

Recessed
"Pulse Start"
Downlights: 50 to 200 Watt

THIS PRODUCT IS NO LONGER AVAILABLE

4" 100W
6" 175W
7" 200W

HRR-04030
HRR-06031
HRR-07032

Features

Lamp

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

Socket

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

Reflectors

- Upper: Ellipsoidal specular Alzak® aluminum.
- Lower: Low brightness parabolic specular Alzak aluminum, self-flanged.
- Fourteen optional lower reflector finishes.

Lens

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

Ballast Assembly - Specify Voltage

- Whisper Back™ fully encapsulated 1000V rated HPS pulse start ballast.

- 50-150 watt: Class H, high reactance for 270 volt applications. -65, -66, -HL, linear reactor for 277 volt.
- 175-200 watt: Type C, W, or D wattage. Options -65, -66, -HL; Class H, linear reactor for 277 volt.
- Capacitor and ignitor supplied.
- Dimming (-39) and electronic (-96) ballasts available. See Options.
- Color: White, Light, Silver, Gold, Black, and EasyClean™ and EasyClean™ including dry wall.
- Finish: Acrylic enameled aluminum.
- Cool: Dissipates heat across entire surface area. Ventilated.
- UL C-UL (Canada) listings. Complete standard fixture, including ballast.

- Entire luminaire serviced from below through removable reflectors.
- Built-in plaster frame.
- Outlet Box**
- Prewired 14 GA (NEC) galvanized steel, UL listed; with removable insulated cover.
- 1/2" and 3/4" knockouts.
- Installation**
- 27" galvanized hanger bars supplied (2).
- Fully adjustable universal mounting brackets supplied (2).
- Recesses indoor or outdoor in covered locations.
- UL, C-UL (Canada) Listings**
- Wet, damp or dry locations, covered ceilings.
- Through-branch circuit conductors (6 #12).
- Three Year Limited Warranty**
- Complete standard fixture, including ballast.
- UL Type I protection.
- Per current NEC.

Please consult **QUOTATIONS** for the best alternative.

Wattage / Lamp Availability and Cut-out Dimensions

Catalog No.	Lamp/Base	Standard Wattage		Option -43: Lower Wattage		Max. Standby Wattage (-49-65-66-LS)	Ceiling Cut-Out Diameter
		Pulse MH	-24 (HPS)	Pulse MH	-24 (HPS)		
HRR-04030	ED-17/Med	100	100	50-70	50-70	—	5.0"
HRR-06031	ED-17/Med	175	150	50-150	50-150	100	6.5"
HRR-07032	ED-17/Med	200	150	50-175	50-150	100	8.0"

Options

Sources and Ballasts

- 24 HPS ballast instead. See wattage chart above for available wattages. Specify voltage.
- 39 Electronic dimming ballast instead, for pulse start metal halide. Consult factory for wattage and voltage availability.
- 96 Regulating electronic MH ballast instead. Consult factory for 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 instead. Consult factory.

Relays, Standby, Lamps (see chart)

- (-49, -65, -66, -HL NA for HRR-04030)**
- 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.
- HL Hi-Lo wiring modification for use with external relay systems (by others). 175 watt or above. CWA ballast only. Specify system.
- LP With lamp. Specify source, wattage, color temperature, and clear or coated. (3700°K standard for metal halide) Consult factory for other color temperatures.
- 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 lower cone. (CP x .95)
- 30 All White lower cone. (CP x .95)
- 31 White flange (only) on lower cone.
- 32 Trim extender. Broadens trim flange O.D. by 1".
- 45 Gasket above lower reflector flange. Stops dust streaks on ceiling.
- 63 Dune specular Alzak lower cone. (CP x .93)
- 69 Wheat specular Alzak lower cone. (CP x .92)
- 70 SofTex Clear etched lower cone. (CP x .92)
- 71 SofTex Dune etched lower cone. (CP x .89)
- 72 Black specular Alzak lower cone. (CP x .77)
- 77 SofTex Pewter etched lower cone. (CP x .85)

- 90 SofTex Champagne Gold etched lower cone. (CP x .90)
- 91 SofTex Wheat etched lower cone. (CP x .88)
- 92 Umber specular Alzak lower cone. (CP x .83)
- 93 Pewter specular Alzak lower cone. (CP x .88)
- 94 Custom color lower reflector. Consult factory.
- OG OptiGroove black seamless tapered aluminum lower reflector. White trim. (CP x .75)

Lenses

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

Mounting Options

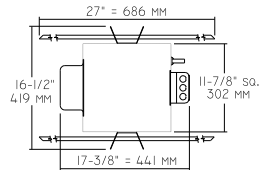
- 79 Extension collar for up to 2" thick ceilings.

Other Options

- 99 Special modification. Consult factory.
- TA Top access modification for servicing above ceiling.

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Plan View



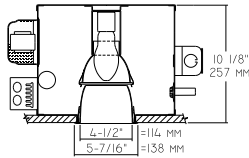
Cone of Light Key

- 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.

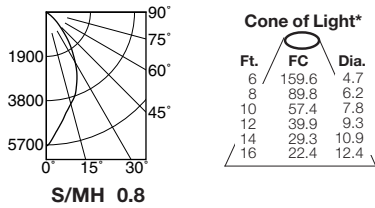
C.U. (Coefficients of Utilization) Tables are available on request. Please contact your Kirlin representative.

