

High Efficiency, Long Life, "Pulse Start" Capable, Downlights and Wall Wash: 39 to 250 Watt

**THIS PRODUCT IS NO LONGER AVAILABLE**

**HRR-08203**  
**HRR-06204**

**Features**

**Lamp**

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

**Socket**

- Pulse rated, glazed porcelain.
- Nickel-plated brass screw shell. Silicon leads.

**Reflectors**

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

**Lens**

- HRR-08203: UV absorbing tempered MicroLux glass mounted to upper reflector.

**Ballast Assembly**

- WhisperPulse™ for pulse start ballast.

**AVAILABLE**

*Please consult*

**QUOTATIONS**

*for the best alternative.*

- 175-250 watt: Super CWA for 120 volt and Options -65, -66, -HL; Class H, linear reactor for 277 volt.
- Capacitor and ignitor supplied.
- Dimming (-39) and electronic (-96) ballast available. See Option -39, -96, -97, -98, -99, -100, -101, -102, -103, -104, -105, -106, -107, -108, -109, -110, -111, -112, -113, -114, -115, -116, -117, -118, -119, -120, -121, -122, -123, -124, -125, -126, -127, -128, -129, -130, -131, -132, -133, -134, -135, -136, -137, -138, -139, -140, -141, -142, -143, -144, -145, -146, -147, -148, -149, -150, -151, -152, -153, -154, -155, -156, -157, -158, -159, -160, -161, -162, -163, -164, -165, -166, -167, -168, -169, -170, -171, -172, -173, -174, -175, -176, -177, -178, -179, -180, -181, -182, -183, -184, -185, -186, -187, -188, -189, -190, -191, -192, -193, -194, -195, -196, -197, -198, -199, -200, -201, -202, -203, -204, -205, -206, -207, -208, -209, -210, -211, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221, -222, -223, -224, -225, -226, -227, -228, -229, -230, -231, -232, -233, -234, -235, -236, -237, -238, -239, -240, -241, -242, -243, -244, -245, -246, -247, -248, -249, -250, -251, -252, -253, -254, -255, -256, -257, -258, -259, 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- 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/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**
- Fixture, including ballast.
- Per current NEC.

**Wattage 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	Fixture Style
		Pulse MH	-24 (HPS)	Pulse MH	-24 (HPS)			
HRR-08203	ED-28/Mog	250	250	150-200	150	150	9.0"	Lensed
HRR-06204	ED-17/Med	100	100	50-70	35-70	—	6.5"	Open

**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 in 175W or above.

**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 Extra circuit DCB socket. Do not energize simultaneously with main source. Also see -LS. Not available for HRR-06204.
- 65 Electronic standby system and DCB socket. Following HID outage, provides immediate light

- until HID restrikes. Also see -66 and -LS. Not available for HRR-06204.
- 66 Electronic time delay standby system and DCB socket. Following outage, provides light until HID reaches 70% output. Also see Option -LS. Not available for HRR-06204.
- HL Hi-Lo wiring modification for use with external relay systems (by others). 175 watt or above. CWA ballast only. Specify system. Available for HRR-08203 only.
- LP With lamp. Specify source, wattage, color temperature, and clear or coated. Consult factory for color temperatures.
- LS With T-4 DCB tungsten halogen standby lamp. Use only with Options -49, -65 or -66. Not available for HRR-06204.

**Reflectors and Trims (Self-Flanged)**

- 16 Champagne specular Alzak 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.
- 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 etched 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) Not available for HRR-06204.
- WW Wall wash trim assembly for HRR-06204 only.
- DW Double wall wash assembly for HRR-06204 only.

**Lenses**

- 15 Prismatic flat C#73 glass instead.
- 28 UV absorbing clear tempered glass instead.

**Mounting Options**

- 79 Extension collar for up to 2" thick ceilings.
- 82 Sloped ceiling adapter, with mounting hardware. Specify 5° increments up to 30°.

**Other Options**

- 99 Special modification. Consult factory.
- TA Top access modification for servicing above ceiling. Not available for HRR-06204.

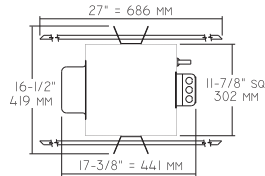


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### HRR-08203 HRR-06204

Plan View



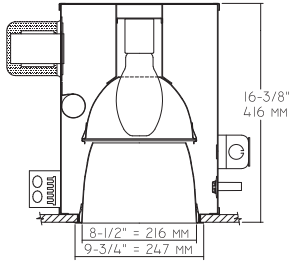
**Cone of Light Key**  
**Ft.** Distance from fixture  
**FC** Footcandles (average)  
**Dia.** Circle of light at 50% of FC  
 \* Dia. (in ft.) shown is where FC value is half the FC at nadir.

