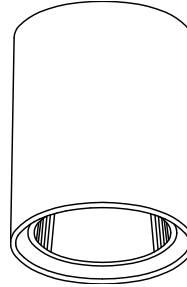


Surface Open Appearance Lensed E-Lamp "Pulse Start" Flare Downlights: 50 to 150 Watt



9" 100W **HSR-09109**
12" 150W **HSR-12110**

Features

Lamp

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

Socket

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

Reflector

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

Lens

- UV absorbing clear tempered glass mounted to reflector. Also see Options.

- Optional trims and lenses available.

Ballast Assembly: Specify Voltage

- WhisperPack™ fully encapsulated 180°C rated HPF pulse start ballast, except core and coil ballast for HSR-09109.
- Class H, high reactance for 120 volt and Options -65, -66; 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.
- 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		Max. Standby Wattage (-49-65-66-LS)
		Pulse MH	-24 (HPS)	Pulse MH	-24 (HPS)	
HSR-09109	ED-17/Med	100	100	50-70	35-70	100
HSR-12110	ED-17/Med	150	150	50-125	35-100	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.

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)

- 49 Extra circuit DCB socket. Do not energize simultaneously with main source. Also see -LS.
- 65 Electronic standby system and DCB socket. Following HID outage, provides immediate light until HID restrikes. Also see -66 and -LS.
- 66 Electronic time delay standby system and DCB socket. Following outage, provides light until HID reaches 70% output. Also see Option -LS.

- LP With lamp. Specify source, wattage, color temperature, and clear or coated. (3700°K standard for metal halide)
- LS With T-4 DCB tungsten halogen standby lamp. Use only with Options -49, -65 or -66.

Reflectors and Trims (Self-Flanged)

- 16 Champagne Gold specular 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 specular Alzak reflector. (CP x .85)
- 94 Custom color reflector. Consult factory.

Lenses

- 15 Prismatic flat C#73 glass instead.
- ML UV absorbing tempered Microlux glass instead.

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.

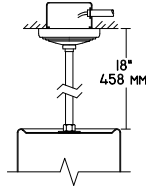
Mounting Options

- 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. 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.

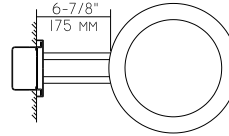
HSR-09109 HSR-12110



Representative Views:

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

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

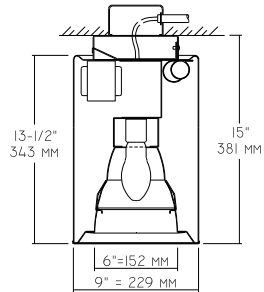


Cone of Light Key

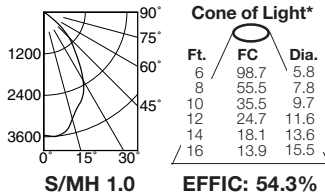
- Ft.** Distance from fixture
- FC** Footcandles (average)
- Dia.** Circle of light at 50% of FC
- * Dia. (in ft.) shown is where FC value is half the FC at nadir.

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

HSR-09109 100W



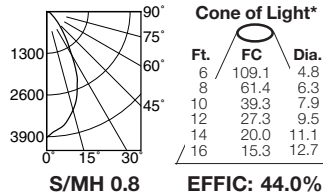
HSR-09109 (Coated Lamp)



ITL TEST #45997
*LER = 34.0 •AEC = \$7.06

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	3554	3554	3554	3554	3554
5	3607	3607	3607	3607	3607
15	3190	3190	3190	3190	3190
25	2667	2667	2667	2667	2667
35	1776	1776	1776	1776	1776
45	1031	1031	1031	1031	1031
55	220	220	220	220	220
65	18	18	18	18	18
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

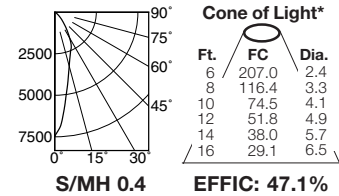
HSR-09109-15 (Clear Lamp)



ITL TEST #45996
*LER = 27.5 •AEC = \$8.71

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	3927	3927	3927	3927	3927
5	3702	3702	3702	3702	3702
15	3175	3175	3175	3175	3175
25	2248	2248	2248	2248	2248
35	1090	1090	1090	1090	1090
45	517	517	517	517	517
55	242	242	242	242	242
65	142	142	142	142	142
75	30	30	30	30	30
85	0	0	0	0	0
90	0	0	0	0	0

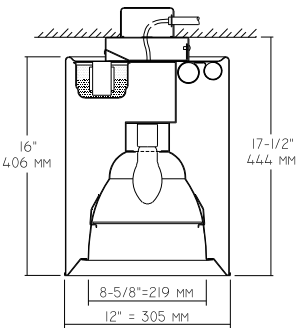
HSR-09109-ML (Clear Lamp)



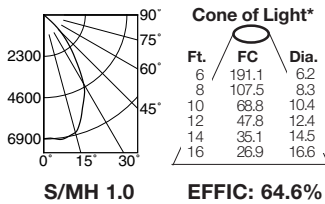
ITL TEST #45995
*LER = 29.5 •AEC = \$8.14

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	7452	7452	7452	7452	7452
5	6075	6075	6075	6075	6075
15	3361	3361	3361	3361	3361
25	2349	2349	2349	2349	2349
35	1237	1237	1237	1237	1237
45	524	524	524	524	524
55	173	173	173	173	173
65	69	69	69	69	69
75	30	30	30	30	30
85	0	0	0	0	0
90	0	0	0	0	0

HSR-12110 150W



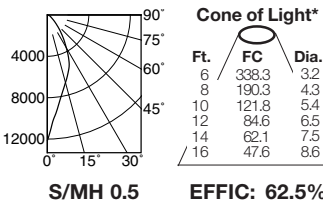
HSR-12110 (Coated Lamp)



ITL TEST #61859
*LER = 44.6 •AEC = \$5.38

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	6880	6880	6880	6880	6880
5	6907	6907	6907	6907	6907
15	6766	6766	6766	6766	6766
25	5235	5235	5235	5235	5235
35	3139	3139	3139	3139	3139
45	1307	1307	1307	1307	1307
55	99	99	99	99	99
65	31	31	31	31	31
75	6	6	6	6	6
85	0	0	0	0	0
90	0	0	0	0	0

HSR-12110-15 (Clear Lamp)



ITL TEST #61860
*LER = 46.6 •AEC = \$5.15

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	12177	12177	12177	12177	12177
5	9546	9546	9546	9546	9546
15	6769	6769	6769	6769	6769
25	4954	4954	4954	4954	4954
35	2622	2622	2622	2622	2622
45	1178	1178	1178	1178	1178
55	528	528	528	528	528
65	315	315	315	315	315
75	7	7	7	7	7
85	0	0	0	0	0
90	0	0	0	0	0

ALL FIXTURE DRAWINGS SHOWN WITH OPTION -QM

* LER (Luminaire Efficacy Rating) = Luminaire Effic. x Total Lamp Lumens x Ballast Factor / Input Watts

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

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME

TYPE

WATTAGE

VOLTAGE

CATALOG NUMBER

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 on 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 or for any person in connection with the purchase, use, or installation of any fixture, or modification of the fixture without prior written authorization from the manufacturer. Manufacturer will render the warranty void.