

Recessed Open End Lamp
 "Pulse Start" Voltage
 50 to 150 Watt

THIS PRODUCT IS NO LONGER AVAILABLE

100W
 150W
 150W

HRR-04019
 HRR-06020
 HRR-07021

Features

Lamp

- Designed for medium base open end 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. Medium base. Glazed porcelain rated.
- Pulse and open rated.
- Nickel-plated brass screw shell. Silicone leads.

Reflectors

- Inner: Self-flanged clear specular aluminum. Adjusts 360° for precise position.
- Eleven optical reflector finishes available.
- Optional double trim available.
- Outer: etched and anodized 100% aluminum for uniform wall washing.

Ballast Assembly: Select Voltage

- 50-150 watt: 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.
- Fused time delay reset for 180°.
- Acrylic enameled aluminum.
- Cool: Dissipates heat across entire surface.
- Resists smudges.
- Resists salt crystals.
- Passes 100% salt spray test.

- Entire luminaire serviced from below through removable reflector.
- 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**
- Includes standard fixture, including ballast.
- Per current NEC.

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

Wattage Availability and Cut-Out Dimensions

Catalog No.	Lamp/Base	Standard Wattage		Option -43: Lower Wattage		Ceiling Cut-Out Diameter
		Pulse MH	-24 (HPS)	Pulse MH	-24 (HPS)	
HRR-04019	ED-17/Med	100	100	50-70	35-70	5.0"
HRR-06020	ED-17/Med	150	150	50-125	35-100	6.5"
HRR-07021	ED-17/Med	150	150	50-125	35-100	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.

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.

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 specular Alzak inner reflector. (CP x .93)
- 31 White flange (only) on self-flanged inner reflector.
- 32 Trim extender. Broadens trim flange O.D. by 1" to cover larger ceiling opening.
- 45 Gasket above inner reflector flange. Stops dust streaks on ceiling.
- 63 Dune specular Alzak inner reflector. (CP x .90)
- 69 Wheat specular Alzak inner reflector. (CP x .88)
- 70 SofTex Clear softly etched inner reflector. Resists smudges. (CP x .90)
- 71 SofTex Dune softly etched inner reflector. Resists smudges. (CP x .81)
- 77 SofTex Pewter softly etched inner reflector. Resists smudges. (CP x .78)

- 90 SofTex Champagne Gold softly etched inner reflector. Resists smudges. (CP x .84)
- 91 SofTex Wheat softly etched inner reflector. Resists smudges. (CP x .80)
- 93 Pewter specular Alzak inner reflector. (CP x .85)
- 94 Custom color inner reflector. Consult factory
- DW Double wall wash. 180° opposite.
- OG OptiGroove; black seamless tapered aluminum. White trim. Not available for HRR-04019. (CP x .80)

Mounting Options

- 79 Extension collar for up to 2" thick ceilings.
- 85 Ceiling Panel; with recessed fixture hole. Lays-in 2' x 2' grid. White.

Other Options

- 99 Special modification. Consult factory.

PS MET HALIDE
 REV/APRIL 2009



THE KIRLIN COMPANY

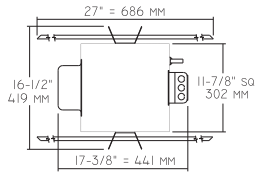
3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232
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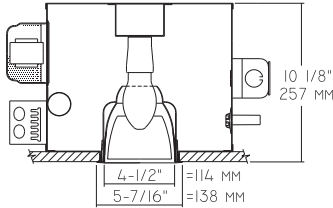
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Plan View

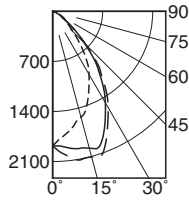


C.U. (Coefficients of Utilization) Tables are available on request. Please contact your Kirlin representative.

HRR-04019 100W



(Coated Lamp)

