECIFICATIONS

Applications

H Series fixtures can be used for: Hazardous locations indoors and outdoors.

General lighting or process finish, storage and handling areas where flammable gases, vapor or dust may be present in the air to produce explosive or ignitable mixtures.

Features

- Cast of corrosion resistant aluminum alloy with electrostatically applied epoxy/polyester finish
- Heat and impact resistant pre-stressed fluted globe
- Relamp without tools—no need to remove accessories for relamping
- Fixture for lamp base-up mounting only
- Reflectors-aluminum with white finish

Fixture Ordering Information

- See catalog numbers shown at right
- For mogul base 300 watt PS-35 or 500 watt PS-40 lamps
- Fixture hub size is 3/4"
- Omit "G" in fixture catalog number to omit guard

H COMPLETE FIXTURES		
CATALOG NUMBER	HUB SIZE	DESCRIPTION
HPG-2-500F	3/4"	Pendant
HXG-2-500F	3/4"	Ceiling
HBG-2-500F	3/4"	Wall



HP-2

HX-2

HB-2

H MOUNTING SPLICE BOXES		
CATALOG NUMBER	HUB SIZE	DESCRIPTION
HP-2	3/4"	Pendant
HX-2	3/4"	Ceiling
HB-2	3/4"	Wall



HRSD-500

HRD-400

HRA-500

HGSA-500F

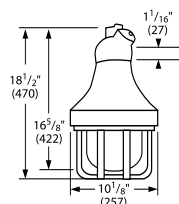
EZG1G

HRMO

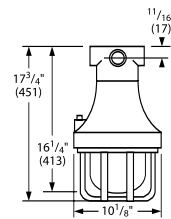
H ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
HRSD-500	Standard dome reflector 18-1/4" dia. (or VMASD-40)
HRD-400	Deep reflector 21-1/8" dia.
HRA-500	Angle reflector 15-1/8" dia. (or VMMA-40)
HGSA-500F	Globe with support assembly (for replacement)
EZG1G	Guard
HG-500	Guard (old style without "F" only)
HRMO	Replacement mogul socket (HRME for discontinued medium base)

H APPLICATION DATA							
LAMP WATTS	RATED AMBIENT °C	CLASS I, DIV. 1 & 2		CLASS II, DIV. 1 & 2		CLASS III SUITABILITY	SUPPLY WIRE °C
		T-CODE	GROUPS	T-CODE	GROUPS		
300	40	T3C	C, D	T3C	E F G	YES	150
500	40	T3	C, D	T3	E	NO	150

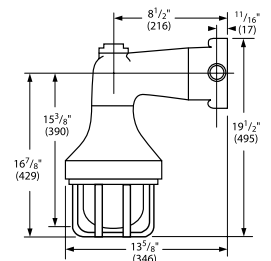
Dimensions



Pendant



Ceiling



Wall



E INCANDESCENT



EPG-2-200



EXG-2-200



EBG-2-200

Class I, Div. 1 & 2, Groups A,B,C,D
Class I, Zones 1 & 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G



HG-200

Applications

For hazardous locations including where **Group A or Group B** gases are present, indoors or outdoors.

General, local or supplementary lighting in areas where Group A or Group B gases are manufactured, used or handled.

Features

- Cast of corrosion resistant aluminum alloy with electrostatically applied epoxy/polyester finish
- For 200 watt or 300 watt PS-30 medium base lamps. Fixture for lamp base-up mounting only
- Omit "G" in catalog number to omit guard

Groups A,B Rated

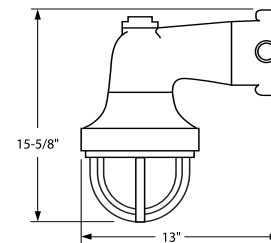
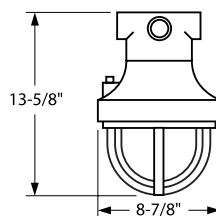
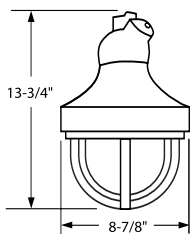
E INCANDESCENT FIXTURE	
CATALOG NUMBER	DESCRIPTION
EPG-2-200	Pendant 3/4" hub
EXG-2-200	Ceiling 3/4" hub
EBG-2-200	Bracket 3/4" hub

Note: For 200 watt or 300 watt PS-30 lamps. Fixture for lamp base-up mounting only.

E ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
HG-200	Guard
EGSA-200	Globe w/ support assembly
HRME*	Replacement socket
ERSD30	Dome reflector
ERA30	Angle reflector

** Also fits discontinued H series medium base fixtures*

E APPLICATION DATA							
LAMP WATTS	RATED AMBIENT °C	CLASS I, DIV. 1 & 2		CLASS II, DIV. 1 & 2		CLASS III SUITABILITY	SUPPLY WIRE °C
		T-CODE	GROUPS	T-CODE	GROUPS		
200	40	T4	A, B, C, D	T3C	E F G	YES	90
300	40	T3C	A, B, C, D	T3A	E, F	NO	150



XHL SERIES HAND LAMPS

XHL Series Hand Lamps are a handy accessory to the ACCEPTOR® Series. Used as a supplemental illumination source for areas where flammable materials are present such as processed finished goods, storage vats or handling areas.



XHL



XHLF

Features XHL Incandescent

- Phenolic handle for long service in rugged conditions
- Aluminum guard
- Heat and impact resistant globe
- Supplied with an A-21 100 Watt (100A/RS) Rough Service lamp
- Supplied with 2 grommets for use with either 14/3 or 16/3 user furnished SO cable

CATALOG NUMBER	DESCRIPTION
XHL-100	Handlamp
XHL-GL	Replacement Globe
XHLG	Replacement Guard
XHLS	Replacement Socket

XHL Incandescent

Class I, Div. 1 & 2, Groups C, D
Class I, Zones 1 & 2, Groups IIB,IIA

Features XHLF Fluorescent

- No exposed metal parts
- Furnished with 26 watt 1800 Lumen fluorescent lamp and light shield
- Supplied with grommet for use with 16/3 user furnished SO cable

CATALOG NUMBER	DESCRIPTION
XHLF26	Fluorescent hand lamp
XHLF26-50KP	Fluorescent hand lamp with 50' of 16/3 SOW cord and 15A Acceptor plug

XHLF Fluorescent

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
Class II, Div. 1 & 2, Groups F,G

Listed File No. E97760

Listed File No. E97760

Certified File No. LR10019



KILLARK®



Pendant

Ceiling

Wall

Stanchion

Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
Marine
NEMA 3, 4X

Listed - Files E10514 and E91793 (Marine)

Certified - File LR11713

FEATURES-SPECIFICATIONS

CERTILITE®

Applications

CERTILITE® MB fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambi-ents can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufac-turing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Compliances

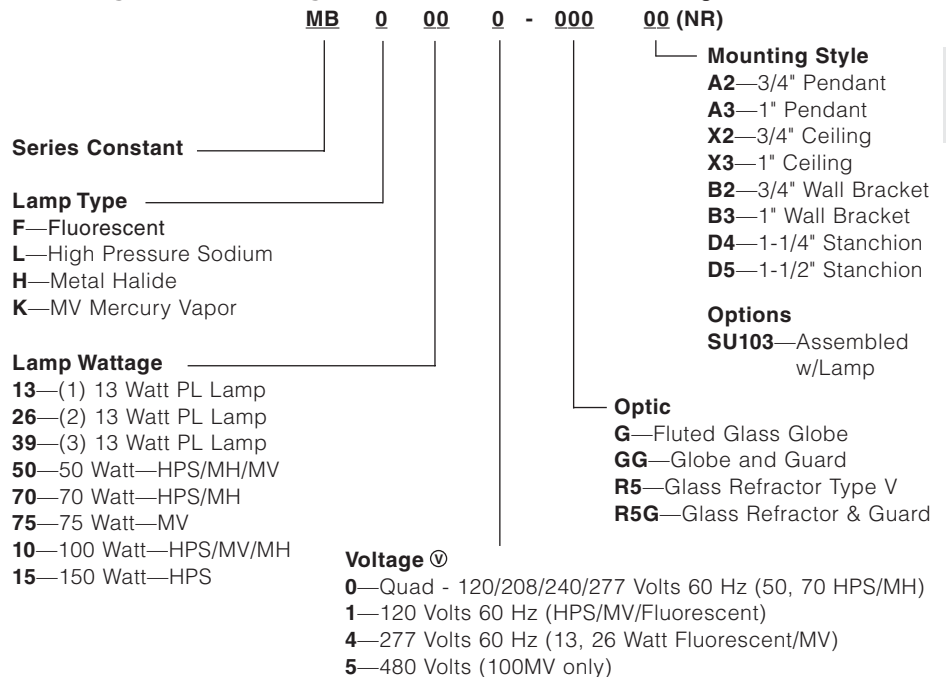
- UL-1572 Standard for HID lighting fixtures
- UL-1570 Standard for Fluorescent fixtures
- UL Marine type lighting fixtures (HID models) UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaries for use in hazardous loca-tions
- Enclosed and gasketed
- NEMA 3, 4X

Features

- Ballast tank and splice box — corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware — stainless steel
- Guard — copper-free aluminum alloy
- Normally shipped as components for quick delivery

- Refractor guard — steel with corro-sion resistant finish
- Reflector — lightweight, corrosion resistant polyester reinforced fiber-glass
- Fluorescent models furnished with lamps. Energy efficient instant on white light (2700K). 10,000 hour lamp life
- HID lamp holders are E26 medium base

Catalog Number Logic



② Consult factory for available lamp and voltage combinations.

* See Hazardous Location Application Data on page L26 for limitations.

① See page L22 for Ex nR Restricted Breathing models.



Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
NEMA 3, 4X

Listed - Files E10514 and E91793

Certified - File LR11713

FEATURES-SPECIFICATIONS

PENDANT



PENDANT FLUORESCENT					
LAMP TYPE	LAMP/① WATTS	HUB SIZE①	VOLTAGE 60 HZ③	CATALOG NUMBER②	
				GLOBE AND GUARD	REFRACTOR AND GUARD
Bi-Pin	13 Watt (1 x 13)	3/4"	120	MBF131-GGA2	MBF131-R5GA2
	26 Watt (2 x 13)	3/4"	120	MBF261-GGA2	MBF261-R5GA2
	39 Watt (3 x 13)	3/4"	120	MBF391-GGA2	MBF391-R5GA2

CEILING



CEILING FLUORESCENT					
LAMP TYPE	LAMP/① WATTS	HUB SIZE②	VOLTAGE 60 HZ③	CATALOG NUMBER②	
				GLOBE AND GUARD	REFRACTOR AND GUARD
Bi-Pin	13 Watt (1 x 13)	3/4"	120	MBF131-GGX2	MBF131-R5GX2
	26 Watt (2 x 13)	3/4"	120	MBF261-GGX2	MBF261-R5GX2
	39 Watt (3 x 13)	3/4"	120	MBF391-GGX2	MBF391-R5GX2

WALL



WALL FLUORESCENT					
LAMP TYPE	LAMP/① WATTS	HUB SIZE②	VOLTAGE 60 HZ③	CATALOG NUMBER②	
				GLOBE AND GUARD	REFRACTOR AND GUARD
Bi-Pin	13 Watt (1 x 13)	3/4"	120	MBF131-GGB2	MBF131-R5GB2
	26 Watt (2 x 13)	3/4"	120	MBF261-GGB2	MBF261-R5GB2
	39 Watt (3 x 13)	3/4"	120	MBF391-GGB2	MBF391-R5GB2

STANCHION



STANCHION FLUORESCENT					
LAMP TYPE	LAMP/① WATTS	HUB SIZE②	VOLTAGE 60 HZ③	CATALOG NUMBER②	
				GLOBE AND GUARD	REFRACTOR AND GUARD
Bi-Pin	13 Watt (1 x 13)	1-1/4"	120	MBF131-GGD4	MBF131-R5GD4
	26 Watt (2 x 13)	1-1/4"	120	MBF261-GGD4	MBF261-R5GD4
	39 Watt (3 x 13)	1-1/4"	120	MBF391-GGD4	MBF391-R5GD4

① Fixtures supplied with Bi-Pin fluorescent lamps. Replacement number MPL13.

② Catalog numbers shown are with 3/4" conduit openings (1-1/4" on stanchion mount) and include globe and guard. See catalog logic for other possible configurations.

③ Catalog numbers are shown with 120V ballasts. 1 & 2 lamp fixtures are available with 277V ballasts. Change 6th character from "1" to "4"; e.g. MBF264-GGA2.

* See Hazardous Location Application Data on page L26 for limitations.





Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

 Listed - Files E10514 and E91793 (Marine)

 Certified - File LR11713

FEATURES-SPECIFICATIONS

PENDANT



PENDANT 50-150W HIGH PRESSURE SODIUM					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
HPS	50 (S68)	3/4"	120	MBL501-GGA2	MBL501-R5GA2
	70 (S62)	3/4"	120	MBL701-GGA2	MBL701-R5GA2
	100 (S54)	3/4"	120	MBL101-GGA2	MBL101-R5GA2
	150 (S55)	3/4"	120	MBL151-GGA2	MBL151-R5GA2

CEILING



CEILING 50-150W HIGH PRESSURE SODIUM					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
HPS	50 (S68)	3/4"	120	MBL501-GGX2	MBL501-R5GX2
	70 (S62)	3/4"	120	MBL701-GGX2	MBL701-R5GX2
	100 (S54)	3/4"	120	MBL101-GGX2	MBL101-R5GX2
	150 (S55)	3/4"	120	MBL151-GGX2	MBL151-R5GX2

WALL



WALL 50-150W HIGH PRESSURE SODIUM					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
HPS	50 (S68)	3/4"	120	MBL501-GGB2	MBL501-R5GB2
	70 (S62)	3/4"	120	MBL701-GGB2	MBL701-R5GB2
	100 (S54)	3/4"	120	MBL101-GGB2	MBL101-R5GB2
	150 (S55)	3/4"	120	MBL151-GGB2	MBL151-R5GB2

STANCHION



STANCHION 50-150W HIGH PRESSURE SODIUM					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
HPS	50 (S68)	1-1/4"	120	MBL501-GGD4	MBL501-R5GD4
	70 (S62)	1-1/4"	120	MBL701-GGD4	MBL701-R5GD4
	100 (S54)	3/4"	120	MBL101-GGB2	MBL101-R5GB2
	150 (S55)	1-1/4"	120	MBL101-GGD4	MBL101-R5GD4

[Ⓛ] Catalog numbers shown are 120. Consult factory for other available voltages.

[Ⓢ] Catalog numbers shown with 3/4" conduit openings (1-1/4" on stanchion mount) and includes globe and guard or IES type V 8" glass refractor and guard. See catalog logic for other possible configurations.

* See Hazardous Location Application Data on page L26 for limitations.



Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

Listed - Files E10514 and E91793 (Marine)

Certified - File LR11713

ORDERING INFORMATION

PENDANT



PENDANT 50-100W METAL HALIDE					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MH	50 (M110)	3/4"	120/208/240/277	MBH500-GGA2	MBH500-R5GA2
	70 (M98)	3/4"	120/208/240/277	MBH700-GGA2	MBH700-R5GA2
	100 (M90)	3/4"	120/208/240/277	MBH100-GGA2	MBH100-R5GA2

CEILING



CEILING 50-100W METAL HALIDE					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MH	50 (M110)	3/4"	120/208/240/277	MBH500-GGX2	MBH500-R5GX2
	70 (M98)	3/4"	120/208/240/277	MBH700-GGX2	MBH700-R5GX2
	100 (M90)	3/4"	120/208/240/277	MBH100-GGX2	MBH100-R5GX2

WALL



WALL 50-100W METAL HALIDE					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MH	50 (M110)	3/4"	120/208/240/277	MBH500-GGB2	MBH500-R5GB2
	70 (M98)	3/4"	120/208/240/277	MBH700-GGB2	MBH700-R5GB2
	100 (M90)	3/4"	120/208/240/277	MBH100-GGB2	MBH100-R5GB2

STANCHION



STANCHION 50-100W METAL HALIDE					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MH	50 (M110)	1-1/4"	120/208/240/277	MBH500-GGD4	MBH500-R5GD4
	70 (M98)	1-1/4"	120/208/240/277	MBH700-GGD4	MBH700-R5GD4
	100 (M90)	1-1/4"	120/208/240/277	MBH100-GGD4	MBH100-R5GD4

[Ⓛ] Metal Halide MB fixtures use quad-volt ballasts.

[Ⓢ] Catalog numbers shown with 3/4" conduit openings (1-1/4" on stanchion mount) and include globe and guard or IES type V 8" glass refractor and guard. See catalog logic for other possible configurations.

* See Hazardous Location Application Data on page L26 for limitations.



Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

 Listed - Files E10514 and E91793 (Marine)

 Certified - File LR11713

ORDERING INFORMATION

PENDANT



PENDANT 50-100W MERCURY VAPOR					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MV	50 (H46)	3/4"	120	MBK501-GGA2	MBK501-R5GA2
	75 (H43)	3/4"	120	MBK751-GGA2	MBK701-R5GA2
	100 (H38)	3/4"	120	MBK101-GGA2	MBK101-R5GA2

CEILING



CEILING 50-100W MERCURY VAPOR					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MV	50 (H46)	3/4"	120	MBK501-GGX2	MBK501-R5GX2
	75 (H43)	3/4"	120	MBK751-GGX2	MBK751-R5GX2
	100 (H38)	3/4"	120	MBK101-GGX2	MBK101-R5GX2

WALL



WALL 50-100W MERCURY VAPOR					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MV	50 (H46)	3/4"	120	MBK501-GGB2	MBK501-R5GB2
	75 (H43)	3/4"	120	MBK751-GGB2	MBK751-R5GB2
	100 (H38)	3/4"	120	MBK101-GGB2	MBK101-R5GB2

STANCHION



STANCHION 50-100W MERCURY VAPOR					
LAMP TYPE	LAMP WATTS/ANSI	HUB SIZE [Ⓞ]	VOLTAGE 60 HZ [Ⓛ]	CATALOG NUMBER [Ⓢ]	
				GLOBE AND GUARD	REFRACTOR AND GUARD
MV	50 (H46)	1-1/4"	120	MBK501-GGD4	MBK501-R5GD4
	75 (H43)	1-1/4"	120	MBK751-GGD4	MBK751-R5GD4
	100 (H38)	1-1/4"	120	MBK101-GGD4	MBK101-R5GD4

[Ⓛ] Catalog numbers shown are 120 volt. Consult factory for other available voltages.

[Ⓢ] Catalog numbers shown with 3/4" conduit openings (1-1/4" on stanchion mount) and includes globe and guard or IES type V 8" glass refractor and guard. See catalog logic for other possible configurations.

* See Hazardous Location Application Data on page L26 for limitations.





Pendant



Ceiling



Wall



Stanchion

AEx nR / Ex nR*
Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

 Listed - Files E10514 and E91793 (Marine)

 Certified - File LR11713

FEATURES-SPECIFICATIONS

CERTILITE®

Applications

MB Restricted Breathing option fixtures maintain all the features and compliances listed for standard MB HID lighting fixtures. An alternate testing and installation method allows much lower Temperature Codes when compared to conventional units. Installation requires sealed entry (conduit or cable). See temperature data charts to determine suitability per applicable construction codes. Ex nR Restricted Breathing fixtures are available with globe only, not refractors.

CERTILITE® MB fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Compliances

- UL-1572 Standard for HID lighting fixtures
- UL Marine type lighting fixtures
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- IEC 60079-15 Electrical apparatus with "n" type protection
- Enclosed and gasketed
- NEMA 3, 4X

Features

- Ballast tank and splice box — corrosion resistant copper-free aluminum alloy
- HID lamp holders are E-26 medium base

- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware — stainless steel
- Guard — copper-free aluminum alloy
- Reflector — lightweight, corrosion resistant polyester reinforced fiberglass

Electrical

Fixtures are available in

- Fluorescent Bi-Pin: 13-39 watts[Ⓞ]
- HPS: 50 through 150 watts
- MH: 50 through 100 watts
- MV: 50 through 100 watts

All HID ballast circuits are high power factor. Consult catalog logic on page L17 for available voltages.

* See Hazardous Location Application Data on page L26 for limitations.

Ex nR HID models listed page L23. For fluorescent models, add NR to "globe" model number from page L18.



KILLARK®



AEx nR / Ex nR*
Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

 Listed - Files E10514 and E91793 (Marine)

 Certified - File LR11713

FEATURES-SPECIFICATIONS

PENDANT



MB 50-150W Ex nR PENDANT^①				
LAMP WATTS^③	VOLTAGE @ 60 HERTZ	CATALOG NUMBER		
		HPS	MH^②	MV
50	120 ^②	MBL501-GGA2NR	MBH500-GGA2NR	MBK501-GGA2NR
70	120 ^②	MBL701-GGA2NR	MBH700-GGA2NR	—
75	120	—	—	MBK751-GGA2NR
100	120	MBL101-GGA2NR	MBH100-GGA2NR	MBK101-GGA2NR
150	120	MBL151-GGA2NR	—	—

CEILING



MB 50-150W Ex nR CEILING^①				
LAMP WATTS^③	VOLTAGE @ 60 HERTZ	CATALOG NUMBER		
		HPS	MH^②	MV
50	120 ^②	MBL501-GGX2NR	MBH500-GGX2NR	MBK501-GGX2NR
70	120 ^②	MBL701-GGX2NR	MBH700-GGX2NR	—
75	120	—	—	MBK751-GGX2NR
100	120	MBL101-GGX2NR	MBH100-GGX2NR	MBK101-GGX2NR
150	120	MBL151-GGX2NR	—	—

WALL



MB 50-150W Ex nR WALL^①				
LAMP WATTS^③	VOLTAGE @ 60 HERTZ	CATALOG NUMBER		
		HPS	MH^②	MV
50	120 ^②	MBL501-GGB2NR	MBH500-GGB2NR	MBK501-GGB2NR
70	120 ^②	MBL701-GGB2NR	MBH700-GGB2NR	—
75	120	—	—	MBK751-GGB2NR
100	120	MBL101-GGB2NR	MBH100-GGB2NR	MBK101-GGB2NR
150	120	MBL151-GGB2NR	—	—

STANCHION



MB 50-150W Ex nR STANCHION^①				
LAMP WATTS^③	VOLTAGE @ 60 HERTZ	CATALOG NUMBER		
		HPS	MH^②	MV
50	120 ^②	MBL501-GGD4NR	MBH500-GGD4NR	MBK501-GGD4NR
70	120 ^②	MBL701-GGD4NR	MBH700-GGD4NR	—
75	120	—	—	MBK751-GGD4NR
100	120	MBL101-GGD4NR	MBH100-GGD4NR	MBK101-GGD4NR
150	120	MBL151-GGD4NR	—	—

^① Fixtures are shown with 120V ballasts, except Metal Halide. All assemblies with 3/4" conduit openings (1-1/4" Stanchion), globe and guard. Consult prior pages and catalog logic for other options.

^② Metal Halide fixtures are furnished with quad-volt ballasts.

^③ See standard MB Series HID fixtures for ANSI data.

* See Hazardous Location Application Data on page L26 for limitations.

Note: For fluorescent Ex nR models, add NR to "globe" model number from page L18.





MB MOUNTING BRACKETS				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	WALL	STANCHION	
MBA-2	MBX-2	MBB-2	—	3/4"
MBA-3	MBX-3	MBB-3	—	1"
—	MBX-8*	—	—	M20
—	—	—	MBD-4	1-1/4"
—	—	—	MBD-5	1-1/2"

* MBX-8 furnished with 3 non-metallic Ex plugs



④ Catalog numbers shown are 120 volt (except Metal Halide). Consult catalog number logic on page L17 and change sixth character to indicate other available voltages.

⑤ For Class I Ex nR Restricted Breathing ballast housings, add "NR" to catalog number e.g. MBL501NR. "NR" ballast housing not available for use with refractors.



EBRS



EMRS



ENY-2SET

MB ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
EMRS	MB medium base replacement socket (E26)
EBRS	MB Bi-Pin base replacement socket
MPL13	Replacement lamp for MBF and EBF series
ENY-2SET	3/4" ENY seal with set screw for sealed (Ex nR) pendant installations
ENY-3SET	1" ENY seal with set screw for sealed (Ex nR) pendant installations

MB BALLAST TANK ④ ⑤			
LAMP TYPE	LAMP WATTAGE	VOLTAGE 60 HZ	CATALOG NUMBER
FL	13	120	MBF131
	26	120	MBF261
	39	120	MBF391
HPS	50	120	MBL501
	70	120	MBL701
	100	120	MBL101
	150	120	MBL151
MH	50	120/208/240/277	MBH500
	70	120/208/240/277	MBH700
	100	120/208/240/277	MBH100
MV	50	120	MBK501
	75	120	MBK751
	100	120	MBK101

MB BALLAST DATA										
LAMP	LAMP TYPE		STARTING AMPS	OPERATING AMPS	OPEN CIRCUIT AMPS	INPUT WATTS MAX	BALLAST CIRCUIT	REGULATIONS	MINIMUM START TEMPERATURE	
	WATTS	VOLTS - VAC							°F	°C
FL④	13	120/277	.39/.35	.30/.3	—	16	NPF	—	0°F	-18°C
HPS	50	120	.75	.55	.90	60	HX-HPF②	±5% Line voltage③	-40°F	-40°C
	70	120	.85	.75	1.30	82	HX-HPF②	±5% Line voltage③	-40°F	-40°C
	100	120	1.50	1.05	1.80	115	HX-HPF②	±5% Line voltage③	-40°F	-40°C
	150	120	2.20	1.50	2.35	170	HX-HPF②	±5% Line voltage③	-40°F	-40°C
MH	50	120/208 240/277	.87/.51/.47/.39	.6/.35/.3/.25	1.6/.67/.57/.5	67	HX-HPF②	±5% Line voltage③ ±12% Lamp watts③	-20°F	-30°C
	70	120/208 240/277	.8/.5/.43/.39	.85/.5/.43/.37	1.7/1.04/.87/.78	95	HX-HPF②	±5% Line voltage③ ±12% Lamp watts③	-20°F	-30°C
	100	120/208 240/277	1.2/.8/.65/.6	1.15/.66/.58/.5	2.3/1.4/1.15/1.0	129	HX-HPF②	±5% Line voltage③ ±12% Lamp watts③	-20°F	-30°C
MV	50	120/277	.60/.26	.67/.29	.30/.13	74	CWA②	±10% Lamp watts③	-20°F	-30°C
	75	120/277	.80/.35	.82/.36	.50/.22	93	CWA②	±10% Lamp watts③	-20°F	-30°C
	100	120/277/480	1.00/.43/.25	1.05/.45/.26	.64/.28/.16	118	CWA②	±10% Lamp watts③	-20°F	-30°C



KILLARK®

④ Per lamp, max available lamps @ 120 volt is .3; max @ 277 volt is .2.

② Ballasts are High Power Factor 90%+.

③ Lamp watts within ANSI Trapezoid limitations.

Globe



MBG

Refractor



VZRG-1550

Guards



MBAG



VMRWG-8

Reflectors



VMPSD-17

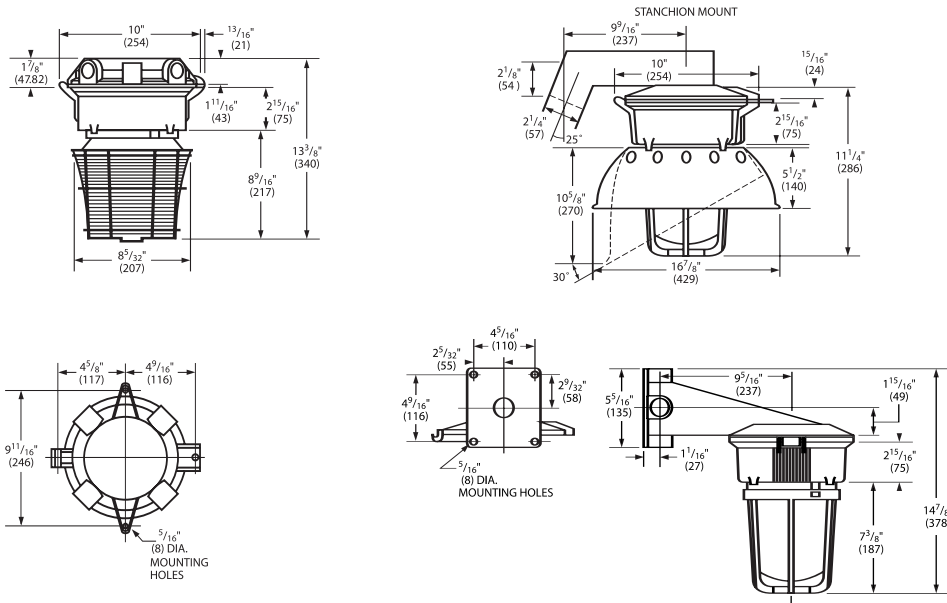


VMPA-17

ORDERING INFORMATION

MB ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
MBG	Heat and impact resistant globe
VZRG-1550	(I.E.S. Type V) closed bottom 8" glass refractor
MBAG	Globe guard - Epoxy/polyester painted aluminum
VMRWG-8	Refractor guard - plated steel
VMPSD-17	Standard dome reflector (polyester reinforced fiberglass)
VMPA-17	Angle reflector (polyester reinforced fiberglass)
VMRD-17ALZ	Deep Alzak full cutoff reflector. Suitable for "dark sky" applications. 17" Dia.
MBPLG	Polycarbonate globe for non-hazardous locations. For use with PL Fluorescent and HID to 75 W.

Dimensions



MBF HAZARDOUS LOCATION DATA							
			CLASS I, DIVISION 2 GROUPS A, B, C, D ^① LAMP TEMP, W/GLOBE, GLOBE & REFLECTOR ^② OR 8" GLASS REFRACTOR	CLASS II, DIVISION 1 & 2 ^① MAXIMUM SURFACE TEMPERATURE W/GLOBE, GUARD ^③ & REFLECTOR ^② OR 8" GLASS REFRACTOR ^④	CLASS III, DIV. 1 & 2 ^① W/GLOBE, W/GUARD ^③ & REFLECTOR ^② OR 8" GLASS REFRACTOR	SUPPLY WIRE SUITABLE FOR °C	
LAMP TYPE	LAMPS/WATTS	RATED AMBIENT °C	UL/CSA TEMP I.D. ^⑤	UL/CSA TEMP I.D.	GROUP	UL/CSA	
PL	13	40	(T3B) 165°C	(T4) 135°C	E, F & G	YES	
	26 (2x13)	40	(T3B) 165°C	(T4) 135°C	E, F & G	YES	
	39 (3x13)	25	(T3A) 180°C	(T4) 135°C	E, F & G	YES	

- ① Verify temperatures for suitability for intended use.
- ② Includes both standard dome and angle reflectors.
- ③ Guard required for Class II, Division 1 and Class III, Division 1 applications.
- ④ Note: 8 inch glass refractor not CSA certified for Class II, Division 1 and Class III, Divisions 1 installations.
- ⑤ Add NR to globe fluorescent models for Ex nR Restricted Breathing—all have T6 Temperature I.D.

MB HAZARDOUS LOCATION DATA												
LAMP		RATED AMBIENT °C	CLASS I, DIV. 2, GROUPS A, B, C, D ^① LAMP TEMPERATURES			CLASS II, DIV. 1 & 2, GROUPS E, F, G ^{②③} MAXIMUM SURFACE TEMPERATURES			CLASS III, DIV. 1 & 2 ^③			SUPPLY WIRE SUITABLE FOR °C
TYPE	WATTAGE		WITHOUT ^④ REFLECTOR	WITH ^② REFLECTOR	WITH REFRACTOR	WITHOUT ^④ REFLECTOR	WITH ^② REFLECTOR	WITH REFRACTOR	WITHOUT ^④ REFLECTOR	WITH ^② REFLECTOR	WITH REFRACTOR	
HPS	50	40	215°C(T2D)	215°C(T2D)	215°C(T2D)	120°C(T4A)	135°C(T4)	120°C(T4A)	YES	YES	YES	75
	50	55	230°C(T2C)	230°C(T2C)	230°C(T2C)	135°C(T4)	160°C(T3C)	135°C(T4)	YES	YES	YES	90
	50	65	230°C(T2C)	230°C(T2C)	230°C(T2C)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	70	40	260°C(T2B)	260°C(T2B)	230°C(T2C)	120°C(T4A)	135°C(T4)	120°C(T4A)	YES	YES	YES	75
	100	40	280°C(T2A)	280°C(T2A)	280°C(T2A)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	150	40	325°C(T1)	325°C(T1)	325°C(T1)	—	—	160°C(T3C)	NO	NO	YES	110
MH	50	40	230°C(T2C)	230°C(T2C)	230°C(T2C)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	70	40	230°C(T2C)	230°C(T2C)	230°C(T2C)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	100	40	280°C(T2A)	280°C(T2A)	280°C(T2A)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	85
MV	50	40	260°C(T2B)	260°C(T2B)	260°C(T2B)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	50	55	260°C(T2B)	260°C(T2B)	260°C(T2B)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	75	40	325°C(T1)	325°C(T1)	325°C(T1)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	90
	100	40	450°C(T1)	450°C(T1)	450°C(T1)	160°C(T3C)	160°C(T3C)	160°C(T3C)	YES	YES	YES	110

- ① Verify temperatures for suitability for intended use.
- ② Includes both standard dome and angle reflectors.
- ③ Guard required for Class II, Division 1 and Class III applications.
- ④ Based on luminaire with globe and guard only.
- ⑤ 150 watt HPS—Groups E, F only with or without reflector and Groups E, F and G with refractor.

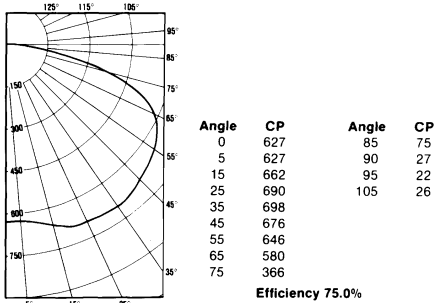
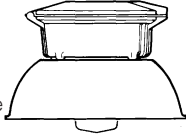
MB-NR Ex nR RESTRICTED BREATHING DATA ^① CLASS 1, ZONE 2, IIC, IIB, IIA						
LAMP WITH GLOBE			RATED AMBIENT °C	GLOBE OR GLOBE WITH REFLECTOR	SUPPLY WIRE SUITABLE FOR °C	
SERIES	TYPE	WATTAGE		UL/CSA		
MBL	HPS	50	40	T6	75	
			55	T5	90	
			65	T5	90	
MBL	HPS	70	40	T5	75	
MBL	HPS	100	40	T4	90	
MBL	HPS	150	40	T4	110	
MBH	MH	50	40	T5	90	
MBH	MH	70	40	T5	90	
MBH	MH	100	40	T4	90	
MBK	MV	50	40	T5	90	
			55	T5	110	
MBK	MV	75	40	T4	90	
MBK	MV	100	40	T4	110	



MERCURY VAPOR & METAL HALIDE
With Globe and Dome Reflector
50 – 100 Watt Medium Base

CANDLEPOWER-100 WATT MV
B-17 Clear Lamp
(4400 Lumens)

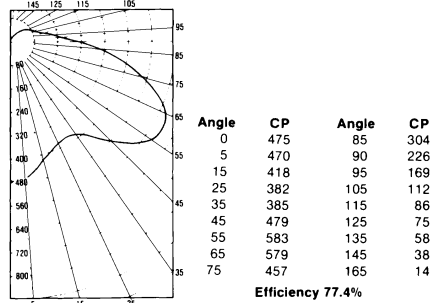
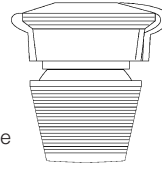
For CP of a 75 Watt MV Luminaire multiply by .636;
For a 50 Watt MV Luminaire multiply by .359;
For a 50 Watt MH Luminaire multiply by .77;
For a 70 Watt MH Luminaire multiply by 1.36
For a 100 Watt MH Luminaire multiply by 1.93



MERCURY VAPOR & METAL HALIDE
With Type V 8" Refractor
50 – 100 Watt Medium Base

CANDLEPOWER-100 WATT MV
B-17 Clear Lamp
(4400 Lumens)

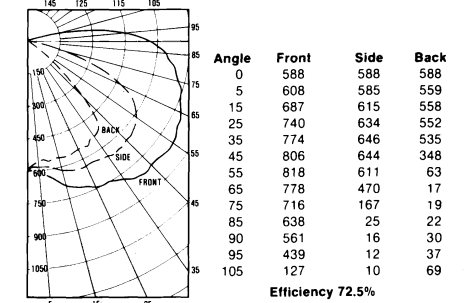
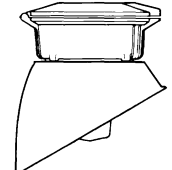
For CP of a 75 Watt MV Luminaire multiply by .636;
For a 50 Watt MV Luminaire multiply by .359;
For a 50 Watt MH Luminaire multiply by .77;
For a 70 Watt MH Luminaire multiply by 1.36
For a 100 Watt MH Luminaire multiply by 1.93



MERCURY VAPOR & METAL HALIDE
With Globe and 30° Angle Reflector
50 – 100 Watt Medium Base

CANDLEPOWER-100 WATT MV
B-17 Clear Lamp
(4400 Lumens)

For CP of a 75 Watt Luminaire multiply by .636;
For a 50 Watt MV Luminaire multiply by .359;
For a 50 Watt MH Luminaire multiply by .77;
For a 70 Watt MH Luminaire multiply by 1.36
For a 100 Watt MH Luminaire multiply by 1.93



COEFFICIENTS OF UTILIZATION-ZONAL CAVITY

% EFFECTIVE CEILING CAVITY REFLECTANCE f _{cc}	20% Effective Floor Cavity Reflectance															
	80		70		50		30		10		0					
% WALL REFLECTANCE f _w	50	30	10	50	30	10	50	30	10	50	30	10	0			
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance															
1	.76	.72	.69	.74	.70	.67	.70	.67	.65	.66	.64	.62	.63	.61	.63	.58
2	.65	.60	.55	.63	.58	.54	.60	.56	.52	.57	.54	.50	.53	.51	.45	.47
3	.57	.50	.45	.55	.49	.44	.52	.47	.43	.50	.45	.42	.48	.44	.41	.39
4	.49	.42	.37	.48	.41	.36	.45	.40	.35	.43	.38	.34	.41	.37	.34	.32
5	.43	.36	.31	.42	.35	.30	.38	.34	.29	.38	.33	.29	.39	.32	.28	.26
6	.38	.31	.26	.37	.31	.26	.36	.30	.25	.34	.29	.25	.33	.28	.24	.23
7	.34	.27	.22	.33	.27	.22	.32	.26	.22	.30	.25	.21	.29	.24	.21	.19
8	.31	.24	.19	.30	.23	.19	.29	.23	.19	.27	.22	.18	.26	.21	.18	.16
9	.28	.21	.17	.27	.21	.16	.26	.20	.14	.25	.20	.16	.24	.19	.16	.14
10	.24	.18	.13	.24	.18	.13	.23	.18	.13	.22	.17	.13	.21	.16	.13	.11

SPACING TO MOUNTING HEIGHT RATIO — S/MH 1.7
ILLUMINATION ON HORIZONTAL SURFACE

Illumination for 100 Watts MV
See above for other values

$$FC = \frac{\text{Candlepower} (\text{COS } \theta)}{D^2}$$

COEFFICIENTS OF UTILIZATION-ZONAL CAVITY

% EFFECTIVE CEILING CAVITY REFLECTANCE f _{cc}	20% Effective Floor Cavity Reflectance															
	80		70		50		30		10		0					
% WALL REFLECTANCE f _w	50	30	10	50	30	10	50	30	10	50	30	10	0			
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance															
1	.72	.67	.63	.69	.65	.61	.63	.60	.57	.58	.55	.53	.53	.51	.49	.46
2	.61	.54	.48	.58	.52	.46	.53	.48	.43	.49	.44	.41	.44	.41	.38	.35
3	.52	.44	.38	.49	.42	.37	.45	.39	.34	.41	.36	.32	.38	.34	.30	.28
4	.44	.36	.30	.42	.35	.29	.39	.32	.27	.35	.30	.26	.32	.28	.24	.22
5	.38	.30	.25	.37	.29	.24	.34	.27	.22	.31	.25	.21	.28	.23	.20	.17
6	.34	.26	.21	.33	.25	.20	.30	.24	.19	.27	.22	.18	.25	.20	.16	.14
7	.30	.23	.17	.29	.22	.17	.27	.20	.16	.24	.19	.15	.22	.18	.14	.12
8	.27	.20	.15	.26	.19	.14	.24	.18	.13	.22	.16	.13	.20	.15	.12	.10
9	.24	.17	.13	.23	.17	.12	.22	.16	.12	.20	.15	.11	.18	.14	.10	.09
10	.22	.15	.11	.21	.15	.10	.19	.14	.10	.18	.13	.09	.16	.12	.08	.07

SPACING TO MOUNTING HEIGHT RATIO — S/MH 1.2
ILLUMINATION OF HORIZONTAL SURFACE

Illumination for 100 Watts MV
See above for other values

$$FC = \frac{\text{Candlepower} (\text{COS } \theta)}{D^2}$$

COEFFICIENTS OF UTILIZATION-ZONAL CAVITY

% EFFECTIVE CEILING CAVITY REFLECTANCE f _{cc}	20% Effective Floor Cavity Reflectance															
	80		70		50		30		10		0					
% WALL REFLECTANCE f _w	50	30	10	50	30	10	50	30	10	50	30	10	0			
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance															
1	.71	.67	.63	.68	.65	.62	.64	.61	.58	.60	.58	.56	.55	.53	.51	
2	.61	.55	.51	.59	.54	.49	.55	.51	.47	.52	.48	.45	.49	.46	.43	.41
3	.53	.47	.42	.52	.46	.41	.49	.44	.39	.46	.41	.38	.43	.39	.36	.34
4	.47	.40	.35	.45	.39	.34	.43	.37	.33	.40	.35	.32	.38	.34	.31	.29
5	.41	.34	.29	.40	.34	.29	.38	.32	.28	.36	.31	.27	.34	.29	.26	.24
6	.37	.30	.25	.36	.29	.25	.34	.28	.24	.32	.27	.23	.30	.26	.23	.21
7	.33	.26	.22	.32	.26	.21	.30	.25	.21	.29	.24	.20	.27	.23	.19	.18
8	.29	.23	.18	.29	.23	.18	.27	.22	.18	.26	.21	.17	.24	.20	.17	.15
9	.27	.20	.16	.26	.20	.16	.25	.19	.15	.23	.19	.15	.22	.18	.15	.13
10	.23	.17	.13	.23	.17	.13	.22	.16	.12	.21	.16	.12	.20	.15	.12	.10

SPACING TO MOUNTING HEIGHT RATIO — S/MH 1.6
ILLUMINATION OF HORIZONTAL SURFACE

Illumination for 100 Watts MV
See above for other values

$$FC = \frac{\text{Candlepower} (\text{COS } \theta)}{D^2}$$

FOOTCANDLE CHART (INITIAL) 100 WATT

MOUNTING HEIGHT FT	HORIZONTAL DISTANCE FROM SOURCE IN FT																						
	0'	4'	8'	12'	16'	20'	24'	28'	32'	36'	40'	0'	4'	8'	12'	16'	20'						
8'	9.80	7.73	3.73	1.69	.84	.41	.27	.12	.07	.04	.02	8'	7.42	4.25	2.65	1.57	.82	.44	.25	.15	.10	.06	.04
10'	6.27	5.49	3.30	1.73	.94	.58	.31	.19	.15	.07	.05	10'	4.75	3.14	1.95	1.42	.88	.52	.33	.20	.13	.09	.06
12'	4.35	4.03	2.78	1.66	.98	.59	.37	.24	.15	.10	.07	12'	3.30	2.40	1.52	1.18	.86	.56	.36	.23	.16	.13	.08
14'	3.20	3.01	2.32	1.55	.97	.62	.40	.27	.18	.13	.09	14'	2.42	1.86	1.25	.95	.77	.56	.39	.27	.19	.13	.09
16'	3.19	2.26	1.93	1.39	.93	.63	.43	.30	.20	.15	.10	16'	1.86	1.52	1.06	.79	.66	.52	.39	.28	.20	.15	.11

Test No. HP-03139

FOOTCANDLE CHART (INITIAL) 100 WATT

MOUNTING HEIGHT FT	HORIZONTAL DISTANCE FROM SOURCE IN FT																						
	0'	4'	8'	12'	16'	20'	24'	28'	32'	36'	40'	0'	4'	8'	12'	16'	20'						
8'	9.80	7.73	3.73	1.69	.84	.41	.27	.12	.07	.04	.02	8'	7.42	4.25	2.65	1.57	.82	.44	.25	.15	.10	.06	.04
10'	6.27	5.49	3.30	1.73	.94	.58	.31	.19	.15	.07	.05	10'	4.75	3.14	1.95	1.42	.88	.52	.33	.20	.13	.09	.06
12'	4.35	4.03	2.78	1.66	.98	.59	.37	.24	.15	.10	.07	12'	3.30	2.40	1.52	1.18	.86	.56	.36	.23	.16	.13	.08
14'	3.20	3.01	2.32	1.55	.97	.62	.40	.27	.18	.13	.09	14'	2.42	1.86	1.25	.95	.77	.56	.39	.27	.19	.13	.09
16'	3.19	2.26	1.93	1.39	.93	.63	.43	.30	.20	.15	.10	16'	1.86	1.52	1.06	.79	.66	.52	.39	.28	.20	.15	.11

Test No. HP-03141

FOOTCANDLE CHART (INITIAL) 100 WATT

MOUNTING HEIGHT FT	HORIZONTAL DISTANCE FROM SOURCE (FRONT) IN FT															
	0'	4'	8'	12'	16'	20'	0'	4'	8'	12'	16'	20'				
8'	9.19	8.27	4.45	2.18	1.09	.61	8'	9.19	7.12	3.56	1.61	.73	.27			
10'	5.88	5.72	3.61	2.14	1.16	.70	10'	5.88	5.08	2.98	1.67	.85	.47			
12'	4.08	4.18	3.06	1.98	1.21	.75	12'	4.08	3.65	2.56	1.58	.92	.53			
14'	3.00	3.17	2.49	1.80	1.18	.79	14'	3.00	2.77	2.11	1.45	.93	.59			
16'	2.30	2.45	2.07	1.56	1.11	.78	16'	2.30	2.19	1.78	1.30	.89	.60			

Test No. HP-03140



Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X

Compliances: UL 844; UL 1570
 Listed & CSA Certified
 CSA C22.2 no. 137-M1981
 Rated for 40C° ambient. Minimum start 0° C.

FEATURES-SPECIFICATIONS



Applications

CERTILITE® VBF and VQF are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufacturing plants, and certain chemical and petro-chemical processing facilities,

sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Features

- Bi-Pin Twin (VBF) or Quad-Pin triple-tube (VQF) long-life compact fluorescent lamps included
- **World Voltage** on Quad-Pin VQF Series: 120 through 277VAC; 50/60 Hz
- Choice of Pendant, Ceiling, Wall or Stanchion mount
- Energy-saving instant on white light
- Corrosion resistant-Copper-free aluminum die-cast construction (less than 4/10 of 1%) w/Baked-on epoxy/polyester powder finish

- Exposed hardware is 316 grade stainless steel

Accessories

Exit sign: Model **VEXA-100** (Note: omit 2nd "G" in catalog number for globe-only fixture), see page L183

Reflectors: Use standard dome **VMPSD-17** or angle model **VMPA-17** (see page L118)

Options

For Factory Fusing on **VBF** and for **VQF** to be used on 120V or 277V systems, add **-F** to catalog number e.g. **VBF261A2GGN4-F**. For **VQF** to be used on 208V, 220V, 230V, 240V systems, add **-FF** to catalog number e.g. **VQF2630A2GGN4-FF**.

VBF/VQF 26-84WATT					
COMPACT FLUORESCENT LAMPS INCLUDED	LINE VOLTAGE	CATALOG NUMBER ③④⑤			
		PENDANT 3/4" ①	CEILING 3/4" ①	WALL 3/4" ①	STANCHION 1-1/4" ②
26Watt (2x13)	120VAC 60Hz	VBF261A2GGN4	VBF261X2GGN4	VBF261B2GGN4	VBF261D4GGN4
	277VAC 60Hz	VBF264A2GGN4	VBF264X2GGN4	VBF264B2GGN4	VBF264D4GGN4
39Watt (3x13)	120VAC 60Hz	VBF391A2GGN4	VBF391X2GGN4	VBF391B2GGN4	VBF391D4GGN4
	277VAC 60Hz	VBF394A2GGN4	VBF394X2GGN4	VBF394B2GGN4	VBF394D4GGN4
26Watt (1x26)	120-277 50-60Hz	VQF2630A2GGN4	VQF2630X2GGN4	VQF2630B2GGN4	VQF2630D4GGN4
32Watt (1x32)	120-277 50-60Hz	VQF3230A2GGN4	VQF3230X2GGN4	VQF3230B2GGN4	VQF3230D4GGN4
42Watt (1x42)	120-277 50-60Hz	VQF4230A2GGN4	VQF4230X2GGN4	VQF4230B2GGN4	VQF4230D4GGN4
52Watt (2x26)	120-277 50-60Hz	VQF5230A2GGN4	VQF5230X2GGN4	VQF5230B2GGN4	VQF5230D4GGN4
64Watt (2x32)	120-277 50-60Hz	VQF6430A2GGN4	VQF6430X2GGN4	VQF6430B2GGN4	VQF6430D4GGN4
84Watt (2x42)	120-277 50-60Hz	VQF8430A2GGN4	VQF8430X2GGN4	VQF8430B2GGN4	VQF8430D4GGN4

① Pendant, Ceiling & Bracket models may be changed to 1" hubs by changing the 8th character from 2 to 3 e.g. **VBF261A3GGN4** (9th character in VQF series).

② For 1-1/2" angle Stanchion, change **D4** to **D5** in catalog number. Change **D4** to **S5** for 1-1/2" Straight (90°) Stanchion.

③ Omit 2nd "G" for globe-only fixture for use with VEXA-100 Exit Accessory.

④ For VM series for dimensional data, contact factory.

⑤ For refractor assemblies, order ballast tank, mounting splice box, "low wattage" optic and guard from "VM" page L118.



Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X

Compliances: UL 844; UL 1570

 UL Listed & CSA Certified

 CSA C22.2 no. 137-M1981

Rated for 40C° ambient. Minimum start 0° C.



Pendant

Ceiling

Wall

Stanchion

FEATURES-SPECIFICATIONS

LUMEN OUTPUT [Ⓢ]	
LAMP SOURCE	LUMEN OUTPUT
26Watt (2x13)	1800
39Watt (3X13)	2700
26Watt (1x26)	1800
32Watt (1X32)	2400
42Watt (1X42)	3200
52Watt (2x26)	3600
64Watt (2X32)	4800
84Watt (2X42)	6400

[Ⓢ] Photometric characteristics similar to 26 watt MBF pages L31-L33, except adjusted for Lumen output.

VBF/VQF 26-84WATT BALLAST TANKS ONLY [Ⓢ]		
COMPACT FLUOR. [Ⓢ] LAMPS INCLUDED	LINE VOLTAGE	CATALOG NUMBER
26Watt (2x13)	120VAC 60Hz	VBF261N4
	277VAC 60Hz	VBF264N4
39Watt (3x13)	120VAC 60Hz	VBF391N4
	277VAC 60Hz	VBF394N4
26Watt (1x26)	120-277 50-60Hz	VQF2630N4
32Watt (1x32)	120-277 50-60Hz	VQF3230N4
42Watt (1x42)	120-277 50-60Hz	VQF4230N4
52Watt (2x26)	120-277 50-60Hz	VQF5230N4
64Watt (2x32)	120-277 50-60Hz	VQF6430N4
84Watt (2x42)	120-277 50-60Hz	VQF8430N4

[Ⓢ] Order splice box, optic and guard separately.

[Ⓢ] See pages L78, L79 for ballast data.

REPLACEMENT LAMPS	
CATALOG NUMBER	DESCRIPTION
MPL13	13W Bi-Pin
MQL26	26W Quad-Pin
MQL32	32W Quad-Pin
MQL42	42W Quad-Pin

HAZARDOUS LOCATION APPLICATION DATA FOR GLOBE & GUARD (SAME WITH REFLECTOR OR EXIT ACCESSORY) [Ⓢ]				
LAMP SOURCE	CLASS I DIV. 2 A,B,C,D	CLASS II DIV. 1 & 2 E,F,G	CLASS III SUITABILITY	SUPPLY WIRE
26Watt (2x13)	180°C (T3A)	85°C (T6)	YES	85°C
39Watt (3X13)	180°C (T3A)	85°C (T6)	YES	85°C
26Watt (1x26)	215°C (T2D)	120°C (T4A)	YES	85°C
32Watt (1X32)	215°C (T2D)	120°C (T4A)	YES	85°C
42Watt (1X42)	215°C (T2D)	120°C (T4A)	YES	85°C
52Watt (2x26)	215°C (T2D)	120°C (T4A)	YES	85°C
64Watt (2X32)	215°C (T2D)	120°C (T4A)	YES	85°C
84Watt (2X42)	215°C (T2D)	120°C (T4A)	YES	85°C

[Ⓢ] VBF/VQF units are rated for simultaneous presence.

VBF/VBQ BALLAST DATA							
LAMP SOURCE	LAMP WATTS/TYPE	VOLTAGE 60 HERTZ	START (AMPS)	OPERATING (AMPS)	BALLAST CIRCUIT	REGULATION	MIN. START
(2) Bi-Pin Fluorescent	26W (2 X 13)	120	.78	.60	NPF	—	32°F (0°C)
		277	.70				
(3) Bi-Pin Fluorescent	39W (3 X 13)	120	.78	.60	NPF	—	32°F (0°C)
		277	.70				
Quad-Pin Fluorescent	26W (1 X 26)	120-277	—	.24(120)/.11(277)	HPF	Electronic	-4°F (-20°C)
	32W (1 X 32)			.31(120)/.13(277)			
	42W (1 X 42)			.38(120)/.18(277)			
Quad-Pin Fluorescent	52W (2 X 26)	120-277	—	.48(120)/.22(277)	HPF	Electronic	-4°F (-20°C)
	64W (2 X 32)			.62(120)/.26(277)			
	84W (2 X 42)			.76(120)/.36(277)			





Class I, Div. 2, Groups A,B,C,D®
 Class I, Zone 2, Groups IIC, IIB, IIA
 Class II, Div. 1 & 2, Groups E,F,G
 Class III
 Suitable for wet locations
 NEMA 3, 4, 4X; IP66

cUL_{us} Listed - File E10514 (Hazardous & Marine)

cSP_{us} Certified - File LR11713

NR Restricted Breathing Option®
 Class I, Zone 2 AEx nAnR (UL)
 Class I, Zone 2 Ex nR (SP)

FEATURES-SPECIFICATIONS

KILLARK® CertiLite® V Series sets a new standard for industrial grade HID luminaires. Designed for installations where moisture, dirt, dust, corrosion and vibration may be present, these fixtures are suitable for NEMA 3 and 4X areas and where wind, water, snow or high ambients can be expected. They also can be used in locations made hazardous by the presence of flammable vapors and gases or combustible dusts, as defined by the NEC®. Typical applications include manufacturing sites, chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and warehouses.

Standard Materials:

- Ballast tank and splice box – corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection.
- All external hardware – 316 stainless steel.
- Guards – Painted copper-free aluminum alloy or 316SS for 7-3/4" glass optics and Enclosed Reflectors.
- Spin-top Refractor Guards are Plated Steel.
- Reflectors – lightweight, corrosion resistant polyester reinforced fiberglass, or copper-free aluminum.

Additional Features:

- Seven mounting splice box types; Pendant, Flex Pendant, Ceiling, Wall bracket, Cone Top, 25° Angle Stanchion, Straight Stanchion – in a variety of entry sizes, including M20 for the VMX ceiling style.
- Quartz auxiliary, HPS instant restart, Ballast Protectors
- Minimum starting temperature: HPS – 40°C; MV, MH & MHP – 30°C
- Normally shipped as components for fast delivery, or may be ordered factory assembled with or without lamps.
- Options for fuses and Quick Disconnect

Compliances

- UL1598 Standard for luminaires
- UL1598A Marine type luminaire
- UL-844 Standard for lighting fixtures for hazardous locations
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X IP66
- UL 60079-15 - Electrical apparatus for Explosive Gas Atmospheres with Type of Protection "n" (Restricted Breathing and non-sparking).

NEW FEATURES		BENEFITS
	Swing-Barrel Nut Patented Tank Mounting System	<ul style="list-style-type: none"> • Stainless-to-Stainless securement • Takes load off during installation • Uses ordinary tools • Saves time and labor
	New ballast tank sizes	Cover a wider range of wattage sizes and socket types (will include five total) for maximum user selection flexibility
	Sealed Optic Zone 2 AEx nAR Restricted Breathing (suffix NR)	NO External Seals. Lower T-codes, Suitable for Class I Div. 2 Classified areas per the NEC®
	All glass refractors	Compact (5-1/2" thread size, types I & V) Standard (7-3/4", thread size, types I, III, V) Enhances user selection flexibility
	New "EZ" mount adapter	Easier Maintenance, saves labor, move fixture from the ladder to the workbench
	Photo controls - Class I Div. 2 / N4X areas	Available as Field or Factory Installed to save energy when light not required
	Earthquake Tab - Built-in attachment point for safety cables	Safety: Secures fixture to structure in case of conduit failure. "3rd hand" accessories for lamp change out
	"FULL CUTOFF" & CUTOFF Optics	For "Dark Sky" Requirements. Helps to minimize offending light pollution
	VMEP40 "Food Optic"	Expanded Offering for Food or Grain Handling Applications to minimize contamination
	NEMA Decals	Easier Maintenance, Saves labor "Have the right lamp in hand before going up the ladder".
	Expanded lamp types and wattages	Philips® QL Induction type and 600Watt HPS available for long life or high lumen requirements
	CertiLite Software	Used to determine number of fixtures required and their proper layout for various tasks and applications.



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 © See Thermal Performance Tables beginning L84.

CERTILITE®V
The Logical Choice



VM1*
5 1/2" Optic
Compact Profile
Medium Base



VM2*
7 3/4" Optic
Compact Profile
Medium Base



VM3
5 1/2" Optic
Low Wattage
Mogul Base

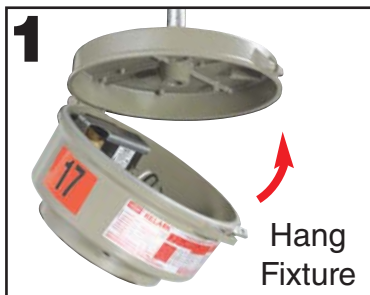


VM4
7 3/4" Optic
Low Wattage
Mogul Base



VM5
7 3/4" Optic
High Wattage
Mogul Base

SWING-BARREL NUT



- The CertiLite®V Swing-Barrel Nut System provides a Stainless-to-Stainless securement between tank and mounting box. No more Stainless-to-Aluminum connections or need for Stainless inserts.
- Users can easily lift the tank into place and "take the load off", then tighten. Saves time and labor.

- Only the patented Swing-Barrel Nut Stainless System can be tightened with a common screwdriver or nut driver; others are either stainless-to-aluminum, or require a wrench or special deep socket.

NOTE: CertiLite®V series tanks are backwardly compatible with older CertiLite® mounts. Simply remove Barrel Nut and thread into old mount.

QUICK LOCATOR TABLE

Lamp Type	Wattage Range	Luminaire Tank	Begins on Page
HPS	50-150	VM3 & VM4	L43
	200-600	VM5	L60
MH	70-250	VM3 & VM4	L47
	400	VM5	L64
MHP	150-200	VM3 & VM4	L51
	250-400	VM5	L66
MV	100-250	VM3 & VM4	L55
	400	VM5	L70
QL	85	VM4	L73
	165	VM5	
Accessories			L75
Dimensional Information			L80
Temperature Data			L84
Photometrics			L90
VM3 & VM4 Logic Tree			L42
VM5 Logic Tree			L59
QL Logic Tree			L72
Cross-reference guide CertiLite® to CertiLite®V			L119

Or turn the page for more features/comparisons



KILLARK®

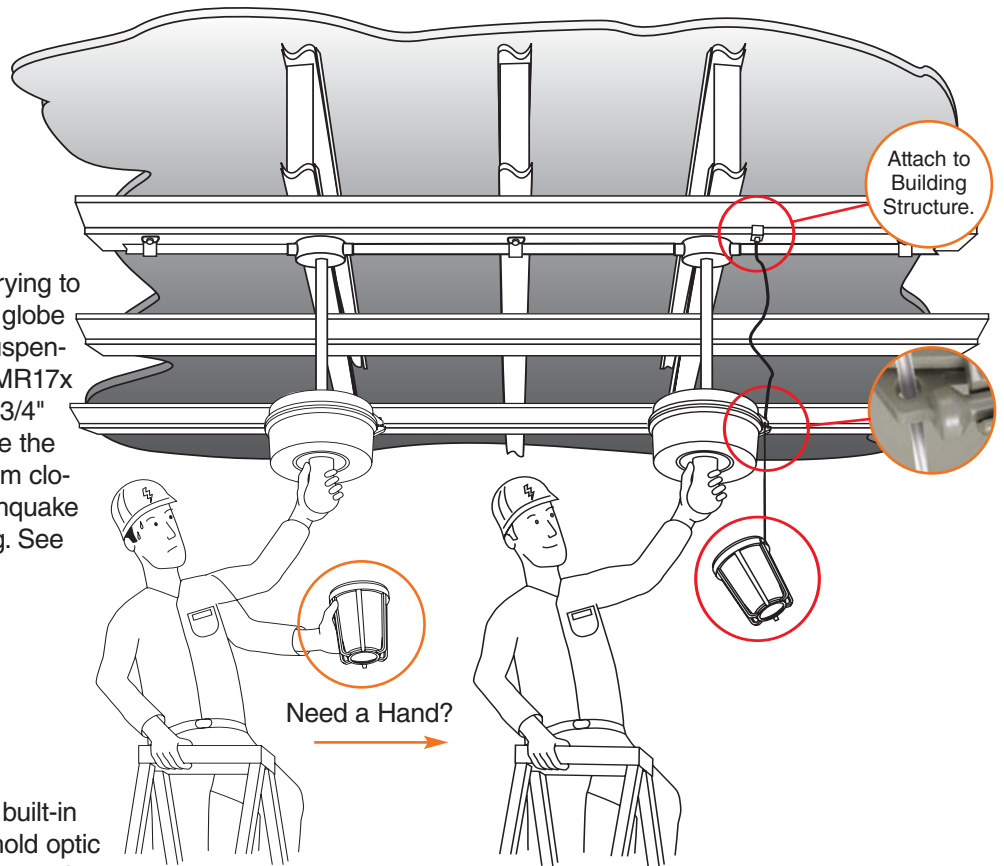
CERTILITE®V
The Logical Choice

For Personnel Safety

Maintenance personnel are often in awkward positions when relamping: trying to simultaneously hold on to a ladder, a globe and the lamp. Available "3rd Hand" suspension cables support 5-1/2" VMG17/VMR17x optics, utilizing the VMAG17 guard. 7-3/4" VMG25/VMR25x/VMG40 optics utilize the VMAGxxS guard and VMAGBC bottom closure. Cables attach to a special "Earthquake Tab" built into the ballast tank housing. See Suspension Accessories page L77.



CertiLite®V tanks as standard have a built-in "Earthquake Tab." The tab is used to hold optic suspension devices, and can simultaneously be used to add a safety cable linked to the building superstructure.



EZ MOUNT & LAMP IDENTIFICATION

To enable easy and safe removal of CertiLite®V fixtures for future maintenance, install with the new VMEZA ballast tank to EZ mount adapter.

The complete assembly is removed for maintenance at the workbench.

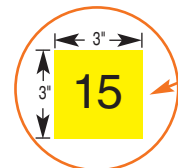
Large facilities often keep spares so that a "new" fixture is put in at the time one needs maintenance – thus eliminating the need to set up access equipment multiple times.



HAVE THE RIGHT LAMP IN HAND BEFORE GOING UP THE LADDER.

15	17	17P*	17
YELLOW 150W HPS	RED 175W MH	RED 175W MHP	BLUE 175W MV

* "P" designates newer Pulse Start Metal Halide lamps: 150, 175, 200, 250, 320, 350 and 400 watt models.

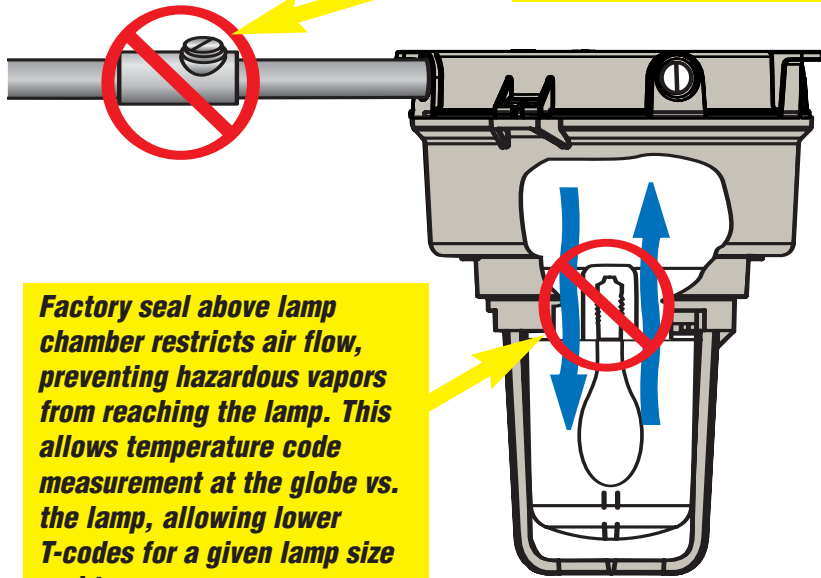


NEMA Decals for Lamp Type & Wattage

CERTILITE® V
The Logical Choice
For Lower T-Codes

NEW “Sealed Optic” construction, option “NR.” Rated for Class I, Zone 2 **AEx nAnR/Ex nR II** Restricted Breathing. “Sealed Entry” is no longer required to obtain **significantly lower T-codes**.

No labor intensive conduit seals or sealed cable glands required for installation



Factory seal above lamp chamber restricts air flow, preventing hazardous vapors from reaching the lamp. This allows temperature code measurement at the globe vs. the lamp, allowing lower T-codes for a given lamp size and type.

- CertiLite® V luminaires with the NR option are factory sealed to save installation time and labor costs.
- AEx nAnR/Ex nR II is covered under NEC® Article 505, and indicates Non-Arcing and Non-Breathing.
- North American Class I Division 2 designated locations may use properly marked Zone 2 rated equipment per NEC Article 501.5.
- The CertiLite® V NR option is available for VMG, VMR, and VMER40 optics, but not VZRG “Spin-top” Refractors.
- Permits the use of fewer higher wattage luminaires for a given application.

CLASS I, DIV. 2 OPERATING TEMP	SIMULTANEOUS EXPOSURE						CLASS I, DIV. 2 OPERATING TEMP				CAUTION: OPTICS MUST BE TIGHTENED SECURELY & PERIODICALLY INSPECTED IF IN A VIBRATION LOCATION	
	40	50	60	70	80	90	40	50	60	70		80
GLOBE	T2B	T3C	EFG	T2A	T4	T4	T2A	T3C	EFG	T2A	T4	T4
GLOBE W/REFLECTOR	T2B	T3C	EFG	T2A	T4	T4	T2A	T3C	EFG	T2A	T4	T4
8" REFLECTOR	T2B	T3C	EFG	T2A	T4	T4	T2A	T3C	EFG	T2A	T4	T4
12" REFLECTOR	T2B	T3C	EFG	T2A	T4	T4	T2A	T3C	EFG	T2A	T4	T4
ENLARGED REFLECTOR	T2B	T3C	EFG	T2A	T4	T4	T2A	T3C	EFG	T2A	T4	T4

See the Benefit!

Lamp Type and Wattage	Examples at 40c ambient. See thermal performance charts beginning L84 for more information	Class I Div. 2/ Zone 2 Globe only	Class I Zone 2 AEx nAnR II	Reduction in Applied T-Code
150 HPS	VM3 w/VMG or VMR	T2B (260°C)	T4 (135°C)	-125°C
	VM4 w/VMG or VMR	T2B (260°C)	T4 (135°C)	-125°C
400 HPS	VM5 w/VMG	350° C	T3 (200°C)	-150°C
	VM5 w/VMER40	350° C	T3 (200°C)	-150°C
175 MH	VM3 w/VMG or VMR	T2A (280°C)	T3 (200°C)	-80°C
	VM4 w/VMG or VMR	T2B (260°C)	T4 (135°C)	-125°C
400 MH	VM5 w/VMG40	325° (300°C)	T3 (200°C)	-100°C
	VM5 w/VMER40	T2 (300°C)	T3 (200°C)	-100°C

① Based on Lamp temperature data
 ② Based on Globe temperature data

CERTILITE®V

The Logical Choice

**For Food & Grain Safety
and Low Bay Applications**




Grain Area



VMEP40 Optic



Food Area

 Listed and Certified
Class I Div. 2; Class II Div. 1;
N4X; NSF

- CertiLite®V VM4 or VM5 series luminaires with the new VMEP40 Optic have a strong non-glass polycarbonate shield protecting food from potential broken glass contamination, as could be the case even with heat-resistant heavy duty globes.
- Unique design incorporates internal glass lens to seal out dust and vapors from the lamp, with a polycarbonate shield banded tightly at the bottom.
- Copper-free aluminum reflector is painted white for easy cleaning; threaded portion at top is natural aluminum to prevent paint dust contamination during maintenance (from attaching/detaching).
- Polycarbonate shield is replaceable and must always be used to maintain ratings.

SAFETY COATING

EXPANDED TEFLON® COATED OPTICS

- CertiLite®V now offers additional all-glass threaded refractors, and many are available with a Teflon coating.
- Teflon® coating helps to reduce the likelihood of glass breakage, and if broken, reduces the area of contamination. Also enhances cleanability.
- See Accessories page L76 for more information.



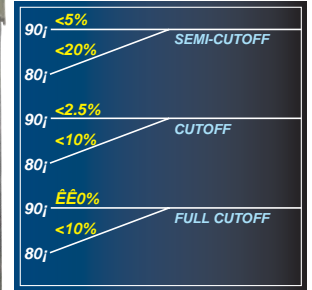
VMG17T

Teflon® is a registered trademark of Dupont, Inc.

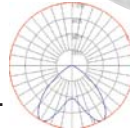


KILLARK®

CERTILITE®V
The Logical Choice
For Dark Sky Needs



- The CertiLite®V VMER40 Enclosed Reflector meets the “Full Cutoff” photometric requirement in many areas, such as observatories, to minimize offending light pollution. Fits VM4 and VM5 Series tanks.
- “Dark Sky” Kits are available to enable the deep HRD-400 Series Reflectors meet this requirement over globes on the VM4, “Full Cutoff” or “Cutoff” on VM5 Series tanks. See L77 for more information.

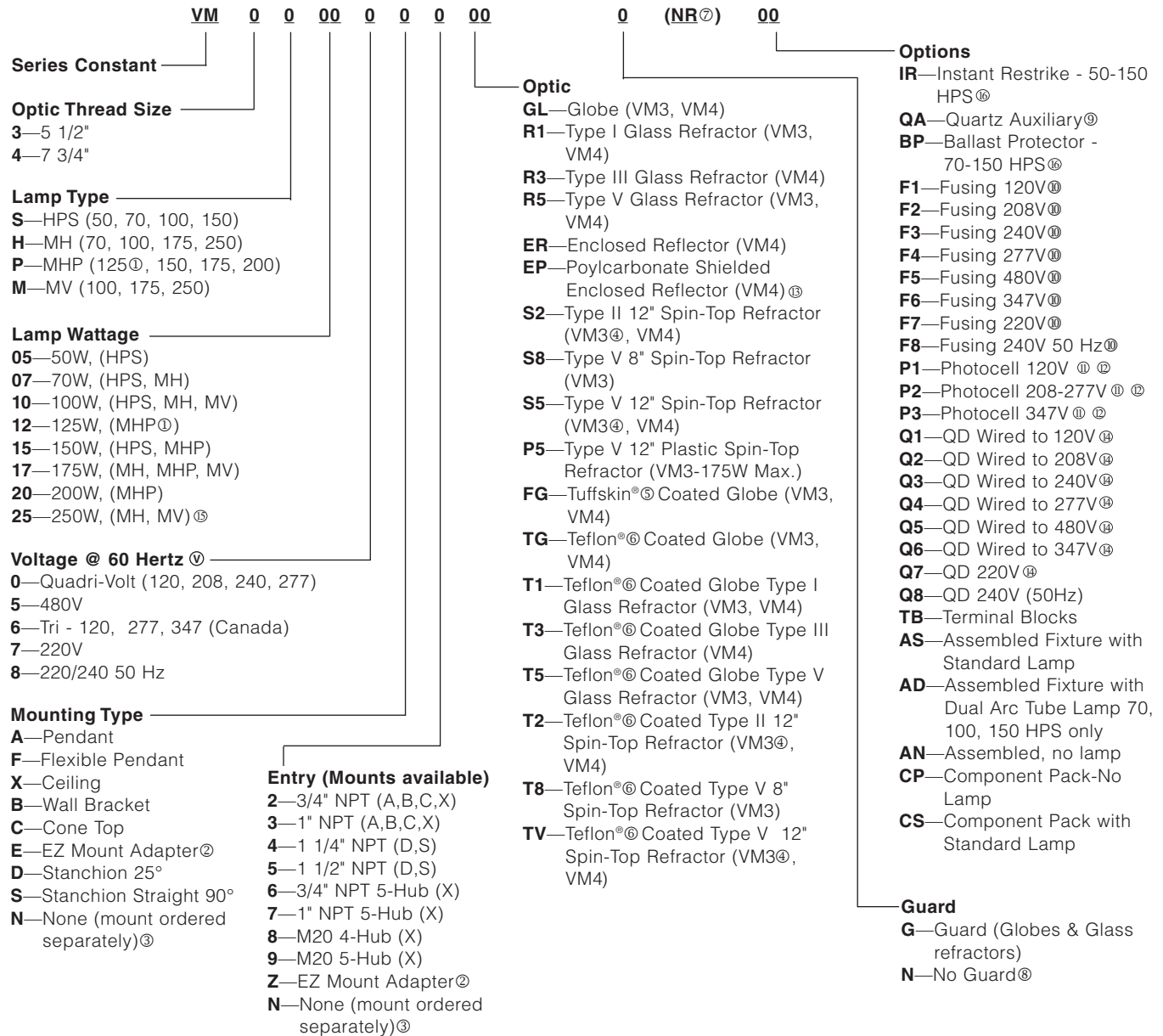


COMPETITIVE COMPARISONS

CertiLite®V KILLARK		vs.	COMPETITION
	Swing-barrel nut Stainless-to-Stainless securement between tank and mounting box. Can be tightened with a common screwdriver or nut driver.		Either not stainless, or require a wrench or special deep socket.
	Earthquake tab Built in securement location for safety cables, optic “3rd Hand” or to building structure.		Not Available
	Maintenance Safety Optic suspension systems		Not Available
	Suspension safety cable to building superstructure		Not Available
	“Sealed Optic” Instead of more costly “Sealed Entry” Meets AEx nAR Requirements		“Sealed Entry” requires extra parts (conduit seals) and labor to install, and block pulling of replacement wiring.
	VMEP40 Food Area Suitable Optic		Only Glass Optics Offered
	Dark Sky Optics Available		Limited, if any, solutions for light pollution, a problem in many areas.
	316 Stainless Guards For 7 3/4" All Glass Optics. Optional Bottom Closure.		“Ordinary” stainless & open bottom type only. Provides less protection from bottom impact or corrosion.



CertiLite®V Catalog Number Logic; 50-250 Low Wattage (Mogul Base) HID Fixtures



Ⓢ Special order lamp type/wattage not shown in grids, minimums apply.
 Ⓢ Completes as "EZ", conduit mounting boxes ordered separately - See L63.
 Ⓢ NN mount ordered separately.
 Ⓢ 12" Spintops for use with VM3 tanks ship with a Mogul to Mogul socket extender for enhanced photometrics vs. 7 3/4", which are used on VM5, but will fit VM4.
 Ⓢ Tuffskin® is a registered trademark of Thomas Mfg. Corp.
 Ⓢ Teflon® is a registered trademark of DuPont, Inc.
 Ⓢ Consult factory for available lamp and voltage combinations.

Ⓢ Restricted Breathing - See L39 for more information.
 Ⓢ Order Guards for Spin-Tops & VMER40 separately.
 Ⓢ QA not suitable for Class I, Div. 2/Zone 2 applications; consult factory for other hazardous applications.
 Ⓢ Fusing not for Marine or Canadian installations.
 Ⓢ Photo cells for Class I, Div. 2 only.
 Ⓢ Field connection to proper tap in case of Multitap Ballasts.
 Ⓢ Not for use with wall or straight (90°) Stanchion.
 Ⓢ QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician simply unplugs de-energized ballast from supply circuit.
 Ⓢ 220V 60Hz or 230V 50Hz used with QA-requires VM5 tank.
 Ⓢ IR and BP cannot be ordered together.





**Pendant
w/ 5-1/2"
Globe & Guard**



**Flexible Pendant
w/ 5-1/2"
Refractor & Guard**



**Pendant
w/ 7-3/4"
Globe & Guard**



**Flexible Pendant
w/ 7-3/4"
Refractor & Guard**



**Pendant
w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓛ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations

NEMA 3, 4, 4X; IP66

cUL^{us} Listed - File E10514 (Hazardous & Marine)

cSP^{us} Certified - File LR11713

NR Restricted Breathing Option[Ⓛ]

Class I, Zone 2 AEx nAnR [Ⓛ]

Class I, Zone 2 Ex nR [Ⓛ]

VM 50-150 WATT HIGH PRESSURE SODIUM PENDANT											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓛ]			7-3/4" OPTIC THREAD SIZE [Ⓛ]				
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	3/4"	Quad	VM3S050A2GLG	VM3S050A2R1G	VM3S050A2R5G	VM4S050A2GLG	VM4S050A2R1G	VM4S050A2R5G	VM4S050A2ERN	
			Tri	VM3S056A2GLG	VM3S056A2R1G	VM3S056A2R5G	VM4S056A2GLG	VM4S056A2R1G	VM4S056A2R5G	VM4S056A2ERN	
			480	VM3S055A2GLG	VM3S055A2R1G	VM3S055A2R5G	VM4S055A2GLG	VM4S055A2R1G	VM4S055A2R5G	VM4S055A2ERN	
70	S62	3/4"	Quad	VM3S070A2GLG	VM3S070A2R1G	VM3S070A2R5G	VM4S070A2GLG	VM4S070A2R1G	VM4S070A2R5G	VM4S070A2ERN	
			Tri	VM3S076A2GLG	VM3S076A2R1G	VM3S076A2R5G	VM4S076A2GLG	VM4S076A2R1G	VM4S076A2R5G	VM4S076A2ERN	
			480	VM3S075A2GLG	VM3S075A2R1G	VM3S075A2R5G	VM4S075A2GLG	VM4S075A2R1G	VM4S075A2R5G	VM4S075A2ERN	
100	S54	3/4"	Quad	VM3S100A2GLG	VM3S100A2R1G	VM3S100A2R5G	VM4S100A2GLG	VM4S100A2R1G	VM4S100A2R5G	VM4S100A2ERN	
			Tri	VM3S106A2GLG	VM3S106A2R1G	VM3S106A2R5G	VM4S106A2GLG	VM4S106A2R1G	VM4S106A2R5G	VM4S106A2ERN	
			480	VM3S105A2GLG	VM3S105A2R1G	VM3S105A2R5G	VM4S105A2GLG	VM4S105A2R1G	VM4S105A2R5G	VM4S105A2ERN	
150	S55	3/4"	Quad	VM3S150A2GLG	VM3S150A2R1G	VM3S150A2R5G	VM4S150A2GLG	VM4S150A2R1G	VM4S150A2R5G	VM4S150A2ERN	
			Tri	VM3S156A2GLG	VM3S156A2R1G	VM3S156A2R5G	VM4S156A2GLG	VM4S156A2R1G	VM4S156A2R5G	VM4S156A2ERN	
			480	VM3S155A2GLG	VM3S155A2R1G	VM3S155A2R5G	VM4S155A2GLG	VM4S155A2R1G	VM4S155A2R5G	VM4S155A2ERN	

VM 50-150 WATT HIGH PRESSURE SODIUM FLEXIBLE PENDANT											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓛ]			7-3/4" OPTIC THREAD SIZE [Ⓛ]				
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	3/4"	Quad	VM3S050F2GLG	VM3S050F2R1G	VM3S050F2R5G	VM4S050F2GLG	VM4S050F2R1G	VM4S050F2R5G	VM4S050F2ERN	
			Tri	VM3S056F2GLG	VM3S056F2R1G	VM3S056F2R5G	VM4S056F2GLG	VM4S056F2R1G	VM4S056F2R5G	VM4S056F2ERN	
			480	VM3S055F2GLG	VM3S055F2R1G	VM3S055F2R5G	VM4S055F2GLG	VM4S055F2R1G	VM4S055F2R5G	VM4S055F2ERN	
70	S62	3/4"	Quad	VM3S070F2GLG	VM3S070F2R1G	VM3S070F2R5G	VM4S070F2GLG	VM4S070F2R1G	VM4S070F2R5G	VM4S070F2ERN	
			Tri	VM3S076F2GLG	VM3S076F2R1G	VM3S076F2R5G	VM4S076F2GLG	VM4S076F2R1G	VM4S076F2R5G	VM4S076F2ERN	
			480	VM3S075F2GLG	VM3S075F2R1G	VM3S075F2R5G	VM4S075F2GLG	VM4S075F2R1G	VM4S075F2R5G	VM4S075F2ERN	
100	S54	3/4"	Quad	VM3S100F2GLG	VM3S100F2R1G	VM3S100F2R5G	VM4S100F2GLG	VM4S100F2R1G	VM4S100F2R5G	VM4S100F2ERN	
			Tri	VM3S106F2GLG	VM3S106F2R1G	VM3S106F2R5G	VM4S106F2GLG	VM4S106F2R1G	VM4S106F2R5G	VM4S106F2ERN	
			480	VM3S105F2GLG	VM3S105F2R1G	VM3S105F2R5G	VM4S105F2GLG	VM4S105F2R1G	VM4S105F2R5G	VM4S105F2ERN	
150	S55	3/4"	Quad	VM3S150F2GLG	VM3S150F2R1G	VM3S150F2R5G	VM4S150F2GLG	VM4S150F2R1G	VM4S150F2R5G	VM4S150F2ERN	
			Tri	VM3S156F2GLG	VM3S156F2R1G	VM3S156F2R5G	VM4S156F2GLG	VM4S156F2R1G	VM4S156F2R5G	VM4S156F2ERN	
			480	VM3S155F2GLG	VM3S155F2R1G	VM3S155F2R5G	VM4S155F2GLG	VM4S155F2R1G	VM4S155F2R5G	VM4S155F2ERN	

[Ⓛ] See hazardous application data on pages L84-L89 for limitations.

[Ⓛ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3S050A2GLN

[Ⓛ] Catalog numbers shown are with 3/4" conduit openings; change 2 to 3 for 1"; e.g. VM3S050A3GLG.

[Ⓛ] Consult catalog logic for other available voltages.

[Ⓛ] Add suffix NR for restricted breathing; see page L39 for more information.





Ceiling
w/ 5-1/2"
Globe & Guard



Wall
w/ 5-1/2"
Refractor & Guard



Ceiling
w/ 7-3/4"
Globe & Guard



Wall
w/ 7-3/4"
Refractor & Guard



Ceiling
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓞ]
 Class I, Zone 2, Groups IIC, IIB, IIA
 Class II, Div. 1 & 2, Groups E,F,G
 Class III

Suitable for wet locations
 NEMA 3, 4, 4X; IP66

UL[®] Listed - File E10514 (Hazardous & Marine)

SP[®] Certified - File LR11713

NR Restricted Breathing Option[Ⓞ]

Class I, Zone 2 AEx nAnR ^{UL}

Class I, Zone 2 Ex nR ^{SP}

VM 50-150 WATT HIGH PRESSURE SODIUM CEILING											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]				
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	3/4"	Quad	VM3S050X2GLG	VM3S050X2R1G	VM3S050X2R5G	VM4S050X2GLG	VM4S050X2R1G	VM4S050X2R5G	VM4S050X2ERN	
			Tri	VM3S056X2GLG	VM3S056X2R1G	VM3S056X2R5G	VM4S056X2GLG	VM4S056X2R1G	VM4S056X2R5G	VM4S056X2ERN	
			480	VM3S055X2GLG	VM3S055X2R1G	VM3S055X2R5G	VM4S055X2GLG	VM4S055X2R1G	VM4S055X2R5G	VM4S055X2ERN	
70	S62	3/4"	Quad	VM3S070X2GLG	VM3S070X2R1G	VM3S070X2R5G	VM4S070X2GLG	VM4S070X2R1G	VM4S070X2R5G	VM4S070X2ERN	
			Tri	VM3S076X2GLG	VM3S076X2R1G	VM3S076X2R5G	VM4S076X2GLG	VM4S076X2R1G	VM4S076X2R5G	VM4S076X2ERN	
			480	VM3S075X2GLG	VM3S075X2R1G	VM3S075X2R5G	VM4S075X2GLG	VM4S075X2R1G	VM4S075X2R5G	VM4S075X2ERN	
100	S54	3/4"	Quad	VM3S100X2GLG	VM3S100X2R1G	VM3S100X2R5G	VM4S100X2GLG	VM4S100X2R1G	VM4S100X2R5G	VM4S100X2ERN	
			Tri	VM3S106X2GLG	VM3S106X2R1G	VM3S106X2R5G	VM4S106X2GLG	VM4S106X2R1G	VM4S106X2R5G	VM4S106X2ERN	
			480	VM3S105X2GLG	VM3S105X2R1G	VM3S105X2R5G	VM4S105X2GLG	VM4S105X2R1G	VM4S105X2R5G	VM4S105X2ERN	
150	S55	3/4"	Quad	VM3S150X2GLG	VM3S150X2R1G	VM3S150X2R5G	VM4S150X2GLG	VM4S150X2R1G	VM4S150X2R5G	VM4S150X2ERN	
			Tri	VM3S156X2GLG	VM3S156X2R1G	VM3S156X2R5G	VM4S156X2GLG	VM4S156X2R1G	VM4S156X2R5G	VM4S156X2ERN	
			480	VM3S155X2GLG	VM3S155X2R1G	VM3S155X2R5G	VM4S155X2GLG	VM4S155X2R1G	VM4S155X2R5G	VM4S155X2ERN	

VM 50-150 WATT HIGH PRESSURE SODIUM WALL											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]				
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	3/4"	Quad	VM3S050B2GLG	VM3S050B2R1G	VM3S050B2R5G	VM4S050B2GLG	VM4S050B2R1G	VM4S050B2R5G	VM4S050B2ERN	
			Tri	VM3S056B2GLG	VM3S056B2R1G	VM3S056B2R5G	VM4S056B2GLG	VM4S056B2R1G	VM4S056B2R5G	VM4S056B2ERN	
			480	VM3S055B2GLG	VM3S055B2R1G	VM3S055B2R5G	VM4S055B2GLG	VM4S055B2R1G	VM4S055B2R5G	VM4S055B2ERN	
70	S62	3/4"	Quad	VM3S070B2GLG	VM3S070B2R1G	VM3S070B2R5G	VM4S070B2GLG	VM4S070B2R1G	VM4S070B2R5G	VM4S070B2ERN	
			Tri	VM3S076B2GLG	VM3S076B2R1G	VM3S076B2R5G	VM4S076B2GLG	VM4S076B2R1G	VM4S076B2R5G	VM4S076B2ERN	
			480	VM3S075B2GLG	VM3S075B2R1G	VM3S075B2R5G	VM4S075B2GLG	VM4S075B2R1G	VM4S075B2R5G	VM4S075B2ERN	
100	S54	3/4"	Quad	VM3S100B2GLG	VM3S100B2R1G	VM3S100B2R5G	VM4S100B2GLG	VM4S100B2R1G	VM4S100B2R5G	VM4S100B2ERN	
			Tri	VM3S106B2GLG	VM3S106B2R1G	VM3S106B2R5G	VM4S106B2GLG	VM4S106B2R1G	VM4S106B2R5G	VM4S106B2ERN	
			480	VM3S105B2GLG	VM3S105B2R1G	VM3S105B2R5G	VM4S105B2GLG	VM4S105B2R1G	VM4S105B2R5G	VM4S105B2ERN	
150	S55	3/4"	Quad	VM3S150B2GLG	VM3S150B2R1G	VM3S150B2R5G	VM4S150B2GLG	VM4S150B2R1G	VM4S150B2R5G	VM4S150B2ERN	
			Tri	VM3S156B2GLG	VM3S156B2R1G	VM3S156B2R5G	VM4S156B2GLG	VM4S156B2R1G	VM4S156B2R5G	VM4S156B2ERN	
			480	VM3S155B2GLG	VM3S155B2R1G	VM3S155B2R5G	VM4S155B2GLG	VM4S155B2R1G	VM4S155B2R5G	VM4S155B2ERN	

[Ⓛ] See hazardous application data on pages L84-L89 for limitations.

[Ⓜ] Catalog numbers shown are with guard, to omit guard (except enclosed reflector); change ending G to N; e.g. VM3S050X2GLN

[Ⓝ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3S050X3GLG.

[Ⓞ] Consult catalog logic for other available voltages.

[Ⓟ] Add suffix NR for restricted breathing; see page L39 for more information.





Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 50-150 WATT HIGH PRESSURE SODIUM CONE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE ②			7-3/4" OPTIC THREAD SIZE ②			
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
50	S68	3/4"	Quad	VM3S050C2GLG	VM3S050C2R1G	VM3S050C2R5G	VM4S050C2GLG	VM4S050C2R1G	VM4S050C2R5G	VM4S050C2ERN
			Tri	VM3S056C2GLG	VM3S056C2R1G	VM3S056C2R5G	VM4S056C2GLG	VM4S056C2R1G	VM4S056C2R5G	VM4S056C2ERN
			480	VM3S055C2GLG	VM3S055C2R1G	VM3S055C2R5G	VM4S055C2GLG	VM4S055C2R1G	VM4S055C2R5G	VM4S055C2ERN
70	S62	3/4"	Quad	VM3S070C2GLG	VM3S070C2R1G	VM3S070C2R5G	VM4S070C2GLG	VM4S070C2R1G	VM4S070C2R5G	VM4S070C2ERN
			Tri	VM3S076C2GLG	VM3S076C2R1G	VM3S076C2R5G	VM4S076C2GLG	VM4S076C2R1G	VM4S076C2R5G	VM4S076C2ERN
			480	VM3S075C2GLG	VM3S075C2R1G	VM3S075C2R5G	VM4S075C2GLG	VM4S075C2R1G	VM4S075C2R5G	VM4S075C2ERN
100	S54	3/4"	Quad	VM3S100C2GLG	VM3S100C2R1G	VM3S100C2R5G	VM4S100C2GLG	VM4S100C2R1G	VM4S100C2R5G	VM4S100C2ERN
			Tri	VM3S106C2GLG	VM3S106C2R1G	VM3S106C2R5G	VM4S106C2GLG	VM4S106C2R1G	VM4S106C2R5G	VM4S106C2ERN
			480	VM3S105C2GLG	VM3S105C2R1G	VM3S105C2R5G	VM4S105C2GLG	VM4S105C2R1G	VM4S105C2R5G	VM4S105C2ERN
150	S55	3/4"	Quad	VM3S150C2GLG	VM3S150C2R1G	VM3S150C2R5G	VM4S150C2GLG	VM4S150C2R1G	VM4S150C2R5G	VM4S150C2ERN
			Tri	VM3S156C2GLG	VM3S156C2R1G	VM3S156C2R5G	VM4S156C2GLG	VM4S156C2R1G	VM4S156C2R5G	VM4S156C2ERN
			480	VM3S155C2GLG	VM3S155C2R1G	VM3S155C2R5G	VM4S155C2GLG	VM4S155C2R1G	VM4S155C2R5G	VM4S155C2ERN

VM 50-150 WATT HIGH PRESSURE SODIUM EZ ADAPTER ⑥										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE ②			7-3/4" OPTIC THREAD SIZE ③			
WATTS	ANSI	HUB SIZE ⑥	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
50	S68	⊙	Quad	VM3S050EZGLG	VM3S050EZR1G	VM3S050EZR5G	VM4S050EZGLG	VM4S050EZR1G	VM4S050EZR5G	VM4S050EZERN
			Tri	VM3S056EZGLG	VM3S056EZR1G	VM3S056EZR5G	VM4S056EZGLG	VM4S056EZR1G	VM4S056EZR5G	VM4S056EZERN
			480	VM3S055EZGLG	VM3S055EZR1G	VM3S055EZR5G	VM4S055EZGLG	VM4S055EZR1G	VM4S055EZR5G	VM4S055EZERN
70	S62	⊙	Quad	VM3S070EZGLG	VM3S070EZR1G	VM3S070EZR5G	VM4S070EZGLG	VM4S070EZR1G	VM4S070EZR5G	VM4S070EZERN
			Tri	VM3S076EZGLG	VM3S076EZR1G	VM3S076EZR5G	VM4S076EZGLG	VM4S076EZR1G	VM4S076EZR5G	VM4S076EZERN
			480	VM3S075EZGLG	VM3S075EZR1G	VM3S075EZR5G	VM4S075EZGLG	VM4S075EZR1G	VM4S075EZR5G	VM4S075EZERN
100	S54	⊙	Quad	VM3S100EZGLG	VM3S100EZR1G	VM3S100EZR5G	VM4S100EZGLG	VM4S100EZR1G	VM4S100EZR5G	VM4S100EZERN
			Tri	VM3S106EZGLG	VM3S106EZR1G	VM3S106EZR5G	VM4S106EZGLG	VM4S106EZR1G	VM4S106EZR5G	VM4S106EZERN
			480	VM3S105EZGLG	VM3S105EZR1G	VM3S105EZR5G	VM4S105EZGLG	VM4S105EZR1G	VM4S105EZR5G	VM4S105EZERN
150	S55	⊙	Quad	VM3S150EZGLG	VM3S150EZR1G	VM3S150EZR5G	VM4S150EZGLG	VM4S150EZR1G	VM4S150EZR5G	VM4S150EZERN
			Tri	VM3S156EZGLG	VM3S156EZR1G	VM3S156EZR5G	VM4S156EZGLG	VM4S156EZR1G	VM4S156EZR5G	VM4S156EZERN
			480	VM3S155EZGLG	VM3S155EZR1G	VM3S155EZR5G	VM4S155EZGLG	VM4S155EZR1G	VM4S155EZR5G	VM4S155EZERN

① See hazardous application data on pages L84-L89 for limitations.
 ② Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3S050C2GLN
 ③ Cone top catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3S050C3GLG.
 ④ Consult catalog logic for other available voltages.
 ⑤ Add suffix NR for restricted breathing; see page L39 for more information.
 ⑥ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L63.



Stanchion 25°
w/ 5-1/2"
Globe & Guard



Stanchion Straight
w/ 5-1/2"
Refractor & Guard



Stanchion 25°
w/ 7-3/4"
Globe & Guard



Stanchion Straight
w/ 7-3/4"
Refractor & Guard



Stanchion 25°
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓞ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓞ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

VM 50-150 WATT HIGH PRESSURE SODIUM STANCHION 25° ANGLE											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]				
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	1-1/2"	Quad	VM3S050D5GLG	VM3S050D5R1G	VM3S050D5R5G	VM4S050D5GLG	VM4S050D5R1G	VM4S050D5R5G	VM4S050D5ERN	
			Tri	VM3S056D5GLG	VM3S056D5R1G	VM3S056D5R5G	VM4S056D5GLG	VM4S056D5R1G	VM4S056D5R5G	VM4S056D5ERN	
			480	VM3S055D5GLG	VM3S055D5R1G	VM3S055D5R5G	VM4S055D5GLG	VM4S055D5R1G	VM4S055D5R5G	VM4S055D5ERN	
70	S62	1-1/2"	Quad	VM3S070D5GLG	VM3S070D5R1G	VM3S070D5R5G	VM4S070D5GLG	VM4S070D5R1G	VM4S070D5R5G	VM4S070D5ERN	
			Tri	VM3S076D5GLG	VM3S076D5R1G	VM3S076D5R5G	VM4S076D5GLG	VM4S076D5R1G	VM4S076D5R5G	VM4S076D5ERN	
			480	VM3S075D5GLG	VM3S075D5R1G	VM3S075D5R5G	VM4S075D5GLG	VM4S075D5R1G	VM4S075D5R5G	VM4S075D5ERN	
100	S54	1-1/2"	Quad	VM3S100D5GLG	VM3S100D5R1G	VM3S100D5R5G	VM4S100D5GLG	VM4S100D5R1G	VM4S100D5R5G	VM4S100D5ERN	
			Tri	VM3S106D5GLG	VM3S106D5R1G	VM3S106D5R5G	VM4S106D5GLG	VM4S106D5R1G	VM4S106D5R5G	VM4S106D5ERN	
			480	VM3S105D5GLG	VM3S105D5R1G	VM3S105D5R5G	VM4S105D5GLG	VM4S105D5R1G	VM4S105D5R5G	VM4S105D5ERN	
150	S55	1-1/2"	Quad	VM3S150D5GLG	VM3S150D5R1G	VM3S150D5R5G	VM4S150D5GLG	VM4S150D5R1G	VM4S150D5R5G	VM4S150D5ERN	
			Tri	VM3S156D5GLG	VM3S156D5R1G	VM3S156D5R5G	VM4S156D5GLG	VM4S156D5R1G	VM4S156D5R5G	VM4S156D5ERN	
			480	VM3S155D5GLG	VM3S155D5R1G	VM3S155D5R5G	VM4S155D5GLG	VM4S155D5R1G	VM4S155D5R5G	VM4S155D5ERN	

VM 50-150 WATT HIGH PRESSURE SODIUM STANCHION STRAIGHT											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]				
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
50	S68	1-1/2"	Quad	VM3S050S5GLG	VM3S050S5R1G	VM3S050S5R5G	VM4S050S5GLG	VM4S050S5R1G	VM4S050S5R5G	VM4S050S5ERN	
			Tri	VM3S056S5GLG	VM3S056S5R1G	VM3S056S5R5G	VM4S056S5GLG	VM4S056S5R1G	VM4S056S5R5G	VM4S056S5ERN	
			480	VM3S055S5GLG	VM3S055S5R1G	VM3S055S5R5G	VM4S055S5GLG	VM4S055S5R1G	VM4S055S5R5G	VM4S055S5ERN	
70	S62	1-1/2"	Quad	VM3S070S5GLG	VM3S070S5R1G	VM3S070S5R5G	VM4S070S5GLG	VM4S070S5R1G	VM4S070S5R5G	VM4S070S5ERN	
			Tri	VM3S076S5GLG	VM3S076S5R1G	VM3S076S5R5G	VM4S076S5GLG	VM4S076S5R1G	VM4S076S5R5G	VM4S076S5ERN	
			480	VM3S075S5GLG	VM3S075S5R1G	VM3S075S5R5G	VM4S075S5GLG	VM4S075S5R1G	VM4S075S5R5G	VM4S075S5ERN	
100	S54	1-1/2"	Quad	VM3S100S5GLG	VM3S100S5R1G	VM3S100S5R5G	VM4S100S5GLG	VM4S100S5R1G	VM4S100S5R5G	VM4S100S5ERN	
			Tri	VM3S106S5GLG	VM3S106S5R1G	VM3S106S5R5G	VM4S106S5GLG	VM4S106S5R1G	VM4S106S5R5G	VM4S106S5ERN	
			480	VM3S105S5GLG	VM3S105S5R1G	VM3S105S5R5G	VM4S105S5GLG	VM4S105S5R1G	VM4S105S5R5G	VM4S105S5ERN	
150	S55	1-1/2"	Quad	VM3S150S5GLG	VM3S150S5R1G	VM3S150S5R5G	VM4S150S5GLG	VM4S150S5R1G	VM4S150S5R5G	VM4S150S5ERN	
			Tri	VM3S156S5GLG	VM3S156S5R1G	VM3S156S5R5G	VM4S156S5GLG	VM4S156S5R1G	VM4S156S5R5G	VM4S156S5ERN	
			480	VM3S155S5GLG	VM3S155S5R1G	VM3S155S5R5G	VM4S155S5GLG	VM4S155S5R1G	VM4S155S5R5G	VM4S155S5ERN	

[Ⓞ] See hazardous application data on pages L84-L89 for limitations.