LIMITED WARRANTY: CATALOGUED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION MUST BE BY A QUALIFIED ELECTRICIAN. MANUFACTURER'S WARRANTY: MANUFACTURER'S WARRANTY SHALL BE VOID IF THE PURCHASER OR END USER MODIFIES OR ALTERS THE PRODUCT OR USES IT FOR A PURPOSE OTHER THAN THAT FOR WHICH IT WAS DESIGNED. THE WARRANTY SHALL BE VOID IF THE PURCHASER OR END USER DOES NOT FOLLOW THE INSTRUCTIONS FOR USE AND MAINTENANCE PROVIDED IN THE USER MANUAL. THE WARRANTY SHALL BE VOID IF THE PURCHASER OR END USER DOES NOT MAINTAIN THE PRODUCT IN ACCORDANCE WITH THE INSTRUCTIONS FOR USE AND MAINTENANCE PROVIDED IN THE USER MANUAL. THE WARRANTY SHALL BE VOID IF THE PURCHASER OR END USER DOES NOT MAINTAIN THE PRODUCT IN ACCORDANCE WITH THE INSTRUCTIONS FOR USE AND MAINTENANCE PROVIDED IN THE USER MANUAL.

HRR-04030 100W



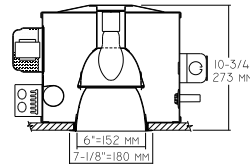
HRR-04030 (Coated Lamp)



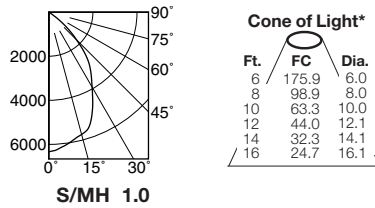
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	5744	5744	5744	5744	5744
5	5120	5120	5120	5120	5120
15	4075	4075	4075	4075	4075
25	3123	3123	3123	3123	3123
35	1859	1859	1859	1859	1859
45	757	757	757	757	757
55	69	69	69	69	69
65	5	5	5	5	5
75	2	2	2	2	2
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 36.9%
ITL TEST #51570
***LER = 25.2**
***AEC = \$9.52**

HRR-06031 175W



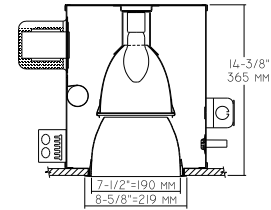
HRR-06031 (Coated Lamp)



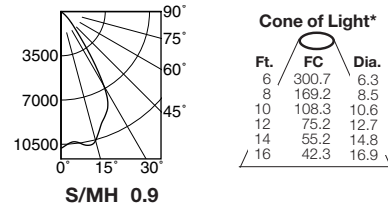
CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	6332	6332	6332	6332	6332
5	6170	6170	6170	6170	6170
15	5746	5746	5746	5746	5746
25	4705	4705	4705	4705	4705
35	3322	3322	3322	3322	3322
45	1781	1781	1781	1781	1781
55	253	253	253	253	253
65	24	24	24	24	24
75	6	6	6	6	6
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 49.1%
ITL TEST #51200
***LER = 36.9**
***AEC = \$6.51**

HRR-07032 200W



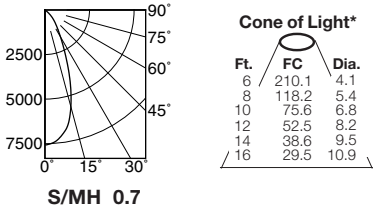
HRR-07032 (Coated Lamp)



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	10826	10826	10826	10826	10826
5	10357	10357	10357	10357	10357
15	10567	10567	10567	10567	10567
25	8630	8630	8630	8630	8630
35	3486	3486	3486	3486	3486
45	903	903	903	903	903
55	0	0	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 54.3%
ITL TEST #51703
***LER = 44.5**
***AEC = \$5.40**

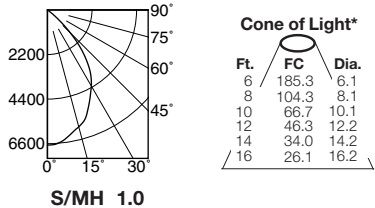
HRR-04030-15 (Clear Lamp)



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	7564	7564	7564	7564	7564
5	7370	7370	7370	7370	7370
15	5617	5617	5617	5617	5617
25	2657	2657	2657	2657	2657
35	1186	1186	1186	1186	1186
45	523	523	523	523	523
55	56	56	56	56	56
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 33.4%
ITL TEST #51571
***LER = 24.0**
***AEC = \$10.00**

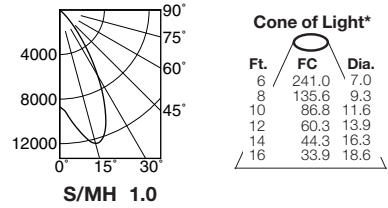
HRR-06031-15 (Clear Lamp)



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	6672	6672	6672	6672	6672
5	6582	6582	6582	6582	6582
15	5972	5972	5972	5972	5972
25	4930	4930	4930	4930	4930
35	3657	3657	3657	3657	3657
45	1589	1589	1589	1589	1589
55	82	82	82	82	82
65	5	5	5	5	5
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 46.8%
ITL TEST #51201
***LER = 37.1**
***AEC = \$6.48**

HRR-07032-15 (Clear Lamp)



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	8676	8676	8676	8676	8676
5	9684	9684	9684	9684	9684
15	12393	12393	12393	12393	12393
25	9545	9545	9545	9545	9545
35	4136	4136	4136	4136	4136
45	890	890	890	890	890
55	27	27	27	27	27
65	12	12	12	12	12
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

EFFIC: 57.8%
ITL TEST #51704
***LER = 49.7**
***AEC = \$4.83**

* 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