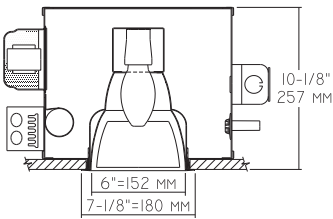


WALL > --- 0°
 --- 90°
 --- 180°

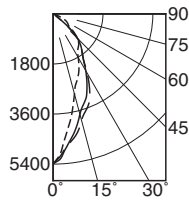
DISTANCE FROM CEILING IN FEET	SINGLE FIXTURE				MULTIPLE FIXTURES						
	1'	2'	3'	4'	3' CENTERS	4' CENTERS					
	FIXTURE INSTALLED 3' FROM WALL Footcandle Distribution on Wall Surface										
1	5.5	4.3	3.0	1.8	1.2	10.7	10.6	10.7	9.6	9.3	9.6
2	10.3	8.3	5.2	3.1	2.0	19.9	19.8	19.9	16.0	15.7	16.0
3	14.5	12.4	8.7	5.0	3.0	28.6	28.8	28.6	22.6	22.5	22.6
4	18.7	14.9	11.3	7.1	4.2	35.0	35.4	35.0	26.3	26.4	26.3
5	16.4	15.4	12.6	8.8	5.5	38.2	38.6	38.2	28.8	29.1	28.8
6	13.3	12.8	11.4	8.8	6.1	36.6	37.1	36.6	27.9	28.3	27.9
7	10.8	10.4	9.5	8.1	6.1	33.3	33.8	33.3	26.2	26.6	26.2
8	8.8	8.6	7.8	7.0	5.8	30.1	30.4	30.1	23.8	24.0	23.8
9	7.3	7.4	6.8	6.0	5.1	27.4	27.3	27.4	21.8	21.8	21.8

EFFIC: 36.6%
ITL TEST #51197
***LER = 21.8 •AEC = \$10.99**

HRR-06020 150W



(Coated Lamp)

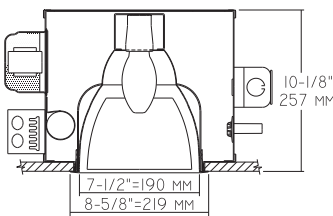


WALL > --- 0°
 --- 90°
 --- 180°

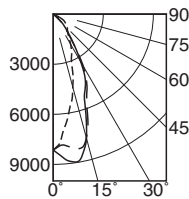
DISTANCE FROM CEILING IN FEET	SINGLE FIXTURE				MULTIPLE FIXTURES						
	1'	2'	3'	4'	3' CENTERS	4' CENTERS					
	FIXTURE INSTALLED 3' FROM WALL Footcandle Distribution on Wall Surface										
1	13.6	10.1	6.4	3.5	2.0	23.3	22.8	23.3	21.4	20.4	21.4
2	29.1	22.5	12.3	6.7	4.0	49.8	49.0	49.8	37.7	36.5	37.7
3	38.9	33.0	22.4	11.7	6.4	69.3	69.1	69.3	54.1	53.5	54.1
4	38.8	34.9	26.6	16.5	8.9	77.0	77.2	77.0	56.6	56.4	56.6
5	30.9	29.1	24.3	17.7	11.4	74.3	74.9	74.0	57.1	57.3	57.1
6	24.3	23.1	20.2	16.0	11.6	66.3	67.4	66.3	52.1	52.5	52.1
7	19.8	18.8	16.8	14.0	10.8	59.9	61.0	59.9	47.2	47.8	47.2
8	16.4	15.9	14.2	12.2	9.9	54.2	54.8	54.2	42.8	43.1	42.8
9	13.7	13.7	12.6	10.7	8.9	49.4	49.1	49.4	39.3	39.3	39.3

EFFIC: 44.3%
ITL TEST #51198
***LER = 27.3 •AEC = \$8.79**

HRR-07021 150W



(Coated Lamp)



WALL > --- 0°
 --- 90°
 --- 180°

DISTANCE FROM CEILING IN FEET	SINGLE FIXTURE				MULTIPLE FIXTURES						
	1'	2'	3'	4'	3' CENTERS	4' CENTERS					
	FIXTURE INSTALLED 3' FROM WALL Footcandle Distribution on Wall Surface										
1	13.6	9.8	6.0	3.1	2.0	23.2	22.7	23.2	23.1	22.1	23.1
2	31.9	25.0	13.6	6.9	4.0	54.5	54.3	54.5	40.3	39.2	40.3
3	42.1	36.0	25.1	13.4	6.8	74.3	74.8	74.3	57.8	57.0	57.8
4	40.2	36.0	27.3	17.3	9.3	79.8	80.5	79.8	58.7	58.4	58.7
5	33.4	30.8	24.6	16.9	10.4	75.5	76.2	75.5	58.8	59.0	58.8
6	28.7	27.3	23.1	17.0	11.3	72.2	73.3	72.2	56.5	57.1	56.5
7	24.8	23.7	21.3	16.8	12.0	69.8	70.5	69.8	54.0	54.8	54.0
8	21.8	21.1	18.9	16.1	12.3	66.9	67.1	66.9	51.9	52.1	51.9
9	19.3	19.2	17.4	14.7	11.9	63.7	63.1	63.7	49.3	48.9	49.3

EFFIC: 56.8%
ITL TEST #51199
***LER = 35.0 •AEC = \$6.86**

* 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 MANUFACTURED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLED TO N.E.C. IN NORMAL USE. Manufacturer at its option will replace or repair fixture or refund the purchase price on presentation of proof of workmanship and electrical fixture at the office of manufacturer. All other warranties, expressed or implied, Seller does not warrant as to merchantability or fitness for a particular use, nor will any oral statement constitute a warranty or amend this specific warranty. Abnormal use, abuse of the fixture, improper installation, or repair, or modification of the fixture without prior written authorization from the manufacturer will render this warranty void.