[Ⓞ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3S050D5GLN

[Ⓞ] Catalog numbers shown are with 1-1/2" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM3S050D4GLG.

[Ⓞ] Consult catalog logic for other available voltages.

[Ⓞ] Add suffix NR for restricted breathing; see page L39 for more information.





**Pendant
w/ 5-1/2"
Globe & Guard**



**Flexible Pendant
w/ 5-1/2"
Refractor & Guard**



**Pendant
w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL US Listed - File E10514 (Hazardous & Marine)

SP US Certified - File LR11713

NR Restricted Breathing Option

Class I, Zone 2 AEx nAnR **UL**

Class I, Zone 2 Ex nR **SP**



**Pendant
w/ 7-3/4"
Globe & Guard**



**Flexible Pendant
w/ 7-3/4"
Refractor & Guard**

VM 70-250 WATT METAL HALIDE PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE			7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	3/4"	Quad	VM3H070A2GLG	VM3H070A2R1G	VM3H070A2R5G	VM4H070A2GLG	VM4H070A2R1G	VM4H070A2R5G	VM4H070A2ERN
			Tri	VM3H076A2GLG	VM3H076A2R1G	VM3H076A2R5G	VM4H076A2GLG	VM4H076A2R1G	VM4H076A2R5G	VM4H076A2ERN
			480	VM3H075A2GLG	VM3H075A2R1G	VM3H075A2R5G	VM4H075A2GLG	VM4H075A2R1G	VM4H075A2R5G	VM4H075A2ERN
100	M90 M140	3/4"	Quad	VM3H100A2GLG	VM3H100A2R1G	VM3H100A2R5G	VM4H100A2GLG	VM4H100A2R1G	VM4H100A2R5G	VM4H100A2ERN
			Tri	VM3H106A2GLG	VM3H106A2R1G	VM3H106A2R5G	VM4H106A2GLG	VM4H106A2R1G	VM4H106A2R5G	VM4H106A2ERN
			480	VM3H105A2GLG	VM3H105A2R1G	VM3H105A2R5G	VM4H105A2GLG	VM4H105A2R1G	VM4H105A2R5G	VM4H105A2ERN
175	M57	3/4"	Quad	VM3H170A2GLG	VM3H170A2R1G	VM3H170A2R5G	VM4H170A2GLG	VM4H170A2R1G	VM4H170A2R5G	VM4H170A2ERN
			Tri	VM3H176A2GLG	VM3H176A2R1G	VM3H176A2R5G	VM4H176A2GLG	VM4H176A2R1G	VM4H176A2R5G	VM4H176A2ERN
			480	VM3H175A2GLG	VM3H175A2R1G	VM3H175A2R5G	VM4H175A2GLG	VM4H175A2R1G	VM4H175A2R5G	VM4H175A2ERN
250	M58	3/4"	Quad	VM3H250A2GLG	VM3H250A2R1G	VM3H250A2R5G	VM4H250A2GLG	VM4H250A2R1G	VM4H250A2R5G	VM4H250A2ERN
			Tri	VM3H256A2GLG	VM3H256A2R1G	VM3H256A2R5G	VM4H256A2GLG	VM4H256A2R1G	VM4H256A2R5G	VM4H256A2ERN
			480	VM3H255A2GLG	VM3H255A2R1G	VM3H255A2R5G	VM4H255A2GLG	VM4H255A2R1G	VM4H255A2R5G	VM4H255A2ERN

VM 70-250 WATT METAL HALIDE FLEXIBLE PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE			7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	3/4"	Quad	VM3H070F2GLG	VM3H070F2R1G	VM3H070F2R5G	VM4H070F2GLG	VM4H070F2R1G	VM4H070F2R5G	VM3H070F2ERN
			Tri	VM3H076F2GLG	VM3H076F2R1G	VM3H076F2R5G	VM4H076F2GLG	VM4H076F2R1G	VM4H076F2R5G	VM3H076F2ERN
			480	VM3H075F2GLG	VM3H075F2R1G	VM3H075F2R5G	VM4H075F2GLG	VM4H075F2R1G	VM4H075F2R5G	VM3H075F2ERN
100	M90 M140	3/4"	Quad	VM3H100F2GLG	VM3H100F2R1G	VM3H100F2R5G	VM4H100F2GLG	VM4H100F2R1G	VM4H100F2R5G	VM3H100F2ERN
			Tri	VM3H106F2GLG	VM3H106F2R1G	VM3H106F2R5G	VM4H106F2GLG	VM4H106F2R1G	VM4H106F2R5G	VM3H106F2ERN
			480	VM3H105F2GLG	VM3H105F2R1G	VM3H105F2R5G	VM4H105F2GLG	VM4H105F2R1G	VM4H105F2R5G	VM3H105F2ERN
175	M57	3/4"	Quad	VM3H170F2GLG	VM3H170F2R1G	VM3H170F2R5G	VM4H170F2GLG	VM4H170F2R1G	VM4H170F2R5G	VM3H170F2ERN
			Tri	VM3H176F2GLG	VM3H176F2R1G	VM3H176F2R5G	VM4H176F2GLG	VM4H176F2R1G	VM4H176F2R5G	VM3H176F2ERN
			480	VM3H175F2GLG	VM3H175F2R1G	VM3H175F2R5G	VM4H175F2GLG	VM4H175F2R1G	VM4H175F2R5G	VM3H175F2ERN
250	M58	3/4"	Quad	VM3H250F2GLG	VM3H250F2R1G	VM3H250F2R5G	VM4H250F2GLG	VM4H250F2R1G	VM4H250F2R5G	VM3H250F2ERN
			Tri	VM3H256F2GLG	VM3H256F2R1G	VM3H256F2R5G	VM4H256F2GLG	VM4H256F2R1G	VM4H256F2R5G	VM3H256F2ERN
			480	VM3H255F2GLG	VM3H255F2R1G	VM3H255F2R5G	VM4H255F2GLG	VM4H255F2R1G	VM4H255F2R5G	VM3H255F2ERN

See hazardous application data on pages L84-L89 for limitations.

Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3H070A2GLN

Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3H070A3GLG.

Consult catalog logic for other available voltages.

Add suffix NR for restricted breathing; see page L39 for more information.





Ceiling
w/ 5-1/2"
Globe & Guard



Wall
w/ 5-1/2"
Refractor & Guard



Ceiling
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

us Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR



Ceiling
w/ 7-3/4"
Globe & Guard



Wall
w/ 7-3/4"
Refractor & Guard

VM 70-250 WATT METAL HALIDE CEILING										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	3/4"	Quad	VM3H070X2GLG	VM3H070X2R1G	VM3H070X2R5G	VM4H070X2GLG	VM4H070X2R1G	VM4H070X2R5G	VM4H070X2ERN
			Tri	VM3H076X2GLG	VM3H076X2R1G	VM3H076X2R5G	VM4H076X2GLG	VM4H076X2R1G	VM4H076X2R5G	VM4H076X2ERN
			480	VM3H075X2GLG	VM3H075X2R1G	VM3H075X2R5G	VM4H075X2GLG	VM4H075X2R1G	VM4H075X2R5G	VM4H075X2ERN
100	M90 M140	3/4"	Quad	VM3H100X2GLG	VM3H100X2R1G	VM3H100X2R5G	VM4H100X2GLG	VM4H100X2R1G	VM4H100X2R5G	VM4H100X2ERN
			Tri	VM3H106X2GLG	VM3H106X2R1G	VM3H106X2R5G	VM4H106X2GLG	VM4H106X2R1G	VM4H106X2R5G	VM4H106X2ERN
			480	VM3H105X2GLG	VM3H105X2R1G	VM3H105X2R5G	VM4H105X2GLG	VM4H105X2R1G	VM4H105X2R5G	VM4H105X2ERN
175	M57	3/4"	Quad	VM3H170X2GLG	VM3H170X2R1G	VM3H170X2R5G	VM4H170X2GLG	VM4H170X2R1G	VM4H170X2R5G	VM4H170X2ERN
			Tri	VM3H176X2GLG	VM3H176X2R1G	VM3H176X2R5G	VM4H176X2GLG	VM4H176X2R1G	VM4H176X2R5G	VM4H176X2ERN
			480	VM3H175X2GLG	VM3H175X2R1G	VM3H175X2R5G	VM4H175X2GLG	VM4H175X2R1G	VM4H175X2R5G	VM4H175X2ERN
250	M58	3/4"	Quad	VM3H250X2GLG	VM3H250X2R1G	VM3H250X2R5G	VM4H250X2GLG	VM4H250X2R1G	VM4H250X2R5G	VM4H250X2ERN
			Tri	VM3H256X2GLG	VM3H256X2R1G	VM3H256X2R5G	VM4H256X2GLG	VM4H256X2R1G	VM4H256X2R5G	VM4H256X2ERN
			480	VM3H255X2GLG	VM3H255X2R1G	VM3H255X2R5G	VM4H255X2GLG	VM4H255X2R1G	VM4H255X2R5G	VM4H255X2ERN

VM 70-250 WATT METAL HALIDE WALL										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	3/4"	Quad	VM3H070B2GLG	VM3H070B2R1G	VM3H070B2R5G	VM4H070B2GLG	VM4H070B2R1G	VM4H070B2R5G	VM3H070B2ERN
			Tri	VM3H076B2GLG	VM3H076B2R1G	VM3H076B2R5G	VM4H076B2GLG	VM4H076B2R1G	VM4H076B2R5G	VM3H076B2ERN
			480	VM3H075B2GLG	VM3H075B2R1G	VM3H075B2R5G	VM4H075B2GLG	VM4H075B2R1G	VM4H075B2R5G	VM3H075B2ERN
100	M90 M140	3/4"	Quad	VM3H100B2GLG	VM3H100B2R1G	VM3H100B2R5G	VM4H100B2GLG	VM4H100B2R1G	VM4H100B2R5G	VM3H100B2ERN
			Tri	VM3H106B2GLG	VM3H106B2R1G	VM3H106B2R5G	VM4H106B2GLG	VM4H106B2R1G	VM4H106B2R5G	VM3H106B2ERN
			480	VM3H105B2GLG	VM3H105B2R1G	VM3H105B2R5G	VM4H105B2GLG	VM4H105B2R1G	VM4H105B2R5G	VM3H105B2ERN
175	M57	3/4"	Quad	VM3H170B2GLG	VM3H170B2R1G	VM3H170B2R5G	VM4H170B2GLG	VM4H170B2R1G	VM4H170B2R5G	VM3H170B2ERN
			Tri	VM3H176B2GLG	VM3H176B2R1G	VM3H176B2R5G	VM4H176B2GLG	VM4H176B2R1G	VM4H176B2R5G	VM3H176B2ERN
			480	VM3H175B2GLG	VM3H175B2R1G	VM3H175B2R5G	VM4H175B2GLG	VM4H175B2R1G	VM4H175B2R5G	VM3H175B2ERN
250	M58	3/4"	Quad	VM3H250B2GLG	VM3H250B2R1G	VM3H250B2R5G	VM4H250B2GLG	VM4H250B2R1G	VM4H250B2R5G	VM3H250B2ERN
			Tri	VM3H256B2GLG	VM3H256B2R1G	VM3H256B2R5G	VM4H256B2GLG	VM4H256B2R1G	VM4H256B2R5G	VM3H256B2ERN
			480	VM3H255B2GLG	VM3H255B2R1G	VM3H255B2R5G	VM4H255B2GLG	VM4H255B2R1G	VM4H255B2R5G	VM3H255B2ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3H070X2GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3H070X3GLG.


[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.



Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

 US Listed - File E10514 (Hazardous & Marine)

 Certified - File LR11713

NR Restricted Breathing Option

Class I, Zone 2 AEx nAnR 

Class I, Zone 2 Ex nR 



VM 70-250 WATT METAL HALIDE CONE											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE ②			7-3/4" OPTIC THREAD SIZE ②				
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
70	M98 M143	3/4"	Quad	VM3H070C2GLG	VM3H070C2R1G	VM3H070C2R5G	VM4H070C2GLG	VM4H070C2R1G	VM4H070C2R5G	VM4H070C2ERN	
			Tri	VM3H076C2GLG	VM3H076C2R1G	VM3H076C2R5G	VM4H076C2GLG	VM4H076C2R1G	VM4H076C2R5G	VM4H076C2ERN	
			480	VM3H075C2GLG	VM3H075C2R1G	VM3H075C2R5G	VM4H075C2GLG	VM4H075C2R1G	VM4H075C2R5G	VM4H075C2ERN	
100	M90 M140	3/4"	Quad	VM3H100C2GLG	VM3H100C2R1G	VM3H100C2R5G	VM4H100C2GLG	VM4H100C2R1G	VM4H100C2R5G	VM4H100C2ERN	
			Tri	VM3H106C2GLG	VM3H106C2R1G	VM3H106C2R5G	VM4H106C2GLG	VM4H106C2R1G	VM4H106C2R5G	VM4H106C2ERN	
			480	VM3H105C2GLG	VM3H105C2R1G	VM3H105C2R5G	VM4H105C2GLG	VM4H105C2R1G	VM4H105C2R5G	VM4H105C2ERN	
175	M57	3/4"	Quad	VM3H170C2GLG	VM3H170C2R1G	VM3H170C2R5G	VM4H170C2GLG	VM4H170C2R1G	VM4H170C2R5G	VM4H170C2ERN	
			Tri	VM3H176C2GLG	VM3H176C2R1G	VM3H176C2R5G	VM4H176C2GLG	VM4H176C2R1G	VM4H176C2R5G	VM4H176C2ERN	
			480	VM3H175C2GLG	VM3H175C2R1G	VM3H175C2R5G	VM4H175C2GLG	VM4H175C2R1G	VM4H175C2R5G	VM4H175C2ERN	
250	M58	3/4"	Quad	VM3H250C2GLG	VM3H250C2R1G	VM3H250C2R5G	VM4H250C2GLG	VM4H250C2R1G	VM4H250C2R5G	VM4H250C2ERN	
			Tri	VM3H256C2GLG	VM3H256C2R1G	VM3H256C2R5G	VM4H256C2GLG	VM4H256C2R1G	VM4H256C2R5G	VM4H256C2ERN	
			480	VM3H255C2GLG	VM3H255C2R1G	VM3H255C2R5G	VM4H255C2GLG	VM4H255C2R1G	VM4H255C2R5G	VM4H255C2ERN	

VM 70-250 WATT METAL HALIDE EZ ADAPTER											
DESCRIPTION				5-1/2" OPTIC THREAD SIZE ②			7-3/4" OPTIC THREAD SIZE ②				
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
70	M98 M143	⑥	Quad	VM3H070EZGLG	VM3H070EZR1G	VM3H070EZR5G	VM4H070EZGLG	VM4H070EZR1G	VM4H070EZR5G	VM3H070EZERN	
			Tri	VM3H076EZGLG	VM3H076EZR1G	VM3H076EZR5G	VM4H076EZGLG	VM4H076EZR1G	VM4H076EZR5G	VM3H076EZERN	
			480	VM3H075EZGLG	VM3H075EZR1G	VM3H075EZR5G	VM4H075EZGLG	VM4H075EZR1G	VM4H075EZR5G	VM3H075EZERN	
100	M90 M140	⑥	Quad	VM3H100EZGLG	VM3H100EZR1G	VM3H100EZR5G	VM4H100EZGLG	VM4H100EZR1G	VM4H100EZR5G	VM3H100EZERN	
			Tri	VM3H106EZGLG	VM3H106EZR1G	VM3H106EZR5G	VM4H106EZGLG	VM4H106EZR1G	VM4H106EZR5G	VM3H106EZERN	
			480	VM3H105EZGLG	VM3H105EZR1G	VM3H105EZR5G	VM4H105EZGLG	VM4H105EZR1G	VM4H105EZR5G	VM3H105EZERN	
175	M57	⑥	Quad	VM3H170EZGLG	VM3H170EZR1G	VM3H170EZR5G	VM4H170EZGLG	VM4H170EZR1G	VM4H170EZR5G	VM3H170EZERN	
			Tri	VM3H176EZGLG	VM3H176EZR1G	VM3H176EZR5G	VM4H176EZGLG	VM4H176EZR1G	VM4H176EZR5G	VM3H176EZERN	
			480	VM3H175EZGLG	VM3H175EZR1G	VM3H175EZR5G	VM4H175EZGLG	VM4H175EZR1G	VM4H175EZR5G	VM3H175EZERN	
250	M58	⑥	Quad	VM3H250EZGLG	VM3H250EZR1G	VM3H250EZR5G	VM4H250EZGLG	VM4H250EZR1G	VM4H250EZR5G	VM3H250EZERN	
			Tri	VM3H256EZGLG	VM3H256EZR1G	VM3H256EZR5G	VM4H256EZGLG	VM4H256EZR1G	VM4H256EZR5G	VM3H256EZERN	
			480	VM3H255EZGLG	VM3H255EZR1G	VM3H255EZR5G	VM4H255EZGLG	VM4H255EZR1G	VM4H255EZR5G	VM3H255EZERN	

① See hazardous application data on pages L84-L89 for limitations.

② Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3H070C2GLN

③ Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3H070C3GLG.

④ Consult catalog logic for other available voltages.

⑤ Add suffix NR for restricted breathing; see page L39 for more information.

⑥ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L63.





Stanchion 25°
w/ 5-1/2"
Globe & Guard



Stanchion Straight
w/ 5-1/2"
Reflector & Guard



Stanchion 25°
w/ 7-3/4"
Globe & Guard



Stanchion Straight
w/ 7-3/4"
Reflector & Guard



Stanchion 25°
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

us Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

VM 70-250 WATT METAL HALIDE STANCHION 25° ANGLE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	1-1/2"	Quad	VM3H070D5GLG	VM3H070D5R1G	VM3H070D5R5G	VM4H070D5GLG	VM4H070D5R1G	VM4H070D5R5G	VM4H070D5ERN
			Tri	VM3H076D5GLG	VM3H076D5R1G	VM3H076D5R5G	VM4H076D5GLG	VM4H076D5R1G	VM4H076D5R5G	VM4H076D5ERN
			480	VM3H075D5GLG	VM3H075D5R1G	VM3H075D5R5G	VM4H075D5GLG	VM4H075D5R1G	VM4H075D5R5G	VM4H075D5ERN
100	M90 M140	1-1/2"	Quad	VM3H100D5GLG	VM3H100D5R1G	VM3H100D5R5G	VM4H100D5GLG	VM4H100D5R1G	VM4H100D5R5G	VM4H100D5ERN
			Tri	VM3H106D5GLG	VM3H106D5R1G	VM3H106D5R5G	VM4H106D5GLG	VM4H106D5R1G	VM4H106D5R5G	VM4H106D5ERN
			480	VM3H105D5GLG	VM3H105D5R1G	VM3H105D5R5G	VM4H105D5GLG	VM4H105D5R1G	VM4H105D5R5G	VM4H105D5ERN
175	M57	1-1/2"	Quad	VM3H170D5GLG	VM3H170D5R1G	VM3H170D5R5G	VM4H170D5GLG	VM4H170D5R1G	VM4H170D5R5G	VM4H170D5ERN
			Tri	VM3H176D5GLG	VM3H176D5R1G	VM3H176D5R5G	VM4H176D5GLG	VM4H176D5R1G	VM4H176D5R5G	VM4H176D5ERN
			480	VM3H175D5GLG	VM3H175D5R1G	VM3H175D5R5G	VM4H175D5GLG	VM4H175D5R1G	VM4H175D5R5G	VM4H175D5ERN
250	M58	1-1/2"	Quad	VM3H250D5GLG	VM3H250D5R1G	VM3H250D5R5G	VM4H250D5GLG	VM4H250D5R1G	VM4H250D5R5G	VM4H250D5ERN
			Tri	VM3H256D5GLG	VM3H256D5R1G	VM3H256D5R5G	VM4H256D5GLG	VM4H256D5R1G	VM4H256D5R5G	VM4H256D5ERN
			480	VM3H255D5GLG	VM3H255D5R1G	VM3H255D5R5G	VM4H255D5GLG	VM4H255D5R1G	VM4H255D5R5G	VM4H255D5ERN

VM 70-250 WATT METAL HALIDE STANCHION STRAIGHT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98 M143	1-1/2"	Quad	VM3H070S5GLG	VM3H070S5R1G	VM3H070S5R5G	VM4H070S5GLG	VM4H070S5R1G	VM4H070S5R5G	VM3H070S5ERN
			Tri	VM3H076S5GLG	VM3H076S5R1G	VM3H076S5R5G	VM4H076S5GLG	VM4H076S5R1G	VM4H076S5R5G	VM3H076S5ERN
			480	VM3H075S5GLG	VM3H075S5R1G	VM3H075S5R5G	VM4H075S5GLG	VM4H075S5R1G	VM4H075S5R5G	VM3H075S5ERN
100	M90 M140	1-1/2"	Quad	VM3H100S5GLG	VM3H100S5R1G	VM3H100S5R5G	VM4H100S5GLG	VM4H100S5R1G	VM4H100S5R5G	VM3H100S5ERN
			Tri	VM3H106S5GLG	VM3H106S5R1G	VM3H106S5R5G	VM4H106S5GLG	VM4H106S5R1G	VM4H106S5R5G	VM3H106S5ERN
			480	VM3H105S5GLG	VM3H105S5R1G	VM3H105S5R5G	VM4H105S5GLG	VM4H105S5R1G	VM4H105S5R5G	VM3H105S5ERN
175	M57	1-1/2"	Quad	VM3H170S5GLG	VM3H170S5R1G	VM3H170S5R5G	VM4H170S5GLG	VM4H170S5R1G	VM4H170S5R5G	VM3H170S5ERN
			Tri	VM3H176S5GLG	VM3H176S5R1G	VM3H176S5R5G	VM4H176S5GLG	VM4H176S5R1G	VM4H176S5R5G	VM3H176S5ERN
			480	VM3H175S5GLG	VM3H175S5R1G	VM3H175S5R5G	VM4H175S5GLG	VM4H175S5R1G	VM4H175S5R5G	VM3H175S5ERN
250	M58	1-1/2"	Quad	VM3H250S5GLG	VM3H250S5R1G	VM3H250S5R5G	VM4H250S5GLG	VM4H250S5R1G	VM4H250S5R5G	VM3H250S5ERN
			Tri	VM3H256S5GLG	VM3H256S5R1G	VM3H256S5R5G	VM4H256S5GLG	VM4H256S5R1G	VM4H256S5R5G	VM3H256S5ERN
			480	VM3H255S5GLG	VM3H255S5R1G	VM3H255S5R5G	VM4H255S5GLG	VM4H255S5R1G	VM4H255S5R5G	VM3H255S5ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3H070D5GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM3H070D4GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





**Pendant
w/ 5-1/2"
Globe & Guard**



**Flexible Pendant
w/ 5-1/2"
Refractor & Guard**



**Pendant
w/ 7-3/4"
Globe & Guard**



**Flexible Pendant
w/ 7-3/4"
Refractor & Guard**



**Pendant
w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL US Listed - File E10514 (Hazardous & Marine)

SP Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]
Class I, Zone 2 AEx nAnR **UL**
Class I, Zone 2 Ex nR **SP**

VM 150-200 WATT METAL HALIDE PULSE PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	3/4"	Quad	VM3P150A2GLG	VM3P150A2R1G	VM3P150A2R5G	VM4P150A2GLG	VM4P150A2R1G	VM4P150A2R5G	VM4P156A2ERN
			Tri	VM3P156A2GLG	VM3P156A2R1G	VM3P156A2R5G	VM4P156A2GLG	VM4P156A2R1G	VM4P156A2R5G	VM4P155A2ERN
			480	VM3P155A2GLG	VM3P155A2R1G	VM3P155A2R5G	VM4P155A2GLG	VM4P155A2R1G	VM4P155A2R5G	VM4P170A2ERN
175	M137 M152	3/4"	Quad	VM3P170A2GLG	VM3P170A2R1G	VM3P170A2R5G	VM4P170A2GLG	VM4P170A2R1G	VM4P170A2R5G	VM4P170A2ERN
			Tri	VM3P176A2GLG	VM3P176A2R1G	VM3P176A2R5G	VM4P176A2GLG	VM4P176A2R1G	VM4P176A2R5G	VM4P176A2ERN
			480	VM3P175A2GLG	VM3P175A2R1G	VM3P175A2R5G	VM4P175A2GLG	VM4P175A2R1G	VM4P175A2R5G	VM4P175A2ERN
200	M136	3/4"	Quad	VM3P200A2GLG	VM3P200A2R1G	VM3P200A2R5G	VM4P200A2GLG	VM4P200A2R1G	VM4P200A2R5G	VM4P200A2ERN
			Tri	VM3P206A2GLG	VM3P206A2R1G	VM3P206A2R5G	VM4P206A2GLG	VM4P206A2R1G	VM4P206A2R5G	VM4P206A2ERN
			480	VM3P205A2GLG	VM3P205A2R1G	VM3P205A2R5G	VM4P205A2GLG	VM4P205A2R1G	VM4P205A2R5G	VM4P205A2ERN

VM 150-200 WATT METAL HALIDE PULSE FLEXIBLE PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	3/4"	Quad	VM3P150F2GLG	VM3P150F2R1G	VM3P150F2R5G	VM4P150F2GLG	VM4P150F2R1G	VM4P150F2R5G	VM4P156F2ERN
			Tri	VM3P156F2GLG	VM3P156F2R1G	VM3P156F2R5G	VM4P156F2GLG	VM4P156F2R1G	VM4P156F2R5G	VM4P155F2ERN
			480	VM3P155F2GLG	VM3P155F2R1G	VM3P155F2R5G	VM4P155F2GLG	VM4P155F2R1G	VM4P155F2R5G	VM4P170F2ERN
175	M137 M152	3/4"	Quad	VM3P170F2GLG	VM3P170F2R1G	VM3P170F2R5G	VM4P170F2GLG	VM4P170F2R1G	VM4P170F2R5G	VM4P170F2ERN
			Tri	VM3P176F2GLG	VM3P176F2R1G	VM3P176F2R5G	VM4P176F2GLG	VM4P176F2R1G	VM4P176F2R5G	VM4P176F2ERN
			480	VM3P175F2GLG	VM3P175F2R1G	VM3P175F2R5G	VM4P175F2GLG	VM4P175F2R1G	VM4P175F2R5G	VM4P175F2ERN
200	M136	3/4"	Quad	VM3P200F2GLG	VM3P200F2R1G	VM3P200F2R5G	VM4P200F2GLG	VM4P200F2R1G	VM4P200F2R5G	VM4P200F2ERN
			Tri	VM3P206F2GLG	VM3P206F2R1G	VM3P206F2R5G	VM4P206F2GLG	VM4P206F2R1G	VM4P206F2R5G	VM4P206F2ERN
			480	VM3P205F2GLG	VM3P205F2R1G	VM3P205F2R5G	VM4P205F2GLG	VM4P205F2R1G	VM4P205F2R5G	VM4P205F2ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3P150A2GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings; change 2 to 3 for 1"; e.g. VM3P150A3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





Ceiling
w/ 5-1/2"
Globe & Guard



Wall
w/ 5-1/2"
Refractor & Guard



Ceiling
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR



Ceiling
w/ 7-3/4"
Globe & Guard



Wall
w/ 7-3/4"
Refractor & Guard

VM 150-200 WATT METAL HALIDE PULSE CEILING										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	3/4"	Quad	VM3P150X2GLG	VM3P150X2R1G	VM3P150X2R5G	VM4P150X2GLG	VM4P150X2R1G	VM4P150X2R5G	VM4P150X2ERN
			Tri	VM3P156X2GLG	VM3P156X2R1G	VM3P156X2R5G	VM4P156X2GLG	VM4P156X2R1G	VM4P156X2R5G	VM4P156X2ERN
			480	VM3P155X2GLG	VM3P155X2R1G	VM3P155X2R5G	VM4P155X2GLG	VM4P155X2R1G	VM4P155X2R5G	VM4P155X2ERN
175	M137 M152	3/4"	Quad	VM3P170X2GLG	VM3P170X2R1G	VM3P170X2R5G	VM4P170X2GLG	VM4P170X2R1G	VM4P170X2R5G	VM4P170X2ERN
			Tri	VM3P176X2GLG	VM3P176X2R1G	VM3P176X2R5G	VM4P176X2GLG	VM4P176X2R1G	VM4P176X2R5G	VM4P176X2ERN
			480	VM3P175X2GLG	VM3P175X2R1G	VM3P175X2R5G	VM4P175X2GLG	VM4P175X2R1G	VM4P175X2R5G	VM4P175X2ERN
200	M136	3/4"	Quad	VM3P200X2GLG	VM3P200X2R1G	VM3P200X2R5G	VM4P200X2GLG	VM4P200X2R1G	VM4P200X2R5G	VM4P200X2ERN
			Tri	VM3P206X2GLG	VM3P206X2R1G	VM3P206X2R5G	VM4P206X2GLG	VM4P206X2R1G	VM4P206X2R5G	VM4P206X2ERN
			480	VM3P205X2GLG	VM3P205X2R1G	VM3P205X2R5G	VM4P205X2GLG	VM4P205X2R1G	VM4P205X2R5G	VM4P205X2ERN

VM 150-200 WATT METAL HALIDE PULSE WALL										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	3/4"	Quad	VM3P150B2GLG	VM3P150B2R1G	VM3P150B2R5G	VM4P150B2GLG	VM4P150B2R1G	VM4P150B2R5G	VM4P150B2ERN
			Tri	VM3P156B2GLG	VM3P156B2R1G	VM3P156B2R5G	VM4P156B2GLG	VM4P156B2R1G	VM4P156B2R5G	VM4P156B2ERN
			480	VM3P155B2GLG	VM3P155B2R1G	VM3P155B2R5G	VM4P155B2GLG	VM4P155B2R1G	VM4P155B2R5G	VM4P155B2ERN
175	M137 M152	3/4"	Quad	VM3P170B2GLG	VM3P170B2R1G	VM3P170B2R5G	VM4P170B2GLG	VM4P170B2R1G	VM4P170B2R5G	VM4P170B2ERN
			Tri	VM3P176B2GLG	VM3P176B2R1G	VM3P176B2R5G	VM4P176B2GLG	VM4P176B2R1G	VM4P176B2R5G	VM4P176B2ERN
			480	VM3P175B2GLG	VM3P175B2R1G	VM3P175B2R5G	VM4P175B2GLG	VM4P175B2R1G	VM4P175B2R5G	VM4P175B2ERN
200	M136	3/4"	Quad	VM3P200B2GLG	VM3P200B2R1G	VM3P200B2R5G	VM4P200B2GLG	VM4P200B2R1G	VM4P200B2R5G	VM4P200B2ERN
			Tri	VM3P206B2GLG	VM3P206B2R1G	VM3P206B2R5G	VM4P206B2GLG	VM4P206B2R1G	VM4P206B2R5G	VM4P206B2ERN
			480	VM3P205B2GLG	VM3P205B2R1G	VM3P205B2R5G	VM4P205B2GLG	VM4P205B2R1G	VM4P205B2R5G	VM4P205B2ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflectors); to omit guard, change ending G to N; e.g. VM3P050X2GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3P150X3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





**Cone
w/ 5-1/2"
Globe & Guard**



**EZ Adapter
w/ 5-1/2"
Refractor & Guard**



**Cone
w/ 7-3/4"
Globe & Guard**



**EZ Adapter
w/ 7-3/4"
Refractor & Guard**



**Cone
w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 150-200 WATT METAL HALIDE PULSE CONE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE			7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	3/4"	Quad	VM3P150C2GLG	VM3P150C2R1G	VM3P150C2R5G	VM4P150C2GLG	VM4P150C2R1G	VM4P150C2R5G	VM4P150C2ERN
			Tri	VM3P156C2GLG	VM3P156C2R1G	VM3P156C2R5G	VM4P156C2GLG	VM4P156C2R1G	VM4P156C2R5G	VM4P156C2ERN
			480	VM3P155C2GLG	VM3P155C2R1G	VM3P155C2R5G	VM4P155C2GLG	VM4P155C2R1G	VM4P155C2R5G	VM4P155C2ERN
175	M137 M152	3/4"	Quad	VM3P170C2GLG	VM3P170C2R1G	VM3P170C2R5G	VM4P170C2GLG	VM4P170C2R1G	VM4P170C2R5G	VM4P170C2ERN
			Tri	VM3P176C2GLG	VM3P176C2R1G	VM3P176C2R5G	VM4P176C2GLG	VM4P176C2R1G	VM4P176C2R5G	VM4P176C2ERN
			480	VM3P175C2GLG	VM3P175C2R1G	VM3P175C2R5G	VM4P175C2GLG	VM4P175C2R1G	VM4P175C2R5G	VM4P175C2ERN
200	M136	3/4"	Quad	VM3P200C2GLG	VM3P200C2R1G	VM3P200C2R5G	VM4P200C2GLG	VM4P200C2R1G	VM4P200C2R5G	VM4P200C2ERN
			Tri	VM3P206C2GLG	VM3P206C2R1G	VM3P206C2R5G	VM4P206C2GLG	VM4P206C2R1G	VM4P206C2R5G	VM4P206C2ERN
			480	VM3P205C2GLG	VM3P205C2R1G	VM3P205C2R5G	VM4P205C2GLG	VM4P205C2R1G	VM4P205C2R5G	VM4P205C2ERN

VM 150-200 WATT METAL HALIDE PULSE EZ ADAPTER										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE			7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	⊙	Quad	VM3P150EZGLG	VM3P150EZR1G	VM3P150EZR5G	VM4P150EZGLG	VM4P150EZR1G	VM4P150EZR5G	VM4P150EZERN
			Tri	VM3P156EZGLG	VM3P156EZR1G	VM3P156EZR5G	VM4P156EZGLG	VM4P156EZR1G	VM4P156EZR5G	VM4P156EZERN
			480	VM3P155EZGLG	VM3P155EZR1G	VM3P155EZR5G	VM4P155EZGLG	VM4P155EZR1G	VM4P155EZR5G	VM4P155EZERN
175	M137 M152	⊙	Quad	VM3P170EZGLG	VM3P170EZR1G	VM3P170EZR5G	VM4P170EZGLG	VM4P170EZR1G	VM4P170EZR5G	VM4P170EZERN
			Tri	VM3P176EZGLG	VM3P176EZR1G	VM3P176EZR5G	VM4P176EZGLG	VM4P176EZR1G	VM4P176EZR5G	VM4P176EZERN
			480	VM3P175EZGLG	VM3P175EZR1G	VM3P175EZR5G	VM4P175EZGLG	VM4P175EZR1G	VM4P175EZR5G	VM4P175EZERN
200	M136	⊙	Quad	VM3P200EZGLG	VM3P200EZR1G	VM3P200EZR5G	VM4P200EZGLG	VM4P200EZR1G	VM4P200EZR5G	VM4P200EZERN
			Tri	VM3P206EZGLG	VM3P206EZR1G	VM3P206EZR5G	VM4P206EZGLG	VM4P206EZR1G	VM4P206EZR5G	VM4P206EZERN
			480	VM3P205EZGLG	VM3P205EZR1G	VM3P205EZR5G	VM4P205EZGLG	VM4P205EZR1G	VM4P205EZR5G	VM4P205EZERN

① See hazardous application data on pages L84-L89 for limitations.

② Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3P150C2GLN

③ Catalog numbers shown are with 3/4" conduit openings; change 2 to 3 for 1"; e.g. VM3P150C3GLG.

④ Consult catalog logic for other available voltages.

⑤ Add suffix NR for restricted breathing; see page L39 for more information.

⑥ VMEZA tank adapters UL "Classified" as an assembly for use between VM Tanks and EZ mounts. Order EZ mounts separately; see page L63.





Stanchion 25°
w/ 5-1/2"
Globe & Guard



Stanchion Straight
w/ 5-1/2"
Refractor & Guard



Stanchion 25°
w/ 7-3/4"
Globe & Guard



Stanchion Straight
w/ 7-3/4"
Refractor & Guard



Stanchion 25°
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

VM 150-200 WATT METAL HALIDE PULSE STANCHION 25° ANGLE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	1-1/2"	Quad	VM3P150D5GLG	VM3P150D5R1G	VM3P150D5R5G	VM4P150D5GLG	VM4P150D5R1G	VM4P150D5R5G	VM4P150D5ERN
			Tri	VM3P156D5GLG	VM3P156D5R1G	VM3P156D5R5G	VM4P156D5GLG	VM4P156D5R1G	VM4P156D5R5G	VM4P156D5ERN
			480	VM3P155D5GLG	VM3P155D5R1G	VM3P155D5R5G	VM4P155D5GLG	VM4P155D5R1G	VM4P155D5R5G	VM4P155D5ERN
175	M137 M152	1-1/2"	Quad	VM3P170D5GLG	VM3P170D5R1G	VM3P170D5R5G	VM4P170D5GLG	VM4P170D5R1G	VM4P170D5R5G	VM4P170D5ERN
			Tri	VM3P176D5GLG	VM3P176D5R1G	VM3P176D5R5G	VM4P176D5GLG	VM4P176D5R1G	VM4P176D5R5G	VM4P176D5ERN
			480	VM3P175D5GLG	VM3P175D5R1G	VM3P175D5R5G	VM4P175D5GLG	VM4P175D5R1G	VM4P175D5R5G	VM4P175D5ERN
200	M136	1-1/2"	Quad	VM3P200D5GLG	VM3P200D5R1G	VM3P200D5R5G	VM4P200D5GLG	VM4P200D5R1G	VM4P200D5R5G	VM4P200D5ERN
			Tri	VM3P206D5GLG	VM3P206D5R1G	VM3P206D5R5G	VM4P206D5GLG	VM4P206D5R1G	VM4P206D5R5G	VM4P206D5ERN
			480	VM3P205D5GLG	VM3P205D5R1G	VM3P205D5R5G	VM4P205D5GLG	VM4P205D5R1G	VM4P205D5R5G	VM4P205D5ERN

VM 150-200 WATT METAL HALIDE PULSE STANCHION STRAIGHT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
150	M102 M142	1-1/2"	Quad	VM3P150S5GLG	VM3P150S5R1G	VM3P150S5R5G	VM4P150S5GLG	VM4P150S5R1G	VM4P150S5R5G	VM4P150S5ERN
			Tri	VM3P156S5GLG	VM3P156S5R1G	VM3P156S5R5G	VM4P156S5GLG	VM4P156S5R1G	VM4P156S5R5G	VM4P156S5ERN
			480	VM3P155S5GLG	VM3P155S5R1G	VM3P155S5R5G	VM4P155S5GLG	VM4P155S5R1G	VM4P155S5R5G	VM4P155S5ERN
175	M137 M152	1-1/2"	Quad	VM3P170S5GLG	VM3P170S5R1G	VM3P170S5R5G	VM4P170S5GLG	VM4P170S5R1G	VM4P170S5R5G	VM4P170S5ERN
			Tri	VM3P176S5GLG	VM3P176S5R1G	VM3P176S5R5G	VM4P176S5GLG	VM4P176S5R1G	VM4P176S5R5G	VM4P176S5ERN
			480	VM3P175S5GLG	VM3P175S5R1G	VM3P175S5R5G	VM4P175S5GLG	VM4P175S5R1G	VM4P175S5R5G	VM4P175S5ERN
200	M136	1-1/2"	Quad	VM3P200S5GLG	VM3P200S5R1G	VM3P200S5R5G	VM4P200S5GLG	VM4P200S5R1G	VM4P200S5R5G	VM4P200S5ERN
			Tri	VM3P206S5GLG	VM3P206S5R1G	VM3P206S5R5G	VM4P206S5GLG	VM4P206S5R1G	VM4P206S5R5G	VM4P206S5ERN
			480	VM3P205S5GLG	VM3P205S5R1G	VM3P205S5R5G	VM4P205S5GLG	VM4P205S5R1G	VM4P205S5R5G	VM4P205S5ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflectors); to omit guard change ending G to N; e.g. VM3P150D5GLN

[Ⓢ] Catalog numbers shown are with 1-1/2" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM3P150D4GLG.

[Ⓢ] Consult catalog logic for other available voltages.


[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.



Class I, Div. 2, Groups A,B,C,D[Ⓢ]
 Class I, Zone 2, Groups IIC, IIB, IIA
 Class II, Div. 1 & 2, Groups E,F,G
 Class III

Suitable for wet locations
 NEMA 3, 4, 4X; IP66

 US Listed - File E10514 (Hazardous & Marine)

 Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR 

Class I, Zone 2 Ex nR 



Pendant
w/ 5-1/2"
Globe & Guard



Flexible Pendant
w/ 5-1/2"
Refractor & Guard



Pendant
w/ 7-3/4"
Globe & Guard



Flexible Pendant
w/ 7-3/4"
Refractor & Guard



Pendant
w/ Enclosed Reflector

VM 100-250 WATT MERCURY VAPOR PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	3/4"	Quad	VM3M100A2GLG	VM3M100A2R1G	VM3M100A2R5G	VM4M100A2GLG	VM4M100A2R1G	VM4M100A2R5G	VM4M100A2ERN
			Tri	VM3M106A2GLG	VM3M106A2R1G	VM3M106A2R5G	VM4M106A2GLG	VM4M106A2R1G	VM4M106A2R5G	VM4M106A2ERN
			480	VM3M105A2GLG	VM3M105A2R1G	VM3M105A2R5G	VM4M105A2GLG	VM4M105A2R1G	VM4M105A2R5G	VM4M105A2ERN
175	H39	3/4"	Quad	VM3M170A2GLG	VM3M170A2R1G	VM3M170A2R5G	VM4M170A2GLG	VM4M170A2R1G	VM4M170A2R5G	VM4M170A2ERN
			Tri	VM3M176A2GLG	VM3M176A2R1G	VM3M176A2R5G	VM4M176A2GLG	VM4M176A2R1G	VM4M176A2R5G	VM4M176A2ERN
			480	VM3M175A2GLG	VM3M175A2R1G	VM3M175A2R5G	VM4M175A2GLG	VM4M175A2R1G	VM4M175A2R5G	VM4M175A2ERN
250	H37	3/4"	Quad	VM3M250A2GLG	VM3M250A2R1G	VM3M250A2R5G	VM4M250A2GLG	VM4M250A2R1G	VM4M250A2R5G	VM4M250A2ERN
			Tri	VM3M256A2GLG	VM3M256A2R1G	VM3M256A2R5G	VM4M256A2GLG	VM4M256A2R1G	VM4M256A2R5G	VM4M256A2ERN
			480	VM3M255A2GLG	VM3M255A2R1G	VM3M255A2R5G	VM4M255A2GLG	VM4M255A2R1G	VM4M255A2R5G	VM4M255A2ERN

VM 100-250 WATT MERCURY VAPOR FLEXIBLE PENDANT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	3/4"	Quad	VM3M100F2GLG	VM3M100F2R1G	VM3M100F2R5G	VM4M100F2GLG	VM4M100F2R1G	VM4M100F2R5G	VM4M100F2ERN
			Tri	VM3M106F2GLG	VM3M106F2R1G	VM3M106F2R5G	VM4M106F2GLG	VM4M106F2R1G	VM4M106F2R5G	VM4M106F2ERN
			480	VM3M105F2GLG	VM3M105F2R1G	VM3M105F2R5G	VM4M105F2GLG	VM4M105F2R1G	VM4M105F2R5G	VM4M105F2ERN
175	H39	3/4"	Quad	VM3M170F2GLG	VM3M170F2R1G	VM3M170F2R5G	VM4M170F2GLG	VM4M170F2R1G	VM4M170F2R5G	VM4M170F2ERN
			Tri	VM3M176F2GLG	VM3M176F2R1G	VM3M176F2R5G	VM4M176F2GLG	VM4M176F2R1G	VM4M176F2R5G	VM4M176F2ERN
			480	VM3M175F2GLG	VM3M175F2R1G	VM3M175F2R5G	VM4M175F2GLG	VM4M175F2R1G	VM4M175F2R5G	VM4M175F2ERN
250	H37	3/4"	Quad	VM3M250F2GLG	VM3M250F2R1G	VM3M250F2R5G	VM4M250F2GLG	VM4M250F2R1G	VM4M250F2R5G	VM4M250F2ERN
			Tri	VM3M256F2GLG	VM3M256F2R1G	VM3M256F2R5G	VM4M256F2GLG	VM4M256F2R1G	VM4M256F2R5G	VM4M256F2ERN
			480	VM3M255F2GLG	VM3M255F2R1G	VM3M255F2R5G	VM4M255F2GLG	VM4M255F2R1G	VM4M255F2R5G	VM4M255F2ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3M100A2GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3M100A3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





Ceiling
w/ 5-1/2"
Globe & Guard



Wall
w/ 5-1/2"
Refractor & Guard



Ceiling
w/ 7-3/4"
Globe & Guard



Wall
w/ 7-3/4"
Refractor & Guard



Ceiling
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

VM 100-250 WATT MERCURY VAPOR CEILING										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	3/4"	Quad	VM3M100X2GLG	VM3M100X2R1G	VM3M100X2R5G	VM4M100X2GLG	VM4M100X2R1G	VM4M100X2R5G	VM4M100X2ERN
			Tri	VM3M106X2GLG	VM3M106X2R1G	VM3M106X2R5G	VM4M106X2GLG	VM4M106X2R1G	VM4M106X2R5G	VM4M106X2ERN
			480	VM3M105X2GLG	VM3M105X2R1G	VM3M105X2R5G	VM4M105X2GLG	VM4M105X2R1G	VM4M105X2R5G	VM4M105X2ERN
175	H39	3/4"	Quad	VM3M170X2GLG	VM3M170X2R1G	VM3M170X2R5G	VM4M170X2GLG	VM4M170X2R1G	VM4M170X2R5G	VM4M170X2ERN
			Tri	VM3M176X2GLG	VM3M176X2R1G	VM3M176X2R5G	VM4M176X2GLG	VM4M176X2R1G	VM4M176X2R5G	VM4M176X2ERN
			480	VM3M175X2GLG	VM3M175X2R1G	VM3M175X2R5G	VM4M175X2GLG	VM4M175X2R1G	VM4M175X2R5G	VM4M175X2ERN
250	H37	3/4"	Quad	VM3M250X2GLG	VM3M250X2R1G	VM3M250X2R5G	VM4M250X2GLG	VM4M250X2R1G	VM4M250X2R5G	VM4M250X2ERN
			Tri	VM3M256X2GLG	VM3M256X2R1G	VM3M256X2R5G	VM4M256X2GLG	VM4M256X2R1G	VM4M256X2R5G	VM4M256X2ERN
			480	VM3M255X2GLG	VM3M255X2R1G	VM3M255X2R5G	VM4M255X2GLG	VM4M255X2R1G	VM4M255X2R5G	VM4M255X2ERN

VM 100-250 WATT MERCURY VAPOR WALL										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	3/4"	Quad	VM3M100B2GLG	VM3M100B2R1G	VM3M100B2R5G	VM4M100B2GLG	VM4M100B2R1G	VM4M100B2R5G	VM4M100B2ERN
			Tri	VM3M106B2GLG	VM3M106B2R1G	VM3M106B2R5G	VM4M106B2GLG	VM4M106B2R1G	VM4M106B2R5G	VM4M106B2ERN
			480	VM3M105B2GLG	VM3M105B2R1G	VM3M105B2R5G	VM4M105B2GLG	VM4M105B2R1G	VM4M105B2R5G	VM4M105B2ERN
175	H39	3/4"	Quad	VM3M170B2GLG	VM3M170B2R1G	VM3M170B2R5G	VM4M170B2GLG	VM4M170B2R1G	VM4M170B2R5G	VM4M170B2ERN
			Tri	VM3M176B2GLG	VM3M176B2R1G	VM3M176B2R5G	VM4M176B2GLG	VM4M176B2R1G	VM4M176B2R5G	VM4M176B2ERN
			480	VM3M175B2GLG	VM3M175B2R1G	VM3M175B2R5G	VM4M175B2GLG	VM4M175B2R1G	VM4M175B2R5G	VM4M175B2ERN
250	H37	3/4"	Quad	VM3M250B2GLG	VM3M250B2R1G	VM3M250B2R5G	VM4M250B2GLG	VM4M250B2R1G	VM4M250B2R5G	VM4M250B2ERN
			Tri	VM3M256B2GLG	VM3M256B2R1G	VM3M256B2R5G	VM4M256B2GLG	VM4M256B2R1G	VM4M256B2R5G	VM4M256B2ERN
			480	VM3M255B2GLG	VM3M255B2R1G	VM3M255B2R5G	VM4M255B2GLG	VM4M255B2R1G	VM4M255B2R5G	VM4M255B2ERN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3M100X2GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3M100X3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





**Cone
w/ 5-1/2"
Globe & Guard**



**EZ Adapter
w/ 5-1/2"
Refractor & Guard**



**Cone
w/ 7-3/4"
Globe & Guard**



**EZ Adapter
w/ 7-3/4"
Refractor & Guard**



**Cone
w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓞ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL[®] US Listed - File E10514 (Hazardous & Marine)

SP[®] US Certified - File LR11713

NR Restricted Breathing Option[Ⓞ]

Class I, Zone 2 AEx nAnR^{UL}

Class I, Zone 2 Ex nR^{SP}

VM 100-250 WATT MERCURY VAPOR CONE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]			
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	3/4"	Quad	VM3M100C2GLG	VM3M100C2R1G	VM3M100C2R5G	VM4M100C2GLG	VM4M100C2R1G	VM4M100C2R5G	VM4M100C2ERN
			Tri	VM3M106C2GLG	VM3M106C2R1G	VM3M106C2R5G	VM4M106C2GLG	VM4M106C2R1G	VM4M106C2R5G	VM4M106C2ERN
			480	VM3M105C2GLG	VM3M105C2R1G	VM3M105C2R5G	VM4M105C2GLG	VM4M105C2R1G	VM4M105C2R5G	VM4M105C2ERN
175	H39	3/4"	Quad	VM3M170C2GLG	VM3M170C2R1G	VM3M170C2R5G	VM4M170C2GLG	VM4M170C2R1G	VM4M170C2R5G	VM4M170C2ERN
			Tri	VM3M176C2GLG	VM3M176C2R1G	VM3M176C2R5G	VM4M176C2GLG	VM4M176C2R1G	VM4M176C2R5G	VM4M176C2ERN
			480	VM3M175C2GLG	VM3M175C2R1G	VM3M175C2R5G	VM4M175C2GLG	VM4M175C2R1G	VM4M175C2R5G	VM4M175C2ERN
250	H37	3/4"	Quad	VM3M250C2GLG	VM3M250C2R1G	VM3M250C2R5G	VM4M250C2GLG	VM4M250C2R1G	VM4M250C2R5G	VM4M250C2ERN
			Tri	VM3M256C2GLG	VM3M256C2R1G	VM3M256C2R5G	VM4M256C2GLG	VM4M256C2R1G	VM4M256C2R5G	VM4M256C2ERN
			480	VM3M255C2GLG	VM3M255C2R1G	VM3M255C2R5G	VM4M255C2GLG	VM4M255C2R1G	VM4M255C2R5G	VM4M255C2ERN

VM 100-250 WATT MERCURY VAPOR EZ ADAPTER										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓞ]			7-3/4" OPTIC THREAD SIZE [Ⓞ]			
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	Ⓞ	Quad	VM3M100EZGLG	VM3M100EZR1G	VM3M100EZR5G	VM4M100EZGLG	VM4M100EZR1G	VM4M100EZR5G	VM4M100EZERN
			Tri	VM3M106EZGLG	VM3M106EZR1G	VM3M106EZR5G	VM4M106EZGLG	VM4M106EZR1G	VM4M106EZR5G	VM4M106EZERN
			480	VM3M105EZGLG	VM3M105EZR1G	VM3M105EZR5G	VM4M105EZGLG	VM4M105EZR1G	VM4M105EZR5G	VM4M105EZERN
175	H39	Ⓞ	Quad	VM3M170EZGLG	VM3M170EZR1G	VM3M170EZR5G	VM4M170EZGLG	VM4M170EZR1G	VM4M170EZR5G	VM4M170EZERN
			Tri	VM3M176EZGLG	VM3M176EZR1G	VM3M176EZR5G	VM4M176EZGLG	VM4M176EZR1G	VM4M176EZR5G	VM4M176EZERN
			480	VM3M175EZGLG	VM3M175EZR1G	VM3M175EZR5G	VM4M175EZGLG	VM4M175EZR1G	VM4M175EZR5G	VM4M175EZERN
250	H37	Ⓞ	Quad	VM3M250EZGLG	VM3M250EZR1G	VM3M250EZR5G	VM4M250EZGLG	VM4M250EZR1G	VM4M250EZR5G	VM4M250EZERN
			Tri	VM3M256EZGLG	VM3M256EZR1G	VM3M256EZR5G	VM4M256EZGLG	VM4M256EZR1G	VM4M256EZR5G	VM4M256EZERN
			480	VM3M255EZGLG	VM3M255EZR1G	VM3M255EZR5G	VM4M255EZGLG	VM4M255EZR1G	VM4M255EZR5G	VM4M255EZERN

[Ⓞ] See hazardous application data on pages L84-L89 for limitations.

[Ⓞ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3M100C2GLN

[Ⓞ] Cone top catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3M100C3GLG.

[Ⓞ] Consult catalog logic for other available voltages.

[Ⓞ] Add suffix NR for restricted breathing; see page L39 for more information.

[Ⓞ] VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L63.





Stanchion 25°
w/ 5-1/2"
Globe & Guard



Stanchion Straight
w/ 5-1/2"
Refractor & Guard



Stanchion 25°
w/ 7-3/4"
Globe & Guard



Stanchion Straight
w/ 7-3/4"
Refractor & Guard



Stanchion 25°
w/ Enclosed Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]

Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 100-250 WATT MERCURY VAPOR STANCHION 25° ANGLE										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	1-1/2"	Quad	VM3M100D5GLG	VM3M100D5R1G	VM3M100D5R5G	VM4M100D5GLG	VM4M100D5R1G	VM4M100D5R5G	VM4M100D5ERN
			Tri	VM3M106D5GLG	VM3M106D5R1G	VM3M106D5R5G	VM4M106D5GLG	VM4M106D5R1G	VM4M106D5R5G	VM4M106D5ERN
			480	VM3M105D5GLG	VM3M105D5R1G	VM3M105D5R5G	VM4M105D5GLG	VM4M105D5R1G	VM4M105D5R5G	VM4M105D5ERN
175	H39	1-1/2"	Quad	VM3M170D5GLG	VM3M170D5R1G	VM3M170D5R5G	VM4M170D5GLG	VM4M170D5R1G	VM4M170D5R5G	VM4M170D5ERN
			Tri	VM3M176D5GLG	VM3M176D5R1G	VM3M176D5R5G	VM4M176D5GLG	VM4M176D5R1G	VM4M176D5R5G	VM4M176D5ERN
			480	VM3M175D5GLG	VM3M175D5R1G	VM3M175D5R5G	VM4M175D5GLG	VM4M175D5R1G	VM4M175D5R5G	VM4M175D5ERN
250	H37	1-1/2"	Quad	VM3M250D5GLG	VM3M250D5R1G	VM3M250D5R5G	VM4M250D5GLG	VM4M250D5R1G	VM4M250D5R5G	VM4M250D5ERN
			Tri	VM3M256D5GLG	VM3M256D5R1G	VM3M256D5R5G	VM4M256D5GLG	VM4M256D5R1G	VM4M256D5R5G	VM4M256D5ERN
			480	VM3M255D5GLG	VM3M255D5R1G	VM3M255D5R5G	VM4M255D5GLG	VM4M255D5R1G	VM4M255D5R5G	VM4M255D5ERN

VM 100-250 WATT MERCURY VAPOR STANCHION STRAIGHT										
DESCRIPTION				5-1/2" OPTIC THREAD SIZE [Ⓢ]			7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
100	H38	1-1/2"	Quad	VM3M100S5GLG	VM3M100S5R1G	VM3M100S5R5G	VM4M100S5GLG	VM4M100S5R1G	VM4M100S5R5G	VM4M100S5ERN
			Tri	VM3M106S5GLG	VM3M106S5R1G	VM3M106S5R5G	VM4M106S5GLG	VM4M106S5R1G	VM4M106S5R5G	VM4M106S5ERN
			480	VM3M105S5GLG	VM3M105S5R1G	VM3M105S5R5G	VM4M105S5GLG	VM4M105S5R1G	VM4M105S5R5G	VM4M105S5ERN
175	H39	1-1/2"	Quad	VM3M170S5GLG	VM3M170S5R1G	VM3M170S5R5G	VM4M170S5GLG	VM4M170S5R1G	VM4M170S5R5G	VM4M170S5ERN
			Tri	VM3M176S5GLG	VM3M176S5R1G	VM3M176S5R5G	VM4M176S5GLG	VM4M176S5R1G	VM4M176S5R5G	VM4M176S5ERN
			480	VM3M175S5GLG	VM3M175S5R1G	VM3M175S5R5G	VM4M175S5GLG	VM4M175S5R1G	VM4M175S5R5G	VM4M175S5ERN
250	H37	1-1/2"	Quad	VM3M250S5GLG	VM3M250S5R1G	VM3M250S5R5G	VM4M250S5GLG	VM4M250S5R1G	VM4M250S5R5G	VM4M250S5ERN
			Tri	VM3M256S5GLG	VM3M256S5R1G	VM3M256S5R5G	VM4M256S5GLG	VM4M256S5R1G	VM4M256S5R5G	VM4M256S5ERN
			480	VM3M255S5GLG	VM3M255S5R1G	VM3M255S5R5G	VM4M255S5GLG	VM4M255S5R1G	VM4M255S5R5G	VM4M255S5ERN

[Ⓢ] See hazardous application data on pages L89-L89 for limitations.

[Ⓢ] Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3M100D5GLN

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM3M100D4GLG.

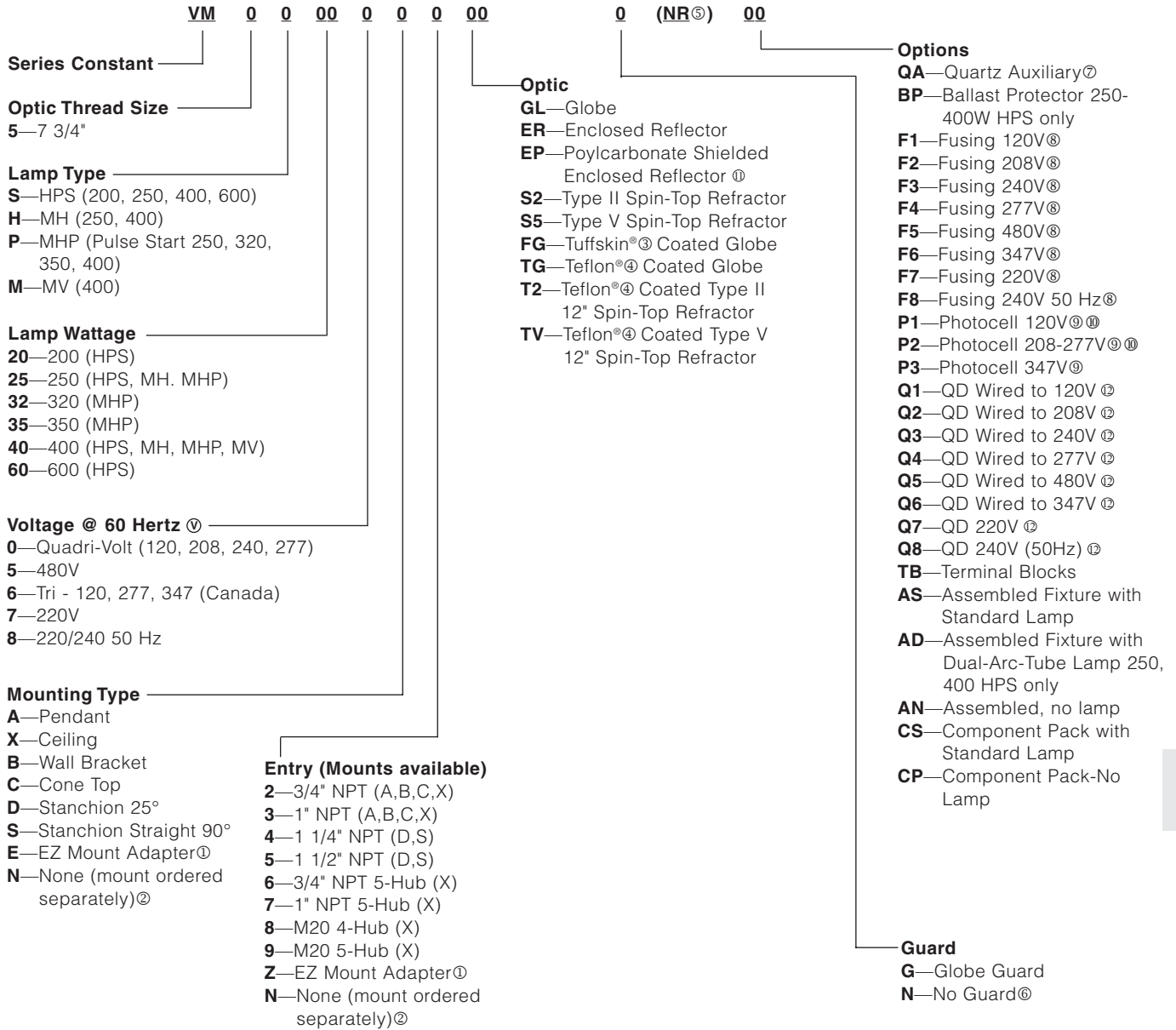
[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





CertiLite®V Catalog Number Logic; 200-400 High Wattage (Mogul Base) HID Fixtures



① Completes as "EZ", conduit mounting boxes ordered separately - See L63.
 ② NN mount ordered separately.
 ③ Tuffskin® is a registered trademark of Thomas Mfg. Corp.
 ④ Teflon® is a registered trademark of DuPont, Inc.
 ⑤ Restricted Breathing - See L39 for more information.
 ⑥ Order Guards for Spin-Tops & VMER40 separately.
 ⑦ Consult factory for available lamp and voltage combinations.

⑦ QA not suitable for Class I, Div. 2/Zone 2 applications; consult factory for other hazardous applications.
 ⑧ Fusing not for Marine or Canadian installations.
 ⑨ Photo cells for Class I, Div. 2 only.
 ⑩ Field connection to proper tap in case of Multitap Ballasts.
 ⑪ Not for use with wall or straight (90°) Stanchion.
 ⑫ QD = Quick Disconnect. Allows easy tank removal for maintenance. Electrician simply unplugs de-energized ballast from supply circuit.
 ⑬ 250W MH w/quad, tri-tap, or 480V 60Hz, or 230V 50Hz w/o Quartz - use VM5 tank.





**Pendant
w/ Globe &
Guard**



**Pendant
w/ Spin-Top
Refractor**



**Ceiling
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓛ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL Listed - File E10514 (Hazardous & Marine)

CSB Certified - File LR11713

NR Restricted Breathing Option[Ⓛ]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 200-600 WATT HIGH PRESSURE SODIUM PENDANT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
200	S66	3/4"	Quad	VM5S200A2GLG	VM5S200A2S5N	VM5S200A2ERN	VM5S200A2EPN
			Tri	VM5S206A2GLG	VM5S206A2S5N	VM5S206A2ERN	VM5S206A2EPN
			480	VM5S205A2GLG	VM5S205A2S5N	VM5S205A2ERN	VM5S205A2EPN
250	S50	3/4"	Quad	VM5S250A2GLG	VM5S250A2S5N	VM5S250A2ERN	VM5S250A2EPN
			Tri	VM5S256A2GLG	VM5S256A2S5N	VM5S256A2ERN	VM5S256A2EPN
			480	VM5S255A2GLG	VM5S255A2S5N	VM5S255A2ERN	VM5S255A2EPN
400	S51	3/4"	Quad	VM5S400A2GLG	VM5S400A2S5N	VM5S400A2ERN	VM5S400A2EPN
			Tri	VM5S406A2GLG	VM5S406A2S5N	VM5S406A2ERN	VM5S406A2EPN
			480	VM5S405A2GLG	VM5S405A2S5N	VM5S405A2ERN	VM5S405A2EPN
600	S106	3/4"	Quad	—	—	VM5S600A2ERN	—
			Tri	—	—	VM5S606A2ERN	—
			480	—	—	VM5S605A2ERN	—

VM 200-600 WATT HIGH PRESSURE SODIUM CEILING							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
200	S66	3/4"	Quad	VM5S200X2GLG	VM5S200X2S5N	VM5S200X2ERN	VM5S200X2EPN
			Tri	VM5S206X2GLG	VM5S206X2S5N	VM5S206X2ERN	VM5S206X2EPN
			480	VM5S205X2GLG	VM5S205X2S5N	VM5S205X2ERN	VM5S205X2EPN
250	S50	3/4"	Quad	VM5S250X2GLG	VM5S250X2S5N	VM5S250X2ERN	VM5S250X2EPN
			Tri	VM5S256X2GLG	VM5S256X2S5N	VM5S256X2ERN	VM5S256X2EPN
			480	VM5S255X2GLG	VM5S255X2S5N	VM5S255X2ERN	VM5S255X2EPN
400	S51	3/4"	Quad	VM5S400X2GLG	VM5S400X2S5N	VM5S400X2ERN	VM5S400X2EPN
			Tri	VM5S406X2GLG	VM5S406X2S5N	VM5S406X2ERN	VM5S406X2EPN
			480	VM5S405X2GLG	VM5S405X2S5N	VM5S405X2ERN	VM5S405X2EPN
600	S106	3/4"	Quad	—	—	VM5S600X2ERN	—
			Tri	—	—	VM5S606X2ERN	—
			480	—	—	VM5S605X2ERN	—

[Ⓛ] See hazardous application data on pages L84-L89 for limitations.

[Ⓛ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5S200A2GLN. Order spin top and enclosed reflector guards separately.

[Ⓛ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5S200A3GLG.

[Ⓛ] Consult catalog logic for other available voltages.

[Ⓛ] Add suffix NR for restricted breathing; see page L39 for more information.





**Wall
w/ Globe &
Guard**



**Wall
w/ Spin-Top
Refractor**



**Cone
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 200-600 WATT HIGH PRESSURE SODIUM WALL							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
200	S66	3/4"	Quad	VM5S200B2GLG	VM5S200B2S5N	VM5S200B2ERN	—
			Tri	VM5S206B2GLG	VM5S206B2S5N	VM5S206B2ERN	—
			480	VM5S205B2GLG	VM5S205B2S5N	VM5S205B2ERN	—
250	S50	3/4"	Quad	VM5S250B2GLG	VM5S250B2S5N	VM5S250B2ERN	—
			Tri	VM5S256B2GLG	VM5S256B2S5N	VM5S256B2ERN	—
			480	VM5S255B2GLG	VM5S255B2S5N	VM5S255B2ERN	—
400	S51	3/4"	Quad	VM5S400B2GLG	VM5S400B2S5N	VM5S400B2ERN	—
			Tri	VM5S406B2GLG	VM5S406B2S5N	VM5S406B2ERN	—
			480	VM5S405B2GLG	VM5S405B2S5N	VM5S405B2ERN	—
600	S106	3/4"	Quad	—	—	VM5S600B2ERN	—
			Tri	—	—	VM5S606B2ERN	—
			480	—	—	VM5S605B2ERN	—

VM 200-600 WATT HIGH PRESSURE SODIUM CONE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
200	S66	3/4"	Quad	VM5S200C2GLG	VM5S200C2S5N	VM5S200C2ERN	VM5S200C2EPN
			Tri	VM5S206C2GLG	VM5S206C2S5N	VM5S206C2ERN	VM5S206C2EPN
			480	VM5S205C2GLG	VM5S205C2S5N	VM5S205C2ERN	VM5S205C2EPN
250	S50	3/4"	Quad	VM5S250C2GLG	VM5S250C2S5N	VM5S250C2ERN	VM5S250C2EPN
			Tri	VM5S256C2GLG	VM5S256C2S5N	VM5S256C2ERN	VM5S256C2EPN
			480	VM5S255C2GLG	VM5S255C2S5N	VM5S255C2ERN	VM5S255C2EPN
400	S51	3/4"	Quad	VM5S400C2GLG	VM5S400C2S5N	VM5S400C2ERN	VM5S400C2EPN
			Tri	VM5S406C2GLG	VM5S406C2S5N	VM5S406C2ERN	VM5S406C2EPN
			480	VM5S405C2GLG	VM5S405C2S5N	VM5S405C2ERN	VM5S405C2EPN
600	S106	3/4"	Quad	—	—	VM5S600C2ERN	—
			Tri	—	—	VM5S606C2ERN	—
			480	—	—	VM5S605C2ERN	—

① See hazardous application data on pages L84-L89 for limitations.
 ② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5S200B2GLN. Order spin top and enclosed reflector guards separately.
 ③ Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5S200B3GLG.
 ④ Consult catalog logic for other available voltages.
 ⑤ Add suffix NR for restricted breathing; see page L39 for more information.



**Stanchion 25°
w/ Globe &
Guard**



**Stanchion 25°
w/ Spin-Top
Refractor**



**Stanchion Straight
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓛ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

us Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option[Ⓛ]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 200-600 WATT HIGH PRESSURE SODIUM STANCHION 25° ANGLE						
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓛ]		
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR
200	S66	1-1/2"	Quad	VM5S200D5GLG	VM5S200D5S5N	VM5S200D5ERN
			Tri	VM5S206D5GLG	VM5S206D5S5N	VM5S206D5ERN
			480	VM5S205D5GLG	VM5S205D5S5N	VM5S205D5ERN
250	S50	1-1/2"	Quad	VM5S250D5GLG	VM5S250D5S5N	VM5S250D5ERN
			Tri	VM5S256D5GLG	VM5S256D5S5N	VM5S256D5ERN
			480	VM5S255D5GLG	VM5S255D5S5N	VM5S255D5ERN
400	S51	1-1/2"	Quad	VM5S400D5GLG	VM5S400D5S5N	VM5S400D5ERN
			Tri	VM5S406D5GLG	VM5S406D5S5N	VM5S406D5ERN
			480	VM5S405D5GLG	VM5S405D5S5N	VM5S405D5ERN
600	S106	1-1/2"	Quad	—	—	VM5S600D5ERN
			Tri	—	—	VM5S606D5ERN
			480	—	—	VM5S605D5ERN

VM 200-600 WATT HIGH PRESSURE SODIUM STANCHION STRAIGHT						
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓛ]		
WATTS	ANSI	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR
200	S66	1-1/2"	Quad	VM5S200S5GLG	VM5S200S5S5N	VM5S200S5ERN
			Tri	VM5S206S5GLG	VM5S206S5S5N	VM5S206S5ERN
			480	VM5S205S5GLG	VM5S205S5S5N	VM5S205S5ERN
250	S50	1-1/2"	Quad	VM5S250S5GLG	VM5S250S5S5N	VM5S250S5ERN
			Tri	VM5S256S5GLG	VM5S256S5S5N	VM5S256S5ERN
			480	VM5S255S5GLG	VM5S255S5S5N	VM5S255S5ERN
400	S51	1-1/2"	Quad	VM5S400S5GLG	VM5S400S5S5N	VM5S400S5ERN
			Tri	VM5S406S5GLG	VM5S406S5S5N	VM5S406S5ERN
			480	VM5S405S5GLG	VM5S405S5S5N	VM5S405S5ERN
600	S106	1-1/2"	Quad	—	—	VM5S600S2ERN
			Tri	—	—	VM5S606S2ERN
			480	—	—	VM5S605S2ERN

[Ⓛ] See hazardous application data on pages L84-L89 for limitations.

[Ⓛ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5S200D5GLN. Order spin top and enclosed reflector guards separately.

[Ⓛ] Catalog numbers shown are with 1-1/2" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM5S200D4GLG.

[Ⓛ] Consult catalog logic for other available voltages.

[Ⓛ] Add suffix NR for restricted breathing; see page L39 for more information.





**EZ Adapter
w/ Globe &
Guard**



**EZ Adapter
w/ Spin-Top
Refractor**



**EZ Adapter
w/ Enclosed
Reflector**

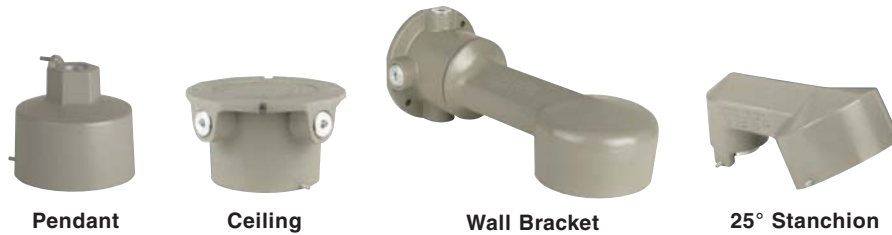
Class I, Div. 2, Groups A,B,C,D[Ⓞ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL Listed - File E10514 (Hazardous & Marine)

SP Certified - File LR11713

NR Restricted Breathing Option[Ⓞ]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 200-600 WATT HIGH PRESSURE SODIUM EZ ADAPTER							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓞ]			
WATTS	ANSI	HUB SIZE [Ⓞ]	VOLTAGE [Ⓞ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR [Ⓞ]
200	S66	Ⓞ	Quad	VM5S200EZGLG	VM5S200EZS5N	VM5S200EZERN	VM5S200EZEPN
			Tri	VM5S206EZGLG	VM5S206EZS5N	VM5S206EZERN	VM5S206EZEPN
			480	VM5S205EZGLG	VM5S205EZS5N	VM5S205EZERN	VM5S205EZEPN
250	S50	Ⓞ	Quad	VM5S250EZGLG	VM5S250EZS5N	VM5S250EZERN	VM5S250EZEPN
			Tri	VM5S256EZGLG	VM5S256EZS5N	VM5S256EZERN	VM5S256EZEPN
			480	VM5S255EZGLG	VM5S255EZS5N	VM5S255EZERN	VM5S255EZEPN
400	S51	Ⓞ	Quad	VM5S400EZGLG	VM5S400EZS5N	VM5S400EZERN	VM5S400EZEPN
			Tri	VM5S406EZGLG	VM5S406EZS5N	VM5S406EZERN	VM5S406EZEPN
			480	VM5S405EZGLG	VM5S405EZS5N	VM5S405EZERN	VM5S405EZEPN
600	S106	Ⓞ	Quad	—	—	VM5S600EZERN	—
			Tri	—	—	VM5S606EZERN	—
			480	—	—	VM5S605EZERN	—



MOUNTING BOXES				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB2	—	3/4"
EZA3	EZX3	EZB3	—	1"
—	—	—	EZD4A*	1-1/4"/1-1/2"*

*1-1/2" furnished with 1-1/2"-1-1/4" reducer and extension.

- Ⓞ See hazardous application data on pages L84-L89 for limitations.
- Ⓞ Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5S200EZGLN. Order spin top and enclosed reflector guards separately.
- Ⓞ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. See above for separate ordering information
- Ⓞ Consult catalog logic for other available voltages.
- Ⓞ Add suffix NR for restricted breathing; see page L39 for more information.
- Ⓞ VMEP40 not for use with EZ wall bracket.



Pendant
w/ Globe &
Guard



Ceiling
w/ Globe &
Guard



Wall
w/ Spin-Top
Refractor



Cone
w/ Enclosed
Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL^{us} Listed - File E10514 (Hazardous & Marine)

SP^{us} Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 400 WATT METAL HALIDE PENDANT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	3/4"	Quad	VM5H400A2GLG	VM5H400A2S5N	VM5H400A2ERN	VM5H400A2EPN
			Tri	VM5H406A2GLG	VM5H406A2S5N	VM5H406A2ERN	VM5H406A2EPN
			480	VM5H405A2GLG	VM5H405A2S5N	VM5H405A2ERN	VM5H405A2EPN

VM 400 WATT METAL HALIDE CEILING							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	3/4"	Quad	VM5H400X2GLG	VM5H400X2S5N	VM5H400X2ERN	VM5H400X2EPN
			Tri	VM5H406X2GLG	VM5H406X2S5N	VM5H406X2ERN	VM5H406X2EPN
			480	VM5H405X2GLG	VM5H405X2S5N	VM5H405X2ERN	VM5H405X2EPN

VM 400 WATT METAL HALIDE WALL							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	3/4"	Quad	VM5H400B2GLG	VM5H400B2S5N	VM5H400B2ERN	—
			Tri	VM5H406B2GLG	VM5H406B2S5N	VM5H406B2ERN	—
			480	VM5H405B2GLG	VM5H405B2S5N	VM5H405B2ERN	—

VM 400 WATT METAL HALIDE CONE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	3/4"	Quad	VM5H400C2GLG	VM5H400C2S5N	VM5H400C2ERN	VM5H400C2EPN
			Tri	VM5H406C2GLG	VM5H406C2S5N	VM5H406C2ERN	VM5H406C2EPN
			480	VM5H405C2GLG	VM5H405C2S5N	VM5H405C2ERN	VM5H405C2EPN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5H400A2GLN. Order spin top and enclosed reflector guards separately.

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5H400A3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





**Stanchion 25°
w/ Globe &
Guard**



**Stanchion 90°
w/ Spin-Top
Refractor**



**EZ Adapter
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 400 WATT METAL HALIDE STANCHION 25° ANGLE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	1-1/2"	Quad	VM5H400D5GLG	VM5H400D5S5N	VM5H400D5ERN	—
			Tri	VM5H406D5GLG	VM5H406D5S5N	VM5H406D5ERN	—
			480	VM5H405D5GLG	VM5H405D5S5N	VM5H405D5ERN	—

VM 400 WATT METAL HALIDE STANCHION STRAIGHT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	M59	1-1/2"	Quad	VM5H400S5GLG	VM5H400S5S5N	VM5H400S5ERN	—
			Tri	VM5H406S5GLG	VM5H406S5S5N	VM5H406S5ERN	—
			480	VM5H405S5GLG	VM5H405S5S5N	VM5H405S5ERN	—

VM 400 WATT METAL HALIDE EZ ADAPTER							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR [Ⓢ]
400	M59	Ⓢ	Quad	VM5H400EZGLG	VM5H400EZS5N	VM5H400EZERN	VM5H400EZEPN
			Tri	VM5H406EZGLG	VM5H406EZS5N	VM5H406EZERN	VM5H406EZEPN
			480	VM5H405EZGLG	VM5H405EZS5N	VM5H405EZERN	VM5H405EZEPN

- [Ⓢ] See hazardous application data on pages L84-L89 for limitations.
- [Ⓢ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5H400D5GLN. Order spin top and enclosed reflector guards separately.
- [Ⓢ] Catalog numbers shown with 1-1/2" conduit openings; change 5 to 4 for 1-1/4"; e.g. VM5H400D4GLG.
- [Ⓢ] Consult catalog logic for other available voltages.
- [Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.
- [Ⓢ] VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L69.
- [Ⓢ] VMEP40 not for use with EZ wall bracket.



Pendant
w/ Globe &
Guard



Pendant
w/ Spin-Top
Refractor



Ceiling
w/ Enclosed
Reflector

Class I, Div. 2, Groups A,B,C,D[Ⓢ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL^{us} Listed - File E10514 (Hazardous & Marine)

SP^{us} Certified - File LR11713

NR Restricted Breathing Option[Ⓢ]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 250-400 WATT METAL HALIDE PULSE PENDANT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
250	M138 M153	3/4"	Quad	VM5P250A2GLG	VM5P250A2S5N	VM5P250A2ERN	VM5P250A2EPN
			Tri	VM5P256A2GLG	VM5P256A2S5N	VM5P256A2ERN	VM5P256A2EPN
			480	VM5P255A2GLG	VM5P255A2S5N	VM5P255A2ERN	VM5P255A2EPN
320	M132 M154	3/4"	Quad	VM5P320A2GLG	VM5P320A2S5N	VM5P320A2ERN	VM5P320A2EPN
			Tri	VM5P326A2GLG	VM5P326A2S5N	VM5P326A2ERN	VM5P326A2EPN
			480	VM5P325A2GLG	VM5P325A2S5N	VM5P325A2ERN	VM5P325A2EPN
350	M131	3/4"	Quad	VM5P350A2GLG	VM5P350A2S5N	VM5P350A2ERN	VM5P350A2EPN
			Tri	VM5P356A2GLG	VM5P356A2S5N	VM5P356A2ERN	VM5P356A2EPN
			480	VM5P355A2GLG	VM5P355A2S5N	VM5P355A2ERN	VM5P355A2EPN
400	M135 M155	3/4"	Quad	VM5P400A2GLG	VM5P400A2S5N	VM5P400A2ERN	VM5P400A2EPN
			Tri	VM5P406A2GLG	VM5P406A2S5N	VM5P406A2ERN	VM5P406A2EPN
			480	VM5P405A2GLG	VM5P405A2S5N	VM5P405A2ERN	VM5P405A2EPN

VM 250-400 WATT METAL HALIDE PULSE CEILING							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE [Ⓢ]			
WATTS	ANSI	HUB SIZE [Ⓢ]	VOLTAGE [Ⓢ]	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
250	M138 M153	3/4"	Quad	VM5P250X2GLG	VM5P250X2S5N	VM5P250X2ERN	VM5P250X2EPN
			Tri	VM5P256X2GLG	VM5P256X2S5N	VM5P256X2ERN	VM5P256X2EPN
			480	VM5P255X2GLG	VM5P255X2S5N	VM5P255X2ERN	VM5P255X2EPN
320	M132 M154	3/4"	Quad	VM5P320X2GLG	VM5P320X2S5N	VM5P320X2ERN	VM5P320X2EPN
			Tri	VM5P326X2GLG	VM5P326X2S5N	VM5P326X2ERN	VM5P326X2EPN
			480	VM5P325X2GLG	VM5P325X2S5N	VM5P325X2ERN	VM5P325X2EPN
350	M131	3/4"	Quad	VM5P350X2GLG	VM5P350X2S5N	VM5P350X2ERN	VM5P350X2EPN
			Tri	VM5P356X2GLG	VM5P356X2S5N	VM5P356X2ERN	VM5P356X2EPN
			480	VM5P355X2GLG	VM5P355X2S5N	VM5P355X2ERN	VM5P355X2EPN
400	M135 M155	3/4"	Quad	VM5P400X2GLG	VM5P400X2S5N	VM5P400X2ERN	VM5P400X2EPN
			Tri	VM5P406X2GLG	VM5P406X2S5N	VM5P406X2ERN	VM5P406X2EPN
			480	VM5P405X2GLG	VM5P405X2S5N	VM5P405X2ERN	VM5P405X2EPN

[Ⓢ] See hazardous application data on pages L84-L89 for limitations.

[Ⓢ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5P250A2GLN. Order spin top and enclosed reflector guards separately.

[Ⓢ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5P250A3GLG.

[Ⓢ] Consult catalog logic for other available voltages.

[Ⓢ] Add suffix NR for restricted breathing; see page L39 for more information.





**Wall
w/ Globe &
Guard**



**Wall
w/ Spin-Top
Reflector**



**Cone
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL Listed - File E10514 (Hazardous & Marine)

SP Certified - File LR11713

NR Restricted Breathing Option

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

VM 250-400 WATT METAL HALIDE PULSE WALL							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
250	M138 M153	3/4"	Quad	VM5P250B2GLG	VM5P250B2S5N	VM5P250B2ERN	—
			Tri	VM5P256B2GLG	VM5P256B2S5N	VM5P256B2ERN	—
			480	VM5P255B2GLG	VM5P255B2S5N	VM5P255B2ERN	—
320	M132 M154	3/4"	Quad	VM5P320B2GLG	VM5P320B2S5N	VM5P320B2ERN	—
			Tri	VM5P326B2GLG	VM5P326B2S5N	VM5P326B2ERN	—
			480	VM5P325B2GLG	VM5P325B2S5N	VM5P325B2ERN	—
350	M131	3/4"	Quad	VM5P350B2GLG	VM5P350B2S5N	VM5P350B2ERN	—
			Tri	VM5P356B2GLG	VM5P356B2S5N	VM5P356B2ERN	—
			480	VM5P355B2GLG	VM5P355B2S5N	VM5P355B2ERN	—
400	M135 M155	3/4"	Quad	VM5P400B2GLG	VM5P400B2S5N	VM5P400B2ERN	—
			Tri	VM5P406B2GLG	VM5P406B2S5N	VM5P406B2ERN	—
			480	VM5P405B2GLG	VM5P405B2S5N	VM5P405B2ERN	—

VM 250-400 WATT METAL HALIDE PULSE CONE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
250	M138 M153	3/4"	Quad	VM5P250C2GLG	VM5P250C2S5N	VM5P250C2ERN	VM5P250C2EPN
			Tri	VM5P256C2GLG	VM5P256C2S5N	VM5P256C2ERN	VM5P256C2EPN
			480	VM5P255C2GLG	VM5P255C2S5N	VM5P255C2ERN	VM5P255C2EPN
320	M132 M154	3/4"	Quad	VM5P320C2GLG	VM5P320C2S5N	VM5P320C2ERN	VM5P320C2EPN
			Tri	VM5P326C2GLG	VM5P326C2S5N	VM5P326C2ERN	VM5P326C2EPN
			480	VM5P325C2GLG	VM5P325C2S5N	VM5P325C2ERN	VM5P325C2EPN
350	M131	3/4"	Quad	VM5P350C2GLG	VM5P350C2S5N	VM5P350C2ERN	VM5P350C2EPN
			Tri	VM5P356C2GLG	VM5P356C2S5N	VM5P356C2ERN	VM5P356C2EPN
			480	VM5P355C2GLG	VM5P355C2S5N	VM5P355C2ERN	VM5P355C2EPN
400	M135 M155	3/4"	Quad	VM5P400C2GLG	VM5P400C2S5N	VM5P400C2ERN	VM5P400C2EPN
			Tri	VM5P406C2GLG	VM5P406C2S5N	VM5P406C2ERN	VM5P406C2EPN
			480	VM5P405C2GLG	VM5P405C2S5N	VM5P405C2ERN	VM5P405C2EPN

① See hazardous application data on pages L84-L89 for limitations.

② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5P250B2GLN. Order spin top and enclosed reflector guards separately.

③ Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5P250B3GLG.

④ Consult catalog logic for other available voltages.

⑤ Add suffix NR for restricted breathing; see page L39 for more information.





Stanchion 25° w/ Globe & Guard **Stanchion 25° w/ Spin-Top Refractor** **Stanchion Straight w/ Enclosed Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL Listed - File E10514 (Hazardous & Marine)
CSB Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 250-400 WATT METAL HALIDE PULSE STANCHION 25° ANGLE						
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ②		
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR
250	M138 M153	1-1/2"	Quad	VM5P250D5GLG	VM5P250D5S5N	VM5P250D5ERN
			Tri	VM5P256D5GLG	VM5P256D5S5N	VM5P256D5ERN
			480	VM5P255D5GLG	VM5P255D5S5N	VM5P255D5ERN
320	M132 M154	1-1/2"	Quad	VM5P320D5GLG	VM5P320D5S5N	VM5P320D5ERN
			Tri	VM5P326D5GLG	VM5P326D5S5N	VM5P326D5ERN
			480	VM5P325D5GLG	VM5P325D5S5N	VM5P325D5ERN
350	M131	1-1/2"	Quad	VM5P350D5GLG	VM5P350D5S5N	VM5P350D5ERN
			Tri	VM5P356D5GLG	VM5P356D5S5N	VM5P356D5ERN
			480	VM5P355D5GLG	VM5P355D5S5N	VM5P355D5ERN
400	M135 M155	1-1/2"	Quad	VM5P400D5GLG	VM5P400D5S5N	VM5P400D5ERN
			Tri	VM5P406D5GLG	VM5P406D5S5N	VM5P406D5ERN
			480	VM5P405D5GLG	VM5P405D5S5N	VM5P405D5ERN

VM 250-400 WATT METAL HALIDE PULSE STANCHION STRAIGHT						
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ②		
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR
250	M138 M153	1-1/2"	Quad	VM5P250S5GLG	VM5P250S5S5N	VM5P250S5ERN
			Tri	VM5P256S5GLG	VM5P256S5S5N	VM5P256S5ERN
			480	VM5P255S5GLG	VM5P255S5S5N	VM5P255S5ERN
320	M132 M154	1-1/2"	Quad	VM5P320S5GLG	VM5P320S5S5N	VM5P320S5ERN
			Tri	VM5P326S5GLG	VM5P326S5S5N	VM5P326S5ERN
			480	VM5P325S5GLG	VM5P325S5S5N	VM5P325S5ERN
350	M131	1-1/2"	Quad	VM5P350S5GLG	VM5P350S5S5N	VM5P350S5ERN
			Tri	VM5P356S5GLG	VM5P356S5S5N	VM5P356S5ERN
			480	VM5P355S5GLG	VM5P355S5S5N	VM5P355S5ERN
400	M135 M155	1-1/2"	Quad	VM5P400S5GLG	VM5P400S5S5N	VM5P400S5ERN
			Tri	VM5P406S5GLG	VM5P406S5S5N	VM5P406S5ERN
			480	VM5P405S5GLG	VM5P405S5S5N	VM5P405S5ERN

① See hazardous application data on pages L84-L89 for limitations.
 ② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5P250D5GLN. Order spin top and enclosed reflector guards separately.
 ③ Catalog numbers shown with 1-1/2" conduit openings; change 5 to 4 for 1-1/4"; e.g. VM5P250D4GLG.
 ④ Consult catalog logic for other available voltages.
 ⑤ Add suffix NR for restricted breathing; see page L39 for more information.



**EZ Adapter
w/ Globe &
Guard**



**EZ Adapter
w/ Spin-Top
Refractor**



**EZ Adapter
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 250-400 WATT METAL HALIDE PULSE EZ ADAPTER							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
250	M138 M153	3	Quad	VM5P250EZGLG	VM5P250EZS5N	VM5P250EZERN	VM5P250EZEPN
			Tri	VM5P256EZGLG	VM5P256EZS5N	VM5P256EZERN	VM5P256EZEPN
			480	VM5P255EZGLG	VM5P255EZS5N	VM5P255EZERN	VM5P255EZEPN
320	M132 M154	3	Quad	VM5P320EZGLG	VM5P320EZS5N	VM5P320EZERN	VM5P320EZEPN
			Tri	VM5P326EZGLG	VM5P326EZS5N	VM5P326EZERN	VM5P326EZEPN
			480	VM5P325EZGLG	VM5P325EZS5N	VM5P325EZERN	VM5P325EZEPN
350	M131	3	Quad	VM5P350EZGLG	VM5P350EZS5N	VM5P350EZERN	VM5P350EZEPN
			Tri	VM5P356EZGLG	VM5P356EZS5N	VM5P356EZERN	VM5P356EZEPN
			480	VM5P355EZGLG	VM5P355EZS5N	VM5P355EZERN	VM5P355EZEPN
400	M135 M155	3	Quad	VM5P400EZGLG	VM5P400EZS5N	VM5P400EZERN	VM5P400EZEPN
			Tri	VM5P406EZGLG	VM5P406EZS5N	VM5P406EZERN	VM5P406EZEPN
			480	VM5P405EZGLG	VM5P405EZS5N	VM5P405EZERN	VM5P405EZEPN



Pendant



Ceiling



Wall Bracket



25° Stanchion

MOUNTING BOXES				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EXZ2	EZB2	—	3/4"
EZA3	EXZ3	EZB3	—	1"
—	—	—	EZD4A*	1-1/4"/1-1/2"*

*1-1/2" furnished with 1-1/2"-1-1/4" reducer and extension.

- ① See hazardous application data on pages L84-L89 for limitations.
- ② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5P250EZGLN. Order spin top and enclosed reflector guards separately.
- ③ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. See above for separate ordering information.
- ④ Consult catalog logic for other available voltages.
- ⑤ Add suffix NR for restricted breathing; see page L39 for more information.
- ⑥ VMEP40 not for use with EZ wall bracket.



**Pendant
w/ Globe &
Guard**



**Ceiling
w/ Globe &
Guard**



**Wall
w/ Spin-Top
Refractor**



**Cone
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D^①
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

UL Listed - File E10514 (Hazardous & Marine)

SP Certified - File LR11713

NR Restricted Breathing Option[®]
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 400 WATT MERCURY VAPOR PENDANT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ^②			
WATTS	ANSI	HUB SIZE ^③	VOLTAGE ^④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	3/4"	Quad	VM5M400A2GLG	VM5M400A2S5N	VM5M400A2ERN	VM5M400A2EPN
			Tri	VM5M406A2GLG	VM5M406A2S5N	VM5M406A2ERN	VM5M406A2EPN
			480	VM5M405A2GLG	VM5M405A2S5N	VM5M405A2ERN	VM5M405A2EPN

VM 400 WATT MERCURY VAPOR CEILING							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ^②			
WATTS	ANSI	HUB SIZE ^③	VOLTAGE ^④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	3/4"	Quad	VM5M400X2GLG	VM5M400X2S5N	VM5M400X2ERN	VM5M400X2EPN
			Tri	VM5M406X2GLG	VM5M406X2S5N	VM5M406X2ERN	VM5M406X2EPN
			480	VM5M405X2GLG	VM5M405X2S5N	VM5M405X2ERN	VM5M405X2EPN

VM 400 WATT MERCURY VAPOR WALL							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ^②			
WATTS	ANSI	HUB SIZE ^③	VOLTAGE ^④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	3/4"	Quad	VM5M400B2GLG	VM5M400B2S5N	VM5M400B2ERN	—
			Tri	VM5M406B2GLG	VM5M406B2S5N	VM5M406B2ERN	—
			480	VM5M405B2GLG	VM5M405B2S5N	VM5M405B2ERN	—

VM 400 WATT MERCURY VAPOR CONE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE ^②			
WATTS	ANSI	HUB SIZE ^③	VOLTAGE ^④	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	3/4"	Quad	VM5M400C2GLG	VM5M400C2S5N	VM5M400C2ERN	VM5M400C2EPN
			Tri	VM5M406C2GLG	VM5M406C2S5N	VM5M406C2ERN	VM5M406C2EPN
			480	VM5M405C2GLG	VM5M405C2S5N	VM5M405C2ERN	VM5M405C2EPN

^① See hazardous application data on pages L84-L89 for limitations.

^② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5M400A2GLN. Order spin top and enclosed reflector guards separately.

^③ Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM5M400A3GLG.

^④ Consult catalog logic for other available voltages.

^⑤ Add suffix NR for restricted breathing; see page L39 for more information.





**Stanchion 25°
w/ Globe &
Guard**



**Stanchion 90°
w/ Spin-Top
Refractor**



**EZ Adapter
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4X; IP66

US Listed - File E10514 (Hazardous & Marine)

Certified - File LR11713

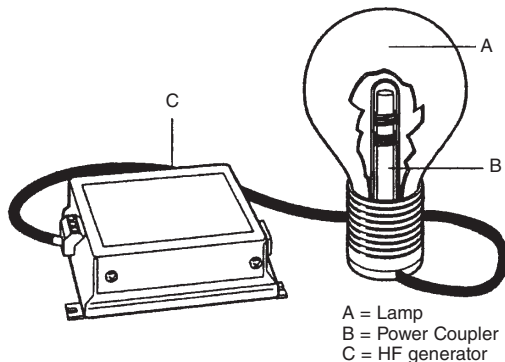
NR Restricted Breathing Option
Class I, Zone 2 AEx nAnR
Class I, Zone 2 Ex nR

VM 400 WATT MERCURY VAPOR STANCHION 25° ANGLE							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	1-1/2"	Quad	VM5M400D5GLG	VM5M400D5S5N	VM5M400D5ERN	—
			Tri	VM5M406D5GLG	VM5M406D5S5N	VM5M406D5ERN	—
			480	VM5M405D5GLG	VM5M405D5S5N	VM5M405D5ERN	—

VM 400 WATT MERCURY VAPOR STANCHION STRAIGHT							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	1-1/2"	Quad	VM5M400S5GLG	VM5M400S5S5N	VM5M400S5ERN	—
			Tri	VM5M406S5GLG	VM5M406S5S5N	VM5M406S5ERN	—
			480	VM5M405S5GLG	VM5M405S5S5N	VM5M405S5ERN	—

VM 400 WATT MERCURY VAPOR EZ ADAPTER							
DESCRIPTION				7-3/4" OPTIC THREAD SIZE			
WATTS	ANSI	HUB SIZE	VOLTAGE	GLOBE & GUARD	TYPE V SPIN-TOP GLASS REFRACTOR	ENCLOSED REFLECTOR	POLYCARBONATE SHIELDED ENCLOSED REFLECTOR
400	H33	⊙	Quad	VM5M400EZGLG	VM5M400EZS5N	VM5M400EZERN	VM5M400EZEPN
			Tri	VM5M406EZGLG	VM5M406EZS5N	VM5M406EZERN	VM5M406EZEPN
			480	VM5M405EZGLG	VM5M405EZS5N	VM5M405EZERN	VM5M405EZEPN

- Ⓛ See hazardous application data on pages L84-L89 for limitations.
- Ⓛ Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM5M400D5GLN. Order spin top and enclosed reflector guards separately.
- Ⓛ Catalog numbers shown are with 1-1/2" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM5M400D4GLG.
- Ⓛ Consult catalog logic for other available voltages.
- Ⓛ Add suffix NR for restricted breathing; see page L39 for more information.
- Ⓛ VMEZA tank adapters UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L63.
- Ⓛ VMEP40 not for use with EZ wall bracket.