**SC = Spacing Criteria**

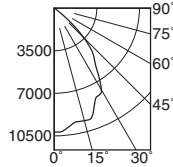
**C.U. (Coefficients of Utilization) Tables are available on request. Please contact your Kirlin representative.**

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALL TO N.E.C. IN NORMAL USE. Manufacturer at this option will replace or repair such fixture or lighting fixture at the purchase price or replacement of product of purchase and defective fixture at the option of manufacturer within three years of original purchase. 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. This warranty is subject to the terms and conditions of the Kirlin Limited Warranty. A detailed copy of this warranty or a copy of the Kirlin Limited Warranty can be obtained from the manufacturer.

### HRR-08203 250W



### HRR-08203 (Clear Lamp)



**SC 1.1**

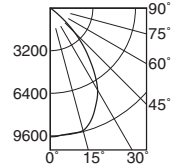
**EFFIC: 57.0%**  
**ITL TEST #53675**  
**\*LER = 45.9 \*AEC = \$5.23**

Cone of Light\*

Ft.	FC	Dia.
6	282.8	6.9
8	159.1	9.2
10	101.8	11.5
12	70.7	13.7
14	51.9	16.0
16	39.8	18.3

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	10180	10180	10180	10180	10180
5	10037	10037	10037	10037	10037
15	9574	9574	9574	9574	9574
25	8123	8123	8123	8123	8123
35	6056	6056	6056	6056	6056
45	3433	3433	3433	3433	3433
55	220	220	220	220	220
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

### HRR-08203-15 (Clear Lamp)



**SC 1.1**

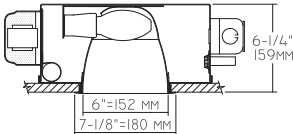
**EFFIC: 52.4%**  
**ITL TEST #53676**  
**\*LER = 42.2 \*AEC = \$5.69**

Cone of Light\*

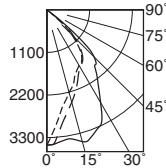
Ft.	FC	Dia.
6	268.7	6.7
8	151.1	9.0
10	96.7	11.2
12	67.2	13.4
14	49.3	15.7
16	37.8	17.9

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	9672	9672	9672	9672	9672
5	9579	9579	9579	9579	9579
15	9521	9521	9521	9521	9521
25	8079	8079	8079	8079	8079
35	5650	5650	5650	5650	5650
45	2594	2594	2594	2594	2594
55	250	250	250	250	250
65	12	12	12	12	12
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

### HRR-06204 100W



### HRR-06204 (Coated Lamp)



--- 0° SC 0.7  
 — 90° SC 1.2  
 - - 180° SC 0.8

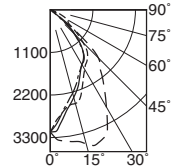
**EFFIC: 62.8%**  
**ITL TEST #53654**  
**\*LER = 33.8 \*AEC = \$7.11**

Cone of Light\*

Ft.	FC	Dia.
6	97.1	6.0
8	54.6	8.1
10	35.0	10.1
12	24.3	12.1
14	17.8	14.1
16	13.7	16.1

	CANDLEPOWER DISTRIBUTION				
	0.0	45.0	90.0	135.0	180.0
0	3496	3496	3496	3496	3496
5	2934	3142	3437	3385	3243
15	2210	2781	3523	3040	2473
25	1779	2523	3282	2536	1906
35	1566	1895	2291	1962	1605
45	915	1275	1715	1320	1000
55	21	25	32	32	32
65	8	9	9	10	9
75	4	4	4	5	4
85	0	1	1	2	2
90	0	0	0	0	0

### HRR-06204-WW (Coated Lamp)



WALL > --- 0°  
 — 90°  
 - - 180°

**EFFIC: 61.0%**  
**ITL TEST #53655**  
**\*LER = 32.8 \*AEC = \$7.32**

DISTANCE FROM CEILING IN FEET	SINGLE FIXTURE					MULTIPLE FIXTURES					
	1'	2'	3'	4'	3' CENTERS	4' CENTERS	3' CENTERS	4' CENTERS	3' CENTERS	4' CENTERS	
1	7.4	5.9	3.6	1.7	0.8	23.4	21.3	23.4	21.8	17.4	21.8
2	15.4	12.9	8.1	4.3	2.2	52.9	50.1	52.9	42.4	34.3	42.4
3	16.1	14.4	10.3	6.1	3.3	67.9	66.8	67.9	54.8	47.9	54.8
4	12.7	11.7	9.2	6.4	4.0	70.3	71.1	70.3	54.4	53.0	54.4
5	9.3	8.6	7.2	5.3	3.7	62.1	62.9	62.1	48.2	48.3	48.2
6	6.7	6.5	5.7	4.5	3.4	53.7	54.0	53.7	42.2	42.3	42.2
7	5.0	4.8	4.3	3.7	2.9	47.3	47.7	47.3	37.4	37.4	37.4
8	3.9	3.9	3.6	3.1	2.5	42.0	42.2	42.0	33.9	33.1	33.9
9	3.0	3.0	2.9	2.7	2.3	37.9	36.1	37.9	29.8	27.7	29.8

\* 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 @ \$.08 KWH).

### SUBMITTAL DATA

### APPROVAL STAMP

JOB NAME

TYPE

WATTAGE

VOLTAGE

CATALOG NUMBER