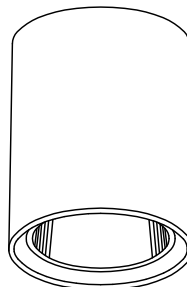


Surface Open E-Lamp "Pulse Start" Flare Downlights: 50 to 150 Watt



9" 100W **HSR-09099**
12" 150W **HSR-12100**

Features

Lamp

- Designed for open rated medium base metal halide E-lamps. See chart below for standard and optional wattages.
- See Option -43 and chart below for lower wattage or HPS availability.

Socket

- Vertical. Pulse and open rated.
- Glazed porcelain.
- Nickel-plated brass screw shell. Silicone leads.

Reflector

- Self-flanged clear specular Alzak® aluminum.
- Eleven optional reflector finishes available.

Ballast Assembly: Specify Voltage

- WhisperPack™ fully encapsulated 180°C

rated HPF pulse start ballast, except core and coil ballast for HSR-09099.

- Class H, high reactance for 120 volt, linear reactor for 277 volt.
- Capacitor and ignitor supplied.
- Dimming (-39) and electronic (-96) ballasts available. See Options.
- Cool, quiet, long-life. Silicone leads.

Fuse

- Fused primary. Renewable. Not for 480 volt.

Housing

- White acrylic enameled aluminum with interlocking flare trim ring.
- No visible seam or cylinder hardware.
- Cool: Dissipates heat across entire surface area.

- Rustproof: Exceeds 1000 hour ASTM 5% salt spray test.

Installation

- Center point mounting for snug fit to ceiling. Mounting hardware furnished.
- QuickConnect mounting system available (Option -QM).
- Surface J-box mount available. (Option -80)
- Pendant or wall bracket mount available. (See Options -PM, -WB)
- Indoor or outdoor for covered ceiling use. (See Options -QM, -89)

UL, C-UL (Canada) Listings

- Wet, damp or dry locations, covered ceilings. (See Options -QM, -89)

Three Year Limited Warranty

- Complete standard fixture, including ballast.

Wattage Availability

Catalog No.	Lamp/Base	Standard Wattage		Option -43: Lower Wattage	
		Pulse MH	-24 (HPS)	Pulse MH	-24 (HPS)
HSR-09099	ED-17/Med	100	100	50-70	35-70
HSR-12100	ED-17/Med	150	150	50-125	35-100

Options

Sources and Ballasts

- 24 HPS ballast instead. See wattage chart above for available wattages. Specify voltage.
- 39 Remote (10' max.) electronic dimming ballast instead, for pulse start metal halide. Consult factory for wattage and voltage availability.
- 96 Remote (15' max.) electronic MH ballast instead. Consult factory for internal mounting.
- PR Conventional probe start CWA metal halide ballast instead. Specify wattage and voltage. See chart above for wattage availability.

Wattage and Voltage

- 43 Lower wattage: See Option -43 chart above for available lower wattages. Specify voltage.
- 120 120 volt, 60 Hz. ballast.
- 277 277 volt, 60 Hz. ballast.
- 347 347 volt, 60 Hz. ballast. Consult factory for dimming or electronic.
- 97 Other voltage ballast. Consult factory.

Relays, Standbys, Lamps (see Chart)

- LP With lamp. Specify source, wattage, color temperature, and clear or coated. (3700°K standard for metal halide) Consult factory for other color temperatures.

Reflectors and Trims (Self-Flanged)

- 16 Champagne Gold Alzak reflector. (CP x .93)
- 31 White flange (only) on self-flanged reflector.
- 63 Dune specular Alzak reflector. (CP x .90)
- 69 Wheat specular Alzak reflector. (CP x .88)
- 70 SofTex Clear softly etched reflector. (CP x .90)
- 71 SofTex Dune softly etched reflector. (CP x .81)
- 77 SofTex Pewter softly etched reflector. (CP x .78)
- 90 SofTex Champagne Gold softly etched reflector. (CP x .84)
- 91 SofTex Wheat softly etched reflector. (CP x .80)
- 93 Pewter anodized Alzak reflector. (CP x .85)
- 94 Custom color reflector. Consult factory.
- OG OptiGroove black seamless tapered aluminum reflector. White trim. (CP x .80)
- DW Double wall wash 180° reflector assembly instead for HSR-09099 only.
- WW Wall wash reflector assembly instead for HSR-09099 only.

Luminaire (Housing) Finishes

- 35 Natural Aluminum enameled luminaire finish instead.
- 36 Gold enameled luminaire finish instead.
- 37 Dark Bronze enameled luminaire finish instead.
- 38 Black enameled luminaire finish instead.
- 94 Custom color luminaire finish. Consult factory.