Class I, Div. 2, Groups A,B,C,D^①
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4x

Listed - File LR11713

CERTILITE®V LUMINAIRE WITH INDUCTION LIGHTING SYSTEM

APPLICATIONS

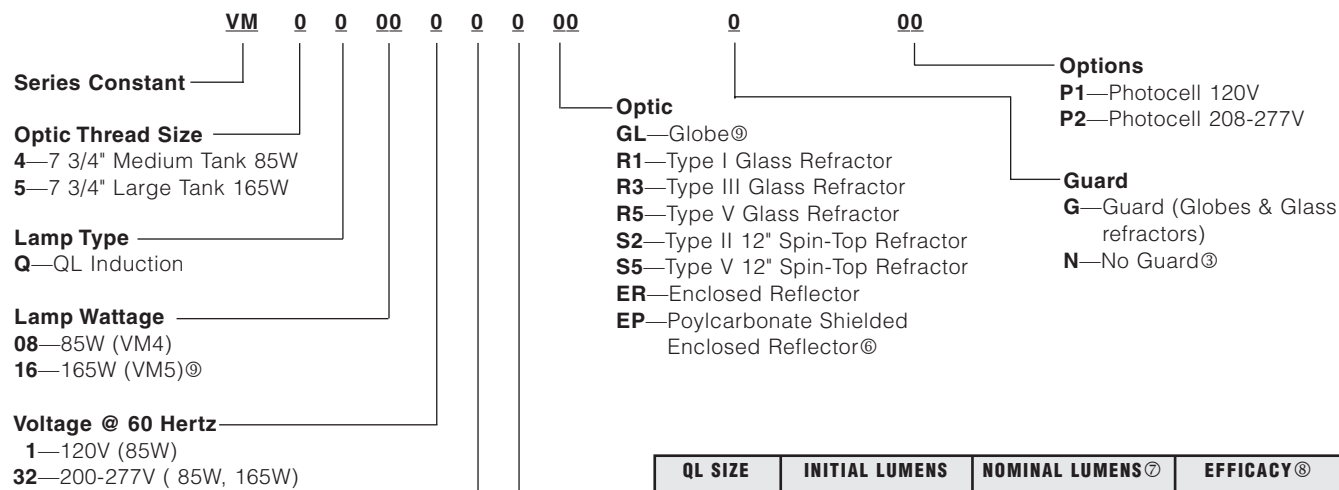
- Where long life lamp sources (up to 100,000 hours) ^② are needed.
- In areas that require "instant on" illumination.
- Where cool globe temperatures are required.
- In difficult-to-reach installations.
- In cold environment applications.

FEATURES

- Almost maintenance-free Philips® QL Induction Lamp system.
- Includes lamp.
- Up to 100,000 hour life minimizes maintenance costs.
- Instant start and restart in low temperatures down to -40°C.
- White light with 80+ CRI (Color rendering Index).
- High lumen output & efficacy.
- Less than 10% THD (Total Harmonic Distortion) will not add electrical noise to circuits.

Philips® is a registered trademark of Koninklijke Philips Electronics N.V.

CertiLite®V Catalog Number Logic; 85-165W QL Induction Fixtures



- Entry (Mounts available)**
2—3/4" NPT (A,B,C,X)
3—1" NPT (A,B,C,X)
4—1 1/4" NPT (D,S)
5—1 1/2" NPT (D,S)
6—3/4" NPT 5-Hub (X)
7—1" NPT 5-Hub (X)
8—M20 4-Hub (X)
9—M20 5-Hub (X)
Z—EZ Mount Adapter^④
N—None (mount ordered separately)^⑤

QL SIZE	INITIAL LUMENS	NOMINAL LUMENS ^⑦	EFFICACY ^⑧
85 WATT	6500	6000	72
165 WATT	12200	12000	71

^① See hazardous application data on pages L84-L89 for limitations.
^② Must not exceed 40°C ambient.
^③ Order Guards for Spin-Tops & VMER40 separately.
^④ Completes as "EZ", conduit mounts ordered separately - See L63.
^⑤ NN mount ordered separately.
^⑥ Not for use with wall or straight (90°) stanchion.
^⑦ At 100 hours; up to 75% of nominal value maintained at 60,000 hours.
^⑧ Lumens per watt.
^⑨ 165W uses VMG25 in VM5 tank (or VMR25x all glass refractors).





**Pendant
w/ Globe &
Guard**



**Ceiling
w/ Globe &
Guard**



**Wall
w/ Spin-Top
Refractor**



**Cone
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D[Ⓛ]
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4x

Listed - File LR11713

VM 85-165W QL INDUCTION PENDANT						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	3/4"	120	LOW WATTAGE (VM4)	VM4Q081A2GLG	VM4Q081A2R5G	VM4Q081A2ERN
85	3/4"	200-277	LOW WATTAGE (VM4)	VM4Q0832A2GLG	VM4Q0832A2R5G	VM4Q0832A2ERN
165	3/4"	200-277	HIGH WATTAGE (VM5)	VM5Q1632A2GLG	VM5Q1632A2R5G	VM5Q1632A2ERN

VM 85-165W QL INDUCTION CEILING						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	3/4"	120	LOW WATTAGE (VM4)	VM4Q081X2GLG	VM4Q081X2R5G	VM4Q081X2ERN
85	3/4"	200-277	LOW WATTAGE (VM4)	VM4Q0832X2GLG	VM4Q0832X2R5G	VM4Q0832X2ERN
165	3/4"	200-277	HIGH WATTAGE (VM5)	VM5Q1632X2GLG	VM5Q1632X2R5G	VM5Q1632X2ERN

VM 85-165W QL INDUCTION WALL						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	3/4"	120	LOW WATTAGE (VM4)	VM4Q081B2GLG	VM4Q081B2R5G	VM4Q081B2ERN
85	3/4"	200-277	LOW WATTAGE (VM4)	VM4Q0832B2GLG	VM4Q0832B2R5G	VM4Q0832B2ERN
165	3/4"	200-277	HIGH WATTAGE (VM5)	VM5Q1632B2GLG	VM5Q1632B2R5G	VM5Q1632B2ERN

VM 85-165W QL INDUCTION CONE						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE [Ⓛ]			
WATTS	HUB SIZE [Ⓛ]	VOLTAGE [Ⓛ]	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	3/4"	120	LOW WATTAGE (VM4)	VM4Q081C2GLG	VM4Q081C2R5G	VM4Q081C2ERN
85	3/4"	200-277	LOW WATTAGE (VM4)	VM4Q0832C2GLG	VM4Q0832C2R5G	VM4Q0832C2ERN
165	3/4"	200-277	HIGH WATTAGE (VM5)	VM5Q1632C2GLG	VM5Q1632C2R5G	VM5Q1632C2ERN

[Ⓛ] See hazardous application data on pages L84-L89 for limitations.

[Ⓛ] Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM4Q081A2GLN. Order spin top and enclosed reflector guards separately.

[Ⓛ] Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM4Q081A3GLG.

[Ⓛ] Consult catalog logic for other available voltages.



**Stanchion 25°
w/ Globe &
Guard**



**Stanchion 90°
w/ Spin-Top
Refractor**



**EZ Adapter
w/ Enclosed
Reflector**

Class I, Div. 2, Groups A,B,C,D^①
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
NEMA 3, 4, 4x

 Listed - File LR11713

VM 85-165W QL INDUCTION STANCHION 25° ANGLE (INCLUDES LAMP)						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE ^②			
WATTS	HUB SIZE ^③	VOLTAGE ^④	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	1-1/2"	120	LOW WATTAGE (VM4)	VM4Q081D5GLG	VM4Q081D5R5G	VM4Q081D5ERN
85	1-1/2"	200-277	LOW WATTAGE (VM4)	VM4Q0832D5GLG	VM4Q0832D5R5G	VM4Q0832D5ERN
165	1-1/2"	200-277	HIGH WATTAGE (VM5)	VM5Q1632D5GLG	VM5Q1632D5R5G	VM5Q1632D5ERN

VM 85-165W QL INDUCTION STANCHION STRAIGHT (INCLUDES LAMP)						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE ^②			
WATTS	HUB SIZE ^③	VOLTAGE ^④	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	1-1/2"	120	LOW WATTAGE (VM4)	VM4Q081S5GLG	VM4Q081S5R5G	VM4Q081S5ERN
85	1-1/2"	200-277	LOW WATTAGE (VM4)	VM4Q0832S5GLG	VM4Q0832S5R5G	VM4Q0832S5ERN
165	1-1/2"	200-277	HIGH WATTAGE (VM5)	VM5Q1632S5GLG	VM5Q1632S5R5G	VM5Q1632S5ERN

VM 85-165W QL INDUCTION EZ ADAPTER (INCLUDES LAMP)						
DESCRIPTION			7-3/4" OPTIC THREAD SIZE ^②			
WATTS	HUB SIZE ^③	VOLTAGE ^④	TANK STYLE	GLOBE & GUARD	TYPE V REFRACTOR	ENCLOSED REFLECTOR
85	⑤	120	LOW WATTAGE (VM4)	VM4Q081EZGLG	VM4Q081EZR5G	VM4Q081EZERN
85	⑤	200-277	LOW WATTAGE (VM4)	VM4Q0832EZGLG	VM4Q0832EZR5G	VM4Q0832EZERN
165	⑤	200-277	HIGH WATTAGE (VM5)	VM5Q1632EZGLG	VM5Q1632EZR5G	VM5Q1632EZERN

^① See hazardous application data on pages L84-L89 for limitations.
^② Globe catalog number shown with guard. To omit guard, change G to N; e.g. VM4Q081D5GLN. Order spin top and enclosed reflector guards separately.
^③ Stanchion catalog numbers shown are with 1-1/2" conduit openings, change "5" to "4" for 1-1/4"; e.g. VM4Q081D4GLG.
^④ Consult catalog logic for other available voltages.
^⑤ VMEZA tank adapters are UL "classified" as an assembly for use between VM tanks and EZ mounts. Order EZ mounts separately. See page L63.



CERTILITE®V VM MOUNTING SPLICE BOXES								
		CATALOG NUMBER						
HUB SIZE	PENDANT	FLEXIBLE PENDANT	CEILING 4 HUB	CEILING 5 HUB	WALL	CONE TOP	25 DEGREE STANCHION	90 DEGREE STANCHION
3/4"	VMA2B	VMF2B	VMX2B	VMX6B	VMB2B	VMC2B	—	—
1"	VMA3B	VMF3B	VMX3B	VMX7B	VMB3B	VMC3B	—	—
1-1/4"	—	—	—	—	—	—	VMD4B	VMS4B
1-1/2"	—	—	—	—	—	—	VMD5B	VMS5B
M-20	—	—	VMX8B**	VMX9B	—	—	—	—

*VMEZA is used between a ballast tank and an EZ mount-ordered separately. See L63 for more info.

**VMX8B furnished with 3 non-metallic plugs.



VM3 Low Wattage
5-1/2" Optic Thread Size



VM4 Low Wattage
7-3/4" Optic Thread Size



VM5 High Wattage
7-3/4" Optic Thread Size

CERTILITE®V VM 50-600W BALLAST TANK ASSEMBLIES													
		CATALOG NUMBER											
		HPS			MH			MH PULSE			MV		
		LOW WATTAGE		HIGH WATTAGE	LOW WATTAGE		HIGH WATTAGE	LOW WATTAGE		HIGH WATTAGE	LOW WATTAGE		HIGH WATTAGE
WATTS	VOLTAGE @ 60 Hz	5-1/2"	7-3/4"	7-3/4"	5-1/2"	7-3/4"	7-3/4"	5-1/2"	7-3/4"	7-3/4"	5-1/2"	7-3/4"	7-3/4"
50	Quad	VM3S050	VM4S050	—	—	—	—	—	—	—	—	—	—
	Tri	VM3S056	VM4S056	—	—	—	—	—	—	—	—	—	—
	480	VM3S055	VM4S055	—	—	—	—	—	—	—	—	—	—
70	Quad	VM3S070	VM4S070	—	VM3H070	VM4H070	—	—	—	—	—	—	—
	Tri	VM3S076	VM4S076	—	VM3H076	VM4H076	—	—	—	—	—	—	—
	480	VM3S075	VM4S075	—	VM3H075	VM4H075	—	—	—	—	—	—	—
100	Quad	VM3S100	VM4S100	—	VM3H100	VM4H100	—	—	—	—	VM3M100	VM4M100	—
	Tri	VM3S106	VM4S106	—	VM3H106	VM4H106	—	—	—	—	VM3M106	VM4M106	—
	480	VM3S105	VM4S105	—	VM3H105	VM4H105	—	—	—	—	VM3M105	VM4M105	—
150	Quad	VM3S150	VM4S150	—	—	—	—	VM3P150	VM4P150	—	—	—	—
	Tri	VM3S156	VM4S156	—	—	—	—	VM3P156	VM4P156	—	—	—	—
	480	VM3S155	VM4S155	—	—	—	—	VM3P155	VM4P155	—	—	—	—
175	Quad	—	—	—	VM3H170	VM4H170	—	VM3P170	VM4P170	—	VM3M170	VM4M170	—
	Tri	—	—	—	VM3H176	VM4H176	—	VM3P176	VM4P176	—	VM3M176	VM4M176	—
	480	—	—	—	VM3H175	VM4H175	—	VM3P175	VM4P175	—	VM3M175	VM4M175	—
200	Quad	—	—	VM5S200	—	—	—	VM3P200	VM4P200	—	—	—	—
	Tri	—	—	VM5S206	—	—	—	VM3P206	VM4P206	—	—	—	—
	480	—	—	VM5S205	—	—	—	VM3P205	VM4P205	—	—	—	—
250	Quad	—	—	VM5S250	VM3H250	VM4H250	—	—	—	VM5P250	VM3M250	VM4M250	—
	Tri	—	—	VM5S256	VM3H256	VM4H256	—	—	—	VM5P256	VM3M256	VM4M256	—
	480	—	—	VM5S255	VM3H255	VM4H255	—	—	—	VM5P255	VM3M255	VM4M255	—
320	Quad	—	—	—	—	—	—	—	—	VM5P320	—	—	—
	Tri	—	—	—	—	—	—	—	—	VM5P326	—	—	—
	480	—	—	—	—	—	—	—	—	VM5P325	—	—	—
350	Quad	—	—	—	—	—	—	—	—	VM5P350	—	—	—
	Tri	—	—	—	—	—	—	—	—	VM5P356	—	—	—
	480	—	—	—	—	—	—	—	—	VM5P355	—	—	—
400	Quad	—	—	VM5S400	—	—	VM5H400	—	—	VM5P400	—	—	VM5M400
	Tri	—	—	VM5S406	—	—	VM5H406	—	—	VM5P406	—	—	VM5M406
	480	—	—	VM5S405	—	—	VM5H405	—	—	VM5P405	—	—	VM5M405
600	Quad	—	—	VM5S600	—	—	—	—	—	—	—	—	—
	Tri	—	—	VM5S606	—	—	—	—	—	—	—	—	—
	480	—	—	VM5S605	—	—	—	—	—	—	—	—	—



CERTILITE®V OPTICS & GUARDS						
DESCRIPTION	OPTICS	GUARD	OPTICS	GUARD	OPTICS	GUARD
Globe (glass)	VMG17	VMAG17	VMG25	VMAG25S	VMG40	VMAG40S
Refractor (all glass) Type V	VMR175	VMAG17	VMR255	VMAG25S	—	—
Refractor (all glass) Type I	VMR171Ⓣ	VMAG17	VMR251Ⓣ	VMAG25S	—	—
Refractor (all glass) Type III	—	—	VMR253Ⓣ	VMAG25S	—	—
Refractor (spin top glass) 8" Type V	VZRG1550	VMRWG8	—	—	—	—
Refractor (spin top glass) 12" Type V	VZRG2550	VMRWG	VZRG4050Ⓣ	VMRWG	VZRG4050	VMRWG
Refractor (spin top glass) 12" Type II	VZRG2520	VMRWG	VZRG4020Ⓣ	VMRWG	VZRG4020	VMRWG
Refractor (spin top plastic) 12" Type V	VZRP175	VMRWG	—	—	—	—
Enclosed Reflector (glass lens)	—	—	VMER40	VMERG	VMER40	VMERG
Enclosed Reflector (plastic lens)	—	—	VMEP40	—	VMEP40	—
Globe (Tuffskin® coated)Ⓞ	VMG17F	VMAG17	VMG25F	VMAG25S	VMG40F	VMAG40S
Globe (Teflon® coated)Ⓞ	VMG17T	VMAG17	VMG25T	VMAG25S	VMG40T	VMAG40S
Refractor (Teflon coated) Type V	VMR175T	VMAG17	VMR255T	VMAG25S	—	—
Refractor (Teflon coated) Type I	VMR171T	VMAG17	VMR251T	VMAG25S	—	—
Refractor (Teflon coated) Type III	—	—	VMR253T	VMAG25S	—	—
Refractor (Spin Top Teflon coated) 8" Type V	VZRG1550T	VMRWG8	—	—	—	—
Refractor (Spin Top Teflon coated) 12" Type V	VZRG2550T	VMRWG	VZRG4050TⓉ	VMRWG	VZRG4050T	VMRWG
Refractor (Spin Top Teflon coated) 12" Type II	VZRG2520T	VMRWG	VZRG4020TⓉ	VMRWG	VZRG4020T	VMRWG

OPTICS



GUARDS



Ⓛ For reference VM5 Spin Top optics fit VM4 tanks, but VM3 tanks and optics are recommended for low wattage Spin Top applications. VM3 12" Spin Tops ship with a mogul-to-mogul extender for improved photometrics.

Ⓜ Standard material, copper-free aluminum painted.

Ⓝ Standard material, 316 stainless steel.

Ⓞ Standard material, plated steel.

Ⓞ Tuffskin® is a registered trademark of Thomas Manufacturing, Co. Teflon® is a registered trademark of DuPont, Inc. Alzak is a registered trademark of Alcoa.

Ⓞ 175W max; not hazloc listed

Ⓞ Type I (III) all-glass refractors align with fixture hinge. Ceiling mount unit utilizing these optics must have offset conduit feed.

CERTILITE®V REFLECTORS			
VMPSD40	VMPA40	HRD400	HRD400ALZ
Standard Dome Fiberglass White Reflector Dia: 16"	30° Angle Fiberglass White Reflector Dia: 16"	Deep Aluminum White Reflector Dia: 21"	Deep Aluminum Alzak® finish Reflector Dia: 21"

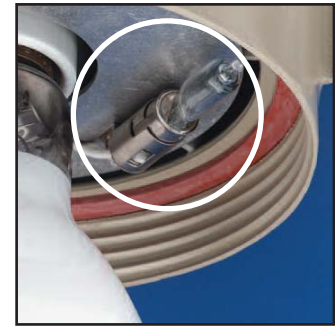
VMAGBC
Bottom Closure for VMAG25S/VMAG40S



Photo Control
(Field Installed
in Splice cap)

Photo Control①
(Factory Installed
in ballast tank)

Photo Control
Component*



Auxiliary Lighting

Momentary voltage outages or dips can temporarily extinguish HID lamps which may require up to ten (10) minutes to restrike. To provide illumination during this period, about 10% of the fixtures should be specified with auxiliary lighting.

Quartz Auxiliary

Quartz auxiliary is available for all CertiLite®V Series fixtures (except those with plastic refractors) by adding the suffix “QA” to the fixture catalog number. Example: VM3S050A2GLG-QA.

Low wattage fixtures with this option use 100 or 150 watt quartz lamps. High wattage fixtures can use up to 250 watt quartz lamps. Quartz lamps are not supplied with the fixture. Use quartz lamp type Q100 CL/DC (100W) or Q150 CL/DC (150W) DC Bayonet T-4 Base.

Due to the quartz envelope surface temperature (exceeding 600°C), fixtures with this option are not suitable for Class I, Division 2, Class I, Zone 2, some Class I, Zone 2 Ex nR, Class II and Class III hazardous locations. Contact the factory for specific fixture suitabilities.

Instant Restrike

Available for low wattage High Pressure Sodium Fixtures by adding Suffix “IR” to catalog number Example: VM3S050A2GLG-IR.

Additional instant restrike interior circuitry may decrease High Pressure Sodium lamp life. Feature will not affect fixture suitability in hazardous location applications.

Ballast Protection Circuit

Optional factory installed special ballast protector replaces the standard HPS ignitor and applies starting pulse to the lamp for 10 to 15 seconds each time voltage is supplied to the ballast. If the lamp has not ignited by the end of the time period, the starter will cease pulsing. Used to eliminate the continuous high voltage pulsing of the ignitor when end of life, lamp cycling, or missing lamp conditions exist. Available for HPS fixtures. Add suffix “BP” to fixture catalog number.

Notes: BP and IR cannot be used together. QTZ and IR cannot be used together.

PHOTO CONTROL FOR STANDARD AND HAZARDOUS CLASS I DIVISION 2 AREAS②			
CATALOG NUMBER	VOLTS	FREQUENCY	WATTS
HUB2PC120	120VAC	50/60Hz	400
HUB2PC227③	208-277VAC③	50/60Hz	400
HUB2PC347	347VAC	50/60Hz	440

① Must be factory installed. Add P1 (for 120V), P2 (for 208-277V) or P3 (for 347V).

② Photo control cells for Class 1 Division 2 only.

③ Marked 220-277V, suitable for 208V.

* Patent Pending

SUSPENSION DEVICES④		
TANK	DESCRIPTION	CATALOG NUMBER
VM GLOBE & GUARD UNITS	“3rd hand” safety kits. 24” stainless cable holds globe using guard for lamp change out. Attaches to tank’s built-in “Earthquake Tab”.	VMAGSC④
VM (ALL TANKS)	10’ Stainless Steel Safety Cable with loop grip. Drop limit 3’. Attaches to “Earthquake Tab” (L41) and to building structure (e.g. I-beam).	VMSC10

④ VM4, VM5 units require VMAGBC bottom closure, sold separately, in addition to guard.

FUSE KITS
See catalog logic for factory installed fuses, or page L78-79 for field installation kits.

DARK SKY KITS		
VMDARK1	Gasket Kit	On VM4 “Full Cutoff” when used with HRD400 or HRD400ALZ On VM5 “Cutoff” when used with HRD400 or HRD400ALZ
VMDARK2	Spacer & Gasket Kit	On VM5 “Full Cutoff” when used with HRD400 or HRD400ALZ
VMER40	Enclosed Reflector	Enclosed Reflector “Full Cutoff” on VM4 OR VM5 as standard

Note: CertiLite®V luminaires may be configured for “Full Cutoff”, or Semi-Cutoff photometric distribution. See page L41 for pattern descriptions. Local requirements dictate which parameter is required.



VMCHVM adapter for upgrading existing Crouse-Hinds® to Killark, see page L199 for more information.

SOCKET REPLACEMENTS	
0735015B	Mogul Socket VM3, VM4, VM5
VMBNKIT	Barrel nut and long bolt adapts older CertiLite tanks to newer CertiLite®V mounts.

Crouse-Hinds is a registered trademark of Cooper Crouse-Hinds, LLC.



HID BALLAST DATA & FUSE KITS ①											
LAMP SOURCE	LAMP WATTS/TYPE	VOLTAGE	CURRENT (AMPS)			INPUT WATTS	BALLAST CIRCUIT ②	REGULATION	MIN. START	VM FUSE KIT	EZ FUSE KIT
			START	OPERATING	OPEN						
HPS	50 S-68	120	.58	.58	1.24	62	HX/HPF	±5% VOLTAGE* ±12% WATTAGE	-40C -40F	1VM-5	1FK-5
		208	.35	.33	.59					2VM-3	2FK-3
		240	.30	.29	.50					2VM-3	2FK-3
		277	.24	.25	.44					1VM-2	1FK-2
HPS	70 S-62	120	.75	.81	1.45	93	HX/HPF	±5% VOLTAGE* ±12% WATTAGE	-40C -40F	1VM-5	1FK-5
		208	.45	.47	.85					2VM-3	2FK-3
		240	.35	.40	.75					2VM-2	2FK-2
		277	.37	.35	.65					1VM-2	1FK-2
		480	.21	.21	.36					2VM-2	2FK-2
		347	.28	.30	0.52					1VM-2	1FK-2
HPS	100 S-54	120	1.30	1.15	2.20	130	HX/HPF	±5% VOLTAGE* ±12% WATTAGE	-40C -40F	1VM-7	1FK-7
		208	.76	.67	1.27					2VM-5	2FK-5
		240	.66	.58	1.10					2VM-3	2FK-3
		277	.60	.50	.85					1VM-3	1FK-3
		480	0.35	0.29	.55					2VM-3	2FK-3
		347	.44	.39	.70					1VM-3	1FK-3
		220-240/50	.56/.51	.67/.62	1.28/1.17					1VM-4	1FK-4
HPS	150 (55 VOLT LAMP) S-55	120	2.00	1.65	2.80	188	HX/HPF	±5% VOLTAGE* ±12% WATTAGE	-40C -40F	1VM-10	1FK-10
		208	1.15	.95	1.60					2VM-5	2FK-5
		240	1.00	.83	1.40					1VM-4	1FK-4
		277	.85	.72	1.25					2VM-2	2FK-2
		480	.50	.42	.70					1VM-3	1FK-3
		347	.52	.59	.92					1VM-3	1FK-3
		220-240/50	1.27/1.16	.91/.83	1.52/1.40					1VM-5	1FK-5
HPS	200 S-66	120	1.50	2.2	1.3	240	CWA	±10% VOLTAGE* ±8% WATTAGE	-40C -40F	1VM-6	—
		208	.90	1.28	.75					2VM-4	—
		240	.75	1.11	.65					2VM-3	—
		277	.65	.96	.60					1VM-3	—
		480	.35	.58	.58					2VM-2	—
HPS	250 S-50	120	1.80	2.75	1.50	295	CWA	±10% VOLTAGE* ±5% WATTAGE	-40C -40F	1VM-7	1FK-7
		208	1.00	1.60	.87					2VM-4	2FK-4
		240	.90	1.38	.75					2VM-4	2FK-4
		277	.78	1.20	.65					1VM-3	1FK-3
		480	.38	.69	.37					2VM-2	2FK-2
		347	.56	.93	.75					1VM-2	1FK-2
		220-240/50	1.00/.90	.91/.83	.90/.80					1VM-4	1FK-4
HPS	400 S-51	120	2.82	4.30	1.83	464	CWA	±10% VOLTAGE* ±5% WATTAGE	-40C -40F	1VM-10	1FK-10
		208	1.56	2.48	1.15					2VM-8	2FK-8
		240	1.36	2.15	.84					2VM-5	2FK-5
		277	1.18	1.86	.71					1VM-5	1FK-5
		480	.60	1.00	.75					2VM-3	2FK-3
		347	1.05	1.40	.75					1VM-5	1FK-5
		220-240/50	1.65/1.50	2.30/2.10	1.20/1.10					1VM-6	1FK-6
HPS	600 S-106	120	5.25	5.50	3.0	288	CWA	±10% VOLTAGE* ±10% WATTAGE	-40C -40F	1VM-20	—
		208	3.00	3.25	1.75					2VM-15	—
		240	2.60	2.85	1.80					2VM-10	—
		277	2.15	2.50	1.40					1VM-10	—
		480	1.2	1.43	.75					2VM-4	—
		347	1.7	2.00	1.10					1VM-5	—
MH	70 M-98	120	.80	.85	1.70	90	HX-HPF	±5% VOLTAGE ±12% WATTAGE	-30C -20F	1VM-4	1FK-4
		208	.50	.50	1.04					2VM-3	2FK-3
		240	.43	.43	.87					2VM-2	2FK-2
		277	.39	.39	.78					1VM-2	1FK-2
		480	0.19	0.23	.50					2VM-1	2FK-1
		347	.30	.30	.60					1VM-2	1FK-2
MH	100 M-90	120	1.20	1.15	2.3	129	HX-HPF	±5% VOLTAGE ±12% WATTAGE	-30C -20F	1VM-6	1FK-6
		208	.70	1.50	.60					2VM-4	2FK-4
		240	.61	1.30	.55					2VM-3	2FK-3
		277	.55	1.15	.45					1VM-3	1FK-3
		480	0.30	0.30	0.55					2VM-2	2FK-2
		347	.40	.90	.40					1VM-2	1FK-2
		220-240/50	.45/.41	.52/.51	.60/.85					1VM-4	1FK-4
MH	175 M-57	120	.80	1.80	1.80	210	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-5	1FK-5
		208	.42	1.04	1.04					2VM-3	2FK-3
		240	.42	.90	.90					2VM-3	2FK-3
		277	.35	.78	.78					1VM-2	1FK-2
		480	.22	.45	.45					2VM-2	2FK-2
		347	.42	.62	.62					1VM-2	1FK-2
		220-240/50	.60/.55	.98/.90	.97/.89					1VM-3	1FK-3
MH	250 M-58	120	1.25	2.60	2.50	294	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-8	1FK-8
		208	.65	1.50	1.58					2VM-5	2FK-5
		240	.60	1.30	1.25					2VM-5	2FK-5
		277	.50	1.12	1.10					1VM-3	1FK-3
		480	.25	.65	.65					2VM-2	2FK-2
		347	.90	.95	.65					1VM-3	1FK-3
		220-240/50	.94/.86	1.35/1.24	1.20/1.10					1VM-4	1FK-4
MH	400 M-59	120	1.10	4.00	3.80	458	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-10	1FK-10
		208	.70	2.30	2.20					2VM-7	2FK-7
		240	.52	2.00	1.90					2VM-5	2FK-5
		277	.45	1.75	1.65					1VM-5	1FK-5
		480	.38	1.00	1.00					2VM-4	2FK-4
		347	1.20	1.40	1.35					1VM-4	2FK-4
		220-240/50	1.30/1.19	2.20/2.00	2.10/1.93					1VM-6	2FK-6

① Fuse kits, for field installation, must be used within guidelines of governing Electric Codes. Fuses not permitted by CSA C22.2 no. 37 for Canada.

② All ballasts circuits are High Power Factor 90%+.

* Lamp watts: within ANSI trapezoid limitations.

Consult major lamp & ballast manufacturer catalogs if more detailed data is needed.



HID BALLAST DATA & FUSE KIT [Ⓛ]											
LAMP SOURCE	LAMP WATTS/TYPE	VOLTAGE	CURRENT (AMPS)			INPUT WATTS	BALLAST CIRCUIT [Ⓜ]	REGULATION	MIN. START	VM FUSE KIT	EZ FUSE KIT
			START	OPERATING	OPEN						
MHP	150 M-102	120	1.75	1.60	3.65	185	HX-HPF	±5% VOLTAGE ±12% WATTAGE	-30C -20F	1VM-10 2VM-5 2VM-5 1VM-4 2VM-3 1VM-3	1FK-10 2FK-5 2FK-5 1FK-4 2FK-3 1FK-3
		208	1.30	1.00	2.10						
		240	0.85	0.80	1.80						
		277	0.77	0.70	1.58						
		480	0.45	0.42	0.81						
		347	0.30	0.62	0.98						
MHP	175 M-137	120	0.95	1.80	1.80	208	CWA	±10% VOLTAGE ±10% WATTAGE	-30C -20F	1VM-5 2VM-3 2VM-3 1VM-2 2VM-2 1VM-2	1FK-5 2FK-3 2FK-3 1FK-2 2FK-2 1FK-2
		208	0.55	1.05	1.05						
		240	0.45	0.90	0.90						
		277	0.40	0.80	0.80						
		480	0.25	0.50	0.45						
		347	0.4	0.70	0.60						
MHP	250 M-138	120	2.30	2.50	1.40	288	CWA	±10% VOLTAGE ±10% WATTAGE	-30C -20F	1VM-8 2VM-5 2VM-5 1VM-3 2VM-2 1VM-3	1FK-8 2FK-5 2FK-5 1FK-3 2FK-2 1FK-3
		208	1.30	1.45	0.80						
		240	1.15	1.25	0.70						
		277	1.00	1.10	0.60						
		480	0.21	0.57	0.48						
		347	0.45	0.95	0.75						
MHP	320 M-132	120	1.80	3.25	2.30	365	CWA	±10% VOLTAGE ±10% WATTAGE	-30C -20F	1VM-8 2VM-6 2VM-5 1VM-3 2VM-5 1VM-3	1FK-8 2FK-6 2FK-5 1FK-3 2FK-5 1FK-3
		208	1.05	1.90	1.35						
		240	0.30	1.65	1.15						
		277	0.80	1.40	1.00						
		480	0.45	0.80	0.60						
		347	0.70	1.10	0.80						
MHP	350 M-131	120	2.20	3.40	2.20	400	CWA	±10% VOLTAGE ±10% WATTAGE	-30C -20F	1VM-10 2VM-7 2VM-5 1VM-5 2VM-3 1VM-3	1FK-10 2FK-7 2FK-5 1FK-5 2FK-3 1FK-3
		208	1.30	2.00	1.30						
		240	1.10	1.70	1.10						
		277	1.00	1.50	1.00						
		480	0.60	0.85	0.60						
		347	0.85	1.20	0.80						
MHP	400 M-135	120	2.85	3.80	2.20	452	CWA	±10% VOLTAGE ±10% WATTAGE	-30C -20F	1VM-10 2VM-7 2VM-5 1VM-5 2VM-3 1VM-4	1FK-10 2FK-7 2FK-5 1FK-5 2FK-3 1FK-4
		208	1.65	2.20	1.50						
		240	1.45	1.90	1.10						
		277	1.25	1.65	0.95						
		480	0.75	1.00	0.60						
		347	1.10	1.35	0.75						
MV	100 H-38	120	1.00	1.05	0.64	125	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-3 2VM-2 2VM-2 1VM-2 2VM-1 1VM-1 1VM-2	1FK-3 2FK-2 2FK-2 1FK-2 2FK-1 1FK-1 1FK-2
		208	0.58	0.60	0.37						
		240	0.50	0.52	0.32						
		277	0.43	0.45	0.28						
		480	0.25	0.26	0.16						
		347	0.35	0.40	0.20						
MV	175 H-39	120	1.70	1.75	0.86	205	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-5 2VM-3 2VM-3 1VM-2 2VM-2 1VM-3 1VM-3	1FK-5 2FK-3 2FK-3 1FK-2 2FK-2 1FK-2 1FK-3
		208	0.98	1.00	0.50						
		240	0.85	0.88	0.43						
		277	0.74	0.76	0.37						
		480	0.41	0.44	0.20						
		347	0.60	0.60	0.21						
MV	250 H-37	120	2.40	2.50	0.60	285	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-8 2VM-5 2VM-5 1VM-3 2VM-2 1VM-3 1VM-4	1FK-8 2FK-5 2FK-5 1FK-3 2FK-2 1FK-3 1FK-4
		208	1.40	1.45	0.35						
		240	1.20	1.25	0.30						
		277	1.00	1.10	0.29						
		480	0.60	0.62	0.20						
		347	0.80	0.85	0.50						
MV	400 H-33	120	2.90	3.90	1.30	454	CWA	±10% VOLTAGE ±5% WATTAGE	-30C -20F	1VM-10 2VM-7 2VM-5 1VM-5 2VM-4 1VM-4 1VM-6	1FK-10 2FK-7 2FK-5 1FK-5 2FK-4 1FK-4 1FK-6
		208	1.67	2.20	0.75						
		240	1.45	1.95	0.65						
		277	1.25	1.70	0.56						
		480	0.95	0.98	0.24						
		347	1.00	1.30	0.45						
		220-240/50	1.75/1.61	2.20/2.00	.42/.39						

Ⓛ Fuse kits, for field installation, must be used within guidelines of governing Electric Codes. Fuses not permitted by CSA C22.2 no.137 for Canada.

Ⓜ All ballasts circuits are High Power Factor 90%+.

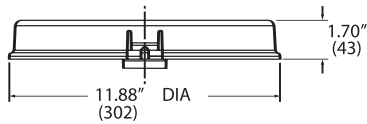
* Lamp watts: within ANSI trapezoid limitations .

Consult major lamp & ballast manufacturer catalogs if more detailed data is needed.

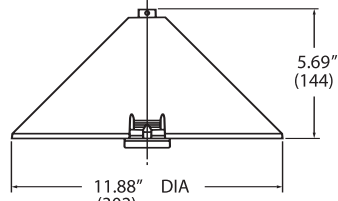
QL INDUCTION BALLAST DATA							
LAMP SOURCE	LAMP WATTS/TYPE	VOLTAGE	INRUSH CURRENT .005 SEC	NOMINAL OPERATING CURRENT	THD	REGULATION	MIN. START
Induction	85	120	25A	.71A	<10%	±20V, ±2% W	-40C -40F
		240	45A	.4A	<10%	±20V, ±2% W	-40C -40F
Induction	165	240-277	45A	.58A	<10%	±20V, ±2% W	-40C -40F



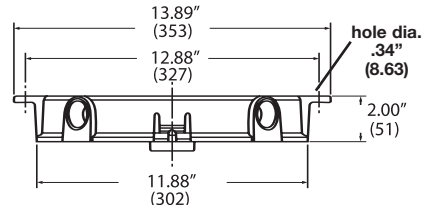
KILLARK®



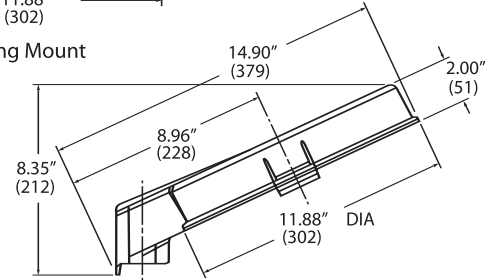
Pendant Mount



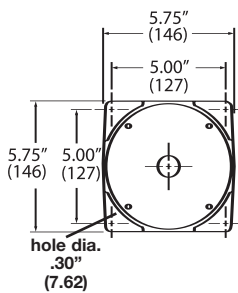
Cone Mount



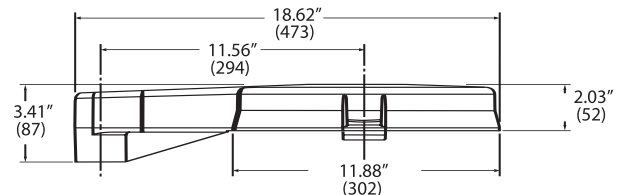
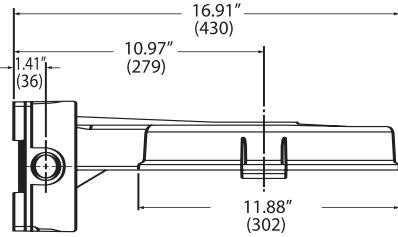
Ceiling Mount



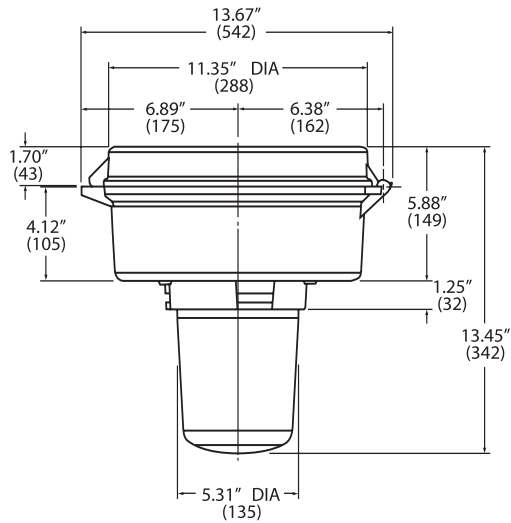
Stanchion(25°) Mount



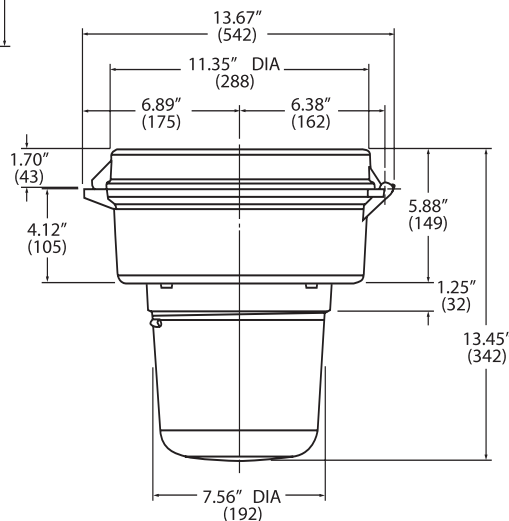
Wall Bracket Mount



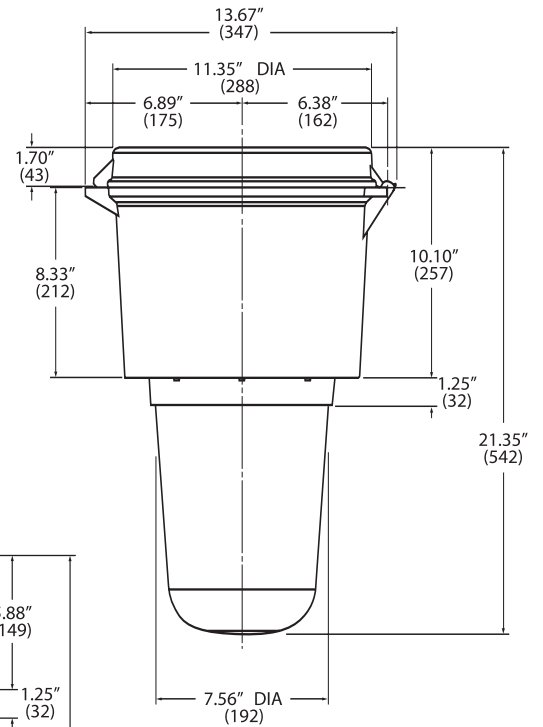
Stanchion(0°) Mount



VM3 Fixture

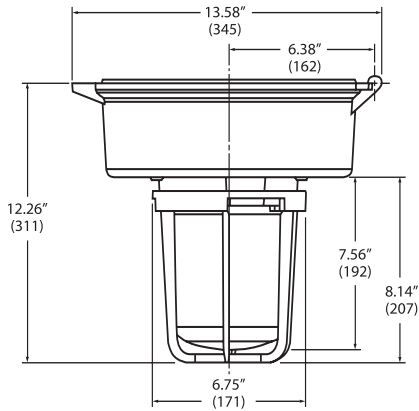


VM4 Fixture

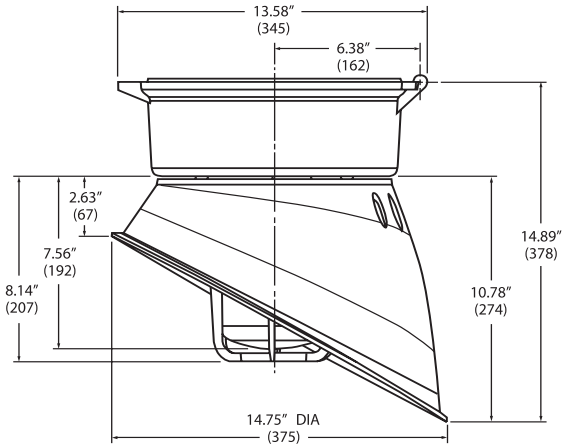


VM5 Fixture

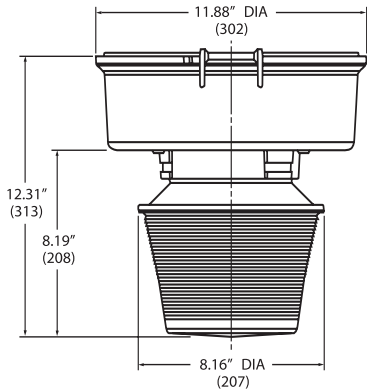




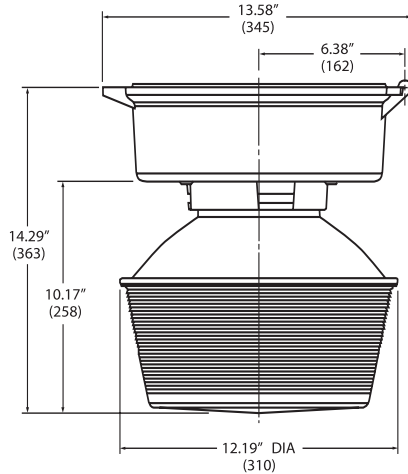
VM3 BALLAST TANK
5-1/2" OPTICS GLOBE OR REFRACTOR
VMAG17 GLOBE GUARD



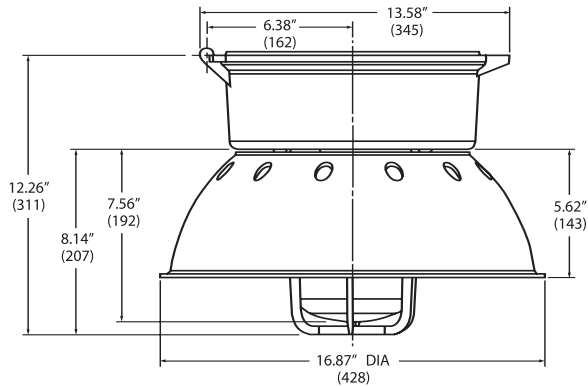
VM3 BALLAST TANK
VMG17 5-1/2" OPTICS GLOBE
VMPA-40 ANGLED REFLECTOR



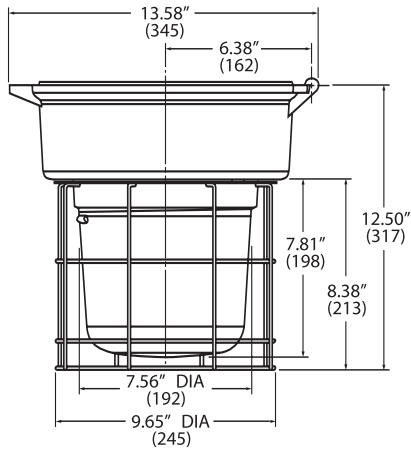
VM3 BALLAST TANK
VZRG-1550 8" SPUN REFRACTOR



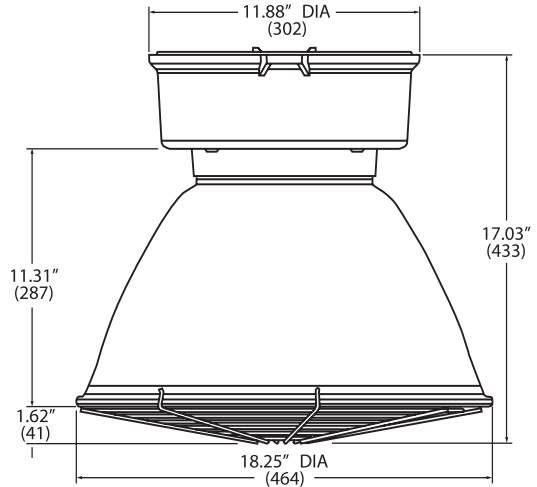
VM3 BALLAST TANK
VZRG 12" SPUN REFRACTOR



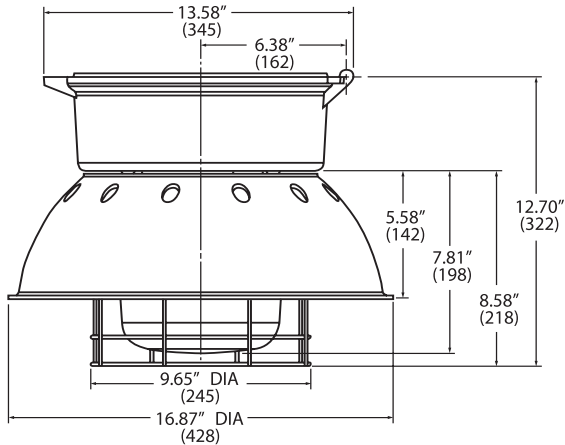
VM3 BALLAST TANK
VMG17 5-1/2" OPTICS GLOBE
VMPSD-40 DOME REFLECTOR



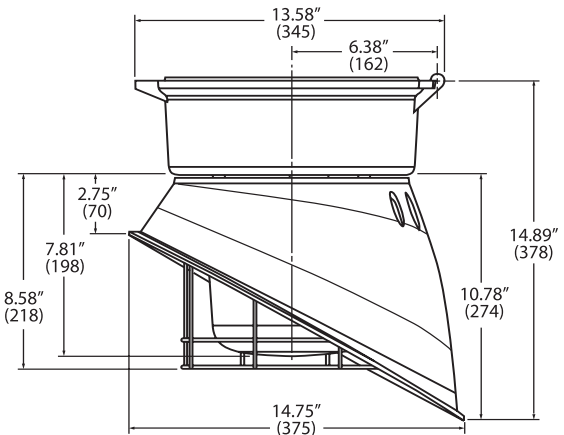
VM4 BALLAST TANK
7-3/4" OPTICS GLOBE (VMG25)
OR REFRACTOR (VMR25 SERIES)
VMAG255 WIRE GUARD



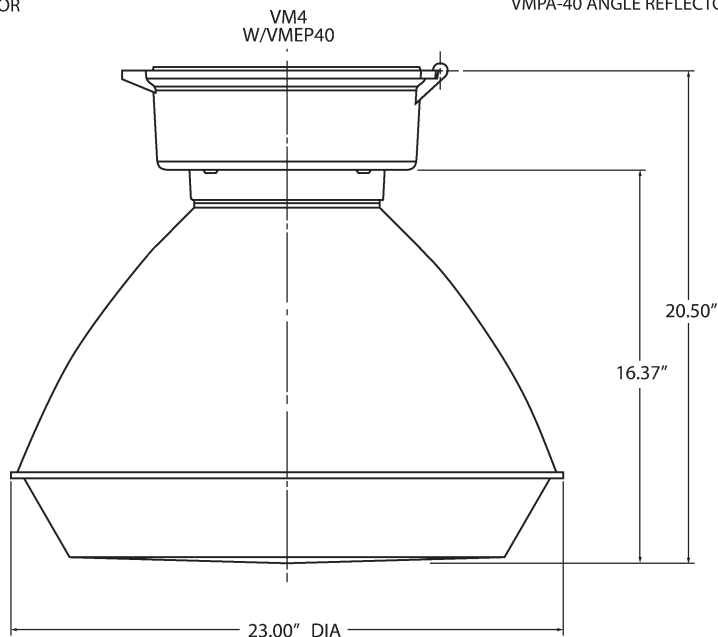
VM4 BALLAST TANK
VMER40 ENCLOSED REFLECTOR
VMERG GUARD



VM4 BALLAST TANK
VMG25 7-3/4" OPTICS GLOBE
VMAG255 WIRE GUARD
VMPSD-40 DOME REFLECTOR

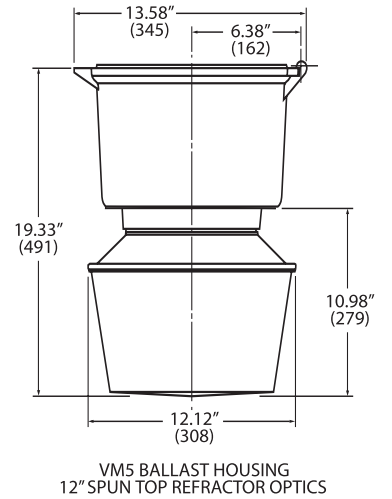
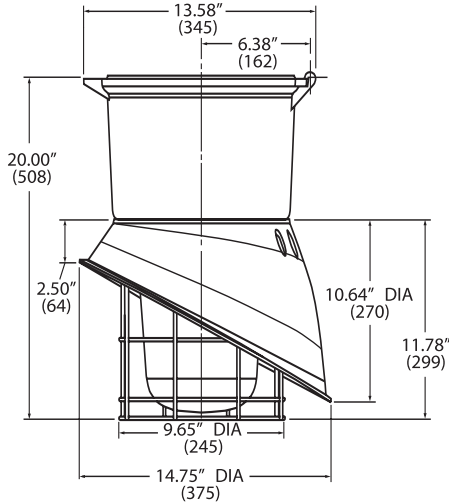
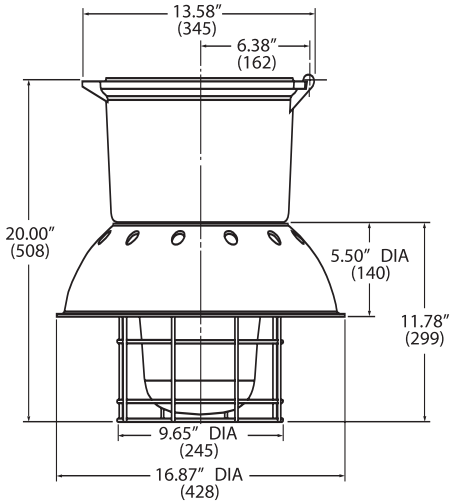
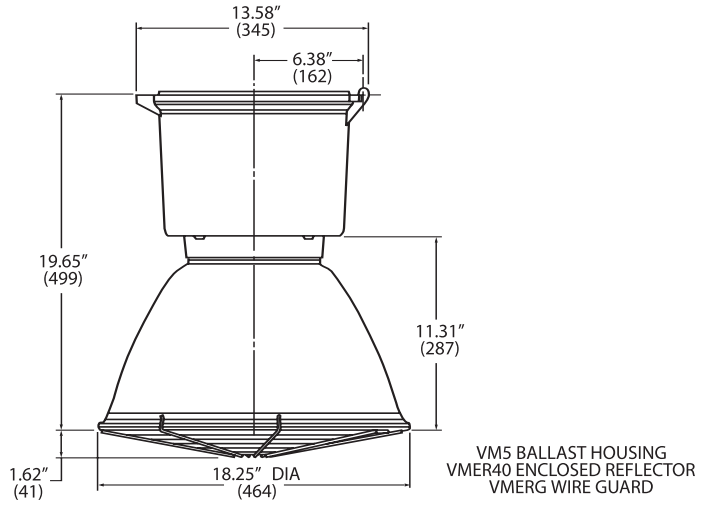
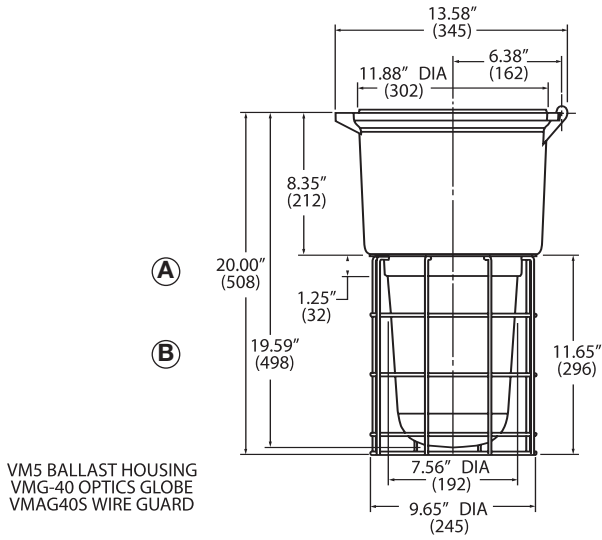


VM4 BALLAST TANK
VMG25 7-3/4" OPTICS GLOBE
VMAG255 WIRE GUARD
VMPA-40 ANGLE REFLECTOR



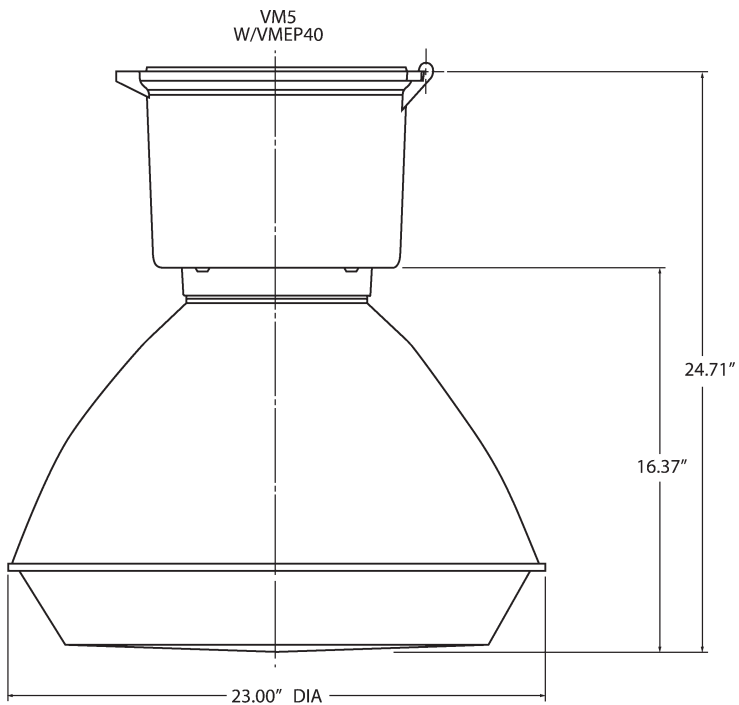
VM4 with VMEP40 Optic





QL 165W uses VM5 tank and VMG25 series optics, VMAG25S guard

Ⓐ 16.59 (421)
Ⓑ 16.11 (409)



VM5 with VMPE40 Optic

VM3/VM4 SERIES THERMAL PERFORMANCE DATA ① CLASS I DIVISION 2 GROUPS A,B,C,D / ZONE 2 GROUPS IIC, IIB, IIA													
DESCRIPTION			VM3 SERIES**					VM4 SERIES**					
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	VMR	REFRACTORS		GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VMR	ENCLOSED REFLECTORS		SUPPLY WIRE °C
						VZRG 8"	VZRG 12"				VMER40	VMEP40	
HPS	50	40	T3B	T3B	T3B	T3B	T3B	T3C	T3C	T3C	T3C	T3C	90
		55	T3A	T3A	T3A	T3A	T3A	T3B	T3B	T3B	T3B	T3B	90
		65	T3	T3	T3	T3	T3	T3	T3	T3	T3	T3	90
HPS	70	40	T3	T3	T3	T3	T3A	T3A	T3A	T3A	T3A	T3A	90
		55	T3	T3	T3	T3	T3	T3A	T3	T3	T3	T3	90
		65	T3	T3	T3	T3	T3	T3	T3	T3	T3	T3	90
HPS	100	40	T2D	T2D	T2D	T2D	T3	T3	T3	T3	T3	T3	90
		55	T2C	T2C	T2C	T2C	T2C	T2D	T2D	T2D	T2D	T2D	90
		65	T2C	T2C	T2C	T2C	T2C	T2C	T2C	T2C	T2C	T2C	110
HPS	150	40	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		55	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		65	—	—	—	—	—	—	—	—	—	—	—
MH	70	40	T3B	T3A	T3B	T3A	T3C	T3C	T3C	T3C	T3C	T3C	90
		55	T3A	T3	T3A	T3A	T3A	T3C	T3B	T3C	T3C	T3C	90
		65	T3	T3	T3	T3	T3	T3A	T3A	T3A	T3A	T3A	90
MH	100	40	T3	T3	T3	T3	T3A	T3A	T3	T3A	T3A	T3A	90
		55	T2D	T2D	T2D	T2D	T2D	T3	T3	T3	T3	T3	90
		65	T2D	T2D	T2D	T2D	T2D	T3	T3	T3	T3	T3	90
MH	175	40	T2A	T2A	T2A	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		55	T2	T2	T2	T2A	T2A	T2A	T2A	T2A	T2A	T2A	110
		65	—	—	—	—	—	—	—	—	—	—	—
MH	250	40	325°C	325°C	325°C	T2	T2	T2	T2	T2	T2	T2	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	150/175	40	T2A	T2A	T2A	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		55	T3	T3	T3	T3	T3	T2B	T2A	T2B	T2B	T2B	90
		65	—	—	—	—	—	T2A	T2A	T2A	T2A	T2A	110
MHP	200	40	T2A	T2A	T2A	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		55	T2	T2	T2	T2A	T2A	T2A	T2A	T2A	T2A	T2A	110
		65	—	—	—	—	—	—	—	—	—	—	—
MV	100	40	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		55	T2B	T2A	T2B	T2B	T2B	T2B	T2B	T2B	T2B	T2B	90
		65	—	—	—	—	—	—	—	—	—	—	—
MV	175	40	T2	T2	T2	T2A	T2A	T2A	T2A	T2A	T2A	T2A	90
		55	T3	T3	T3	T3	T3	T2A	T2A	T2A	T2A	T2A	90
		65	—	—	—	—	—	—	—	—	—	—	—
MV	250	40	350°C	350°C	350°C	350°C	350°C	350°C	350°C	350°C	350°C	350°C	110
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
QL	85	40	—	—	—	—	—	T3	T3	T3	T3	T3	75
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

① Data does not apply to luminaires with auxiliary quartz lighting; consult factory with requirements. The suitability of these fixtures for Class I Division 2 / Zone 2 locations must be determined for each application based on NEC® Articles 501.125(B) or 505.

** VM3 Series accepts 5-1/2" threaded optics; VM4 accepts 7-3/4" optics.

— Not available.



KILLARK®

VM3/VM4 SERIES THERMAL PERFORMANCE DATA ①											
CLASS I ZONE 2 RESTRICTED BREATHING											
DESCRIPTION			VM3 SERIES**			VM4 SERIES**					
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VMR	GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VMR	ENCLOSED REFLECTORS		SUPPLY WIRE °C
									VMER40	VMEP40	
HPS	50	40	T6	T6	T6	T6	T6	T6	T6	T6	90
		55	T5	T5	T5	T6	T6	T6	T6	T6	90
		65	T4	T4	T4	T5	T5	T5	T5	T5	90
HPS	70	40	T5	T5	T5	T6	T6	T6	T6	T6	90
		55	T5	T5	T5	T5	T5	T5	T5	T5	90
		65	T4	T4	T4	T5	T5	T5	T5	T5	90
HPS	100	40	T5	T5	T5	T5	T5	T5	T5	T5	90
		55	T5	T5	T5	T5	T5	T5	T5	T5	90
		65	T4	T4	T4	T4	T4	T4	T4	T4	110
HPS	150	40	T4	T4	T4	T4	T4	T4	T4	T4	90
		55	T3	T3	T3	T4	T4	T4	T4	T4	90
		65	—	—	—	—	—	—	—	—	—
MH	70	40	T5	T5	T5	T6	T6	T6	T6	T6	90
		55	T4	T4	T4	T5	T5	T5	T5	T5	90
		65	T4	T4	T4	T4	T4	T4	T4	T4	90
MH	100	40	T4	T4	T4	T5	T5	T5	T5	T5	90
		55	T4	T4	T4	T4	T4	T4	T4	T4	90
		65	T4	T4	T4	T4	T4	T4	T4	T4	90
MH	175	40	T3	T3	T3	T4	T4	T4	T4	T4	90
		55	T3	T3	T3	T4	T4	T4	T4	T4	110
		65	—	—	—	—	—	—	—	—	—
MH	250	40	T3	T3	T3	T3	T3	T3	T3	T3	90
		55	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—
MHP	150/175	40	T3	T3	T3	T4	T4	T4	T4	T4	90
		55	T3	T3	T3	T4	T4	T4	T4	T4	90
		65	—	—	—	T3	T3	T3	T3	T3	110
MHP	200	40	T3	T3	T3	T4	T4	T4	T4	T4	90
		55	T3	T3	T3	T3	T3	T3	T3	T3	110
		65	—	—	—	—	—	—	—	—	—
MV	100	40	T4	T4	T4	T5	T5	T5	T5	T5	90
		55	T4	T4	T4	T4	T4	T4	T4	T4	90
		65	—	—	—	—	—	—	—	—	—
MV	175	40	T3	T3	T3	T4	T4	T4	T4	T4	90
		55	T3	T3	T3	T4	T3	T4	T4	T4	90
		65	—	—	—	—	—	—	—	—	—
MV	250	40	T3	T3	T3	T3	T3	T3	T3	T3	110
		55	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

① Data does not apply to luminaries with auxiliary quartz lighting; consult factory with requirements. The suitability of these fixtures for Class I Zone 2 AEx nAR II locations must be determined for each application based on NEC® Article 505.

** VM3 Series accepts 5-1/2" threaded optics; VM4 accepts 7-3/4" optics.

— Not available.

VM3/VM4 SERIES THERMAL PERFORMANCE DATA ① CLASS II DIVISIONS 1 & 2 GROUPS E,F,G & CLASS III*													
DESCRIPTION			VM3 SERIES**					VM4 SERIES**					
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	VMR	REFRACTORS		GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VMR	ENCLOSED REFLECTORS		SUPPLY WIRE °C
						VZRG 8"	VZRG 12"				VMER40	VMEP40	
HPS	50	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	70	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	100	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	150	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	70	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	100	40	T3C	T3C	T3C	T3C	T3C	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	175	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	250	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	150/175	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	200	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	100	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	175	40	—	—	—	—	—	T3B	T3B	T3B	T3B	T3B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	250	40	—	—	—	—	—	T3A	T3A	T3A	T3A	T3A	110
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C ② ③															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

① Data does not apply to luminaries with auxiliary quartz lighting; consult factory with requirements.

② Limit for E & F.

③ Limit for G & Class III.

* Luminaries rated for Group G (= < 165°C), T3B are also suitable for Class III applications; Luminaries rated for E & F ≤ 200°C (T3).

** VM3 Series accepts 5-1/2" threaded optics; VM4 accepts 7-3/4" optics.

— Not available.



VM3/VM4 SERIES THERMAL PERFORMANCE DATA ① ②													
"SIMULTANEOUS PRESENCE" CLASS I DIVISION 2 (LAMP TEMPERATURE IN DUST CONDITIONS) & CLASS II DIVISION I													
DESCRIPTION			VM3 SERIES**					VM4 SERIES**					
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	VMR	REFRACTORS		GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VMR	ENCLOSED REFLECTORS		SUPPLY WIRE °C
						VZRG 8"	VZRG 12"				VMER40	VMEP40	
HPS	50	40	T3	T2D	T3	T3	T3	T3C	T3C	T3C	T3C	T3C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	70	40	T3	T2D	T3	T3	T3	T3A	T3A	T3A	T3A	T3A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	100	40	T2C	T2C	T2C	T2C	T2C	T3	T3	T3	T3	T3	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	150	40	T2A	T2A	T2A	T2A	T2A	T2B	T2B	T2B	T2B	T2B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	70	40	T3A	T3A	T3A	T3A	T3A	T3C	T3C	T3C	T3C	T3C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	100	40	T2D	T2D	T2D	T2D	T2D	T3A	T3	T3A	T3A	T3A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	175	40	—	—	—	—	—	T2A	T2A	T2A	T2A	T2A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	250	40	—	—	—	—	—	325°C	325°C	325°C	325°C	325°C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	150/175	40	—	—	—	—	—	T2A	T2A	T2A	T2A	T2A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	200	40	—	—	—	—	—	T2A	T2A	T2A	T2A	T2A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	100	40	—	—	—	—	—	T2B	T2B	T2B	T2B	T2B	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	175	40	—	—	—	—	—	T2A	T2A	T2A	T2A	T2A	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MV	250	40	—	—	—	—	—	350°C	350°C	350°C	350°C	350°C	110
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

① Data does not apply to luminaires with auxiliary quartz lighting; consult factory with requirements.
 ② Table shows lamp temperature inside dust covered optic - see Class II table for Groups E, F, G and Class III data.
 ** VM3 Series accepts 5-1/2" threaded optics; VM4 accepts 7-3/4" optics.
 — Not available.



VM5 SERIES THERMAL PERFORMANCE DATA ①												
DESCRIPTION			CLASS I DIVISION 2 GROUPS A, B, C, D / ZONE 2 GROUPS IIC, IIB, IIA					CLASS I ZONE 2, "RESTRICTED BREATHING" ②				
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VZRG 12"	ENCLOSED REFLECTORS		GLOBE ONLY	GLOBE W/ REFLECTOR	ENCLOSED REFLECTORS		SUPPLY WIRE °C
						VMER40	VMEP40			VMER40	VMEP40	
HPS	200	40	325°C	325°C	325°C	T2	T2	T3	T3	T4	T4	90
		55	350°C	350°C	350°C	325°C	325°C	T3	T3	T3	T3	110
		65	—	—	—	—	—	—	—	—	—	—
HPS	250	40	325°C	325°C	325°C	T2	T2	T3	T3	T4	T4	90
		55	350°C	350°C	350°C	325°C	325°C	T3	T3	T3	T3	110
		65	350°C	350°C	350°C	325°C	325°C	T3	T3	T3	T3	110
HPS	400	40	350°C	450°C	350°C	350°C	350°C	T3	T3	T3	T3	90
		55	450°C	—	450°C	450°C	450°C	T3	—	T3	T3	110
		65	—	—	—	—	—	—	—	—	—	—
HPS	600	40	—	—	—	450°C	450°C	—	—	T3	T3	90
		55	—	—	—	450°C	450°C	—	—	T3	T3	110
		65	—	—	—	—	—	—	—	—	—	—
MH	250	40	T2	325°C	T2	T2	T2	T3	T3	T3	T3	90
		55	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—
MH	400	40	T2	325°C	T2	T2	T2	T3	T3	T3	T3	90
		55	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—
MHP	250	40	T2B	T2B	T2B	T2B	T2B	T4	T4	T4	T4	90
		55	T2A	T2A	T2A	T2B	T2B	T3	T3	T3	T3	90
		65	—	—	—	—	—	—	—	—	—	—
MHP	320	40	T2B	T2B	T2B	T2B	T2B	T4	T4	T4	T4	90
		55	T2A	T2A	T2A	T2B	T2B	T3	T3	T3	T3	90
		65	T2A	—	T2A	T2A	T2A	T3	—	T3	T3	110
MHP	350	40	T2A	T2A	T2A	T2B	T2B	T3	T3	T4	T4	90
		55	T2	T2	T2A	T2A	T2A	T3	T3	T3	T3	110
		65	—	—	—	—	—	—	—	—	—	—
MHP	400	40	T2A	T2A	T2A	T2B	T2B	T3	T3	T4	T4	90
		55	T2	T2	T2A	T2A	T2A	T3	T3	T3	T3	110
		65	—	—	—	—	—	—	—	—	—	—
MV	400	40	325°C	350°C	325°C	325°C	325°C	T3	T3	T4	T4	90
		55	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—
QL	165	40	T3	T3	T3	T3	T3	—	—	—	—	75
		55	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

① Data does not apply to luminaries with auxiliary quartz lighting; consult factory with requirements. The suitability of these fixtures for Class I Division 2/Zone 2 locations must be determined for each application based on NEC® Articles 501.125(B) or 505.

② See L39 for Restricted Breathing Information.

— Not available



VM5 SERIES THERMAL PERFORMANCE DATA ① ②													
DESCRIPTION			CLASS II DIVISION 1 & 2 GROUPS E,F,G & CLASS III*					SIMULTANEOUS PRESENCE ③ LAMP TEMP. IN DUST CONDITIONS					
LAMP TYPE	LAMP WATTAGE	AMBIENT °C	GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VZRG 12"	ENCLOSED REFLECTORS		GLOBE ONLY	GLOBE W/ REFLECTOR	REFRACTOR VZRG 12"	ENCLOSED REFLECTORS		SUPPLY WIRE °C
						VMER40	VMEP40				VMER40	VMEP40	
HPS	200	40	T3C	T3C	T4A	T4	T4	350°C	350°C	325°C	325°C	325°C	90
		55	—	—	T4	T3C	T3C	—	—	350°C	350°C	350°C	110
		65	—	—	—	—	—	—	—	—	—	—	—
HPS	250	40	T3C	T3C	T4A	T4	T4	350°C	350°C	325°C	325°C	325°C	90
		55	—	—	T4	T3C	T3C	—	—	350°C	350°C	350°C	110
		65	—	—	T4	T3C	T3C	—	—	350°C	350°C	350°C	110
HPS	400	40	T3B	T3B	T4	T4	T4	T1	T1	350°C	350°C	350°C	90
		55	—	—	T3C	T3B	T3B	—	—	T1	T1	T1	110
		65	—	—	—	—	—	—	—	—	—	—	—
MH	250	40	—	—	T4	T4	T4	—	—	325°C	325°C	325°C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MH	400	40	—	—	T4	T4	T4	—	—	325°C	325°C	325°C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	250	40	—	—	T4	T4	T4	—	—	T2B	T2B	T2B	90
		55	—	—	T4	T4	T4	—	—	T2A	T2A	T2A	90
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	320	40	—	—	T4	T4	T4	—	—	T2B	T2B	T2B	90
		55	—	—	T3C	T3C	—	—	T2A	T2A	T2A	90	
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	350	40	—	—	T4	T4	T4	—	—	T2A	T2A	T2A	90
		55	—	—	T3C	T3C	T3C	—	—	T2	T2	T2	110
		65	—	—	—	—	—	—	—	—	—	—	—
MHP	400	40	—	—	T4	T4	T4	—	—	T2A	T2A	T2A	90
		55	—	—	T3C	T3C	T3C	—	—	T2	T2	T2	110
		65	—	—	—	—	—	—	—	—	—	—	—
MV	400	40	—	—	T3C	T4	T4	—	—	325°C	325°C	325°C	90
		55	—	—	—	—	—	—	—	—	—	—	—
		65	—	—	—	—	—	—	—	—	—	—	—

T-CODE & TEMPERATURE RANGE CONVERSION TABLE °C ③ ④															
T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	<=85

*** Table shows lamp temperature inside optic dust conditions, see Class II table for Groups E, F, G data.

① Data does not apply to luminaires with auxiliary quartz lighting; consult factory with requirements.

② Table shows lamp temperature inside dust covered optic - see Class II table for Groups E, F, G and Class III data.

③ Limit for E & F.

④ Limit for G & Class III.

* Luminaires rated for Group G (<=165°C), T3B are also suitable for Class III applications; Luminaires rated for E & F ≤ 200°C (T3).

— Not available.

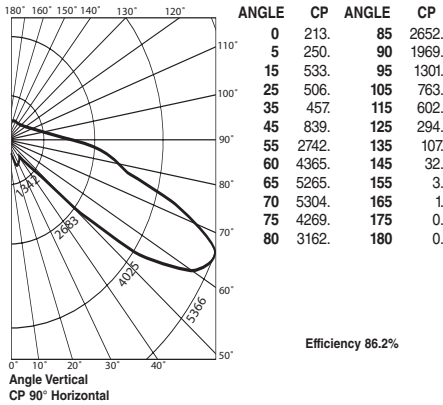
HIGH PRESSURE SODIUM-VM3

With Type I All Glass Refractor
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

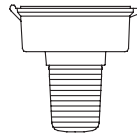
% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.99	.99	.99	.95	.95	.95
1	.83	.76	.70	.64	.79	.72
2	.72	.61	.52	.44	.68	.58
3	.63	.50	.40	.32	.59	.47
4	.56	.42	.32	.24	.52	.40
5	.50	.36	.26	.19	.47	.34
6	.46	.31	.22	.15	.43	.30
7	.42	.28	.19	.12	.39	.26
8	.39	.25	.16	.10	.36	.24
9	.36	.23	.14	.09	.34	.21
10	.34	.21	.13	.08	.32	.20

SPACING TO MOUNTING HEIGHT RATIO - 6.76 90-270°

Test No. HPK09954

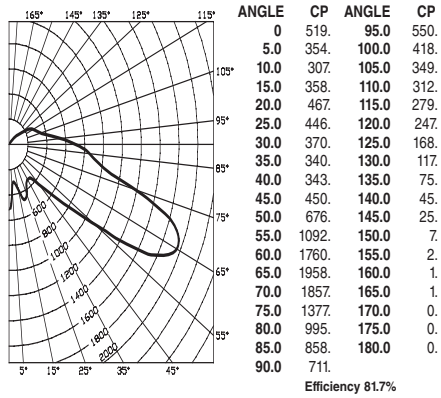
HIGH PRESSURE SODIUM-VM3

With Type V All Glass Refractor
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

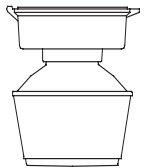
% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.93	.93	.93	.89	.89	.89
1	.78	.72	.66	.61	.74	.68
2	.68	.58	.50	.43	.64	.55
3	.60	.48	.39	.32	.56	.45
4	.53	.40	.30	.23	.49	.38
5	.47	.34	.25	.18	.44	.32
6	.43	.30	.21	.14	.40	.28
7	.40	.26	.18	.12	.37	.25
8	.36	.24	.16	.10	.34	.22
9	.34	.22	.14	.09	.32	.20
10	.32	.20	.12	.07	.30	.19

SPACING TO MOUNTING HEIGHT RATIO - 1.1

Test No. HPK09953

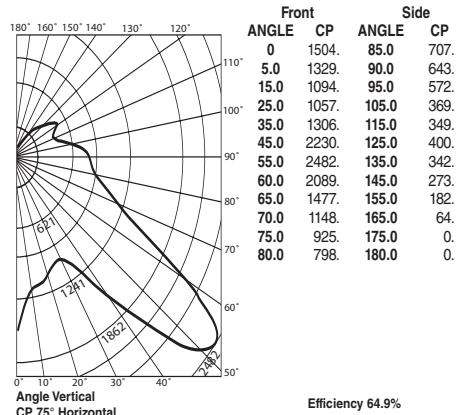
HIGH PRESSURE SODIUM-VM3

With Type II 12" Spin-Top Refractor
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.84	.84	.84	.80	.80	.80
1	.75	.70	.66	.62	.71	.67
2	.67	.59	.53	.48	.63	.56
3	.60	.51	.44	.39	.56	.48
4	.54	.44	.37	.31	.51	.42
5	.49	.39	.31	.26	.46	.37
6	.45	.34	.27	.22	.42	.32
7	.41	.30	.23	.18	.39	.29
8	.38	.27	.20	.16	.36	.26
9	.35	.25	.18	.14	.33	.23
10	.33	.22	.16	.12	.31	.21

SPACING TO MOUNTING HEIGHT RATIO - 1.36 0-180°

Test No. HPK09483

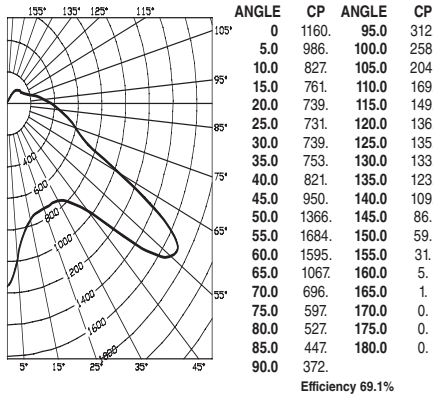
HIGH PRESSURE SODIUM-VM3

With Type V 8" Spin-Top Refractor
50-150 Watt
Mogul Base



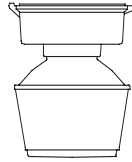
CANDLEPOWER – 100 WATT

9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



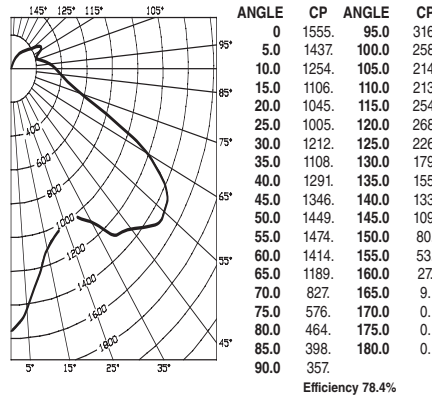
HIGH PRESSURE SODIUM-VM3

With Type V 12" Spin-Top Refractor
50-150 Watt
Mogul Base



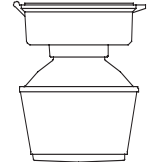
CANDLEPOWER – 100 WATT

9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



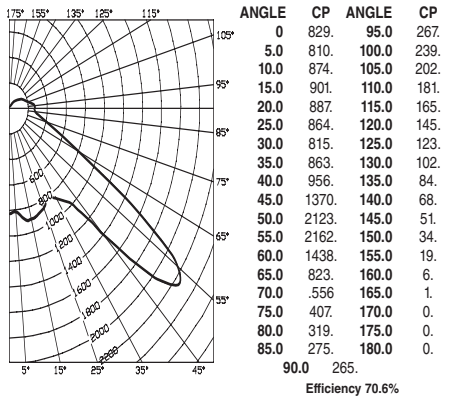
HIGH PRESSURE SODIUM-VM3

With Type V 12" Spin-Top Poly Refractor
50-150 Watt
Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.79 .79 .79 .79	.76 .76 .76 .76	.71 .71 .71 .71	.65 .65 .65 .65	.61 .61 .61 .61	.58
1	.70 .66 .62 .59	.67 .63 .60 .57	.58 .56 .53	.54 .52 .50 .50	.48 .46 .44	
2	.63 .56 .50 .46	.60 .54 .48 .44	.49 .45 .42	.45 .42 .39 .42	.39 .37 .34	
3	.56 .48 .41 .36	.53 .46 .40 .35	.42 .37 .33	.39 .34 .31 .36	.32 .29 .27	
4	.51 .41 .34 .29	.48 .39 .33 .28	.36 .31 .27	.33 .29 .25 .31	.27 .24 .22	
5	.46 .35 .28 .23	.43 .34 .28 .23	.31 .26 .21	.29 .24 .20 .26	.22 .19 .17	
6	.41 .31 .24 .19	.39 .29 .23 .18	.27 .21 .17	.25 .20 .16 .23	.19 .15 .14	
7	.37 .27 .20 .15	.35 .26 .19 .15	.23 .18 .14	.22 .17 .13 .20	.15 .12 .10	
8	.34 .24 .17 .13	.32 .23 .17 .12	.21 .16 .12	.19 .15 .11 .18	.14 .10 .09	
9	.32 .21 .15 .11	.30 .21 .15 .11	.19 .14 .10	.17 .13 .09 .16	.12 .09 .07	
10	.29 .19 .13 .09	.28 .19 .13 .09	.17 .12 .09	.16 .11 .08 .15	.11 .08 .06	

SPACING TO MOUNTING HEIGHT RATIO - 0.8

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.90 .90 .90 .90	.87 .87 .87 .87	.80 .80 .80	.74 .74 .74	.68 .68 .68	.65
1	.80 .76 .72 .68	.77 .73 .69 .66	.67 .64 .61	.62 .59 .57	.55 .53 .50	
2	.72 .65 .59 .54	.69 .62 .57 .52	.57 .53 .49	.53 .49 .46	.49 .46 .43 .41	
3	.65 .56 .49 .44	.62 .54 .48 .42	.50 .44 .40	.46 .41 .38	.42 .30 .35 .33	
4	.59 .49 .41 .35	.56 .47 .40 .34	.43 .37 .33	.40 .35 .31 .36	.32 .29 .27	
5	.53 .42 .35 .29	.51 .41 .34 .28	.38 .31 .27	.35 .29 .25 .32	.27 .24 .22	
6	.49 .37 .30 .25	.46 .36 .29 .24	.33 .27 .23	.31 .25 .21 .28	.24 .20 .18	
7	.45 .33 .26 .21	.42 .32 .25 .20	.29 .23 .19	.27 .22 .18 .25	.20 .17 .15	
8	.41 .29 .22 .17	.39 .28 .22 .17	.26 .20 .16	.24 .19 .15 .22	.18 .14 .13	
9	.38 .27 .20 .15	.36 .26 .19 .15	.24 .18 .14	.22 .17 .13 .20	.16 .12 .11	
10	.35 .23 .17 .12	.33 .23 .16 .12	.21 .15 .11	.19 .14 .11 .18	.13 .10 .09	

SPACING TO MOUNTING HEIGHT RATIO - 0.9

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.82 .82 .82 .82	.79 .79 .79 .79	.73 .73 .73	.68 .68 .68	.63 .63 .63	.61
1	.73 .70 .66 .63	.70 .67 .64 .61	.62 .60 .57	.58 .56 .54	.54 .52 .51	.49
2	.66 .60 .55 .50	.63 .58 .53 .49	.54 .50 .46	.50 .47 .44	.47 .44 .42 .40	
3	.60 .52 .46 .41	.57 .50 .44 .40	.47 .42 .38	.43 .39 .36	.40 .37 .34 .32	
4	.54 .45 .38 .33	.51 .43 .37 .32	.40 .35 .31	.37 .33 .29	.35 .31 .28 .26	
5	.49 .39 .32 .27	.46 .37 .31 .26	.35 .29 .25	.32 .28 .24	.30 .26 .23 .21	
6	.44 .34 .27 .22	.42 .32 .26 .21	.30 .25 .20	.28 .23 .19	.26 .22 .19 .17	
7	.40 .29 .22 .18	.38 .28 .22 .17	.26 .20 .16	.24 .19 .16	.22 .18 .15 .13	
8	.36 .25 .19 .14	.34 .25 .18 .14	.23 .17 .13	.21 .16 .13	.20 .15 .12 .10	
9	.33 .23 .17 .12	.32 .22 .16 .12	.21 .15 .11	.19 .14 .11	.18 .13 .10 .09	
10	.30 .20 .14 .10	.29 .19 .14 .10	.18 .13 .09	.17 .12 .09	.15 .11 .08 .07	

SPACING TO MOUNTING HEIGHT RATIO - 2.8

Test No. HPK09472

Test No. HPK09475

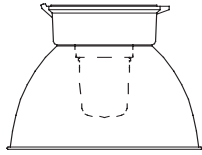
Test No. HPK09478



KILLARK®

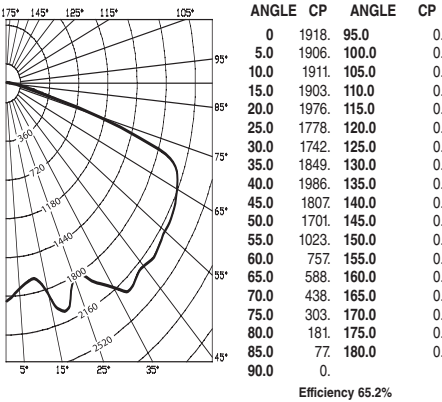
HIGH PRESSURE SODIUM-VM3

With Globe & Full Cutoff Deep White Reflector*
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



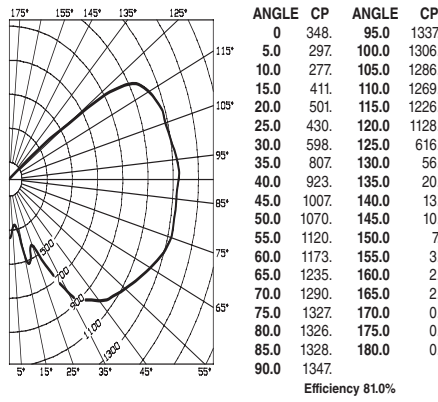
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Globe
 70-250 Watt
 Mogul Base



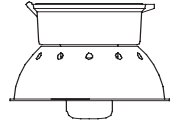
CANDLEPOWER – 175 WATT

14000 lumens
 For 70 MH watt multiply by 0.40
 For 100 MH watt multiply by 0.64
 For 250 MH watt multiply by 1.46
 For 150 MHP watt multiply by 1.00
 For 175 MHP watt multiply by 1.25
 For 200 MHP watt multiply by 1.50
 For 100 MV watt multiply by 0.31
 For 175 MV watt multiply by 0.56
 For 250 MV watt multiply by 0.93



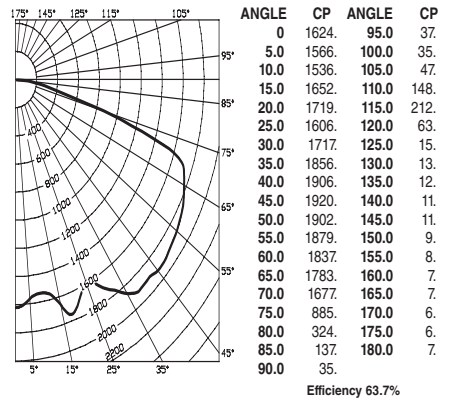
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Globe and Dome Refractor
 70-250 Watt
 Mogul Base



CANDLEPOWER – 175 WATT

14000 lumens
 For 70 MH watt multiply by 0.40
 For 100 MH watt multiply by 0.64
 For 250 MH watt multiply by 1.46
 For 150 MHP watt multiply by 1.00
 For 175 MHP watt multiply by 1.25
 For 200 MHP watt multiply by 1.50
 For 100 MV watt multiply by 0.31
 For 175 MV watt multiply by 0.56
 For 250 MV watt multiply by 0.93



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.75 .75 .75 .75	.74 .74 .74 .74	.70 .70 .70 .70	.67 .67 .67 .67	.65 .65 .65 .65	.63
1	.70 .67 .64 .62	.68 .65 .63 .61	.63 .61 .59 .60	.59 .57 .58 .57	.56 .56 .54	
2	.64 .60 .56 .53	.63 .58 .55 .52	.56 .53 .51 .54	.52 .50 .49 .47		
3	.59 .53 .49 .45	.58 .52 .48 .45	.51 .47 .44 .49	.46 .43 .47 .45	.43 .41	
4	.54 .46 .42 .39	.53 .47 .42 .38	.45 .41 .38 .44	.40 .37 .42 .39	.37 .36	
5	.50 .43 .37 .33	.49 .42 .37 .33	.41 .36 .33 .39	.36 .33 .38 .35	.32 .31	
6	.46 .38 .33 .29	.45 .38 .33 .29	.37 .32 .29 .36	.32 .29 .35 .31	.28 .27	
7	.43 .34 .29 .25	.42 .34 .29 .25	.33 .28 .25 .32	.28 .25 .31 .28	.25 .24	
8	.39 .31 .26 .22	.38 .31 .26 .22	.30 .25 .22 .29	.25 .22 .28 .24	.22 .20	
9	.36 .28 .23 .19	.35 .28 .23 .19	.27 .22 .19 .26	.22 .19 .26 .22	.19 .18	
10	.33 .24 .19 .16	.32 .24 .19 .16	.23 .19 .16 .23	.18 .16 .22 .18	.15 .14	

SPACING TO MOUNTING HEIGHT RATIO - 1.5

*Values using Spacer Kit

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.88 .88 .88 .88	.83 .83 .83 .83	.72 .72 .72	.62 .62 .62	.52 .52 .52	.48
1	.76 .70 .64 .60	.70 .65 .60 .56	.55 .51 .48	.46 .43 .41	.38 .36 .34	.30
2	.67 .58 .51 .45	.61 .54 .47 .42	.45 .40 .36	.38 .34 .30	.30 .27 .25	.21
3	.60 .49 .41 .35	.55 .46 .38 .33	.38 .33 .28	.32 .27 .23	.25 .22 .19	.15
4	.54 .42 .34 .28	.49 .39 .32 .26	.33 .27 .22	.27 .22 .18	.22 .18 .15	.11
5	.49 .37 .29 .23	.44 .34 .27 .21	.29 .22 .18	.23 .18 .15	.19 .15 .11	.09
6	.44 .33 .25 .19	.41 .30 .23 .17	.25 .19 .15	.21 .16 .12	.16 .12 .09	.07
7	.41 .29 .21 .16	.37 .27 .20 .15	.22 .16 .12	.18 .13 .10	.14 .11 .08	.05
8	.37 .26 .18 .13	.34 .24 .17 .12	.20 .14 .10	.16 .12 .08	.13 .09 .06	.04
9	.35 .23 .16 .11	.32 .21 .15 .10	.18 .12 .09	.15 .10 .07	.12 .08 .05	.03
10	.32 .21 .14 .09	.29 .19 .13 .09	.16 .11 .05	.13 .09 .05	.10 .07 .04	.02

SPACING TO MOUNTING HEIGHT RATIO - 3.0

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.75 .75 .75 .75	.73 .73 .73 .73	.69 .69 .69	.66 .66 .66	.63 .63 .63	.61
1	.68 .64 .61 .59	.66 .63 .60 .57	.59 .57 .55	.57 .55 .53	.54 .52 .51	.49
2	.61 .55 .51 .47	.59 .54 .50 .46	.51 .48 .44	.49 .46 .43	.46 .44 .42	.40
3	.55 .48 .42 .38	.53 .47 .41 .37	.44 .40 .36	.42 .38 .35	.40 .37 .34	.33
4	.50 .41 .35 .30	.48 .40 .34 .30	.38 .33 .29	.36 .32 .29	.35 .31 .28	.26
5	.45 .36 .30 .25	.43 .35 .29 .25	.33 .28 .24	.32 .27 .24	.30 .26 .23	.22
6	.41 .32 .26 .21	.40 .31 .25 .21	.30 .24 .21	.28 .24 .20	.27 .23 .20	.18
7	.37 .28 .22 .18	.36 .27 .22 .18	.26 .21 .17	.25 .20 .17	.24 .20 .17	.15
8	.34 .25 .19 .15	.33 .24 .19 .15	.23 .18 .15	.22 .18 .14	.21 .17 .14	.13
9	.32 .22 .17 .13	.31 .22 .17 .13	.21 .16 .13	.20 .16 .12	.19 .15 .12	.11
10	.29 .20 .14 .10	.28 .19 .14 .10	.18 .14 .10	.18 .13 .10	.17 .13 .10	.09

SPACING TO MOUNTING HEIGHT RATIO - 1.8

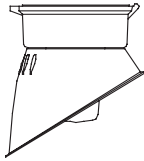
Test No. HPK10116

Test No. HPK09935

Test No. HPK09936

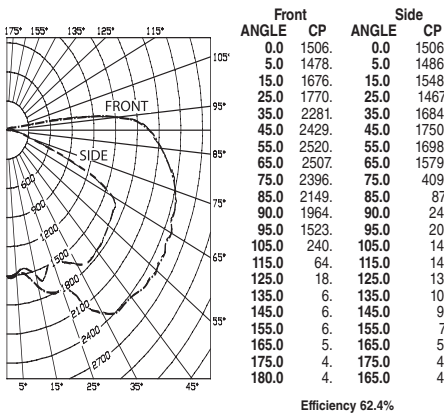
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Globe and Angle Refractor
70-250 Watt
Mogul Base



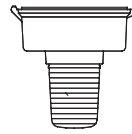
CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH watt multiply by 0.64
For 250 MH watt multiply by 1.46
For 150 MHP watt multiply by 1.00
For 175 MHP watt multiply by 1.25
For 200 MHP watt multiply by 1.50
For 100 MV watt multiply by 0.31
For 175 MV watt multiply by 0.56
For 250 MV watt multiply by 0.93



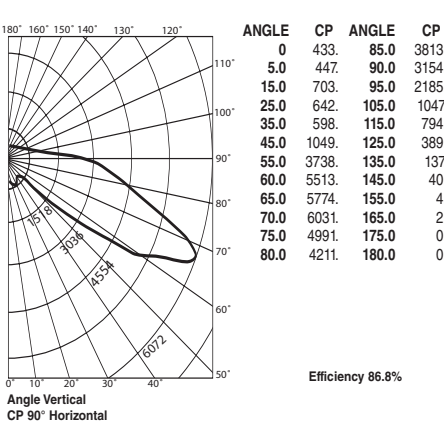
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Type I All Glass Refractor
70-250 Watt
Mogul Base



CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH watt multiply by 0.64
For 250 MH watt multiply by 1.46
For 150 MHP watt multiply by 1.00
For 175 MHP watt multiply by 1.25
For 200 MHP watt multiply by 1.50
For 100 MV watt multiply by 0.31
For 175 MV watt multiply by 0.56
For 250 MV watt multiply by 0.93



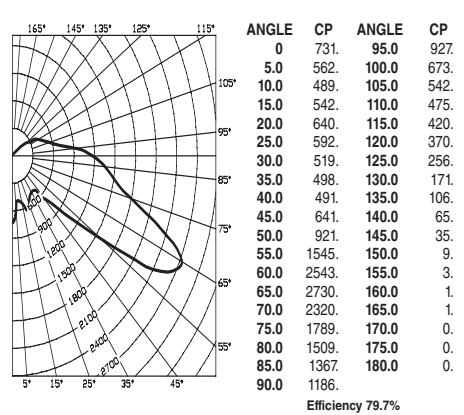
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Type V All Glass Refractor
70-250 Watt
Mogul Base



CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH watt multiply by 0.64
For 250 MH watt multiply by 1.46
For 150 MHP watt multiply by 1.00
For 175 MHP watt multiply by 1.25
For 200 MHP watt multiply by 1.50
For 100 MV watt multiply by 0.31
For 175 MV watt multiply by 0.56
For 250 MV watt multiply by 0.93



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.73	.73	.73	.71	.71	.71
1	.65	.61	.57	.54	.53	.53
2	.58	.52	.47	.43	.42	.42
3	.53	.45	.39	.35	.34	.34
4	.48	.39	.32	.29	.28	.28
5	.44	.35	.28	.24	.23	.23
6	.40	.31	.25	.20	.19	.19
7	.37	.27	.21	.17	.16	.16
8	.34	.24	.19	.15	.14	.14
9	.31	.22	.16	.13	.12	.12
10	.28	.19	.14	.10	.09	.09

SPACING TO MOUNTING HEIGHT RATIO - 1.7

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.99	.99	.99	.95	.95	.95
1	.83	.76	.69	.63	.61	.61
2	.72	.61	.52	.44	.42	.42
3	.63	.50	.40	.32	.31	.31
4	.56	.42	.32	.24	.23	.23
5	.51	.36	.26	.19	.18	.18
6	.46	.32	.22	.15	.14	.14
7	.42	.28	.19	.13	.12	.12
8	.39	.25	.17	.11	.10	.10
9	.36	.23	.15	.09	.08	.08
10	.34	.21	.13	.08	.07	.07

SPACING TO MOUNTING HEIGHT RATIO - 5.7 90-270°

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.90	.90	.90	.86	.86	.86
1	.76	.70	.64	.59	.57	.57
2	.66	.57	.49	.42	.41	.41
3	.58	.47	.38	.31	.30	.30
4	.52	.39	.30	.23	.22	.22
5	.46	.33	.24	.18	.17	.17
6	.42	.29	.21	.14	.13	.13
7	.39	.26	.18	.12	.11	.11
8	.36	.23	.15	.10	.09	.09
9	.33	.21	.14	.09	.08	.08
10	.31	.19	.12	.08	.07	.07

SPACING TO MOUNTING HEIGHT RATIO - 1.1

Test No. HPK09937

Test No. HPK09980

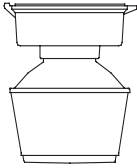
Test No. HPK09946



KILLARK®

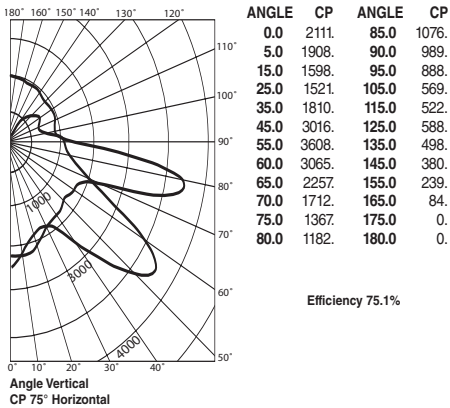
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Type II 12" Spin-Top Refractor
 70-250 Watt
 Mogul Base



CANDLEPOWER – 175 WATT
 14000 lumens

For 70 MH watt multiply by 0.40
 For 100 MH watt multiply by 0.64
 For 250 MH watt multiply by 1.46
 For 150 MHP watt multiply by 1.00
 For 175 MHP watt multiply by 1.25
 For 200 MHP watt multiply by 1.50
 For 100 MV watt multiply by 0.31
 For 175 MV watt multiply by 0.56
 For 250 MV watt multiply by 0.93



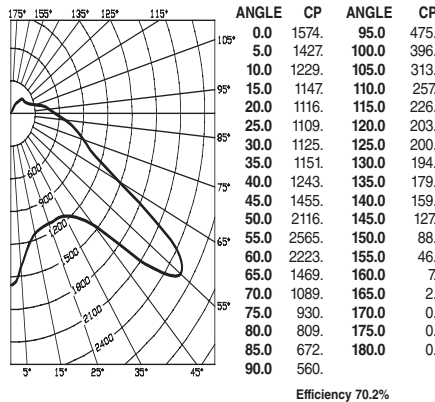
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Type V 8" Spin-Top Refractor
 70-250 Watt
 Mogul Base



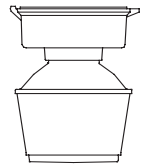
CANDLEPOWER – 175 WATT
 14000 lumens

For 70 MH watt multiply by 0.40
 For 100 MH watt multiply by 0.64
 For 250 MH watt multiply by 1.46
 For 150 MHP watt multiply by 1.00
 For 175 MHP watt multiply by 1.25
 For 200 MHP watt multiply by 1.50
 For 100 MV watt multiply by 0.31
 For 175 MV watt multiply by 0.56
 For 250 MV watt multiply by 0.93



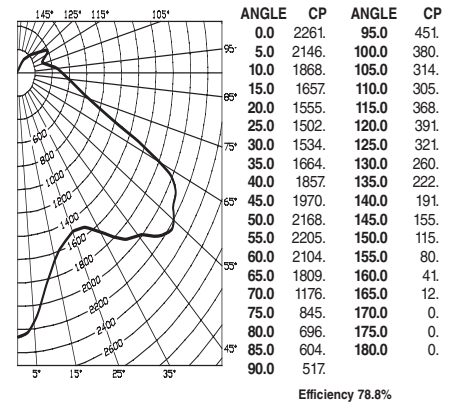
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR -VM3

With Type V 12" Spin-Top Refractor
 70-250 Watt
 Mogul Base



CANDLEPOWER – 175 WATT
 14000 lumens

For 70 MH watt multiply by 0.40
 For 100 MH watt multiply by 0.64
 For 250 MH watt multiply by 1.46
 For 150 MHP watt multiply by 1.00
 For 175 MHP watt multiply by 1.25
 For 200 MHP watt multiply by 1.50
 For 100 MV watt multiply by 0.31
 For 175 MV watt multiply by 0.56
 For 250 MV watt multiply by 0.93



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE T _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE T _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.85 .85 .85 .85	.81 .81 .81 .81	.74 .74 .74 .74	.67 .67 .67 .67	.60 .60 .60 .60	.57 .57
1	.75 .71 .67 .63	.71 .67 .63 .60	.61 .58 .55 .55	.55 .52 .50 .49	.47 .46 .43 .43	
2	.67 .60 .54 .49	.63 .57 .51 .47	.51 .47 .43 .46	.46 .42 .39 .41	.38 .36 .33 .36	
3	.60 .51 .44 .39	.57 .49 .42 .37	.44 .39 .34 .39	.35 .31 .35 .32	.29 .26 .26	
4	.54 .44 .37 .31	.51 .42 .35 .30	.38 .32 .28 .34	.29 .26 .30 .27	.23 .21 .21	
5	.49 .39 .31 .26	.46 .37 .30 .25	.33 .27 .23 .30	.25 .21 .27 .23	.19 .17 .17	
6	.45 .34 .27 .22	.42 .33 .26 .21	.29 .24 .19 .26	.22 .18 .24 .19	.16 .14 .14	
7	.41 .31 .23 .19	.39 .29 .23 .18	.26 .21 .16 .24	.19 .15 .21 .17	.14 .12 .12	
8	.38 .27 .21 .16	.36 .26 .20 .15	.24 .18 .14 .21	.17 .13 .19 .15	.12 .10 .10	
9	.35 .25 .18 .14	.33 .24 .18 .13	.21 .16 .12 .19	.15 .11 .17 .13	.10 .09 .09	
10	.33 .23 .16 .12	.31 .22 .16 .12	.20 .14 .11 .18	.13 .10 .16 .12	.09 .08 .08	

SPACING TO MOUNTING HEIGHT RATIO - 1.48 0-180°

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE T _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE T _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.81 .81 .81 .81	.78 .78 .78 .78	.72 .72 .72 .72	.66 .66 .66 .66	.62 .62 .62 .62	.59 .59
1	.71 .67 .63 .59	.68 .64 .61 .57	.59 .56 .54 .54	.52 .50 .50 .48	.47 .44 .44 .44	
2	.64 .57 .51 .46	.61 .54 .49 .45	.50 .46 .42 .46	.43 .40 .40 .37	.35 .35 .35 .35	
3	.57 .49 .42 .37	.54 .47 .41 .36	.43 .38 .34 .40	.35 .32 .36 .33	.30 .28 .28	
4	.51 .42 .35 .29	.49 .40 .34 .29	.37 .31 .27 .34	.29 .25 .31 .27	.24 .22 .22	
5	.46 .36 .29 .24	.44 .35 .28 .23	.32 .26 .22 .29	.24 .21 .27 .23	.19 .17 .17	
6	.42 .32 .25 .20	.40 .30 .24 .19	.28 .22 .18 .26	.21 .17 .24 .19	.16 .14 .14	
7	.38 .28 .21 .16	.36 .27 .20 .16	.24 .19 .15 .22	.17 .14 .21 .16	.13 .11 .11	
8	.35 .24 .18 .13	.33 .23 .17 .13	.22 .16 .12 .20	.15 .11 .18 .14	.11 .09 .09	
9	.32 .22 .16 .11	.31 .21 .15 .11	.20 .14 .11 .18	.13 .10 .17 .12	.09 .08 .08	
10	.30 .20 .14 .09	.28 .19 .13 .09	.17 .12 .09 .16	.11 .08 .15 .11	.08 .06 .06	

SPACING TO MOUNTING HEIGHT RATIO - 1.0

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE T _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE T _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.91 .91 .91 .91	.87 .87 .87 .87	.81 .81 .81 .81	.74 .74 .74 .74	.69 .69 .69 .69	.66 .66
1	.81 .76 .72 .69	.77 .73 .70 .66	.68 .65 .62 .62	.60 .58 .57 .55	.54 .51 .51 .51	
2	.73 .66 .59 .54	.70 .63 .57 .53	.58 .53 .50 .53	.50 .47 .49 .46	.44 .41 .41 .41	
3	.66 .57 .50 .44	.63 .54 .48 .43	.50 .45 .40 .46	.42 .38 .43 .39	.36 .34 .34 .34	
4	.59 .49 .41 .36	.56 .47 .40 .35	.43 .38 .33 .40	.35 .31 .37 .33	.29 .27 .27 .27	
5	.54 .43 .35 .29	.51 .41 .34 .29	.38 .32 .27 .35	.30 .26 .32 .28	.24 .22 .22 .22	
6	.49 .38 .30 .25	.47 .36 .29 .24	.34 .27 .23 .31	.26 .22 .29 .24	.20 .18 .18 .18	
7	.45 .33 .26 .21	.43 .32 .25 .20	.30 .24 .19 .27	.22 .18 .25 .21	.17 .15 .15 .15	
8	.41 .30 .22 .18	.39 .29 .22 .17	.26 .20 .16 .24	.19 .15 .23 .18	.13 .11 .11 .11	
9	.38 .27 .20 .15	.36 .26 .19 .15	.24 .18 .14 .22	.17 .13 .20 .16	.13 .11 .11 .11	
10	.35 .24 .17 .13	.33 .23 .16 .12	.21 .15 .12 .20	.14 .11 .18 .14	.10 .09 .09 .09	

SPACING TO MOUNTING HEIGHT RATIO - .9

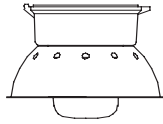
Test No. HPK09482

Test No. HPK09473

Test No. HPK09475

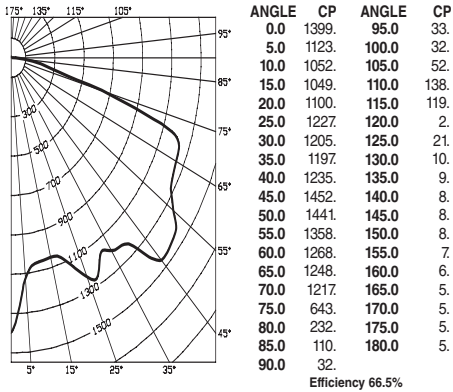
HIGH PRESSURE SODIUM-VM4

With Globe and Dome Reflector
 50-150 Watt
 Mogul Base



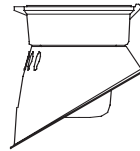
CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



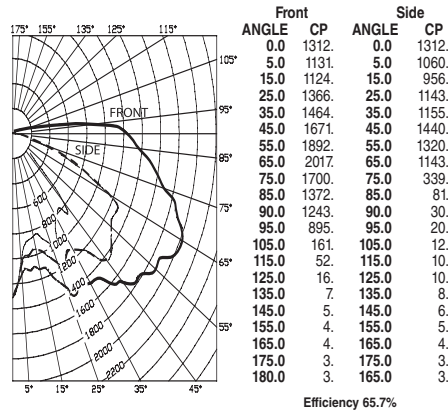
HIGH PRESSURE SODIUM-VM4

With Globe
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



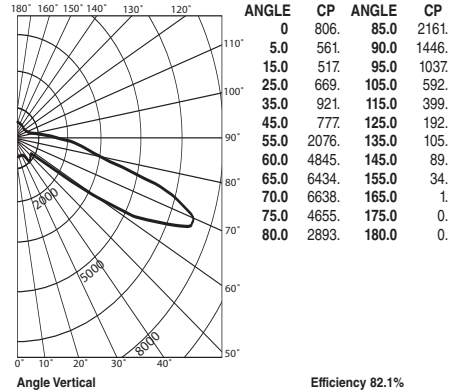
HIGH PRESSURE SODIUM-VM4

With Type I All Glass Refractor
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.79	.79	.79	.77	.77	.77
1	.71	.68	.64	.61	.69	.66
2	.64	.58	.53	.49	.62	.57
3	.58	.50	.44	.39	.56	.49
4	.52	.43	.37	.32	.50	.42
5	.47	.38	.31	.26	.45	.37
6	.43	.33	.27	.22	.41	.32
7	.39	.29	.23	.19	.38	.29
8	.36	.26	.20	.16	.35	.26
9	.33	.23	.18	.13	.32	.23
10	.30	.20	.15	.11	.29	.20

SPACING TO MOUNTING HEIGHT RATIO - 1.3

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.78	.78	.78	.76	.76	.76
1	.69	.64	.61	.57	.66	.62
2	.62	.55	.50	.45	.59	.53
3	.56	.48	.42	.37	.54	.46
4	.50	.42	.35	.30	.49	.40
5	.46	.37	.30	.25	.44	.35
6	.42	.32	.26	.21	.41	.32
7	.39	.29	.23	.18	.37	.28
8	.35	.26	.20	.15	.34	.25
9	.33	.23	.17	.13	.32	.23
10	.30	.20	.14	.11	.29	.20

SPACING TO MOUNTING HEIGHT RATIO - 1.3

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80	70	50	30	10	0
% WALL REFLECTANCE ρ_w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.95	.95	.95	.91	.91	.91
1	.81	.74	.69	.63	.77	.71
2	.70	.60	.51	.44	.66	.57
3	.61	.49	.40	.32	.58	.47
4	.54	.41	.32	.24	.51	.39
5	.49	.35	.26	.19	.46	.34
6	.44	.31	.22	.15	.42	.29
7	.41	.27	.19	.12	.41	.27
8	.38	.24	.16	.10	.38	.24
9	.35	.22	.14	.09	.35	.21
10	.33	.20	.13	.08	.33	.19

SPACING TO MOUNTING HEIGHT RATIO - 1.64 90-270°

Test No. HPK09956

Test No. HPK09957

Test No. HPK09960

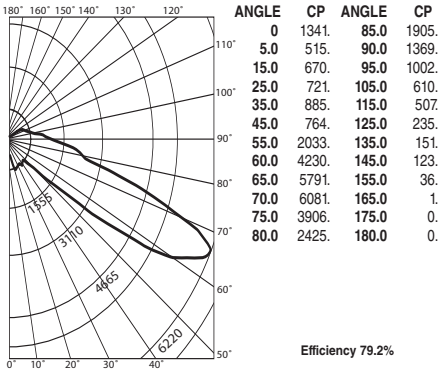
HIGH PRESSURE SODIUM-VM4

With Type III All Glass Refractor
50-150 Watt
Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



Angle Vertical
CP 75° Horizontal

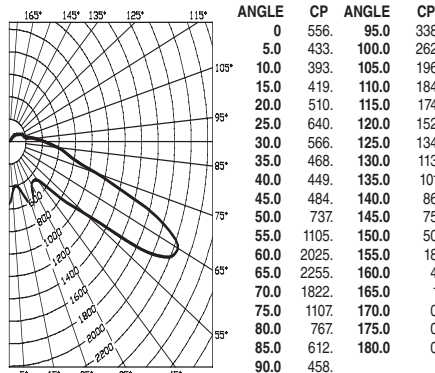
HIGH PRESSURE SODIUM-VM4

With Type V All Glass Refractor
50-150 Watt
Mogul Base



CANDLEPOWER – 100 WATT

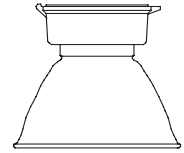
9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



Efficiency 77.1%

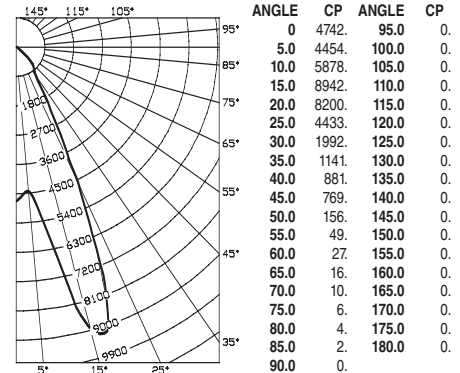
HIGH PRESSURE SODIUM-VM4

With Enclosed Reflector
50-150 Watt
Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
For 50 watt multiply by 0.42
For 70 watt multiply by 0.68
For 150 watt multiply by 1.68



Efficiency 66.1%

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.91 .91 .91 .91	.88 .88 .88 .88	.81 .81 .81	.75 .75 .75 .70	.70 .70 .70	.67
1	.78 .71 .66 .61	.74 .68 .63 .59	.63 .58 .55	.57 .54 .51	.52 .50 .47	.44
2	.67 .57 .49 .43	.63 .55 .47 .41	.50 .43 .38	.45 .40 .35 .41	.37 .33 .30	
3	.59 .47 .38 .31	.55 .45 .36 .30	.40 .33 .28	.36 .31 .26 .33	.28 .24 .21	
4	.52 .40 .30 .23	.49 .38 .29 .22	.34 .27 .21	.30 .24 .19 .27	.22 .17 .15	
5	.47 .34 .25 .18	.44 .32 .24 .18	.29 .22 .16	.26 .20 .15 .23	.18 .13 .11	
6	.43 .30 .21 .15	.40 .28 .20 .14	.25 .18 .13	.23 .17 .12 .20	.15 .11 .08	
7	.39 .26 .18 .12	.37 .25 .17 .12	.23 .16 .11	.20 .14 .10 .18	.13 .09 .07	
8	.36 .24 .16 .10	.34 .22 .15 .10	.20 .14 .09	.18 .12 .08 .16	.11 .07 .05	
9	.34 .21 .14 .09	.32 .20 .13 .08	.19 .12 .08	.17 .11 .07 .15	.10 .06 .05	
10	.31 .20 .12 .08	.30 .19 .12 .07	.17 .11 .07	.15 .10 .06 .14	.09 .06 .04	

SPACING TO MOUNTING HEIGHT RATIO - 0.16 0-180°

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.88 .88 .88 .88	.84 .84 .84 .84	.78 .78 .78	.73 .73 .73 .68	.68 .68 .65	.65
1	.75 .70 .65 .60	.72 .67 .62 .58	.61 .58 .54	.56 .53 .51	.52 .49 .47	.45
2	.66 .57 .49 .43	.62 .54 .48 .42	.50 .44 .39	.45 .41 .37 .41	.38 .34 .32	
3	.58 .47 .38 .32	.54 .45 .37 .31	.41 .34 .29	.37 .31 .27 .34	.29 .25 .23	
4	.51 .39 .30 .23	.48 .37 .29 .23	.34 .27 .21	.30 .24 .20 .27	.22 .18 .16	
5	.45 .33 .24 .18	.43 .31 .23 .17	.28 .21 .16	.25 .19 .15 .23	.18 .13 .11	
6	.41 .29 .20 .14	.39 .27 .20 .14	.25 .18 .13	.22 .16 .12 .20	.15 .11 .09	
7	.38 .26 .18 .12	.36 .24 .17 .12	.22 .16 .11	.20 .14 .10 .18	.13 .09 .07	
8	.35 .23 .15 .10	.33 .22 .15 .10	.20 .14 .09	.18 .12 .08 .16	.11 .08 .06	
9	.33 .21 .14 .09	.31 .20 .13 .09	.18 .12 .08	.17 .11 .07 .15	.10 .07 .05	
10	.30 .19 .12 .08	.29 .18 .12 .07	.17 .11 .07	.15 .10 .06 .14	.09 .06 .04	

SPACING TO MOUNTING HEIGHT RATIO - 1.4

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.80 .80 .80 .80	.78 .78 .78 .78	.75 .75 .75	.72 .72 .72	.69 .69 .69	.67
1	.77 .76 .75 .74	.76 .75 .73 .72	.72 .71 .70	.69 .69 .68	.67 .67 .66	.65
2	.75 .73 .71 .69	.74 .72 .70 .68	.70 .68 .67	.68 .66 .64	.66 .65 .64	.63
3	.73 .70 .68 .66	.72 .69 .67 .65	.68 .66 .64	.66 .65 .63	.65 .63 .62	.62
4	.71 .67 .65 .63	.70 .67 .64 .62	.65 .63 .62	.64 .62 .61	.63 .62 .60	.60
5	.69 .65 .62 .60	.68 .64 .62 .60	.63 .61 .59	.62 .60 .59	.61 .60 .59	.58
6	.67 .63 .60 .58	.66 .62 .60 .58	.61 .59 .58	.61 .59 .57	.60 .58 .57	.56
7	.65 .61 .58 .56	.64 .60 .58 .56	.60 .57 .56	.59 .57 .55	.58 .56 .55	.54
8	.63 .59 .56 .54	.62 .58 .56 .54	.58 .55 .54	.57 .55 .53	.56 .55 .53	.53
9	.61 .56 .54 .52	.60 .56 .53 .52	.56 .53 .52	.55 .53 .51	.55 .53 .51	.51
10	.57 .52 .49 .47	.57 .52 .49 .47	.52 .49 .47	.51 .49 .47	.51 .49 .47	.46

SPACING TO MOUNTING HEIGHT RATIO - 1.0

Test No. HPK09962

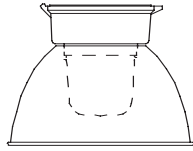
Test No. HPK09959

Test No. HPK09958



HIGH PRESSURE SODIUM-VM4

With Globe & full Cutoff Deep White Reflector*
 50-150 Watt
 Mogul Base



CANDLEPOWER – 100 WATT

9500 lumens
 For 50 watt multiply by 0.42
 For 70 watt multiply by 0.68
 For 150 watt multiply by 1.68

**METAL HALIDE, METAL HALIDE PULSE,
 MERCURY VAPOR-VM4**

With Globe
 70-250 Watt
 Mogul Base

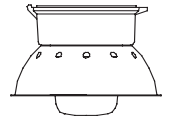


CANDLEPOWER – 175 WATT

14000 lumens
 For 70 MH watt multiply by 0.40
 For 100 MH multiply by 0.64
 For 250 MH multiply by 1.46
 For 150 MHP multiply by 1.00
 For 175 MHP multiply by 1.25
 For 200 MHP multiply by 1.50
 For 100 MV multiply by 0.31
 For 175 MV multiply by 0.56
 For 250 MV multiply by 0.93

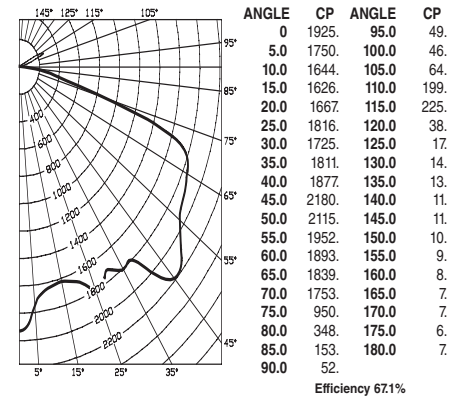
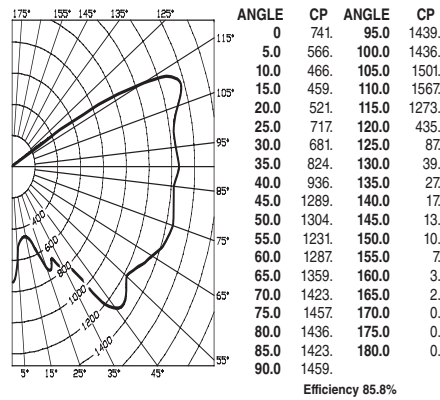
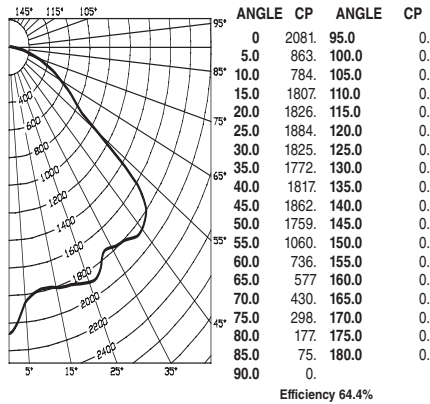
**METAL HALIDE, METAL HALIDE PULSE,
 MERCURY VAPOR-VM4**

With Globe &
 Dome Reflector
 70-250 Watt
 Mogul Base



CANDLEPOWER – 175 WATT

14000 lumens
 For 70 MH watt multiply by 0.40
 For 100 MH multiply by 0.64
 For 250 MH multiply by 1.46
 For 150 MHP multiply by 1.00
 For 175 MHP multiply by 1.25
 For 200 MHP multiply by 1.50
 For 100 MV multiply by 0.31
 For 175 MV multiply by 0.56
 For 250 MV multiply by 0.93



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.76	.76	.76	.74	.74	.74
1	.70	.67	.65	.62	.68	.66
2	.65	.60	.56	.53	.63	.59
3	.60	.54	.49	.45	.58	.53
4	.55	.48	.43	.39	.53	.47
5	.50	.43	.38	.34	.49	.42
6	.47	.39	.33	.28	.45	.38
7	.43	.35	.29	.24	.42	.34
8	.40	.31	.26	.22	.39	.31
9	.36	.28	.23	.19	.36	.28
10	.33	.24	.19	.16	.32	.24

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.95	.95	.95	.89	.89	.89
1	.81	.75	.70	.65	.75	.70
2	.72	.63	.55	.49	.66	.58
3	.65	.53	.45	.38	.59	.50
4	.58	.46	.37	.30	.53	.43
5	.53	.40	.31	.25	.48	.37
6	.48	.35	.27	.21	.44	.33
7	.44	.31	.23	.17	.40	.29
8	.40	.28	.20	.15	.37	.26
9	.37	.25	.18	.12	.34	.23
10	.34	.22	.15	.10	.32	.21

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.80	.80	.80	.77	.77	.77
1	.72	.68	.65	.62	.70	.66
2	.65	.59	.54	.49	.63	.57
3	.58	.51	.45	.40	.56	.49
4	.53	.44	.37	.32	.51	.43
5	.48	.38	.32	.27	.46	.37
6	.44	.34	.27	.23	.42	.33
7	.40	.30	.23	.19	.38	.29
8	.36	.24	.18	.14	.35	.26
9	.34	.24	.18	.14	.33	.23
10	.31	.21	.15	.11	.30	.20

SPACING TO MOUNTING HEIGHT RATIO - 1.3

* Values using Dark Sky gasket kit

SPACING TO MOUNTING HEIGHT RATIO - 2.3

SPACING TO MOUNTING HEIGHT RATIO - 1.5

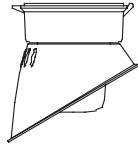
Test No. HPK10125

Test No. HPK09919

Test No. HPK09920

METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Globe &
Angle Reflector
70-250 Watt
Mogul Base



METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Type I All
Glass Refractor
70-250 Watt
Mogul Base



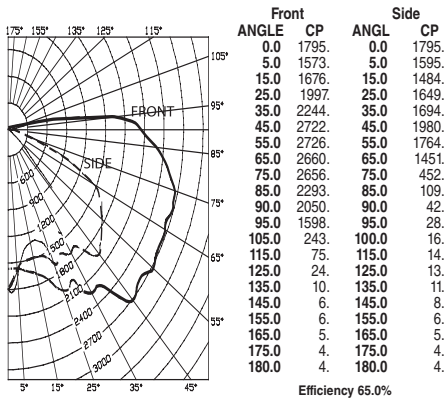
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Type III All
Glass Refractor
70-250 Watt
Mogul Base



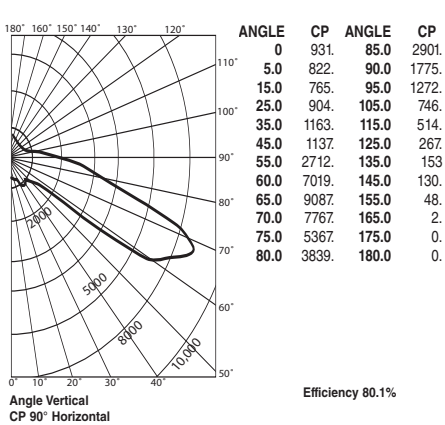
CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH multiply by 0.64
For 250 MH multiply by 1.46
For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
For 100 MV multiply by 0.31
For 175 MV multiply by 0.56
For 250 MV multiply by 0.93



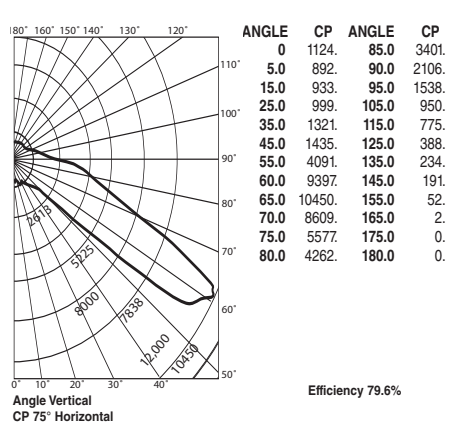
CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH multiply by 0.64
For 250 MH multiply by 1.46
For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
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CANDLEPOWER – 175 WATT

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For 70 MH watt multiply by 0.40
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For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
For 100 MV multiply by 0.31
For 175 MV multiply by 0.56
For 250 MV multiply by 0.93



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80						70						50						30						10						0					
	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30
0	.77	.77	.77	.77	.75	.75	.75	.70	.70	.70	.66	.66	.66	.63	.63	.63	.61	.77	.77	.77	.77	.75	.75	.75	.70	.70	.70	.66	.66	.66	.63	.63	.63	.61		
1	.68	.64	.60	.57	.66	.62	.59	.55	.55	.53	.55	.52	.50	.51	.50	.48	.46	.68	.64	.60	.57	.66	.62	.59	.55	.55	.53	.55	.52	.50	.51	.50	.48	.46		
2	.61	.55	.49	.45	.59	.53	.48	.44	.44	.41	.44	.41	.41	.39	.37	.37	.35	.61	.55	.49	.45	.59	.53	.48	.44	.44	.41	.44	.41	.39	.37	.37	.35	.35	.33	
3	.56	.48	.42	.37	.53	.46	.41	.36	.43	.39	.35	.41	.37	.34	.39	.35	.32	.31	.56	.48	.42	.37	.53	.46	.41	.36	.43	.39	.35	.41	.37	.34	.39	.35	.32	.31
4	.50	.42	.35	.30	.48	.40	.34	.30	.38	.33	.29	.36	.31	.28	.34	.30	.27	.25	.50	.42	.35	.30	.48	.40	.34	.30	.38	.33	.29	.36	.31	.28	.34	.30	.27	.25
5	.46	.37	.30	.25	.44	.36	.29	.25	.34	.28	.24	.32	.27	.23	.30	.26	.23	.21	.46	.37	.30	.25	.44	.36	.29	.25	.34	.28	.24	.32	.27	.23	.30	.26	.23	.21
6	.42	.33	.26	.22	.40	.32	.26	.21	.30	.25	.21	.28	.24	.20	.27	.23	.20	.18	.42	.33	.26	.22	.40	.32	.26	.21	.30	.25	.21	.28	.24	.20	.27	.23	.20	.18
7	.39	.29	.23	.18	.37	.28	.22	.18	.27	.21	.18	.25	.21	.17	.24	.20	.17	.15	.39	.29	.23	.18	.37	.28	.22	.18	.27	.21	.18	.25	.21	.17	.24	.20	.17	.15
8	.35	.26	.20	.16	.34	.25	.19	.15	.24	.19	.15	.23	.18	.15	.21	.17	.14	.13	.35	.26	.20	.16	.34	.25	.19	.15	.24	.19	.15	.23	.18	.15	.21	.17	.14	.13
9	.33	.23	.17	.13	.31	.23	.17	.13	.21	.16	.13	.20	.16	.13	.19	.15	.12	.11	.33	.23	.17	.13	.31	.23	.17	.13	.21	.16	.13	.20	.16	.13	.19	.15	.12	.11
10	.30	.20	.15	.11	.29	.20	.14	.11	.19	.14	.10	.18	.13	.10	.17	.13	.10	.09	.30	.20	.15	.11	.29	.20	.14	.11	.19	.14	.10	.18	.13	.10	.17	.13	.10	.09

SPACING TO MOUNTING HEIGHT RATIO - 1.6

Test No. HPK09921

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80						70						50						30						10						0					
	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30
0	.93	.93	.93	.89	.89	.89	.89	.83	.83	.83	.77	.77	.77	.71	.71	.68	.93	.93	.93	.89	.89	.89	.89	.83	.83	.83	.77	.77	.77	.71	.71	.68				
1	.78	.72	.66	.61	.75	.69	.64	.59	.63	.59	.55	.58	.54	.51	.53	.50	.48	.45	.78	.72	.66	.61	.75	.69	.64	.59	.63	.59	.55	.58	.54	.51	.53	.50	.48	.45
2	.68	.58	.50	.43	.64	.55	.48	.41	.50	.44	.38	.45	.40	.36	.41	.37	.33	.30	.68	.58	.50	.43	.64	.55	.48	.41	.50	.44	.38	.45	.40	.36	.41	.37	.33	.30
3	.59	.47	.38	.31	.56	.45	.37	.30	.41	.34	.28	.37	.31	.26	.33	.28	.24	.21	.59	.47	.38	.31	.56	.45	.37	.30	.41	.34	.28	.37	.31	.26	.33	.28	.24	.21
4	.53	.40	.30	.23	.50	.38	.29	.22	.34	.27	.21	.31	.24	.19	.27	.22	.18	.15	.53	.40	.30	.23	.50	.38	.29	.22	.34	.27	.21	.31	.24	.19	.27	.22	.18	.15
5	.47	.34	.25	.18	.45	.33	.24	.17	.29	.22	.16	.26	.20	.15	.23	.18	.14	.11	.47	.34	.25	.18	.45	.33	.24	.17	.29	.22	.16	.26	.20	.15	.23	.18	.14	.11
6	.43	.30	.21	.15	.41	.28	.20	.14	.26	.18	.13	.23	.17	.12	.21	.15	.11	.08	.43	.30	.21	.15	.41	.28	.20	.14	.26	.18	.13	.23	.17	.12	.21	.15	.11	.08
7	.40	.26	.18	.12	.37	.25	.17	.12	.23	.16	.11	.20	.14	.10	.18	.13	.09	.07	.40	.26	.18	.12	.37	.25	.17	.12	.23	.16	.11	.20	.14	.10	.18	.13	.09	.07
8	.36	.24	.16	.10	.34	.23	.15	.10	.20	.14	.09	.18	.12	.08	.17	.11	.07	.05	.36	.24	.16	.10	.34	.23	.15	.10	.20	.14	.09	.18	.12	.08	.17	.11	.07	.05
9	.34	.21	.14	.09	.32	.20	.13	.08	.19	.12	.08	.17	.11	.07	.15	.10	.06	.04	.34	.21	.14	.09	.32	.20	.13	.08	.19	.12	.08	.17	.11	.07	.15	.10	.06	.04
10	.32	.20	.12	.08	.30	.19	.12	.07	.17	.11	.07	.15	.10	.06	.14	.09	.05	.04	.32	.20	.12	.08	.30	.19	.12	.07	.17	.11	.07	.15	.10	.06	.14	.09	.05	.04

SPACING TO MOUNTING HEIGHT RATIO - 1.82 90-270°

Test No. HPK09934

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80						70						50						30						10						0					
	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30	80	70	60	50	40	30
0	.92	.92	.92	.88	.88	.88	.88	.82	.82	.82	.76	.76	.76	.70	.70	.67	.92	.92	.92	.88	.88	.88	.88	.82	.82	.82	.76	.76	.76	.70	.70	.67				
1	.78	.72	.66	.61	.74	.68	.63	.59	.63	.58	.55	.57	.54	.51	.52	.50	.47	.44	.78	.72	.66	.61	.74	.68	.63	.59	.63	.58	.55	.57	.54	.51	.52	.50	.47	.44
2	.67	.57	.49	.43	.64	.55	.47	.41	.50	.44	.38	.45	.40	.36	.41	.36	.33	.30	.67	.57	.49	.43	.64	.55	.47	.41	.50	.44	.38	.45	.40	.36	.41	.36	.33	.30
3	.59	.47	.38	.31	.56	.45	.37	.30	.41	.34	.28	.37	.31	.26	.33	.28	.24	.21	.59	.47	.38	.31	.56	.45	.37	.30	.41	.34	.28	.37	.31	.26	.33	.28	.24	.21
4	.52	.40	.30	.23	.49	.38	.29	.22	.34	.27	.21	.31	.24	.19	.27	.22	.18	.15	.52	.40	.30	.23	.49	.38	.29											

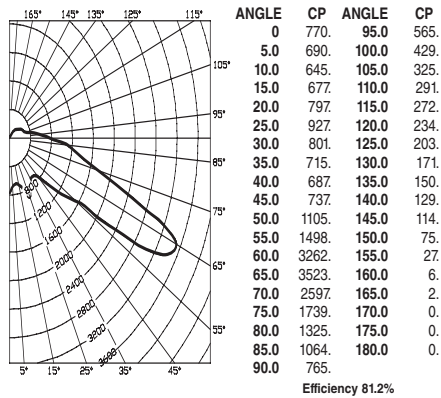
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Type V All Glass Refractor
70-250 Watt
Mogul Base



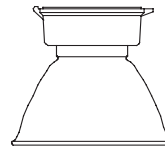
CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH multiply by 0.68
For 250 MH multiply by 1.46
For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
For 100 MV multiply by 0.31
For 175 MV multiply by 0.56
For 250 MV multiply by 0.93



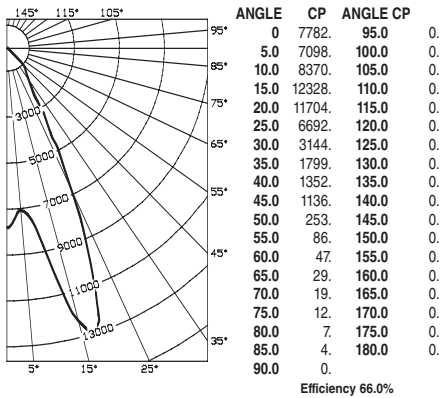
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Enclosed Reflector
70-250 Watt
Mogul Base



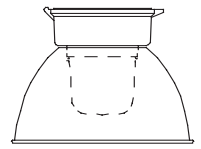
CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH multiply by 0.68
For 250 MH multiply by 1.46
For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
For 100 MV multiply by 0.31
For 175 MV multiply by 0.56
For 250 MV multiply by 0.93



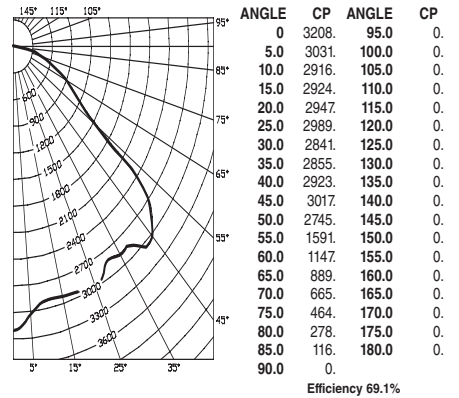
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM4

With Globe & Full Cutoff Deep White Reflector*
70-250 Watt
Mogul Base



CANDLEPOWER – 175 WATT

14000 lumens
For 70 MH watt multiply by 0.40
For 100 MH multiply by 0.68
For 250 MH multiply by 1.46
For 150 MHP multiply by 1.00
For 175 MHP multiply by 1.25
For 200 MHP multiply by 1.50
For 100 MV multiply by 0.31
For 175 MV multiply by 0.56
For 250 MV multiply by 0.93



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.92 .92 .92 .89 .89 .89 .89 .82 .82 .82 .76 .76 .76 .71 .71 .71 .68					
1	.79 .73 .67 .62 .75 .70 .65 .60 .64 .60 .56 .59 .55 .52 .54 .51 .49 .46					
2	.69 .59 .51 .45 .65 .56 .49 .43 .42 .35 .30 .38 .32 .27 .34 .30 .25 .23					
3	.60 .49 .40 .33 .57 .46 .38 .32 .42 .35 .30 .38 .32 .27 .34 .30 .25 .23					
4	.53 .40 .31 .24 .50 .38 .30 .23 .35 .27 .22 .31 .25 .20 .28 .23 .18 .16					
5	.47 .34 .25 .18 .45 .32 .24 .18 .29 .22 .16 .26 .20 .15 .24 .18 .14 .11					
6	.43 .30 .21 .15 .41 .29 .20 .14 .26 .19 .13 .23 .17 .12 .21 .15 .11 .09					
7	.40 .27 .18 .13 .37 .26 .18 .12 .23 .16 .11 .21 .15 .10 .19 .13 .09 .07					
8	.37 .24 .16 .11 .35 .23 .15 .10 .21 .14 .09 .19 .13 .09 .17 .12 .08 .06					
9	.34 .22 .14 .09 .32 .21 .14 .09 .19 .13 .08 .17 .12 .08 .16 .11 .07 .05					
10	.32 .20 .13 .08 .30 .19 .12 .08 .17 .11 .07 .16 .10 .06 .14 .09 .06 .04					

SPACING TO MOUNTING HEIGHT RATIO - 1.4

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.80 .80 .80 .80 .78 .78 .78 .78 .75 .75 .75 .71 .71 .71 .69 .69 .69 .67					
1	.77 .76 .75 .73 .76 .74 .73 .72 .72 .71 .70 .69 .69 .68 .67 .66 .66 .65					
2	.75 .73 .71 .69 .74 .71 .70 .68 .69 .68 .67 .67 .66 .65 .66 .65 .64 .63					
3	.73 .70 .67 .65 .71 .69 .67 .65 .67 .65 .64 .66 .64 .63 .64 .63 .62 .61					
4	.70 .67 .64 .62 .69 .66 .64 .62 .65 .63 .61 .64 .62 .61 .62 .61 .60 .59					
5	.68 .64 .62 .60 .67 .64 .61 .59 .63 .61 .59 .62 .60 .58 .61 .59 .58 .57					
6	.66 .62 .59 .57 .66 .62 .59 .57 .61 .59 .57 .60 .58 .57 .59 .58 .56 .56					
7	.64 .60 .57 .55 .64 .60 .57 .55 .59 .57 .55 .58 .56 .55 .58 .56 .54 .54					
8	.62 .58 .55 .53 .62 .58 .55 .53 .57 .55 .53 .56 .54 .53 .56 .54 .52 .52					
9	.60 .56 .53 .51 .60 .55 .53 .51 .55 .52 .51 .54 .52 .51 .54 .52 .50 .50					
10	.56 .51 .48 .46 .56 .51 .48 .46 .51 .48 .46 .50 .48 .46 .50 .48 .46 .45					

SPACING TO MOUNTING HEIGHT RATIO - 1.0

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80	70	50	30	10	0
% WALL REFLECTANCE 1w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.81 .81 .81 .81 .79 .79 .79 .79 .76 .76 .76 .73 .73 .73 .70 .70 .70 .68					
1	.75 .72 .70 .67 .73 .71 .68 .66 .68 .66 .64 .65 .64 .62 .63 .61 .60 .59					
2	.69 .64 .60 .57 .68 .63 .59 .56 .61 .58 .55 .59 .56 .54 .57 .55 .53 .51					
3	.64 .58 .53 .49 .63 .57 .52 .49 .55 .51 .48 .53 .50 .47 .51 .49 .46 .45					
4	.59 .52 .46 .42 .57 .51 .46 .42 .49 .45 .41 .48 .44 .41 .46 .43 .40 .39					
5	.54 .46 .41 .36 .53 .46 .40 .36 .44 .39 .36 .43 .39 .36 .42 .38 .35 .34					
6	.50 .42 .36 .32 .49 .41 .36 .32 .40 .35 .32 .39 .35 .31 .38 .34 .31 .30					
7	.46 .37 .32 .28 .45 .37 .32 .28 .36 .31 .27 .35 .31 .27 .34 .30 .27 .26					
8	.43 .34 .28 .24 .42 .33 .28 .24 .32 .27 .24 .31 .27 .24 .31 .27 .24 .22					
9	.39 .30 .25 .21 .38 .30 .25 .21 .29 .24 .21 .28 .24 .21 .28 .24 .21 .19					
10	.35 .26 .21 .17 .35 .26 .21 .17 .25 .20 .17 .25 .20 .17 .24 .20 .17 .16					

SPACING TO MOUNTING HEIGHT RATIO - 1.4

*Values using Dark Sky gasket kit

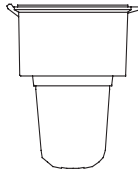
Test No. HPK09929

Test No. HPK09922

Test No. HPK10129

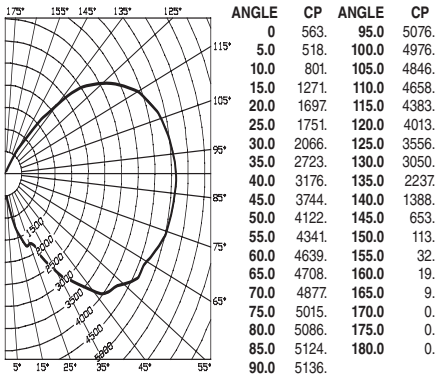
HIGH PRESSURE SODIUM-VM5

With Globe
200-600 Watt
Mogul Base



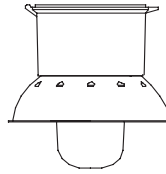
CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



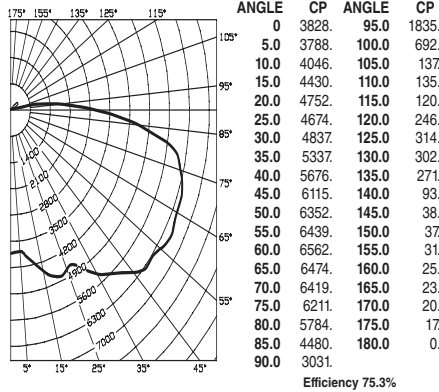
HIGH PRESSURE SODIUM-VM5

With Globe & Reflector
200-600 Watt
Mogul Base



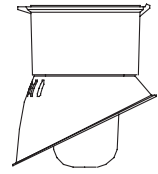
CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



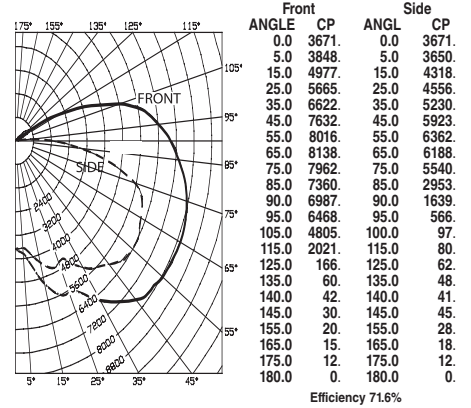
HIGH PRESSURE SODIUM-VM5

With Globe & Angle Reflector
200-600 Watt
Mogul Base



CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	20% Effective Floor Cavity Reflectance					
	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70	50	30	10	0	0
ROOM CAVITY RATIO RCR	97	97	97	90	90	90
0	83	77	71	66	61	59
1	76	70	65	60	55	52
2	73	64	56	50	46	44
3	66	55	46	39	36	34
4	59	47	38	31	28	26
5	54	41	32	25	22	20
6	49	36	27	21	18	17
7	45	32	23	18	15	14
8	41	28	20	15	12	11
9	38	25	18	13	10	9
10	35	23	15	11	8	7

SPACING TO MOUNTING HEIGHT RATIO - 4.3

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	20% Effective Floor Cavity Reflectance					
	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70	50	30	10	0	0
ROOM CAVITY RATIO RCR	49	37	29	23	18	16
0	88	88	88	85	85	85
1	76	70	65	60	55	53
2	67	58	51	45	41	38
3	60	49	42	35	31	28
4	54	42	34	28	24	22
5	49	37	29	23	19	18
6	44	33	25	19	16	15
7	41	29	21	16	13	12
8	37	26	18	13	10	9
9	35	23	16	11	8	7
10	32	20	14	9	6	5

SPACING TO MOUNTING HEIGHT RATIO - 2.2

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE l _{cc}	20% Effective Floor Cavity Reflectance					
	80	70	50	30	10	0
% WALL REFLECTANCE l _w	70	50	30	10	0	0
ROOM CAVITY RATIO RCR	83	83	83	80	80	80
0	83	83	83	80	80	80
1	72	67	63	59	56	55
2	64	57	50	45	41	39
3	58	49	42	36	32	29
4	52	42	35	29	25	22
5	47	37	29	24	20	18
6	43	32	25	20	16	15
7	39	29	22	17	13	12
8	36	25	19	14	11	10
9	33	23	16	12	9	8
10	30	20	14	10	7	6

SPACING TO MOUNTING HEIGHT RATIO - 2.2

Test No. HPK09924

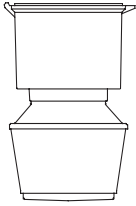
Test No. HPK09927

Test No. HPK09928

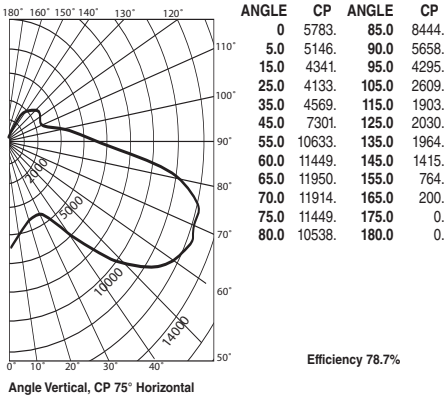


KILLARK®

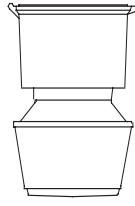
HIGH PRESSURE SODIUM-VM5
 With Type II 12" Spintop Refractor
 00-600 Watt
 Mogul Base



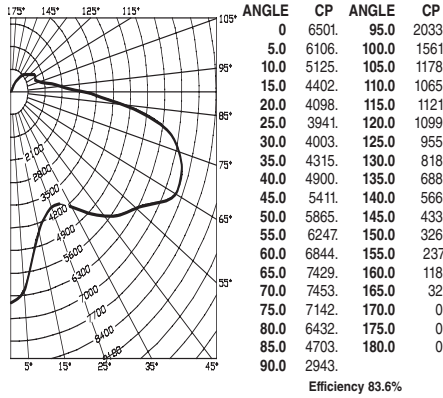
CANDLEPOWER – 400 WATT
 51000 lumens
 For 200 watt multiply by 0.43
 For 250 watt multiply by 0.53



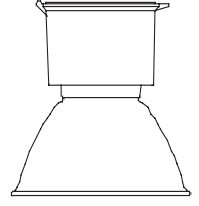
HIGH PRESSURE SODIUM-VM5
 With Type V 12" Spintop Reflector
 200-600 Watt
 Mogul Base



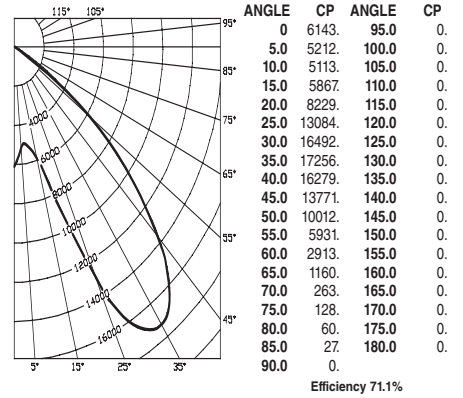
CANDLEPOWER – 400 WATT
 51000 lumens
 For 200 watt multiply by 0.43
 For 250 watt multiply by 0.53



HIGH PRESSURE SODIUM-VM5
 With Enclosed Reflector
 200-600 Watt
 Mogul Base



CANDLEPOWER – 400 WATT
 51000 lumens
 For 200 watt multiply by 0.43
 For 250 watt multiply by 0.53
 For 600 watt multiply by 1.76



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.89 .89 .69 .69 .85 .85 .85 .85 .78 .78 .71 .71 .71 .64 .64 .61					
1	.77 .72 .67 .63 .73 .68 .64 .60 .62 .58 .55 .55 .53 .50 .50 .48 .45 .42					
2	.68 .60 .53 .47 .64 .56 .50 .45 .51 .45 .41 .45 .41 .37 .40 .37 .34 .31					
3	.61 .50 .42 .36 .57 .48 .40 .34 .43 .37 .32 .38 .33 .29 .34 .30 .26 .23					
4	.54 .43 .35 .28 .51 .41 .33 .27 .36 .30 .25 .32 .27 .23 .29 .24 .21 .18					
5	.49 .37 .29 .23 .46 .35 .28 .22 .32 .25 .20 .28 .23 .18 .25 .20 .17 .14					
6	.45 .33 .25 .19 .42 .31 .24 .18 .28 .21 .17 .25 .19 .15 .22 .17 .14 .11					
7	.41 .29 .21 .16 .39 .28 .20 .15 .25 .19 .14 .22 .17 .13 .20 .15 .11 .09					
8	.38 .26 .19 .14 .36 .25 .18 .13 .22 .16 .12 .20 .15 .11 .18 .13 .10 .08					
9	.35 .24 .17 .12 .33 .23 .16 .11 .20 .14 .10 .18 .13 .09 .16 .12 .08 .07					
10	.33 .22 .15 .10 .31 .21 .14 .10 .19 .13 .09 .17 .12 .08 .15 .10 .07 .06					

SPACING TO MOUNTING HEIGHT RATIO - 1.38 0-180°

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.96 .96 .96 .96 .93 .93 .93 .93 .86 .86 .86 .80 .80 .74 .74 .74 .71					
1	.83 .77 .71 .67 .79 .74 .69 .64 .68 .64 .60 .62 .59 .56 .57 .54 .52 .49					
2	.73 .63 .55 .49 .69 .60 .53 .47 .55 .49 .44 .50 .45 .41 .46 .42 .38 .35					
3	.64 .53 .44 .37 .61 .51 .42 .36 .46 .39 .34 .42 .36 .31 .38 .33 .29 .26					
4	.58 .46 .37 .30 .55 .44 .35 .29 .40 .33 .27 .36 .30 .25 .33 .28 .24 .21					
5	.53 .40 .31 .24 .50 .38 .30 .23 .35 .27 .22 .32 .25 .20 .29 .23 .19 .17					
6	.48 .35 .26 .20 .45 .33 .25 .19 .30 .23 .18 .28 .22 .17 .25 .20 .16 .13					
7	.44 .31 .22 .16 .41 .29 .22 .16 .27 .20 .15 .25 .18 .14 .22 .17 .13 .11					
8	.41 .28 .20 .14 .38 .27 .19 .14 .24 .18 .13 .22 .16 .12 .20 .15 .11 .09					
9	.38 .25 .17 .12 .36 .24 .17 .12 .22 .16 .11 .20 .14 .10 .18 .13 .10 .08					
10	.35 .23 .15 .11 .33 .22 .15 .10 .20 .14 .10 .18 .13 .09 .17 .12 .08 .07					

SPACING TO MOUNTING HEIGHT RATIO - .8

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.85 .85 .85 .85 .83 .83 .83 .83 .79 .79 .79 .76 .76 .76 .73 .73 .73 .71					
1	.79 .77 .75 .72 .78 .75 .73 .71 .72 .71 .69 .70 .68 .67 .67 .66 .65 .64					
2	.74 .70 .66 .63 .73 .68 .65 .62 .66 .63 .61 .64 .62 .59 .62 .60 .58 .57					
3	.69 .63 .59 .55 .68 .62 .58 .54 .60 .57 .54 .58 .55 .53 .57 .54 .52 .51					
4	.64 .56 .51 .47 .62 .56 .51 .47 .54 .50 .46 .52 .49 .46 .51 .48 .45 .44					
5	.58 .51 .45 .41 .57 .50 .45 .41 .48 .44 .40 .47 .43 .40 .46 .42 .39 .38					
6	.54 .45 .39 .35 .52 .44 .39 .35 .43 .38 .35 .42 .38 .34 .41 .37 .34 .33					
7	.49 .40 .34 .30 .48 .39 .34 .30 .38 .33 .29 .37 .33 .29 .36 .32 .29 .28					
8	.44 .35 .29 .25 .43 .34 .29 .25 .34 .28 .25 .33 .28 .25 .32 .28 .24 .23					
9	.40 .31 .25 .21 .39 .30 .25 .21 .29 .24 .21 .29 .24 .20 .28 .24 .20 .19					
10	.35 .25 .19 .15 .34 .25 .19 .15 .24 .19 .15 .23 .19 .15 .23 .18 .15 .14					

SPACING TO MOUNTING HEIGHT RATIO - 2.3

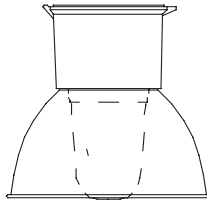
Test No. HPK09932

Test No. HPK09931

Test No. HPK09933

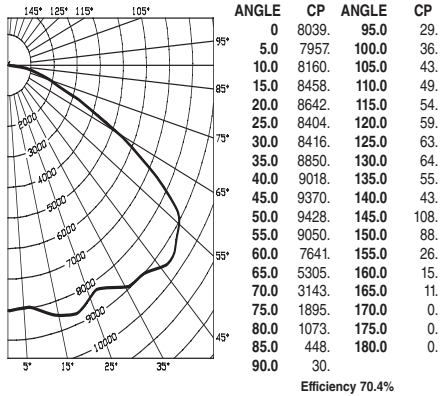
HIGH PRESSURE SODIUM-VM5

With Globe & Deep White Reflector
200-400 Watt
Mogul Base



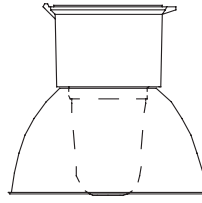
CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



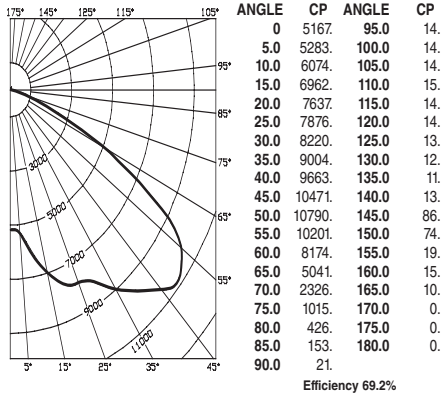
HIGH PRESSURE SODIUM-VM5

With Globe & Deep Alzak Reflector
200-400 Watt
Mogul Base



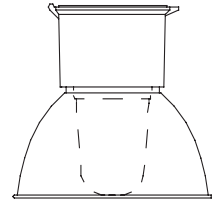
CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



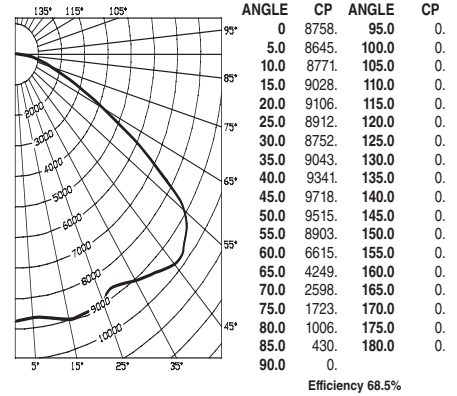
HIGH PRESSURE SODIUM-VM5

With Globe & Full Cutoff Deep White Reflector*
200-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

51000 lumens
For 200 watt multiply by 0.43
For 250 watt multiply by 0.53



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE I _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE I _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.84 .84 .84 .84	.82 .82 .82 .82	.78 .78 .78	.75 .75 .75 .72 .72 .70		
1	.77 .74 .71 .68	.75 .72 .69 .67	.69 .67 .65	.66 .64 .62 .63 .62 .60 .59		
2	.70 .65 .60 .56	.68 .63 .59 .55	.61 .57 .54	.58 .55 .53 .56 .54 .51 .50		
3	.64 .57 .51 .47	.62 .56 .51 .46	.54 .49 .45	.52 .48 .45 .50 .46 .44 .42		
4	.58 .50 .43 .39	.57 .49 .43 .38	.47 .42 .38	.45 .41 .37 .44 .40 .37 .35		
5	.53 .44 .37 .32	.51 .43 .37 .32	.41 .36 .32	.40 .35 .31 .38 .34 .31 .29		
6	.48 .39 .32 .28	.47 .38 .32 .28	.37 .31 .27	.35 .31 .27 .34 .30 .27 .25		
7	.44 .34 .28 .23	.43 .34 .28 .23	.33 .27 .23	.31 .26 .23 .30 .26 .23 .21		
8	.41 .30 .24 .20	.39 .30 .24 .20	.29 .23 .20	.28 .23 .19 .27 .23 .19 .18		
9	.37 .27 .21 .17	.36 .27 .21 .17	.26 .21 .17	.25 .20 .17 .24 .20 .17 .15		
10	.34 .24 .18 .14	.33 .23 .18 .14	.23 .17 .14	.22 .17 .14 .21 .17 .13 .12		

SPACING TO MOUNTING HEIGHT RATIO - 1.7

Test No. HPK09925

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE I _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE I _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.83 .83 .83 .83	.81 .81 .81 .81	.77 .77 .77	.74 .74 .74	.71 .71 .71 .69	
1	.76 .73 .70 .68	.74 .71 .69 .67	.68 .66 .64	.66 .64 .62	.63 .62 .60 .59	
2	.70 .64 .60 .56	.68 .63 .59 .55	.60 .57 .54	.58 .55 .53	.56 .54 .52 .50	
3	.64 .57 .51 .47	.62 .55 .50 .46	.53 .49 .46	.51 .48 .45	.50 .47 .44 .42	
4	.57 .49 .43 .38	.56 .48 .43 .38	.46 .42 .38	.45 .41 .37	.43 .40 .37 .35	
5	.52 .43 .37 .32	.51 .42 .36 .32	.41 .35 .31	.39 .35 .31	.38 .34 .31 .29	
6	.47 .38 .31 .27	.46 .37 .31 .27	.36 .30 .26	.35 .30 .26	.33 .29 .26 .24	
7	.43 .33 .27 .22	.42 .32 .26 .22	.31 .26 .22	.30 .25 .22	.29 .25 .21 .20	
8	.39 .29 .23 .18	.38 .28 .22 .18	.27 .22 .18	.27 .22 .18	.26 .21 .18 .16	
9	.36 .26 .20 .16	.35 .25 .19 .15	.25 .19 .15	.24 .19 .15	.23 .18 .15 .14	
10	.32 .22 .16 .12	.31 .22 .16 .12	.21 .16 .12	.20 .15 .12	.20 .15 .12 .10	

SPACING TO MOUNTING HEIGHT RATIO - 2.5

Test No. HPK09926

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE I _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE I _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.82 .82 .82 .82	.80 .80 .80 .80	.77 .77 .77	.73 .73 .73	.70 .70 .70 .69	
1	.75 .72 .70 .67	.74 .71 .68 .66	.68 .66 .64	.65 .63 .62	.63 .61 .60 .59	
2	.69 .64 .59 .56	.67 .63 .59 .55	.60 .57 .54	.58 .55 .53	.56 .54 .51 .50	
3	.63 .57 .51 .47	.62 .56 .51 .47	.53 .49 .46	.52 .48 .45	.50 .47 .44 .43	
4	.58 .50 .44 .39	.56 .49 .43 .39	.47 .42 .39	.46 .41 .38	.44 .40 .38 .36	
5	.53 .44 .38 .33	.51 .43 .37 .33	.42 .37 .33	.40 .36 .32	.39 .35 .32 .31	
6	.48 .39 .33 .29	.47 .38 .33 .28	.37 .32 .28	.36 .31 .28	.35 .31 .28 .26	
7	.44 .35 .29 .24	.43 .34 .28 .24	.33 .28 .24	.32 .27 .24	.31 .27 .24 .22	
8	.40 .31 .25 .21	.39 .30 .25 .21	.29 .24 .20	.29 .24 .20	.28 .23 .20 .19	
9	.37 .28 .22 .18	.36 .27 .22 .18	.27 .21 .18	.26 .21 .18	.25 .21 .18 .16	
10	.34 .24 .18 .14	.33 .24 .18 .14	.23 .18 .14	.22 .18 .14	.22 .17 .14 .13	

SPACING TO MOUNTING HEIGHT RATIO - 1.6

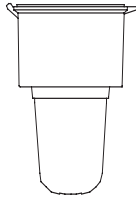
*Values using Spacer Kit

Test No. HPK10103



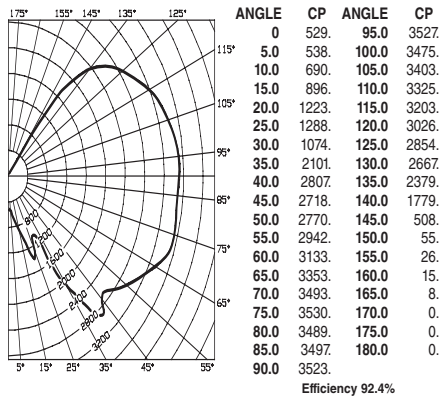
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



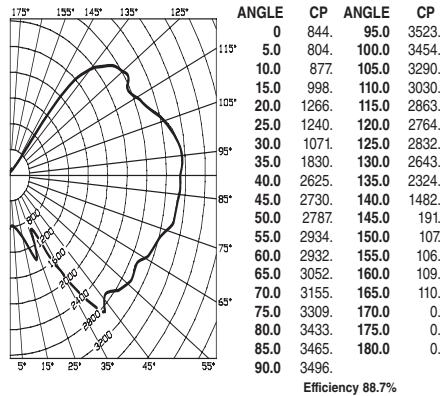
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe & Guard
250-400 Watt
Mogul Base



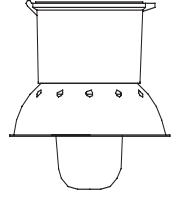
CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



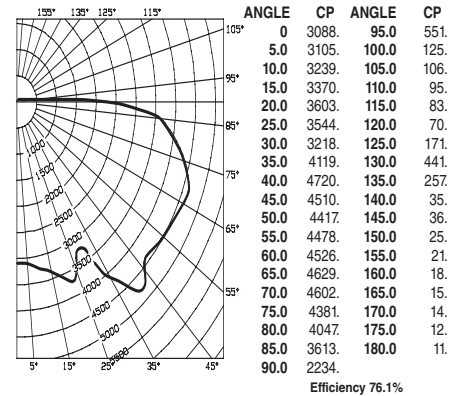
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe & Dome Reflector
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% WALL REFLECTANCE 1w	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	100	100	100	92	92	92	79	79	79	66	66	66	55	55	55	50	50	50	40	40	40	38	36	31						
1	86	79	73	68	63	61	57	53	50	47	44	40	38	36	31															
2	76	66	58	52	48	45	40	37	33	32	29	26	22																	
3	68	57	48	41	38	37	31	28	26	23	20	16																		
4	61	49	40	33	30	30	25	22	20	18	15	12																		
5	55	42	33	27	25	25	20	17	15	13	10	07																		
6	51	37	28	22	20	20	16	14	12	10	07	04																		
7	46	33	25	18	16	16	12	10	08	05	04																			
8	43	29	21	16	14	14	10	08	06	04																				
9	39	26	19	13	11	11	08	06	04																					
10	36	24	16	11	09	09	06	04																						

SPACING TO MOUNTING HEIGHT RATIO - 3.6

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% WALL REFLECTANCE 1w	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	96	96	96	89	89	89	76	76	76	64	64	64	53	53	53	48	48	48	38	38	38	29	29	29						
1	82	76	70	65	61	58	55	51	48	45	42	38	36	34	29															
2	73	64	56	50	46	43	39	35	32	31	28	25	21																	
3	65	54	46	39	35	34	29	26	23	21	18	15																		
4	59	47	38	31	28	28	23	20	18	15	12																			
5	53	41	32	26	24	24	20	17	15	13	10	07																		
6	49	36	27	21	19	19	15	13	11	09	06	04																		
7	45	32	24	18	16	16	12	10	08	05	04																			
8	41	28	20	15	13	13	10	08	06	04																				
9	38	26	18	13	11	11	08	06	04																					
10	35	23	16	11	09	09	06	04																						

SPACING TO MOUNTING HEIGHT RATIO - 3.2

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% WALL REFLECTANCE 1w	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	90	90	90	87	87	87	83	83	83	78	78	78	74	74	74	73	73	73	61	61	61	52	52	52						
1	76	71	65	61	57	54	50	47	44	40	38	36	34	29																
2	68	59	51	45	41	38	34	31	28	25	21																			
3	61	50	42	36	33	31	27	24	21	18	15																			
4	54	43	35	28	25	24	20	17	15	12																				
5	49	37	29	23	21	21	17	15	13	10	07																			
6	45	33	25	19	17	17	13	11	09	06	04																			
7	41	29	22	16	14	14	10	08	06	04																				
8	38	26	19	14	12	12	09	07	05	04																				
9	35	24	16	12	10	10	07	05	04																					
10	32	21	14	09	08	08	05	04																						

SPACING TO MOUNTING HEIGHT RATIO - 2.0

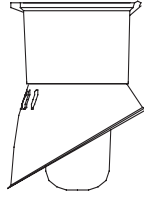
Test No. HPK09911

Test No. HPK09912

Test No. HPK09918

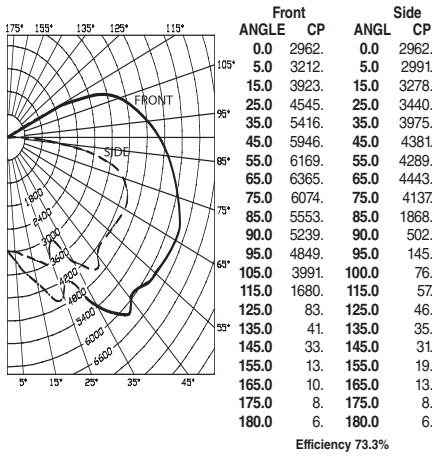
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe & Angle Reflector
250-400 Watt
Mogul Base



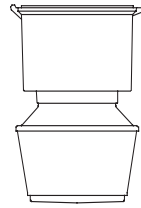
CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



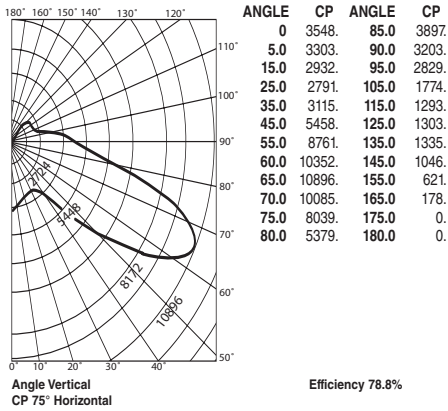
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Type II 12" Spintop Refractor
250-400 Watt
Mogul Base



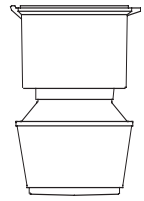
CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



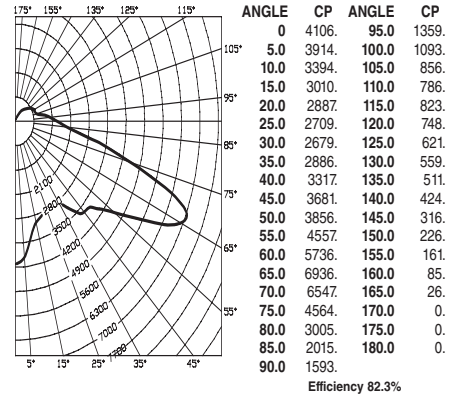
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Type V 12" Spintop Refractor
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



COEFFICIENTS OF UTILIZATION --- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.85 .85 .85 .85	.82 .82 .82 .82	.76 .76 .76	.70 .70 .70	.65 .65 .65	.63
1	.74 .69 .65 .61	.71 .66 .62 .59	.61 .58 .55	.56 .54 .51	.52 .50 .48	.46
2	.66 .59 .52 .47	.63 .56 .50 .46	.52 .47 .43	.48 .44 .40	.44 .41 .38	.36
3	.60 .50 .43 .38	.57 .48 .42 .37	.45 .39 .35	.41 .37 .33	.38 .34 .31	.29
4	.54 .44 .36 .30	.51 .42 .35 .30	.39 .33 .28	.36 .31 .27	.33 .29 .25	.23
5	.49 .38 .31 .25	.46 .37 .30 .24	.34 .28 .23	.31 .26 .22	.29 .24 .21	.19
6	.45 .34 .26 .21	.42 .32 .26 .21	.30 .24 .20	.28 .22 .19	.26 .21 .18	.16
7	.41 .30 .23 .18	.39 .29 .22 .17	.27 .21 .16	.25 .19 .16	.23 .18 .15	.13
8	.37 .26 .20 .15	.36 .25 .19 .15	.24 .18 .14	.22 .17 .13	.20 .16 .12	.11
9	.35 .24 .17 .13	.33 .23 .17 .12	.21 .16 .12	.20 .15 .11	.18 .14 .11	.09
10	.32 .21 .15 .10	.30 .20 .14 .10	.19 .13 .10	.17 .12 .09	.16 .12 .08	.07

SPACING TO MOUNTING HEIGHT RATIO - 2.2

COEFFICIENTS OF UTILIZATION --- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.89 .89 .89 .89	.85 .85 .85 .85	.77 .77 .77	.70 .70 .70	.64 .64 .64	.61
1	.78 .73 .68 .64	.74 .69 .65 .61	.62 .59 .56	.56 .53 .51	.50 .48 .46	.43
2	.69 .60 .53 .48	.65 .57 .51 .46	.51 .46 .42	.46 .42 .38	.41 .38 .35	.32
3	.61 .51 .43 .37	.57 .48 .41 .35	.43 .37 .32	.38 .33 .29	.34 .30 .27	.24
4	.55 .44 .35 .29	.51 .41 .34 .28	.37 .30 .25	.33 .27 .23	.29 .25 .21	.18
5	.50 .38 .30 .23	.46 .36 .28 .22	.32 .25 .21	.28 .23 .19	.25 .20 .17	.14
6	.45 .33 .25 .19	.42 .31 .24 .19	.28 .22 .17	.25 .19 .15	.22 .17 .14	.12
7	.41 .29 .22 .16	.39 .28 .21 .16	.25 .19 .14	.22 .17 .13	.20 .15 .11	.09
8	.38 .26 .19 .14	.36 .25 .18 .13	.22 .16 .12	.20 .15 .11	.18 .13 .10	.08
9	.35 .24 .17 .12	.33 .23 .16 .11	.20 .14 .10	.18 .13 .09	.16 .12 .08	.07
10	.33 .22 .15 .10	.31 .20 .14 .10	.18 .13 .09	.16 .12 .08	.15 .10 .07	.06

SPACING TO MOUNTING HEIGHT RATIO - 1.88 0-180°

COEFFICIENTS OF UTILIZATION --- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE lcc	80	70	50	30	10	0
% WALL REFLECTANCE lw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.95 .95 .95 .95	.91 .91 .91 .91	.84 .84 .84	.78 .78 .78	.73 .73 .73	.70
1	.82 .77 .72 .67	.79 .74 .69 .65	.68 .64 .61	.62 .59 .56	.57 .55 .53	.50
2	.73 .64 .56 .50	.69 .61 .54 .48	.56 .50 .45	.51 .46 .42	.47 .43 .40	.37
3	.64 .53 .45 .38	.61 .51 .43 .37	.47 .40 .35	.43 .37 .33	.39 .34 .30	.28
4	.57 .45 .36 .30	.54 .43 .35 .29	.39 .32 .27	.36 .30 .25	.33 .28 .23	.21
5	.52 .39 .30 .23	.49 .37 .29 .23	.34 .27 .21	.31 .25 .20	.28 .23 .18	.16
6	.47 .34 .26 .20	.45 .33 .25 .19	.30 .23 .18	.27 .21 .17	.25 .20 .15	.13
7	.43 .30 .22 .16	.41 .29 .21 .16	.27 .20 .15	.24 .18 .14	.22 .17 .13	.11
8	.40 .27 .19 .14	.38 .26 .19 .13	.24 .17 .13	.22 .16 .12	.20 .15 .11	.09
9	.37 .25 .17 .12	.35 .24 .17 .12	.22 .15 .11	.20 .14 .10	.18 .13 .09	.08
10	.34 .22 .15 .10	.32 .21 .14 .10	.19 .13 .09	.18 .12 .08	.16 .11 .08	.06

SPACING TO MOUNTING HEIGHT RATIO - .9

Test No. HPK09917

Test No. HPK10081

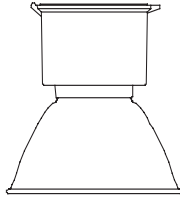
Test No. HPK10078



KILLARK®

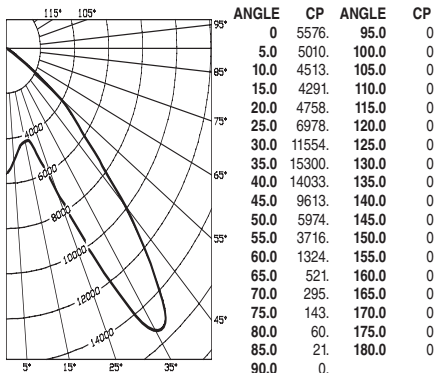
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Enclosed Reflector
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

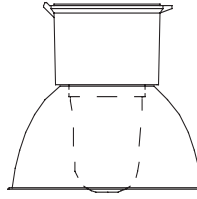
36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



Efficiency 71.5%

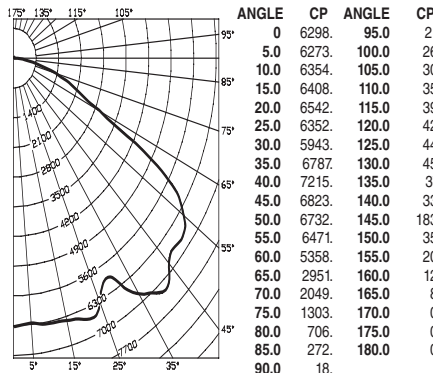
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe & Deep White Reflector
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

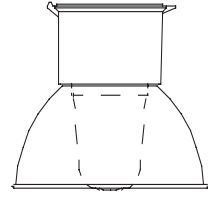
36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



Efficiency 71.6%

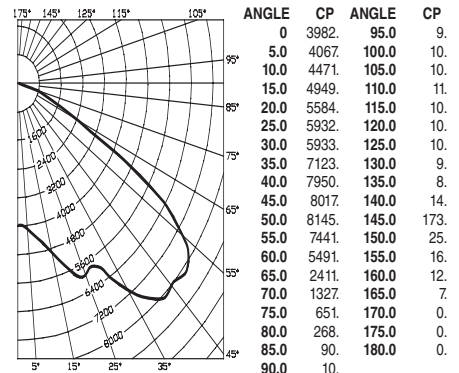
METAL HALIDE, METAL HALIDE PULSE, MERCURY VAPOR-VM5

With Globe & Deep Alzak Reflector
250-400 Watt
Mogul Base



CANDLEPOWER – 400 WATT

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



Efficiency 70.8%

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE Icc	80	70	50	30	10	0
% WALL REFLECTANCE Iw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.86 .86 .86 .86	.84 .84 .84 .84	.80 .80 .80 .77	.77 .77 .74 .74	.74 .74 .72	
1	.81 .78 .76 .73	.79 .76 .74 .72	.73 .72 .70 .71	.69 .68 .68 .67	.66 .65	
2	.75 .71 .67 .64	.73 .69 .66 .63	.67 .64 .62 .65	.62 .60 .63 .61	.59 .58	
3	.70 .64 .59 .56	.68 .63 .59 .55	.61 .57 .54 .59	.56 .53 .57 .55	.52 .51	
4	.64 .57 .52 .48	.63 .56 .51 .47	.54 .50 .47 .53	.49 .46 .51 .48	.46 .44	
5	.59 .51 .45 .41	.58 .50 .45 .41	.49 .44 .40 .47	.43 .40 .46 .43	.40 .38	
6	.54 .45 .39 .35	.53 .44 .39 .35	.43 .38 .35 .42	.38 .34 .41 .37	.34 .33	
7	.49 .40 .34 .29	.48 .39 .33 .29	.38 .33 .29 .37	.32 .29 .36 .32	.29 .27	
8	.44 .35 .28 .24	.43 .34 .28 .24	.33 .28 .24 .32	.27 .24 .31 .27	.24 .22	
9	.40 .30 .24 .20	.39 .29 .24 .20	.29 .23 .20 .28	.23 .19 .27 .23	.19 .18	
10	.35 .25 .18 .14	.34 .24 .18 .14	.23 .18 .14	.22 .17 .14		

SPACING TO MOUNTING HEIGHT RATIO - 2.1

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE Icc	80	70	50	30	10	0
% WALL REFLECTANCE Iw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.84 .84 .84 .84	.82 .82 .82 .82	.79 .79 .79 .75	.75 .75 .72 .72	.72 .72 .70	
1	.78 .74 .71 .69	.76 .73 .70 .68	.70 .67 .65 .67	.65 .63 .64 .63	.61 .60	
2	.71 .66 .61 .57	.69 .64 .60 .57	.62 .58 .55 .59	.56 .54 .57 .55	.52 .51	
3	.65 .58 .53 .48	.63 .57 .52 .48	.55 .50 .47 .53	.49 .46 .51 .48	.45 .44	
4	.59 .51 .45 .40	.58 .50 .44 .40	.48 .43 .39 .47	.42 .39 .45 .41	.38 .37	
5	.54 .45 .39 .34	.53 .44 .38 .34	.43 .38 .34 .41	.37 .33 .40 .36	.33 .31	
6	.50 .40 .34 .29	.48 .40 .34 .29	.38 .33 .29 .37	.32 .28 .36 .31	.28 .27	
7	.45 .36 .29 .25	.44 .35 .29 .25	.34 .28 .24 .33	.28 .24 .32 .27	.24 .23	
8	.42 .32 .25 .21	.40 .31 .25 .21	.30 .25 .21 .29	.24 .21 .28 .24	.20 .19	
9	.38 .28 .22 .18	.37 .28 .22 .18	.27 .22 .18 .26	.21 .18 .25 .21	.18 .16	
10	.35 .25 .19 .15	.34 .24 .19 .15	.24 .18 .15 .23	.18 .15 .22 .18	.14 .13	

SPACING TO MOUNTING HEIGHT RATIO - 1.6

COEFFICIENTS OF UTILIZATION -- ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE Icc	80	70	50	30	10	0
% WALL REFLECTANCE Iw	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.83 .83 .83 .83	.81 .81 .81 .81	.78 .78 .78 .74	.74 .74 .74 .71	.71 .71 .70	
1	.77 .74 .71 .69	.75 .72 .70 .68	.69 .67 .65 .67	.65 .63 .64 .63	.61 .60	
2	.71 .66 .61 .58	.69 .64 .60 .57	.62 .58 .56 .59	.57 .54 .57 .55	.53 .52	
3	.65 .58 .53 .49	.63 .57 .52 .48	.55 .51 .47 .53	.49 .46 .51 .48	.46 .44	
4	.59 .51 .45 .40	.57 .50 .44 .40	.48 .43 .40 .47	.42 .39 .45 .41	.38 .37	
5	.54 .45 .39 .34	.52 .44 .38 .34	.42 .37 .33 .41	.36 .33 .40 .36	.32 .31	
6	.49 .39 .33 .28	.47 .39 .33 .28	.37 .32 .28 .36	.31 .28 .35 .31	.27 .26	
7	.44 .34 .28 .23	.43 .34 .28 .23	.33 .27 .23 .31	.27 .23 .30 .26	.23 .21	
8	.40 .30 .24 .19	.39 .30 .24 .19	.29 .23 .19 .28	.23 .19 .27 .22	.19 .17	
9	.37 .27 .21 .16	.36 .26 .20 .16	.25 .20 .16 .25	.20 .16 .24 .19	.16 .15	
10	.33 .23 .17 .13	.32 .22 .17 .13	.22 .16 .13 .21	.16 .12 .20 .16	.12 .11	

SPACING TO MOUNTING HEIGHT RATIO - 2.5

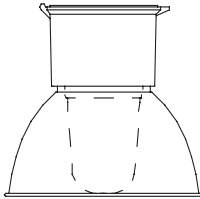
Test No. HPK10077

Test No. HPK09915

Test No. HPK09914

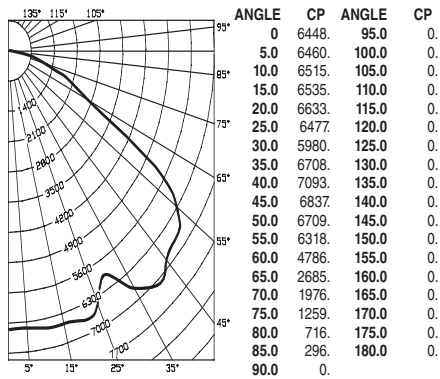
**METAL HALIDE, METAL HALIDE PULSE,
MERCURY VAPOR-VMs**

With Globe & Full Cutoff Deep White Reflector*
250-400 Watt
Mogul Base



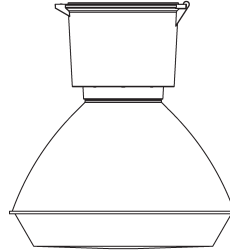
**CANDLEPOWER –
400 WATT**

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



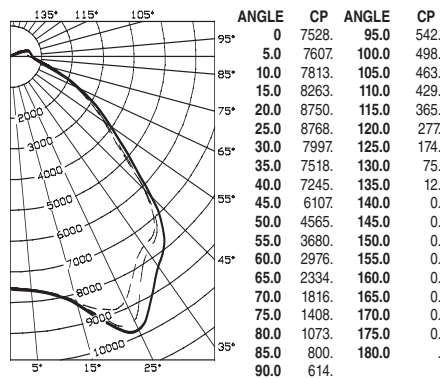
**METAL HALIDE, METAL HALIDE PULSE,
MERCURY VAPOR-VMs**

With Enclosed Poly Shielded Reflector
250-400 Watt
Mogul Base



**CANDLEPOWER –
400 WATT**

36000 lumens
For 250 MH multiply by 0.61
For 250 MHP multiply by 0.66
For 320 MHP multiply by 0.92
For 350 MHP multiply by 1.00
For 400 MHP multiply by 1.22
For 400 MV multiply by 0.64



COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE T _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE T _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.83 .83 .83 .81 .81 .81 .77 .77 .77 .74 .74 .74 .71 .71 .71 .69					
1	.76 .73 .70 .67 .74 .71 .69 .66 .68 .66 .64 .66 .64 .62 .63 .62 .60 .59					
2	.70 .64 .60 .56 .68 .63 .59 .56 .61 .57 .54 .58 .56 .53 .56 .54 .52 .51					
3	.64 .57 .52 .48 .62 .56 .51 .47 .54 .50 .46 .52 .49 .46 .50 .47 .45 .43					
4	.58 .50 .45 .40 .57 .49 .44 .40 .48 .43 .39 .46 .42 .39 .45 .41 .38 .37					
5	.53 .45 .39 .34 .52 .44 .38 .34 .42 .37 .33 .41 .37 .33 .40 .36 .33 .31					
6	.49 .40 .34 .29 .48 .39 .33 .29 .38 .33 .29 .37 .32 .29 .36 .32 .28 .27					
7	.45 .35 .29 .25 .44 .35 .29 .25 .34 .28 .25 .33 .28 .24 .32 .27 .24 .23					
8	.41 .31 .25 .21 .40 .31 .25 .21 .30 .25 .21 .29 .24 .21 .28 .24 .21 .19					
9	.38 .28 .22 .18 .37 .28 .22 .18 .27 .22 .18 .26 .22 .18 .26 .21 .18 .17					
10	.34 .25 .19 .15 .33 .24 .19 .15 .23 .18 .15 .23 .18 .15 .22 .18 .15 .13					

SPACING TO MOUNTING HEIGHT RATIO - 1.8

*Values using Spacer Kit

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE T _{cc}	80	70	50	30	10	0
% WALL REFLECTANCE T _w	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance					
0	.75 .75 .75 .72 .72 .72 .72 .68 .68 .68 .65 .65 .65 .61 .61 .61 .59					
1	.69 .66 .63 .61 .66 .64 .61 .59 .60 .58 .57 .57 .56 .54 .54 .53 .52 .50					
2	.63 .59 .55 .51 .61 .57 .54 .50 .54 .51 .49 .52 .49 .47 .49 .47 .45 .44					
3	.59 .53 .48 .44 .57 .51 .47 .44 .49 .45 .43 .47 .44 .41 .45 .42 .40 .39					
4	.54 .47 .42 .38 .52 .46 .41 .38 .44 .40 .37 .42 .39 .36 .40 .37 .35 .34					
5	.50 .43 .37 .34 .48 .42 .37 .33 .40 .36 .33 .38 .35 .32 .37 .34 .31 .30					
6	.46 .39 .33 .30 .45 .38 .33 .29 .36 .32 .29 .35 .31 .28 .34 .30 .28 .27					
7	.43 .35 .30 .26 .42 .34 .29 .26 .33 .29 .26 .32 .28 .25 .31 .27 .25 .23					
8	.40 .32 .27 .23 .39 .31 .26 .23 .30 .26 .23 .29 .25 .22 .28 .24 .22 .21					
9	.37 .29 .24 .21 .36 .28 .24 .20 .27 .23 .20 .26 .23 .20 .26 .22 .20 .18					
10	.34 .25 .20 .17 .33 .25 .20 .17 .24 .20 .17 .23 .19 .16 .22 .19 .16 .15					

SPACING TO MOUNTING HEIGHT RATIO - 1.5

**CERTILITE®
SOFTWARE**

**POWERFUL
Luminaire Layout
and Calculation
Software**



Software is used to determine number of fixtures required and their proper layout for various tasks and applications.

Contact you local Killark sales representative for availability.

Test No. HPK10075

Test No. HPK09904

See pages L36 - L108 for **NEW** CertiLite®V Luminaries
 Cross Reference from VM Series to CertiLite®V on L119



Class I, Div. 2, Groups A,B,C,D*
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G,*
Class III
Suitable for wet locations
UL Marine
NEMA 3, 4X

Listed - Files E10514 and E91793 (Marine)
 Certified - File LR11713

FEATURES-SPECIFICATIONS

CERTILITE®

Applications

CERTILITE® VM fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

Features

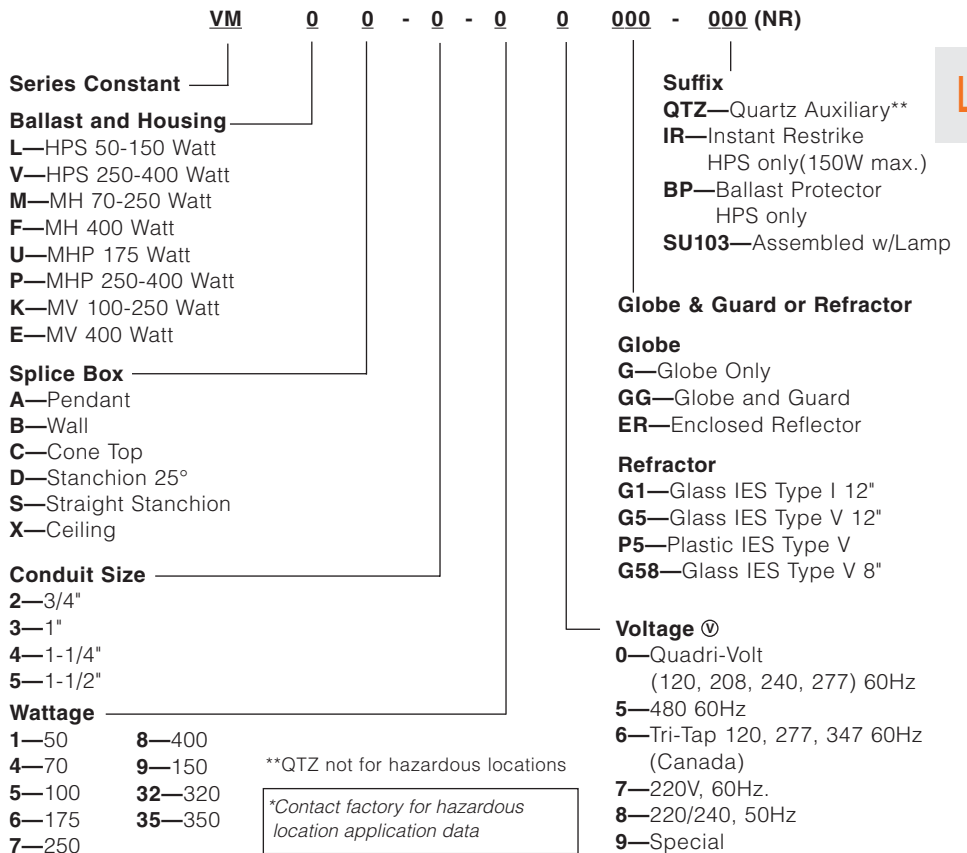
- CERTILITE® VM fixtures are now available with Pulse Start Metal Halide ballasts. Pulse Start systems provide higher and better maintained light output with longer life compared standard Metal Halide systems
 Pulse Start and standard Metal Halide lamps and ballasts are *not* interchangeable
 - Ballast tank and splice box — corrosion resistant copper-free aluminum alloy
 - Baked powder epoxy polyester finish, electrostatically applied for complete, uniform corrosion protection
 - All external hardware — stainless steel
 - Guard — copper-free aluminum alloy
 - Normally shipped as components for quick delivery
- Ⓞ Consult factory for available lamp and voltage combinations.

- Refractor guard — steel with corrosion resistant finish
- Reflector — lightweight, corrosion resistant polyester reinforced fiberglass
- Five mounting splice box types; pendant, ceiling, bracket, cone top, stanchion
- Quartz and incandescent auxiliary or HPS instant restart
- Minimum starting temperature
 HPS – 40°C, MV, MH & MHP – 30°C

Compliances

- UL-1572 Standard for HID lighting fixtures
- UL Marine type lighting fixtures
- UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 #137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X

Catalog Number Logic



**QTZ not for hazardous locations

*Contact factory for hazardous location application data



PENDANT

50-150W



250-400W



CEILING

50-150W



250-400W



WALL

50-150W



250-400W



VM 50-400 WATT HIGH PRESSURE SODIUM PENDANT ^①						
WATTS	ANSI LAMP	HUB SIZE ^②	VOLTAGE	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
50	S-68	3/4"	QUAD	VMLA-2-10GG	VMLA-2-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	3/4"	QUAD	VMLA-2-40GG	VMLA-2-40G58	—
			TRI	VMLA-2-46GG	VMLA-2-46G58	
			480	VMLA-2-45GG	VMLA-2-45G58	
100	S-54	3/4"	QUAD	VMLA-2-50GG	VMLA-2-50G58	—
			TRI	VMLA-2-56GG	VMLA-2-56G58	
			480	VMLA-2-55GG	VMLA-2-55G58	
150	S-55	3/4"	QUAD	VMLA-2-90GG	VMLA-2-90G58	—
			TRI	VMLA-2-96GG	VMLA-2-96G58	
			480	VMLA-2-95GG	VMLA-2-95G58	
250	S-50	3/4"	QUAD	VMVA-2-70GG	VMVA-2-70G5	VMVA-2-70ER
			TRI	VMVA-2-76GG	VMVA-2-76G5	VMVA-2-76ER
			480	VMVA-2-75GG	VMVA-2-75G5	VMVA-2-75ER
400	S-51	3/4"	QUAD	VMVA-2-80GG	VMVA-2-80G5	VMVA-2-80ER
			TRI	VMVA-2-86GG	VMVA-2-86G5	VMVA-2-86ER
			480	VMVA-2-85GG	VMVA-2-85G5	VMVA-2-85ER

VM 50-400 WATT HIGH PRESSURE SODIUM CEILING ^①						
WATTS	ANSI LAMP	HUB SIZE ^②	VOLTAGE	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
50	S-68	3/4"	QUAD	VMLX-2-10GG	VMLX-2-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	3/4"	QUAD	VMLX-2-40GG	VMLX-2-40G58	—
			TRI	VMLX-2-46GG	VMLX-2-46G58	
			480	VMLX-2-45GG	VMLX-2-45G58	
100	S-54	3/4"	QUAD	VMLX-2-50GG	VMLX-2-50G58	—
			TRI	VMLX-2-56GG	VMLX-2-56G58	
			480	VMLX-2-55GG	VMLX-2-55G58	
150	S-55	3/4"	QUAD	VMLX-2-90GG	VMLX-2-90G58	—
			TRI	VMLX-2-96GG	VMLX-2-96G58	
			480	VMLX-2-95GG	VMLX-2-95G58	
250	S-50	3/4"	QUAD	VMVX-2-70GG	VMVX-2-70G5	VMVX-2-70ER
			TRI	VMVX-2-76GG	VMVX-2-76G5	VMVX-2-76ER
			480	VMVX-2-75GG	VMVX-2-75G5	VMVX-2-75ER
400	S-51	3/4"	QUAD	VMVX-2-80GG	VMVX-2-80G5	VMVX-2-80ER
			TRI	VMVX-2-86GG	VMVX-2-86G5	VMVX-2-86ER
			480	VMVX-2-85GG	VMVX-2-85G5	VMVX-2-85ER

VM 50-400 WATT HIGH PRESSURE SODIUM WALL ^①						
WATTS	ANSI LAMP	HUB SIZE ^②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
50	S-68	3/4"	QUAD	VMLB-2-10GG	VMLB-2-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	3/4"	QUAD	VMLB-2-40GG	VMLB-2-40G58	—
			TRI	VMLB-2-46GG	VMLB-2-46G58	
			480	VMLB-2-45GG	VMLB-2-45G58	
100	S-54	3/4"	QUAD	VMLB-2-50GG	VMLB-2-50G58	—
			TRI	VMLB-2-56GG	VMLB-2-56G58	
			480	VMLB-2-55GG	VMLB-2-55G58	
150	S-55	3/4"	QUAD	VMLB-2-90GG	VMLB-2-90G58	—
			TRI	VMLB-2-96GG	VMLB-2-96G58	
			480	VMLB-2-95GG	VMLB-2-95G58	
250	S-50	3/4"	QUAD	VMVB-2-70GG	VMVB-2-70G5	—
			TRI	VMVB-2-76GG	VMVB-2-76G5	
			480	VMVB-2-75GG	VMVB-2-75G5	
400	S-51	3/4"	QUAD	VMVB-2-80GG	VMVB-2-80G5	—
			TRI	VMVB-2-86GG	VMVB-2-86G5	
			480	VMVB-2-85GG	VMVB-2-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.



CONE TOP

50-150W

250-400W



**STANCHION
25° ANGLE**

50-150W

250-400W



**STANCHION
STRAIGHT**

50-150W

250-400W



VM 50-400 WATT HIGH PRESSURE SODIUM CONE TOP ①

WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ②	REFRACTOR ③	ENCLOSED REFLECTOR
50	S-68	3/4"	QUAD	VMLC-2-10GG	VMLC-2-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	3/4"	QUAD	VMLC-2-40GG	VMLC-2-40G58	—
			TRI	VMLC-2-46GG	VMLC-2-46G58	
			480	VMLC-2-45GG	VMLC-2-45G58	
100	S-54	3/4"	QUAD	VMLC-2-50GG	VMLC-2-50G58	—
			TRI	VMLC-2-56GG	VMLC-2-56G58	
			480	VMLC-2-55GG	VMLC-2-55G58	
150	S-55	3/4"	QUAD	VMLC-2-90GG	VMLC-2-90G58	—
			TRI	VMLC-2-96GG	VMLC-2-96G58	
			480	VMLC-2-95GG	VMLC-2-95G58	
250	S-50	3/4"	QUAD	VMVC-2-70GG	VMVC-2-70G5	VMVC-2-70ER
			TRI	VMVC-2-76GG	VMVC-2-76G5	VMVC-2-76ER
			480	VMVC-2-75GG	VMVC-2-75G5	VMVC-2-75ER
400	S-51	3/4"	QUAD	VMVC-2-80GG	VMVC-2-80G5	VMVC-2-80ER
			TRI	VMVC-2-86GG	VMVC-2-86G5	VMVC-2-86ER
			480	VMVC-2-85GG	VMVC-2-85G5	VMVC-2-85ER

VM 50-400 WATT HIGH PRESSURE SODIUM STANCHION 25° ANGLE ①

WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ②	REFRACTOR ③	ENCLOSED REFLECTOR
50	S-68	1-1/4"	QUAD	VMLD-4-10GG	VMLD-4-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	1-1/4"	QUAD	VMLD-4-40GG	VMLD-4-40G58	—
			TRI	VMLD-4-46GG	VMLD-4-46G58	
			480	VMLD-4-45GG	VMLD-4-45G58	
100	S-54	1-1/4"	QUAD	VMLD-4-50GG	VMLD-4-50G58	—
			TRI	VMLD-4-56GG	VMLD-4-56G58	
			480	VMLD-4-55GG	VMLD-4-55G58	
150	S-55	1-1/4"	QUAD	VMLD-4-90GG	VMLD-4-90G58	—
			TRI	VMLD-4-96GG	VMLD-4-96G58	
			480	VMLD-4-95GG	VMLD-4-95G58	
250	S-50	1-1/4"	QUAD	VMVD-4-70GG	VMVD-4-70G5	VMVD-4-70ER
			TRI	VMVD-4-76GG	VMVD-4-76G5	VMVD-4-76ER
			480	VMVD-4-75GG	VMVD-4-75G5	VMVD-4-75ER
400	S-51	1-1/4"	QUAD	VMVD-4-80GG	VMVD-4-80G5	VMVD-4-80ER
			TRI	VMVD-4-86GG	VMVD-4-86G5	VMVD-4-86ER
			480	VMVD-4-85GG	VMVD-4-85G5	VMVD-4-85ER

VM 50-400 WATT HIGH PRESSURE SODIUM STANCHION STRAIGHT ①

WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ②	REFRACTOR ③	ENCLOSED REFLECTOR
50	S-68	1-1/2"	QUAD	VMLS-5-10GG	VMLS-5-10G58	—
			TRI	—	—	
			480	—	—	
70	S-62	1-1/2"	QUAD	VMLS-5-40GG	VMLS-5-40G58	—
			TRI	VMLS-5-46GG	VMLS-5-46G58	
			480	VMLS-5-45GG	VMLS-5-45G58	
100	S-54	1-1/2"	QUAD	VMLS-5-50GG	VMLS-5-50G58	—
			TRI	VMLS-5-56GG	VMLS-5-56G58	
			480	VMLS-5-55GG	VMLS-5-55G58	
150	S-55	1-1/2"	QUAD	VMLS-5-90GG	VMLS-5-90G58	—
			TRI	VMLS-5-96GG	VMLS-5-96G58	
			480	VMLS-5-95GG	VMLS-5-95G58	
250	S-50	1-1/2"	QUAD	VMVS-5-70GG	VMVS-5-70G5	—
			TRI	VMVS-5-76GG	VMVS-5-76G5	
			480	VMVS-5-75GG	VMVS-5-75G5	
400	S-51	1-1/2"	QUAD	VMVS-5-80GG	VMVS-5-80G5	—
			TRI	VMVS-5-86GG	VMVS-5-86G5	
			480	VMVS-5-85GG	VMVS-5-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number, or change "4" to "5" for 1-1/2" VMD 25° stanchion.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.