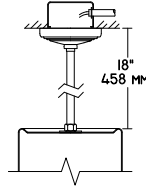
Mounting Options

- 54 Safety cable through pendant stem. 12" longer than specified stem length. Anchored to fixture. Use with Option -PM.
- 80 2" concealment collar for mounting luminaire beneath surface outlet box. 1/2" T.S. KO's provided. Also see Option -89.
- 87 Custom -PM length. Specify up to 4 feet or consult factory for longer lengths with couplers.
- 88 Swivel canopy for sloped ceilings up to 45°. Earthquake rated. Use with Option -PM.
- 89 Sealed top feature prevents moisture and insect intrusion from above in outdoor or high humidity areas. Must add to Options -80, -PM or -WB for Wet Label listing.
- PM Pendant mount instead. 3/8" T.S. x 18" standard. Also see Options -54, -87, -88, -89.
- QM QuickConnect mount, for indoor (damp or dry) use only. Housing swings aside for easy wiring, then pivots and locks to matte black collar.
- WB Wall bracket mount instead. Also see Option -89.

Other Options

- 99 Special modification. Consult factory.

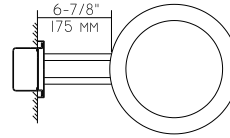
HSR-09099 HSR-12100



Representative Views:

(Right) With optional wall bracket (Option -WB)

(Left) With optional pendant mount (Option -PM)

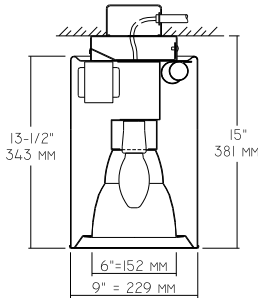


Cone of Light Key

- Ft.** Distance from fixture
- FC** Footcandles (average)
- Dia.** Circle of light at 50% of FC
- * Dia. (in ft.) shown is where FC value is half the FC at nadir.

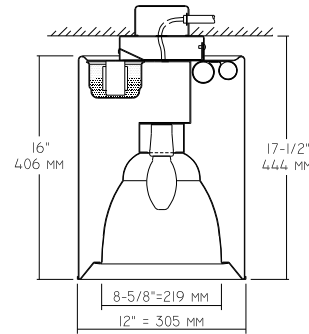
C.U. (Coefficients of Utilization) Tables are available on request. Please contact your Kirlin representative.

HSR-09099 100W

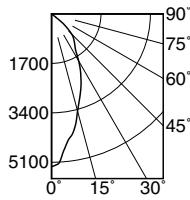


WALL WASH VERSION AVAILABLE - SEE OPTIONS

HSR-12100 150W



(Coated Lamp)



S/MH 0.7

Cone of Light*

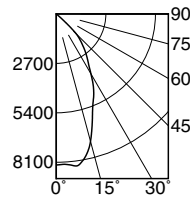
Ft.	FC	Dia.
6	146.0	4.0
8	82.1	5.3
10	52.5	6.6
12	36.5	7.9
14	26.8	9.3
16	20.5	10.6

EFFIC: 52.2%

ITL TEST #51681
*LER = 31.1 •AEC = \$7.71

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	5255	5255	5255	5255	5255
5	4734	4734	4734	4734	4734
15	3457	3457	3457	3457	3457
25	2387	2387	2387	2387	2387
35	1416	1416	1416	1416	1416
45	979	979	979	979	979
55	12	12	12	12	12
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

(Coated Lamp)



S/MH 0.8

Cone of Light*

Ft.	FC	Dia.
6	229.2	5.0
8	128.9	6.6
10	82.5	8.3
12	57.3	10.0
14	42.1	11.6
16	32.2	13.3

EFFIC: 62.4%

ITL TEST #51683
*LER = 40.4 •AEC = \$5.94

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	8250	8250	8250	8250	8250
5	8270	8270	8270	8270	8270
15	7207	7207	7207	7207	7207
25	4827	4827	4827	4827	4827
35	2934	2934	2934	2934	2934
45	1547	1547	1547	1547	1547
55	29	29	29	29	29
65	15	15	15	15	15
75	8	8	8	8	8
85	0	0	0	0	0
90	0	0	0	0	0

ALL FIXTURE DRAWINGS SHOWN WITH OPTION -QM

* **LER (Luminaire Efficacy Rating)** = $\frac{\text{Luminaire Effic.} \times \text{Total Lamp Lumens} \times \text{Ballast Factor}}{\text{Input Watts}}$

* **AEC = Annual Energy Cost per 1000 lumens** (based on 3000 hours use @ \$0.08 KWH).

SUBMITTAL DATA

JOB NAME

TYPE

WATTAGE

VOLTAGE

CATALOG NUMBER

APPROVAL STAMP

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION TO N.E.C., IN NORMAL USE. Manufacturer at his option will replace or repair such fixture or refund the purchase price or presentation of proof of purchase and defective fixture at the office of manufacturer within three years of original shipment. Liability of manufacturer is limited to the foregoing, and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered by the purchaser or third parties. This warranty is void where prohibited by law. No other warranties, express or implied, shall be made by Kirlin Lighting Inc. without prior written authorization from the manufacturer and the manufacturer will not extend the warranty. Void or repair, or modification of the fixture without prior written authorization from the manufacturer will void the warranty. Void.

PS MET HAIDE
REV MAY 2012