PENDANT



VM 70-400 WATT METAL HALIDE PENDANT ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	3/4"	QUAD	VMMA-2-40GG	VMMA-2-40G58	—
			TRI	VMMA-2-46GG	VMMA-2-46G58	
			480	VMMA-2-45GG	VMMA-2-45G58	
100	M-90	3/4"	QUAD	VMMA-2-50GG	VMMA-2-50G58	—
			TRI	VMMA-2-56GG	VMMA-2-56G58	
			480	VMMA-2-55GG	VMMA-2-55G58	
175	M-57	3/4"	QUAD	VMMA-2-60GG	VMMA-2-60G58	—
			TRI	VMMA-2-66GG	VMMA-2-66G58	
			480	VMMA-2-65GG	VMMA-2-65G58	
250	M-58	3/4"	QUAD	VMMA-2-70GG	VMMA-2-70G58	—
			TRI	VMFA-2-76GG	VMFA-2-76G58	
			480	VMMA-2-75GG	VMMA-2-75G58	
400	M-59	3/4"	QUAD	VMFA-2-80GG	VMFA-2-80G5	VMFA-2-80ER
			TRI	VMFA-2-86GG	VMFA-2-86G5	VMFA-2-86ER
			480	VMFA-2-85GG	VMFA-2-85G5	VMFA-2-85ER

CEILING



VM 70-400 WATT METAL HALIDE CEILING ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	3/4"	QUAD	VMMX-2-40GG	VMMX-2-40G58	—
			TRI	VMMX-2-46GG	VMMX-2-46G58	
			480	VMMX-2-45GG	VMMX-2-45G58	
100	M-90	3/4"	QUAD	VMMX-2-50GG	VMMX-2-50G58	—
			TRI	VMMX-2-56GG	VMMX-2-56G58	
			480	VMMX-2-55GG	VMMX-2-55G58	
175	M-57	3/4"	QUAD	VMMX-2-60GG	VMMX-2-60G58	—
			TRI	VMMX-2-66GG	VMMX-2-66G58	
			480	VMMX-2-65GG	VMMX-2-65G58	
250	M-58	3/4"	QUAD	VMMX-2-70GG	VMMX-2-70G58	—
			TRI	VMFX-2-76GG	VMFX-2-76G58	
			480	VMMX-2-75GG	VMMX-2-75G58	
400	M-59	3/4"	QUAD	VMFX-2-80GG	VMFX-2-80G5	VMFX-2-80ER
			TRI	VMFX-2-86GG	VMFX-2-86G5	VMFX-2-86ER
			480	VMFX-2-85GG	VMFX-2-85G5	VMFX-2-85ER

WALL



VM 70-400 WATT METAL HALIDE WALL ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	3/4"	QUAD	VMMB-2-40GG	VMMB-2-40G58	—
			TRI	VMMB-2-46GG	VMMB-2-46G58	
			480	VMMB-2-45GG	VMMB-2-45G58	
100	M-90	3/4"	QUAD	VMMB-2-50GG	VMMB-2-50G58	—
			TRI	VMMB-2-56GG	VMMB-2-56G58	
			480	VMMB-2-55GG	VMMB-2-55G58	
175	M-57	3/4"	QUAD	VMMB-2-60GG	VMMB-2-60G58	—
			TRI	VMMB-2-66GG	VMMB-2-66G58	
			480	VMMB-2-65GG	VMMB-2-65G58	
250	M-58	3/4"	QUAD	VMMB-2-70GG	VMMB-2-70G58	—
			TRI	VMFB-2-76GG	VMFB-2-76G58	
			480	VMMB-2-75GG	VMMB-2-75G58	
400	M-59	3/4"	QUAD	VMFB-2-80GG	VMFB-2-80G5	—
			TRI	VMFB-2-86GG	VMFB-2-86G5	
			480	VMFB-2-85GG	VMFB-2-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.



CONE TOP



VM 70-400 WATT METAL HALIDE CONE TOP ①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	3/4"	QUAD	VMMC-2-40GG	VMMC-2-40G58	—
			TRI	VMMC-2-46GG	VMMC-2-46G58	
			480	VMMC-2-45GG	VMMC-2-45G58	
100	M-90	3/4"	QUAD	VMMC-2-50GG	VMMC-2-50G58	—
			TRI	VMMC-2-56GG	VMMC-2-56G58	
			480	VMMC-2-55GG	VMMC-2-55G58	
175	M-57	3/4"	QUAD	VMMC-2-60GG	VMMC-2-60G58	—
			TRI	VMMC-2-66GG	VMMC-2-66G58	
			480	VMMC-2-65GG	VMMC-2-65G58	
250	M-58	3/4"	QUAD	VMMC-2-70GG	VMMC-2-70G58	—
			TRI	VMFC-2-76GG	VMFC-2-76G58	
			480	VMMC-2-75GG	VMMC-2-75G58	
400	M-59	3/4"	QUAD	VMFC-2-80GG	VMFC-2-80G5	VMFC-2-80ER
			TRI	VMFC-2-86GG	VMFC-2-86G5	VMFC-2-86ER
			480	VMFC-2-85GG	VMFC-2-85G5	VMFC-2-85ER

STANCHION 25° ANGLE



VM 70-400 WATT METAL HALIDE STANCHION 25° ANGLE ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	1-1/4"	QUAD	VMD-4-40GG	VMD-4-40G58	—
			TRI	VMD-4-46GG	VMD-4-46G58	
			480	VMD-4-45GG	VMD-4-45G58	
100	M-90	1-1/4"	QUAD	VMD-4-50GG	VMD-4-50G58	—
			TRI	VMD-4-56GG	VMD-4-56G58	
			480	VMD-4-55GG	VMD-4-55G58	
175	M-57	1-1/4"	QUAD	VMD-4-60GG	VMD-4-60G58	—
			TRI	VMD-4-66GG	VMD-4-66G58	
			480	VMD-4-65GG	VMD-4-65G58	
250	M-58	1-1/4"	QUAD	VMD-4-70GG	VMD-4-70G58	—
			TRI	VMFD-4-76GG	VMFD-4-76G58	
			480	VMD-4-75GG	VMD-4-75G58	
400	M-59	1-1/4"	QUAD	VMFD-4-80GG	VMFD-4-80G5	VMFD-4-80ER
			TRI	VMFD-4-86GG	VMFD-4-86G5	VMFD-4-80ER
			480	VMFD-4-85GG	VMFD-4-85G5	VMFD-4-80ER

STANCHION STRAIGHT



VM 70-400 WATT METAL HALIDE STANCHION STRAIGHT ①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
70	M-98	1-1/2"	QUAD	VMMS-5-40GG	VMMS-5-40G58	—
			TRI	VMMS-5-46GG	VMMS-5-46G58	
			480	VMMS-5-45GG	VMMS-5-45G58	
100	M-90	1-1/2"	QUAD	VMMS-5-50GG	VMMS-5-50G58	—
			TRI	VMMS-5-56GG	VMMS-5-56G58	
			480	VMMS-5-55GG	VMMS-5-55G58	
175	M-57	1-1/2"	QUAD	VMMS-5-60GG	VMMS-5-60G58	—
			TRI	VMMS-5-66GG	VMMS-5-66G58	
			480	VMMS-5-65GG	VMMS-5-65G58	
250	M-58	1-1/2"	QUAD	VMMS-5-70GG	VMMS-5-70G58	—
			TRI	VMFS-5-76GG	VMFS-5-76G58	
			480	VMMS-5-75GG	VMMS-5-75G58	
400	M-59	1-1/2"	QUAD	VMFS-5-80GG	VMFS-5-80G5	—
			TRI	VMFS-5-86GG	VMFS-5-86G5	
			480	VMFS-5-85GG	VMFS-5-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number, or change "4" to "5" for 1-1/2" VMD 25° stanchion.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.

PENDANT



VM 175-400 WATT PULSE START METAL HALIDE PENDANT ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
175	M-137	3/4"	QUAD	VMUA-2-60GG	VMUA-2-60G58	—
			TRI	VMUA-2-66GG	VMUA-2-66G58	
			480	VMUA-2-65GG	VMUA-2-65G58	
250	M-138	3/4"	QUAD	VMPA-2-70GG	VMPA-2-70G5	VMPA-2-70ER
			TRI	VMPA-2-76GG	VMPA-2-76G5	VMPA-2-76ER
			480	VMPA-2-75GG	VMPA-2-75G5	VMPA-2-75ER
320	M-132	3/4"	QUAD	VMPA-2-320GG	VMPA-2-320G5	VMPA-2-320ER
			TRI	VMPA-2-326GG	VMPA-2-326G5	VMPA-2-326ER
			480	VMPA-2-325GG	VMPA-2-325G5	VMPA-2-325ER
350	M-131	3/4"	QUAD	VMPA-2-350GG	VMPA-2-350G5	VMPA-2-350ER
			TRI	VMPA-2-356GG	VMPA-2-356G5	VMPA-2-356ER
			480	VMPA-2-355GG	VMPA-2-355G5	VMPA-2-355ER
400	M-135	3/4"	QUAD	VMPA-2-80GG	VMPA-2-80G5	VMPA-2-80ER
			TRI	VMPA-2-86GG	VMPA-2-86G5	VMPA-2-86ER
			480	VMPA-2-85GG	VMPA-2-85G5	VMPA-2-85ER

CEILING



VM 175-400 WATT PULSE START METAL HALIDE CEILING ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
175	M-137	3/4"	QUAD	VMUX-2-60GG	VMUX-2-60G58	—
			TRI	VMUX-2-66GG	VMUX-2-66G58	
			480	VMUX-2-65GG	VMUX-2-65G58	
250	M-138	3/4"	QUAD	VMPX-2-70GG	VMPX-2-70G5	VMPX-2-70ER
			TRI	VMPX-2-76GG	VMPX-2-76G5	VMPX-2-76ER
			480	VMPX-2-75GG	VMPX-2-75G5	VMPX-2-75ER
320	M-132	3/4"	QUAD	VMPX-2-320GG	VMPX-2-320G5	VMPX-2-320ER
			TRI	VMPX-2-326GG	VMPX-2-326G5	VMPX-2-326ER
			480	VMPX-2-325GG	VMPX-2-325G5	VMPX-2-325ER
350	M-131	3/4"	QUAD	VMPX-2-350GG	VMPX-2-350G5	VMPX-2-350ER
			TRI	VMPX-2-356GG	VMPX-2-356G5	VMPX-2-356ER
			480	VMPX-2-355GG	VMPX-2-355G5	VMPX-2-355ER
400	M-135	3/4"	QUAD	VMPX-2-80GG	VMPX-2-80G5	VMPX-2-80ER
			TRI	VMPX-2-86GG	VMPX-2-86G5	VMPX-2-86ER
			480	VMPX-2-85GG	VMPX-2-85G5	VMPX-2-85ER

WALL



VM 175-400 WATT PULSE START METAL HALIDE WALL ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
175	M-137	3/4"	QUAD	VMUB-2-60GG	VMUB-2-60G58	—
			TRI	VMUB-2-66GG	VMUB-2-66G58	
			480	VMUB-2-65GG	VMUB-2-65G58	
250	M-138	3/4"	QUAD	VMPB-2-70GG	VMPB-2-70G5	—
			TRI	VMPB-2-76GG	VMPB-2-76G5	
			480	VMPB-2-75GG	VMPB-2-75G5	
320	M-132	3/4"	QUAD	VMPB-2-320GG	VMPB-2-320G5	—
			TRI	VMPB-2-326GG	VMPB-2-326G5	
			480	VMPB-2-325GG	VMPB-2-325G5	
350	M-131	3/4"	QUAD	VMPB-2-350GG	VMPB-2-350G5	—
			TRI	VMPB-2-356GG	VMPB-2-356G5	
			480	VMPB-2-355GG	VMPB-2-355G5	
400	M-135	3/4"	QUAD	VMPB-2-80GG	VMPB-2-80G5	—
			TRI	VMPB-2-86GG	VMPB-2-86G5	
			480	VMPB-2-85GG	VMPB-2-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.

CONE TOP



VM 175-400 WATT PULSE START METAL HALIDE CONE TOP ^①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
175	M-137	3/4"	QUAD	VMUC-2-60GG	VMUC-2-60G58	—
			TRI	VMUC-2-66GG	VMUC-2-66G58	
			480	VMUC-2-65GG	VMUC-2-65G58	
250	M-138	3/4"	QUAD	VMPC-2-70GG	VMPC-2-70G5	VMPC-2-70ER
			TRI	VMPC-2-76GG	VMPC-2-76G5	VMPC-2-76ER
			480	VMPC-2-75GG	VMPC-2-75G5	VMPC-2-75ER
320	M-132	3/4"	QUAD	VMPC-2-320GG	VMPC-2-320G5	VMPC-2-320ER
			TRI	VMPC-2-326GG	VMPC-2-326G5	VMPC-2-326ER
			480	VMPC-2-325GG	VMPC-2-325G5	VMPC-2-325ER
350	M-131	3/4"	QUAD	VMPC-2-350GG	VMPC-2-350G5	VMPC-2-350ER
			TRI	VMPC-2-356GG	VMPC-2-356G5	VMPC-2-356ER
			480	VMPC-2-355GG	VMPC-2-355G5	VMPC-2-355ER
400	M-135	3/4"	QUAD	VMPC-2-80GG	VMPC-2-80G5	VMPC-2-80ER
			TRI	VMPC-2-86GG	VMPC-2-86G5	VMPC-2-86ER
			480	VMPC-2-85GG	VMPC-2-85G5	VMPC-2-85ER

STANCHION 25° ANGLE



VM 175-400 WATT PULSE START METAL HALIDE STANCHION 25° ANGLE ^①						
WATTS	ANSI LAMP	HUB SIZE ^②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
175	M-137	1-1/4"	QUAD	VMUD-4-60GG	VMUD-4-60G58	—
			TRI	VMUD-4-66GG	VMUD-4-66G58	
			480	VMUD-4-65GG	VMUD-4-65G58	
250	M-138	1-1/4"	QUAD	VMPD-4-70GG	VMPD-4-70G5	VMPD-4-70ER
			TRI	VMPD-4-76GG	VMPD-4-76G5	VMPD-4-76ER
			480	VMPD-4-75GG	VMPD-4-75G5	VMPD-4-75ER
320	M-132	1-1/4"	QUAD	VMPD-4-320GG	VMPD-4-320G5	VMPD-4-320ER
			TRI	VMPD-4-326GG	VMPD-4-326G5	VMPD-4-326ER
			480	VMPD-4-325GG	VMPD-4-325G5	VMPD-4-325ER
350	M-131	1-1/4"	QUAD	VMPD-4-350GG	VMPD-4-350G5	VMPD-4-350ER
			TRI	VMPD-4-356GG	VMPD-4-356G5	VMPD-4-356ER
			480	VMPD-4-355GG	VMPD-4-355G5	VMPD-4-355ER
400	M-135	1-1/4"	QUAD	VMPD-4-80GG	VMPD-4-80G5	VMPD-4-80ER
			TRI	VMPD-4-86GG	VMPD-4-86G5	VMPD-4-86ER
			480	VMPD-4-85GG	VMPD-4-85G5	VMPD-4-85ER

STANCHION STRAIGHT



VM 175-400 WATT PULSE START METAL HALIDE STANCHION STRAIGHT ^①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ^③	REFRACTOR ^④	ENCLOSED REFLECTOR
175	M-137	1-1/2"	QUAD	VMUS-5-60GG	VMUS-5-60G58	—
			TRI	VMUS-5-66GG	VMUS-5-66G58	
			480	VMUS-5-65GG	VMUS-5-65G58	
250	M-138	1-1/2"	QUAD	VMPS-5-70GG	VMPS-5-70G5	—
			TRI	VMPS-5-76GG	VMPS-5-76G5	
			480	VMPS-5-75GG	VMPS-5-75G5	
320	M-132	1-1/2"	QUAD	VMPS-5-320GG	VMPS-5-320G5	—
			TRI	VMPS-5-326GG	VMPS-5-326G5	
			480	VMPS-5-325GG	VMPS-5-325G5	
350	M-131	1-1/2"	QUAD	VMPS-5-350GG	VMPS-5-350G5	—
			TRI	VMPS-5-356GG	VMPS-5-356G5	
			480	VMPS-5-355GG	VMPS-5-355G5	
400	M-135	1-1/2"	QUAD	VMPS-5-80GG	VMPS-5-80G5	—
			TRI	VMPS-5-86GG	VMPS-5-86G5	
			480	VMPS-5-85GG	VMPS-5-85G5	

^① See L109 for hazardous location application information.

^② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number, or change "4" to "5" for 1-1/2" VMD 25° stanchion.

^③ Omit 2nd "G" for Globe only.

^④ Order Refractor Guards separately.



PENDANT

100-250W

400W



VM 100-400 WATT MERCURY VAPOR PENDANT ①

WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	3/4"	QUAD	VMKA-2-50GG	VMKA-2-50G58	—
			TRI	VMKA-2-56GG	VMKA-2-56G58	
			480	VMKA-2-55GG	VMKA-2-55G58	
175	H-39	3/4"	QUAD	VMKA-2-60GG	VMKA-2-60G58	—
			TRI	VMKA-2-66GG	VMKA-2-66G58	
			480	VMKA-2-65GG	VMKA-2-65G58	
250	H-37	3/4"	QUAD	VMKA-2-70GG	VMKA-2-70G58	—
			TRI	VMKA-2-76GG	VMKA-2-76G58	
			480	VMKA-2-75GG	VMKA-2-75G58	
400	H-33	3/4"	QUAD	VMEA-2-80GG	VMEA-2-80G5	VMEA-2-80ER
			TRI	VMEA-2-86GG	VMEA-2-86G5	VMEA-2-86ER
			480	VMEA-2-85GG	VMEA-2-85G5	VMEA-2-85ER

CEILING

100-250W

400W



VM 100-400 WATT MERCURY VAPOR CEILING ①

WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	3/4"	QUAD	VMKX-2-50GG	VMKX-2-50G58	—
			TRI	VMKX-2-56GG	VMKX-2-56G58	
			480	VMKX-2-55GG	VMKX-2-55G58	
175	H-39	3/4"	QUAD	VMKX-2-60GG	VMKX-2-60G58	—
			TRI	VMKX-2-66GG	VMKX-2-66G58	
			480	VMKX-2-65GG	VMKX-2-65G58	
250	H-37	3/4"	QUAD	VMKX-2-70GG	VMKX-2-70G58	—
			TRI	VMKX-2-76GG	VMKX-2-76G58	
			480	VMKX-2-75GG	VMKX-2-75G58	
400	H-33	3/4"	QUAD	VMEX-2-80GG	VMEX-2-80G5	VMEX-2-80ER
			TRI	VMEX-2-86GG	VMEX-2-86G5	VMEX-2-86ER
			480	VMEX-2-85GG	VMEX-2-85G5	VMEX-2-85ER

WALL

100-250W

400W



VM 100-400 WATT MERCURY VAPOR WALL ①

WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	3/4"	QUAD	VMKB-2-50GG	VMKB-2-50G58	—
			TRI	VMKB-2-56GG	VMKB-2-56G58	
			480	VMKB-2-55GG	VMKB-2-55G58	
175	H-39	3/4"	QUAD	VMKB-2-60GG	VMKB-2-60G58	—
			TRI	VMKB-2-66GG	VMKB-2-66G58	
			480	VMKB-2-65GG	VMKB-2-65G58	
250	H-37	3/4"	QUAD	VMKB-2-70GG	VMKB-2-70G58	—
			TRI	VMKB-2-76GG	VMKB-2-76G58	
			480	VMKB-2-75GG	VMKB-2-75G58	
400	H-33	3/4"	QUAD	VMEB-2-80GG	VMEB-2-80G5	—
			TRI	VMEB-2-86GG	VMEB-2-86G5	
			480	VMEB-2-85GG	VMEB-2-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.



CONE TOP

100-250W

400W



STANCHION
25° ANGLE

100-250W

400W



STANCHION
STRAIGHT

100-250W

400W



VM 100-400 WATT MERCURY VAPOR CONE TOP ①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	3/4"	QUAD	VMKC-2-50GG	VMKC-2-50G58	—
			TRI	VMKC-2-56GG	VMKC-2-56G58	
			480	VMKC-2-55GG	VMKC-2-55G58	
175	H-39	3/4"	QUAD	VMKC-2-60GG	VMKC-2-60G58	—
			TRI	VMKC-2-66GG	VMKC-2-66G58	
			480	VMKC-2-65GG	VMKC-2-65G58	
250	H-37	3/4"	QUAD	VMKC-2-70GG	VMKC-2-70G58	—
			TRI	VMKC-2-76GG	VMKC-2-76G58	
			480	VMKC-2-75GG	VMKC-2-75G58	
400	H-33	3/4"	QUAD	VMEC-2-80GG	VMEC-2-80G5	VMEC-2-80ER
			TRI	VMEC-2-86GG	VMEC-2-86G5	VMEC-2-86ER
			480	VMEC-2-85GG	VMEC-2-85G5	VMEC-2-85ER

VM 100-400 WATT MERCURY VAPOR STANCHION 25° ANGLE ①						
WATTS	ANSI LAMP	HUB SIZE ②	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	1-1/4"	QUAD	VMKD-4-50GG	VMKD-4-50G58	—
			TRI	VMKD-4-56GG	VMKD-4-56G58	
			480	VMKD-4-55GG	VMKD-4-55G58	
175	H-39	1-1/4"	QUAD	VMKD-4-60GG	VMKD-4-60G58	—
			TRI	VMKD-4-66GG	VMKD-4-66G58	
			480	VMKD-4-65GG	VMKD-4-65G58	
250	H-37	1-1/4"	QUAD	VMKD-4-70GG	VMKD-4-70G58	—
			TRI	VMKD-4-76GG	VMKD-4-76G58	
			480	VMKD-4-75GG	VMKD-4-75G58	
400	H-33	1-1/4"	QUAD	VMED-4-80GG	VMED-4-80G5	VMED-4-80ER
			TRI	VMED-4-86GG	VMED-4-86G5	VMED-4-86ER
			480	VMED-4-85GG	VMED-4-85G5	VMED-4-85ER

VM 100-400 WATT MERCURY VAPOR STANCHION STRAIGHT ①						
WATTS	ANSI LAMP	HUB SIZE	VOLTAGE @ 60Hz	CATALOG NUMBER		
				GLOBE AND GUARD ③	REFRACTOR ④	ENCLOSED REFLECTOR
100	H-38	1-1/2"	QUAD	VMKS-5-50GG	VMKS-5-50G58	—
			TRI	VMKS-5-56GG	VMKS-5-56G58	
			480	VMKS-5-55GG	VMKS-5-55G58	
175	H-39	1-1/2"	QUAD	VMKS-5-60GG	VMKS-5-60G58	—
			TRI	VMKS-5-66GG	VMKS-5-66G58	
			480	VMKS-5-65GG	VMKS-5-65G58	
250	H-37	1-1/2"	QUAD	VMKS-5-70GG	VMKS-5-70G58	—
			TRI	VMKS-5-76GG	VMKS-5-76G58	
			480	VMKS-5-75GG	VMKS-5-75G58	
400	H-33	1-1/2"	QUAD	VMES-5-80GG	VMES-5-80G5	—
			TRI	VMES-5-86GG	VMES-5-86G5	
			480	VMES-5-85GG	VMES-5-85G5	

① See L109 for hazardous location application information.

② Hub size shown is 3/4" NPT. For 1", change "2" to "3" in catalog number, or change "4" to "5" for 1-1/2" VMD 25° stanchion.

③ Omit 2nd "G" for Globe only.

④ Order Refractor Guards separately.



VM MOUNTING SPLICE BOX							
CATALOG NUMBER							HUB SIZE
PENDANT ^①	PENDANT ^②	CEILING	WALL	CONE TOP	25° STANCHION	STRAIGHT STANCHION	
VMA-2	VMA-24	VMX-2	VMB-2	VMC-2	—	—	3/4"
VMA-3	—	VMX-3	VMB-3	—	—	—	1"
—	—	—	—	—	VMD-4	—	1-1/4"
—	—	—	—	—	VMD-5	VMDS-5	1-1/2"

① For use with Series VML, VMK, VMM and VMU fixtures.

② For use with Series VMV, VME, VMF and VMP fixtures.

Flexible pendant mounting-order VMA-24.

Cone top pendant not suitable for flexible mounting.

50-400W BALLAST TANK ASSEMBLY					
WATTS	VOLTAGE @ 60Hz	CATALOG NUMBER			
		LAMP TYPE			
		HPS	MH	PULSE START MH	MV
50	Quad	VMLO-0-100	—	—	—
	Tri	—	—	—	—
	480	—	—	—	—
70	Quad	VMLO-0-400	VMMO-0-400	—	—
	Tri	VMLO-0-460	VMMO-0-460	—	—
	480	VMLO-0-450	VMMO-0-450	—	—
100	Quad	VMLO-0-500	VMMO-0-500	—	VMKO-0-500
	Tri	VMLO-0-560	VMMO-0-560	—	VMKO-0-560
	480	VMLO-0-550	VMMO-0-550	—	VMKO-0-550
150	Quad	VMLO-0-900	—	—	—
	Tri	VMLO-0-960	—	—	—
	480	VMLO-0-950	—	—	—
175	Quad	—	VMMO-0-600	VMUO-0-600	VMKO-0-600
	Tri	—	VMMO-0-660	VMUO-0-660	VMKO-0-660
	480	—	VMMO-0-650	VMUO-0-650	VMKO-0-650
250	Quad	VMVO-0-700	VMMO-0-700	VMPO-0-700	VMKO-0-700
	Tri	VMVO-0-760	VMFO-0-760	VMPO-0-760	VMKO-0-760
	480	VMVO-0-750	VMMO-0-750	VMPO-0-750	VMKO-0-750
320	Quad	—	—	VMPO-0-3200	—
	Tri	—	—	VMPO-0-3260	—
	480	—	—	VMPO-0-3250	—
350	Quad	—	—	VMPO-0-3500	—
	Tri	—	—	VMPO-0-3560	—
	480	—	—	VMPO-0-3550	—
400	Quad	VMVO-0-800	VMFO-0-800	VMPO-0-800	VME0-0-800
	Tri	VMVO-0-860	VMFO-0-860	VMPO-0-860	VME0-0-860
	480	VMVO-0-850	VMFO-0-850	VMPO-0-850	VME0-0-850

Note: For Class I, Zone 2 ExnR Restricted Breathing ballast housings, add "NR" suffix to catalog number; e.g. VMLO-0-400NR. "NR" ballast housings are NOT approved for use with refractors.

Splice Boxes



Pendant



Ceiling



Cone Top



Wall



25° Stanchion



Straight Stanchion

Ballast Tanks



50-250 Watt



250-400 Watt

Globes



VMG-17



VMGTC-17*



VMG-40

Guards



VMAG-17



VMAG-40

VM SERIES GLOBES & GUARDS											
SERIES	CATALOG NUMBER				SPINTOP REFRACTORS			REFLECTORS			
	GLOBE	TUFF-SKIN COATED*	TEFLON COATED**	GUARD	8" ③	12" TYPE V ④	12" POLY. ④	STD. DOME	ANGLE	DEEP REFLECTOR	ENCLOSED REFLECTOR
VML, VMM VMU, VMK	VMG-17	VMGT-17	VMGTC-17	VMAG-17	VZRG-1550	VZRG2550	VZRP-175	VMPSD-17	VMPA-17	VMRD-17ALZ	—
VMV, VMF VMP, VME	VMG-40	—	—	VMAG-40	—	VZRG4050	—	VMPSD-40	VMPA-40	HRD-400 HRD-400ALZ	VMER40

*Registered trademark of Thomas Manufacturing Corp.

**Registered trademark of DuPont, Inc.

Coatings for added resistance to thermal shock, but diminish light output and may hinder heat dissipation.

③Plated steel 8" guard VMRWG-8.

④Plated steel 12" guard VMRWG.



GENERAL CROSS-REFERENCE FOR CERTILITE® TO NEW CERTILITE®V***							
	WATTS	ANSI LAMP TYPE		GLOBE & GUARD	SPIN-TOP REFRACTOR	ENCLOSED REFLECTOR	TANK ONLY
HPS	50	S68	Certilite®	VML0-0-1GG	VML0-0-1GG58	—	VMLO-0-100
			Certilite®V	VM3S05GG	VM3S05S8N	—	VM3S050
	70	S62	Certilite®	VML0-0-4GG	VML0-0-4GG58	—	VMLO-0-400
			Certilite®V	VM3S07GG	VM3S07S8N	—	VM3S070
	100	S54	Certilite®	VML0-0-5GG	VML0-0-5GG58	—	VMLO-0-500
			Certilite®V	VM3S10GG	VM3S10S8N	—	VM3S100
	150	S55	Certilite®	VML0-0-9GG	VML0-0-9GG58	—	VMLO-0-900
			Certilite®V	VM3S15GG	VM3S15S8N	—	VM3S150
250	S50	Certilite®	VMV0-0-7GG	VMV0-0-7GG5	VMV0-0-7GER	VMVO-0-700	
		Certilite®V	VM5S25GG	VM5S25S5N	VM5S250ERN	VM5S250	
400	S51	Certilite®	VMV0-0-8GG	VMV0-0-8GG5	VMV0-0-8GER	VMVO-0-800	
		Certilite®V	VM5S40GG	VM5S40S5N	VM5S400ERN	VM5S400	
MH	70	M98	Certilite®	VMM0-0-4GG	VMM0-0-4GG58	—	VMM0-0-400
			Certilite®V	VM3H07GG	VM3H07S8N	—	VM3H070
	100	M90	Certilite®	VMM0-0-5GG	VMM0-0-5GG58	—	VMM0-0-500
			Certilite®V	VM3H10GG	VM3H10S8N	—	VM3H100
	175	M57	Certilite®	VMM0-0-6GG	VMM0-0-6GG58	—	VMM0-0-600
Certilite®V			VM3H17GG	VM3H17S5N	—	VM3H170	
250	M58	Certilite®	VMM0-0-7GG	VMM0-0-7GG58	—	VMM0-0-700	
400	M59	Certilite®	VMF0-0-8GG	VMF0-0-8GG5	VMF0-0-8GER	VMFO-0-800	
MHP	175	M137	Certilite®	VMU0-0-6GG	VMU0-0-6GG58	—	VMU0-0-600
			Certilite®V	VM3P17GG	VM3P17S8N	—	VM3P170
	250	M138	Certilite®	VMP0-0-7GG	VMP0-0-7GG5	VMP0-0-7GER	VMPO-0-700
			Certilite®V	VM5P25GG	VM5P25S5N	VM5P250ERN	VM5P250
	320	M132	Certilite®	VMP0-0-32GG	VMP0-0-32GG5	VMP0-0-32GER	VMPO-0-3200
Certilite®V			VM5P32GG	VM5P32S5N	VM5P320ERN	VM5P320	
350	M131	Certilite®	VMP0-0-35GG	VMP0-0-35GG5	VMP0-0-35GER	VMPO-0-3500	
Certilite®V	VM5P35GG	VM5P35S5N	VM5P350ERN	VM5P350			
MV	100	H38	Certilite®	VMK0-0-5GG	VMK0-0-5GG58	—	VMKO-0-500
			Certilite®V	VM3M10GG	VM3M10S8N	—	VM3M100
	175	H39	Certilite®	VMK0-0-6GG	VMK0-0-6GG58	—	VMKO-0-600
			Certilite®V	VM3M17GG	VM3M17S8N	—	VM3M170
	250	H37	Certilite®	VMK0-0-7GG	VMK0-0-7GG58	—	VMKO-0-700
Certilite®V			VM3M25GG	VM3M25S8N	—	VM3M250	
400	H33	Certilite®	VME0-0-8GG	VME0-0-8GG5	VME0-0-8GER	VMEO-0-800	
Certilite®V	VM5M40GG	VM5M40S5N	VM5M400ERN	VM5M400			

COMPONENTS			
	Certilite®	Certilite®V	DESCRIPTION
MOUNTS	VMA-2	VMA2B	3/4" Pendant
	VMA-3	VMA3B	1" Pendant
	VMB-2	VMB2B	3/4" Wall Bracket
	VMB-3	VMB3B	1" Wall Bracket
	VMC-2	VMC2B	3/4" Cone Top
	VMD-4	VMD4B	1-1/4" 25° Stanchion
	VMD-5	VMD5B	1-1/2" 25° Stanchion
	VMDS-5	VMS5B	1-1/2" 90° Stanchion
	VMX-2	VMX2B	3/4" Ceiling
	VMX-3	VMX3B	1" Ceiling
OPS	VMG-17	VMG17	5-1/2" GLOBE
	VMGT-17	VMG17F	TUFFSKIN GLOBE
	VMGT-17	VMG17T	TELFON GLOBE
	VMG-40	VMG40	7-3/4" HIGH WATT GLOBE
	VZRG-1550	VZRG1550	8" SPIN-TOP V REFRACTOR
	VZRG-2550	VZRG2550	12" SPIN-TOP V REFRACTOR
	VZRG-2510	VZRG2520	12" SPIN-TOP II REFRACTOR
	VZRP-175	VZRP175	12" POLY REFRACTOR
	VZRG-4050	VZRG4050	12" SPIN-TOP V REFRACTOR
	VZRG-4020	VZRG4020	12" SPIN-TOP II REFRACTOR
VMER40	VMER40	ENCLOSED REFLECTOR	
GUARDS	VMAG-17	VMAG17	5-1/2" GLOBE GUARD
	VMAG-40	VMAG40S	HIGH WATT GLOBE GUARD
	VMRWG-8	VMRWG8	8" SPIN-TOP GUARD
	VMRWG	VMRWG	12" SPIN-TOP GUARD
REFLECTORS	VMPSD-17	VMPSD40	WHITE REFLECTOR
	VMPA-17	VMPA40	WHITE ANGLE REFLECTOR
	VMPSD-40	VMPSD40	WHITE REFLECTOR
	VMPA-40	VMPA40	WHITE ANGLE REFLECTOR
	HRD-400	HRD400	DEEP WHITE REFLECTOR
	HRD-400ALZ	HRD400ALZ	DEEP ALZAK REFLECTOR

© All Certilite®V tanks use "40" reflectors.

*** See catalog logic for more information regarding additional conduit sizing and fixture options and accessories.

MOUNT CODES ① ②		
Certilite® ①-②	Certilite®V ②②	DESCRIPTION
A-2	A2	3/4" Pendant
A-3	A3	1" Pendant
B-2	B2	3/4" Wall Bracket
B-3	B3	1" Wall Bracket
C-2	C2	3/4" Cone Top
D-4	D4	1-1/4" 25° Stanchion
D-5	D5	1-1/2" 25° Stanchion
S-5	S5	1-1/2" 90° Stanchion
X-2	X2	3/4" Ceiling
X-3	X3	1" Ceiling

VOLTAGE CODES ②		
Certilite®	Certilite®V	DESCRIPTION
0	0	Quad-Tap 120, 208, 240, 277V 60Hz
6	6	Tri-Tap 120, 277, 347V 60Hz
5	5	480V 60Hz
7	7	220V 60Hz
8	8	240V 50Hz

OPTIONS		
Certilite®	Certilite®V	DESCRIPTION
QTZ	QA	Quartz Auxiliary
IR	IR	Instant Restart
BP	BP	Ballast Protector
NR	NR	Restricted Breathing
SU103	AS	Assembled w/Standard Lamp

Certilite® VM Fixture



Certilite®V Fixture





Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
Suitable for wet locations
Marine
NEMA 3, 4, 4X
Factory Sealed

Listed - Files E10514 and E91793 (Marine)

Certified - File LR11713

FEATURES-SPECIFICATIONS

HOSTILELITE®

Applications

HOSTILELITE® EM, EB, & EQ Series fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4x areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible dusts as defined by the NEC.

Applications include classified areas such as paint manufacturing plants, ammunition facilities, oil and gas producing and refining plants, off-shore and dockside installations, tank farms, pipeline pumping stations and marine loading and fuel transfer terminals.

Features:

- Five light sources—Incandescent, compact fluorescent, high pressure sodium, metal halide and mercury vapor
- Mounting choice—Pendant, ceiling, 25° stanchion or 90° wall mount, all with “wireless” design that allows fast, easy fixture installation
- Factory sealed—No external seal needed. Simply wire mounting cap and thread on fixture to install
- Compact size—Medium base incandescent and HID lamps, plus PL fluorescent lamps allow smaller fixture design
- Corrosion resistant—Copper-free aluminum die-cast construction. Baked powder epoxy finish, electrostatically applied. Exposed hardware is 316 grade stainless steel

Accessories

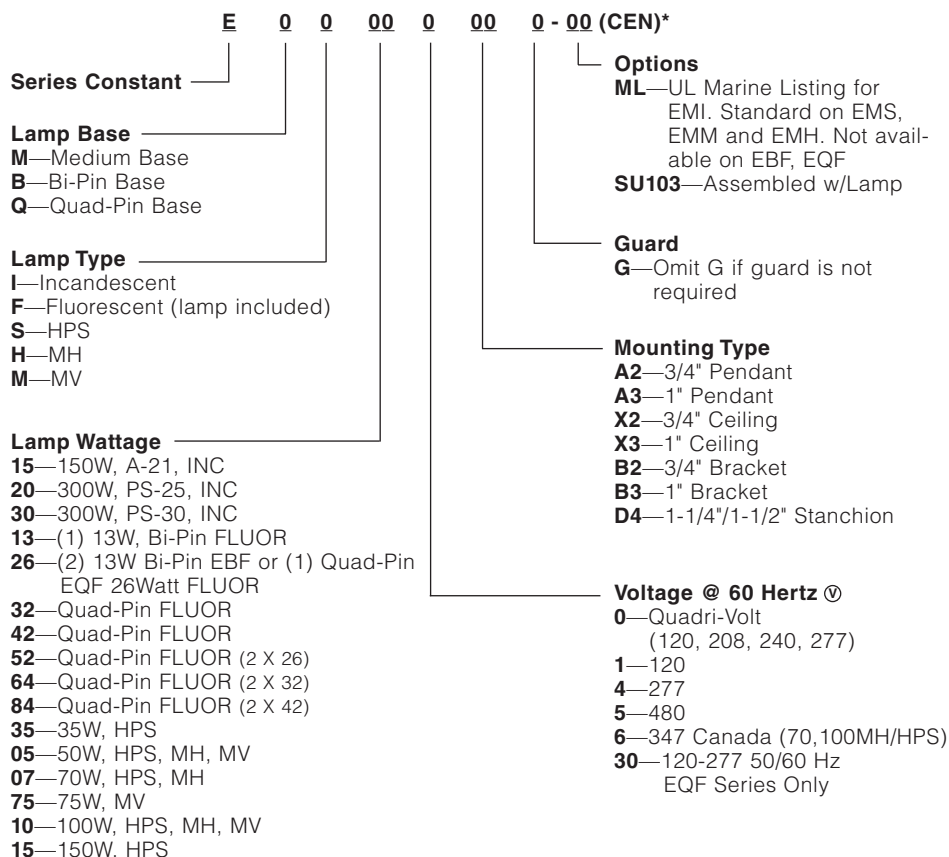
- Available with or without guard, standard dome or 25° angle reflector, exit sign and inner colored globes

Compliances

- UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL Marine Type Electric Lighting Fixtures

- UL-1570 Standard for Fluorescent Lighting Fixtures
- UL-1571 Standard for Incandescent Lighting Fixtures
- UL-1572 Standard for HID Lighting Fixtures
- CSA C22.2 no. 137-M1981 Electric Luminaires for use in Hazardous Locations
- NEMA 3, 4, 4X, 7CD, 9EFG

Catalog Number Logic



KILLARK®

*CEN (CENELEC) approval option available on certain models. See page L127 for more information.
 Ⓟ Consult factory for available lamp and voltage combinations.



Pendant



Ceiling



Wall



Stanchion

Class I, Div. 1 & 2, Groups C,D
 Class I, Zones 1 & 2, Groups IIB, IIA
 Class II, Div. 1 & 2, Groups E,F,G
 Class III, Div. 1 & 2
 Suitable for wet locations
 Marine
 NEMA 3, 4, 4X
 Factory Sealed

UL Listed - Files E10514 and E91793 (Marine)

SF Certified - File LR11713

ORDERING INFORMATION

EM 60-300W MEDIUM BASE INCANDESCENT ^①						
LAMP TYPE	LAMP/WATTS	LAMP SIZE	CATALOG NUMBER ^④			
			PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
INC	60, 75, 100, 150	A-19, A-21	EMI15A2G	EMI15X2G	EMI15B2G	EMI15D4G
	100, 150, 200, 300	A-23, PS-25	EMI20A2G	EMI20X2G	EMI20B2G	EMI20D4G
	200, 300	PS-25, PS-30	EMI30A2G	EMI30X2G	EMI30B2G	EMI30D4G

EBF 13-26W Bi-Pin COMPACT FLUORESCENT ^①						
LAMP TYPE	Bi-Pin FLUORESCENT		CATALOG NUMBER ^④			
	LAMP INCLUDED	LINE VOLTAGE @60Hz	PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
COMPACT FLUOR.	13 (1 X 13)	120	EBF131A2G	EBF131X2G	EBF131B2G	EBF131D4G
		277	EBF134A2G	EBF134X2G	EBF134B2G	EBF134D4G
	26 (2 X 13)	120	EBF261A2G	EBF261X2G	EBF261B2G	EBF261D4G
		277	EBF264A2G	EBF264X2G	EBF264B2G	EBF264D4G

EQF 26-42W WORLD VOLTAGE QUAD-PIN COMPACT FLUORESCENT ^①						
LAMP TYPE	Quad-Pin FLUORESCENT		CATALOG NUMBER ^④			
	LAMP INCLUDED	LINE VOLTAGE	PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
COMPACT FLUOR.	26 Watt ^⑤	120-277VAC 50-60Hz	EQF2630A2G	EQF2630X2G	EQF2630B2G	EQF2630D4G
	32 Watt ^⑤	120-277VAC 50-60Hz	EQF3230A2G	EQF3230X2G	EQF3230B2G	EQF3230D4G
	42 Watt ^⑤	120-277VAC 50-60Hz	EQF4230A2G	EQF4230X2G	EQF4230B2G	EQF4230D4G
	52 Watt (2 X 26)	120-277VAC 50-60Hz	EQF5230A2G	EQF5230X2G	EQF5230B2G	EQF5230D4G
	64 Watt (2 X 32)	120-277VAC 50-60Hz	EQF6430A2G	EQF6430X2G	EQF6430B2G	EQF6430D4G
	84 Watt (2 X 42)	120-277VAC 50-60Hz	EQF8430A2G	EQF8430X2G	EQF8430B2G	EQF8430D4G

① See Hazardous Location Application Data on pages L127-128 for specific suitability.

② For 1" pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EBF131A3G.

③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (refer to catalog logic).

④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

⑤ EQF 26-42 Watt fixtures use a tank extension ring and are 2.5" taller than EBF fixtures.

NOTE: Reflectors must be ordered separately (see page L123). All luminaires are designed for mounting with lamp in base up position.





Pendant



Ceiling



Wall



Stanchion

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
Suitable for wet locations
Marine
NEMA 3, 4, 4X
Factory Sealed

Listed - Files E10514 and E91793 (Marine)

Certified - File LR11713

FEATURES-SPECIFICATIONS

EM 35-150W MEDIUM BASE HIGH PRESSURE SODIUM ^{①④}							
LAMP TYPE	LAMP WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	CATALOG NUMBER ^④			
				PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
HPS	35	S-76	120	EMS351A2G	EMS351X2G	EMS351B2G	EMS351D4G
	50	S-68	120, 208, 240, 277	EMS050A2G	EMS050X2G	EMS050B2G	EMS050D4G
	70	S-62	120, 208, 240, 277	EMS070A2G	EMS070X2G	EMS070B2G	EMS070D4G
	70	S-62	480	EMS075A2G	EMS075X2G	EMS075B2G	EMS075D4G
	100	S-54	120, 208, 240, 277	EMS100A2G	EMS100X2G	EMS100B2G	EMS100D4G
	100	S-54	480	EMS105A2G	EMS105X2G	EMS105B2G	EMS105D4G
	150	S-55	120	EMS151A2G	EMS151X2G	EMS151B2G	EMS151D4G

EM 50-100W MEDIUM BASE METAL HALIDE ^{①④}							
LAMP TYPE	LAMP WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	CATALOG NUMBER ^④			
				PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
MH	50	M-110	120, 208, 240, 277	EMH050A2G	EMH050X2G	EMH050B2G	EMH050D4G
	70	M-98	120, 208, 240, 277	EMH070A2G	EMH070X2G	EMH070B2G	EMH070D4G
	100	M-90	120, 208, 240, 277	EMH100A2G	EMH100X2G	EMH100B2G	EMH100D4G

EM 50-100W MEDIUM BASE MERCURY VAPOR ^{①④}							
LAMP TYPE	LAMP WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	CATALOG NUMBER ^④			
				PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
MV	50	H-46	120/277	EMM0510A2G	EMM0510X2G	EMM0510B2G	EMM0510D4G
	75	H-43	120	EMM751A2G	EMM751X2G	EMM751B2G	EMM751D4G
	75	H-43	277	EMM754A2G	EMM754X2G	EMM754B2G	EMM754D4G
	100	H-38	120, 208, 240, 277	EMM100A2G	EMM100X2G	EMM100B2G	EMM100D4G
	100	H-38	480	EMM105A2G	EMM105X2G	EMM105B2G	EMM105D4G

^① See Hazardous Location Application Data on page L127-128 for specific suitability.

^② For 1" pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EMS351A3G.

^③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (refer to catalog logic).

^④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

NOTE: Reflectors must be ordered separately (see page L123). All luminaires are designed for mounting with lamp in base up position.



 Listed - Files E10514 and E91793 (Marine)
 Certified - File LR11713



EMI15/20/EBF



EMI30 & HID



Pendant



Ceiling



Wall Bracket



25° Stanchion

Housing, Globe and Globe Support Assemblies[Ⓛ]

INCANDESCENT			
CATALOG NUMBER	LAMP TYPE	WATTS	VOLTS [Ⓢ]
EMI15	A-19	60, 75	250 MAX. VAC
	A-19, A-21	100	
	A-21	150	
EMI20	A-23, PS-25	150	250 MAX. VAC
	A-23, PS-25	200	
	PS-25	300	
EMI30	PS-25	200	250 MAX. VAC
	PS-30	300	

FLUORESCENT with lamp(s)*			
CATALOG NUMBER	ANSI LAMP TYPE	WATTS	VOLTS
EBF131	Bi-Pin Fluorescent	13	120VAC
EBF134	Fluorescent		277VAC
EBF261	Bi-Pin Fluorescent	26 (2x13)	120VAC
EBF264	Fluorescent		277VAC
EQF2630	Quad Pin Fluorescent	26	120-277 VAC 50-60Hz
EQF3230		32	
EQF4230		42	
EQF5230		52 (2X26)	
EQF6430		64 (2X32)	
EQF6430		84 (2X42)	

HPS			
CATALOG NUMBER	ANSI LAMP TYPE	WATTS	VOLTS @60HZ.
EMS351	S-76	35	120
EMS050	S-68	50	Quadri-Volt
EMS070	S-62	70	Quadri-Volt
EMS075			480
EMS100	S-54	100	Quadri-Volt
EMS105			480
EMS151	S-55	150	120

METAL HALIDE			
CATALOG NUMBER	ANSI LAMP TYPE	WATTS	VOLTS @60HZ.
EMH050	M-110	50	Quadri-Volt
EMH070	M-98	70	Quadri-Volt
EMH100	M-90	100	Quadri-Volt

MERCURY VAPOR			
CATALOG NUMBER	ANSI LAMP TYPE	WATTS	VOLTS @60HZ.
EMM0510	H-46	50	120, 277
EMM751	H-43	70	120
EMM754			277
EMM100	H-38	100	Quadri-Volt
EMM105			480

MOUNTING BOXES				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB2	—	3/4"
EZA3	EZX3	EZB3	—	1"
—	—	—	EZD4*	1-1/4"/1-1/2**

*1-1/2" furnished with 1-1/2"-1-1/4" reducer



EZCUP

Close up plug for EZ mounting boxes. Used for maintenance when fixture is removed for service.



EMG1



EMG2



EAC[Ⓢ]



Standard Dome



Angle Dome

GUARDS		
CATALOG NUMBER	SERIES	LAMP TYPE
EMG1	EMI15	INC
	EMI20	INC
	EBF	Bi-Pin
	EQF (26, 32, 42)	Quad-Pin
EMG2	EMI30	INC
	EMS	HPS
	EMH	MH
	EMM	MV
	ESX	Strobe
EQF (52, 64, 84)	Quad-Pin	

REFLECTORS		
CATALOG NUMBER		SERIES
STANDARD DOME	ANGLE	
ERSD15	ERA15	EMI15/EMI20
		EBF
		EQF
ERSD30	ERA30	EMI30
		EMS
		EMH
		EMM
		EQF (52, 64, 84)

Reflectors are aluminum with white finish.

Guards are cast of copper-free aluminum with electrostatically applied epoxy/polyester finish.

- Ⓛ Assemblies may be ordered with the CEN (CENELEC) suffix. See page L127 for more information.
- Ⓢ Adapters for discontinued Killark "H" Series and Crouse Hinds[®] available. See page L200 for more information.
- Ⓢ UL fixture rating; socket rated 600V.
- * Consult factory for 52, 64 and 84 Watt availability.



Exit Sign Accessory

Hazardous Locations Exit Sign Applications

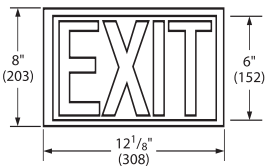
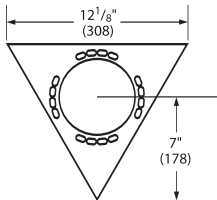
For use in hazardous areas to mark exits over doorways and in hallways.

Features

- Three sided illuminated sign visible from all three sides
- EXIT printed in 6" high red letters with 3/4" strokes as required by OSHA. Sign has open bottom providing light on exit area while illuminating the panel

EXIT SIGN	
CATALOG NUMBER	DESCRIPTION
HEXA-100	Fits EMI15, EMI20, EBF/EQF/EEQ Series without guard * (Fixture not included)

* EQF to 42W



Replacement Globe & Support Assemblies

REPLACEMENT GLOBE AND GLOBE SUPPORTS			
CATALOG NUMBER ^①	SERIES	LAMP TYPE	MAX. WATTAGE
EMGS1	EMI15	INC	150
	EMI20	INC	300
	EBF13/26	PL Bi-Pin Fluorescent	26
	EQF	PL Quad-Pin Fluorescent	26, 32, 42
EMGS2 EMGS3	EMI30	INC	300
	EMS	HPS	150
	EMH	MH	100
	EMM	MV	100
	EQF	PL Quad-Pin Fluorescent	52, 62, 84

① EMGS1, EMGS3 are internally fluted glass. EMGS2 is smooth clear glass used for ESX strobe.



EM Series



EB Series



Female
EZTB



Male
EZCB

REPLACEMENT SOCKETS	
CATALOG NUMBER	DESCRIPTION
EMRS	EM Series E-26 Medium Base
EBRS	EB Series

REPLACEMENT CONNECTION BLOCKS	
CATALOG NUMBER	DESCRIPTION
EZTB	Female
EZCB	Male

COLORED GLOBE KITS FOR HAZARDOUS LOCATIONS ^②	
KIT NO.	GLOBE COLOR
KT-100SU41R	RED
KT-100SU41G	GREEN

Used to modify EMI20 Series only fixtures to accept a colored inner globe. The kit includes the globe plus an adapter assembly and mounting instructions.

② Maximum lamp size A-21 150 Watt.

REPLACEMENT FLUORESCENT LAMPS	
CATALOG NUMBER	SIZE & TYPE
MPL13	13W Bi-Pin
MQL26	26W Quad-Pin
MQL32	32W Quad-Pin
MQL42	42W Quad-Pin



EM/EB BALLAST DATA								
LAMP SOURCE	LAMP WATTS/TYPE	VOLTAGE @ 60 HERTZ	START (AMPS)	OPERATING (AMPS)	OPEN (AMPS)	BALLAST CIRCUIT	REGULATION	MIN, START
(1) Bi-Pin Fluorescent	13W (1 X 13)	120 277	.39 .35	.30	—	NPF	—	32°F (0°C)
(2) Bi-Pin Fluorescent	26W (2 X 13)	120 277	.78 .70	.60	—	NPF	—	32°F (0°C)
Quad-Pin Fluorescent	26W 32W 42W	120-277	—	.24(120)/.11(277) .31(120)/.13(277) .38(120)/.18(277)	—	HPF	ELECTRONIC	0°F (-18°C)
Quad-Pin Fluorescent	52W (2X26) 64W (2X36) 84W (2X42)	120-277	—	.48(120)/.22(277) .62(120)/.26(277) .76(120)/.36(277)	—	HPF	ELECTRONIC	0°F (-18°C)
HPS	35W S-76	120	.55	.40	.65	R-HPF [Ⓢ]	±5% Line Voltage*	0°F (-40°C)
HPS	50W S-68	120	.58	.58	1.24	HX-HPF [Ⓢ]	±5% Line Voltage*	0°F (-40°C)
		208	.35	.33	.59			
		240	.30	.29	.50			
		277	.24	.25	.44			
HPS	70W S-62	120	.75	.81	1.45	HX-HPF [Ⓢ]	±5% Line Voltage*	0°F (-40°C)
		208	.45	.47	.85			
		240	.37	.40	.75			
		277	.35	.35	.65			
		480	.21	.21	.36			
HPS	100W S-54	120	1.30	1.15	2.20	HX-HPF [Ⓢ]	±5% Line Voltage*	0°F (-40°C)
		208	.76	.66	1.27			
		240	.66	.57	1.10			
		277	.60	.49	.85			
		480	.33	.28	.57			
HPS	150W S-55	120	2.20	1.50	2.35	HX-HPF [Ⓢ]	±5% Line Voltage*	0°F (-40°C)
MH	50W M-110	120	.87	.60	1.16	HX-HPF [Ⓢ]	±5% Line Voltage ±12% Lamp Watts	-20°F (-30°C)
		208	.51	.35	.67			
		240	.47	.30	.57			
		277	.39	.25	.50			
MH	70W M-98	120	.80	.85	1.70	HX-HPF [Ⓢ]	±5% Line Voltage ±12% Lamp Watts	-20°F (-30°C)
		208	.50	.50	1.04			
		240	.43	.43	.87			
		277	.39	.37	.78			
MH	100W M-90	120	1.20	1.15	2.30	HX-HPF [Ⓢ]	±5% Line Voltage ±12% Lamp Watts	-20°F (-30°C)
		208	.70	.60	1.30			
		240	.61	.55	1.10			
		277	.55	.45	.95			
MV	50W H-46	120	.60	.67	.30	CWA [Ⓢ]	±5% Line Voltage ±10% Lamp Watts	-20°F (-30°C)
		277	.26	.29	.13			
MV	75W H-43	120	.80	.82	.50	CWA [Ⓢ]	±5% Line Voltage ±10% Lamp Watts	-20°F (-30°C)
		277	.35	.36	.22			
MV	100W H-38	120	1.00	1.05	.64	CWA [Ⓢ]	±5% Line Voltage ±10% Lamp Watts	-20°F (-30°C)
		208	.58	.60	.37			
		240	.50	.52	.32			
		277	.43	.45	.28			
		480	.26	.26	.15			

* Lamp watts within ANSI Trapezoid limitations.
[Ⓢ] Ballast circuits are High Power Factor 90%+.



Pendant



Ceiling



Wall

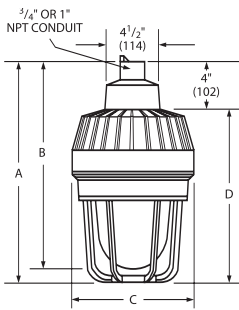


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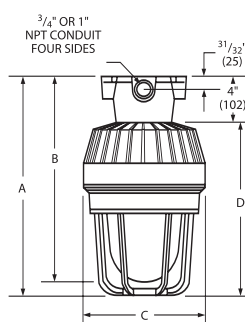
FEATURES-SPECIFICATIONS

EM/EMB/ESX DIMENSIONS															
SERIES	PENDANT				CEILING				WALL				STANCHION		
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C
EMI15 EMI20 EBF13 EBF26	14-5/16" (363)	13-11/16" (346)	7-7/16" (188)	10-5/16" (261)	14-5/16" (363)	13-11/16" (347)	7-7/16" (188)	10-5/16" (261)	15-13/16" (385)	14-7/16" (366)	14-1/2" (369)	10-5/16" (26)	14" (256)	13-1/4" (337)	13" (330)
EQF to 42W EEQ	16-13/16" (427)	16-3/16" (411)	7-7/16" (188)	12-5/8" (321)	16-13/16" (427)	16-3/16" (411)	7-7/16" (188)	12-5/8" (321)	18-5/16" (465)	16-15/16" (430)	14-1/2" (368)	12-5/8" (321)	16-1/4" (413)	15-3/4" (400)	15-1/4" (387)
EMI30 EMH EMM EMS ESX EQF 52, 64, 84	15-15/16" (404)	15-1/16" (382)	8-13/16" (224)	11-15/16" (303)	15-15/16" (404)	15-1/16" (382)	8-13/16" (224)	11-15/16" (303)	16-13/16" (426)	15-15/16" (404)	15" (379)	11-15/16" (303)	15-1/8" (384)	14" (356)	13-1/2" (343)

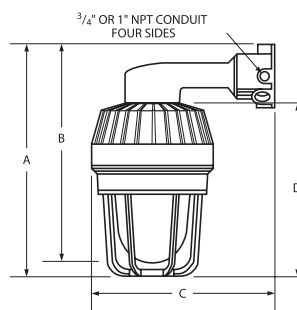
Pendant



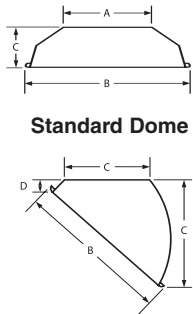
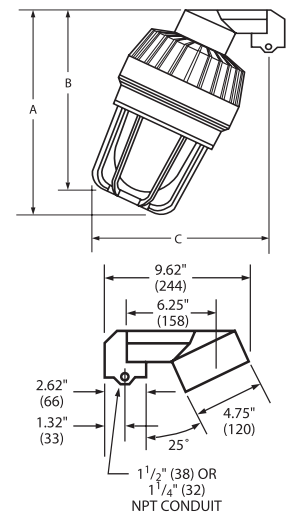
Ceiling



Wall

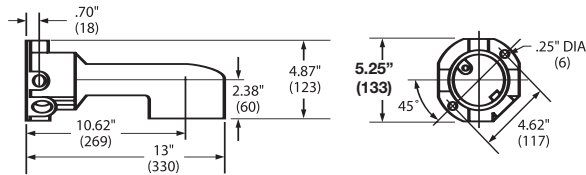
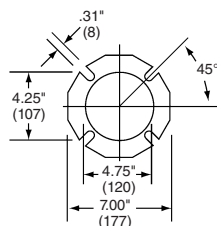


25° Stanchion



Standard Dome

Angle



REFLECTOR DIMENSIONS

SERIES	STANDARD DOME			ANGLE			
	A	B	C	A	B	C	D
EMI15/EMI20 EBF/EQF to 42W	7-3/8" (187)	14" (356)	3-3/4" (95)	7" (178)	11-1/2" (292)	7-3/4" (197)	1" (25)
EMI30/EMS EMH/EMM EQF 52, 64, 84	8-3/4" (222)	16-1/8" (409)	3-15/16" (100)	8-3/4" (222)	14-3/16" (360)	7-3/4" (197)	1" (25)



CEN Option

Applications

Killark EM/EB/ESX series fixtures are available with a European "Certificate of Conformity" from PTB (Physikalisch-Technische Bundesanstalt), the approval agency based in Germany. Fixtures with this rating will be useful for Original Equipment Manufacturers and others who build and ship apparatus into European markets.

This approval is granted by PTB with the use of a special ground lug and label. Fixtures carrying an EEx d IIB approval are automatically granted an IP54 (ingress protection) rating. See Temperature Code chart below for PTB certified ratings. Killark EM/EB/ESX fixtures with the PTB rating and labels still carry all UL & CSA ratings.

Fixture housing/globe/globe support assemblies (e.g. EM120 CEN) may be ordered with the CEN suffix. Complete fixture numbers, with the CEN suffix, will be shipped with the mounting boxes, guards and accessories as component parts. Reflectors and other accessory parts, as listed on pages L123-124, may be used. Killark fixtures are NPT tapped and plugged with at least one conduit hole open.

Compliances

- EN 50014:1992
- EN 50018:1994

Ex EEx d IIB T6 (or T5-T2)
PTB No. Ex-98.E.1076

MAXIMUM AMBIENT TEMPERATURE RANGE -20°C TO 40°C				
TYPE OF LUMINAIRE	TYPE OF ENCLOSURE	FORM OF THE LAMP	MAXIMUM WATTAGE	TEMPERATURE CLASS
EMI15	EMO20	A-19/A-21	150W	T4
EMI20	EMO20	A-23/PS-25	300W	T3
EMI30	EMO30	PS-25/PS-30	300W	T2
EMH05	EMO30	BD17/M-110	50W	T6
EMH07	EMO30	BD17/M-98	70W	T5
EMH10	EMO30	BD17/M-90	100W	T4
EMM05	EMO30	ED17/H-46	50W	T5
EMM75	EMO30	ED17/H-43	75W	T4
EMM10	EMO30	ED17/H-38	100W	T4
EMS35	EMO30	ED17/S-76	35W	T6
EMS05	EMO30	ED17/S-68	50W	T6
EMS07	EMO30	ED17/S-62	70W	T5
EMS10	EMO30	ED17/S-54	100W	T5
EMS15	EMO30	ED17/S-55	150W	T4
EBF13	EMO20	PL13	13W	T6
EBF26	EMO20	PL13	26W	T6
ESX()120	EMO30	120V AC	0.17 A	T6
ESX()240	EMO30	240V AC	0.12 A	T6
ESX()1274	EMO30	12 TO 74 V DC	1.25 TI 0.2 A	T6

EM/EB/EQ HAZARDOUS LOCATION DATA-CLASS I, DIV. 1 & 2 ^{①②}							
FIXTURE SERIES	LAMP TYPE/SIZE MAX.	LAMP WATTS	RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR °C MIN.	CLASS I, DIVISIONS 1 & 2 MAXIMUM SURFACE TEMPERATURE °C		
					UL/CSA		
					WITH OR WITHOUT REFLECTOR		
					TEMP. I.D.	ACTUAL TEMP.	UL/CSA GROUPS
EMI15	INC A-19	60	40	75	T6	79	C,D
			55	75	T6		C,D
			65	75	T4A		C,D
EMI15	INC A-19	75	40	75	T4A	103	C,D
			55	90	T4A		C,D
			65	90	T4		C,D
EMI15	INC A-19	100	40	75	T4A	103	C,D
			55	90	T4A		C,D
			65	90	T4		C,D
EMI15	INC A-21	100	40	75	T4A	101	C,D
			55	90	T4A		C,D
			65	90	T4		C,D
EMI15	INC A-21	150	40	75	T4	123	C,D
			55	90	T3C		C,D
			65	90	T3C		C,D
EMI20	INC A-23	100	40	90	T4A	107	C,D
			55	90	T4		C,D
			65	90	T4		C,D
EMI20	INC A-23	150	40	90	T4	132	C,D
			55	90	T3C		C,D
			65	111	T3C		C,D
EMI20	INC PS-25	150	40	90	T4	126	C,D
			55	110	T3C		C,D
			65	110	T3C		C,D
EMI20	INC A-23	200	40	90	T3C	146	C,D
			55	90	T3B		C,D
			65	110	T3A		C,D
EMI20	INC PS-25	200	40	90	T3C	154	C,D
			55	90	T3A		C,D
			65	110	T3A		C,D
EMI20	INC PS-25	300	40	90	T3	190	C,D
			55	110	T2D		C,D
			65				C,D
EMI30	INC PS-25	200	40	110	T3C	146	C,D
			55	110	T3B		C,D
			65	125	T3A		C,D
EMI30	INC PS-25	300	40	110	T3C	143	C,D
			55	110	T3B		C,D
			65	125	T3A		C,D
EMI30	INC PS-30	200	40	110	T3C	146	C,D
			55	110	T3B		C,D
			65	125	T3A		C,D
EMI30	INC PS-30	300	40	110	T3C	146	C,D
			55	110	T3B		C,D
			65	125	T3A		C,D
EBF13	1 13W Bi-Pin	13	40	75	T6	62	C,D
			55	90	T6		C,D
			65	90	T5		C,D
EBF26	2 13W Bi-Pin	26	40	75	T6	62	C,D
			55	90	T6		C,D
			65	90	T5		C,D
EQF26	1 26W Quad-Pin	26	40	75	T6	75	C,D
EQF32	1 32W Quad-Pin	32	40	75	T6	75	C,D
EQF42	1 42W Quad-Pin	42	40	75	T6	75	C,D
EQF52	2 26W Quad-Pin	52	40	75	T6	85	C,D
EQF64	2 32W Quad-Pin	64	40	75	T6	85	C,D
EQF84	2 42W Quad-Pin	84	40	75	T6	85	C,D
EMS35	HPS S-70	35	40	75	T6	65	C,D
			55	90	T5		C,D
			65	90	T4A		C,D
EMS05	HPS S-68	50	40	75	T6	68	C,D
			55	75	T6		C,D
			65	90	T5		C,D
EMS07	HPS S-62	70	40	75	T6	83	C,D
			55	90	T5		C,D
			65	90	T4A		C,D
EMS100	HPS S-54	100	40	75	T5	99	C,D
			55	90	T4A		C,D
			65	110	T4A		C,D
EMS151	HPS S-55	150	40	75	T4A	119	C,D
			55	90	T4		C,D
			65	110	T3C		C,D
EMM05	MV H-46	50	40	75	T6	78	C,D
			55	90	T5		C,D
			65	90	T4A		C,D
EMM75	MV H-43	75	40	75	T5	95	C,D
			55	90	T4A		C,D
			65	90	T4A		C,D
EMM100	MV H-38	100	40	75	T4A	111	C,D
			55	90	T4		C,D
			65	110	T3C		C,D
EMH05	MH M-110	50	40	75	T6	78	C,D
			55	90	T5		C,D
			65	110	T4A		C,D
EMH07	MH M-98	75	40	75	T5	95	C,D
			55	90	T4A		C,D
			65	110	T4A		C,D
EMH100	MH M-90	100	40	75	T4A	101	C,D
			55	90	T4		C,D
			65	110	T3C		C,D

① Do not install where marked operating temperature exceeds ignition temperature of hazardous atmosphere.

② See Class II table for simultaneous presence ratings.



EM/EB/EQ HAZARDOUS LOCATION DATA—CLASS II, III, DIVISIONS 1 & 2 ① ②														
FIXTURE SERIES	LAMP TYPE/SIZE MAX.	LAMP WATTS	RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR °C MIN.	CLASS II, DIV. 1 & 2 MAXIMUM SURFACE TEMPERATURE °C				UL/CSA GROUPS	CLASS III DIV. 1 & 2 UL/CSA SUITABILITY	UL MARINE LISTED ³	U.L. PAINT SPRAY SUITABILITY	UL/CSA TYPE 3 (RAIN-TIGHT)	UL/CSA TYPE 4 (HOSE-DOWN) ³
					UL/CSA WITHOUT REFLECTOR		UL/CSA WITH REFLECTOR							
					TEMP. I.D.	ACTUAL TEMP. °C	TEMP. I.D.	ACTUAL TEMP. °C						
EMI15	INC A-19	60	40	75	T3C	132	T3C	132	E,F,G	YES	YES	NO	YES	YES
			55	75	T3A				E,F	NO	YES	NO	YES	YES
			65	75	T3A				E,F	NO				
EMI15	INC A-19	75	40	75	T3A	163	T3A	162	E,F	NO	YES	NO	YES	YES
			55	90	T3A				E,F	NO	YES	NO	YES	YES
			65	90	T3A				E,F	NO	YES	NO	YES	YES
EMI15	INC A-19	100	40	75	T3A	163	T3A	162	E,F	NO	YES	NO	YES	YES
			55	90	T3A				E,F	NO	YES	NO	YES	YES
			65	90	T3A				E,F	NO	YES	NO	YES	YES
EMI15	INC A-21	100	40	75	T3A	172	T3A	172	E,F	NO	YES	NO	YES	YES
			55	90	T3				E,F	NO	YES	NO	YES	YES
			65	90	T3				E,F	NO	YES	NO	YES	YES
EMI15	INC A-21	150	40	75	N/A	192	T3	192	E,F	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI20	INC A-23	100	40	90	T3A	166	T3A	166	E,F	NO	YES	NO	YES	YES
			55	90	T3				E,F	NO	YES	NO	YES	YES
			65		N/A									
EMI20	INC A-23	150	40	90	T3	196	T3A	178	E,F	NO	YES	NO	YES	YES
			55	90	T3				E,F	NO	YES	NO	YES	YES
			65		N/A									
EMI20	INC PS-25	150	40	90	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI20	INC A-23	200	40	90	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI20	INC PS-25	200	40	90	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI20	INC PS-25	300	40	90	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI30	INC PS-25	200	40	110	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI30	INC PS-25	300	40	110	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI30	INC PS-30	200	40	110	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMI30	INC PS-30	300	40	110	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EBF13	1 13W Bi-Pin	13	40	75	T6	69	T6	66	E,F,G	YES	NO	YES	YES	YES
			55	90	T6				E,F,G	YES	NO	YES	YES	YES
			65	90	T5				E,F,G	YES	NO	YES	YES	YES
EBF26	2 13W Bi-Pin	26	40	75	T6	69	T6	66	E,F,G	YES	NO	YES	YES	YES
			55	90	T6				E,F,G	YES	NO	YES	YES	YES
			65	90	T5				E,F,G	YES	NO	YES	YES	YES
EQF26	1.26W Quad-Pin	26	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T6				E,F,G	YES	NO	YES	YES	YES
			65	90	T5				E,F,G	YES	NO	YES	YES	YES
EQF32	1.32W Quad-Pin	32	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T4				E,F,G	YES	NO	YES	YES	YES
			65	90	T4				E,F,G	YES	NO	YES	YES	YES
EQF42	1.42W Quad-Pin	42	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T4				E,F,G	YES	NO	YES	YES	YES
			65	90	T4				E,F,G	YES	NO	YES	YES	YES
EQF52	2.26W Quad-Pin	52	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T4				E,F,G	YES	NO	YES	YES	YES
			65	90	T4				E,F,G	YES	NO	YES	YES	YES
EQF64	2.32W Quad-Pin	64	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T4				E,F,G	YES	NO	YES	YES	YES
			65	90	T4				E,F,G	YES	NO	YES	YES	YES
EQF84	2.42W Quad-Pin	84	40	75	T4	135	T4	135	E,F,G	YES	NO	YES	YES	YES
			55	90	T4A	116	T4A	116	E,F,G	YES	YES	YES	YES	YES
			65		N/A									
EMS35	HPS S-70	35	40	75	T4A	116	T4A	116	E,F,G	YES	YES	YES	YES	YES
			55		N/A									
			65		N/A									
EMS05	HPS S-68	50	40	75	T4A	116	T4A	116	E,F,G	YES	YES	YES	YES	YES
			55	75	T4				E,F,G					
			65	90	T3C				E,F,G					
EMS07	HPS S-62	70	40	75	T4A	116	T4A	116	E,F,G	YES	YES	YES	YES	YES
			55	90	T4				E,F,G	YES	YES	YES	YES	YES
			65	90	T3C				E,F,G	YES	YES	YES	YES	YES
EMS100	HPS S-54	100	40	75	T3B	161	T3B	161	E,F,G	YES	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMS150	HPS S-55	150	40	75	T3A	180	T3B	180	E,F	NO	YES	NO	YES	YES
			55	90	T3				E,F	NO	YES	NO	YES	YES
			65		N/A									
EMM05	MV H-46	50	40	75	T4	121	T4	121	E,F,G	YES	YES	YES	YES	YES
			55		N/A									
			65		N/A									
EMM75	MV H-43	75	40	75	T4	121	T4	121	E,F,G	YES	YES	YES	YES	YES
			55	90	T3C				E,F,G	YES	YES	YES	YES	YES
			65	90	T3B				E,F,G	YES	YES	YES	YES	YES
EMM100	MV H-38	100	40	75	T3C	153	T3C	153	E,F,G	YES	YES	NO	YES	YES
			55		N/A									
			65		N/A									
EMH05	MH M-110	50	40	75	T4	121	T4	121	E,F,G	YES	YES	YES	YES	YES
			55	90	T3C				E,F	NO	YES	YES	YES	YES
			65	110	T3B				E,F,G	NO	YES	YES	YES	YES
EMH07	MH M-98	70	40	75	T4	121	T4	121	E,F,G	YES	YES	YES	YES	YES
			55	90	T3C				E,F,G	YES	YES	YES	YES	YES
			65	110	T3B				E,F,G	YES	YES	YES	YES	YES
EMH100	MH M-90	100	40	75	T3C	153	T3C	153	E,F,G	YES	YES	NO	YES	YES
			55	90	T3A				NO	YES	YES	NO	YES	YES
			65		N/A									

① Do not install where marked operating temperature exceeds ignition temperature of hazardous atmosphere.

② Fixtures rated for simultaneous presence as shown in Class II table (unless marked with N/A).

③ For UL-Marine and UL/CSA Type 4 listing add suffix "ML" to "EMI" Series fixture catalog number; standard on "EMS", "EMH", "EMM" series. Not available on "EBF", or "EQF" series.



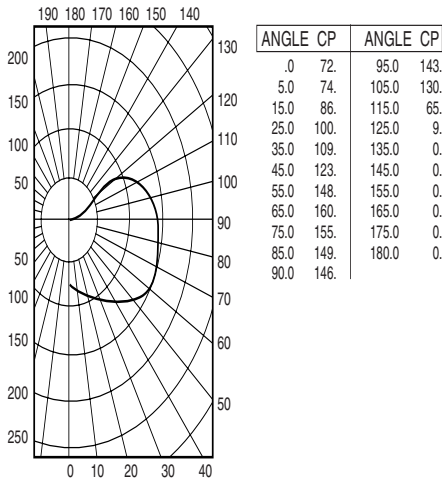
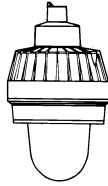
EMI15 INCANDESCENT

With Globe Only
60 – 100 Watt Medium Base

CANDLEPOWER – 100 WATT

A-19 lamp 1740 lumens

For 60 watt multiply by .494
For 75 watt multiply by .678



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0											
	70	50	30	10	0	70	50	30	10	0	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10									
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																																				
0	.79	.79	.79	.79	.74	.74	.74	.74	.66	.66	.66	.59	.59	.59	.52	.52	.52	.49	.68	.68	.68	.68	.63	.63	.63	.55	.55	.55	.48	.48	.48	.40	.40	.38	.36	.33	
1	.68	.63	.58	.54	.63	.59	.55	.51	.52	.49	.46	.45	.43	.40	.40	.38	.36	.33	.58	.53	.49	.45	.56	.52	.48	.45	.50	.46	.44	.48	.45	.43	.46	.44	.42	.41	
2	.60	.52	.46	.40	.56	.49	.43	.38	.43	.38	.34	.37	.33	.30	.32	.29	.26	.23	.52	.46	.41	.37	.51	.45	.40	.37	.43	.39	.36	.42	.38	.35	.40	.37	.35	.33	
3	.53	.44	.37	.31	.49	.41	.35	.30	.36	.31	.26	.31	.27	.23	.27	.23	.20	.18	.48	.38	.31	.25	.45	.36	.29	.24	.31	.26	.21	.27	.23	.19	.23	.20	.16	.14	
4	.48	.38	.31	.25	.45	.36	.29	.24	.31	.26	.21	.27	.23	.19	.23	.20	.16	.14	.44	.33	.26	.21	.40	.31	.25	.20	.27	.22	.17	.24	.19	.15	.20	.16	.13	.11	
5	.44	.33	.26	.21	.40	.31	.25	.20	.27	.22	.17	.24	.19	.15	.20	.16	.13	.11	.40	.29	.22	.17	.37	.27	.21	.16	.24	.18	.14	.21	.16	.13	.18	.14	.11	.09	
6	.40	.29	.22	.17	.37	.27	.21	.16	.24	.18	.14	.21	.16	.13	.18	.14	.11	.09	.36	.26	.19	.14	.34	.24	.18	.13	.21	.16	.12	.18	.14	.10	.16	.12	.09	.07	
7	.36	.26	.19	.14	.34	.24	.18	.13	.21	.16	.12	.18	.14	.10	.16	.12	.09	.07	.34	.23	.17	.12	.31	.22	.16	.12	.19	.14	.10	.17	.12	.09	.14	.10	.08	.06	
8	.34	.23	.17	.12	.31	.22	.16	.12	.19	.14	.10	.17	.12	.09	.14	.10	.08	.06	.31	.21	.15	.10	.29	.20	.14	.10	.17	.12	.09	.15	.11	.08	.13	.09	.06	.05	
9	.31	.21	.15	.10	.29	.20	.14	.10	.17	.12	.09	.15	.11	.08	.13	.09	.06	.05	.29	.19	.13	.09	.27	.18	.12	.09	.16	.11	.08	.14	.09	.07	.12	.08	.06	.04	
10	.29	.19	.13	.09	.27	.18	.12	.09	.16	.11	.08	.14	.09	.07	.12	.08	.06	.04																			

Spacing Criterion -- SC = 2.4

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 100 WATT INCANDESCENT											
	Horizontal Distance From Source in Feet											
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'		
8'	1.12	1.02	.55	.39	.23	.22	.16	.12	.07	.04		
10'	.72	.71	.43	.35	.29	.22	.18	.14	.08	.05		
12'	.50	.51	.36	.30	.25	.21	.17	.14	.09	.05		
14'	.36	.39	.29	.27	.22	.18	.15	.14	.09	.06		
16'	.28	.30	.25	.21	.19	.16	.14	.12	.09	.06		
18'	.22	.23	.21	.19	.16	.14	.13	.12	.09	.06		

$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} (\text{COS } \theta)$

Test No. LTL-00676

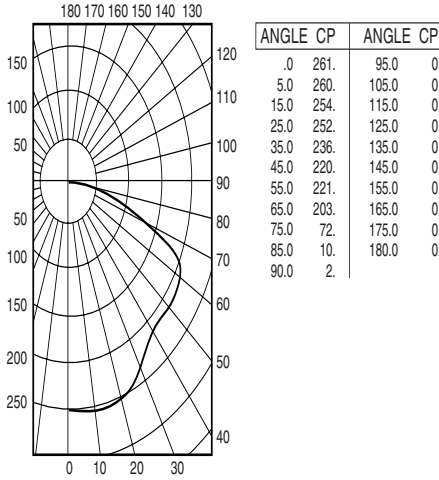
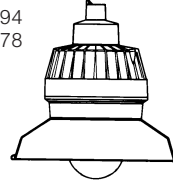
EMI15 INCANDESCENT

With Globe and Standard Dome Reflector
60 – 100 Watt Medium Base

CANDLEPOWER – 100 WATT

A-19 lamp 1740 lumens

For 60 watt multiply by .494
For 75 watt multiply by .678



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10								
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																																			
0	.70	.70	.70	.70	.68	.68	.68	.65	.65	.65	.62	.62	.62	.60	.60	.60	.58	.64	.61	.58	.56	.62	.59	.57	.55	.57	.55	.53	.55	.53	.53	.51	.50	.49		
1	.58	.53	.49	.45	.56	.52	.48	.45	.50	.46	.44	.48	.45	.43	.46	.44	.42	.41	.52	.46	.41	.37	.51	.45	.40	.37	.43	.39	.36	.42	.38	.35	.40	.37	.35	.33
2	.48	.40	.35	.31	.46	.40	.35	.31	.38	.34	.30	.37	.33	.30	.35	.32	.29	.28	.48	.40	.35	.31	.46	.40	.35	.31	.38	.34	.30	.37	.33	.30	.35	.32	.29	.28
3	.43	.35	.30	.26	.42	.35	.29	.26	.33	.29	.25	.32	.28	.25	.31	.28	.25	.23	.43	.35	.30	.26	.42	.35	.29	.26	.33	.29	.25	.32	.28	.25	.31	.28	.25	.23
4	.39	.31	.26	.22	.38	.31	.25	.22	.30	.25	.21	.29	.24	.21	.28	.24	.21	.20	.39	.31	.26	.22	.38	.31	.25	.22	.30	.25	.21	.29	.24	.21	.28	.24	.21	.20
5	.36	.28	.22	.18	.35	.27	.22	.18	.26	.22	.18	.25	.21	.18	.24	.21	.18	.17	.36	.28	.22	.18	.35	.27	.22	.18	.26	.22	.18	.25	.21	.18	.24	.21	.18	.17
6	.33	.25	.20	.16	.32	.24	.19	.16	.24	.19	.16	.23	.19	.16	.22	.18	.16	.14	.33	.25	.20	.16	.32	.24	.19	.16	.24	.19	.16	.23	.19	.16	.22	.18	.16	.14
7	.31	.22	.17	.14	.30	.22	.17	.14	.21	.17	.14	.21	.17	.14	.21	.17	.14	.12	.31	.22	.17	.14	.30	.22	.17	.14	.21	.17	.14	.21	.17	.14	.21	.17	.14	.12
8	.29	.20	.15	.12	.28	.20	.15	.12	.19	.15	.12	.19	.15	.12	.18	.15	.12	.11	.29	.20	.15	.12	.28	.20	.15	.12	.19	.15	.12	.19	.15	.12	.18	.15	.12	.11

Spacing Criterion -- SC = 1.4

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 100 WATT INCANDESCENT											
	Horizontal Distance From Source in Feet											
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'		
8'	4.07	2.28	.83	.58	.40	.28	.21	.13	.04	.02		
10'	2.61	1.80	.77	.57	.43	.32	.24	.18	.08	.03		
12'	1.81	1.38	.71	.54	.42	.33	.26	.20	.11	.05		
14'	1.33	1.07	.64	.50	.39	.32	.26	.21	.12	.07		
16'	1.01	.86	.57	.46	.37	.30	.25	.21	.13	.08		
18'	.80	.70	.50	.42	.35	.29	.24	.20	.13	.09		

$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} (\text{COS } \theta)$

Test No. LTL-00677

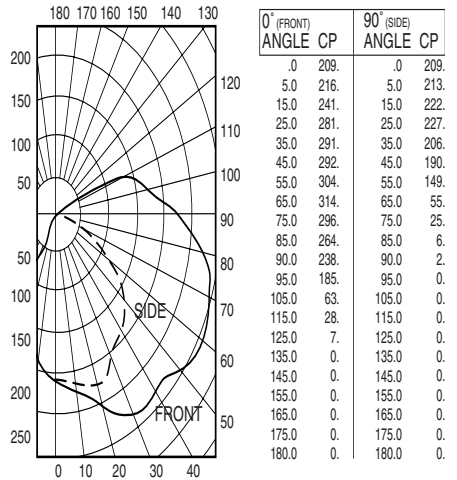
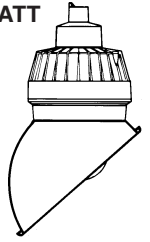
EMI15 INCANDESCENT

With Globe and Angle Reflector
60 – 100 Watt Medium Base

CANDLEPOWER – 100 WATT

A-19 lamp 1740 lumens

For 60 watt multiply by .494
For 75 watt multiply by .678



Coefficients of Utilization -- Zonal Cavity Method

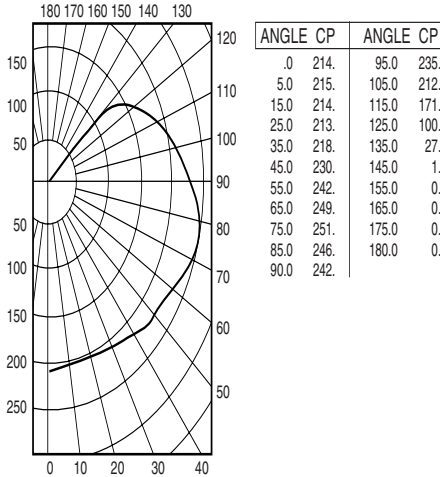
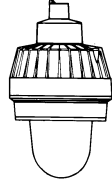
% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10								
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																																			
0	.63	.63	.63	.63	.61	.61	.61	.57	.57	.57	.54	.54	.54	.51	.51	.51	.50	.56	.52	.49	.47	.54	.51	.48	.46	.48	.46	.44	.45	.43	.42	.42	.41	.40	.38	
1	.50	.45	.41	.37	.48	.44	.40	.36	.41	.38	.35	.39	.36	.34	.36	.34	.32	.31	.45	.39	.34	.30	.44	.38	.33	.30	.36	.32	.29	.34	.30	.28	.32	.29	.27	.25
2	.41	.34	.29	.26	.40	.34	.29	.25	.32	.28	.24	.30	.27	.24	.28	.25	.23	.22	.41	.34	.29	.26	.40	.34	.29	.25	.32	.28	.24	.30	.27	.24	.28	.25	.23	.22
3	.38	.31	.25	.22	.36	.30	.25	.21	.28	.24	.21	.27	.23	.20	.25	.22	.20	.18	.38	.31	.25	.22	.36	.30	.25	.21	.28	.24	.21	.27	.23	.20	.25	.22	.20	.18
4	.35	.27	.22	.19	.33	.26	.22	.18	.25	.21	.18	.24	.20	.17	.23	.19	.16	.1																		

EMI15 INCANDESCENT

With Globe Only
100 – 150 Watt Medium Base

CANDLEPOWER – 150 WATT

A-21 lamp 2880 lumens
For 100 watt multiply by .587



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance tw	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.87	.87	.87	.87	.82	.82	.82	.82	.72	.72	.72	.64	.64	.64	.56	.56	.56	.52												
1	.75	.70	.65	.61	.70	.66	.61	.58	.57	.54	.51	.50	.47	.45	.43	.41	.39	.35												
2	.67	.59	.52	.46	.62	.55	.49	.44	.48	.43	.39	.41	.37	.34	.35	.32	.29	.26												
3	.60	.50	.43	.37	.56	.47	.40	.35	.41	.35	.31	.35	.31	.27	.30	.26	.23	.20												
4	.55	.44	.36	.30	.51	.41	.34	.29	.36	.30	.25	.31	.26	.22	.26	.22	.19	.16												
5	.50	.39	.31	.25	.46	.36	.29	.24	.31	.26	.21	.27	.22	.18	.23	.19	.16	.13												
6	.45	.34	.26	.21	.42	.32	.25	.20	.28	.22	.18	.24	.19	.15	.20	.16	.13	.11												
7	.42	.30	.23	.18	.38	.28	.22	.17	.25	.19	.15	.21	.17	.13	.18	.14	.11	.09												
8	.38	.27	.20	.15	.36	.26	.19	.15	.22	.17	.13	.19	.15	.11	.16	.13	.10	.08												
9	.36	.25	.18	.13	.33	.23	.17	.13	.20	.15	.11	.17	.13	.10	.15	.11	.08	.07												
10	.33	.22	.16	.12	.31	.21	.15	.11	.18	.13	.10	.16	.12	.08	.14	.10	.07	.06												

Spacing Criterion -- SC = 1.6

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 150 WATT INCANDESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	3.34	2.05	.90	.65	.47	.34	.26	.20	.11	.07	
10'	2.14	1.65	.81	.62	.47	.36	.28	.22	.13	.08	
12'	1.48	1.17	.70	.56	.45	.36	.29	.23	.14	.09	
14'	1.09	.91	.60	.50	.41	.34	.28	.23	.15	.10	
16'	.83	.73	.51	.44	.37	.32	.27	.23	.15	.10	
18'	.66	.59	.44	.38	.33	.29	.25	.22	.15	.10	

$$FC = \frac{\text{Candlepower}}{\text{COS } \theta} \cdot \frac{1}{\text{DISTANCE}^2}$$

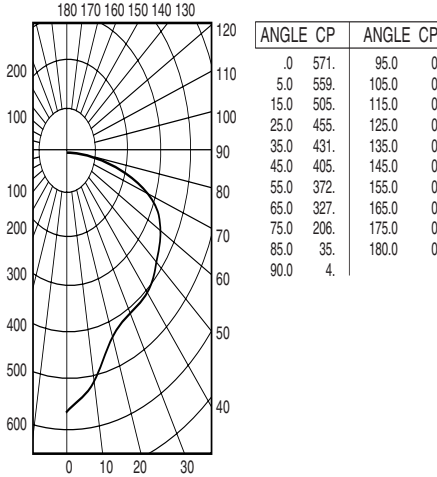
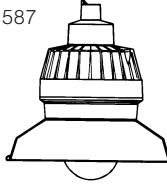
Test No. LTL-00679

EMI15 INCANDESCENT

With Globe and Standard Dome Reflector
100 – 150 Watt Medium Base

CANDLEPOWER – 150 WATT

A-21 lamp 2880 lumens
For 100 watt multiply by .587



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance tw	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.79	.79	.79	.79	.77	.77	.77	.77	.74	.74	.74	.70	.70	.70	.67	.67	.67	.66												
1	.72	.68	.65	.62	.70	.67	.64	.61	.64	.62	.59	.61	.59	.58	.59	.57	.56	.54												
2	.65	.59	.54	.50	.63	.58	.53	.49	.55	.51	.48	.53	.50	.47	.51	.48	.46	.45												
3	.58	.51	.45	.41	.57	.50	.45	.40	.48	.43	.40	.46	.42	.39	.44	.41	.38	.37												
4	.53	.45	.39	.34	.52	.44	.38	.34	.42	.37	.34	.41	.37	.33	.39	.36	.33	.31												
5	.49	.40	.33	.29	.47	.39	.33	.29	.37	.32	.28	.36	.32	.28	.35	.31	.28	.26												
6	.45	.35	.29	.24	.43	.35	.29	.24	.33	.28	.24	.32	.27	.24	.31	.27	.24	.22												
7	.41	.31	.25	.21	.40	.31	.25	.21	.30	.24	.21	.29	.24	.20	.28	.23	.20	.19												
8	.38	.28	.22	.18	.37	.28	.22	.18	.27	.22	.18	.26	.21	.18	.25	.21	.18	.16												
9	.35	.26	.20	.16	.34	.25	.20	.16	.24	.19	.16	.24	.19	.16	.23	.19	.16	.14												
10	.32	.23	.18	.14	.32	.23	.18	.14	.22	.17	.14	.22	.17	.14	.21	.17	.14	.13												

Spacing Criterion -- SC = 1.2

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 150 WATT INCANDESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	8.92	4.17	1.47	.98	.67	.48	.33	.23	.11	.06	
10'	5.71	3.17	1.43	1.02	.72	.51	.40	.30	.14	.08	
12'	3.96	2.57	1.32	.99	.75	.57	.44	.33	.19	.10	
14'	2.91	2.05	1.18	.93	.73	.57	.46	.36	.21	.13	
16'	2.23	1.68	1.04	.86	.69	.56	.45	.37	.22	.14	
18'	1.76	1.39	.91	.76	.65	.54	.44	.36	.23	.15	

$$FC = \frac{\text{Candlepower}}{\text{COS } \theta} \cdot \frac{1}{\text{DISTANCE}^2}$$

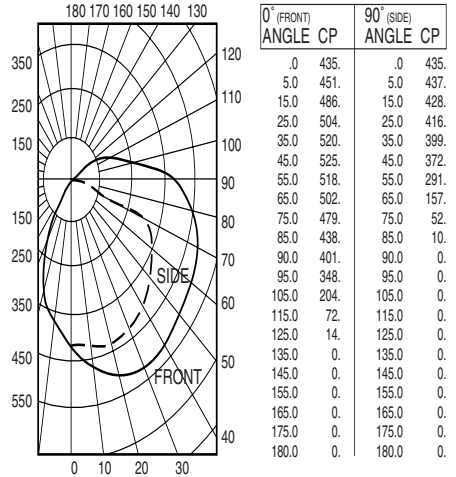
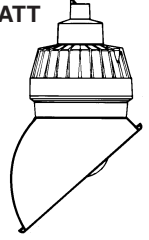
Test No. LTL-00680

EMI15 INCANDESCENT

With Globe and Angle Reflector
100 – 150 Watt Medium Base

CANDLEPOWER – 150 WATT

A-21 lamp 2880 lumens
For 100 watt multiply by .587



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance tw	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.70	.70	.70	.70	.68	.68	.68	.64	.64	.64	.60	.60	.60	.57	.57	.57	.55													
1	.63	.59	.56	.53	.60	.57	.54	.52	.54	.51	.49	.50	.48	.47	.47	.46	.44	.43												
2	.56	.51	.46	.42	.54	.49	.45	.41	.46	.43	.40	.43	.41	.38	.41	.38	.36	.35												
3	.51	.44	.39	.35	.49	.43	.38	.34	.40	.36	.33	.38	.35	.32	.36	.33	.30	.29												
4	.47	.39	.34	.30	.45	.38	.33	.29	.36	.32	.28	.34	.30	.27	.32	.29	.26	.25												
5	.43	.35	.29	.25	.41	.34	.29	.25	.32	.28	.24	.30	.26	.23	.29	.25	.23	.21												
6	.40	.31	.26	.22	.38	.30	.25	.21	.29	.24	.21	.27	.23	.20	.26	.22	.20	.18												
7	.36	.28	.23	.19	.35	.27	.22	.18	.26	.21	.18	.24	.20	.17	.23	.20	.17	.16												
8	.34	.25	.20	.16	.33	.25	.20	.16	.23	.19	.16	.22	.18	.15	.21	.18	.15	.14												
9	.31	.23	.18	.14	.30	.22	.18	.14	.21	.17	.14	.20	.16	.14	.19	.16	.13	.12												
10	.29	.21	.16	.12	.28	.20	.16	.13	.20	.15	.12	.19	.15	.12	.18	.14	.12	.11												

0-DEG / 90-DEG

Spacing Criterion -- SC = 1.8 / 1.4

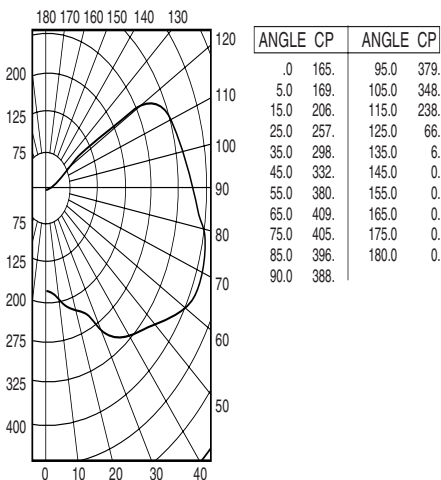
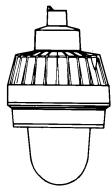
Illumination on Horizontal Surface

EMI20 INCANDESCENT

With Globe Only Reflector
150, 200 and 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 150 watt multiply by .421
For 200 watt multiply by .506



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	58	58	58	55	55	55	49	49	49	43	43	43	38	38	38	35														
1	50	46	43	40	47	44	41	38	38	36	34	33	31	29	28	27	26	23												
2	44	39	34	30	41	36	32	28	31	28	25	27	24	22	23	21	19	17												
3	40	33	28	23	37	31	26	22	27	23	19	23	20	17	19	17	15	13												
4	36	28	23	19	33	27	22	18	23	19	16	20	16	14	17	14	12	10												
5	32	25	19	16	30	23	18	15	20	16	13	17	14	11	15	12	10	08												
6	30	22	17	13	27	20	16	12	18	14	11	15	12	09	13	10	08	06												
7	27	19	14	11	25	18	13	10	16	12	09	13	10	08	11	08	06	05												
8	25	17	12	09	23	16	12	09	14	10	08	12	09	06	10	07	05	04												
9	23	16	11	08	21	15	10	07	13	09	06	11	08	06	09	07	05	03												
10	21	14	10	07	20	13	09	06	11	08	06	10	07	05	08	06	04	03												

Spacing Criterion -- SC = 2.6

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	2.58	2.24	1.36	1.01	.75	.56	.43	.33	.18	.11	
10'	1.65	1.84	1.17	.93	.75	.57	.45	.36	.21	.13	
12'	1.15	1.32	.99	.82	.68	.56	.45	.37	.23	.14	
14'	.84	.98	.82	.70	.60	.50	.43	.37	.24	.16	
16'	.64	.73	.68	.60	.52	.46	.40	.34	.24	.16	
18'	.51	.57	.57	.52	.46	.41	.36	.32	.24	.17	

$$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} \text{ (COS } \theta \text{)}$$

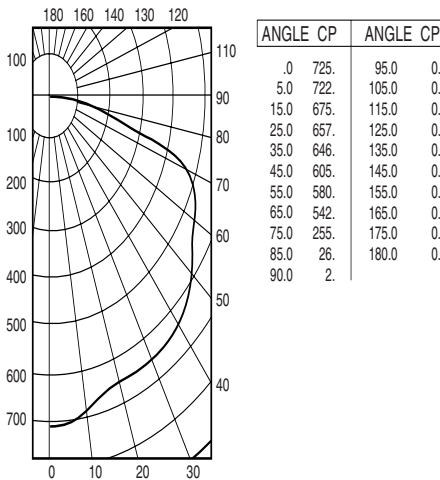
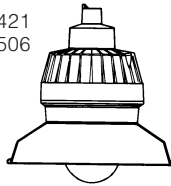
Test No. LTL-00673

EMI20 INCANDESCENT

With Globe and Standard Dome Reflector
150, 200 and 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 150 watt multiply by .421
For 200 watt multiply by .506



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	52	52	52	52	51	51	51	51	49	49	49	47	47	47	45	45	45	44												
1	48	45	44	42	46	44	43	41	43	41	40	41	40	39	39	38	37	37												
2	43	39	36	34	42	38	36	33	37	35	32	35	33	32	34	32	31	30												
3	39	34	30	27	38	33	30	27	32	29	27	31	28	26	30	27	26	25												
4	35	30	26	23	34	29	26	23	28	25	22	27	24	22	26	24	22	21												
5	32	26	22	19	31	26	22	19	25	21	19	24	21	18	23	20	18	17												
6	29	23	19	16	28	23	19	16	22	18	16	21	18	16	20	18	15	14												
7	27	20	16	13	26	20	16	13	19	16	13	19	16	13	18	15	13	12												
8	25	18	14	12	24	18	14	12	18	14	12	17	14	12	16	14	11	11												
9	23	17	13	10	22	16	13	10	16	12	10	15	12	10	15	12	10	09												
10	21	15	11	09	21	15	11	09	14	11	09	14	11	09	14	11	09	08												

Spacing Criterion -- SC = 1.4

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	11.32	6.23	2.16	1.55	1.07	.78	.57	.36	.15	.07	
10'	7.25	4.70	2.14	1.49	1.14	.85	.64	.49	.23	.13	
12'	5.03	3.60	1.97	1.48	1.09	.88	.69	.53	.31	.16	
14'	3.70	2.83	1.78	1.40	1.09	.83	.66	.56	.33	.21	
16'	2.83	2.26	1.55	1.29	1.04	.84	.65	.54	.35	.23	
18'	2.24	1.86	1.34	1.15	.97	.81	.66	.53	.36	.24	

$$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} \text{ (COS } \theta \text{)}$$

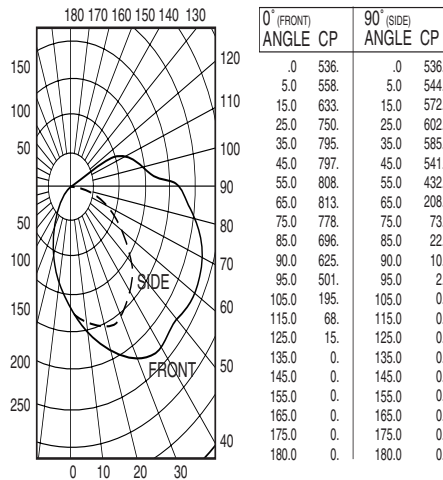
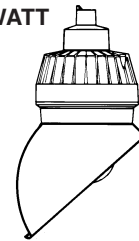
Test No. LTL-00674

EMI20 INCANDESCENT

With Globe and Angle Reflector
150, 200 and 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 150 watt multiply by .421
For 200 watt multiply by .506



Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	47	47	47	47	45	45	45	43	43	43	40	40	40	38	38	38	37													
1	41	39	37	35	40	38	36	34	36	34	33	34	32	31	32	31	30	29												
2	37	33	30	28	36	32	30	27	31	28	26	29	27	25	27	26	24	23												
3	34	29	25	23	32	28	25	22	27	24	21	25	23	21	24	22	20	19												
4	31	26	22	19	30	25	21	19	24	21	18	22	20	18	21	19	17	16												
5	28	23	19	16	27	22	19	16	21	18	15	20	17	15	19	16	15	14												
6	26	20	16	14	25	20	16	14	19	16	13	18	15	13	17	15	13	12												
7	24	18	14	12	23	18	14	12	17	14	11	16	13	11	15	13	11	10												
8	22	16	13	10	21	16	13	10	15	12	10	14	12	10	14	11	09	09												
9	20	15	11	09	20	14	11	09	14	11	09	13	10	08	12	10	08	07												
10	19	13	10	08	18	13	10	08	13	10	08	12	09	07	11	09	07	07												

0-DEG / 90-DEG

Spacing Criterion -- SC = 2.1 / 1.6

Illumination on Horizontal Surface

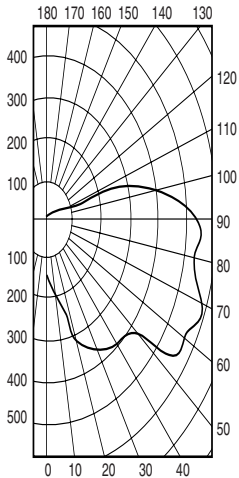
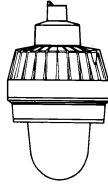
Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
0' 8"	8.38	7.44	3.05	2.15	1.55	1.13	.85	.64	.35	.21	
10'	5.36	5.37	2.82	2.10	1.59	1.20	.93	.73	.41	.25	
12'	3.72	3.90	2.5								

EMI30 INCANDESCENT

With Globe Only
200 – 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 200 watt multiply by .597



ANGLE CP	ANGLE CP
.0	139.
5.0	184.
10.0	213.
15.0	268.
20.0	364.
25.0	371.
30.0	381.
35.0	410.
40.0	402.
45.0	434.
50.0	488.
55.0	586.
60.0	573.
65.0	604.
70.0	585.
75.0	567.
80.0	566.
85.0	549.
90.0	515.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.72	.72	.72	.72	.68	.68	.68	.68	.63	.63	.63	.57	.57	.57	.52	.52	.52	.50												
1	.61	.57	.52	.49	.58	.54	.50	.47	.49	.46	.43	.44	.42	.39	.40	.38	.36	.33												
2	.54	.46	.40	.35	.51	.44	.39	.34	.40	.35	.31	.36	.32	.29	.32	.29	.26	.24												
3	.48	.39	.33	.28	.45	.37	.31	.26	.34	.29	.24	.30	.26	.22	.27	.23	.20	.18												
4	.43	.34	.27	.22	.41	.32	.26	.21	.29	.24	.19	.26	.21	.18	.23	.19	.16	.14												
5	.39	.29	.22	.17	.36	.28	.21	.17	.25	.19	.15	.22	.18	.14	.20	.16	.13	.11												
6	.35	.25	.19	.14	.33	.24	.18	.14	.22	.16	.13	.19	.15	.11	.17	.13	.10	.09												
7	.32	.23	.16	.12	.30	.21	.16	.11	.19	.14	.10	.17	.13	.09	.15	.11	.08	.07												
8	.30	.20	.14	.10	.28	.19	.13	.10	.17	.12	.09	.15	.11	.08	.14	.10	.07	.06												
9	.27	.18	.12	.08	.26	.17	.12	.08	.15	.11	.07	.14	.10	.07	.12	.08	.06	.04												
10	.25	.16	.11	.07	.24	.16	.10	.07	.14	.09	.06	.13	.08	.06	.11	.08	.05	.04												

Spacing Criterion -- SC = 3.5

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	2.17	3.67	1.86	1.56	1.09	.84	.63	.47	.26	.15
10'	1.39	2.65	1.53	1.28	1.15	.85	.66	.54	.30	.19
12'	.96	1.97	1.26	1.06	.93	.80	.69	.56	.34	.21
14'	.71	1.55	1.13	.90	.78	.69	.66	.56	.34	.23
16'	.54	1.01	.92	.82	.67	.60	.54	.46	.35	.23
18'	.43	.74	.79	.67	.62	.52	.47	.43	.36	.24

$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2}$

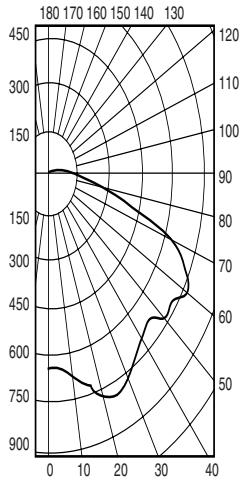
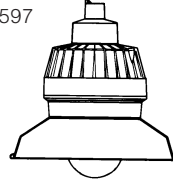
Test No. BALL-6769.1

EMI30 INCANDESCENT

With Globe and Standard Dome Reflector
200 – 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 200 watt multiply by .597



ANGLE CP	ANGLE CP
.0	649.
5.0	647.
10.0	684.
15.0	747.
20.0	825.
25.0	842.
30.0	768.
35.0	754.
40.0	738.
45.0	693.
50.0	705.
55.0	749.
60.0	774.
65.0	735.
70.0	458.
75.0	132.
80.0	82.
85.0	32.
90.0	3.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.61	.61	.61	.61	.59	.59	.59	.59	.57	.57	.57	.54	.54	.54	.52	.52	.52	.51												
1	.56	.53	.51	.49	.54	.52	.50	.49	.50	.49	.47	.48	.47	.46	.46	.45	.44	.43												
2	.51	.46	.43	.40	.49	.46	.42	.40	.44	.41	.39	.42	.40	.38	.40	.39	.37	.36												
3	.46	.41	.36	.33	.45	.40	.36	.33	.38	.35	.32	.37	.34	.31	.35	.33	.31	.30												
4	.42	.35	.31	.27	.40	.35	.30	.27	.33	.30	.27	.32	.29	.26	.31	.28	.26	.25												
5	.37	.30	.25	.22	.36	.30	.25	.22	.29	.25	.21	.28	.24	.21	.27	.23	.21	.20												
6	.34	.27	.22	.18	.33	.26	.22	.18	.25	.21	.18	.24	.21	.18	.23	.20	.18	.17												
7	.31	.24	.19	.15	.30	.23	.19	.15	.22	.18	.15	.22	.18	.15	.21	.18	.15	.14												
8	.28	.21	.16	.13	.28	.21	.16	.13	.20	.16	.13	.19	.16	.13	.19	.15	.13	.12												
9	.26	.19	.14	.11	.25	.18	.14	.11	.18	.14	.11	.17	.13	.11	.17	.13	.11	.10												
10	.24	.17	.13	.10	.23	.17	.12	.10	.16	.12	.10	.16	.12	.09	.15	.12	.09	.08												

Spacing Criterion -- SC = 1.7

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	10.14	7.26	2.68	2.00	1.48	1.06	.77	.42	.16	.03
10'	6.49	6.02	2.45	1.85	1.47	1.13	.89	.67	.27	.14
12'	4.51	4.57	2.32	1.70	1.35	1.03	.89	.73	.41	.18
14'	3.31	3.51	2.07	1.65	1.25	1.02	.86	.72	.46	.28
16'	2.53	2.63	1.81	1.51	1.23	.96	.80	.67	.47	.32
18'	2.00	2.06	1.58	1.36	1.14	.95	.76	.64	.46	.32

$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2}$

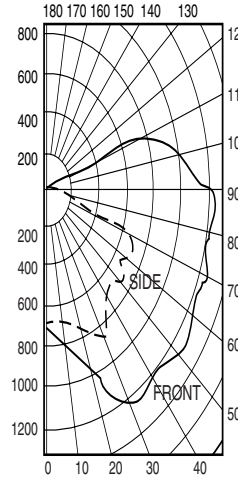
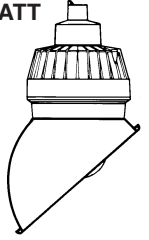
Test No. BALL-6770.1

EMI30 INCANDESCENT

With Globe and Angle Reflector
200 – 300 Watt Medium Base

CANDLEPOWER – 300 WATT

PS-25 lamp 6360 lumens
For 200 watt multiply by .597



0° (FRONT) ANGLE CP	90° (SIDE) ANGLE CP
.0	563.
5.0	714.
15.0	888.
25.0	927.
35.0	853.
45.0	875.
55.0	950.
65.0	998.
75.0	890.
85.0	807.
90.0	561.
95.0	179.
105.0	96.
115.0	33.
125.0	0.
135.0	0.
145.0	0.
155.0	0.
165.0	0.
175.0	0.
180.0	0.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.52	.52	.52	.52	.51	.51	.51	.51	.48	.48	.48	.45	.45	.45	.42	.42	.42	.41												
1	.46	.43	.41	.39	.45	.42	.40	.38	.40	.38	.36	.37	.36	.34	.35	.34	.33	.32												
2	.41	.37	.33	.30	.40	.36	.32	.29	.33	.31	.28	.31	.29	.27	.30	.28	.26	.25												
3	.37	.32	.28	.24	.36	.31	.27	.24	.29	.26	.23	.27	.25	.22	.26	.23	.21	.20												
4	.34	.28	.23	.20	.32	.27	.23	.20	.25	.22	.19	.24	.21	.19	.23	.20	.18	.17												
5	.31	.24	.20	.16	.29	.24	.19	.16	.22	.19	.16	.21	.18	.15	.20	.17	.15	.14												
6	.28	.22	.17	.14	.27	.21	.17	.14	.20	.16	.13	.19	.15	.13	.18	.15	.13	.12												
7	.26	.19	.15	.12	.25	.19	.15	.12	.18	.14	.12	.17	.14	.11	.16	.13	.11	.10												
8	.24	.17	.13	.10	.23	.17	.13	.10	.16	.12	.10	.15	.12	.10	.14	.11	.09	.08												
9	.22	.16	.12	.09	.21	.15	.11	.09	.14	.11	.09	.14	.11	.09	.13	.10	.08	.07												
10	.20	.14	.10	.08	.20	.14	.10	.08	.13	.10	.08	.13	.10	.08	.12	.09	.07	.06												

Spacing Criterion -- SC = 2.14 / 1.5

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 300 WATT INCANDESCENT									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	8.80	8.18	3.43	2.53	1.87	1.39	1.04	.79	.43	.24
10'	5.63	6.63	3.09	2.37	1.86	1.42	1.12	.89	.50	.31
12'	3.91	5.01	2.77	2.15	1.73	1.41	1.13	.93	.56	.35
14'	2.87	3.90	2.34	1.96	1.58	1.44	1.08	.91	.58	.38
16'	2.20	3.03	2.04	1.71	1.46	1.21	1.03	.86	.58	.40
18'	1.74	2.45	1.77							

EBF13/EQF SERIES FLUORESCENT

With Globe Only
One 13 Watt Bi-Pin Base
or one 26/32/42 Quad-Pin

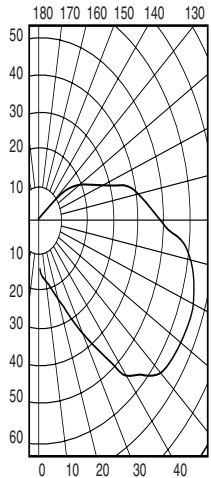
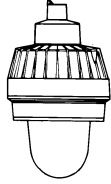
CANDLEPOWER – (1) 13 WATT

PL lamp 900 lumens

For 26 watt quad-pin
multiply by 2.0

For 32 watt quad-pin
multiply by 2.66

For 42 watt quad-pin
multiply by 3.55



ANGLE CP		ANGLE CP	
.0	13.	95.0	48.
5.0	14.	105.0	37.
15.0	21.	115.0	24.
25.0	31.	125.0	13.
35.0	48.	135.0	2.
45.0	60.	145.0	0.
55.0	66.	155.0	0.
65.0	66.	165.0	0.
75.0	63.	175.0	0.
85.0	57.	180.0	0.
90.0	52.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR																														
0	60	60	60	60	60	57	57	57	57	57	51	51	51	51	51	46	46	46	46	46	41	41	41	41	41	39	39	39	39	39
1	52	48	44	41	39	49	45	42	39	37	40	38	35	33	32	31	30	28	26	24	25	23	21	19	17	14	12	10	8	6
2	45	40	35	31	29	43	37	33	29	27	33	29	26	24	22	25	23	21	19	17	14	12	10	8	6	4	3	2	1	0
3	40	33	28	24	22	38	31	26	22	20	28	24	20	18	16	21	18	16	14	12	10	8	6	4	2	1	0	0	0	0
4	37	29	23	19	17	34	27	22	18	16	24	20	16	14	12	17	14	12	10	8	6	4	2	1	0	0	0	0	0	0
5	33	25	19	15	13	31	23	18	14	12	21	16	13	11	10	16	12	10	8	6	4	2	1	0	0	0	0	0	0	0
6	30	22	16	12	10	28	20	15	12	10	18	14	10	8	7	13	10	8	6	4	2	1	0	0	0	0	0	0	0	0
7	27	19	14	10	9	25	18	13	10	9	16	12	8	7	6	11	8	6	4	2	1	0	0	0	0	0	0	0	0	0
8	25	17	12	8	7	23	16	11	8	7	14	10	7	6	5	10	7	5	3	2	1	0	0	0	0	0	0	0	0	0
9	23	15	10	7	6	22	14	10	7	6	13	9	6	5	4	9	6	4	2	1	0	0	0	0	0	0	0	0	0	0
10	21	14	9	6	5	20	13	9	6	5	11	8	5	4	3	8	5	3	2	1	0	0	0	0	0	0	0	0	0	0

Spacing Criterion -- SC = 3.8

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) (1) 13 WATT FLUORESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	.20	.40	.24	.18	.12	.09	.07	.05	.03	.02	
10'	.13	.22	.21	.16	.13	.10	.07	.06	.03	.02	
12'	.09	.15	.17	.15	.12	.10	.07	.06	.04	.02	
14'	.07	.11	.13	.12	.11	.09	.07	.06	.04	.02	
16'	.05	.08	.10	.10	.09	.08	.07	.06	.04	.03	
18'	.04	.06	.08	.07	.07	.07	.06	.06	.04	.03	

$$FC = \frac{\text{(Candlepower)} (\text{COS } \theta)}{\text{DISTANCE}^2}$$

Test No. LTL 00667

EBF13/EQF SERIES FLUORESCENT

With Globe and Standard Dome Reflector
One 13 Watt Bi-Pin Base
or one 26/32/42 Quad-Pin

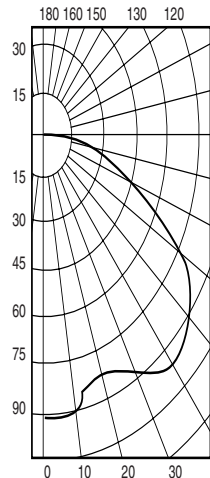
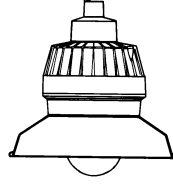
CANDLEPOWER – (1) 13 WATT

PL lamp 900 lumens

For 26 watt quad-pin
multiply by 2.0

For 32 watt quad-pin
multiply by 2.66

For 42 watt quad-pin
multiply by 3.55



ANGLE CP		ANGLE CP	
.0	92.	95.0	0.
5.0	93.	105.0	0.
15.0	86.	115.0	0.
25.0	86.	125.0	0.
35.0	95.	135.0	0.
45.0	97.	145.0	0.
55.0	88.	155.0	0.
65.0	64.	165.0	0.
75.0	35.	175.0	0.
85.0	7.	180.0	0.
90.0	1.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR																														
0	52	52	52	52	52	51	51	51	51	51	49	49	49	47	47	47	45	45	45	44	44	41	41	41	39	38	37	36		
1	48	45	43	42	41	46	44	43	41	40	42	41	40	41	39	38	39	38	37	36	35	33	32	31	30	29	28	27		
2	43	39	36	33	32	42	38	36	33	32	37	34	32	35	33	32	34	32	31	30	29	27	26	25	24	23	22	21		
3	39	34	30	27	26	38	33	30	27	26	32	29	26	31	28	26	30	27	26	25	24	22	21	20	19	18	17	16		
4	35	30	26	23	22	34	29	26	23	22	28	25	22	27	24	22	26	24	22	21	20	18	17	16	15	14	13	12		
5	32	26	22	19	18	31	26	22	19	18	25	21	19	24	21	18	23	20	18	17	16	14	13	12	11	10	9	8		
6	29	23	19	16	15	28	23	19	16	15	22	18	16	21	18	15	20	18	15	14	13	11	10	9	8	7	6	5		
7	27	20	16	13	12	26	20	16	13	12	19	16	13	19	15	13	18	15	13	12	11	9	8	7	6	5	4	3		
8	25	18	14	11	10	24	18	14	11	10	17	14	11	17	13	11	16	13	11	10	9	7	6	5	4	3	2	1		
9	23	16	12	10	9	22	16	12	10	9	15	12	10	15	12	10	14	12	9	8	7	5	4	3	2	1	0	0		
10	21	15	11	8	7	20	14	11	8	7	14	11	8	13	10	8	13	10	8	7	6	4	3	2	1	0	0	0		

Spacing Criterion -- SC = 1.6

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) (1) 13 WATT FLUORESCENT										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	1.44	.88	.35	.22	.14	.10	.07	.05	.02	.00	
10'	.92	.61	.34	.24	.17	.12	.07	.06	.03	.01	
12'	.64	.47	.30	.24	.18	.14	.10	.07	.04	.02	
14'	.47	.37	.26	.21	.17	.14	.11	.08	.04	.02	
16'	.36	.29	.22	.19	.16	.13	.11	.09	.05	.03	
18'	.28	.24	.18	.16	.14	.12	.10	.09	.05	.03	

$$FC = \frac{\text{(Candlepower)} (\text{COS } \theta)}{\text{DISTANCE}^2}$$

Test No. LTL 00668

EBF13/EQF SERIES FLUORESCENT

With Globe and Angle Reflector
One 13 Watt Bi-Pin Base
or one 26/32/42 Quad-Pin

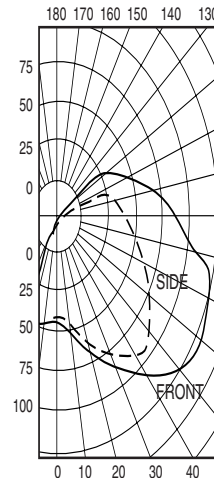
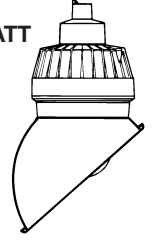
CANDLEPOWER – (1) 13 WATT

PL lamp 900 lumens

For 26 watt quad-pin
multiply by 2.0

For 32 watt quad-pin
multiply by 2.66

For 42 watt quad-pin
multiply by 3.55



0° (FRONT) ANGLE CP		90° (SIDE) ANGLE CP	
.0	36.	.0	36.
5.0	27.	5.0	37.
15.0	35.	15.0	46.
25.0	53.	25.0	58.
35.0	81.	35.0	70.
45.0	106.	45.0	81.
55.0	121.	55.0	81.
65.0	126.	65.0	68.
75.0	123.	75.0	60.
85.0	113.	85.0	52.
90.0	106.	90.0	46.
95.0	97.	95.0	41.
105.0	77.	105.0	30.
115.0	54.	115.0	19.
125.0	32.	125.0	8.
135.0	12.	135.0	0.
145.0	1.	145.0	0.
155.0	0.	155.0	0.
165.0	0.	165.0	0.
175.0	0.	175.0	0.
180.0	0.	180.0	0.

Coefficients of Utilization -- Zonal Cavity Method

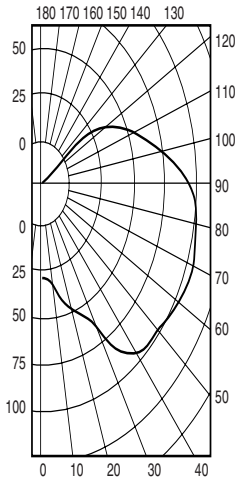
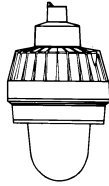
% Effective Ceiling Cavity Reflectance ρ_{cc}	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																													
Room Cavity Ratio RCR																														
0	50	50	50	50	50	48	48	48	48	48	44	44	44	44	44	40	40	40	36	36	35									
1	44	41	38	36	35	41	39	36	34	33	35	33	31	32	30	29	28	27	26	24	23									
2	39	34	30	27	26	37	32	29	26	24	26	24	22	23	22	20	18	17	16	14	13									
3	35	29	25	21	20	33	28	24	20	19	25	22	19	22	20	17	16	14	13	11	10									
4	31	25	21	17	16	30	24	20	17	16	22	18	15	19	17	14	13	11	10	8	7									
5	28	22	18	14	13	27	21	17	14	13	19	15	13	17	14	12	11	9	8	6										

EBF26 FLUORESCENT

With Globe Only
Two 13 Watt Bi-Pin Base

CANDLEPOWER – (2) 13 WATT

PL lamps
900 lumens per lamp



ANGLE CP		ANGLE CP	
.0	28.	95.0	82.
5.0	29.	105.0	63.
15.0	40.	115.0	44.
25.0	58.	125.0	24.
35.0	82.	135.0	7.
45.0	100.	145.0	1.
55.0	110.	155.0	0.
65.0	111.	165.0	0.
75.0	106.	175.0	0.
85.0	96.	180.0	0.
90.0	90.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80				70				50				30				10				0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																									
Room Cavity Ratio RCR																										
0	.52	.52	.52	.52	.49	.49	.49	.49	.44	.44	.44	.44	.39	.39	.39	.35	.35	.35	.33							
1	.44	.41	.38	.36	.42	.39	.36	.34	.34	.32	.30	.30	.29	.27	.27	.25	.24	.22								
2	.39	.34	.30	.26	.37	.32	.28	.25	.28	.25	.23	.25	.22	.20	.22	.20	.18	.16								
3	.35	.29	.24	.20	.32	.27	.23	.19	.24	.20	.17	.21	.18	.15	.18	.16	.14	.12								
4	.31	.25	.20	.16	.29	.23	.19	.16	.21	.17	.14	.18	.15	.13	.16	.13	.11	.09								
5	.28	.22	.17	.13	.26	.20	.16	.13	.18	.14	.11	.16	.12	.10	.13	.11	.09	.07								
6	.26	.19	.14	.11	.24	.18	.13	.10	.16	.12	.09	.14	.10	.08	.12	.09	.07	.06								
7	.23	.17	.12	.09	.22	.16	.11	.08	.14	.10	.07	.12	.09	.07	.10	.08	.06	.04								
8	.22	.15	.10	.07	.20	.14	.10	.07	.12	.09	.06	.11	.08	.05	.09	.07	.05	.04								
9	.20	.13	.09	.06	.19	.12	.09	.06	.11	.08	.05	.10	.07	.05	.08	.06	.04	.03								
10	.18	.12	.08	.05	.17	.11	.08	.05	.10	.07	.04	.09	.06	.04	.07	.05	.03	.02								

Spacing Criterion -- SC = 3.5

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) (2) 13 WATT FLUORESCENT									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	.44	.71	.40	.29	.21	.15	.12	.09	.05	.03
10'	.28	.41	.35	.27	.22	.16	.13	.10	.06	.03
12'	.19	.28	.29	.24	.20	.16	.13	.10	.06	.04
14'	.14	.21	.22	.20	.18	.15	.13	.10	.06	.04
16'	.11	.15	.17	.16	.15	.14	.12	.10	.07	.04
18'	.09	.11	.14	.13	.13	.12	.11	.09	.07	.05

FC = (Candlepower) (COS 0)
DISTANCE²

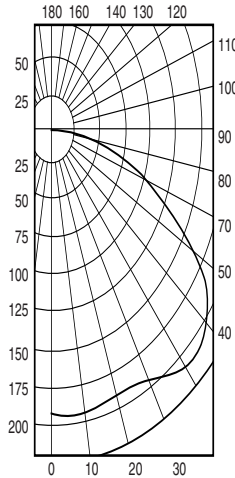
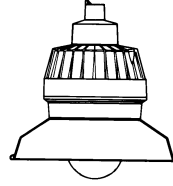
Test No. LTL 00682

EBF26 FLUORESCENT

With Globe and Standard Dome Reflector
Two 13 Watt Bi-Pin Base

CANDLEPOWER – (2) 13 WATT

PL lamps
900 lumens per lamp



ANGLE CP		ANGLE CP	
.0	189.	95.0	0.
5.0	193.	105.0	0.
15.0	191.	115.0	0.
25.0	190.	125.0	0.
35.0	204.	135.0	0.
45.0	205.	145.0	0.
55.0	188.	155.0	0.
65.0	136.	165.0	0.
75.0	74.	175.0	0.
85.0	15.	180.0	0.
90.0	1.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80				70				50				30				10				0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																									
Room Cavity Ratio RCR																										
0	.56	.56	.56	.56	.55	.55	.55	.55	.52	.52	.52	.50	.50	.50	.48	.48	.48	.47								
1	.51	.49	.46	.45	.50	.47	.46	.44	.45	.44	.42	.44	.42	.41	.42	.41	.40	.39								
2	.46	.42	.39	.36	.45	.41	.38	.36	.39	.37	.35	.38	.36	.34	.36	.35	.33	.32								
3	.42	.36	.32	.30	.40	.36	.32	.29	.34	.31	.28	.33	.30	.28	.32	.29	.27	.26								
4	.38	.32	.28	.25	.37	.31	.27	.24	.30	.27	.24	.29	.26	.24	.28	.25	.23	.22								
5	.35	.28	.24	.20	.33	.28	.23	.20	.27	.23	.20	.26	.22	.20	.25	.22	.20	.19								
6	.31	.25	.20	.17	.30	.24	.20	.17	.23	.20	.17	.23	.19	.17	.22	.19	.17	.16								
7	.29	.22	.17	.14	.28	.21	.17	.14	.21	.17	.14	.20	.17	.14	.19	.16	.14	.13								
8	.26	.20	.15	.12	.26	.19	.15	.12	.19	.15	.12	.18	.15	.12	.17	.14	.12	.11								
9	.24	.17	.13	.11	.24	.17	.13	.11	.17	.13	.10	.16	.13	.10	.16	.13	.10	.09								
10	.22	.16	.12	.09	.22	.16	.12	.09	.15	.11	.09	.15	.11	.09	.14	.11	.09	.08								

Spacing Criterion -- SC = 1.6

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) (2) 13 WATT FLUORESCENT									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	2.95	1.85	.75	.50	.31	.21	.14	.09	.04	.02
10'	1.89	1.36	.72	.52	.37	.28	.18	.13	.06	.03
12'	1.31	1.04	.64	.50	.38	.29	.22	.15	.08	.04
14'	.96	.81	.56	.45	.37	.29	.23	.18	.10	.05
16'	.73	.65	.46	.41	.34	.28	.23	.19	.12	.06
18'	.58	.53	.41	.34	.31	.26	.22	.18	.11	.07

FC = (Candlepower) (COS 0)
DISTANCE²

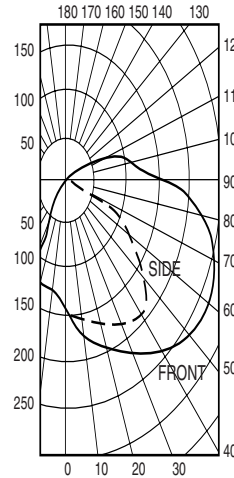
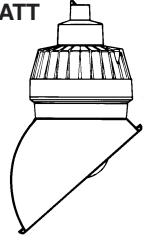
Test No. LTL 00683

EBF26 FLUORESCENT

With Globe and Angle Reflector
Two 13 Watt Bi-Pin Base

CANDLEPOWER – (2) 13 WATT

PL lamps
900 lumens per lamp



0° (FRONT) ANGLE CP		90° (SIDE) ANGLE CP	
.0	155.	.0	155.
5.0	166.	5.0	155.
15.0	190.	15.0	160.
25.0	211.	25.0	171.
35.0	242.	35.0	188.
45.0	264.	45.0	174.
55.0	274.	55.0	130.
65.0	269.	65.0	78.
75.0	238.	75.0	35.
85.0	189.	85.0	10.
90.0	161.	90.0	4.
95.0	132.	95.0	1.
105.0	75.	105.0	0.
115.0	27.	115.0	0.
125.0	4.	125.0	0.
135.0	0.	135.0	0.
145.0	0.	145.0	0.
155.0	0.	155.0	0.
165.0	0.	165.0	0.
175.0	0.	175.0	0.
180.0	0.	180.0	0.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80				70				50				30				10				0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
% Wall Reflectance ρ_w	20% Effective Floor Cavity Reflectance																									
Room Cavity Ratio RCR																										
0	.49	.49	.49	.49	.48	.48	.48	.48	.45	.45	.45	.42	.42	.40	.40	.40	.39									
1	.44	.41	.39	.37	.42	.40	.38	.36	.38	.36	.35	.36	.34	.33	.33	.32	.31	.30								
2	.40	.36	.32	.30	.38	.35	.32	.29	.32	.30	.28	.31	.29	.27	.29	.27	.26	.25								
3	.36	.31	.27	.24	.34	.30	.27	.24	.28	.25	.23	.27	.24	.22	.25	.23	.21	.20								
4	.33	.27	.23	.20	.31	.27	.23	.20	.25	.22	.19	.24	.21	.19	.22	.20	.18	.17								
5	.30	.24	.20	.17	.29	.23	.20	.17	.22	.19	.16	.21	.18	.16	.20	.17	.15	.14								
6	.27	.21	.17	.15	.26	.21	.17	.14	.20	.16	.14	.19	.16	.14	.18	.15	.13	.12								
7	.25	.19	.15	.12	.24	.19	.15	.12	.18	.14	.12	.17	.14	.12	.16	.13	.11	.10								
8	.23	.17	.13	.11	.22	.17	.13	.11	.16	.13	.10	.15	.12	.10	.14	.12	.10	.09								
9	.21	.15	.12	.09	.21	.15	.12	.09	.14	.11	.09	.14	.11	.09	.13	.10	.09	.08								
10	.20	.14	.10	.08	.19	.14	.10	.08	.13	.10	.08	.12	.10	.08	.12	.09	.07	.07								

0-DEG / 90-DEG
Spacing Criterion -- SC = 2.3 / 1.8

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 100 WATT H.P.S									
	FOOTCANDLE CHART (Initial) (2) 13 WATT FLUORESCENT									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
0' 8"	2.42	3.53	1.02	.73	.52	.38	.28	.21	.11	.06
10'	1.55	1.51	.93	.70	.54	.41	.28	.24	.13	.08
12'	1.08	1.11	.80	.65</						

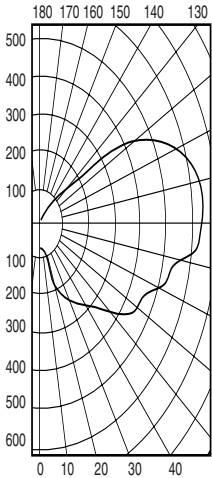
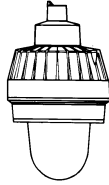
EMS HIGH PRESSURE SODIUM

With Globe Only
35 – 100 Watt Medium Base

CANDLEPOWER – 70 WATT

B-17 clear lamp 6300 lumens

For 35 watt multiply by .357
For 50 watt multiply by .635
For 100 watt multiply by 1.508



ANGLE CP	ANGLE CP
.0	80. 95.0 651.
5.0	84. 100.0 635.
10.0	108. 105.0 624.
15.0	148. 110.0 581.
20.0	202. 115.0 505.
25.0	262. 120.0 250.
30.0	298. 125.0 23.
35.0	321. 130.0 8.
40.0	352. 135.0 3.
45.0	397. 140.0 3.
50.0	444. 145.0 1.
55.0	467. 150.0 0.
60.0	471. 155.0 0.
65.0	540. 160.0 0.
70.0	562. 165.0 0.
75.0	603. 170.0 0.
80.0	618. 175.0 0.
85.0	633. 180.0 0.
90.0	644. 180.0 0.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.85	.85	.85	.85	.85	.79	.79	.79	.79	.79	.69	.69	.69	.69	.69	.60	.60	.60	.60	.60	.51	.51	.51	.51	.47					
1	.72	.67	.62	.57	.52	.67	.62	.58	.54	.53	.50	.46	.45	.42	.40	.37	.35	.33	.32	.31	.25	.25	.25	.25	.29					
2	.64	.55	.48	.42	.38	.51	.45	.39	.33	.38	.34	.36	.32	.29	.30	.26	.24	.20	.20	.18	.15	.15	.15	.15	.15					
3	.57	.47	.39	.33	.28	.43	.36	.31	.25	.37	.31	.26	.22	.22	.25	.21	.18	.15	.15	.15	.15	.15	.15	.15	.15					
4	.51	.41	.33	.27	.22	.37	.30	.25	.20	.32	.26	.21	.18	.18	.21	.17	.14	.11	.11	.11	.11	.11	.11	.11	.11					
5	.46	.35	.27	.21	.16	.32	.25	.20	.15	.27	.21	.17	.12	.12	.18	.14	.11	.08	.08	.08	.08	.08	.08	.08	.08					
6	.42	.31	.23	.18	.13	.28	.21	.16	.11	.24	.18	.14	.10	.10	.15	.11	.07	.07	.07	.07	.07	.07	.07	.07	.07					
7	.39	.27	.20	.15	.10	.25	.19	.14	.09	.21	.16	.12	.08	.08	.13	.09	.05	.05	.05	.05	.05	.05	.05	.05	.05					
8	.36	.25	.18	.13	.08	.23	.16	.12	.07	.19	.14	.10	.06	.06	.11	.08	.04	.04	.04	.04	.04	.04	.04	.04	.04					
9	.33	.22	.15	.11	.06	.20	.14	.10	.05	.17	.12	.08	.04	.04	.10	.07	.03	.03	.03	.03	.03	.03	.03	.03	.03					
10	.31	.20	.14	.10	.05	.18	.13	.09	.04	.16	.11	.07	.03	.03	.09	.06	.02	.02	.02	.02	.02	.02	.02	.02	.02					

Spacing Criterion -- SC = 4.3

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 70 WATT H.P.S.										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	1.25	2.94	1.69	1.24	.90	.73	.56	.43	.25	.16	
10'	.80	1.87	1.40	1.16	.92	.70	.54	.47	.28	.18	
12'	.55	1.21	1.11	.97	.85	.69	.55	.44	.30	.19	
14'	.41	.86	.88	.77	.71	.62	.54	.45	.28	.21	
16'	.31	.57	.74	.64	.59	.55	.48	.42	.29	.19	
18'	.25	.41	.61	.55	.50	.45	.43	.39	.29	.20	

$$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} (\text{COS } \theta)$$

Test No. BALL 6688.0

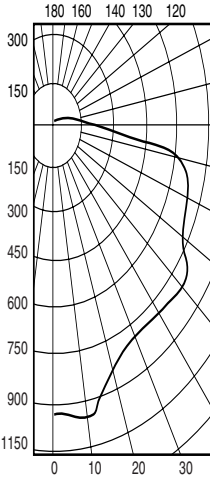
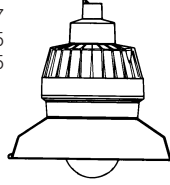
EMS HIGH PRESSURE SODIUM

With Globe and Standard Dome Reflector
35 – 100 Watt Medium Base

CANDLEPOWER – 70 WATT

B-17 clear lamp 6300 lumens

For 35 watt multiply by .357
For 50 watt multiply by .635
For 100 watt multiply by 1.5



ANGLE CP	ANGLE CP
.0	960. 95.0 1.
5.0	933. 100.0 0.
10.0	957. 105.0 0.
15.0	902. 110.0 0.
20.0	856. 115.0 0.
25.0	808. 120.0 0.
30.0	805. 125.0 0.
35.0	789. 130.0 0.
40.0	786. 135.0 0.
45.0	812. 140.0 0.
50.0	804. 145.0 0.
55.0	766. 150.0 0.
60.0	722. 155.0 0.
65.0	740. 160.0 0.
70.0	724. 165.0 0.
75.0	689. 170.0 0.
80.0	170. 175.0 0.
85.0	31. 180.0 0.
90.0	3.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.76	.76	.76	.76	.76	.74	.74	.74	.74	.74	.71	.71	.71	.71	.71	.68	.68	.68	.68	.68	.65	.65	.65	.65	.64					
1	.69	.65	.62	.60	.60	.67	.64	.61	.59	.61	.59	.57	.57	.57	.55	.56	.55	.53	.52	.52	.45	.45	.45	.45	.41					
2	.61	.55	.50	.46	.45	.59	.54	.49	.45	.52	.48	.44	.43	.43	.41	.47	.45	.42	.41	.41	.33	.33	.33	.33	.28					
3	.55	.47	.41	.37	.36	.53	.46	.41	.36	.44	.40	.36	.35	.35	.33	.41	.37	.34	.33	.33	.25	.25	.25	.25	.22					
4	.50	.41	.35	.30	.29	.48	.40	.34	.30	.39	.33	.29	.28	.28	.27	.36	.32	.28	.27	.27	.20	.20	.20	.20	.17					
5	.45	.36	.29	.24	.23	.43	.35	.29	.24	.33	.28	.24	.23	.23	.22	.31	.27	.23	.22	.22	.17	.17	.17	.17	.15					
6	.41	.31	.25	.20	.19	.40	.31	.25	.20	.30	.24	.20	.19	.19	.18	.27	.23	.20	.18	.18	.14	.14	.14	.14	.12					
7	.38	.28	.22	.17	.16	.36	.27	.22	.17	.26	.21	.17	.16	.16	.15	.24	.20	.17	.15	.15	.12	.12	.12	.12	.10					
8	.34	.25	.19	.15	.14	.33	.24	.19	.15	.24	.18	.15	.14	.14	.13	.22	.18	.14	.13	.13	.10	.10	.10	.10	.09					
9	.32	.22	.16	.13	.12	.31	.22	.16	.13	.21	.16	.12	.12	.12	.11	.20	.15	.12	.11	.11	.08	.08	.08	.08	.07					
10	.29	.20	.15	.11	.10	.29	.20	.15	.11	.19	.14	.11	.11	.11	.10	.18	.14	.11	.10	.10	.07	.07	.07	.07	.06					

Spacing Criterion -- SC = 1.3

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 70 WATT H.P.S.										
	Horizontal Distance From Source in Feet										
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'	
8'	15.00	7.63	3.06	2.04	1.38	1.02	.77	.58	.31	.18	
10'	9.60	5.78	2.87	2.11	1.50	1.11	.83	.65	.38	.23	
12'	6.67	4.54	2.47	1.99	1.54	1.18	.91	.68	.42	.26	
14'	4.89	3.65	2.17	1.75	1.46	1.18	.92	.74	.43	.28	
16'	3.75	2.97	2.14	1.58	1.31	1.12	.92	.76	.45	.29	
18'	2.96	2.49	1.66	1.41	1.19	1.01	.89	.75	.47	.30	

$$FC = \frac{\text{Candlepower}}{\text{DISTANCE}^2} (\text{COS } \theta)$$

Test No. BALL 6687.0

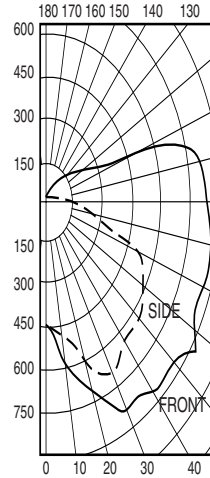
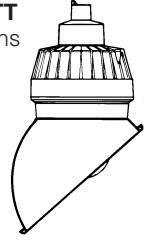
EMS HIGH PRESSURE SODIUM

With Globe and Angle Reflector
35 – 100 Watt Medium Base

CANDLEPOWER – 70 WATT

B-17 clear lamp 6300 lumens

For 35 watt multiply by .357
For 50 watt multiply by .635
For 100 watt multiply by 1.508



0° (FRONT) ANGLE CP	90° (SIDE) ANGLE CP
.0	469. .0 469.
5.0	520. 5.0 479.
15.0	655. 15.0 543.
25.0	846. 25.0 736.
35.0	937. 35.0 713.
45.0	974. 45.0 677.
55.0	1011. 55.0 614.
65.0	993. 65.0 578.
75.0	994. 75.0 84.
85.0	955. 85.0 21.
90.0	915. 90.0 0.
95.0	786. 95.0 0.
105.0	120. 105.0 0.
115.0	39. 115.0 0.
125.0	0. 125.0 0.
135.0	0. 135.0 0.
145.0	0. 145.0 0.
155.0	0. 155.0 0.
165.0	0. 165.0 0.
175.0	0. 175.0 0.
180.0	0. 180.0 0.

Coefficients of Utilization -- Zonal Cavity Method

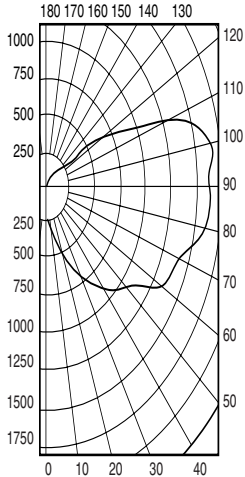
% Effective Ceiling Cavity Reflectance 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
Room Cavity Ratio RCR	20% Effective Floor Cavity Reflectance																													
0	.66	.66	.66	.66	.66	.64	.64	.64	.64	.64	.59	.59	.59	.59	.59	.55	.55	.55	.55	.55	.51	.51	.51	.51	.50					
1	.58	.54	.51	.48	.48	.55	.52	.49	.46	.48	.46	.43	.44	.42	.40	.41	.39	.38	.36	.36	.33	.33	.33	.33	.36					
2	.52	.46	.41	.36	.35	.49	.44	.39	.35	.40	.37	.33	.37	.34	.31	.34	.32	.30	.28	.28	.25	.25	.25	.25	.28					
3	.47	.39	.34	.29	.28	.44	.38	.33	.29	.35	.31	.27	.32	.29	.26	.30	.27	.24	.22	.22	.19	.19	.19	.19	.22					
4	.42	.34	.29	.24	.23	.40	.33	.28	.24	.31	.26	.22	.28	.24	.21	.26	.23	.20	.19	.19	.16	.16	.16	.16	.19					
5	.38	.30	.24	.20	.19	.36	.29	.23	.19	.27	.22	.18	.25	.21	.18	.23	.19	.17	.15	.15	.13	.13	.13	.13	.15					
6	.35	.27	.21	.17	.16	.33	.26	.20	.16	.24	.19	.16	.22	.18	.15	.20	.17	.14	.13	.13	.11	.11	.11	.11	.13					
7	.32	.24	.18	.14	.13	.31	.23	.18	.14	.21	.17	.13	.20	.16	.13	.18</														

EMS HIGH PRESSURE SODIUM

With Globe Only Reflector
150 Watt Medium Base

CANDLEPOWER – 150 WATT

B-17 clear lamp
16000 lumens



ANGLE CP		ANGLE CP	
.0	195.	95.0	1576.
5.0	212.	100.0	1596.
10.0	267.	105.0	1514.
15.0	362.	110.0	1386.
20.0	480.	115.0	1150.
25.0	611.	120.0	685.
30.0	701.	125.0	245.
35.0	763.	130.0	25.
40.0	864.	135.0	10.
45.0	960.	140.0	3.
50.0	1048.	145.0	2.
55.0	1117.	150.0	0.
60.0	1264.	155.0	0.
65.0	1304.	160.0	0.
70.0	1374.	165.0	0.
75.0	1505.	170.0	0.
80.0	1555.	175.0	0.
85.0	1568.	180.0	0.
90.0	1546.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80		70		50		30		10		0	
	70	50	30	10	70	50	30	10	50	30	10	0
Room Cavity Ratio RCR												
20% Effective Floor Cavity Reflectance												
0	.82	.82	.82	.76	.76	.76	.66	.66	.66	.57	.57	.49
1	.70	.64	.60	.55	.65	.60	.56	.52	.51	.48	.45	.43
2	.61	.53	.46	.40	.56	.49	.43	.38	.42	.37	.32	.28
3	.55	.45	.38	.32	.50	.42	.35	.29	.35	.30	.25	.21
4	.49	.39	.31	.25	.45	.36	.29	.24	.30	.25	.20	.17
5	.45	.34	.26	.20	.41	.31	.24	.19	.26	.20	.16	.13
6	.41	.30	.22	.17	.37	.27	.21	.16	.23	.17	.13	.10
7	.37	.26	.19	.14	.34	.24	.18	.13	.21	.15	.11	.08
8	.34	.24	.17	.12	.32	.22	.16	.11	.18	.13	.09	.07
9	.32	.21	.15	.10	.29	.20	.14	.10	.17	.12	.08	.06
10	.30	.19	.13	.09	.27	.18	.12	.08	.15	.10	.07	.05

Spacing Criterion -- SC = 4.3

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 150 WATT H.P.S.									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	3.05	7.35	3.99	2.98	2.41	1.78	1.36	1.09	.62	.40
10'	1.95	4.37	3.39	2.75	2.19	1.71	1.45	1.14	.67	.43
12'	1.35	2.76	2.72	2.36	2.01	1.65	1.32	1.19	.73	.48
14'	.99	2.04	2.10	1.93	1.73	1.50	1.25	1.07	.75	.50
16'	.76	1.31	1.17	1.53	1.44	1.32	1.18	1.00	.70	.51
18'	.60	1.00	1.44	1.27	1.19	1.11	1.05	.95	.69	.53

$$FC = \frac{\text{(Candlepower)} (\text{COS } \theta)}{\text{DISTANCE}^2}$$

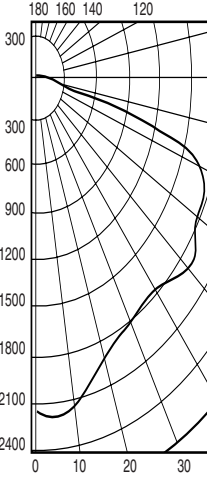
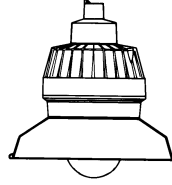
Test No. BALL 6683.0

EMS HIGH PRESSURE SODIUM

With Globe and Standard Dome Reflector
150 Watt Medium Base

CANDLEPOWER – 150 WATT

B-17 clear lamp
16000 lumens



ANGLE CP		ANGLE CP	
.0	2289.	95.0	3.
5.0	2296.	100.0	0.
10.0	2282.	105.0	0.
15.0	2117.	110.0	0.
20.0	1981.	115.0	0.
25.0	1921.	120.0	0.
30.0	1911.	125.0	0.
35.0	1888.	130.0	0.
40.0	1898.	135.0	0.
45.0	1940.	140.0	0.
50.0	1959.	145.0	0.
55.0	1898.	150.0	0.
60.0	1869.	155.0	0.
65.0	1851.	160.0	0.
70.0	1763.	165.0	0.
75.0	1469.	170.0	0.
80.0	601.	175.0	0.
85.0	93.	180.0	0.
90.0	7.		

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80		70		50		30		10		0	
	70	50	30	10	70	50	30	10	50	30	10	0
Room Cavity Ratio RCR												
20% Effective Floor Cavity Reflectance												
0	.71	.71	.71	.71	.70	.70	.70	.67	.67	.67	.64	.64
1	.65	.61	.59	.56	.63	.60	.57	.55	.57	.55	.53	.52
2	.58	.52	.47	.43	.56	.51	.47	.43	.49	.45	.42	.40
3	.52	.45	.39	.35	.50	.44	.39	.34	.42	.37	.34	.31
4	.47	.39	.33	.28	.45	.38	.32	.28	.36	.32	.28	.26
5	.42	.34	.27	.23	.41	.33	.27	.23	.31	.26	.23	.21
6	.38	.30	.24	.19	.37	.29	.23	.19	.28	.23	.19	.17
7	.35	.26	.20	.16	.34	.26	.20	.16	.25	.20	.16	.15
8	.32	.23	.18	.14	.31	.23	.18	.14	.22	.17	.14	.12
9	.30	.21	.15	.12	.29	.20	.15	.12	.20	.15	.12	.10
10	.28	.19	.14	.10	.27	.19	.14	.10	.18	.13	.10	.09

Spacing Criterion -- SC = 1.3

Illumination on Horizontal Surface

Mounting Height in Feet	FOOTCANDLE CHART (Initial) 150 WATT H.P.S.									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	35.76	18.03	7.46	5.06	3.57	2.57	1.94	1.42	.75	.39
10'	22.89	13.74	6.86	5.14	3.73	2.82	2.14	1.66	.91	.56
12'	15.89	10.75	5.97	4.76	3.75	2.87	2.25	1.77	1.04	.63
14'	11.68	8.44	5.19	4.24	3.50	2.85	2.33	1.83	1.11	.71
16'	8.94	7.10	4.54	3.78	3.16	2.68	2.24	1.86	1.16	.76
18'	7.06	5.84	3.94	3.36	2.88	2.44	2.12	1.81	1.17	.78

$$FC = \frac{\text{(Candlepower)} (\text{COS } \theta)}{\text{DISTANCE}^2}$$

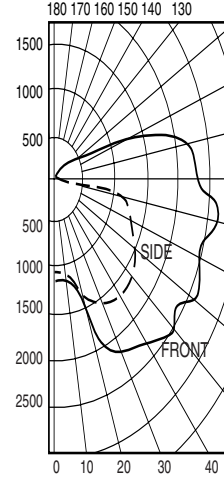
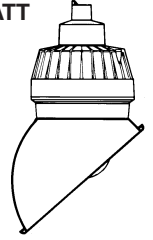
Test No. BALL 6684.0

EMS HIGH PRESSURE SODIUM

With Globe and Angle Reflector
150 Watt Medium Base

CANDLEPOWER – 150 WATT

B-17 clear lamp
16000 lumens



0° (FRONT) ANGLE CP		90° (SIDE) ANGLE CP	
.0	1163.	.0	1163.
5.0	1259.	5.0	1170.
15.0	1590.	15.0	1315.
25.0	2122.	25.0	1676.
35.0	2308.	35.0	1635.
45.0	2478.	45.0	1523.
55.0	2481.	55.0	1469.
65.0	2506.	65.0	1341.
75.0	2540.	75.0	256.
85.0	2431.	85.0	32.
90.0	2307.	90.0	0.
95.0	1868.	95.0	0.
105.0	584.	105.0	0.
115.0	104.	115.0	0.
125.0	3.	125.0	0.
135.0	2.	135.0	0.
145.0	0.	145.0	0.
155.0	0.	155.0	0.
165.0	0.	165.0	0.
175.0	0.	175.0	0.
180.0	0.	180.0	0.

Coefficients of Utilization -- Zonal Cavity Method

% Effective Ceiling Cavity Reflectance ρ_{cc}	80		70		50		30		10		0	
	70	50	30	10	70	50	30	10	50	30	10	0
Room Cavity Ratio RCR												
20% Effective Floor Cavity Reflectance												
0	.64	.64	.64	.64	.62	.62	.62	.57	.57	.57	.53	.53
1	.56	.52	.49	.46	.54	.50	.47	.44	.46	.44	.43	.41
2	.50	.44	.39	.35	.47	.42	.38	.34	.39	.35	.32	.28
3	.45	.38	.33	.28	.43	.37	.32	.28	.34	.29	.26	.23
4	.41	.33	.28	.23	.39	.32	.27	.23	.29	.25	.22	.18
5	.37	.29	.23	.19	.35	.28	.23	.19	.26	.21	.18	.14
6	.34	.26	.20	.16	.32	.25	.20	.16	.23	.18	.15	.12
7	.31	.23	.18	.14	.30	.22	.17	.14	.20	.16	.13	.10
8	.29	.21	.15	.12	.27	.20	.15	.12	.18	.14	.11	.09
9	.26	.18	.13	.10	.25	.18	.13	.10	.16	.12	.09	.07
10	.25	.17	.12	.09	.23	.16	.12	.09	.15	.11	.08	.06

0-DEG / 90-DEG
Spacing Criterion -- SC = 2.53 / 1.87


Illumination on Horizontal Surface


Mounting Height in Feet	FOOTCANDLE CHART (Initial) 150 WATT H.P.S.									
	Horizontal Distance From Source in Feet									
	0'	5'	10'	12'	14'	16'	18'	20'	25'	30'
8'	18.17	21.86	9.74	6.62	4.80	3.50	2.62	1.96	1.08	.68
10'	11.63	15.18	8.76	6.71	4.87	3.70	2.88	2.24	1.26	.78
12'	8.08	10.34	7.24	6.08	4.90	3.74	2.94	2.38	1.41	.88
14'	5.93	7.82	6.34	5.13	4.47	3.71	3.00	2.39	1.50	.97
16'	4.54	5.63	5.46	4.62	3.85	3.42	2.89	2.43	1.52	1.02
18'	3.59	4.39	4.72	4.08	3.49	2.96	2.70	2.35	1.53	1.06
8'	18.17	16.06	5.59	3.92	2.78	1.91	1.40	.74	.31	.07
10'	11.63	11.99	5.38	3.85	2.88	2.18	1.67	1.22	.47	.26
12'	8.08	8.62	4.76	3.74	2.81	2.20	1.74	1.38	.75	.33
14'	5.93	6.63	4.49	3.37	2.75	2.15	1.73	1.41	.86	.52
16'	4.54	4.63	4.02	3.27	2.51	2.10	1.67	1.40	.90	.59
18'	3.59	3.63	3.50	2.93	2.44	1.95	1.66	1.37	.90	.61

$$FC = \frac{\text{(Candlepower)} (\text{COS } \theta)}{\text{DISTANCE}^2}$$

Test No. BALL 6685.0

Class I, Div. 1 & 2 Groups C,D
 Class I, Zone 1 & 2, Groups IIB,IIA
 Class I, Zone 1, AEx d IIB
 Class II, Div. 1 & 2, Groups E,F,G
 Class III, Div. 1 & 2
 Suitable for wet locations
 Marine
 NEMA 3, 4, 4X
 Factory Sealed

 Listed - File E10514 and E91793 (Marine)

 Certified - File LR11713

ORDERING INFORMATION



Pendant

Ceiling

Wall

Stanchion

EZ 50-400 WATT, HIGH PRESSURE SODIUM ① ④						
WATTS	ANSI LAMP	VOLTAGE @ 60Hz	CATALOG NUMBER			
			PENDANT 3/4"②	CEILING 3/4"②	WALL 3/4"②	STANCHION 1-1/4"③
50	S-68	120, 208, 240, 277	EZS050A2G	EZS050X2G	EZS050B2G	EZS050D4G
		120, 277, 347	—	—	—	—
		480	—	—	—	—
70	S-62	120, 208, 240, 277	EZS070A2G	EZS070X2G	EZS070B2G	EZS070D4G
		120, 277, 347	EZS076A2G	EZS076X2G	EZS076B2G	EZS076D4G
		480	EZS075A2G	EZS075X2G	EZS075B2G	EZS075D4G
100	S-54	120, 208, 240, 277	EZS100A2G	EZS100X2G	EZS100B2G	EZS100D4G
		120, 277, 347	EZS106A2G	EZS106X2G	EZS106B2G	EZS106D4G
		480	EZS105A2G	EZS105X2G	EZS105B2G	EZS105D4G
150	S-55	120, 208, 240, 277	EZS150A2G	EZS150X2G	EZS150B2G	EZS150D4G
		120, 277, 347	EZS156A2G	EZS156X2G	EZS156B2G	EZS156D4G
		480	EZS155A2G	EZS155X2G	EZS155B2G	EZS155D4G
250	S-50	120, 208, 240, 277	EZS250A2G	EZS250X2G	EZS250B2G	EZS250D4G
		120, 277, 347	EZS256A2G	EZS256X2G	EZS256B2G	EZS256D4G
		480	EZS255A2G	EZS255X2G	EZS255B2G	EZS255D4G
400	S-51	120, 208, 240, 277	EZS400A2G	EZS400X2G	EZS400B2G	EZS400D4G
		120, 277, 347	EZS406A2G	EZS406X2G	EZS406B2G	EZS406D4G
		480	EZS405A2G	EZS405X2G	EZS405B2G	EZS405D4G

① See Hazardous Location Application Data on pages L148-149 for specific suitabilities.

② For 1 inch pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EZS070A3G.

③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (Refer to catalog logic).


④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

NOTE: Reflectors must be ordered separately (see page L145).

All luminaires are designed for mounting with lamp in base up position.



Class I, Div. 1 & 2 Groups C,D
 Class I, Zone 1 & 2, Groups IIB,IIA
 Class I, Zone 1, AEx d IIB
 Class II, Div. 1 & 2, Groups E,F,G
 Class III, Div. 1 & 2
 Suitable for wet locations
 Marine
 NEMA 3, 4, 4X
 Factory Sealed

 Listed - File E10514 and E91793 (Marine)

 Certified - File LR11713

ORDERING INFORMATION



Pendant

Ceiling

Wall

Stanchion

EZ 70-400 WATT, METAL HALIDE ① ④						
WATTS	ANSI LAMP	VOLTAGE @ 60Hz	CATALOG NUMBER			
			PENDANT 3/4"②	CEILING 3/4"②	WALL 3/4"②	STANCHION 1-1/4"③
70	M-98	120, 208, 240, 277	EZH070A2G	EZH070X2G	EZH070B2G	EZH070D4G
		120, 277, 347	EZH076A2G	EZH076X2G	EZH076B2G	EZH076D4G
		480	EZH075A2G	EZH075X2G	EZH075B2G	EZH075D4G
100	M-90	120, 208, 240, 277	EZH100A2G	EZH100X2G	EZH100B2G	EZH100D4G
		120, 277, 347	EZH106A2G	EZH106X2G	EZH106B2G	EZH106D4G
		480	EZH105A2G	EZH105X2G	EZH105B2G	EZH105D4G
175	M-57 ⑤	120, 208, 240, 277	EZH170A2G	EZH170X2G	EZH170B2G	EZH170D4G
		120, 277, 347	EZH176A2G	EZH176X2G	EZH176B2G	EZH176D4G
		480	EZH175A2G	EZH175X2G	EZH175B2G	EZH175D4G
250	M-58	120, 208, 240, 277	EZH250A2G	EZH250X2G	EZH250B2G	EZH250D4G
		120, 277, 347	EZH256A2G	EZH256X2G	EZH256B2G	EZH256D4G
		480	EZH255A2G	EZH255X2G	EZH255B2G	EZH255D4G
400	M-59	120, 208, 240, 277	EZH400A2G	EZH400X2G	EZH400B2G	EZH400D4G
		120, 277, 347	EZH406A2G	EZH406X2G	EZH406B2G	EZH406D4G
		480	EZH405A2G	EZH405X2G	EZH405B2G	EZH405D4G

① See Hazardous Location Application Data on pages L148-149 for specific suitabilities.

② For 1 inch pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EZH070A3G.

③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (Refer to catalog logic).

④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

⑤ Will also operate 150W M107 Metal Halide Lamps.


NOTE: Reflectors must be ordered separately (see page L145).

All luminaires are designed for mounting with lamp in base up position.



KILLARK®

Class I, Div. 1 & 2 Groups C,D
 Class I, Zone 1 & 2, Groups IIB,IIA
 Class I, Zone 1, AEx d IIB
 Class II, Div. 1 & 2, Groups E,F,G
 Class III, Div. 1 & 2
 Suitable for wet locations
 Marine
 NEMA 3, 4, 4X
 Factory Sealed

 Listed - File E10514 and E91793 (Marine)

 Certified - File LR11713

ORDERING INFORMATION



Pendant



Ceiling



Wall



Stanchion

EZ 175-400 WATT, PULSE START METAL HALIDE ① ④

WATTS	ANSI LAMP	VOLTAGE @ 60Hz	CATALOG NUMBER			
			PENDANT 3/4"②	CEILING 3/4"②	WALL 3/4"②	STANCHION 1-1/4"③
150	M-102 M-142	120, 208, 240, 277	EZP150A2G	EZP150X2G	EZP150B2G	EZP150D4G
		120,277,347	EZP156A2G	EZP156X2G	EZP156B2G	EZP156D4G
		480	EZP155A2G	EZP155X2G	EZP155B2G	EZP155D4G
175	M-137	120, 208, 240, 277	EZP170A2G	EZP170X2G	EZP170B2G	EZP170D4G
		120,277,347	EZP176A2G	EZP176X2G	EZP176B2G	EZP176D4G
		480	EZP175A2G	EZP175X2G	EZP175B2G	EZP175D4G
250	M-138	120, 208, 240, 277	EZP250A2G	EZP250X2G	EZP250B2G	EZP250D4G
		120,277,347	EZP256A2G	EZP256X2G	EZP256B2G	EZP256D4G
		480	EZP255A2G	EZP255X2G	EZP255B2G	EZP255D4G
320	M-132	120, 208, 240, 277	EZP320A2G	EZP320X2G	EZP320B2G	EZP320D4G
		120,277,347	EZP326A2G	EZP326X2G	EZP326B2G	EZP326D4G
		480	EZP325A2G	EZP325X2G	EZP325B2G	EZP325D4G
350	M-131	120, 208, 240, 277	EZP350A2G	EZP350X2G	EZP350B2G	EZP350D4G
		120,277,347	EZP356A2G	EZP356X2G	EZP356B2G	EZP356D4G
		480	EZP355A2G	EZP355X2G	EZP355B2G	EZP355D4G
400	M-135	120, 208, 240, 277	EZP400A2G	EZP400X2G	EZP400B2G	EZP400D4G
		120,277,347	EZP406A2G	EZP406X2G	EZP406B2G	EZP406D4G
		480	EZP405A2G	EZP405X2G	EZP405B2G	EZP405D4G

① See Hazardous Location Application Data on pages L148-149 for specific suitability.

② For 1 inch pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number; example: EZP170A3G.

③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (Refer to catalog logic).

④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

NOTE: Reflectors must be ordered separately (see page L145).

All luminaires are designed for mounting with lamp in base up position.



KILLARK®

Class I, Div. 1 & 2 Groups C,D
 Class I, Zone 1 & 2, Groups IIB,IIA
 Class I, Zone 1, AEx d IIB
 Class II, Div. 1 & 2, Groups E,F,G
 Class III, Div. 1 & 2
 Suitable for wet locations
 Marine
 NEMA 3, 4, 4X
 Factory Sealed

 Listed - File E10514 and E91793 (Marine)

 Certified - File LR11713

ORDERING INFORMATION



Pendant

Ceiling

Wall

Stanchion

EZ 175-400 WATT, MERCURY VAPOR ^{① ④}						
WATTS	ANSI LAMP	VOLTAGE @ 60Hz	CATALOG NUMBER			
			PENDANT 3/4" ^②	CEILING 3/4" ^②	WALL 3/4" ^②	STANCHION 1-1/4" ^③
100	H-38	120, 208, 240, 277	EZM100A2G	EZM100X2G	EZM100B2G	EZM100D4G
		120, 277, 347	EZM106A2G	EZM106X2G	EZM106B2G	EZM106D4G
		480	EZM105A2G	EZM105X2G	EZM105B2G	EZM105D4G
175	H-39	120, 208, 240, 277	EZM170A2G	EZM170X2G	EZM170B2G	EZM170D4G
		120, 277, 347	EZM176A2G	EZM176X2G	EZM176B2G	EZM176D4G
		480	EZM175A2G	EZM175X2G	EZM175B2G	EZM175D4G
250	H-37	120, 208, 240, 277	EZM250A2G	EZM250X2G	EZM250B2G	EZM250D4G
		120, 277, 347	EZM256A2G	EZM256X2G	EZM256B2G	EZM256D4G
		480	EZM255A2G	EZM255X2G	EZM255B2G	EZM255D4G
400	H-33	120, 208, 240, 277	EZM400A2G	EZM400X2G	EZM400B2G	EZM400D4G
		120, 277, 347	EZM406A2G	EZM406X2G	EZM406B2G	EZM406D4G
		480	EZM405A2G	EZM405X2G	EZM405B2G	EZM405D4G

① See Hazardous Location Application Data on pages L148-149 for specific suitability.

② For 1 inch pendant, ceiling and wall hubs, substitute "3" for "2" in catalog number. Example: EZM070A3G.

③ Stanchion conduit hub size supplied is 1-1/2" with 1-1/2" to 1-1/4" reducer for 1-1/4" mounting. (Refer to catalog logic).

④ Luminaire catalog numbers include guards. To order luminaire without guard, omit last letter "G" from catalog number.

NOTE: Reflectors must be ordered separately (see page L145).

All luminaires are designed for mounting with lamp in base up position.

Mounting Boxes



Pendant



Ceiling



EAC^①



Wall Bracket



25° Stanchion



Replacement Globe & Support Assemblies

MOUNTING BOXES				
HUB SIZE	CATALOG NUMBER			
	PENDANT	CEILING	BRACKET	STANCHION
3/4"	EZA2	EZX2**	EZB2	—
1"	EZA3	EZX3	EZB3	—
1-1/4"/1-1/2"	—	—	—	EZD4*

* Supplied as 1-1/2" NPT with 1-1/2" x 1-1/4" reducer
 ** 25 cu. in. below EZTB tangs.



EZCUP

Close up plug for EZ mounting boxes. Used for maintenance when fixture is removed for service.

REPLACEMENT GLOBE & GLOBE SUPPORT ASSEMBLY			
SERIES	LAMP TYPE	WATTAGE	CATALOG NUMBER
EZS	HPS	50-150	EZGS1
EZH	MH	70-250	
EZP	MHP	150, 175, 250	
EZM	MV	100-250	
EZS	HPS	250, 400	EZGS2
EZH	MH	400	
EZP	MHP	320-400	
EZM	MV	400	

EZ Options

Instant Restart Option

Factory installed special ignitor provides hot lamp instant restart of HPS lamps after power interruption of up to 1 minute. Available for 50, 70, 100 and 150 watt HPS lamps only. Add suffix "R" to fixture catalog number (50/60 Hz).

Quartz Emergency Lamp

Factory installed special auxiliary quartz relay and D.C. bayonet base socket installed to accept 100 watt, 120 volt quartz (100Q/DC) lamps only. Lamps not supplied. Refer to Hazardous Location Application Data chart to verify suitability. Add suffix "Q" to fixture catalog number.

Ballast Protection Cutout

Optional factory installed special ballast protector replaces the standard HPS ignitor and applies starting pulse to the lamp for 10 to 15 seconds each time voltage is supplied to the ballast. If the lamp has not ignited by the end of the time period, the starter will cease pulsing. Used to eliminate the continuous high voltage pulsing of the ignitor when end of life, lamp cycling, or missing lamp conditions exist. Available for 70, 100, 150, 250 and 400 watt HPS fixtures. Add suffix "BP" to fixture catalog number.

Notes:
 BP & R cannot be used together.
 Q & R cannot be used together.

^① Adapters for discontinued Killark "H" Series & Crouse-Hinds®.
 See page L200 for more information.

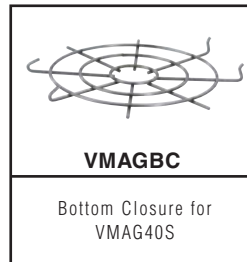


EZG1



VMAG40S

GUARDS				
CATALOG NUMBER	SERIES	LAMP TYPE	WATTAGE	DESCRIPTION
EZG1	EZS	HPS	50-150	Painted cast aluminum
	EZH	MH	70-250	
	EZP	MHP	150, 175, 250	
	EZM	MV	100-250	
VMAG40S	EZS	HPS	250, 400	Cadmium plated steel
	EZH	MH	400	
	EZP	MHP	320-400	
	EZM	MV	400	



VMPSD-40



EZTB



VMPA-40



HRD-400 (pictured)
HRD-400ALZ



EZCB



EZMO

REFLECTORS	
CATALOG NUMBER	DESCRIPTION
VMPSD-40	Standard dome. Polyester reinforced fiberglass
VMPA-40	Angle Polyester reinforced fiberglass
HRD-400	Deep dome. Aluminum with white finishⓄ
HRD-400ALZ	Deep dome with Alzak finish (tm Alcoa) Ⓞ

REPLACEMENT CONNECTION BLOCKS AND LAMP SOCKET	
CATALOG NUMBER	DESCRIPTION
EZTB	Female (goes in splice box)
EZCB	Male (goes in top of fixture body)
EZMO	Replacement lamp socket

Ⓞ For clearance, wall mount models require standoff of 1/2" if not bottom feed; 1-1/2" if bottom feed.



Housing Globe & Globe Support Assemblies

NOTE: See pages L78-79 for ballast data & fuse kit information.

FEATURES-SPECIFICATIONS

HPS HOUSING GLOBE & GLOBE SUPPORT ASSEMBLIES ^①			
WATTS	ANSI LAMP TYPE	VOLTAGE	CATALOG NUMBER
50	S-68/HPS	120, 208, 240, 277/60Hz	EZS050
		220, 240V/50Hz	EZS058
70	S-62/HPS	120, 208, 240, 277/60Hz	EZS070
		480 60Hz	EZS075
		120, 277, 347/60Hz	EZS076
		220, 240V/50Hz	EZS078
100	S-54/HPS	120, 208, 240, 277/60Hz	EZS100
		480 60Hz	EZS105
		120, 277, 347/60Hz	EZS106
		220, 240V/50Hz	EZS108
150	S-55/HPS	120, 208, 240, 277/60Hz	EZS150
		480 60Hz	EZS155
		120, 277, 347/60Hz	EZS156
250	S-50/HPS	120, 208, 240, 277/60Hz	EZS250
		480 60Hz	EZS255
		120, 277, 347/60Hz	EZS256
400	S-51/HPS	220, 240V/50Hz	EZS258
		120, 208, 240, 277/60Hz	EZS400
		480 60Hz	EZS405
		120, 277, 347/60Hz	EZS406
		220, 240V/50Hz	EZS408

METAL HALIDE HOUSING GLOBE & GLOBE SUPPORT ASSEMBLIES ^①			
WATTS	ANSI LAMP TYPE	VOLTAGE	CATALOG NUMBER
70	M-98/MH	120, 208, 240, 277/60Hz	EZH070
		120, 277, 347V/60Hz	EZH076
		480 60Hz	EZH075
		220/240V/50Hz	EZH078
100	M-90/MH	120, 208, 240, 277/60Hz	EZH100
		120, 347V/60Hz	EZH106
		120, 220, 240V/50Hz	EZH108
175	M-57/MH ^②	480 60Hz	EZH105
		120, 208, 240, 277/60Hz	EZH170
		480 60Hz	EZH175
250	M-58/MH	120, 277, 347V/60Hz	EZH176
		220, 240V/50Hz	EZH178
		120, 208, 240, 277/60Hz	EZH250
		480 60Hz	EZH255
400	M-59/MH	120, 277, 347V/60Hz	EZH256
		220, 240V/50Hz	EZH258
		120, 208, 240, 277/60Hz	EZH400
		480 60Hz	EZH405
		120, 277, 347V/60Hz	EZH406
		220, 240V/50Hz	EZH408

MERCURY VAPOR HOUSING GLOBE & GLOBE SUPPORT ASSEMBLIES ^①			
WATTS	ANSI LAMP TYPE	VOLTAGE	CATALOG NUMBER
100	H-38/MV	120, 208, 240, 277/60Hz	EZM100
		480V/60Hz	EZM105
		120, 277, 347/60Hz	EZM106
		220, 240V/50 Hz	EZM108
175	H-39/MV	120, 208, 240, 277/60Hz	EZM170
		480 60Hz	EZM175
		120, 277, 347/60Hz	EZM176
250	H-37/MV	220, 240V/50Hz	EZM178
		120, 208, 240, 277/60Hz	EZM250
		480V/60Hz	EZM255
400	H-33/MV	120, 277, 347/60Hz	EZM256
		220, 240V/50Hz	EZM258
		120, 208, 240, 277/60Hz	EZM400
		480 60Hz	EZM405
		120, 277, 347/60Hz	EZM406
		220, 240V/50Hz	EZM408

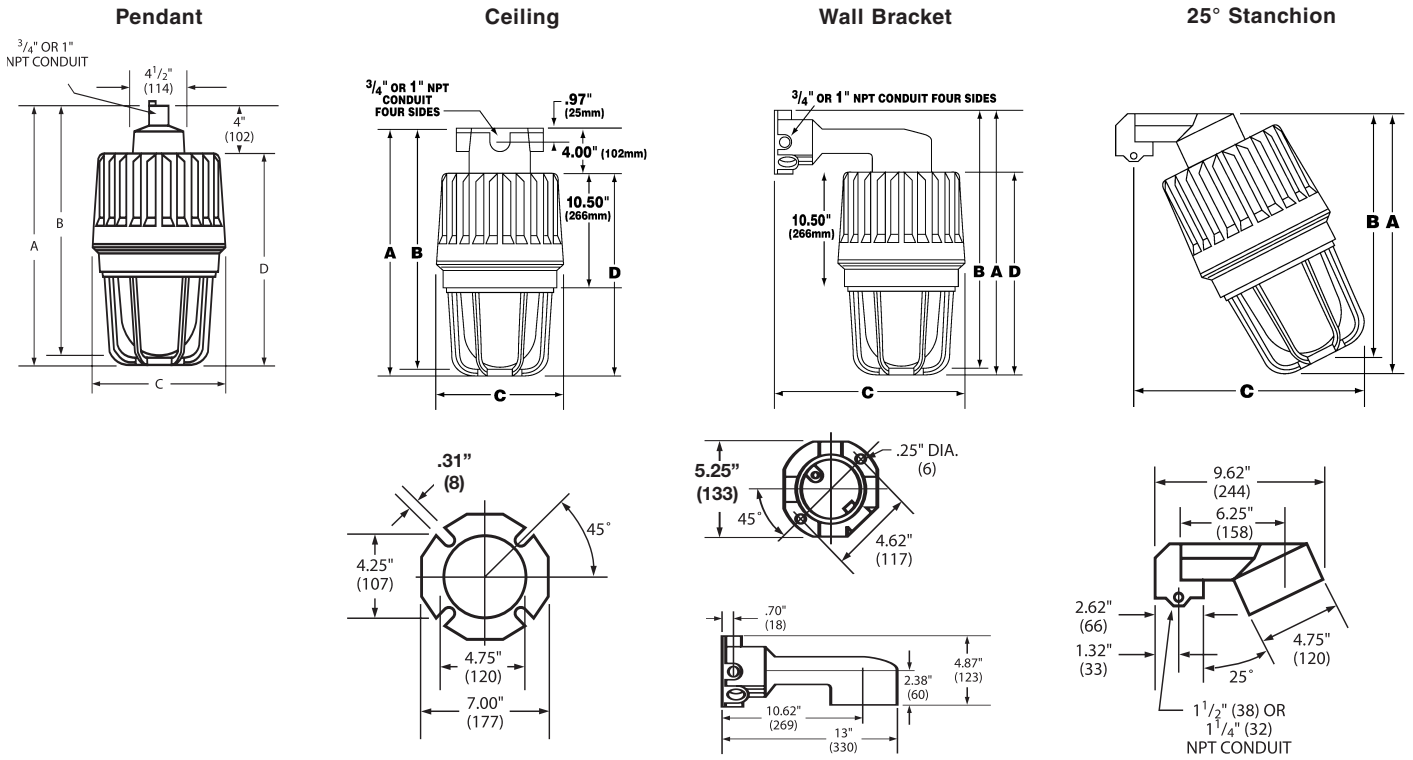
PULSE START HOUSING GLOBE & GLOBE SUPPORT ASSEMBLIES ^①			
WATTS	ANSI LAMP TYPE	VOLTAGE	CATALOG NUMBER
175 ^③	M137/MHP	120, 208, 240, 277/60Hz	EZP170
		480	EZP175
		120, 277, 347V/60Hz	EZP176
		220, 240V/50 Hz	EZP178
250	M138/MHP	120, 208, 240, 277/60Hz	EZP250
		480	EZP255
		120, 277, 347V/60Hz	EZP256
		220, 240V/50Hz	EZP258
320	M132/MHP	120, 208, 240, 277/60Hz	EZP320
		480	EZP325
		120, 277, 347V/60Hz	EZP326
		220, 240V/50Hz	EZP328
350	M131/MHP	120, 208, 240, 277/60Hz	EZP350
		480	EZP355
		120, 277, 347V/60Hz	EZP356
		220, 240V/50Hz	EZP358
400	M135/MHP	120, 208, 240, 277/60Hz	EZP400
		480	EZP405
		120, 277, 347V/60Hz	EZP406
		220, 240V/50Hz	EZP408

^① Assemblies may be ordered with the CEN (CENELEC) suffix; see page L148 for more information.

^② Will also operate 150W M107 Metal Halide Lamps.



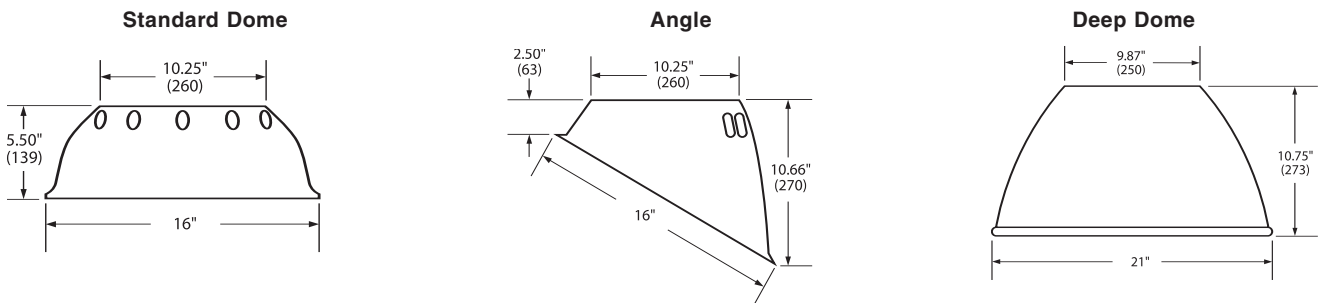
^③ For 150 Watt, change "7" to "5" in catalog number. Example EZP150.



MOUNTING DIMENSIONS															
	PENDANT				CEILING				BRACKET				STANCHION		
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C
50-250W*	22" (558)	21-1/4" (539)	11-1/4" (285)	18" (457)	22" (558)	21-1/4" (539)	11-1/4" (285)	18" (457)	22-7/8" (580)	22-1/8" (561)	16-3/4" (425)	18" (457)	24-7/8" (631)	24" (609)	19-13/16" (503)
250-400W**	26-1/4" (666)	24-1/4" (615)	11-1/4" (285)	22-1/4" (565)	26-1/4" (666)	24-1/4" (615)	11-1/4" (285)	22-1/4" (565)	26-7/8" (682)	24-7/8" (631)	16-3/4" (425)	22-1/4" (565)	28-1/2" (724)	26-11/16" (678)	21-1/2" (546)

* 50, 70, 100, and 150W HPS; 70, 100, 175 and 250W MH; 100, 175, 250W MV; 150, 175, 250W MHP.
** 250 and 400W HPS, 400W MH and MV; 320, 350, 400W MHP.

Reflector Dimensions



EZ HAZARDOUS LOCATION DATA—CLASS I, DIVISIONS 1 & 2 ①②④							
LAMP			RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR °C MIN.	CLASS I, DIVISIONS 1 & 2 MAXIMUM SURFACE TEMPERATURE UL/CSA		
SERIES	TYPE	WATTS			TEMP. I.D. W/O QTZ. ③	TEMP. I.D. W/QTZ. ③	UL/CSA GROUPS
EVS	HPS	50	40	85	T5	T4	C,D
			55	85	T5	N/A	C,D
			65	85	T4A	N/A	C,D
		70	40	85	T5	T4	C,D
			55	85	T5	N/A	C,D
			65	85	T4A	N/A	C,D
		100	40	85	T5	T4	C,D
			55	85	T5	N/A	C,D
			65	85	T4A	N/A	C,D
		150	40	85	T4A	T4	C,D
			55	85	T4A	N/A	C,D
			65	85	T4	N/A	C,D
		250	40	85	T3C	T3C	C,D
			55	85	T3C	N/A	C,D
			400	40	85	T3C	T3C
		EZH	MH	70	40	85	T4A
55	85				T4A	N/A	C,D
65	85				T4A	N/A	C,D
100	40			85	T4A	N/A	C,D
	55			85	T4A	N/A	C,D
	65			85	T4A	N/A	C,D
175	40			85	T4	T3C	C,D
	55			85	T4	N/A	C,D
250	40			85	T3C	T3C	C,D
	55			85	T3C	N/A	C,D
400	40			85	T3A	T3A	C,D
EZP	MHP			150 or 175	40	85	T4
		55	85		T4	N/A	C,D
		250	40	85	T3C	T3C	C,D
			55	25	T3C	N/A	C,D
		320	40	85	T3A	T3A	C,D
		350	40	85	T3A	T3A	C,D
400	40	85	T3A	T3A	C,D		
EZM	MV	100	40	85	T4	T3C	C,D
			55	85	T4	N/A	C,D
		175	40	85	T4	T3C	C,D
			55	85	T4	N/A	C,D
		250	40	85	T3C	T3C	C,D
			400	40	85	T3A	T3A

Notes for Class I, II, III Application Data Tables.

① Instant restrike limited to 55°C ambient maximum.

* ② Temperature code ID marked with an asterisk on Class II table are listed for simultaneous use in Class I, Groups C, D, and Class II, Groups E, F, G or Groups E, F.

③ Fixtures marked "N/A" not suitable for Class II applications when supplied with auxiliary quartz.

④ See Class II table for fixtures suitable for locations having deposits of readily combustible paint residue (paint spray booths).

Do not install where marked operating temperature exceeds ignition temperature of hazardous atmosphere.

See page L149 for Class II, III tables.



CEN Option

Applications

Killark EZ series fixtures are available with a European "Certificate of Conformity" from PTB (Physikalisch-Technische Bundesanstalt), the approval agency based in Germany. Fixtures with this rating will be useful for Original Equipment Manufacturers and others who build and ship apparatus into European markets.

This approval is granted by PTB with the use of a special ground lug and label. Fixtures carrying an EEx d IIB approval are automatically granted an IP54 (ingress protection) rating. See Temperature Code chart below for PTB certified ratings. Killark EZ fixtures with the PTB rating and labels still carry all UL & CSA ratings.

Fixture housing/globe/globe support assemblies (e.g. EMS050 CEN) may be ordered with the CEN suffix. Complete fixture numbers, with the CEN suffix, will be shipped with the mounting boxes, guards and accessories as component parts. Reflectors and other accessory parts, as listed on pages L144-145, may be used. Killark fixtures are NPT tapped and plugged with at least one conduit hole open.

Compliances

- EN 50014:1992
- EN 50018:1994



EEx d IIB T6 (or T5-T2)
PTB No. Ex-98.E.1076

MAXIMUM AMBIENT TEMPERATURE RANGE -20°C TO 40°C				
TYPE OF LUMINAIRE	TYPE OF ENCLOSURE	FORM OF THE LAMP	MAXIMUM WATTAGE	TEMPERATURE CLASS
EZH50	EZ025	ED28/M-110	50W	T4
EZH70	EZ025	ED28/M-98	70W	T4
EZH10	EZ025	ED28/M-90	100W	T4
EZH15	EZ025	ED28/M-102	150W	T4
EZH17	EZ025	ED28/M-57	175W	T4
EZH25	EZ025	ED28/M-58	250W	T3
EZH40	EZ040	ED37/M-59	400W	T3
EZM10	EZ025	ED23-1/2/H-38	100W	T4
EZM17	EZ025	ED28/H-39	175W	T3
EZM25	EZ025	ED28/H-37	250W	T3
EZM40	EZ040	ED37/H-33	400W	T3
EZS50	EZ025	ED23-1/2/S-68	50W	T4
EZS70	EZ025	ED23-1/2/S-62	70W	T4
EZS10	EZ025	ED23-1/2/S-54	100W	T4
EZS15	EZ025	ED23-1/2/S-55	150W	T4
EZS25	EZ040	ED18/S-50	250W	T3
EZS40	EZ040	ED18/S-51	400W	T3



EZ HAZARDOUS LOCATION DATA ^① -CLASS II & III, DIVISIONS 1 & 2 ^②														
LAMP			RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR C°	CLASS II, DIV. 1 & 2, MAX. SURFACE TEMP. UL/CSA SUITABILITY				CLASS III, DIV. 1 & 2 UL/CSA SUITABILITY		UL-595 MARINE	U.L. PAINT SPRAY SUITABILITY ^④	UL/CSA TYPE 3 (RAINTIGHT)	UL/CSA TYPE 4 (HOSEDOWN)
LAMP					TEMP. I.D. W/O QTZ.	TEMP. I.D. WITH QTZ ^③	GROUPS		W/O QTZ.	WITH QTZ ^③				
EZS	HPS	50	40	85	T3C*	T3B*	E,F	E,F,G	YES	YES	YES	YES	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			85	T3B*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES	
EZS	HPS	70	85	T3C*	T3B*	E,F,G	E,F,G	YES	NO	YES	YES	YES	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			65	85	T3B*	N/A	E,F,G	N/A	YES	YES	YES	NO	YES	YES
EZS	HPS	100	40	85	T3C*	T3B*	E,F,G	E,F,G	YES	NO	YES	YES	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			65	85	T3B	N/A	E,F,G	N/A	YES	YES	YES	NO	YES	YES
EZS	HPS	150	40	85	T3C*	T3B*	E,F,G	E,F,G	YES	YES	YES	NO	YES	YES
			55	85	T3C*	N/A	E,F	N/A	YES	YES	YES	NO	YES	YES
			65	85	T3B*	N/A	E,F,G	N/A	YES	YES	YES	NO	YES	YES
EZS	HPS	250	40	85	T3	T3	E,F	E,F	NO	NO	YES	NO	YES	YES
EZS	HPS	400	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZH	MH	70	40	85	T4A	N/A	E,F	N/A	YES	NO	YES	YES	YES	YES
			55	85	T4	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			65	85	T3C	N/A	E,F	N/A	YES	NO	YES	NO	YES	YES
EZH	MH	100	4	85	T4A	N/A	E,F,G	N/A	YES	NO	YES	YES	YES	YES
			55	85	T4	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			65	85	T3C	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
EZH	MH	175	40	85	T3C*	T3A*	E,F,G	N/A	YES	NO	YES	NO	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
EZH	MH	250	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZH	MH	400	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZP	MHP	150 or 175	40	85	T3C*	T3A*	E,F,G	EF	YES	NO	YES	NO	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
EZP	MHP	250	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZP	MHP	320, 350	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZP	MHP	400	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZM	MV	100	40	85	T3C*	T3A*	E,F,G	EF	YES	NO	YES	YES	YES	YES
			55	85	T3C*	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
EZM	MV	175	40	85	T3C	T3A*	E,F,G	EF	YES	NO	YES	NO	YES	YES
			55	85	T3C	N/A	E,F,G	N/A	YES	NO	YES	NO	YES	YES
EZM	MV	250	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES
EZM	MV	400	40	85	N/A	N/A	N/A	N/A	NO	NO	YES	NO	YES	YES

Notes for Class I, II, III Application Data Tables.

① Instant restrike limited to 55°C ambient maximum.

* ② Temperature code ID marked with an asterisk on Class II table are listed for simultaneous use in Class I, Groups C, D, and Class II, Groups E, F, G or Groups E, F.

③ Fixtures marked "NO" or "N/A" are not suitable for Class II or III applications when supplied with auxiliary quartz.

④ Suitability for locations having deposits of readily combustible paint residue (paint spray booths).

Do not install where marked operating temperature exceeds ignition temperature of hazardous atmosphere.

See page L148 for Class I data.

TABLE N.E.C. 500-5 (d)		
I.D. NUMBER	DEGREES C	DEGREES F
T1	450	842
T2	300	572
T2A	280	536
T2B	260	500
T2C	230	446
T2D	215	419
T3	200	392
T3A	180	356
T3B	165	329
T3C	160	320
T4	135	275
T4A	120	248
T5	100	212
T6	85	185



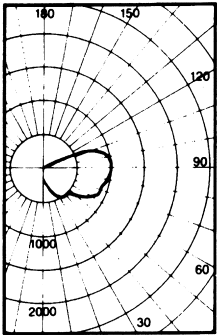
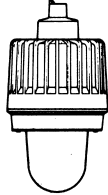
HIGH PRESSURE SODIUM

With Globe Only
50 – 150 Watt Mogul Base

CANDLEPOWER – 100 WATT

E-23½ clear lamp
9500 lumens

For 50 watt multiply by .42
For 70 watt multiply by .67
For 150 watt multiply by 1.68



ANGLE	CP	ANGLE	CP
0	184	90.0	1012
5.0	197	95.0	1012
10.0	236	100.0	983
15.0	319	105.0	921
20.0	395	110.0	732
25.0	451	115.0	406
30.0	499	120.0	106
35.0	523	125.0	14
40.0	526	130.0	3
45.0	527	135.0	1
50.0	523	140.0	0
55.0	732	145.0	0
60.0	838	150.0	0
65.0	906	155.0	0
70.0	928	160.0	0
75.0	948	165.0	0
80.0	968	170.0	0
85.0	1004	175.0	0
		180.0	0

Efficiency 75.7%

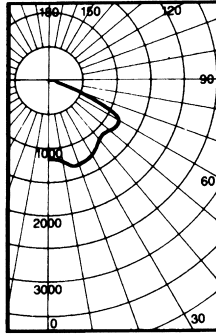
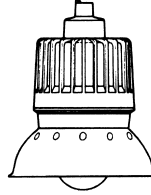
HIGH PRESSURE SODIUM

With Globe and Standard Dome Reflector
50 – 150 Watt Mogul Base

CANDLEPOWER – 100 WATT

E-23½ clear lamp
9500 lumens

For 50 watt multiply by .42
For 70 watt multiply by .67
For 150 watt multiply by 1.68



ANGLE	CP	ANGLE	CP
0	1199	90.0	13
5.0	1214	95.0	48
10.0	1268	100.0	96
15.0	1345	105.0	84
20.0	1363	110.0	29
25.0	1354	115.0	1
30.0	1320	120.0	0
35.0	1268	125.0	0
40.0	1201	130.0	0
45.0	1151	135.0	0
50.0	1198	140.0	0
55.0	1227	145.0	0
60.0	1243	150.0	0
65.0	949	155.0	0
70.0	466	160.0	0
75.0	243	165.0	0
80.0	136	170.0	0
85.0	51	175.0	0
		180.0	0

Efficiency 55.9%

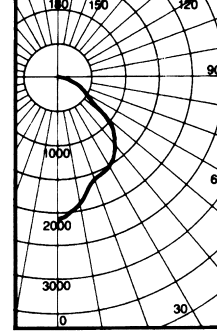
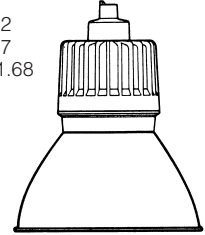
HIGH PRESSURE SODIUM

With Globe and Deep Dome HRD-400 Reflector
50 – 150 Watt Mogul Base

CANDLEPOWER – 100 WATT

E-23½ clear lamp
9500 lumens

For 50 watt multiply by .42
For 70 watt multiply by .67
For 150 watt multiply by 1.68



ANGLE	CP	ANGLE	CP
0	2177	90.0	0
5.0	2114	95.0	0
10.0	1974	100.0	0
15.0	1801	105.0	0
20.0	1658	110.0	0
25.0	1619	115.0	0
30.0	1593	120.0	0
35.0	1499	125.0	0
40.0	1348	130.0	0
45.0	1221	135.0	0
50.0	937	140.0	0
55.0	601	145.0	0
60.0	453	150.0	0
65.0	343	155.0	0
70.0	246	160.0	0
75.0	157	165.0	0
80.0	83	170.0	0
85.0	24	175.0	0
90.0	0	180.0	0

Efficiency 48.8%

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
% WALL REFLECTANCE ρ_w	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	84	84	84	84	79	79	79	79	70	70	70	61	61	61	53	53	53	50	84	84	84	84	79	79	79	70	70	70	61	61	61	53	53	53	50	
1	71	66	61	56	66	61	57	52	53	49	46	46	43	40	39	36	34	31	71	66	61	56	66	61	57	52	53	49	46	46	43	40	39	36	34	31
2	63	54	47	41	58	50	44	38	43	38	34	37	33	29	31	27	25	21	63	54	47	41	58	50	44	38	43	38	34	37	33	29	31	27	25	21
3	56	46	38	32	51	42	35	30	36	30	26	30	26	22	25	22	18	15	56	46	38	32	51	42	35	30	36	30	26	30	26	22	25	22	18	15
4	50	40	32	26	46	37	30	24	31	25	21	26	22	18	22	18	15	12	50	40	32	26	46	37	30	24	31	25	21	26	22	18	22	18	15	12
5	46	34	27	21	42	32	25	19	27	21	17	23	18	14	19	15	12	09	46	34	27	21	42	32	25	19	27	21	17	23	18	14	19	15	12	09
6	42	30	23	17	38	28	21	16	24	18	14	20	15	12	17	12	09	07	42	30	23	17	38	28	21	16	24	18	14	20	15	12	17	12	09	07
7	38	27	19	14	35	25	18	13	21	15	11	18	13	09	15	11	08	06	38	27	19	14	35	25	18	13	21	15	11	18	13	09	15	11	08	06
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9	33	22	15	10	30	20	14	10	17	12	08	15	10	07	12	08	05	04	33	22	15	10	30	20	14	10	17	12	08	15	10	07	12	08	05	04
10	30	20	13	09	28	18	12	08	16	11	07	13	09	06	11	07	05	03	30	20	13	09	28	18	12	08	16	11	07	13	09	06	11	07	05	03

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 3.7
SPACING CRITERION — SC = 3.6

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
% WALL REFLECTANCE ρ_w	70	50	30 <td>10</td> <td>0</td> <td>70</td> <td>50</td> <td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> </td></td></td></td>	10	0	70	50	30 <td>10</td> <td>0</td> <td>70</td> <td>50</td> <td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> </td></td></td>	10	0	70	50	30 <td>10</td> <td>0</td> <td>70</td> <td>50</td> <td>30<td>10</td><td>0</td> <td>70</td><td>50</td><td>30<td>10</td><td>0</td> </td></td>	10	0	70	50	30 <td>10</td> <td>0</td> <td>70</td> <td>50</td> <td>30<td>10</td><td>0</td> </td>	10	0	70	50	30 <td>10</td> <td>0</td>	10	0											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	66	66	66	66	64	64	64	64	61	61	61	58	58	58	56	56	56	54	66	66	66	66	64	64	64	64	61	61	61	58	58	58	56	56	56	54
1	61	58	56	54	59	57	55	53	54	52	51	52	50	49	49	48	47	46	61	58	56	54	59	57	55	53	54	52	51	52	50	49	49	48	47	46
2	55	51	47	44	54	50	46	43	47	45	42	46	43	41	44	42	40	39	55	51	47	44	54	50	46	43	47	45	42	46	43	41	44	42	40	39
3	50	44	40	36	49	43	39	36	42	38	35	40	37	34	38	36	34	32	50	44	40	36	49	43	39	36	42	38	35	40	37	34	38	36	34	32
4	46	39	34	31	45	38	34	30	37	33	30	35	32	29	34	31	29	27	46	39	34	31	45	38	34	30	37	33	30	35	32	29	34	31	29	27
5	42	34	29	26	40	34	29	25	32	28	25	31	27	24	30	27	24	23	42	34	29	26	40	34	29	25	32	28	25	31	27	24	30	27	24	23
6	38	30	25	22	37	30	25	21	29	24	21	27	24	21	26	23	20	19	38	30	25	22	37	30	25	21	29	24	21	27	24	21	26	23	20	19
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8	32	24	19	16	31	24	19	16	23	18	15	22	18	15	21	18	15	14	32	24	19	16	31	24	19	16	23	18	15	22	18	15	21	18	15	14
9	30	22	17	14	29	21	17	14	21	16	13	20	16	13	19	16	13	12	30	22	17	14	29	21	17	14	21	16	13	20	16	13	19	16	13	12
10	27	20	15	12	27	19	15	12	19	15	12	18	14	12	17	14	11	10	27	20	15	12	27	19	15	12	19	15	12	18	14	12	17	14	11	10

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 1.6
SPACING CRITERION — SC = 1.6

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE ρ_{cc}	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
% WALL REFLECTANCE ρ_w	70	50	30 <td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td></td></td></td></td></td>	10 <td>0</td> <td>70</td> <td>50</td> <td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td></td></td></td></td>	0	70	50	30 <td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td></td></td></td>	10 <td>0</td> <td>70</td> <td>50</td> <td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td></td></td>	0	70	50	30 <td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td></td>	10 <td>0</td> <td>70</td> <td>50</td> <td>30<td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td></td>	0	70	50	30 <td>10<td>0</td> <td>70</td><td>50</td><td>30<td>10<td>0</td> </td></td></td>	10 <td>0</td> <td>70</td> <td>50</td> <td>30<td>10<td>0</td> </td></td>	0	70	50	30 <td>10<td>0</td> </td>	10 <td>0</td>	0											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	56	56	56	56	54	54	54	54	52	52	52	50	50	50	48	48	48	47	56	56	56	56	54	54	54	54	52	52	52	50	50	50	48	48	48	47
1	52	50	49	47	51	49	48	46	47	46	45	45	44	44	44	43	42	41	52	50	49	47	51	49	48	46	47	46	45	45	44	44	44	43	42	41
2	48	45	43	40	47	44	42	40	4																											

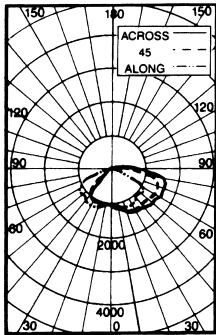
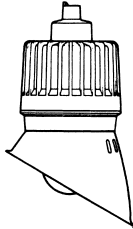
HIGH PRESSURE SODIUM

With Globe and Angle Reflector
 50 – 150 Watt Mogul Base

CANDLEPOWER – 100 WATT

E-2½ clear lamp
 9500 lumens

For 50 watt multiply by .42
 For 70 watt multiply by .67
 For 150 watt multiply by 1.68



ANGLE	90	45	0
0	1089	1089	1089
5.0	1089	1128	1148
15.0	1207	1285	1281
25.0	1268	1392	1421
35.0	1252	1484	1500
45.0	1104	1439	1562
55.0	1166	1511	1638
65.0	516	1530	1722
75.0	176	1415	1649
85.0	19	578	1135
90.0	0	310	803
95.0	0	196	435
105.0	0	51	146
115.0	0	0	30
125.0	0	0	0
135.0	0	0	0
145.0	0	0	0
155.0	0	0	0
165.0	0	0	0
175.0	0	0	0
180.0	0	0	0

Efficiency 57.4%

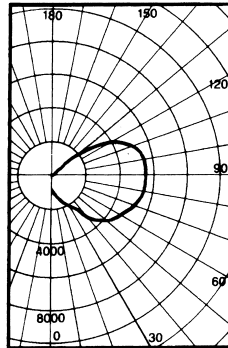
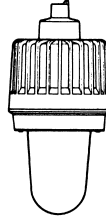
HIGH PRESSURE SODIUM

With Globe Only
 250 – 400 Watt Mogul Base

CANDLEPOWER – 400 WATT

E-18 clear lamp
 50000 lumens

For 250 watt multiply by .60



ANGLE	CP	ANGLE	CP
0	853	90.0	5345
5.0	855	95.0	5305
10.0	1089	100.0	5222
15.0	1458	105.0	5065
20.0	1754	110.0	4801
25.0	1907	115.0	4382
30.0	2041	120.0	3744
35.0	2281	125.0	2869
40.0	2967	130.0	1868
45.0	3500	135.0	965
50.0	3934	140.0	357
55.0	4323	145.0	82
60.0	4602	150.0	8
65.0	4807	155.0	0
70.0	5023	160.0	0
75.0	5187	165.0	0
80.0	5288	170.0	0
85.0	5333	175.0	0
		180.0	0

Efficiency 88.6%

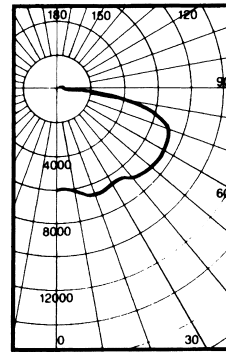
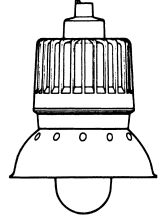
HIGH PRESSURE SODIUM

With Globe and Standard Dome Reflector
 250 – 400 Watt Mogul Base

CANDLEPOWER – 400 WATT

E-18 clear lamp
 50000 lumens

For 250 watt multiply by .60



ANGLE	CP	ANGLE	CP
0	5968	90.0	427
5.0	5968	95.0	241
10.0	6174	100.0	165
15.0	6468	105.0	120
20.0	6624	110.0	282
25.0	6582	115.0	268
30.0	6484	120.0	206
35.0	6438	125.0	113
40.0	6859	130.0	32
45.0	7119	135.0	0
50.0	7281	140.0	0
55.0	7374	145.0	0
60.0	7306	150.0	0
65.0	7169	155.0	0
70.0	6805	160.0	0
75.0	5414	165.0	0
80.0	3750	170.0	0
85.0	1936	175.0	0
		180.0	0

Efficiency 75.1%

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	68	68	68	68	68	66	66	66	66	66	62	62	62	59	59	59	56	56	56	56	56	55	55	55	55	55				
1	60	57	54	51	58	56	53	50	52	50	48	50	48	46	47	46	44	43	44	43	41	38	36	35	35	35				
2	54	49	45	41	53	48	44	40	45	42	39	43	40	37	41	38	36	35	35	34	32	30	28	27	27	27				
3	49	42	37	33	47	41	36	33	39	35	32	37	34	31	35	32	30	28	28	27	25	23	22	22	22	22				
4	45	38	32	28	43	37	32	28	35	30	27	33	29	26	31	28	26	24	24	23	21	19	18	18	18	18				
5	41	33	28	23	40	32	27	23	31	26	23	29	25	22	28	25	22	20	20	19	17	15	14	14	14	14				
6	38	29	24	20	36	29	24	20	27	23	19	26	22	19	25	21	19	17	17	16	14	12	11	11	11	11				
7	34	26	21	17	33	26	20	17	24	20	17	23	19	16	22	19	16	15	15	14	12	10	9	9	9	9				
8	32	24	18	15	31	23	18	15	22	18	14	21	17	14	20	17	14	13	13	12	10	8	7	7	7	7				
9	29	21	16	13	28	21	16	13	20	16	13	19	15	12	18	15	12	11	11	10	8	6	5	5	5	5				
10	27	19	14	11	26	19	14	11	18	14	11	17	13	11	17	13	11	10	10	9	7	5	4	4	4	4				

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 2.0
 SPACING CRITERION (Along) — SC = 1.6
 SPACING CRITERION (Across) — SC = 2.0

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	97	97	97	97	90	90	90	90	90	88	88	88	88	88	86	86	86	86	86	86	86	86	86	86	86	86				
1	83	76	71	66	76	71	66	61	66	61	56	52	50	47	44	41	38	36	32	32	29	26	22	22	22	22				
2	73	63	55	49	67	58	51	45	49	43	38	40	36	32	29	26	22	22	22	21	19	18	18	18	18	18				
3	65	54	45	38	59	49	41	35	41	35	30	33	29	24	26	23	19	15	15	14	12	10	9	9	9	9				
4	59	46	37	31	54	43	35	28	36	29	24	29	24	20	23	19	15	12	12	11	9	7	6	6	6	6				
5	53	40	31	25	48	37	29	23	31	24	19	25	20	16	20	15	12	09	09	08	07	05	04	04	04	04				
6	48	35	27	21	44	32	25	19	27	21	16	22	17	13	17	13	10	07	07	06	05	03	02	02	02	02				
7	44	31	23	17	40	29	21	16	24	17	13	19	14	10	15	11	08	05	05	04	03	02	01	01	01	01				
8	41	28	20	14	37	26	18	13	21	15	11	18	12	09	14	10	06	04	04	03	02	01	01	01	01	01				
9	38	25	18	12	34	23	16	11	19	13	09	16	11	07	12	08	05	03	03	02	01	01	01	01	01	01				
10	35	23	15	11	32	21	14	10	18	12	08	14	10	06	11	07	04	03	03	02	01	01	01	01	01	01				

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 4.0
 SPACING CRITERION — SC = 3.8

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0	50	30	10	0				
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	89	89	89	89	87	87	87	87	87	82	82	82	82	82	80	80	80	80	80	80	80	80	80	80	80	80				
1	79	74	70	67	77	73	69	65	69	66	63	65	63	60	62	60	58	56	56	56	54	52	49	46	44	44				
2	70	63	57	51	68	61	55	50	58	53	49	55	51	47	52	49	46	44	44	43	41	39	37	35	35	35				
3	63	53	46	40	60	52	45	40	49	43	39	47	42	38	44	40	37	35	35	34	32	30	28	27	27	27				
4	57	46	39	33	55	45	38	33	43	37	32	41	36	31	39	34	31	29	29	28	26	24	22	21	21	21				
5	51	40	33	27	49	39	32	27	37	31	26	36	30	26	34	29	25	23	23	22	20	18	16	15	15	15				
6	47	35	28	22	45	35	27	22	33	27	22	31	26	21	30	25	21	19	19	18	16	14	12	11	11	11				
7	43	31	24	19	41	30	23	18	29	23	18	28	22	18	27	21	17	16	16	15	13	11	9	8	8	8				
8	39	28	21	16	38	27	21	16	26	20	16	25	19	15	24	19	15	13	13	12	10	8	6	5	5	5				
9	36	25	18	14	35	25	18	14	24	18	13	23	17	13	22	17	13	11	11	10	8	6	4	3	3	3				
10	34	23	16	12	33	22	16	12	21	16	12	21	15	11	20	15	11	10	10	9	7	5	3	2	2	2				

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 1.7
 SPACING CRITERION — SC = 1.7

ILLUMINATION ON HORIZONTAL SURFACE

FOOTCANDLE CHART (Initial) 100 WATT H.P.S. HORIZONTAL DISTANCE FROM SOURCE (Front) IN FEET	FOOTCANDLE CHART (Initial) 100 WATT H.P.S. HORIZONTAL DISTANCE FROM SOURCE (Side) IN FEET															
	0'	5'	10'	15'	20'	25'	30'	35'	40'	45'						
10'	10.80	10.17	5.52	2.80	1.54	.86	.53	.30	.17	10.89	9.07	3.92	1.99	.46	.14	.08
12'	7.56	7.76	4.83	2												

MERCURY VAPOR, METAL HALIDE, PULSE START METAL HALIDE

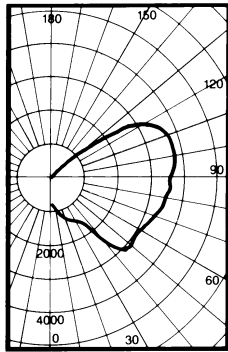
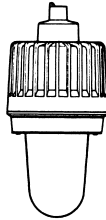
With Globe Only
320 - 400 Watt Mogul Base

CANDLEPOWER – 400 WATT MH

E-37 coated MH
36000 lumens

For 400 watt mercury vapor
lamp multiply by .625

For CP of MHP320 multiply by .87
For CP of MHP350 multiply by 1.05
For CP of MHP400 multiply by 1.22



ANGLE	CP	ANGLE	CP
0	812	90	3511
5	872	95	3591
10	1029	100	3634
15	1187	105	3626
20	1295	110	3551
25	1376	115	3397
30	1471	120	3063
35	1778	125	2392
40	2519	130	1443
45	3028	135	592
50	3051	140	136
55	3016	145	8
60	3076	150	0
65	3180	155	0
70	3299	160	0
75	3389	165	0
80	3419	170	0
85	3452	175	0
		180	0

Efficiency 87.3%

MERCURY VAPOR, METAL HALIDE, PULSE START METAL HALIDE

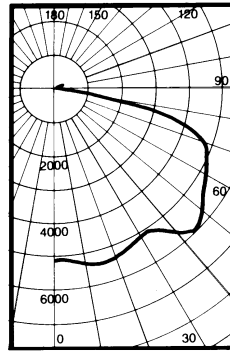
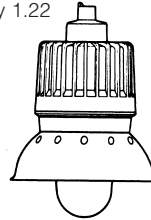
With Globe and Standard Dome Reflector
320 - 400 Watt Mogul Base

CANDLEPOWER – 400 WATT MH

E-37 coated MH
36000 lumens

For 400 watt mercury vapor
lamp multiply by .625

For CP of MHP320 multiply by .87
For CP of MHP350 multiply by 1.05
For CP of MHP400 multiply by 1.22



ANGLE	CP	ANGLE	CP
0	5058	90	121
5	5108	95	90
10	5242	100	83
15	5305	105	118
20	5263	110	203
25	5173	115	280
30	5051	120	258
35	5085	125	145
40	5577	130	36
45	5819	135	0
50	5578	140	0
55	5270	145	0
60	5043	150	0
65	4836	155	0
70	4477	160	0
75	3216	165	0
80	1382	170	0
85	444	175	0
		180	0

Efficiency 72.5%

MERCURY VAPOR, METAL HALIDE, PULSE START METAL HALIDE

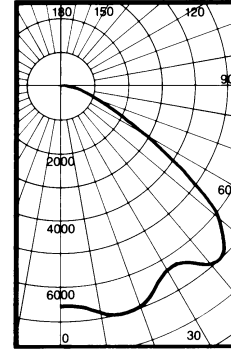
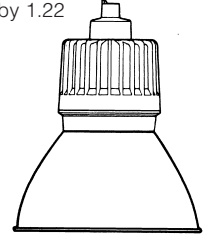
With Globe and Deep Dome Reflector
320 - 400 Watt Mogul Base

CANDLEPOWER – 400 WATT MH

E-37 coated MH
36000 lumens

For 400 watt mercury vapor
lamp multiply by .625

For CP of MHP320 multiply by .87
For CP of MHP350 multiply by 1.05
For CP of MHP400 multiply by 1.22



ANGLE	CP	ANGLE	CP
0	6505	90	0
5	6587	95	0
10	6777	100	0
15	6930	105	0
20	6884	110	0
25	6636	115	0
30	6269	120	0
35	6329	125	0
40	6870	130	0
45	6862	135	0
50	5778	140	0
55	3859	145	0
60	2305	150	0
65	1704	155	0
70	1190	160	0
75	743	165	0
80	397	170	0
85	100	175	0
90	0	180	0

Efficiency 58.2%

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0										
	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10		50	30	10											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	95	95	95	95	88	88	88	88	76	76	76	65	65	65	54	54	54	49	95	95	95	95	88	88	88	88	76	76	76	65	65	65	54	54	54	49
1	82	76	70	66	75	70	65	61	59	55	52	49	46	44	40	38	36	31	82	76	70	66	75	70	65	61	59	55	52	49	46	44	40	38	36	31
2	72	63	56	49	66	58	51	46	43	39	40	36	32	29	26	22		72	63	56	49	66	58	51	46	43	39	40	36	32	29	26	22			
3	64	54	45	39	59	49	42	36	41	35	30	34	29	25	27	23	20	16	64	54	45	39	59	49	42	36	41	35	30	34	29	25	27	23	20	16
4	58	47	38	31	53	43	35	29	36	29	25	29	24	20	23	19	16	13	58	47	38	31	53	43	35	29	36	29	25	29	24	20	23	19	16	13
5	53	40	32	26	48	37	29	24	31	25	20	25	20	16	20	16	13	10	53	40	32	26	48	37	29	24	31	25	20	25	20	16	20	16	13	10
6	48	36	27	21	44	33	25	19	27	21	16	22	17	13	17	13	10	07	48	36	27	21	44	33	25	19	27	21	16	22	17	13	17	13	10	07
7	44	31	23	18	40	29	21	16	24	18	13	19	14	11	15	11	08	06	44	31	23	18	40	29	21	16	24	18	13	19	14	11	15	11	08	06
8	40	28	20	15	37	26	19	14	21	16	11	18	13	09	14	10	07	05	40	28	20	15	37	26	19	14	21	16	11	18	13	09	14	10	07	05
9	37	25	18	13	34	23	16	12	19	14	10	16	11	08	12	08	06	04	37	25	18	13	34	23	16	12	19	14	10	16	11	08	12	08	06	04
10	35	23	16	11	32	21	14	10	18	12	08	14	10	06	11	07	05	03	35	23	16	11	32	21	14	10	18	12	08	14	10	06	11	07	05	03

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 3.4
SPACING CRITERION — SC = 3.3

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0										
	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10		50	30	10											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	86	86	86	86	84	84	84	80	80	80	76	76	72	72	72	72	71	86	86	86	86	84	84	84	80	80	80	76	76	72	72	72	72	71		
1	78	74	70	67	75	72	69	66	68	66	63	63	61	62	61	59	57	78	74	70	67	75	72	69	66	68	66	63	63	61	62	61	59	57		
2	70	63	58	53	68	61	56	52	58	54	51	56	52	49	53	50	48	46	70	63	58	53	68	61	56	52	58	54	51	56	52	49	53	50	48	46
3	62	54	47	42	60	53	47	42	50	45	41	48	44	40	46	42	39	37	62	54	47	42	60	53	47	42	50	45	41	48	44	40	46	42	39	37
4	57	47	40	35	55	46	40	35	44	38	34	42	37	33	40	36	33	31	57	47	40	35	55	46	40	35	44	38	34	42	37	33	40	36	33	31
5	52	41	34	29	50	40	34	29	38	33	28	37	32	28	35	31	27	25	52	41	34	29	50	40	34	29	38	33	28	37	32	28	35	31	27	25
6	47	36	29	24	45	35	29	24	34	28	24	32	27	23	31	26	23	21	47	36	29	24	45	35	29	24	34	28	24	32	27	23	31	26	23	21
7	43	32	25	20	41	31	25	20	30	24	20	29	23	19	28	23	19	17	43	32	25	20	41	31	25	20	30	24	20	29	23	19	28	23	19	17
8	39	29	22	17	38	28	22	17	27	21	17	26	21	17	25	20	16	15	39	29	22	17	38	28	22	17	27	21	17	26	21	17	25	20	16	15
9	36	26	19	15	35	25	19	15	24	19	15	23	18	14	22	18	14	13	36	26	19	15	35	25	19	15	24	19	15	23	18	14	22	18	14	13
10	34	23	17	13	33	23	17	13	22	16	13	21	16	12	20	16	12	11	34	23	17	13	33	23	17	13	22	16	13	21	16	12	20	16	12	11

SPACING TO MOUNTING HEIGHT RATIO — S/MH = 1.7
SPACING CRITERION — SC = 1.7

COEFFICIENTS OF UTILIZATION — ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE tcc	80					70					50					30					10					0										
	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10		50	30	10											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	69	69	69	69	68	68	68	65	65	65	62	62	62	62	59	59	59	58	69	69	69	69	68	68	68	65	65	65	62	62	62	62	59	59	59	58
1	64	62	60	58	63	61	59	57	58	57	55	56	55	54	54	53	52	51	64	62	60	58	63	61	59	57	58	57	55	56	55	54	54	53	52	51
2	59	56	52	49	58	54	51	49	52	50	48	51	48	47	49	47	46	44	59	56	52	49	58	54	51	49	52	50	48	51	48	47	49	47	46	44
3	55	49	45	42	53	49	45	42	47	44	41	45	43	40	44	42	40	38	55	49	45	42	53	49	45	42	47	44	41	45	43	40	44	42	40	38
4	51	44	40	36	49	44	40	36	42	39	36	41	38	35	40	37	35	34	51	44	40	36	49	44	40	36	42	39	36	41	38	35	40	37	35	34
5																																				



Class I, Div. 2, Groups A,B,C,D[Ⓛ]
Class I, Zone 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G[Ⓛ]
Class III, Div. 1 & 2
Suitable for wet locations
NEMA 3, 4

Listed - File E12976

Certified - File LR11713

FEATURES-SPECIFICATIONS

LINEARLITE[®] *

* marca registrada MEXICO

Applications

LINEARLITE DBF fluorescent fixtures are designed for general and task lighting of areas where flammable gases or vapors or combustible dusts may exist due to abnormal conditions resulting in the creation of a Class I, Division 2 or Class II or III, Div. 1 or 2, hazardous location as defined in the NEC. Also for lighting non-hazardous wet locations indoors and outdoors.

Features

- Sheet steel 20 ga. housing with continuous weld prevents foreign matter from entering enclosure
- Lens frame assembly has silicon rubber gasketing and heat tempered glass lens
- Electrostatically applied polyester finish

DBF FLUORESCENT FIXTURES				
CATALOG NUMBER	CONDUIT SIZE [Ⓛ]	NUMBER OF LAMPS	LINE VOLTAGE	DESCRIPTION
DBF32302	3/4"	2	120-277V 50/60 Hz	32W T8 electronic ballast 265 MA 0°F start
DBF4012 [Ⓛ]			120V 60 Hz	40W rapid start electronic F40T12 medium bi-pin 430MA
DBF4042			277V 60 Hz	
DBF6012 [Ⓛ]			120V 60 Hz	60W rapid start high output F48T12/HO recessed double contact 800MA
DBF6042	277V 60 Hz			
DBF32303	3/4"	3	120-277V 50/60 Hz	32W T8 electronic ballast 265 MA 0°F start
DBF4013			120V 60 Hz	40W rapid start electronic F40T12 medium bi-pin 430MA
DBF4043			277V 60 Hz	
DBF6013			120V 60 Hz	60W rapid start high output F48T12/HO recessed double contact 800MA
DBF6043			277V 60 Hz	

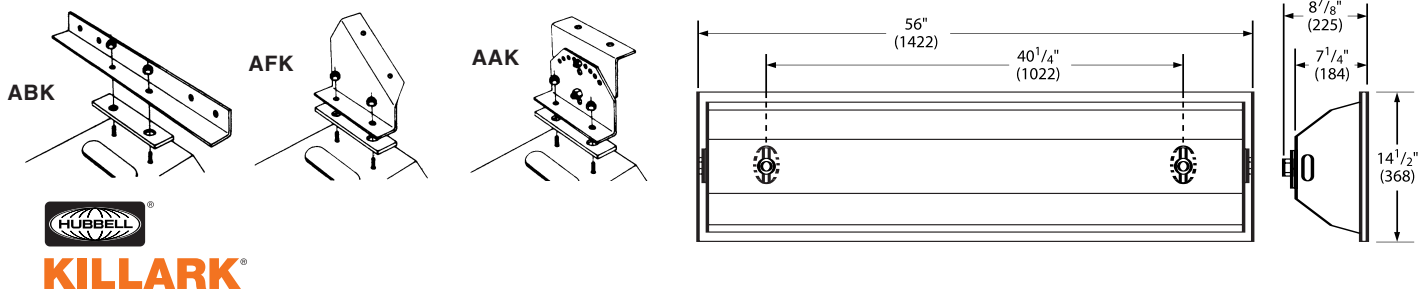
- Standard ballast starting temperature for 40 watt is 50°F.
 - Ballasts are Class P Type with internal, automatic, thermally-activated protective device.
 - Optional external ballast fusing availability by adding suffix **FB**.
 - For other voltages consult factory.
 - 60 watt high output ballasts are standard -20°F start.
- Fixtures are supplied without lamps. To order with lamps installed add suffix **WL**.
- [Ⓛ] UL/CSA Class I, Div. 2
[Ⓛ] Hubs can be relocated in field to fixture end for feed-thru wiring.
[Ⓛ] Change 1 to 8 for 230V 50 Hz.
[Ⓛ] CSA Class II, Div. 1

**SEE PAGE L187
FOR DBFE
EMERGENCY MODELS**

MOUNTING HARDWARE [Ⓛ]	
CATALOG NUMBER	DESCRIPTION
ABK	Angle bar chain bracket
AFK	45° fixed angle bracket
AAK	45° adjustable angle bracket
DBF-HUB	Replacement hub
DBF-DL	Door & Lens

[Ⓛ] Must be ordered separately. Brackets sold as sets.

DBF HAZARDOUS LOCATION APPLICATION DATA ^{ⓁⓅ}								
NUMBER OF LAMPS	LAMP WATTS	RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR °C MIN.	CLASS I, DIV. 2, GROUPS A, B, C, D MAX. LAMP TEMP. °C UL/CSA TEMP./I.D.	CLASS II, DIV. 1 & 2, GROUPS E, F, G MAX. SURFACE TEMP. °C SUITABILITY UL/CSA TEMP./I.D.	CLASS III DIV. 1 & 2 UL/CSA	NEMA TYPE 3 (RAINTIGHT)	NEMA TYPE 4 (HOSEDOWN)
2	32/40	40	90	T6 (85°C/185°F)	T6 (85°C/185°F)	YES	YES	YES
3	32/40	40	90	T5 (100°C/212°F)	T6 (85°C/185°F)	YES	YES	YES
2	60	40	90	T4A (120°C/248°F)	T6 (85°C/185°F)	YES	YES	YES
3	60	40	90	T4 (138°C/275°F)	T6 (85°C/185°F)	YES	YES	YES





NEW!

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Group E,F,G
AEx nAll, Ex nAll
Wet Locations
NEMA 4X, IP66

Certified - File LR11713

ABS Type Approval

Replaces
SSHZ Series

FEATURES-SPECIFICATIONS

LINEARLITE® *

* marca registrada MEXICO

Applications

LINEARLITE® rugged 316 stainless fluorescent fixtures are suitable for wet, harsh, corrosive and hazardous locations. The LZ2S Series can be used in Class I, Division 2 and Zone 2 hazardous vapors and in Class II combustible dust areas typically found in refineries, chemical plants, waste water & sewage treatment facilities, as well as in tunnels, food processing and coastal areas.

ABS (American Bureau of Shipping) type approval for use on decks, vessels, platforms, barges, ships and boats. Also suitable for docks and marinas.

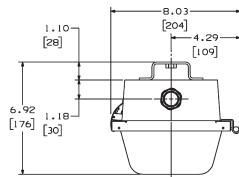
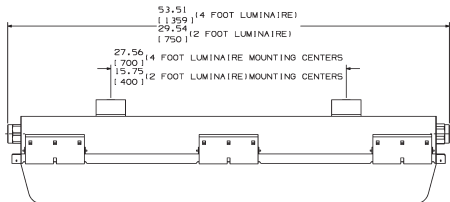
Features

- NEMA 4X & IP66 rated stainless enclosure with Lexan® impact resistant polycarbonate lens.
- Two 3/4" NPT stainless hubs - one at each end (includes aluminum 3/4" close-up plug and two 3/4" x 1/2" reducers for maximum user flexibility).
- Two 1/4" - 20 stainless bushings furnished in top of fixture for threaded rod.

Lexan® is a registered trademark of General Electric

Additional Data

- L188 - Emergency models
- L159 - Ballast data
- L160 - Mounting accessories
- L160 - L161 - Photometrics



LZ2S STAINLESS			
NUMBER OF LAMPS/WATTS	VOLTAGE AC 60 Hz	DESCRIPTION	LZ2S
BIAXIAL LAMP TYPE FIXTURES			
1-40W	120-277V	2' 1-Lamp Biaxial Electronic 50/60 Hz, 0°F Start 4-Pin	LZ2S40130
1-55W	120-277V	2' 1-Lamp Biaxial Electronic 50/60 Hz, 0°F Start 4-Pin	LZ2S55130
2-40W	120-277V	2' 2-Lamp Biaxial Electronic 50/60 Hz, 0°F Start 4-Pin	LZ2S40230
4-40W	120-277V	4' 4-Lamp Biaxial Electronic 50/60 Hz, 0°F Start 4-Pin	LZ2S40430
DOUBLE-ENDED LAMP TYPE FIXTURES			
2-17W	120-277V	2' 2-Lamp T-8 Electronic 50/60 Hz, 0°F Start Medium Bi-Pin	LZ2S17230
3-17W	120-277V	2' 3-Lamp T-8 Electronic 50/60 Hz, 0°F Start Medium Bi-Pin	LZ2S17330
2-28W	120-277V 50-60 Hz	4' 2-Lamp T-5 Electronic 0°F Start Miniature Bi-Pin	LZ2S28230
3-28W	120-277V 50-60 Hz	4' 3-Lamp T-5 Electronic 0°F Start Miniature Bi-Pin	LZ2S28330
2-32W	120-277V 347V	4' 2-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2S32230 LZ2S32215
3-32W	120-277V 347V	4' 3-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2S32330 LZ2S32315
2-40W	120V 277V 230V 50 Hz ⊕	4' 2-Lamp T-12 Electronic Medium Bi-Pin Start 50°F 40W/60°F 34W	LZ2S40201 LZ2S40204 LZ2S40208
2-44W	120V 277V	4' 2-Lamp T-8 Electronic -20°F Start High Output Recessed Double Contact	LZ2S44230
2-54W	120-277V	4' 2-Lamp T5 Electronic 50/60 Hz, -20°F Start Miniature Bi-Pin	LZ2S54230
2-60W	120-277V	4' 2-Lamp T-12 Electronic -20°F Start High Output Recessed Double Contact	LZ2S60201 LZ2S60204

⊕50 Hz ballast is magnetic.

LZ2S, LZ2SE HAZARDOUS LOCATION APPLICATION DATA										
NUMBER OF LAMPS/WATTS	RATED AMBIENT °C	SUITABLE FOR °C SUPPLY WIRE	CLASS I, DIV. 2 MAX. SURFACE TEMP.			CLASS II, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS III DIV. 1 & 2 SUITABILITY	
			TEMP.	T-CODE	GROUPS	TEMP.	T-CODE	GROUPS		
1 X 40W BIAxIAL	40°	75	160°C	T3C	A, B, C, D	100°C	T5	E, F, G	Yes	
1 X 55W BIAxIAL	40°	60	160°C	T3C	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 40W BIAxIAL	40°	75	160°C	T3C	A, B, C, D	100°C	T5	E, F, G	Yes	
4 X 40W BIAxIAL	40°	75	160°C	T3C	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 17W	40°	60	85°C	T5	A, B, C, D	100°C	T5	E, F, G	Yes	
3 X 17W	40°	60	85°C	T5	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 28W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	E, F, G	Yes	
3 X 28W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 32W	40°	60	85°C	T6	A, B, C, D	100°C	T5	E, F, G	Yes	
3 X 32W	40°	60	85°C	T6	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 40W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 44W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 54W	40°	75	160°C	T3C	A, B, C, D	100°C	T5	E, F, G	Yes	
2 X 60W	40°	75	135°C	T4	A, B, C, D	100°C	T5	E, F, G	Yes	



KILLARK®



4' Nominal Style



2' Nominal Style

Quick release diffuser clamp and hinged cover requires no special tools.

Class I, Div. 2 Groups A,B,C,D
Class I, Zones 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups F,G
AEx nAll, Ex nAll
Wet Locations
NEMA 4X, IP66

Certified - File LR11713

ABS Type Approval
NSF Food Handling

FEATURES-SPECIFICATIONS

LINEARLITE® *

* marca registrada MEXICO

Applications

LINEARLITE® rugged Non-Metallic fluorescent fixtures are suitable for wet, harsh and hazardous locations. Use where enclosed and gasketed fixtures are required to withstand exposure to moisture, dust and corrosives. The LZ2N Series can also be used in Class I, Division 2 and Zone 2 hazardous vapors and in Class II areas where combustible dusts may exist. Typical areas used are in refineries, chemical plants, waste water & sewage treatment facilities, as well as in tunnels, food processing and coastal areas.

ABS (American Bureau of Shipping) type approval for use on decks, vessels, platforms, barges, ships and boats. Also suitable for docks and marinas.

NSF (National Sanitation Foundation) approved for "Food Handling" areas, typically requiring non-glass lighting.

Features

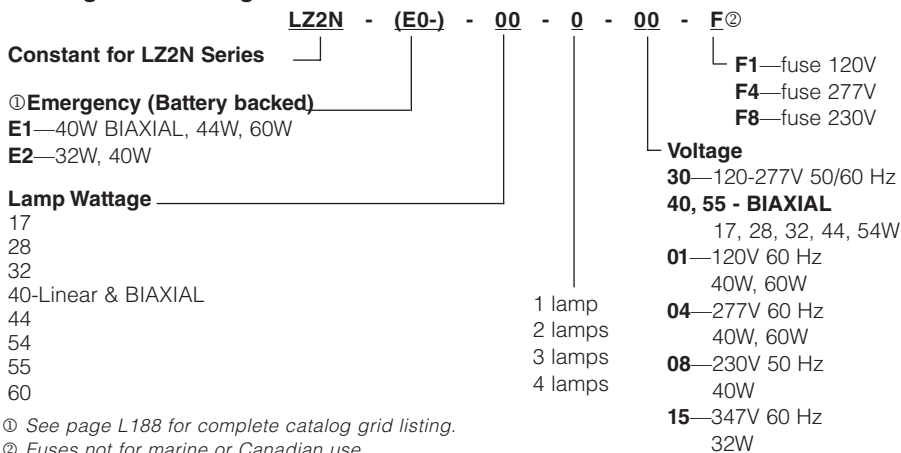
- Housing-one piece fiberglass reinforced polyester, NEMA 4X & IP66 rated.
- Lexan® Clear Lens, impact resistant polycarbonate
- Two 3/4" NTP aluminum hubs - one at each end (includes one 3/4" close-up plug and two 3/4" x 1/2" reducers for maximum user flexibility)
- Two 1/4"-20 aluminum bushings furnished in top of fixture for threaded rod

Lexan® is a registered trademark of General Electric

Product Range

- 2' and 4' luminaries
- Lamp types-
Linear 17, 28, 32, 40, 44, 54, 60W
Long compact 40, 55W (single ended)
- Electronic ballast standard
- World voltage (most models) 120 thru 277V, 50/60 Hz

Catalog Number Logic



LZ2N, LZ2NE HAZARDOUS LOCATION APPLICATION DATA											
NUMBER OF LAMPS/WATTS	RATED AMBIENT °C	SUITABLE FOR °C SUPPLY WIRE	CLASS I, DIV. 2 MAX. SURFACE TEMP.			CLASS II, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS III DIV. 1 & 2 SUITABILITY	NEMA 4X IP66	
			TEMP.	T-CODE	GROUPS	TEMP.	T-CODE	GROUPS			
2 X 17W	40°	60	85°C	T5	A, B, C, D	100°C	T5	F, G	Yes	Yes	
3 X 17W	40°	60	85°C	T5	A, B, C, D	100°C	T5	F, G	Yes	Yes	
1 X 40W BIAxIAL	40°	60	100°C	T5	A, B, C, D	100°C	T5	F, G	Yes	Yes	
1 X 55W BIAxIAL	40°	60	160°C	T3C	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 40W BIAxIAL	40°	60	100°C	T5	A, B, C, D	100°C	T5	F, G	Yes	Yes	
4 X 40W BIAxIAL	40°	60	120°C	T4A	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 28W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	F, G	Yes	Yes	
3 X 28W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 32W	40°	75	85°C	T6	A, B, C, D	100°C	T5	F, G	Yes	Yes	
3 X 32W	40°	75	85°C	T6	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 40W	40°	60	120°C	T4A	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 44W	40°	60	100°C	T5	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 54W T5	40°	75	160°C	T3C	A, B, C, D	100°C	T5	F, G	Yes	Yes	
2 X 60W	40°	75	135°C	T4	A, B, C, D	100°C	T5	F, G	Yes	Yes	



KILLARK®

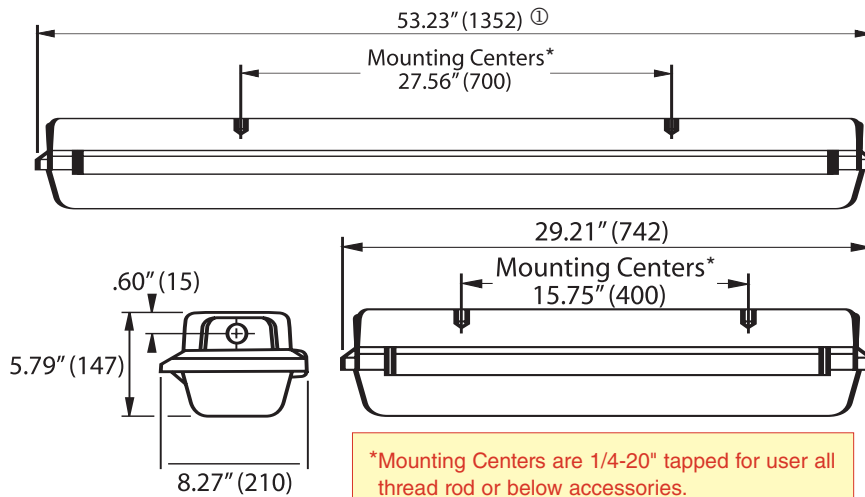
LZ2N NON-METALLIC			
NUMBER OF LAMPS/WATTS	VOLTAGE AC 60 Hz	DESCRIPTION	LZ2N
BIAXIAL LAMP TYPE FIXTURES			
1-40W	120-277V	2' 1-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2N40130
1-55W	120-277V	2' 1-Lamp Biaxial Electronic 0°F Start 4-Pin	LZ2N55130
2-40W	120-277V	2' 2-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2N40230
4-40W	120-277V	4' 4-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2N40430
DOUBLE-ENDED LAMP TYPE FIXTURES			
2-17W	120-277V	2' 2-Lamp T8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2N17230
3-17W	120-277V	2' 3-Lamp T8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2N17330
2-28W	120-277V 50-60 Hz	4' 2-Lamp T-5 Electronic 0°F Start Miniature Bi-Pin	LZ2N28230
3-28W	120-277V 50-60 Hz	4' 3-Lamp T-5 Electronic 0°F Start Miniature Bi-Pin	LZ2N28330
2-32W	120-277V 347V	4' 2-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2N32230 LZ2N32215
3-32W	120-277V 347V	4' 3-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2N32330 LZ2N32315
2-40W	120V-277V 230V 50 Hz [Ⓢ]	4' 2-Lamp T-12 Electronic, Medium Bi-Pin Start 50°F 40W/60°F 34W	LZ2N40201 LZ2N40204 LZ2N40208
2-44W	120-277V	4' 2-Lamp T-8 Electronic -20°F Start High Output Recessed Double Contact	LZ2N44230
2-54W	120-277V	4' 2-Lamp T-5 Electronic 50/60 Hz -20°F Start Miniature Bi-Pin	LZ2N54230
2-60W	120-277V	4' 2-Lamp T-12 Electronic -20°F Start High Output Recessed Double Contact	LZ2N60201 LZ2N60204

**See page L188
for LZ2NE
Non-metallic
and LZ2SE
316 Stainless
Emergency
Models**

LZ2N AND LZ2S BALLAST DATA[Ⓢ]					
NUMBER OF LAMPS/WATTS	VOLTAGE	LINE CURRENT AMPS		INPUT WATTS	STARTING TEMPERATURE
1 X 40W BIAxIAL	120-277V	.35 (120V)	.15 (277V)	39	0°F (-18°C)
1 X 55W BIAxIAL	120-277V	.49 (120V)	.22 (277V)	58	0°F (-18°C)
2 X 40W BIAxIAL	120-277V	.60 (120V)	.28 (277V)	78	0°F (-18°C)
4 X 40W BIAxIAL	120-277V	1.32 (120V)	.56 (277V)	156	0°F (-18°C)
2 X 17W	120-277V	.32 (120V)	.14 (277V)	38	0°F (-18°C)
3 X 17W	120-277V	.39 (120V)	.17 (277V)	48	0°F (-18°C)
2 X 28W	120-277V	.55 (120V)	.23 (277V)	66	0°F (-18°C)
3 X 28W	120-277V	.83 (120V)	.35 (277V)	99	0°F (-18°C)
2 X 32W	120-277V	.54 (120V)	.24 (277V)	65	0°F (-18°C)
3 X 32W	120-277V	.71 (120V)	.31 (277V)	85	0°F (-18°C)
2 X 40W	120-277V	.62 (120V)	.24 (277V)	71	50°F (10°C)
2 X 44W	120-277V	.84 (120V)	.36 (277V)	99	-20°F (-29°C)
2 X 54W	120-277V	1.00 (120V)	.43 (277V)	120	-20°F (-29°C)
2 X 60W	120-277V	1.13 (120V)	.48 (277V)	125	-20°F (-29°C)

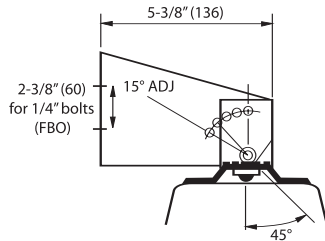
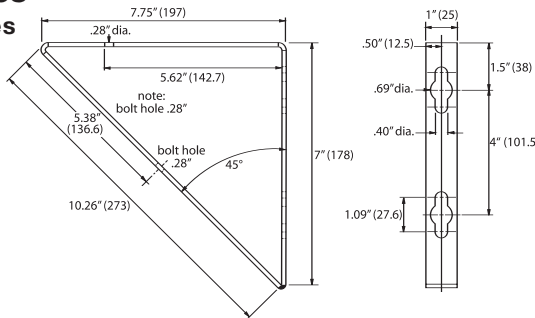
[Ⓢ] Includes normal powered LZ2NE and LZ2SE models, lamps not included.
[Ⓣ] Magnetic ballast.

DIMENSIONS LZ2N, LZ2NE SERIES



Mounting Accessories For All LZ2N, LZ2S Series

Wall Bracket Set ②
Part Number LZWB
Stainless Steel (natural finish)

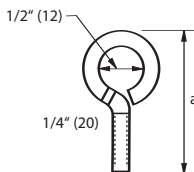
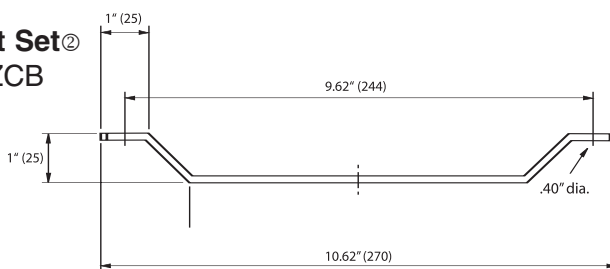


Adjustable Wall Bracket Set

Part Number LZAB

Stainless Steel bracket with ceramic coated pivot bolt

Ceiling Bracket Set ②
Part Number LZCB
Stainless Steel (natural finish)



Eyebolt Set

Part Number LZEB

Stainless Steel bolt with lockwasher & nut (natural finish)

Replacement Parts:	
LZ2N4LENS	4'Lens only LZ2N/LZ2S
LZ2N2LENS	2'Lens only LZ2N/LZ2S
LZ2N4BAR	4'Locking Bar only LZ2N
LZ2N2BAR	2'Locking Bar only LZ2N

Suspension Chains (2 required)

Part Number HFX-SC

36" length plated steel chain with snap link ends For use with LZEB

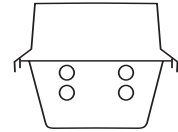
FLUORESCENT FIXTURE- LZ2N(S)40230

2' - 2 40 Watt Biaxial
Lamp Type F40/2G11/835/RS
Lumens 3150 each

Total Bare Lamp

Lumens 6300

All data provided is for F40/2G11/835/RS lamps

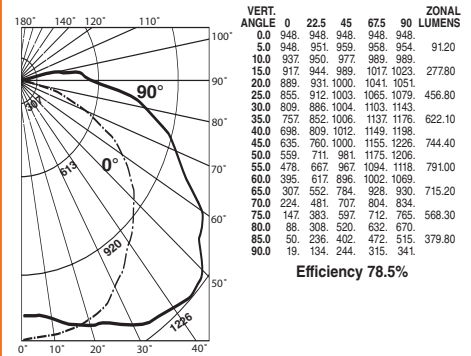


For LZ2N40130 1-lamp models multiply x .50

For LZ2N55130 1-lamp models multiply x .76

ZONAL LUMENS

ZONAL LUMENS	
0-30	826
0-40	1447
0-60	2977
0-90	4638



COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTANCE t_{cc}	80					70					50					30					10					0										
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
% WALL REFLECTANCE t_w	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0											
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																																			
0	.92	.92	.92	.90	.90	.90	.84	.84	.84	.80	.80	.80	.76	.76	.76	.74	.92	.92	.92	.90	.90	.90	.84	.84	.84	.80	.80	.80	.76	.76	.76	.74				
1	.81	.76	.72	.68	.79	.74	.70	.66	.70	.66	.63	.66	.63	.61	.62	.60	.58	.56	.81	.76	.72	.68	.79	.74	.70	.66	.70	.66	.63	.66	.63	.61	.62	.60	.58	.56
2	.73	.65	.58	.53	.70	.63	.57	.52	.59	.54	.50	.56	.52	.48	.53	.49	.46	.44	.73	.65	.58	.53	.70	.63	.57	.52	.59	.54	.50	.56	.52	.48	.53	.49	.46	.44
3	.65	.56	.48	.42	.63	.54	.47	.42	.51	.45	.40	.48	.43	.39	.45	.41	.37	.35	.65	.56	.48	.42	.63	.54	.47	.42	.51	.45	.40	.48	.43	.39	.45	.41	.37	.35
4	.59	.49	.41	.35	.57	.47	.40	.34	.45	.38	.33	.42	.37	.32	.40	.35	.31	.29	.59	.49	.41	.35	.57	.47	.40	.34	.45	.38	.33	.42	.37	.32	.40	.35	.31	.29
5	.54	.43	.35	.29	.52	.42	.34	.29	.39	.33	.28	.37	.32	.27	.35	.30	.26	.24	.54	.43	.35	.29	.52	.42	.34	.29	.39	.33	.28	.37	.32	.27	.35	.30	.26	.24
6	.50	.38	.30	.25	.48	.37	.30	.25	.35	.29	.24	.33	.28	.23	.32	.27	.23	.21	.50	.38	.30	.25	.48	.37	.30	.25	.35	.29	.24	.33	.28	.23	.32	.27	.23	.21
7	.46	.34	.27	.22	.44	.33	.26	.21	.32	.25	.21	.30	.25	.20	.29	.24	.20	.18	.46	.34	.27	.22	.44	.33	.26	.21	.32	.25	.21	.30	.25	.20	.29	.24	.20	.18
8	.43	.31	.24	.19	.41	.30	.24	.19	.29	.23	.18	.27	.22	.18	.26	.21	.17	.16	.43	.31	.24	.19	.41	.30	.24	.19	.29	.23	.18	.27	.22	.18	.26	.21	.17	.16
9	.40	.28	.21	.17	.38	.28	.21	.17	.26	.20	.16	.25	.20	.16	.24	.19	.16	.14	.40	.28	.21	.17	.38	.28	.21	.17	.26	.20	.16	.25	.20	.16	.24	.19	.16	.14
10	.37	.26	.19	.15	.36	.25	.19	.15	.24	.19	.15	.23	.18	.14	.22	.17	.14	.12	.37	.26	.19	.15	.36	.25	.19	.15	.24	.19	.15	.23	.18	.14	.22	.17	.14	.12

SPACING TO MOUNTING HEIGHT RATIO - 1.28 0-180°
SPACING TO MOUNTING HEIGHT RATIO - 1.88 90-270°

Test No. BAL12356



① Dimensions in () are millimeters.
② Product accessories have hardware for attachment to fixture; hardware to attach to wall/ceiling F.B.O.
NOTE: Eyebolts are 316 Series, brackets are 300 Series Stainless Steel.



Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 4X, 7(C,D) 9(E,F,G)
Suitable for wet locations
Suitable for paint spray booths

Listed - File E12976 and E89665 (Marine)

Certified - File LR11713

FEATURES-SPECIFICATIONS

Applications

Biaxial single ended lamp type HFX-T fixtures provide greater efficiency and lumen output than standard models. Designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water and snow can be expected. They can also be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible ducts as defined by the NEC.

Typical applications include classified areas such as inside paint spray booths, paint manufacturing plants, ammunition facilities, oil and gas producing and refining plants, off-shore and dockside installations, tank farms, pipeline pumping stations and marine loading and fuel transfer terminals.

Features

- UL Listed and labeled for use inside paint spray booths and rooms
- 2' nominal compact models facilitate use in areas too small for nominal 4' models, or where the light must be confined
- Standard ballast is 120-277V at 50/60 Hz[Ⓛ]
- 0°F starting temperature

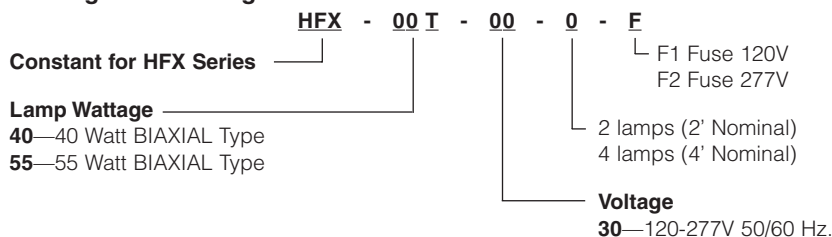
- Construction is strong lightweight corrosion resistant copper-free aluminum alloy, less than 4/10 of 1%
- All external hardware is corrosion resistant 316 stainless steel
- UL Listed externally fused ballast option; protects fixture on line side of ballast, prevents ballast burnout
- Suitable for use in both indoor and outdoor wet locations
- Relamping easily accomplished by removing screw in cap and socket
- Factory sealed construction

- Extruded aluminum reflectors are easily removable for cleaning. White baked enamel finish

Compliances

- UL-1570, Standard for Fluorescent Lighting Fixtures
- UL Marine Type Lighting Fixtures
- UL-844, Standard for Lighting Fixtures for Hazardous Locations
- CSA C22.2 137-M1981
- Meets requirements of NFPA 70-1987 Article 516 and NFPA standard 33

Catalog Number Logic



HFX-T BIAXIAL TYPE LIGHT FIXTURES [Ⓛ]				
CATALOG NUMBER	CONDUIT SIZE	LINE VOLTAGE	DESCRIPTION	PROFILE
HFX-40T-302	3/4"	120V-277V 50/60 Hz	2' 2 Lamp 40W BIAXIAL	
HFX-55T-302			2' 2 Lamp 55W BIAXIAL	
HFX-40T-304			4' 4 Lamp 40W BIAXIAL	
HFX-55T-304			4' 4 Lamp 55W BIAXIAL	

[Ⓛ] See page L162 for ballast current information.

[Ⓛ] Consult HFX page L163 for dimensions and accessories. Photometrics on following page.

**SEE PAGE L189
FOR HFXE
EMERGENCY MODELS**

HFX-T, HFXE-T HAZARDOUS LOCATION APPLICATION DATA													
DESCRIPTION	RATED AMBIENT °C	SUITABLE FOR °C FOR °C SUPPLY WIRE	CLASS I, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS II, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS III DIV. 1 & 2 SUITABILITY	UL MARINE	PAINT SPRAY SUITABLE	NEMA 3 & 4X	
			TEMP.	T-CODE	GROUPS	TEMP.	T-CODE	GROUPS					
HFX-T 40W 2 LAMP	40	60	85°C	T6	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	Yes	
HFX-T 55W 2 LAMP	40	60	85°C	T6	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	Yes	
HFX-T 40W 4 LAMP	40	60	85°C	T6	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	Yes	
HFX-T 55W 4 LAMP	40	60	85°C	T6	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	Yes	

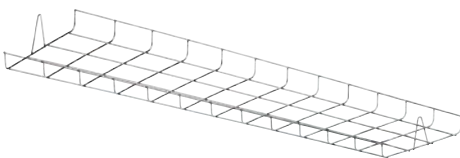




4' Nominal Style



2' Nominal Style



WIRE GUARD ①	
CATALOG NUMBER	DESCRIPTION
2HFX-G2	302 HFX-T Models
2HFX-G4	304 HFX-T Models

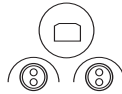
① 316 Stainless Steel

Consult page L167 for dimensions and accessories.

SEE PAGE L189 FOR HFXE EMERGENCY MODELS

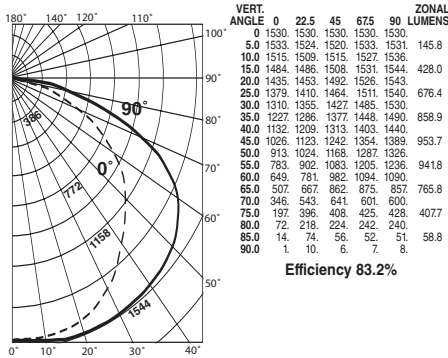
FLUORESCENT FIXTURE- HFX-40T-302

Lamp Type F40/2G11/835/RS
2' – 2 40 Watt Biaxial 3150 Lumens each.
Total Bare Lamp Lumens 6300
For 55W Biaxial multiply by 1.52.



ZONAL LUMENS

ZONE LUMENS	Value
0-30	1246
0-40	2102
0-60	3989
0-90	5237



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

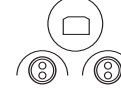
% EFFECTIVE CEILING CAVITY REFLECTAN 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0					
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	99.99	99.99	97.97	97.97	97.97	92.92	92.92	88.88	88.88	88.88	85.85	85.85	85.85	85.85	85.85	81.81	81.81	77.77	77.77	77.77	74.74	74.74	74.74	74.74	74.74					
1	90.86	82.79	88.84	81.78	80.78	75.75	77.75	73.74	72.71	69.69	66.66	67.63	60.64	61.58	56.56	53.53	54.51	47.48	48.44	43.43	40.40	41.39	34.34	35.29	29.29					
2	81.74	68.63	79.73	67.63	63.63	58.58	61.58	54.54	55.50	48.48	49.47	46.46	39.39	40.35	34.34	31.31	32.28	25.25	26.22	21.21	22.18	23.16	16.16	17.13	11.11					
3	74.65	58.52	72.63	57.51	51.51	46.46	49.47	42.42	43.38	36.36	37.33	34.34	27.27	28.24	23.23	24.21	25.18	18.18	19.15	14.14	15.11	16.08	9.09	10.06	4.04					
4	67.57	49.43	65.56	49.43	43.43	38.38	41.39	34.34	35.31	28.28	29.25	26.26	19.19	20.16	15.15	16.12	17.09	10.10	11.07	6.06	7.03	8.00	3.03	4.00	1.01					
5	62.50	43.37	60.50	42.37	36.36	31.31	34.34	27.27	28.24	21.21	22.18	19.19	12.12	13.09	8.08	9.05	10.02	5.05	6.02	3.03	4.00	5.00	2.02	3.00	1.01					
6	57.45	37.32	55.44	37.32	31.31	26.26	29.25	22.22	23.19	16.16	17.13	14.14	7.14	8.11	5.05	6.02	7.00	4.04	5.01	2.02	3.00	4.00	1.01	2.00	1.01					
7	52.41	33.28	51.40	33.28	26.26	21.21	24.21	17.17	18.14	11.11	12.08	9.09	4.04	5.01	3.03	4.00	5.00	3.03	4.00	1.01	2.00	3.00	1.01	2.00	1.01					
8	49.37	30.25	47.36	30.25	23.23	18.18	21.18	14.14	15.11	8.08	9.05	6.06	3.03	4.00	2.02	3.00	4.00	2.02	3.00	1.01	2.00	3.00	1.01	2.00	1.01					
9	45.34	27.22	44.33	27.22	20.20	15.15	18.14	11.11	12.08	6.06	7.03	4.04	2.02	3.00	1.01	2.00	3.00	1.01	2.00	1.01	2.00	3.00	1.01	2.00	1.01					
10	43.31	24.20	41.31	24.20	18.18	13.13	16.12	9.09	10.06	4.04	5.01	3.03	1.01	2.00	1.01	2.00	3.00	1.01	2.00	1.01	2.00	3.00	1.01	2.00	1.01					

SPACING TO MOUNTING HEIGHT RATIO - 1.28 0-180°
SPACING TO MOUNTING HEIGHT RATIO - 1.50 90-270°

Test No. BAL12360

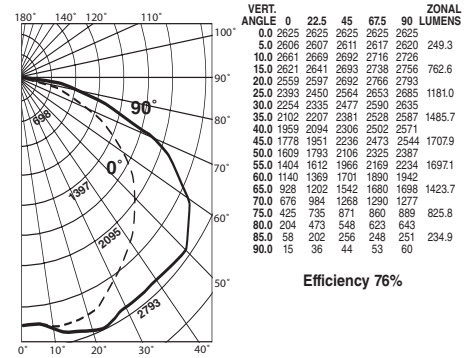
FLUORESCENT FIXTURE- HFX-40T-304

Lamp Type F40/2G11/835/RS
4' – 4 40 Watt Biaxial 3150 Lumens each.
Total Bare Lamp Lumens 12600
For 55W Biaxial multiply by 1.52.



ZONAL LUMENS

ZONE LUMENS	Value
0-30	2197
0-40	3685
0-60	7050
0-90	9559



COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD

% EFFECTIVE CEILING CAVITY REFLECTAN 1cc	80					70					50					30					10					0				
	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0	70	50	30	10	0					
ROOM CAVITY RATIO RCR	20% Effective Floor Cavity Reflectance																													
0	90.90	90.90	88.88	88.88	88.88	84.84	84.84	81.81	81.81	77.77	77.77	76.76	70.70	71.69	65.65	62.62	63.60	56.56	57.54	52.52	49.49	50.47	43.43	44.42	38.38					
1	82.78	74.71	80.76	73.70	70.70	66.66	69.69	62.62	63.60	56.56	57.54	54.54	47.48	48.44	43.43	44.42	45.40	38.38	39.36	34.34	35.32	36.30	29.29	30.27	24.24					
2	74.67	67.57	72.66	60.56	63.58	60.56	63.58	56.56	57.54	50.50	53.48	56.46	49.44	50.42	43.40	46.38	49.36	42.34	43.32	36.30	37.28	40.26	33.24	34.22	27.20					
3	67.58	52.46	65.57	51.46	45.44	48.42	51.40	44.38	45.36	38.34	41.32	44.30	37.28	38.26	31.24	34.22	37.20	30.18	31.16	24.14	25.12	28.10	21.08	22.06	15.04					
4	61.51	44.39	59.50	43.38	38.36	41.34	44.32	37.30	38.28	31.26	34.24	37.22	30.20	31.18	24.16	27.14	30.12	23.10	24.08	17.06	18.04	21.02	14.00	15.00	8.00					
5	56.45	38.33	54.44	38.33	32.30	35.28	38.26	31.24	32.22	25.20	28.18	31.16	24.14	25.12	18.10	21.08	24.06	17.04	18.02	11.00	12.00	15.00	8.00	9.00	3.00					
6	51.41	33.28	50.40	33.28	27.26	30.24	33.22	26.20	27.18	20.16	23.14	26.12	19.10	20.08	13.06	16.04	19.02	12.00	13.00	6.00	7.00	10.00	3.00	4.00	1.00					
7	47.37	30.25	46.36	29.25	23.22	26.22	29.20	22.18	23.16	16.14	19.12	22.10	15.08	16.06	9.04	12.02	15.00	8.00	9.00	3.00	4.00	7.00	1.00	2.00	1.00					
8	44.33	27.22	43.33	26.22	20.20	23.20	26.18	19.16	20.14	13.12	16.10	19.08	12.06	13.04	6.02	9.00	12.00	5.00	6.00	2.00	3.00	6.00	1.00	2.00	1.00					
9	41.30	24.20	40.30	24.20	18.18	21.18	24.16	17.14	18.12	11.10	14.08	17.06	10.04	11.02	4.00	7.00	10.00	3.00	4.00	1.00	2.00	5.00	1.00	2.00	1.00					
10	38.28	22.18	37.28	22.18	16.16	19.16	22.14	15.12	16.10	9.08	12.06	15.04	8.02	9.00	3.00	6.00	9.00	2.00	3.00	1.00	2.00	5.00	1.00	2.00	1.00					

SPACING TO MOUNTING HEIGHT RATIO - 1.28 0-180°
SPACING TO MOUNTING HEIGHT RATIO - 1.52 90-270°

Test No. BAL12361



Class I, Div. 1 & 2 Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 4X, 7(C,D) 9(E,F,G)
Suitable for wet locations
Suitable for paint spray booths

Listed - File E12976 and E89665 (Marine)

Certified - File LR11713

FEATURES-SPECIFICATIONS

Applications

HFX Series fluorescent fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water and snow can be expected. They can also be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible ducts as defined by the NEC.

Typical applications include classified areas such as inside paint spray booths, paint manufacturing plants, ammunition facilities, oil and gas producing and refining plants, off-shore and dockside installations, tank farms, pipeline pump-jacking stations and marine loading and fuel transfer terminals.

Features

- UL Listed and labeled for use inside paint spray booths and rooms
- Construction is strong lightweight corrosion resistant copper-free aluminum alloy, less than 4/10 of 1%
- Class P ballast(s) with internal automatic thermally activated protective device
- All external hardware is corrosion resistant 316 stainless steel to provide maintenance free long life
- UL factory sealed construction (no external seals required). Saves installation time and cost
- Electronic energy efficient ballasts are standard on 430 MA fixtures and meet the requirements of many states

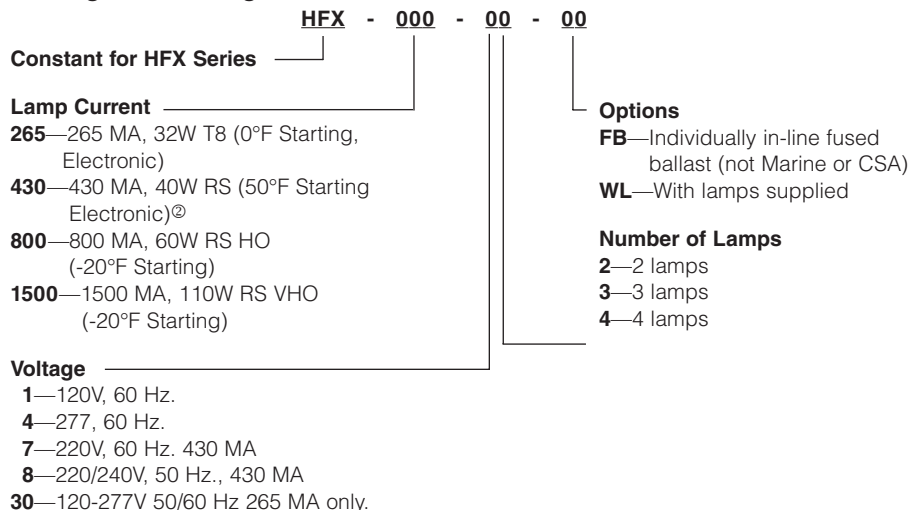
- Extruded aluminum reflectors are easily removable for cleaning. White baked enamel finish
- Optional 316 stainless steel wire guard for added protection
- Threaded O-Ring gasketed covers provide easy access to lamp chambers, ballast and wiring compartment
- UL Listed externally fused ballast option; protects fixture on line side of ballast, prevents ballast burnout
- Suitable for use in both indoor and outdoor wet locations
- Relamping from either end permits easy access, speed and flexibility in relamping

- Spring loaded sockets on both lamp ends provide positive electrical contact and improved vibration resistance

Compliances

- UL-1570, Standard for Fluorescent Lighting Fixtures
- UL Marine Type Lighting Fixtures
- UL-844, Standard for Lighting Fixtures for Hazardous Locations
- CSA C22.2 137-M1981
- Meets requirements of NFPA 70-1987 Article 516 and NFPA standard 33

Catalog Number Logic



SEE PAGE L189
FOR HFXE
EMERGENCY MODELS



KILLARK®

HFX, HFXE HAZARDOUS LOCATION APPLICATION DATA ^①													
FIXTURE SERIES	LAMP WATTS	RATED AMBIENT °C	SUITABLE FOR °C SUPPLY WIRE	CLASS I, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS II, DIV. 1 & 2 MAX. SURFACE TEMP.			CLASS III DIV. 1 & 2 SUITABILITY	UL MARINE	PAINT SPRAY SUITABLE	NEMA 3 & 4
				TEMP.	T-CODE	GROUPS	TEMP.	T-CODE	GROUPS				
HFX	32	40	90	100°C	T5	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	
HFX	40	40	90	100°C	T5	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	
HFX	60	40	90	100°C	T5	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	
HFX	110	40	90	100°C	T5	C, D	120°C	T4A	E, F, G	Yes	Yes	Yes	

^① Ratings apply to all 2, 3, and 4 lamp models.
^② 430 MA ballasts 60°F start with 34 watt lamps.






Class I, Div. 1 & 2 Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
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ORDERING INFORMATION

HFX FLUORESCENT LIGHT FIXTURES				
CATALOG NUMBER ^{①②}	CONDUIT SIZE	LINE VOLTAGE @60 HERTZ	DESCRIPTION	NUMBER OF LAMPS
HFX-265-302	3/4"	120V-277V	32W T8 electronic ballast 265MA	 Two Glass Tubes 4' Nominal
HFX-430-12		120V	40W rapid start electronic F40T12	
HFX-430-42		277V	medium Bi-Pin 430MA	
HFX-800-12		120V	60W rapid start high output F48T12/HO	
HFX-800-42		277V	recessed double contact 800MA	
HFX-1500-12		120V	110W rapid start VHO F48T12/VHO	
HFX-1500-42	277V	recessed double contact 1500MA		
HFX-265-303	3/4"	120V-277V	32W T8 electronic ballast 265MA	 Three Glass Tubes 4' Nominal
HFX-430-13		120V	40W rapid start electronic F40T12	
HFX-430-43		277V	medium Bi-Pin 430MA	
HFX-800-13		120V	60W rapid start high output F48T12/HO	
HFX-800-43		277V	recessed double contact 800MA	
HFX-1500-13		120V	110W rapid start VHO F48T12/VHO	
HFX-1500-43	277V	recessed double contact 1500MA		
HFX-265-304	3/4"	120V-277V	32W T8 electronic ballast 265MA	 Four Glass Tubes^③ 4' Nominal
HFX-430-14		120V	40W rapid start electronic F40T12	
HFX-430-44		277V	medium Bi-Pin 430MA	
HFX-800-14		120V	60W rapid start high output F48T12/HO	
HFX-800-44		277V	recessed double contact 800MA	
HFX-1500-14		120V	110W rapid start VHO F48T12/VHO	
HFX-1500-44	277V	recessed double contact 1500MA		

① Standard ballasts starting temperatures:

- 32 Watt (265MA) Electronic 0°F
- 40 Watt (430MA) Electronic 50°F, 60°F with 34 Watt lamps
- 60 Watt (800MA) Electronic -20°F
- 110 Watt (1500MA) Electronic -20°F

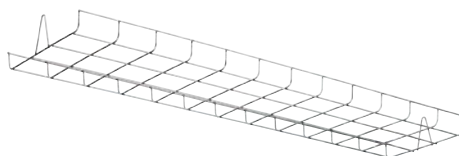
Optional cold weather electromagnetic ballast (0°F starting 40 Watt 430MA) add suffix **CW** to catalog number.

② Optional UL listed in-line ballast fusing is available by adding suffix **FB** to catalog number (UL only).

③ Safety chain accessory catalog number **HFX-SC** available, supplied standard with 4 lamp fixtures.

WIRE GUARD	
CATALOG NUMBER	DESCRIPTION
2HFX-G4	2-Lamp 316 grade stainless steel
3HFX-G4	3-Lamp 316 grade stainless steel

4 lamp fixture requires two 2HFX-G4 guards.



SEE PAGE L189
FOR HFXE
EMERGENCY MODELS



Class I, Div. 1 & 2 Groups C,D
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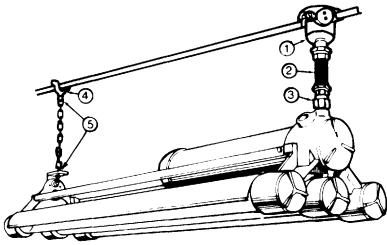
HFX BALLAST DATA					
CATALOG NUMBER	NO. OF LAMPS	VOLTAGE	LINE CURRENT AMPS	INPUT WATTS	STARTING TEMPERATURE
32 WATT T-8 ELECTRONIC 48" 265MA					
HFX-265-302	2	120-277	.54 (120V) .24 (277V)	71	0°F (-18°C)
HFX-265-303 ^①	3	120-277	.71 (120V) .31 (277V)	88	0°F (-18°C)
HFX-265-304	4	120-277	1.10 (120V) .48 (277V)	142	0°F (-18°C)
40 WATT RAPID START ELECTRONIC T-12 MEDIUM BI-PIN 48" 430MA					
HFX-430-12	2	120	.51 ^②	60	60°F (16°C)
HFX-430-42	2	277	.22 ^②	60	60°F (16°C)
HFX-430-13 ^①	3	120	.69 ^②	91	60°F (16°C)
HFX-430-43 ^①	3	277	.30 ^②	91	60°F (16°C)
HFX-430-14	4	120	1.02 ^②	120	60°F (16°C)
HFX-430-44	4	277	.44 ^②	120	60°F (16°C)
40 WATT BIAxIAL TYPE					
HFX-40T-302	2	120-277 50/60 Hz	.63 (120V) .27 (277V)	76	0°F (-18°C)
HFX-40T-304	4	120-277 50/60 Hz	1.32 (120V) .54 (277V)	156	0°F (-18°C)
55 WATT BIAxIAL TYPE					
HFX-55T-302	2	120-277 50/60 Hz	.94 (120V) .41 (277V)	112	0°F (-18°C)
HFX-55T-304	4	120-277 50/60 Hz	1.97 (120V) .84 (277V)	232	0°F (-18°C)
60 WATT RAPID START HIGH OUTPUT T-12 RECESSED DOUBLE CONTACT 48" 800MA					
HFX-800-12	2	120	1.40	135	-20°F (-29°C)
HFX-800-42	2	277	.61	145	-20°F (-29°C)
HFX-800-13	3	120	2.40	260	-20°F (-29°C)
HFX-800-43	3	277	1.03	235	-20°F (-29°C)
HFX-800-14	4	120	2.80	270	-20°F (-29°C)
HFX-800-44	4	277	1.22	290	-20°F (-29°C)
110 WATT RAPID START VERY HIGH OUTPUT T-12 RECESSED DOUBLE CONTACT 48" 1500MA					
HFX-1500-12	2	120	2.10	242	-20°F (-29°C)
HFX-1500-42	2	277	.92	242	-20°F (-29°C)
HFX-1500-13	3	120	3.38	376	-20°F (-29°C)
HFX-1500-43	3	277	1.48	377	-20°F (-29°C)
HFX-1500-14	4	120	4.20	484	-20°F (-29°C)
HFX-1500-44	4	277	1.84	484	-20°F (-29°C)

① 3 lamp 265MA and 430MA fixtures use a single ballast.

② Line current and 60°F start using 34 Watt lamps. Start temperature for 40 Watt lamps is 50°F (10°C). 40 Watt lamps current approximately 24% higher.



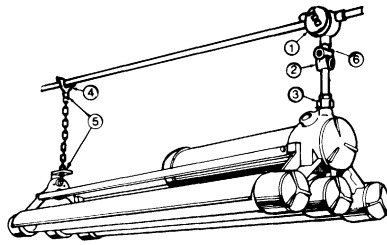
Typical installation using conduit hardware.



Dummy (non-powered) end lowers for relamping clearance, which is required when fixtures are mounted in close proximity. Flexible mounting provides free swing and impact protection.

1. Splice Box/Fixture Hanger (HXB)
2. Flexible Pendant Hanger (EKJ)
3. Union (GUM)
4. Rigid Support Saddle Bracket (KFHS)
5. Support Hook (KEFHM)

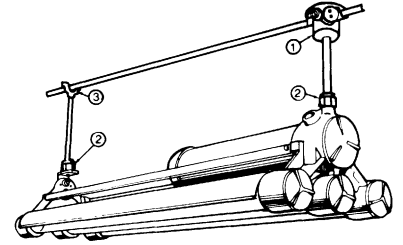
Note: Leave extra links to support fixture in relamping position. Chain furnished by others.



Dummy (non-powered) end lowers for relamping clearance, which is required when fixtures are mounted in close proximity.

1. Splice Box/Fixture Hanger (XFH)
2. Swivel Hanger (KESD)
3. Union (GUM)
4. Rigid Support Saddle Bracket (KFHS)
5. Support Hook (KEFHM)

Note: Leave extra links to support fixture in relamping position. Chain furnished by others.



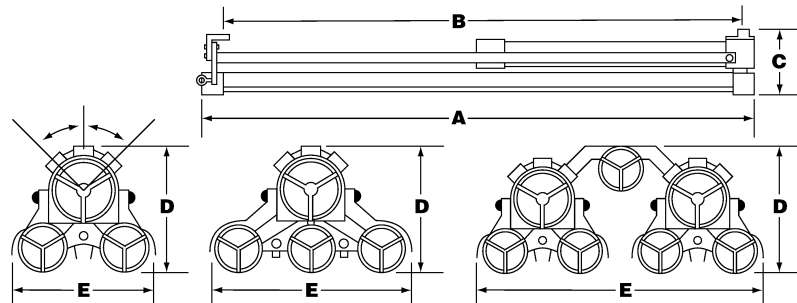
Rigid mounted—for installations where relamping can be accomplished without lowering dummy end.

1. Splice Box/Fixture Hanger (HXB)
2. Union (GUM)
3. Rigid Support Saddle Bracket (KFHS)

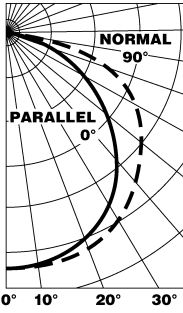
For wall mounting, use securely fastened 3/4" pipe 6" or less in length. Floor flange (furnished by others) recommended for dummy end as well as chain or cable providing vertical strain relief from above fixture. Chain furnished by others.

MOUNTING HARDWARE			
CATALOG NUMBER	HUB SIZE	LENGTH	DESCRIPTION
HXB-12	1/2"	—	HXB SERIES Splice Box/ 3/4" Fixture Hanger
HXB-22	3/4"	—	
EKJ-24	3/4"	4	EKJ SERIES Flexible Pendant Hanger
EKJ-26	3/4"	6	
EKJ-28	3/4"	8	
EKJ-210	3/4"	10	
EKJ-212	3/4"	12	
EKJ-215	3/4"	15	
EKJ-218	3/4"	18	
GUM-2	3/4"		GU SERIES Male Union

MOUNTING HARDWARE		
CATALOG NUMBER	HUB SIZE	DESCRIPTION
XFH-22	3/4"	XFH SERIES Splice box/fixture hanger
KESD-75	3/4"	KESD SERIES Swivel Hanger 15° swivel drop from center and full 360° free swing
KFHS-5075	3/4"	KFHS SERIES Rigid support saddle bracket for fluorescent fixtures (dummy end) Will support 350 lbs. and straddle Max. 1-1/4" conduit
KEFHM-75	3/4"	KEFHM SERIES Safety support hook with 3/4" male end For dummy end of fixture Will support 200 lbs. screw closed 3/8" jaw opening
HFX-SC	—	HFX SERIES Safety chain (36" length plated steel), standard on 4-tube fixture



HFX DIMENSIONS								
HFX MODEL	CONDUIT SIZE	DIMENSIONS					NET WEIGHT	
		A	B	C	D	E		
Nominal 2'	2 Tubes 3/4-14 NPT	28-15/16" (735)	24-3/8" (619)	9-3/32" (231)	9-3/32" (231)	11" (279)	36.0 Lbs.	
Nominal 4'	2 Tubes 3/4-14 NPT	52-13/16" (1367)	48-3/8" (1229)	9-3/32" (231)	9-3/32" (231)	11" (279)	47.7 Lbs.	
Nominal 4'	3 Tubes 3/4-14 NPT	52-13/16" (1367)	48-3/8" (1229)	9-3/32" (231)	9-3/32" (231)	15-5/8" (397)	63.0 Lbs.	
Nominal 4'	4 Tubes 3/4-14 NPT	52-13/16" (1367)	48-3/8" (1229)	9-3/32" (231)	10-1/8" (257)	23" (584)	99.9 Lbs.	

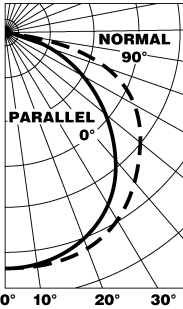


Total Bare Lamp Lumens 6400

All data provided is for F40T12RS/WW lamps 40W rapid start warm white. For Candelpower/Lumen multipliers of other lamps use the following:
 32W T8 (2850 lumen lamp) .89
 34W T12 (2700 lumen lamp) .84
 60W F48T12/WW/HO Warm White High Output 1.35
 110W F48T12/WW/VHO Warm White Very High Output 1.97

ZONAL LUMENS	
ZONE LUMENS	
0-30	1076
0-40	1769
0-60	3194
0-90	4189

CANDLEPOWER 2-40/T12 RAPID START						
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0	22.5	45	67.5	90	
0.0	1325.	1325.	1325.	1325.	1325.	—
5.0	1359.	1366.	1366.	1369.	1365.	130
10.0	1313.	1321.	1328.	1338.	1325.	—
15.0	1309.	1315.	1323.	1333.	1333.	375
20.0	1288.	1302.	1318.	1331.	1333.	—
25.0	1196.	1213.	1238.	1252.	1259.	571
30.0	1147.	1169.	1198.	1229.	1236.	—
35.0	1037.	1065.	1104.	1145.	1160.	693
40.0	961.	1000.	1047.	1105.	1126.	—
45.0	819.	857.	921.	990.	1019.	714
50.0	737.	784.	867.	950.	982.	—
55.0	634.	690.	796.	899.	937.	711
60.0	518.	584.	711.	821.	836.	—
65.0	412.	498.	645.	693.	699.	594
70.0	263.	363.	465.	485.	487.	—
75.0	172.	281.	326.	339.	343.	318
80.0	80.	168.	189.	215.	223.	—
85.0	25.	75.	89.	89.	84.	84
90.0	6.	11.	14.	20.	22.	—

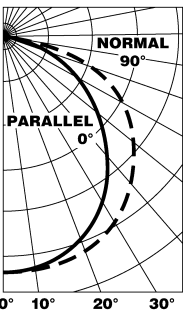


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 60W F48T12/WW/HO Warm White High Output 1.35
 110W F48T12/WW/VHO Warm White Very High Output 1.97

ZONAL LUMENS	
ZONE LUMENS	
0-30	1583
0-40	2613
0-60	4743
0-90	6194

CANDLEPOWER 3-40/T12 RAPID START						
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0	22.5	45	67.5	90	
0.0	1971.	1971.	1971.	1971.	1971.	—
5.0	1988.	1985.	1987.	1994.	1990.	190
10.0	1946.	1949.	1953.	1960.	1962.	—
15.0	1929.	1934.	1944.	1959.	1963.	552
20.0	1897.	1907.	1926.	1947.	1961.	—
25.0	1773.	1788.	1817.	1850.	1866.	842
30.0	1688.	1713.	1758.	1802.	1819.	—
35.0	1551.	1580.	1640.	1701.	1722.	1030
40.0	1427.	1467.	1545.	1626.	1661.	—
45.0	1232.	1281.	1376.	1487.	1528.	1070
50.0	1101.	1159.	1284.	1417.	1463.	—
55.0	952.	1027.	1188.	1340.	1395.	1061
60.0	780.	871.	1068.	1233.	1254.	—
65.0	620.	735.	961.	1042.	1049.	887
70.0	403.	540.	706.	739.	742.	—
75.0	247.	414.	486.	512.	520.	475
80.0	120.	253.	290.	323.	323.	—
85.0	30.	93.	92.	84.	81.	89
90.0	3.	9.	12.	19.	19.	—



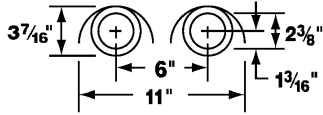
Total Bare Lamp Lumens 12800

All data provided is for F40T12RS/WW lamps 40W rapid start warm white. For Candelpower/Lumen multipliers of other lamps use the following:
 32W T8 (2850 lumen lamp) .89
 34W T12 (2700 lumen lamp) .84
 60W F48T12/WW/HO Warm White High Output 1.35
 110W F48T12/WW/VHO Warm White Very High Output 1.97

ZONAL LUMENS	
ZONE LUMENS	
0-30	2152
0-40	3538
0-60	6388
0-90	8379

CANDLEPOWER 4-40/T12 RAPID START						
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0	22.5	45	67.5	90	
0.0	2650.	2650.	2650.	2650.	2650.	—
5.0	2718.	2733.	2733.	2738.	2730.	261
10.0	2627.	2641.	2656.	2677.	2650.	—
15.0	2617.	2630.	2646.	2665.	2665.	750
20.0	2577.	2604.	2635.	2663.	2666.	—
25.0	2393.	2427.	2476.	2504.	2518.	1141
30.0	2294.	2338.	2396.	2458.	2472.	—
35.0	2074.	2131.	2207.	2290.	2321.	1386
40.0	1922.	2000.	2095.	2209.	2252.	—
45.0	1637.	1713.	1843.	1980.	2037.	1427
50.0	1474.	1567.	1734.	1901.	1963.	—
55.0	1269.	1381.	1592.	1798.	1874.	1422
60.0	1035.	1168.	1422.	1643.	1672.	—
65.0	823.	997.	1291.	1386.	1398.	1187
70.0	526.	726.	929.	970.	973.	—
75.0	343.	562.	652.	678.	686.	636
80.0	159.	336.	378.	431.	446.	—
85.0	50.	149.	177.	177.	168.	167
90.0	13.	22.	28.	41.	44.	—

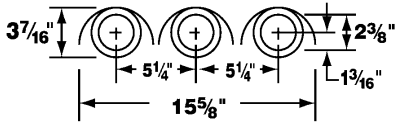




HFX-430-12
Lamp Type F40T12RS/WW
2 – 48" 40 Watt 3200 Lumen
Warm White Lamps

2 LAMP		20% EFFECTIVE FLOOR CAVITY REFLECTANCE																							
% EFFECTIVE CEILING CAVITY REFLECTANCE	rcc	.80				.70				.50				.30				.10				.00			
		% WALL REFLECTANCE		rw	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
ROOM CAVITY RATIOS	0	.78	.78	.78	.78	.76	.76	.76	.76	.73	.73	.73	.70	.70	.70	.67	.67	.67	.65						
	1	.71	.68	.66	.63	.70	.67	.64	.62	.64	.62	.60	.62	.60	.58	.59	.58	.57	.55						
	2	.65	.60	.56	.52	.63	.59	.55	.51	.56	.53	.50	.54	.51	.49	.52	.50	.48	.46						
	3	.60	.53	.48	.43	.58	.52	.47	.43	.50	.46	.42	.48	.45	.42	.46	.43	.41	.39						
	4	.54	.47	.41	.37	.53	.46	.41	.36	.44	.40	.36	.43	.39	.35	.41	.38	.35	.34						
	5	.50	.41	.35	.31	.48	.40	.35	.31	.39	.34	.30	.38	.33	.30	.36	.33	.30	.28						
	6	.45	.37	.31	.26	.44	.36	.30	.26	.35	.30	.26	.34	.29	.26	.33	.29	.26	.24						
	7	.42	.33	.27	.23	.41	.32	.27	.23	.31	.26	.23	.30	.26	.22	.29	.25	.22	.21						
	8	.38	.29	.24	.20	.37	.29	.23	.20	.28	.23	.20	.27	.23	.19	.26	.22	.19	.18						
	9	.35	.26	.21	.17	.34	.26	.21	.17	.25	.20	.17	.24	.20	.17	.24	.20	.17	.17						
	10	.33	.24	.19	.15	.32	.24	.18	.15	.23	.18	.15	.22	.18	.15	.22	.18	.15	.14						

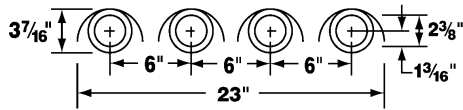
Spacing Criteria: End = 1.3 Diagonal = 1.3 Cross = 1.4



HFX-430-13
Lamp Type F40T12RS/WW
3 – 48" 40 Watt 3200 Lumen
Warm White Lamps

3 LAMP		20% EFFECTIVE FLOOR CAVITY REFLECTANCE																							
% EFFECTIVE CEILING CAVITY REFLECTANCE	rcc	.80				.70				.50				.30				.10				.00			
		% WALL REFLECTANCE		rw	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
ROOM CAVITY RATIOS	0	.77	.77	.77	.77	.75	.75	.75	.75	.72	.72	.72	.69	.69	.69	.66	.66	.66	.65						
	1	.71	.68	.65	.63	.69	.66	.64	.62	.63	.61	.60	.61	.59	.58	.59	.57	.56	.55						
	2	.64	.59	.55	.51	.63	.58	.54	.51	.56	.52	.49	.54	.51	.48	.52	.49	.47	.46						
	3	.59	.52	.47	.43	.57	.51	.46	.43	.49	.45	.42	.47	.44	.41	.46	.43	.40	.39						
	4	.54	.46	.41	.36	.52	.45	.40	.36	.44	.39	.36	.42	.38	.35	.41	.37	.35	.33						
	5	.49	.41	.35	.30	.47	.40	.34	.30	.38	.34	.30	.37	.33	.30	.36	.32	.29	.28						
	6	.45	.36	.30	.26	.44	.36	.30	.26	.34	.29	.26	.33	.29	.26	.32	.28	.25	.24						
	7	.41	.32	.27	.23	.40	.32	.26	.23	.31	.26	.22	.30	.25	.22	.29	.25	.22	.21						
	8	.38	.29	.23	.19	.37	.28	.23	.19	.28	.23	.19	.27	.22	.19	.26	.22	.19	.18						
	9	.35	.26	.20	.17	.34	.26	.20	.17	.25	.20	.17	.24	.20	.17	.23	.19	.16	.15						
	10	.32	.24	.18	.15	.32	.23	.18	.15	.23	.18	.15	.22	.18	.15	.21	.17	.14	.13						

Spacing Criteria: End = 1.3 Diagonal = 1.3 Cross = 1.4



HFX-430-14
Lamp Type F40T12RS/WW
4 – 48" 40 Watt 3200 Lumen
Warm White Lamps

4 LAMP		20% EFFECTIVE FLOOR CAVITY REFLECTANCE																							
% EFFECTIVE CEILING CAVITY REFLECTANCE	rcc	.80				.70				.50				.30				.10				.00			
		% WALL REFLECTANCE		rw	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
ROOM CAVITY RATIOS	0	.78	.78	.78	.78	.76	.76	.76	.76	.73	.73	.73	.70	.70	.70	.67	.67	.67	.65						
	1	.71	.68	.66	.63	.70	.67	.64	.62	.64	.62	.60	.62	.60	.58	.59	.58	.57	.55						
	2	.65	.60	.56	.52	.63	.59	.55	.51	.56	.53	.50	.54	.51	.49	.52	.50	.48	.46						
	3	.60	.53	.48	.43	.58	.52	.47	.43	.50	.46	.42	.48	.45	.42	.46	.43	.41	.39						
	4	.54	.47	.41	.37	.53	.46	.41	.36	.44	.40	.36	.43	.39	.35	.41	.38	.35	.34						
	5	.50	.41	.35	.31	.48	.40	.35	.31	.39	.34	.30	.38	.33	.30	.36	.33	.30	.28						
	6	.45	.37	.31	.26	.44	.36	.30	.26	.35	.30	.26	.34	.29	.26	.33	.29	.26	.24						
	7	.42	.33	.27	.23	.41	.32	.27	.23	.31	.26	.23	.30	.26	.22	.29	.25	.22	.21						
	8	.38	.29	.24	.20	.37	.29	.23	.20	.28	.23	.20	.27	.23	.19	.26	.22	.19	.18						
	9	.35	.26	.21	.17	.34	.26	.21	.17	.25	.20	.17	.24	.20	.17	.24	.20	.17	.15						
	10	.33	.24	.19	.15	.32	.24	.18	.15	.23	.18	.15	.22	.18	.15	.22	.18	.15	.14						

Spacing Criteria: End = 1.3 Diagonal = 1.3 Cross = 1.4



Fixture with Clear Lens



Fixture with EXIT Sign

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA, T4
Class II, Div. 1 & 2, Groups E,F,G
Class III
Enclosure 3, 4, 4X, IP66

 File J.I. 3012168
APPROVED

FEATURES-SPECIFICATIONS

LINEARlite® *

* marca registrada MEXICO

Applications





Hazardous and corrosive environments where reliability and rugged performance are critical.

Ideal for exit sign applications.

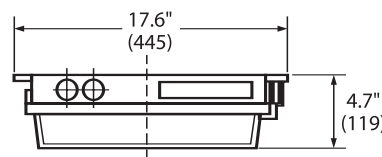
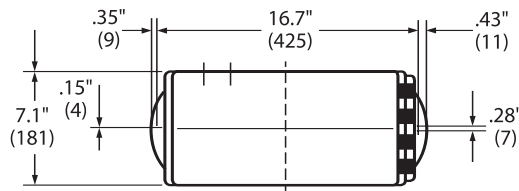
Features

- Housing constructed of heavy-duty fiber reinforced polyester (FRP) with a single piece, low glare polycarbonate lens
- Single point latching mechanism
- Fixture includes threaded opening to accept 3/4" NPT hub
- Clear lens supplied as standard
- Order exit signs separately from chart at right. Signs are adhesive foil type
- For use with F8T5 lamps

LLC SERIES FOR NORTH AMERICAN ZONE 2	
CATALOG NUMBER	DESCRIPTION
LLC22312DN	2 x F8 T5 lamp fixture, 120VAC 50/60Hz 3/4" NPT threaded entry

LLC SERIES EXIT SIGN DECALS			
CATALOG NUMBER	ILLUSTRATION	SIGN COLOR	BACKGROUND
LL-EXIT-80		Red	White
LL-EXIT-81		Red	White
LL-EXIT-82		Red	White
LL-EXIT-83		Red	White

See parts and accessories
on page L171.












KILLARK®

LINEAR *lite*® *

* marca registrada MEXICO

Applications

Hazardous and corrosive environments where reliability and rugged performance are critical.

ACCESSORIES		
CATALOG NUMBER	PRODUCT	DESCRIPTION
8198005400		Socket Wrench, 1/2" (13mm) to operate central lock
CMCXAA050		1/2" NPT, Aluminum Cable Connector (Zone 1 fixture) for MC-HL or ITC-HL cable
CMCAA050		1/2" NPT, Aluminum Cable Connector (Zone 2 fixture) for MC cable
CTCA0050		1/2" NPT, Aluminum Barrier Type Connector (Zone 2 fixture) for non armored cable
CMCXAB075		3/4" NPT, Aluminum Cable Connector (Zone 1 fixture) for MC-HL or ITC-HL cable
CMCAB075		3/4" NPT, Aluminum Cable Connector (Zone 2 fixture) for MC cable
CTCAB075		3/4" NPT, Aluminum Barrier Type Connector (Zone 2 fixture) for non armored cable
SWZ60-050NPT		1/2" NPT Nylon Washer for 1/2" cable fitting
SWZ60-075NPT		3/4" NPT, Nylon Washer for 3/4" cable fitting



QL-500K



QL-1505K



FEATURES-SPECIFICATIONS

Applications

Provides maximum light output with low initial cost. Designed for instant turn-on and high illumination levels where H.I.D. costs are prohibitive. Used to illuminate construction sites, security areas, sports areas, sign lighting and other applications.

QL Series Features

- **Tempered Glass Lens Assembly**—Thermal shock-and impact-resistant glass lens mounted in a die cast aluminum door frame
- **Cast Aluminum Housing**—The cast aluminum body is designed with a specialized heat dissipating fin system for cooler operation
- **Versatile Mounting**—The standard unit has a 1/2 inch swivel knuckle with cast construction for strength and durability
- **High Temperature Gasketing**—A weathertight seal is provided by a high temperature silicone door gasket
- **Exclusive Socket System**—This two-piece, high temperature socket allows easy relamping and prevents socket from binding
- **Reflector**—Linear parabolic reflector system provides maximum light output and control

- **High Temperature Gasketing**—A weathertight seal is provided by a high temperature silicone gasket attached to the housing. Four lens clips positively seal the lens to the gasket with consistent pressure to assure a weathertight seal

- **Versatile Mounting**—The standard unit has a 1/2 inch swivel knuckle with cast construction for strength and universal aiming

See photometric data for QL Series fixtures on page L175.

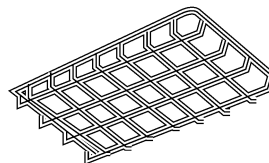
QL QUARTZ FLOODLIGHTS				
CATALOG NUMBER	LAMP AND WATTAGE	BEAM SPREAD	WEIGHT	E.P.A. SQ. FT.
QL-500K ^①	300/500	Wide	4 Lbs. (1.8)	.53
QL-500K-WQ ^②	300/500	Wide	4 Lbs. (1.8)	.53
QL-1505K ^③	1000/1500	Wide	6 Lbs. (2.7)	.86
QL-1505K-WQ ^{②③}	1000/1500	Wide	6 Lbs. (2.7)	.86

^① Lamps not included.

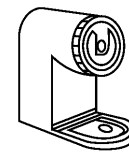
^② Lamps supplied-shipped separately.

^③ Should not be aimed ± 10° from horizontal or higher on 1500 watt models.

QL ACCESSORIES (FIELD INSTALLED)		
SERIES	GUARD	CROSSARM TRUNNION BOX
QL-500K	QL-5G	QL-TB
QL-1505K	QL-15G	QL-TB

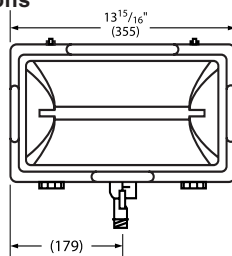


Guard

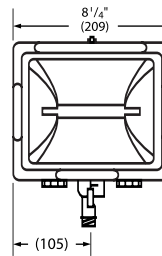


Trunnion Box

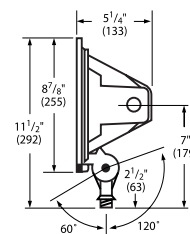
Dimensions



QL-1500 Watt



QL-500 Watt



QL-1500 and QL-500 Watt



QL SERIES

QL-500K

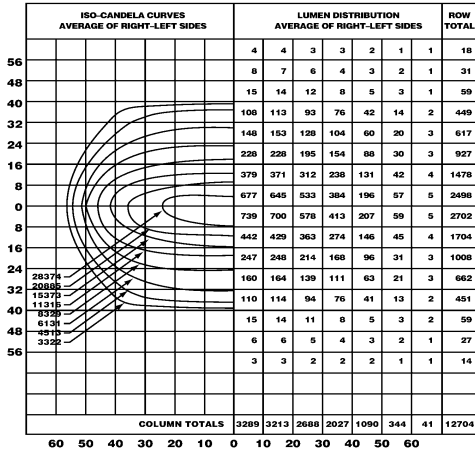
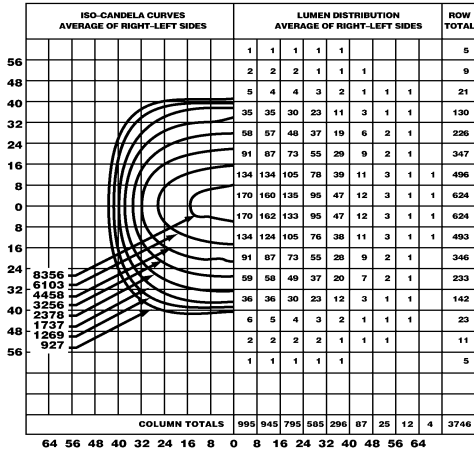
Test No: HP-00930
Source: Incandescent
Lamp: Q500T3/CL
Watts: 500
LCL: —
Lumens: 10950

IES/NEMA Type: 5H X 5V
Beam Spread Horiz: 88°
Beam Spread Vert: 82°
Beam Efficiency: 65%
Beam Lumens: 7060
Max. Beam Candle: 9265
Avg. Max. Candle: 8356

QL-1505K

Test No: HP-00854
Source: Incandescent
Lamp: Q1500T3/CL
Watts: 1500
LCL: —
Lumens: 35800

IES/NEMA Type: 6H X 5V
Beam Spread Horiz: 115°
Beam Spread Vert: 78°
Beam Efficiency: 68%
Beam Lumens: 24306
Max. Beam Candle: 33219
Avg. Max. Candle: 28374

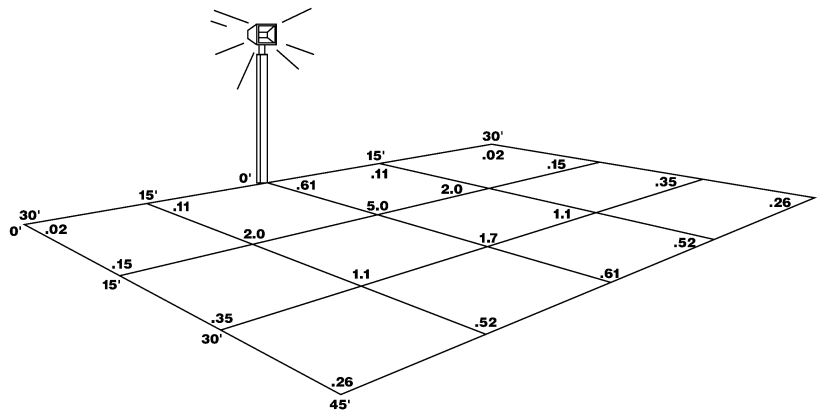


QL SERIES

500 Watt Tungsten Halogen

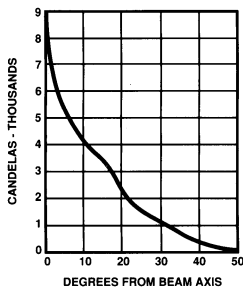
Footcandle Array Based on:

- 15' Mounting Height
- Aimed at 30° below horizontal
- Not to scale. All values are initial footcandles.
- Data calculated from Test No. HP-02305.

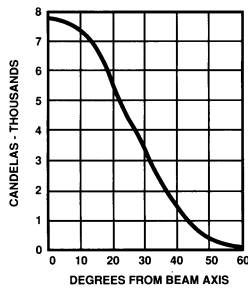


EM/DM SERIES

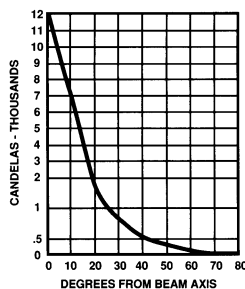
70 WATT HPS



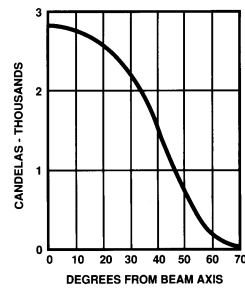
150 WATT HPS



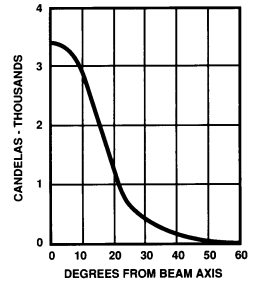
70 WATT MH



110 WATT INC



150 WATT INC



See page L181 for catalog data.



KILLARK®



**Class I, Div. 2 Groups A,B,C,D^{①②}
Class I, Zone 2, Groups IIC, IIB, IIA (nR^⑥)**

Suitable for wet locations

NEMA 4X, IP66

ABS Type Approval



Type approval for shipboard use^⑤

FEATURES-SPECIFICATIONS

Applications

KF series floodlights can be used in industrial installations where flammable gases or vapors may exist due to abnormal conditions resulting in the creation of a Class I, Div. 2 hazardous location as defined by the NEC. Also can be used where general corrosive atmospheric conditions exist such as ocean piers, marinas and costal areas.

Designed for heavy duty applications where long life and maintenance-free service are essential.

Features

- Rugged weathertight housing of copper-free aluminum with corrosion resistant bronze finish
- Wide beam distribution
- Thermal shock, impact-resistant lens
- Continuous silicone gasketing
- All external hardware is corrosion resistant including HubbellGard[®] ceramic coated screws
- Trunnion mounting-heavy gauge, hot dip galvanized steel mounting with stainless steel hardware
- Photometric data & accessories—see page L175
- NR suffix Restricted Breathing models provide lower T-codes
- 3/4" NPT entry on back lower left

KF HID FLOODLIGHTS			
CATALOG NUMBER	LAMP AND WATTAGE	** VOLTS	BEAM SPREAD H° X V°
KFS150-76 KFS155-76	150 HPS	QUAD 480	7 (144°) X 6 (113°)
KFS250-76 KFS255-76	250 HPS	QUAD 480	7 (144°) X 6 (113°)
KFS400-76 KFS405-76	400 HPS	QUAD 480	7 (144°) X 6 (113°)
KFS1000-76 KFS1005-76	1000 HPS ②③	QUAD 480	7 (144°) X 6 (113°)
KFH250-76 KFH255-76	250 MH*	QUAD 480	7 (145°) X 6 (115°)
KFH400-76 KFH405-76	400 MH*	QUAD 480	7 (146°) X 6 (119°)
KFH1000-76 KFH1005-76	1000 MH ②④	QUAD 480	7 (144°) X 6 (113°)
K800-2918-0135		Replacement Lens and Door Assembly	

* Mercury lamps may be used if desired. Lamps not included.

** Change 0 or 5 voltage code to 8 for 240V 50HZ e.g. KFH408-76. Consult factory for other available voltages.

③ Use Phillips C1000S52/ED37 11-1/2" lamp.

④ Use 11-1/2" BT37 lamp available from GE, Venture or Phillips.

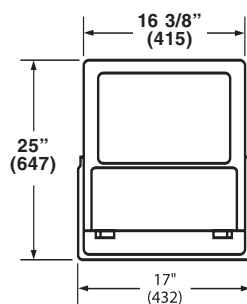
⑤ Not suitable for submersion or wave impact applications.

⑥ Add suffix NR to catalog number for restricted breathing, See chart above for lower T-codes

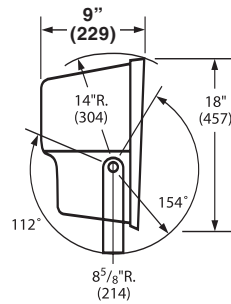
TEMPERATURE DATA ^⑤		
LAMP AND WATTAGE	CLASS I, DIV. 2 ^{①②} MAX. LAMP TEMP. RATING °C	TEMP. CODE CLI Div.2/nR
HIGH PRESSURE SODIUM		
150	260	T2B/T4
250	325	T1/T3
400	350	T1/T3
1000 ^②	378	T1/T2
METAL HALIDE		
250	325	T1/T4
400	325	T1/T4
1000 ^②	442	T1/T2
MERCURY		
250	350	T1/T3
400	350	T1/T3

① 150-400 watt lamp temperature data was obtained in 40°C ambient. UL listed for 25°C ambient operation.

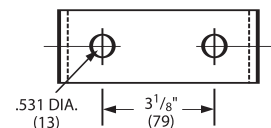
② 1000 watt fixture aiming angle limited to 45°-135° (no straight up or down). 1000 watt fixtures are rated and listed for 40° ambient.



Front



Side



Trunnion Mounting Detail





KFS-6



KFCB



KFWB



K4040



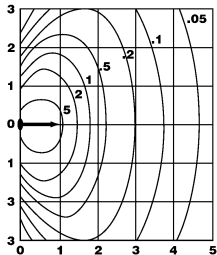
4041

FEATURES-SPECIFICATIONS

KF MOUNTING ACCESSORIES [Ⓢ]	
CATALOG NUMBER	DESCRIPTION
KFS-6	Steel slipfitter for 2" pipe (2-3/8" o.d.) tenon. Slips 3.75" over pipe.
KFCB	Heavy duty cast-iron crossarm fitting for horizontal trunnion
KFWB	Heavy duty wall mount and/or pipe clamp fitting Clamps 2" pipe (2-3/8" o.d.) thru 2-1/2" pipe (2-7/8" o.d.)
K4040	Heavy duty steel wall/pole bracket. (Must use with KFCB crossarm fitting)
4041	Heavy duty steel wall/pole bracket 2" pipe (2-3/8" o.d.) tenon fitting

[Ⓢ] Fittings available to adapt trunnion mount floodlights to crossarms, poles and walls. Must be ordered separately.

KF SERIES

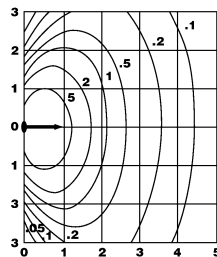


KFH-XXX-76

IES Type—7H x 6V (146° x 119°)
Source—Metal Halide (Clear) 34000 Lumens
Wattage—400 (ANSI M59)
For 250W MH multiply by .6
For 1000W MH multiply by 3.1
Mounting Height (Grid Value)—25 feet
Aiming Angle—45°
Test Number—HP-00738

CONVERSION CHART

MOUNTING HEIGHT (FEET)	20	25	28	30	35
CORRECTION FACTOR	1.56	1.00	.80	.69	.51



KFS-XXX-76

IES Type—7H x 6V (144° x 117°)
Source—High Pressure Sodium (Clear) 50000 Lumens
Wattage—400 (ANSI S51)
For 150W HPS multiply by .32
For 250W HPS multiply by .6
For 1000W HPS multiply by 2.5
Mounting Height (Grid Value)—25 feet
Aiming Angle—45°
Test Number—HP-00740

CONVERSION CHART

MOUNTING HEIGHT (FEET)	23	25	30	35	40
CORRECTION FACTOR	1.18	1.00	.69	.51	.39

[Ⓢ] In converting to a different mounting height, multiply all footcandle values by the correction factor and convert the grid size to the mounting height selected. Example: to convert 25 foot to 30 foot mounting height, multiply all footcandle values by .69. (Grid now becomes 30 replacing 25). To convert footcandles to Lux, multiply values by 10.76. To convert feet to meters, divide values by 3.281.





**Steel Slipfitter
(includes bolts)**



Steel Wall/Pole Bracket



Cross Arm Fitting

**Class I Div. 2, Groups A,B,C,D*
AEx nR/Ex nR**
Class I Zone 2, IIC, IIB, IIA***

UL UL 1572 HID Marine for Wet Locations
UL 844 Hazardous Locations

CSA CSA C22.2 9.9-9.6 General Requirements
CSA C22.2 137-M1981 Hazardous Locations
CSA Enclosure type IP66/67

ABS Type Approval for Shipboard Use

* Consult temperature data table on next page to determine application suitability.

FEATURES-SPECIFICATIONS



Applications

- Offshore production platforms
- Refineries
- Offshore drilling rigs and barges
- Ocean-going vessels
- Commercial fishing vessels
- Ports, wharfs and jetties
- Waste water and sewage treatment facilities
- Any type of washdown, corrosive, abrasive, or dirty environment

Features and Benefits

- Type 316 Stainless Steel Housing. 16-gauge housing ensures low corrosion and long life, reducing maintenance costs
- Rugged quick-release 316 SS Lens Latches. No hardware seizing on disassembly saves maintenance time and money. Only tool needed is a screwdriver
- 316 SS Safety Lens Door Chains. Enables hands-free safe re-lamping
- 316 SS Mounting Yoke Reliable and safe installation
- Highly efficient photometrics and excellent asymmetrical distribution. Photometrics above 85%. Minimizes the number of required fixtures to deliver desired light levels. Saves in energy costs
- Hot-dipped Galvanized Steel Mounting Accessories. Corrosion resistant in marine and corrosive environments, assuring reliable installation

- 316 SS 3/4" Conduit Hub. Maintains grounding continuity. Watertight seal. Corrosion resistant
- Silicone Gasketed Lens Door Frame. Provides watertight seal, protecting interior from moisture and corrosives

KFSS STAINLESS STEEL FLOOD LIGHTS			
CATALOG NUMBER	LAMP TYPE AND CIRCUIT	VOLTAGE [Ⓢ]	BEAM SPREAD H° X V°
KFS150SS	150 HPS	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFS156SS	S-55	120/277/347 @60 Hz	
KFS250SS	250 HPS	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFS256SS	S-50	120/277/347 @60 Hz	
KFS400SS	400 HPS	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFS406SS	S-51	120/277/347 @60 Hz	
KFH250SS	250 MH [Ⓢ]	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFH256SS	M-58	120/277/347 @60 Hz	
KFP250SS	250 MHP [Ⓢ]	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFP256SS	M-138	120/277/347 @60 Hz	
KFH400SS	400 MH [Ⓢ]	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFH406SS	M-59	120/277/347 @60 Hz	
KFP400SS	400 MHP [Ⓢ]	120/208/240/277 @60Hz	6 (118) x 6 (118)
KFP406SS	M-135	120/277/347 @60 Hz	

[Ⓢ] Voltage: 6th character in the catalog number denotes voltage. See "Catalog Number Logic" for details; e.g. KFS155SS = 480 Volt 60Hz.; KFH408SS=240V 50HZ.

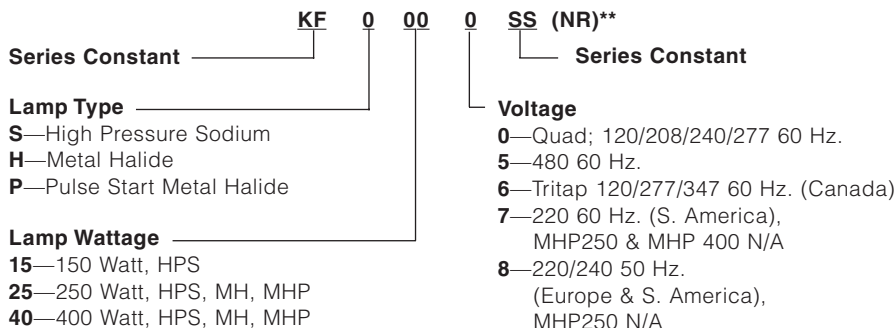
[Ⓢ] Mercury Vapor Lamps of the same wattage may be used if desired.

[Ⓢ] Use a Pulse Start Metal Halide Lamp *rated for Horizontal Position*.

[Ⓢ] Consult factory for available lamp and voltage combinations.

KFSS ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
KFS-6G	Steel slipfitter for 2" pipe (2-3/8" O.D.) tenon. Hot-dipped galvanized (bolts included)
K4040G	Steel wall/pole bracket. Hot-dipped galvanized (bolts included)
KFCBG	Cross arm fitting for horizontal trunnion. Hot-dipped galvanized (bolts included)

Catalog Number Logic



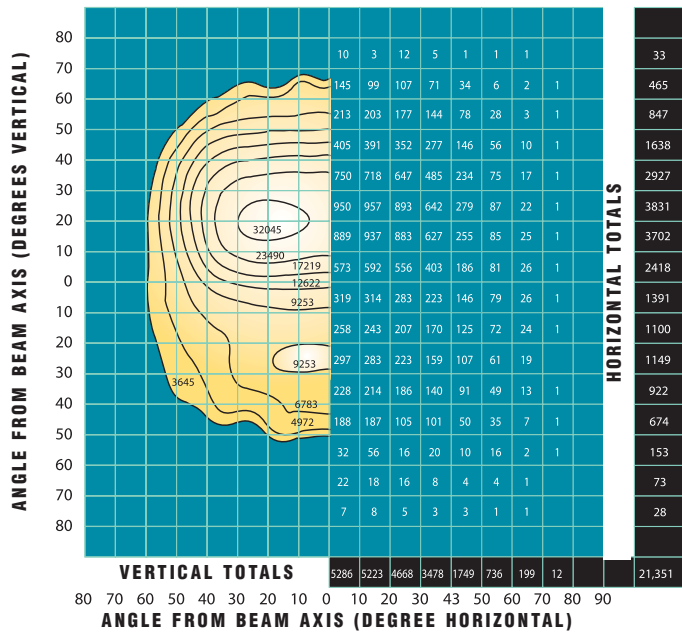
**Restricted Breathing option-see next page.



KILLARK®



**AVERAGE OF RIGHT-LEFT SIDES
ISO CANDELA CURVES LUMEN DISTRIBUTION**

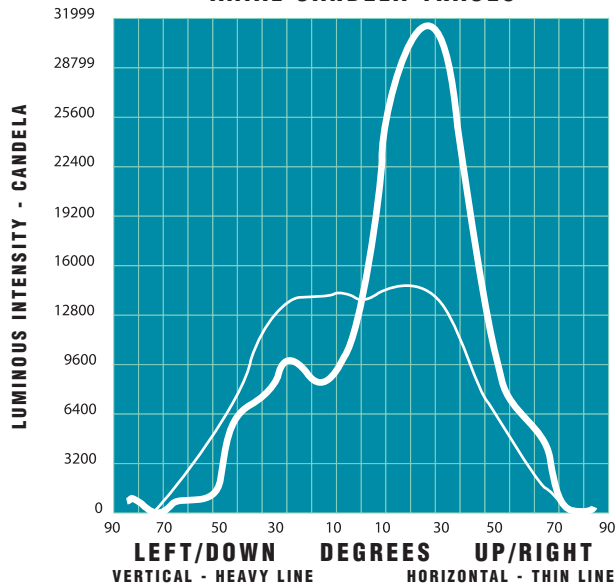


ANGLE FROM BEAM AXIS (DEGREES HORIZONTAL)

Test Number: HP-07477 Lumens: 50,000
 Source: HPS IES/NEMA Type: 6H x 6V
 Lamp: ED-18 Maximum Beam Candlepower: 36,447
 Lamp Watts: 400 Average Maximum Candlepower: 32,045
 LCL: 5.75" Total Efficiency: 85.41%

	HORIZONTALLY	VERTICALLY	LUMENS	EFFICIENCY
BEAM	81.8	41.0	22,196	44.39%
FIELD	118.4	118.6	40,591	81.18%

AXIAL CANDELA TRACES



MARI GARD TEMPERATURE CODES

LAMP TYPE	WATTAGE	RATED AMBIENT C°	CLASS 1 DIV. 2	CLASS 1 ZONE 2	Ex nR	SUPPLY WIRE C°
			TEMP. (CODE)	TEMP. (CODE)		
HPS	150	40	270°C (T2A)	270°C (T2)	T4	90°C
HPS	150	55	285°C (T2)	285°C (T2)	T4	90°C
HPS	150	65	295°C (T2)	295°C (T2)	T3	110°C
HPS	250	40	380°C (T1)	380°C (T1)	T3	90°C
HPS	250	55	395°C (T1)	395°C (T1)	T3	110°C
HPS	400	40	380°C (T1)	380°C (T1)	T3	110°C
MH-MHP-MV	250	40	365°C (T1)	365°C (T1)	T3	110°C
MH-MHP-MV	250	55	380°C (T1)	380°C (T1)	T2	110°C
MH-MHP-MV	400	40	365°C (T1)	365°C (T1)	T3	110°C

Ⓢ Ex nR with NR adder. Allows lower T-CODE approvals through the use of sealed cable entrance fittings. See fittings section or select other gland/connector as appropriate for type of cable used.

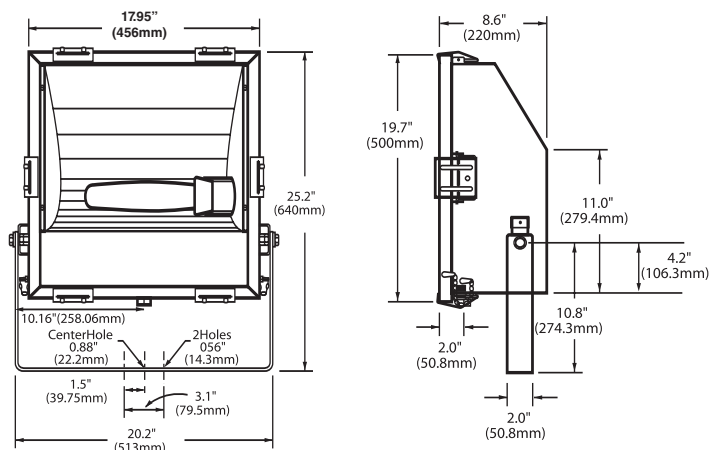


Rugged yet easy-to-open 316 SS Latches require no special tools!



Two 316 SS Lens Chains allow for hands-free maintenance!

Dimensions

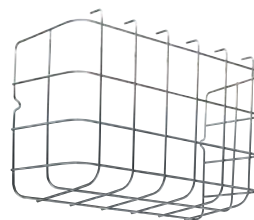




Wall Pack Luminaires



Clear Shield



Wire Guard



Glare Shield

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
NEMA 4X



FEATURES-SPECIFICATIONS



Applications

KWP Wall Luminaires are ideally suited for applications requiring a pleasing aesthetic appearance or hazardous location suitability in a compact energy saving fixture. Units are of copper-free aluminum construction for cool operation with a bronze electrostatically applied powder-coat finish. Suitable for locations such as perimeter security lighting, parking areas, factories and parking garages.

Features

- Aluminum with Bronze finish 1/2" hub on either side for conduit entry
- Mogul Porcelain Socket
- Reflector is specular aluminum precision formed for optimal performance
- Suitability for 40°C ambient, 90°C supply wire required
- Lens thermal shock and impact resistant prismatic borosilicate glass
- Full front access available for lamp or ballast service by hinging front door
- Two Hubbell Guard® Corrosion resistant hex head fasteners provide water-tight seal for door gasket

KWP WALL PACK				
CATALOG NUMBER	LAMP TYPE AND CIRCUIT	VOLTAGE [Ⓢ]	WEIGHT LBS.	T-CODE AT 40°C
KWPS070 KWPS075	70 HPS S-62	QUAD 480	23	215°C (T2D)
KWPS100 KWPS105	100 HPS S-54	QUAD 480	24	215°C (T2D)
KWPS150 KWPS155	150 HPS S-55	QUAD 480	25	260°C (T2B)
KWPH070 KWPH075	70 MH M-98	QUAD 480	24	200°C (T3)
KWPH100 KWPH105	100 MH M-90	QUAD 480	25	200°C (T3)
KWPH170 KWPH175	175 MH M-57	QUAD 480	25	260°C (T2B)
KWPP150 KWPP155	150 MH M-102/M142	QUAD 480	25	260°C (T2B)
KWPP170 KWPP175	175 MH M-137/M152	QUAD 480	26	260°C (T2B)

[Ⓢ] Voltage Change 7th character in catalog number for voltage

Example **KWPS075** = 480 Volt 60Hz

0=QUAD - 120/208/240/277 60Hz

5=480 60Hz

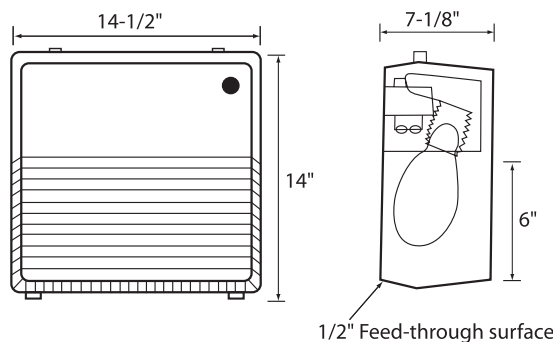
6=TRI - 120/277/347 60Hz (Canada)

7=220 60Hz (S. America)

8=220/240 50Hz (Europe / S. America)

[Ⓢ] Consult factory for available lamp and voltage combinations.

KWP ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
PGPS	Clear Shield (Polycarbonate) for Protecting Lens
PGWG	Wire Guard, Cadmium Plated Steel
PVLV	Glare Shield Cutoff Visor - Formed Bronze Aluminum. Forces Light to Walkway





EMHP071

Class I, Div. 1 & 2 Groups C,D
Class I, Zones 1 & 2 Groups IIB,IIA
Class II, Div. 1 & 2, Groups F,G
Class III, Div. 1 & 2
NEMA 3, 4X, 7(C,D) 9(F,G)
Suitable for wet locations

Listed - File E89665 and E97760

Certified - File LR11713

FEATURES-SPECIFICATIONS

Applications

EM & DM Series portable floodlights provide emergency or maintenance lighting in wet locations or areas made hazardous due to the presence of flammable gases or vapors and combustible dusts as defined by the NEC.

Typical uses are in manufacturing plants, chemical, petrochemical and other industrial process facilities, oil refineries, grain storage sights, aircraft maintenance and refueling areas, tank farms and pipeline pumping stations.

Features

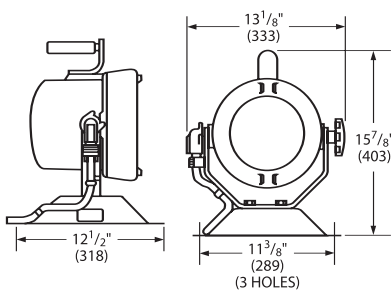
- Factory sealed 100 foot 16/3 SOW cord supplied as standard. See catalog section PR for Acceptor® plugs and receptacles

- Corrosion resistant, rain tight, copper-free cast aluminum housing helps assure safe, reliable operation
- Light weight, strong spun aluminum base provides stability, permits hanging fixture temporarily on wall or lowering it inverted
- Aluminum specular reflector directs light beam for concentrated illumination
- Tempered glass lens resists heat and shock
- Nitrile rubber O-ring gasketing provides an excellent seal for use in wet locations
- Photometric data—see page L175
- Lamps included on all models

Compliances

- UL-781 portable electric lighting units for use in hazardous locations
- UL-1571 standard for incandescent lighting fixtures
- UL-1572 standard for HID lighting fixtures
- UL Marine type electric lighting fixtures
- CSA-C22.2 nos. 12 & 137
- NEMA 3, 4

Dimensions



EM/DM HPS PORTABLE FLOODLIGHTS			
CATALOG NUMBER	LAMP WATTS	VOLTAGE @60 HERTZ	DESCRIPTION ①
EMSP151	150	120	Class I, Div. 1 & 2, Groups C & D
DMSP101*	100	120	Class I, Div. 1 & 2, Groups C & D; Class II, Div. 1 & 2, Groups F & G; Class III
EM MH			
EMHP071	70	120	Class I, Div. 1 & 2, Groups C & D; Class II, Div. 1 & 2, Group F
EM INCANDESCENT			
EMIP111	110	120	Class I, Div. 1 & 2, Groups C & D; Class II, Div. 1 & 2, Group F

① Refer to hazardous location application data below for specific T codes and temperatures.

② EMIP111 can be used with PAR 38 150 Watt incandescent lamp. See hazardous location application data.

* DMS series units have a limiting device to prevent positioning of the fixture head in an orientation where dust could build up on the lens. Any attempt to defeat its purpose can be dangerous.

EM INCANDESCENT ①								
SERIES	LAMP TYPE	LAMP WATTS	RATED AMBIENT DEGREES °F/°C	CLASS I, DIV. 1 & 2 MAX. SURFACE TEMP.		CLASS II, DIV. 1 & 2 MAX. SURFACE TEMP.		CLASS III, DIV. 1 & 2 MAX. SURFACE TEMP.
				UL/CSA TEMP. I.D. °F/°C	UL/CSA GROUPS	UL/CSA TEMP. I.D. °F/°C	UL/CSA GROUPS	UL/CSA TEMP. I.D. °F/°C
EMS	HPS	150	77°/25°	T3C (320°/160°)	CD	—	—	—
DMS	HPS	100	104°/40°	T4A (248°/120°)	CD	T3C (320°-160°)	FG	T3C (320°-160°)
EMH	MH	70	104°/40°	T4 (275°/135°)	CD	T3 (392°-200°)	F	—
EMI	INC	110	104°/40°	T3A (356°/180°)	CD	T3 (392°-200°)	F	—
EMI	INC	150	104°/40°	T3A (356°/180°)	CD	—	—	—

① Do not install where marked operating temperature exceeds ignition temperature of Hazardous Atmosphere.





Shown with optional
VMPSD-40 reflector

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
NEMA 3, 4, 4X, 7(C,D)
Factory Sealed

Listed - file E10514

CSA LR11713

FEATURES-SPECIFICATIONS

Applications

HOSTILELITE® EZ series trunnion mount luminaires provide directional lighting in both vertical and horizontal planes when used with floodlight mounting hardware.

Typical applications include refineries, drilling rigs and platforms, loading docks, bulk fuel loading terminals, and pipeline pumping stations.

Features

- Four light sources
 - High Pressure Sodium (50-400W)
 - Metal Halide (70-400)
 - Metal Halide Pulse (175-400)
 - Mercury Vapor (100-400)

- Trunnion mounted–Trunnion yoke of 316 grade stainless steel attaches via mounting blocks to fixture ballast housing
- Factory sealed–No external seal needed
- Corrosion resistant–Fixture of copper-free aluminum die cast construction. Baked powder epoxy finish, electrostatically applied. Exposed hardware of 316 grade stainless steel
- Accessories–Guards, reflectors and mounting hardware available. Must be ordered separately, see illustration
- Mounting method–See page L183 for typical installation using mounting accessories

Compliances

- UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL-1572 Standard for HID Lighting Fixtures
- CSA C22.2 no. 137-M1981 Electric Luminaires for use in Hazardous Locations
- NEMA 3, 4, 4X, 7CD

EZ HAZARDOUS LOCATION APPLICATION DATA

FIXTURE SERIES	LAMP TYPE	LAMP WATTS	SUITABLE AMBIENT °C	SUPPLY WIRE MIN. °C	CLASS I, DIV. 1 & 2 MAX. SURFACE TEMP.		TYPE 3 (RAINTIGHT)	TYPE 4 (HOSEDOWN)	TYPE 4X (CORROSION RESISTANT)
					TEMP. I. D. (ACTUAL TEMP.)	GROUPS			
EZS	HPS	50	40	85	T4 (135°C)	C,D	YES	YES	YES
EZS	HPS	70	40	85	T4 (135°C)	C,D	YES	YES	YES
EZS	HPS	100	40	85	T4 (135°C)	C,D	YES	YES	YES
EZS	HPS	150	40	85	T4 (135°C)	C,D	YES	YES	YES
EZS	HPS	250	40	85	T3C (160°C)	C,D	YES	YES	YES
EZS	HPS	400	40	85	T3 (200°C)	C,D	YES	YES	YES
EZH	MH	70	40	85	T4A (120°C)	C,D	YES	YES	YES
EZH	MH	100	40	85	T4A (120°C)	C,D	YES	YES	YES
EZH	MH	175	40	85	T3B (165°C)	C,D	YES	YES	YES
EZH	MH	250	40	85	T3A (180°C)	C,D	YES	YES	YES
EZH	MH	400	40	85	T2D (215°C)	C,D	YES	YES	YES
EZP	MHP	175/200	40	85	T3C (160°C)	C,D	YES	YES	YES
EZP	MHP	250/320	40	85	T3 (200°C)	C,D	YES	YES	YES
EZP	MHP	350/400	40	85	T2D (215°C)	C,D	YES	YES	YES
EZM	MV	100	40	85	T3B (165°C)	C,D	YES	YES	YES
EZM	MV	175	40	85	T3B (165°C)	C,D	YES	YES	YES
EZM	MV	250	40	85	T3A (180°C)	C,D	YES	YES	YES
EZM	MV	400	40	85	T2D (215°C)	C,D	YES	YES	YES





Shown with optional VMPSD-40 reflector[®]

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
NEMA 3, 4, 4X, 7(C,D)
Factory Sealed

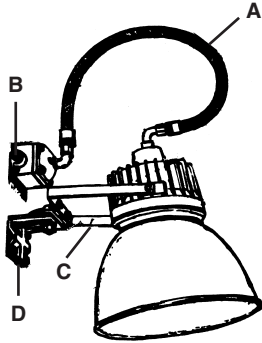
Listed - E10514

LR 11713

ORDERING INFORMATION

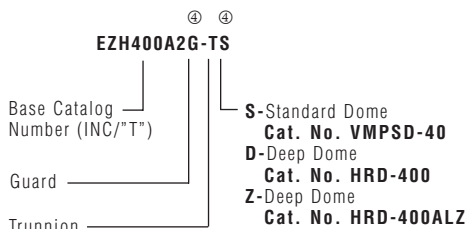
Installation Method

Typical EZ Series trunnion mounted luminaire using conduit hardware.



- A.** Flexible coupling. See page L198 for EKJ series
- B.** Splice box. See page L199 for JL/JAL series
- C.** Trunnion yoke supplied with EZ-T series floodlight fixture
- D.** Mounting accessory wall mount (KFWB) shown. See page L177 for this and other fittings available to adapt trunnion mount floodlights to crossarms, poles or walls

^③ Accessories may be ordered with fixture as a single catalog number with the following logic. Components shipped separately.



④ Optional Accessory

EZ 50-400W HPS FLOODLIGHTS ① ② ③				
WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	HUB SIZE	CATALOG NUMBER
50 HPS	S-68	120, 208, 240, 277	3/4" ①	EZS050A2-T
70 HPS	S-62	120, 208, 240, 277		EZS070A2T
100 HPS	S-54	120, 208, 240, 277		EZS100A2-T
150 HPS	S-55	120, 208, 240, 277		EZS150A2-T
250 HPS	S-50	120, 208, 240, 277		EZS250A2-T
400 HPS	S-51	120, 208, 240, 277		EZS400A2-T

EZ 70-400W MH FLOODLIGHTS ① ② ③				
WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	HUB SIZE	CATALOG NUMBER
70 MH	M-98	120, 208, 240, 277	3/4" ①	EZH070A2-T
100 MH	M-90	120, 208, 240, 277		EZH100A2-T
175 MH	M-57	120, 208, 240, 277		EZH170A2-T
250 MH	M-58	120, 208, 240, 277		EZH250A2-T
400 MH	M-59	120, 208, 240, 277		EZH400A2-T

EZ 175-400W MH PULSE FLOODLIGHTS ① ② ③				
WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	HUB SIZE	CATALOG NUMBER
175 MHP	M-137/M-152	120, 208, 240, 277	3/4" ①	EZP170A2-T
200 MHP	M-136	120, 208, 240, 277		EZP200A2-T
250 MHP	M-138/M153	120, 208, 240, 277		EZP250A2-T
320 MHP	M-132/M154	120, 208, 240, 277		EZP320A2-T
350 MHP	M-131	120, 208, 240, 277		EZP350A2-T
400 MHP	M-135/M155	120, 208, 240, 277		EZP400A2-T

EZ 100-400W MV FLOODLIGHTS ① ② ③				
WATTS	ANSI LAMP TYPE	VOLTAGE @60 HERTZ	HUB SIZE	CATALOG NUMBER
100 MV	H-38	120, 208, 240, 277	3/4" ①	EZM100A2-T
175 MV	H-39	120, 208, 240, 277		EZM170A2-T
250 MV	H-37	120, 208, 240, 277		EZM250A2-T
400 MV	H-33	120, 208, 240, 277		EZM400A2-T

^① Luminaire catalog numbers provide for a single 3/4" NPT flexible conduit connection only. For 1" NPT conduit connection, substitute "3" for "2" in catalog number; example: EZS050A3-T

^② Consult page L139 for other available voltage.

* (tm Alcoa)

EZ ACCESSORIES [®]		
CATALOG NUMBER	DESCRIPTION	
EZG1	HPS 50-150 MH 175-250 MV 100-250	Guard
VMAG-40	HPS 250-400 MH, MV 400	Reflector
VMPSD-40	Standard dome	
HRD-400	Deep dome white	
HRD-400ALZ	Deep dome Alzak*	



KILLARK[®]



**Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X**

- UL844; UL1570; UL924 (File E162407)
UL Wet Location Listed (Indoor & Outdoor)
- UL Listed (Indoor & Outdoor)
Rated for 40C° ambient. Minimum Start 0°

FEATURES-SPECIFICATIONS

CERTILITE® E EMERGENCY

Applications

CERTILITE® DEB Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery backup during power outages. Emergency Units ONLY are available that operate only when normal power fails.

Units contain battery unit(s) that provides the OSHA required 90 minutes of illumination for egress.

Units are designed for general and task lighting in indoor or outdoor wet locations or where **combustible dusts** may exist and create a hazardous location, as defined by the NEC.

Use Push-To-Test station suitable for area of use for testing purposes. FXCS

series control stations should be used for hazardous locations.

Features

- Bi-Pin Twin long-life compact fluorescent lamps **included**
- Choice of Pendant, Ceiling, Wall or Stanchion mount
- Corrosion resistant-Copper-free aluminum die-cast construction (less than 4/10 of 1%) with Baked-on epoxy/polyester powder finish
- Exposed hardware is 316 grade stainless steel
- LED charging indicator light visible through lens
- Pre-wired terminal block for easy power connection

Accessories

- Exit sign: Model VEXA-100 (Note: omit 2nd "G" in catalog number for globe-

only fixture)

- Reflectors: Use standard dome VMPSD-17 or angle model VMPA-17 (see page L118)



- XCS-OB3-PTT: "Push-To-Test" cover only with N.C. contact. Order SWB back box separately.

Options

- For Factory Fusing add -F to catalog number, e.g. DEB2613E1A2GGN4-F
- For Red Painted Fixtures, add -R to catalog number, e.g. DEB2613E1A2GGN4-R

DEB 26-39 WATT NORMAL & EMERGENCY MODE FIXTURES

COMPACT FLUORESCENT LAMPS INCLUDED	LINE VOLTAGE	CATALOG NUMBER ^{③ ④}			
		PENDANT 3/4" ^①	CEILING 3/4" ^①	WALL 3/4" ^①	STANCHION 1-1/4" ^②
26W (2x13) Normal	120VAC 60Hz	DEB2613E1A2GGN4	DEB2613E1X2GGN4	DEB2613E1B2GGN4	DEB2613E1D4GGN4
13W (1x13) Emergency	277VAC 60Hz	DEB2613E4A2GGN4	DEB2613E4X2GGN4	DEB2613E4B2GGN4	DEB2613E4D4GGN4
26W (2x13) Normal	120VAC 60Hz	DEB2626E1A2GGN4	DEB2626E1X2GGN4	DEB2626E1B2GGN4	DEB2626E1D4GGN4
26W (2x13) Emergency	277VAC 60Hz	DEB2626E4A2GGN4	DEB2626E4X2GGN4	DEB2626E4B2GGN4	DEB2626E4D4GGN4
39W (3x13) Normal	120VAC 60Hz	DEB3913E1A2GGN4	DEB3913E1X2GGN4	DEB3913E1B2GGN4	DEB3913E1D4GGN4
13W (1x13) Emergency	277VAC 60Hz	DEB3913E4A2GGN4	DEB3913E4X2GGN4	DEB3913E4B2GGN4	DEB3913E4D4GGN4
39W (3x13) Normal	120VAC 60Hz	DEB3926E1A2GGN4	DEB3926E1X2GGN4	DEB3926E1B2GGN4	DEB3926E1D4GGN4
26W (2x13) Emergency	277VAC 60Hz	DEB3926E4A2GGN4	DEB3926E4X2GGN4	DEB3926E4B2GGN4	DEB3926E4D4GGN4

① Pendant, Ceiling & Wall models may be changed to 1" hubs by changing the 11th character from 2 to 3; e.g. DEB2613E1A3GGN4.

② For 1-1/2" angle Stanchion, change D4 to D5 in catalog number. Change D4 to S5 for 1-1/2" Straight (90°) Stanchion

③ Omit 2nd "G" for globe-only fixture for use with VEXA-100 Exit Accessory.

④ Standard color for fixtures is Killark beige. Add -R for RED adder.

NOTES: See page L78 for ballast data.



KILLARK®



Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X

- UL844; UL1570; UL924 (File E162407)
UL Wet Location Listed (Indoor & Outdoor)
- UL Listed (Indoor & Outdoor)
Rated for 40°C ambient. Minimum start 0°C.

FEATURES-SPECIFICATIONS

DEB 13-26 WATT EMERGENCY-ONLY MODE FIXTURES					
COMPACT FLUOR. LAMP INCL.	LINE VOLTAGE	CATALOG NUMBER ^{③④}			
		PENDANT 3/4 ^①	CEILING 3/4 ^①	WALL 3/4 ^①	STANCHION 1-1/4 ^②
13W (1x13) Emergency	120 or 277VAC 60Hz	DEB0013E10A2GGN4	DEB0013E10X2GGN4	DEB0013E10B2GGN4	DEB0013E10D4GGN4
26W (2x13) Emergency	120 or 277VAC 60Hz	DEB0026E10A2GGN4	DEB0026E10X2GGN4	DEB0026E10B2GGN4	DEB0026E10D4GGN4

- ① Pendant, Ceiling & Wall models may be changed to 1" hubs by changing the 12th character from 2 to 3 e.g. DEB0013E10A3GGN4. 1-1/2" angle Stanchion, change D4 to D5 in catalog number. Change D4 to S5 for 1-1/2" Straight (90°) Stanchion.
- ③ Omit 2nd "G" for globe-only fixture for use with VEXA-100 Exit Accessory.
- ④ Standard color for fixtures is Killark beige. Add -R for RED adder.

REPLACEMENT PARTS	
CATALOG NUMBER	DESCRIPTION
MPL13	Replacement Lamp
KFBP6	Replacement Battery Units*

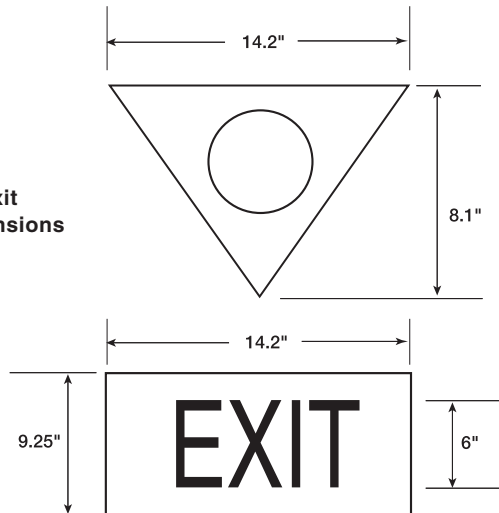
*One used per "Emergency" lamp

LUMEN OUTPUT ^⑤		
LAMP SOURCE	NORMAL POWER	EMERGENCY POWER
13Watt (1X13)	—	625
26Watt (2x13)	1800	1250
39Watt (3X13)	2700	—

⑤ Photometric characteristics similar to 39 watt MBF pages L31-33, except adjusted for lumen output.

HAZARDOUS LOCATION APPLICATION DATA FOR GLOBE & GUARD AND WITH REFLECTOR			
LAMP SOURCE	CLASS II DIV 1 & 2 E,F,G	CLASS III SUITABILITY	SUPPLY WIRE
13Watt (1X13)	85°C (T6)	YES	85°C
26Watt (2x13)	85°C (T6)	YES	85°C
39Watt (3X13)	85°C (T6)	YES	85°C

VEXA-100 Exit Accessory Dimensions





Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X

- UL844; UL1570; UL924 (File E162407)
UL Wet Location Listed (Indoor & Outdoor)
- UL Listed (Indoor & Outdoor)
Rated for 40C° ambient.

FEATURES-SPECIFICATIONS

CERTILITE® E EMERGENCY

Applications

CERTILITE® VEB and VEQ Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery backup during power outages. Emergency Units ONLY are available that operate only when normal power fails.

Units contain battery unit(s) that provides the OSHA required 90 minutes of illumination for egress.

Units are designed for general and task lighting indoors or outdoors where **flammable gases or vapors, combustible dusts, or simultaneous presence** may exist and create a hazardous location, as defined by the NEC.

Use Push-To-Test station suitable for

area of use for testing purposes. FXCS series control stations should be used for hazardous locations.

Features

- Bi-Pin Twin (VEB) or Quad-Pin triple-tube (VEQ) long-life compact fluorescent lamps included
- World Voltage on Quad-Pin VEQ Series: 120 through 277VAC; 50 through 60 Hz
- Choice of Pendant, Ceiling, Wall or Stanchion mount
- Corrosion resistant-Copper-free aluminum die-cast construction with Baked-on epoxy/polyester powder finish
- Exposed hardware is 316 grade stainless steel
- LED charging indicator light visible through lens
- Pre-wired terminal block for easy power connection

Accessories

- Exit sign: Model VEXA-100 (Note: omit 2nd "G" in catalog number for globe-only fixture)
- Reflectors: Use standard dome VMPSD-17 or angle model VMPA-17 (see page L118)
- XCS-OB3-PTT "Push-To-Test" (see L182 for details)

Options

- For Factory Fusing on VEB and for VEQ to be used on 120V or 277V systems, add **-F** to catalog number e.g. VEB2613E1A2GGN4-F. For VEQ to be used on 208V, 220V, 230V, 240V systems, add **-FF** to catalog number, e.g. VEQ2626E30A2GGN4-FF
- For Red Painted Fixtures, add **-R** to catalog number, e.g. VEB2613E1A2GGN4-R

VEB/VEQ SERIES 26 - 84WATT NORMAL & EMERGENCY MODE FIXTURES					
COMPACT FLUORESCENT LAMP INCLUDED	LINE VOLTAGE	CATALOG NUMBER ③④			
		PENDANT 3/4"①	CEILING 3/4"①	WALL 3/4"①	STANCHION 1-1/4"②
26W (2x13) Normal	120VAC 60Hz	VEB2613E1A2GGN4	VEB2613E1X2GGN4	VEB2613E1B2GGN4	VEB2613E1D4GGN4
13W (1x13) Emergency	277VAC 60Hz	VEB2613E4A2GGN4	VEB2613E4X2GGN4	VEB2613E4B2GGN4	VEB2613E4D4GGN4
26W (2x13) Normal	120VAC 60Hz	VEB2626E1A2GGN4	VEB2626E1X2GGN4	VEB2626E1B2GGN4	VEB2626E1D4GGN4
26W (2x13) Emergency	277VAC 60Hz	VEB2626E4A2GGN4	VEB2626E4X2GGN4	VEB2626E4B2GGN4	VEB2626E4D4GGN4
39W (3x13) Normal	120VAC 60Hz	VEB3913E1A2GGN4	VEB3913E1X2GGN4	VEB3913E1B2GGN4	VEB3913E1D4GGN4
13W (1x13) Emergency	277VAC 60Hz	VEB3913E4A2GGN4	VEB3913E4X2GGN4	VEB3913E4B2GGN4	VEB3913E4D4GGN4
39W (3x13) Normal	120VAC 60Hz	VEB3926E1A2GGN4	VEB3926E1X2GGN4	VEB3926E1B2GGN4	VEB3926E1D4GGN4
26W (2x13) Emergency	277VAC 60Hz	VEB3926E4A2GGN4	VEB3926E4X2GGN4	VEB3926E4B2GGN4	VEB3926E4D4GGN4
26W (1x26) Normal	120 through 277 50-60Hz	VEQ2626E30A2GGN4	VEQ2626E30X2GGN4	VEQ2626E30B2GGN4	VEQ2626E30D4GGN4
26W (1x26) Emergency					
52W (2x26) Normal	120 through 277 50-60Hz	VEQ5226E30A2GGN4	VEQ5226E30X2GGN4	VEQ5226E30B2GGN4	VEQ5226E30D4GGN4
26W (1x26) Emergency					
64W (2x32) Normal	120 through 277 50-60Hz	VEQ6432E30A2GGN4	VEQ6432E30X2GGN4	VEQ6432E30B2GGN4	VEQ6432E30D4GGN4
32W (1x32) Emergency					
84W (2x42) Normal	120 through 277 50-60Hz	VEQ8442E30A2GGN4	VEQ8442E30X2GGN4	VEQ8442E30B2GGN4	VEQ8442E30D4GGN4
42W (1x42) Emergency					

① Pendant, Ceiling & Bracket models may be changed to 1" hubs by changing the 11th character from 2 to 3; e.g. VEB2613E1A3GGN4 (12th character in VEQ series).

② For 1-1/2" angle Stanchion, change D4 to D5 in catalog number. Change D4 to S5 for 1-1/2" Straight (90°) Stanchion.

③ Omit 2nd "G" for globe-only fixture for use with VEXA-100 Exit Accessory.

④ Standard color for fixtures is Killark beige. Add -R for RED adder.



KILLARK®

VEB/VEQ 13 - 42WATT EMERGENCY-ONLY MODE FIXTURES					
COMPACT FLUOR. LAMP INCLUDED	LINE VOLTAGE	CATALOG NUMBER ③④			
		PENDANT 3/4"①	CEILING 3/4"①	WALL 3/4"①	STANCHION 1-1/4"②
13W (1x13) Emergency	120 or 277VAC 60Hz	VEB0013E10A2GGN4	VEB0013E10X2GGN4	VEB0013E10B2GGN4	VEB0013E10D4GGN4
26W (2x13) Emergency	120 or 277VAC 60Hz	VEB0026E10A2GGN4	VEB0026E10X2GGN4	VEB0026E10B2GGN4	VEB0026E10D4GGN4
26W (1x26) Emergency	120 through 277 50-60Hz	VEQ0026E30A2GGN4	VEQ0026E30X2GGN4	VEQ0026E30B2GGN4	VEQ0026E30D4GGN4
32W (1x32) Emergency	120 through 277 50-60Hz	VEQ0032E30A2GGN4	VEQ0032E30X2GGN4	VEQ0032E30B2GGN4	VEQ0032E30D4GGN4
42W (1x42) Emergency	120 through 277 50-60Hz	VEQ0042E30A2GGN4	VEQ0042E30X2GGN4	VEQ0042E30B2GGN4	VEQ0042E30D4GGN4

① Pendant, Ceiling & Wall models may be changed to 1" hubs by changing the 12th character from "2" to "3"; e.g. VEB0013E10A3GGN4.

② For 1-1/2" angle Stanchion, change "D4" to "D5" in catalog number.

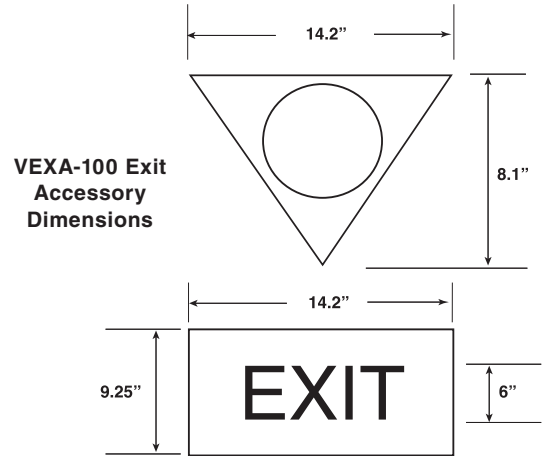
Change "D4" to "S5" for 1-1/2" Straight (90°) Stanchion.

③ Omit 2nd "G" for globe-only fixture for use with VEXA-100 Exit Accessory.

④ Standard color for fixtures is Killark beige. Add -R for RED adder.

LUMEN OUTPUT⑤		
LAMP SOURCE	NORMAL POWER	EMERGENCY POWER
13Watt (1X13)	—	625
26Watt (2x13)	1650	1250
39Watt (3X13)	2475	—
26Watt (1x26)	1800	425
32Watt (1X32)	—	525
42Watt (1X42)	—	700
52Watt (2x26)	3600	—
64Watt (2X32)	4800	—
84Watt (2X42)	6400	—

⑤ Photometric characteristics similar to 39 watt MBF pages L31-33, except adjusted for lumen output.



HAZARDOUS LOCATION APPLICATION DATA FOR GLOBE & GUARD (SAME WITH REFLECTOR OR EXIT ACCESSORY)⑥				
LAMP SOURCE	CLASS I DIV. 2 A,B,C,D	CLASS II DIV. 1 & 2 E,F,G	CLASS III SUITABILITY	SUPPLY WIRE
13Watt (1X13)	180°C (T3A)	85°C (T6)	YES	85°C
26Watt (2x13)	180°C (T3A)	85°C (T6)	YES	85°C
39Watt (3X13)	180°C (T3A)	85°C (T6)	YES	85°C
26Watt (1x26)	215°C (T2D)	120°C (T4A)	YES	85°C
32Watt (1X32)	215°C (T2D)	120°C (T4A)	YES	85°C
42Watt (1X42)	215°C (T2D)	120°C (T4A)	YES	85°C
52Watt (2x26)	215°C (T2D)	120°C (T4A)	YES	85°C
64Watt (2X32)	215°C (T2D)	120°C (T4A)	YES	85°C
84Watt (2X42)	215°C (T2D)	120°C (T4A)	YES	85°C

⑥ VEB/VEQ units are rated for simultaneous presence.

REPLACEMENT PARTS			
CATALOG NUMBER	REPLACEMENT LAMPS	CATALOG NUMBER	REPLACEMENT BATTERY UNITS
MPL13	13W Bi-Pin	KFBP5	13W Bi-Pin*
MLQ26	26W Quad-Pin	KFBP7	26/32/42W Quad-Pin
MLQ32	32W Quad-Pin	KFBP7	26/32/42W Quad-Pin
MLQ42	42W Quad-Pin	KFBP7	26/32/42W Quad-Pin

*One used per "Emergency" lamp.

BALLAST DATA NORMAL POWER							
LAMP WATTS	VOLTAGE AC	START AMPS	OPERATING AMPS	INPUT WATTS	BALLAST CIRCUIT	REGULATION	MIN. START
26Watt (2x13)	120 / 277	0.78/.70	0.6	32	NPF	—	32°F (0°C)
39Watt (3X13)	120 / 277	1.17/1.05	0.9	48	NPF	—	32°F (0°C)
26Watt (1x26)	120 through 277	—	.27@120V /.13 @277V	29	HPF	Electronic	-4°F (-20°C)
32Watt (1X32)	120 through 277	—	.31@120V /.15 @277V	36	HPF	Electronic	-4°F (-20°C)
42Watt (1X42)	120 through 277	—	.37@120V /.17 @277V	46	HPF	Electronic	-4°F (-20°C)
52Watt (2x26)	120 through 277	—	.54@120V /.26 @277V	58	HPF	Electronic	-4°F (-20°C)
64Watt (2X32)	120 through 277	—	.62@120V /.30 @277V	72	HPF	Electronic	-4°F (-20°C)
84Watt (2X42)	120 through 277	—	.74@120V /.34 @277V	92	HPF	Electronic	-4°F (-20°C)

For fixture dimensions consult factory.



Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3

- Complies: UL 844; UL 1570, UL924 (File E162407)
 UL Wet Location Listed (Indoor & Outdoor)
 Rated for 40C° ambient. Minimum start 0° C
- Temperature codes:
 Class I C,D **T6**;
 Class II E,F,G **T4**;
- Suitable for Class III
 Certified File LR11713

FEATURES-SPECIFICATIONS

HOSTILE[®]LITE[®] E EMERGENCY

Applications

HOSTILELITE[®] EEQ Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery backup during power outages. Emergency Units ONLY are available that operate only when normal power fails.

Units contain battery unit that provides the OSHA required 90 minutes of illumination (same lamp) for egress.

Units are designed for general and task lighting indoors or outdoors where flammable gases or vapors or combustible dusts exist and create a hazardous location, as defined by the NEC.

Use Push-To-Test station suitable for area of use for testing purposes. FXCS series control stations should be used for hazardous locations.

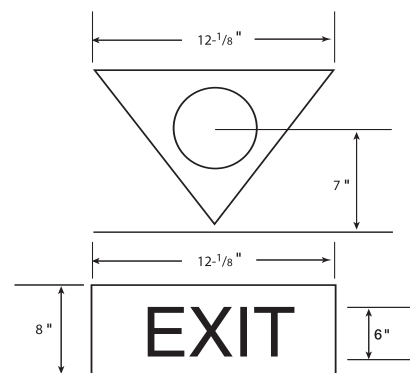
Features

- Quad-Pin long-life triple-tube compact fluorescent lamps included
- Choice of Pendant, Ceiling, Wall or Stanchion mount
- Factory Sealed - No external seal required
- Corrosion resistant-Copper-free aluminum (less than 4/10 of 1%) die-cast construction w/Baked-on epoxy/polyester powder finish
- Exposed hardware is 316 grade stainless steel
- LED charging indicator light visible through lens

Accessories

Exit sign: Model **HEXA-100** (note omit 2nd "G" in catalog number for globe-only fixture) see page L124.

Reflectors: Use standard dome ERSD15 or angle model ERA15 (see page L123).



EEQ 26, 32 & 42WATT NORMAL & EMERGENCY MODE FIXTURES					
QUAD-PIN FLUOR. LAMP INCLUDED	LINE VOLTAGE @ 60 HZ	CATALOG NUMBER ③④⑥			
		PENDANT 3/4" ①	CEILING 3/4" ①	BRACKET 3/4" ①	STANCHION 1-1/4" ②
26Watt	120 or 277VAC⑤	EEQ2626E10A2GG	EEQ2626E10X2GG	EEQ2626E10B2GG	EEQ2626E10D4GG
32Watt	120 or 277VAC⑤	EEQ3232E10A2GG	EEQ3232E10X2GG	EEQ3232E10B2GG	EEQ3232E10D4GG
42Watt	120 or 277VAC⑤	EEQ4242E10A2GG	EEQ4242E10X2GG	EEQ4242E10B2GG	EEQ4242E10D4GG

EEQ 26, 32 & 42WATT EMERGENCY-ONLY MODE FIXTURES					
QUAD-PIN FLUOR. LAMP INCLUDED	LINE VOLTAGE @ 60 HZ	CATALOG NUMBER ③④⑥			
		PENDANT 3/4" ①	CEILING 3/4" ①	BRACKET 3/4" ①	STANCHION 1-1/4" ②
26Watt	120 or 277VAC⑤	EEQ0026E10A2GG	EEQ0026E10X2GG	EEQ0026E10B2GG	EEQ0026E10D4GG
32Watt	120 or 277VAC⑤	EEQ0032E10A2GG	EEQ0032E10X2GG	EEQ0032E10B2GG	EEQ0032E10D4GG
42Watt	120 or 277VAC⑤	EEQ0042E10A2GG	EEQ0042E10X2GG	EEQ0042E10B2GG	EEQ0042E10D4GG

① Pendant, Ceiling & Bracket models may be changed to 1" hubs by changing the 12th character from 2 to 3; e.g. EEQ2626E10A3GG.

② Stanchion fixtures are 1-1/2" with a 1-1/2 to 1-1/4" reducer.

③ Omit 2nd "G" for globe-only fixture for use with HEXA-100 Exit Accessory.

④ Standard color for fixtures is Killark beige. Add -R for RED adder..

⑤ All EEQ fixtures are factory set to 120V and can be changed to 277V in field by following included instructions. Replacement battery pack kit KFDP9.

⑥ EEQ fixtures use a tank extension ring and are 2-1/2" taller than EBF fixtures (see page L126).

⑦ Photometric characteristics similar to EBF26 page L135, except adjusted for lumen output.

LUMEN OUTPUT⑦		
LAMP SOURCE	NORMAL POWER	EMERG. POWER
26Watt	1800	450
32Watt	2400	575
42Watt	3200	750

BALLAST DATA

LAMP WATTS	VOLTAGE	OPERATING AMPS	INPUT WATTS	BALLAST CIRCUIT	REGULATION
26Watt (1x26)	120 / 277 VAC	.24@120V / .11 @277V	29	HPF	Electronic
32Watt (1X32)	120 / 277 VAC	.31@120V / .13 @277V	36	HPF	Electronic
42Watt (1x42)	122 / 277 VAC	.38@120V / .17 @277V	46	HPF	Electronic



KILLARK[®]



Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 2 Groups F,G
NEMA 3, 4

UL Listed
 Compliances: UL 44; UL 81570, UL924
 UL Wet Location Listed (Indoor & Outdoor)

FEATURES-SPECIFICATIONS

LINEARLITE®* E
 * marca registrada MEXICO **EMERGENCY**

Applications

LINEARLITE DBFE Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery backup during power outages. Units contain a battery unit that provides the OSHA required 90 minutes of illumination for egress.

Units are designed for general and task lighting in areas where flammable gases or vapors or combustible dusts may exist due to abnormal conditions, and create a Division 2 hazardous location, as defined by the NEC.

Features

- Sheet steel 20 ga. housing with continuous weld prevents foreign matter from entering enclosure
- Lens frame assembly has silicon rubber gasketing and heat tempered glass lens
- Electrostatically applied polyester finish
- NEMA 4 construction for wet locations
- LED charging indicator light visible through lens
- Push-To-Test Button mounted on sloping side of fixture - allows end-to-end mounting of fixtures

DBFE FLUORESCENT EMERGENCY LIGHTING				
CATALOG NUMBER	CONDUIT SIZE	NUMBER OF LAMPS	LINE VOLTAGE	DESCRIPTION
DBFE232302	3/4"	2	120-277V 50/60 Hz	32W T8 electronic ballast 0°F start Medium bi-pin base
DBFE24012 DBFE24042			120V 60 Hz 277V 60 Hz	40W T12 bi-pin 50°F start electronic Medium bi-pin base
DBFE16012 DBFE16042			120V 60 Hz 277V 60 Hz	60W rapid start high output F48T12/HO Recessed double contact 800MA
DBFE232303	3/4"	3	120-277V 50/60 Hz	32W T8 electronic ballast 0°F start Medium bi-pin base
DBFE24013 DBFE24043			120V 60 Hz 277V 60 Hz	40W T12 bi-pin 50°F start electronic Medium bi-pin base
KFBP7			(32/40 or 60 Watt) Replacement battery unit	

Notes: Emergency unit will start lamps at 0°F
 32W T8 Electronic ballast minimum start is 0°F;
 40W ballast is electronic with 50°F start (add CW for electromagnetic 0°F);
 60W electromagnetic ballast start -20°F
 32W & 40W units operate 2 Lamps in emergency mode for maximum illumination
 60W units operate a single lamp. 3 Lamp 60W emergency units not available.
 For dimensional data and mounting accessories, see DBF series page L156.
 Digit after E is number of lamps energized during power loss.

EMERGENCY LUMEN CHART		
LAMPS	INITIAL LUMENS	AFTER 90 MINUTES
2 32W Lamps	625	455
2 40W Lamps	610	420
1 60W Lamp	780	460

DBFE HAZARDOUS LOCATION APPLICATION DATA							
NO. OF LAMPS	LAMP WATTS	RATED AMBIENT °C	SUPPLY WIRE SUITABLE FOR °C MIN.	CLASS I, DIV. 2, GROUPS A,B,C,D MAX. LAMP TEMP.°C UL/CSA TEMP./I.D.	CLASS II, DIV. 2, GROUPS E,F,G MAX. SURF. TEMP.°C UL/CSA TEMP./I.D.	NEMA TYPE 3 (RAINTIGHT)	NEMA TYPE 4 (HOSEDOWN)
2	32/40	40	90	T6 (85°C/185°F)	T6 (85°C/185°F)	YES	YES
3	32/40	40	90	T5 (100°C/212°F)	T6 (85°C/185°F)	YES	YES
2	60	40	90	T4A (120°C/248°F)	T6 (85°C/185°F)	YES	YES



LZ2NE 2' Non-metallic

LZ2SE 4' Stainless

NEW!

Class I, Div. 2 Groups A,B,C,D
Class I, Zones 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E³, F,G
AEx nAII, Ex nAII
Wet Locations
NEMA 4X, IP66

Certified - File LR11713

ABS Type Approval
NSF Food Handling⁴

FEATURES-SPECIFICATIONS

LINEARLITE[®]* E
 * marca registrada MEXICO
EMERGENCY

Applications

LINEARLITE Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery back-up during power outages. Units contain a battery unit that provides the OSHA required 90 minutes of illumination for egress.

Units are available in non-metallic or 316 Stainless construction and designed for wet, harsh and corrosive environments. The LZ2NE and LZ2SE Series can also be used in Class I, Division 2 and Zone 2 hazardous vapors and in Class II areas where combustible dusts may exist. Typical areas used are in refineries, chemical plants, waste water & sewage treatment facilities, as well as in tunnels, food processing and coastal areas.

ABS (American Bureau of Shipping) type approval for use on decks, vessels, platforms, garages, ships and boats. Also suitable for docks and marinas.

³ LZ2SE only for Group E
⁴ LZ2NE is NSF approved

Additional Data

L157 or L158 - Features
 L159 - Ballast Data
 L160 - Mounting Accessories
 L160 - L161 - Photometrics

LZ2NE/LZ2SE BATTERY-BACKED				
NUMBER OF LAMPS/WATTS	VOLTAGE AC 60 Hz	DESCRIPTION	LZ2NE ¹	LZ2SE ¹
BIAXIAL LAMP TYPE FIXTURES				
1-40W ⁶	120-277V	2' 1-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2NE1-40130	LZ2SE1-40130
1-55W ⁶	120-277V	2' 1-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2NE1-55130	LZ2SE1-55130
2-40W ⁶	120-277V	2' 2-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2NE1-40230	LZ2SE1-40230
4-40W ⁶	120-277V	4' 4-Lamp Biaxial Electronic 50/60 Hz 0°F Start 4-Pin	LZ2NE1-40430	LZ2SE1-40430
DOUBLE-ENDED LAMP TYPE FIXTURES				
2-17W ⁵	120-277V	2' 2-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2NE2-17230	LZ2SE2-17230
3-17W ⁵	120-277V	2' 3-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2NE2-17330	LZ2SE2-17330
2-28W ⁶	120-277V	4' 2-Lamp T-5 Electronic 50/60 Hz 0°F Start Miniature Bi-Pin	LZ2NE1-28230	LZ2SE1-28230
3-28W ⁶	120-277V	4' 3-Lamp T-8 Electronic 50/60 Hz 0°F Start Miniature Bi-Pin	LZ2NE1-28330	LZ2SE1-28330
2-32W ⁵	120-277V 347V	4' 2-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2NE2-32230 LZ2NE2-32215	LZ2SE2-32330 LZ2SE2-32215
3-32W ⁵	120-277V 347V	4' 3-Lamp T-8 Electronic 50/60 Hz 0°F Start Medium Bi-Pin	LZ2NE2-32330 LZ2NE2-32315	LZ2SE2-32330 LZ2SE2-32315
2-40W ⁵	120V 277V 230V 50 Hz ²	4' 2-Lamp T-12 Electronic Medium Bi-Pin Start 50°F 40W/60°F 34W	LZ2NE2-40201 LZ2NE2-40204 LZ2NE2-40208	LZ2SE2-40201 LZ2SE2-40204 LZ2SE2-40208
2-44W ⁶	120-277V	4' 2-Lamp T-8 Electronic -20°F Start High Output Recessed Double Contact	LZ2NE1-44230	LZ2SE1-44230
2-54W ⁶	120-277V	4' 2-Lamp T-5 Electronic 50/60 Hz -20°F Start Miniature Bi-Pin	LZ2NE1-54230	LZ2SE1-54230
2-60W ⁵	120V 277V	4' 2-Lamp T-12 Electronic -20°F Start High Output Recessed Double Contact	LZ2NE1-60201 LZ2NE1-60204	LZ2SE1-60201 LZ2SE1-60204

¹ Digit after E is number of lamps energized during power loss. For optional fused ballasts, add to catalog number F1 for 120V, F4 for 277V, F8 for 230V. Fusing not for marine or Canadian use. Lamps not included.

² Magnetic ballast

Features

- NEMA 4 & IP66 rated enclosure
- Housing-one piece fiberglass reinforced polyester or 316 Stainless Steel
- Clear Lexan[®] impact resistant polycarbonate lens (Lexan is a registered trademark of General Electric)
- Two 3/4" NTP hubs - one at each end (includes one 3/4" close-up plug and two 3/4" X 1/2" reducers for maximum user flexibility)
- Two 1/4"- 20 bushings furnished in top of fixture for threaded rod

REPLACEMENT BATTERY UNIT	
⁵ KFBP7	⁶ KFBPHO

EMERGENCY LUMEN CHART	
LAMPS	INITIAL LUMENS
2 X 17 T8	550
1 X 40 BIAXIAL	900
1 X 55 BIAXIAL	950
1 X 28 T5	1175
1 X 32 T8	925
2 X 32 T8	625
2 X 40 T12	610
1 X 44 T8	950
1 X 54 T5	1200
1 X 60 T12	780





Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
NEMA 3, 7(C,D) 9(E,F,G)
Suitable for wet locations

Listed - File E12976 and E89665 (Marine)®
 UL 924, UL 844

Certified - File LR11713

FEATURES-SPECIFICATIONS

Applications

HFXE Series Emergency Lighting fixtures provide continuous illumination under normal power and switch to emergency battery backup during power outages. Units contain a battery unit that provides the OSHA required 90 minutes of illumination for egress.

Units are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or wet locations where wind, water and snow can be expected. They can also be used in locations made hazardous due to the presence of flammable or explosive gases, vapors and combustible ducts as defined by the NEC.

Features

- Construction is strong lightweight corrosion resistant copper-free aluminum alloy, less than 4/10 of 1%
- All external hardware is corrosion resistant 316 stainless steel to provide maintenance free long life
- World voltage ballasts standard on 32W and BIAxIAL models (120-277V 50/60 Hz)
- LED charging indicator light on ballast enclosure.

HFXE FLUORESCENT EMERGENCY LIGHTING				
CATALOG NUMBER ① ②	CONDUIT SIZE	LINE VOLTAGE	DESCRIPTION	PROFILE
HFXE2-265-302	3/4"	120-277V 50/60 Hz	32W T8 electronic ballast 265MA	 Two Glass Tubes 4' Nominal
HFXE2-430-12		120V 60 Hz	40W T12 electronic ballast 430MA	
HFXE2-430-42		277V 60 Hz	40W T12 electronic ballast 430MA	
HFXE1-800-12		120V 60 Hz	60W T12 electronic ballast 800MA	
HFXE1-800-42		277V 60 Hz	60W T12 electronic ballast 800MA	
HFXE2-265-303	3/4"	120-277V 50/60 Hz	32W T8 electronic ballast 265MA	 Three Glass Tubes 4' Nominal
HFXE2-430-13		120V 60 Hz	40W T12 electronic ballast 430MA	
HFXE2-430-43		277V 60 Hz	40W T12 electronic ballast 430MA	
HFXE1-800-13		120V 60 Hz	60W T12 electronic ballast 800MA	
HFXE2-265-304	3/4"	120-277V 50/60 Hz	32W T8 electronic ballast 265MA	 Four Glass Tubes 4' Nominal
HFXE2-430-14		120V 60 Hz	40W T12 electronic ballast 430MA	
HFXE2-430-44		277V 60 Hz	40W T12 electronic ballast 430MA	
HFXE1-800-14		120V 60 Hz	60W T12 electronic ballast 800MA	
HFXE1-800-44	277V 60 Hz	60W T12 electronic ballast 800MA		
BIAxIAL SERIES				
HFXE1-40T-302	3/4"	120-277V 50/60 Hz	2' 2 Lamp 40W BIAxIAL	 Two Glass Tubes 4' Nominal
HFXE1-55T-302			2' 2 Lamp 55W BIAxIAL	
HFXE1-40T-304			4' 4 Lamp 40W BIAxIAL	
HFXE1-55T-304			4' 4 Lamp 55W BIAxIAL	

① Digit after "E" in catalog logic indicates number of lamps energized in emergency mode.

② Consult non-emergency HFX pages L164-169 for thermal, dimensional and other data, plus for available accessories. 40W & 60W are not available with universal voltage or 240V 50Hz ballasts.

③ 1,2 and 3 tube models are third party certified. 4 tube models are self-certified.

NOTES: For fusing, add suffix F1 for 120V; F4 for 277V.

Emergency unit will start lamps at 0°F

32W T8 electronic ballast minimum start is 0°F

40W ballast is electronic with 50°F start (add CW for electromagnetic 0°F)

60W electromagnetic ballast start at -20°F

32W & 40W units operate 2 lamps in emergency mode for a maximum illumination

60W and BIAxIAL units operate a single lamp. 3 lamp 277V 60W emergency units not available.

Replacement Battery Pack #KFBP10

SEE PAGES L164 TO L169 FOR DIMENSIONS, ACCESSORIES AND PHOTOMETRICS

EMERGENCY LUMEN CHART		
LAMPS	INITIAL LUMENS	AFTER 90 MINUTES
2 32W lamps	1350	900
2 40W lamps	1100	640
1 60W lamp	1200	810
1 40W BIAxIAL	900	540
1 55W BIAxIAL	900	465



KILLARK®



Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2 Groups E,F,G
Class III, Div. 1 & 2
NEMA 7CD, 9EFG

- Listed File E162407
UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- UL-924 Emergency Lighting & Power Equipment
Certified File LR11713

FEATURES-SPECIFICATIONS

HOSTILE/ITE® E EMERGENCY

Applications

Where required by NEC, Life Safety Code, etc., to provide illumination during interruption of normal power to lighting system.

Hazardous Locations (gas, vapor, dust), include such areas as: Oil & Gas Refining, Production & Storage, Grain Processing, Paint Manufacture.

Features

- Three high intensity lamps can be independently adjusted to provide custom emergency lighting to a specific area
- Three 20 watt MR16 lamps included
- Pendant, bracket and ceiling mounting styles for a mounting arrangement that suits any lighting layout
- Remote hazardous location test station (**included**) allows testing of fixture at a convenient ground level location
- Dual voltage transformer can be connected to 120V or 277V systems
- Four tough, long life lead-acid batteries require no maintenance and have a 12 VDC output of 60 watts for 90 minutes
- Safety disconnect feature automatically disconnects lamps from battery if globe is removed
- Solid state battery charger has a low voltage disconnect feature
- Red pilot light, easily visible inside

globe, indicates AC power is being supplied to batter charger

- Fixture housings are factory sealed by the electro-mechanical connection block
- The only wiring required is attaching supply wires to the integral female connection block in the mounting

cap. Threading fixture onto mounting cap makes the electrical connection

- Electrical continuity is not made during assembly or disassembly without five or more threads secured to insure a flame path

EBB HALOGEN EMERGENCY LIGHTING						
ANSI LAMP TYPE	WATTS	VOLTAGE ^①	HUB SIZE	CATALOG NUMBER		
				PENDANT	WALL	CEILING
MR16	3x20W	120, 208, 240, 277V	3/4"	EBB32010A2	EBB32010B2	—
			1"	EBB32010A3	EBB32010B3	EBB32010X3

^① Suitable for 220V/50Hz.

EBB ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
EZG1	Guard (die cast aluminum)
VMPSD40	Reflector (standard dome)
EBB-L12	MR16 12 volt lamp
17505AAAB	MR16 lamp socket
EBB-RB	Rechargeable battery (4 used per unit)
EBB-BC	Battery charger (circuit board)
EBB-TRANS	Transformer Kit 120, 208, 240, 277V
EBB-PL	LED pilot light



Remote test station (**included**) allows "Push-To-Test" at a location convenient to the user. ©

HAZARDOUS LOCATION APPLICATION DATA					
LAMP TYPE	LAMP WATTS	RATED AMBIENT DEGREES	MAX SURFACE TEMPERATURE		
			CLASS I	CLASS II	SIMULTANEOUS CLASS I & II
MR16 Halogen	60W Total	40°C	T6 (85°C)	T5 (100°C)	T5 (100°C)

Note: EBB Series fixtures should not be stored for extended periods before energizing.

© Furnished with 3/4" feed thru mounting box. For Push-To-Test N.C. momentary cover only. Use also with HFXE, DEB, VEB, EEQ, and LZ2NE. Cover only XCSOB3-PTT. Order SWB back box separately.





Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2 Groups E,F,G
Class III, Div. 1 & 2
NEMA 7CD, 9EFG

- Listed File E162407
 UL-844 Electric Lighting Fixtures for use in Hazardous Locations
- Certified File LR11713
 UL-924 Emergency Lighting & Power Equipment

FEATURES-SPECIFICATIONS

Dimensions: See EZ 50-250 Watt dimensions on page L147

Factory sealed; external seals not required

Cast of copper-free Aluminum (Less than 0.4% copper)

Electrostatically applied epoxy polyester finish is baked on for high density corrosion protection

Four lead-acid batteries are maintenance free and provide 60 watts to the lamps for 90 minutes*

Red pilot light indicates AC power flow to battery charger

Lamps automatically disconnect from battery if globe is disengaged

Glass globe prestressed for heat and impact resistance - Globe is internally fluted on sides and prismatic on bottom

Wireless assembly of fixture tank to mounting cap — Electro-mechanical male/female block allows fast, easy installation and bench top servicing without disconnecting supply wires

Nameplate displays Third Party Certifications and ratings in English and French (large red plate identifies it as an emergency fixture)

Acme double lead threads assure quick and trouble free assembly

* EBB Series fixtures should not be stored for extended periods before energizing.

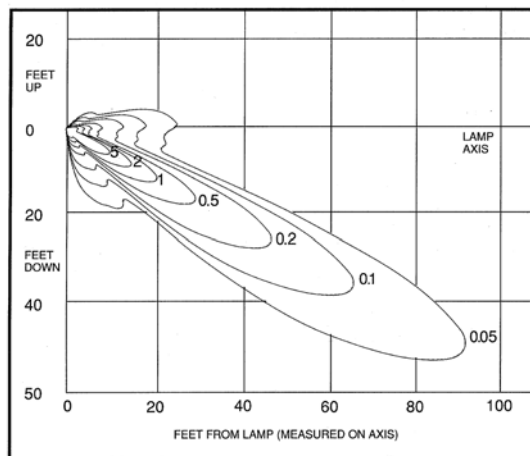
Lamps adjustable on 2 axis for maximum aiming flexibility.

Photometrics

Typical vertical ISO foot candle distribution.

One 20 watt lamp aimed at 20° below horizontal.

Note: Some minor variations in light spread will occur as each lamp is rotated up/down within the glass globe.





Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
Suitable for wet locations
UL Marine
NEMA 3, 4X
Factory sealed

 Listed - File E84609

 Certified - File LR11713

FEATURES-SPECIFICATIONS

HOSTILELITE®

Applications

HOSTILELITE® ESX Series strobe fixtures can be an excellent warning device in hazardous, hostile or wet locations where hearing is impaired due to high ambient noise conditions.

Compliances

- UL-1203 explosion-proof and dust ignition-proof electrical equipment for use in hazardous (classified) locations
- UL-1638 visual signaling appliances
- UL Marine-type electric lighting fixtures
- NEMA 3, 4, 4X, 7CD, 9EFG

Specifications

- Electronic component temperature range -40°C to +55°C
- NEC temperature code, T6 (<85°C)
- Flash rate—85 flashes per minute
- Xenon type lamp

- Voltage and amperage:

12-74 VDC:

Draws 1.25A avg. @ 12 VDC tapering to 0.2A avg. @ 74 VDC, .75A avg. @ 24 VDC

120 VAC (50/60 HZ):

Draws 0.30A avg.

240 VAC (50/60 HZ):

Draws 0.17A avg.

- Power supply output:

13 watts standard

11 watts for 12-74 VDC

- Intensity:

Clear 200 candela effective

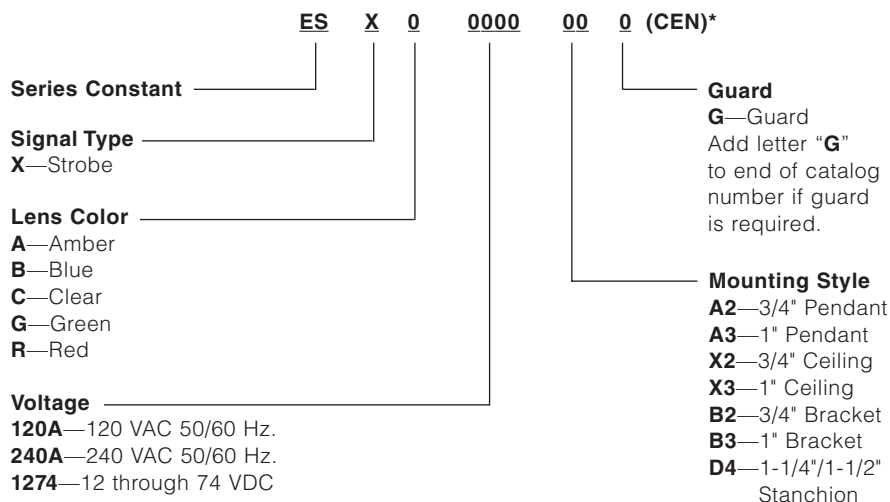
Amber 170 candela effective

Blue 90 candela effective

Red 40 candela effective

Green 70 candela effective

Catalog Number Logic



*CEN (CENELEC) approved option available. See pages L127 for more information. ESX Series strobes with CENELEC labeling are rated T6 by PTB.

REPLACEMENT POWER SUPPLY	
CATALOG NUMBER	VOLTAGE
ESX120PS	120VAC, 50/60 HZ.
ESX240PS	220/240VAC, 50/60 HZ.
ESX1274PS	12-74 VDC

REPLACEMENT LENS & LAMP ASSEMBLY	
CATALOG NUMBER	DESCRIPTION
ESXAL	Amber
ESXBL	Blue
ESXCL	Clear
ESXGL	Green
ESXRL	Red
EMGS2	Rep globe support assembly



KILLARK®



Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III, Div. 1 & 2
Suitable for wet locations
Marine
NEMA 3, 4X
Factory sealed

Listed - File E84609

Certified - File LR11713

FEATURES-SPECIFICATIONS

PENDANT



PENDANT ESX STROBE SIGNAL LIGHT ① ②			
LAMP TYPE	HUB SIZE ③	VOLTAGE @60 HERTZ	CATALOG NUMBER GLOBE AND MOUNT ④
STROBE	3/4"	120 VAC, 50/60 HZ.	ESXR120AA2
		240 VAC, 50/60 HZ.	ESXR240AA2
		12-74 VDC	ESXR1274A2

CEILING



CEILING ESX STROBE SIGNAL LIGHT ① ②			
LAMP TYPE	HUB SIZE ③	VOLTAGE @60 HERTZ	CATALOG NUMBER GLOBE AND MOUNT ④
STROBE	3/4"	120 VAC, 50/60 HZ.	ESXR120AX2
		240 VAC, 50/60 HZ.	ESXR240AX2
		12-74 VDC	ESXR1274X2

WALL



WALL ESX STROBE SIGNAL LIGHT ① ②			
LAMP TYPE	HUB SIZE ③	VOLTAGE @60 HERTZ	CATALOG NUMBER GLOBE AND MOUNT ④
STROBE	3/4"	120 VAC, 50/60 HZ.	ESXR120AB2
		240 VAC, 50/60 HZ.	ESXR240AB2
		12-74 VDC	ESXR1274B2

STANCHION



STANCHION ESX STROBE SIGNAL LIGHT ① ②			
LAMP TYPE	HUB SIZE ③	VOLTAGE @60 HERTZ	CATALOG NUMBER GLOBE AND MOUNT ④
STROBE	1-1/4"	120 VAC, 50/60 HZ.	ESXR120AD4
		240 VAC, 50/60 HZ.	ESXR240AD4
		12-74 VDC	ESXR1274D4

① Catalog numbers do not include guards. To order add letter "G" to end of catalog number or order EMG2 separately.

② Catalog numbers include Red lens. To specify different colored lens, change fourth character in catalog number to one of the following: "B"=Blue, "C"=Clear, "A"=Amber, "G"=Green.

③ Standard hub size is 3/4" NPT. To order 1" NPT, change last character of catalog number from "2" to "3".

④ Stanchion mount is standard with 1-1/2" NPT and a 1-1/2" NPT to 1-1/4" NPT reducer installed.



KILLARK®

NOTE: See EM series for dimensions, page L126.



Class I, Div. 2, Groups C,D
Class I, Zone 2, Groups IIB, IIA
Class II, Div. 2, Group G
NEMA 3
Suitable for Indoor and Outdoor Use

 UL-1638 Visual Signaling Appliances
 UL File No. E121305
 CSA File No. LR-97692

FEATURES-SPECIFICATIONS

Applications

With an all aluminum housing and polycarbonate lens assembly, the GSH Series Strobe Signal Light will withstand the rigors of everyday harsh usage - even in locations that are classified as "Hazardous". The GSH's helix shaped Xenon lamp produces 400 effective candela, making it visible over broad distances. This warning light can be used for plant evacuation or any other communication need.

Hazardous and Wet Locations in industrial facilities where high ambient noise levels prevent the use of audible signaling devices.

As a visual warning of a fault, leak, accident or other condition.

To indicate the status of a particular process or operation.

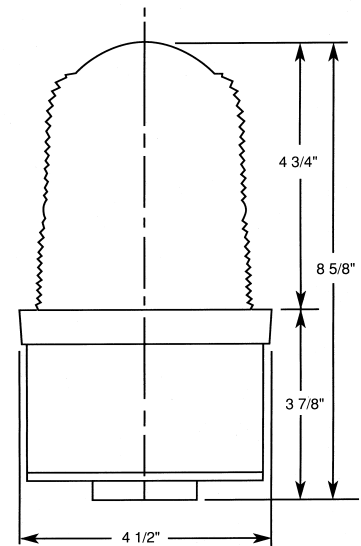
Features

- High-intensity strobe produces 400 candela with 60 flashes per minute
- Reliable solid state components
- All aluminum housing is compact in size and light in weight
- Polycarbonate Lexan lens resists breakage and impacts
- Available in four different globe colors and two voltages
- Designed for mounting with globe in up or down position

GSH STROBE SIGNAL LIGHT					
VOLTAGE	HUB SIZE	CATALOG NUMBER			
		RED LENS	AMBER LENS	BLUE LENS	CLEAR LENS
120VAC, 50/60Hz.	1" NPT	GSH2RA1	GSH2AA1	GSH2BA1	GSH2CA1
24VDC	1" NPT	GSH2RD2	GSH2AD2	GSH2BD2	GSH2CD2
Replacement Lamp		ST77C			

Specifications:

Lamp Life	2,000 hours
Style/Lamp	Xenon flash lamp
Shipping Weight	4 lbs.
Height	8-5/8"
Diameter	4-1/2"
Electrical Ratings	
120 VAC 50/60Hz	.28 Amps
24 VDC	.35 Amps
Temperature Code T4A (120°C/248°F)	





FKA



FH



HOOKLOOP

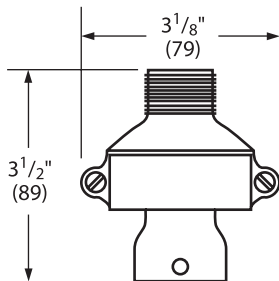
FEATURES-SPECIFICATIONS

FKA

Features

- Ball joint permits fixture to hang plumb. Fixture may swing up to 20° from vertical in any direction
- Cast of aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Set screw locks fixture stem in place. Cannot accidentally loosen – intended for use with threaded metal conduit
- Joint cannot twist conductor
- Suitable for fixtures up to 125 pounds

FKA		
CATALOG NUMBER	MALE THREAD	FIXTURE STEM SIZE
FKA-22	3/4"	3/4"



For replacement ball only catalog number 00890545



Listed - File E27731



Certified - File LR11851

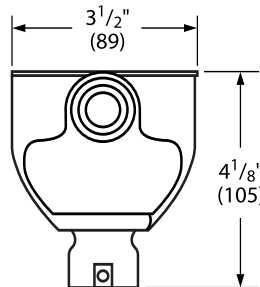
See files for details or call Killark.

FH

Features

- Combination splice box and flexible fixture hanger
- Ball joint permits fixture to hang plumb. Fixture may swing up to 20° from vertical
- Cast of aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Set screw locks fixture stem in place – intended for use with threaded metal conduit
- Joint cannot twist conductors
- Cover may be removed for easy wiring
- Mounts directly to conduit
- Suitable for fixtures up to 125 pounds

FH			
TWO HUBS	THREE HUBS	CONDUIT SIZE	FIXTURE STEM SIZE
FHC-21	FHT-21	3/4"	1/2"
FHC-22	FHT-22	3/4"	3/4"



For replacement ball only catalog number 00890545



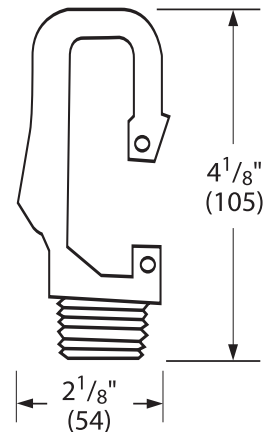
Listed - File E27731

HOOKLOOP

Features

- Pendant fixture hanger consists of a "HOOK" and safety bar which allows conversion to a "LOOP" configuration as necessary
- 3/4" male thread
- Maximum load 125 pounds

HOOKLOOP
CATALOG NUMBER
HOOKLOOP



Listed - File E27731



Certified - File LR11851

See files for details or call Killark.

FH



Hook

V Hanger Boxes



VGA



VGC



VGH



VGX

Covers



Flexible Hanger Covers



Hub Covers
(for Rigid Mounting)

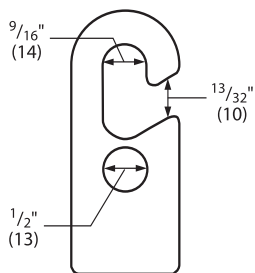
FEATURES-SPECIFICATIONS

FH HOOK

Features

- Economical hanger for pendant fixtures
- Fixtures may absorb minor bumps and vibration through free swinging action
- Hub provided with a set screw to prevent accidental loosening of fixture stem
- A 1/2 inch hole in body is for flexible cable. Cord may be assembled with plug for quick removal of fixtures
- Cast of aluminum alloy (copper-free—less than 4/10 of 1%)
- FH supports up to 125 pounds

FH HOOK, LOOP		
CATALOG NUMBER	DESCRIPTION	FIXTURE STEM SIZE
FH-2	Hook	3/4"



Listed - File E27731 or E3397
See files for details or call Killark.

V SERIES

Features

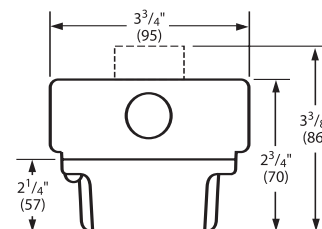
- Flexible fixture hanger for threaded fixture stem
- Enclosed and gasketed, suitable for wet locations
- Permits angular displacement of fixture without twisting wires
- Cushioned—absorbs shock and vibration. Internal strap assures ground continuity
- Combines splice box and hanger in one unit. Splice box available in four configurations
- Cast of corrosion resistant aluminum alloy (copper-free—less than 4/10 of 1%)
- Supports up to 125 pounds

Listed - File E27731 or E3397

FLEXIBLE HANGERS, V SERIES ENCLOSED AND GASKETED			
CATALOG NUMBER		HUB SIZE	FIXTURE STEM SIZE
HANGER W/SPLICE BOX	SPLICE BOX ONLY		
VPFHA-12	VGA-1	1/2"	3/4"
VPFHA-22	VGA-2	3/4"	3/4"
VPFHC-12	VGC-1	1/2"	3/4"
VPFHC-22	VGC-2	3/4"	3/4"
VPFHH-12	VGH-1	1/2"	3/4"
VPFHH-22	VGH-2	3/4"	3/4"
VPFHX-12	VGX-1	1/2"	3/4"
VPFHX-22	VGX-2	3/4"	3/4"

FIXTURE HANGERS ONLY		
CATALOG NUMBER	DESCRIPTION	FIXTURE STEM SIZE
VPFH-2	Flexible hanger cover, maximum load 125 Lbs.	3/4"
VG-2	Hub cover for rigid mounting	3/4"

See page L11 for other box configurations.



Flexible cover with box, dotted line is VGA pendant.



HXB



XFH



EKJ

FEATURES-SPECIFICATIONS

HXB

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Features

- Fixture hanger for hazardous locations combining splice box and hanger
- Set screws in female hub prevents accidental loosening of fixture stem; set screws in hub cover lock cover to the splice box
- Four hubs in "X" configuration up to 3/4"
- Flange mounting ring cast as integral part of box
- Splice box wiring hole with cover for access to box interior
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports to 125 pounds; vol. 16 cu."

Listed - File E10514

Certified - File LR11716

HXB SPLICE BOX AND HANGER		
CATALOG NUMBER	CONDUIT HUB SIZE	FIXTURE STEM SIZE
HXB-11	1/2"	1/2"
HXB-12	1/2"	3/4"
HXB-21	3/4"	1/2"
HXB-22	3/4"	3/4"
HXBC	Blank Cover	
HIC	Replacement Wiring Plug	

XFH

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

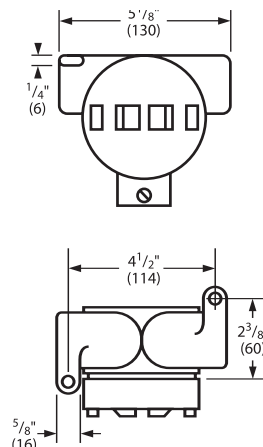
Features

- Fixture hanger for hazardous locations combining splice box and hanger
- Set screws in female hub prevents accidental loosening of fixture
- Straight through conduit hubs for through feed
- Mounting lugs are standard
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports to 125 pounds

Listed - File E10514

Certified - File LR11716

XFH SPLICE BOX AND HANGER		
CATALOG NUMBER	CONDUIT HUB SIZE	FIXTURE STEM SIZE
XFH-21	3/4"	1/2"
XFH-22	3/4"	3/4"



EKJ

Class I, Div. 1 & 2, Groups A,B,C,D
Class I, Zones 1 & 2, Groups IIC,IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Features

- Fixture pendant hanger for hazardous locations
- Permits free swing and plumb hang
- Set screws in each hub prevents accidental loosening of fixture
- Constructed of seamless bronze hose with brass outer braid. Asphaltum impregnated jute inner insulates and protects wire from abrasion. Brass female end fittings are supplied with short nipples
- Electrical ground continuity without bonding jumper
- Suitable for wet locations as well as hazardous locations
- Flexible lengths 4 to 18 inches
- Supports to 125 pounds

Listed - File E10514

Certified - File LR11716

EKJ FLEXIBLE PENDANT HANGER*		
CATALOG NUMBER	CONDUIT HUB SIZE	FIXTURE STEM SIZE
EKJ-14	1/2"	4"
EKJ-24	3/4"	4"
EKJ-16	1/2"	6"
EKJ-26	3/4"	6"
EKJ-18	1/2"	8"
EKJ-28	3/4"	8"
EKJ-110	1/2"	10"
EKJ-210	3/4"	10"
EKJ-112	1/2"	12"
EKJ-212	3/4"	12"
EKJ-115	1/2"	15"
EKJ-215	3/4"	15"
EKJ-118	1/2"	18"
EKJ-218	3/4"	18"

*See page F68 for EKJ 1" sizes



JL



JAL



ENY Pendant Seal

FEATURES-SPECIFICATIONS

JL/JAL

Class I, Div. 1 & 2, Groups C,D
Class I, Zones 1 & 2, Groups IIC,IIB
Class II, Div. 1 & 2, Groups E,F,G
Class III

Features

- Splice box and hub cover for mounting pendant fixtures in hazardous locations
- Conduit openings in two configurations

- Flange type cover. Set screw in hub prevents accidental loosening of fixture stem
- Integral lugs for mounting box to ceiling
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports up to 125 pounds

Listed - File E10514

Certified - File LR11716

ENY PENDANT SEALS

Class I, Div. 1 & 2, Groups A,B,C,D
Class I, Zones 1 & 2, Groups IIC,IIB,IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III

Features

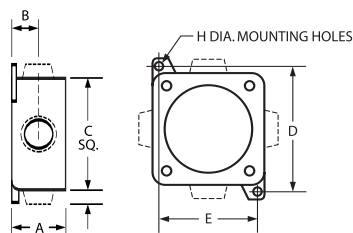
- ENY Pendant Seals are designed for hazardous locations and meet code requirements for a safety set-screw when hanging fixtures. Common applications are for Class I Division I Group B or Class I Zone 2 Ex nR restricted breathing fixtures
- Cast of corrosion resistant aluminum alloy (copper-free aluminum; less than 4/10 of 1%)
- Supports up to 125 pounds

See page F49 for sealing compound and packing fiber

JL/JAL SPLICE BOX AND HUB COVER FIXTURE HANGER				
CATALOG NUMBER		CONDUIT BOX	COVER	TYPE
JL SERIES W/HUB COVER	JAL SERIES W/HUB COVER			
JLC-11	—	1/2"	1/2"	C Straight Through
JLC-12	—	1/2"	3/4"	
JLC-21	—	3/4"	1/2"	
JLC-22	—	3/4"	3/4"	
JLX-11	JALX-11	1/2"	1/2"	X Four Hubs
JLX-12	JALX-12	1/2"	3/4"	
JLX-21	JALX-21	3/4"	1/2"	
JLX-22	JALX-22	3/4"	3/4"	
—	JALX-31	1"	1/2"	
—	JALX-32	1"	3/4"	

CATALOG NUMBER	SIZE
ENY-2SET	3/4"
ENY-3SET	1"

JL/JAL DIMENSIONS						
SERIES	A	B	C	D	E	H
JL	1-15/16" (49)	11/16" (17)	3-1/4" (95)	4-7/32" (107)	2-3/8" (60)	5/16" (8)
JAL	2-3/8" (60)	15/32" (12)	4-5/8" (117)	5-1/4" (133)	4-1/8" (105)	5/16" (8)





**Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
NEMA 3, 4, 4X**



FEATURES-SPECIFICATIONS



Applications

VMCHVM adapters are designed to ease upgrading of existing Crouse-Hinds® "VM, LM, DM" series fixtures to Killark "VM" CERTILITE® fixtures. Units are primarily designed to aid replacement of old ceiling or wall mount units where removal of the existing mounting box and conduit would be difficult or time consuming. Adapter & Killark fixtures rated NEMA 4.

Adapters allow the upgrade of older Mercury Vapor fixtures to newer HID lamp sources, Compact Fluorescent Lamps, or to Emergency Lighting such as VEB or VEQ series.

Note: Adapters are used with Fixture Ballast Tanks (plus globes & guards), e.g. VM3S150, VMG17, VMAG17.

Complete fixture with mounting splice box is not required. Adapters are painted to match Killark beige fixture finish.

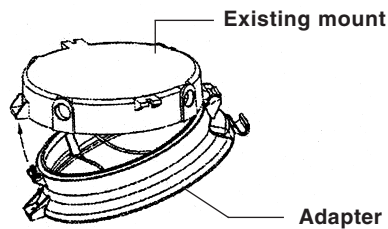
Features

- Allows use of CertiLite®V's new Swing-Barrel nut for ease of maintenance. Attaches to Crouse-Hinds® mount with hinge and set screw.

Temperature codes:

See Certilite®V or VM series product pages or as listed with other desired product series.

VM COMPETITIVE ADAPTER		
CATALOG NUMBER	DESCRIPTION	EXAMPLE OF MODEL UTILIZED OR REPLACED
VMCHXM	Crouse ceiling mount or wall mount splice box. Adapter allows simple attachment of Killark ballast tank to existing mount.	Ceiling mounts CM2, CM3 Wall mounts TWM2, TWM3





EAC/EACH



EZBA12

Class I, Div. 1 & 2, Group D
Class I, Zones 1 & 2, Groups IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III



FEATURES-SPECIFICATIONS



Applications

EAC Series adapters are designed to ease upgrading of existing Crouse-Hinds® "EV" series or existing Killark "H" series to Killark HOSTILE/LITE® EM or EZ series. Units are primarily designed to aid replacement of old ceiling or wall mount units where removal of the existing mounting box and conduit would be difficult or time consuming. Adapter & Killark fixtures rated NEMA 4.

Adapters allow the upgrade of older incandescent fixtures to newer Fluorescent or HID lamp sources, or to Emergency Lighting including ESX strobes or EEQ emergency series.

Note: Adapters are used with Fixture Housing, Globe, Globe Support assemblies, e.g. EBF261 & EMG1; EMS151 & EMG2; or EZH100 & EZG1. Complete fixture with mounting box is not required. Adapters are painted to match Killark beige fixture finish.

Features

- Setscrews permit secure adapter attachment into old mounting box and to new fixture
- Converted fixtures may be easily removed for service using the Killark EZ mounting system. Wire terminals are included in the adapter (EZTB Terminal Block)

Temperature codes:

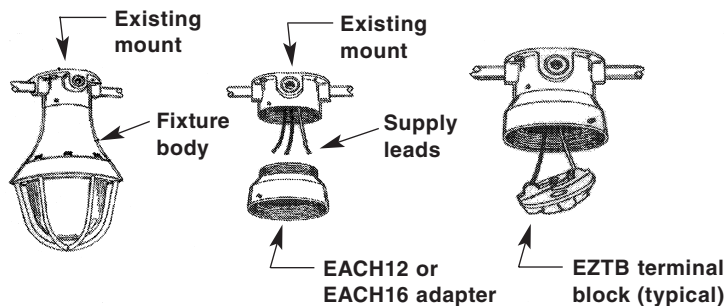
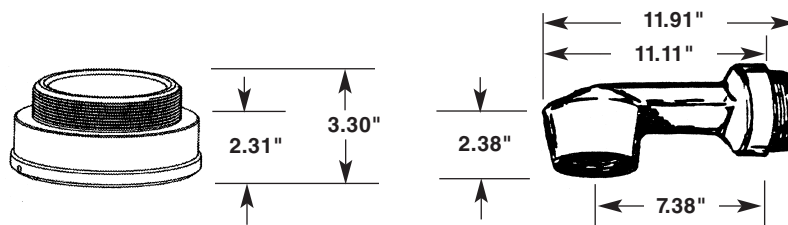
See EM/EB/EQ series pages L127 to L128

EZ series pages L148 to L149

ESX series pages L192 to L193

EEQ series page L186

EAC/EZBA FIXTURE ADAPTERS		
CATALOG NUMBER	DESCRIPTION	EXAMPLE OF MODEL UTILIZED OR REPLACED
EAC	Killark "H" series Ceiling or Wall	HXG-2-125 Fixture
EACH12	Crouse old style Ceiling Mount with lamp socket in adapter ring between fixture body and a GUF 12 pitch box	"GUF" box w/Set Screw
EZBA12	Crouse old style Wall Mount, old style Arm with integral lamp socket (socket in fixture in newer models) attached to GUF 12 pitch mounting box. EZBA12 includes arm	"GUF" box w/Set Screw
EACH16	Crouse newer style ceiling or wall fixtures w/lamp socket in fixture body; mounted to EV series 16 pitch threaded box; adapter fits in ceiling box or existing arm attached to wall fixture	EVA26/EV22 Box; EVBX240



HUBBELL INC. GROUPS AND SUBSIDIARIES - DOMESTIC

ELECTRICAL PRODUCTS

Chalmit - *(see International)*

Hawke International USA

(218) 445-7400 4140 World Houston Parkway Houston, TX 77032
Suite 130

Hubbell Electrical Products

(800) 722-6437 3902 West Sample St. South Bend, IN 46634-4002

Killark

(314) 531-0460 3940 Dr. Martin Luther King Drive St. Louis, MO 63113

Raco/Bell

(800) 722-6437 3902 West Sample St. South Bend, IN 46634-4002

INDUSTRIAL TECHNOLOGY

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Gleason Reel

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Industrial Controls - *(also Euclid and Lexington Brands)*

(336) 434-2800 4301 Cheyenne Dr. Archdale, NC 27263

Hipotronics & Hefely N. America

(845) 279-8091 1650 Route 22 Brewster, NY 10509

Pulse Com

(800) 381-1997 2900 Towerview Rd. Herndon, VA 20171

Wiegmann

(618) 539-3193 501 West Apple St. Freeburg, IL 62243

LIGHTING PRODUCTS

Hubbell Lighting - *(also Hubbell Outdoor & Industrial Lighting, plus Alera, Cornerstone, Devine, Dual-Lite, Prescolite, Progress, Spaulding, Sportsliter Solutions, Sterner and Whiteway Brands)*

(864) 678-1000 701 Millennium Blvd. Greenville, SC 29607

Architectural Area Lighting & Moldcast

(714) 994-2700 14249 Artesia Blvd. La Mirada, CA 90638

Kim Lighting

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Security Lighting Systems

(847) 279-0627 1085 Johnson Drive Buffalo Grove, IL 60089

POWER SYSTEMS

Hubbell Power Systems - *(including A.B. Chance, Anderson, Fargo and Ohio Brass Brands)*

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Polycast and Quazite

(800) 346-3062 3621 Industrial Park Drive Lenoir City, TN 37771

TELECOM & DATA

Pulsecom and Seiscor

(800) 381-1997 2900 Towerview Road Herndon, VA 20171

Premise Wiring

(800) 626-0005 14 Lords Hill Road Stonington, CT 06339

WIRING SYSTEMS

Wiring Device-Kellems - *(also Bryant and Marine Brands)*

(203) 882-4900 185 Plains Rd. Milford, CT 06461

Premise Wiring

(800) 626-0005 14 Lords Hill Road Stonington, CT 06339

Hubbell Building Automation

(888) 698-3242 9601 Dessau Rd. Bldg.1, Suite 100 Austin, TX 78754



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