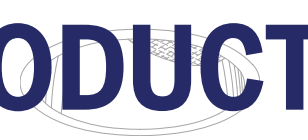
# Recessed Lensed E Lamp "Pulse Start" Adjustable 50 to 400 Watt



7" 150W
8" 150W
11" 400W

**HRR-07045**
**HRR-08046**
**HRR-11047**

**THIS PRODUCT IS NO LONGER AVAILABLE**

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

## Features

**Lamp**
- Designed for universal burn or Vent[illegible] M75 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**
- Pulse rated. Silicone leads. Glazed porcelain.
- Nickel-plated brass screw shell.
- Adjustable.

**Reflectors**
- Upper: Specular Alzak® aluminum, swivels 358° and tilts up to 30°.
- Lower: Low brightness specular Alzak® aluminum, self-flanged.
- Fourteen optional lower reflector finishes.

**Lens**
- UV absorbing tempered Microlux glass mounted to upper reflector. See Options.

**Ballast Assembly: Specific Voltage**
- Dispo-Pak™ fully encapsulated, 80°C rated [illegible] pulse start b[illegible] 50-5[illegible] watt [illegible] HID [illegible] volt and Options -65, -66; linear reactor for 277 volt.
- 175-400 watt: Super CWA for 120V and Options -65, -66, -HL; Class H, linear reactor for 277V.
- Capacitor and ignitor supplied.
- Dimming (-39) and electronic (-96) ballasts [illegible] See [illegible]
- [illegible] low [illegible] noise [illegible]
- Visible and easily serviced in all ceilings including [illegible]

**Fu[illegible]**
- [illegible] primary. Replaceable. [illegible]

**Housing**
- Acrylic enameled aluminum. Ventilated.
- [illegible] Exceeds [illegible] TM-L5[illegible] spray test.
- 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**
- [illegible] standard fixture, including ballast.

**[illegible] Protection**
- Per current NEC.

## Wattage Availability and Cut-Out Dimensions

| Catalog No. | Lamp/Base | Standard Wattage Pulse MH | Standard Wattage -24 (HPS) | Option -43: Lower Wattage Pulse MH | Option -43: Lower Wattage -24 (HPS) | Max. Standby Wattage (-49-65-66-LS) | Ceiling Cut-Out Diameter |
|---|---|---|---|---|---|---|---|
| HRR-07045 | ED-17/Med | 150 | 150 | 50-125 | 35-100 | 100 | 8.0" |
| HRR-08046 | ED-17/Med | 150 | 150 | 50-125 | 35-100 | 100 | 9.0" |
| HRR-11047 | ED-28/Mog | 400 | 250 | 150-320 | 150 | 150 | 12.25" |

## 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, 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.

-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. (3000ºK standard 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 Alzak lower reflector. (CP x .95)

-30 All White lower reflector. (CP x .95)

-31 White flange (only) on lower reflector.

-32 Trim extender. Broadens trim flange O.D. by 1" to cover larger ceiling opening.

-45 Gasket above reflector flange. Stops dust streaks on ceiling.

-63 Dune specular Alzak lower reflector. (CP x .93)

-69 Wheat specular Alzak lower reflector. (CP x .92)

-70 SofTex Clear etched lower reflector. (CP x .92)

-71 SofTex Dune etched lower reflector. (CP x .89)

-72 Black specular Alzak lower reflector. (CP x .77)

-77 SofTex Pewter etched lower reflector. (CP x .85)

-90 SofTex Champagne Gold etched lower reflector. (CP x .90)

-91 SofTex Wheat etched lower reflector. (CP x .88)

-92 Umber specular Alzak lower reflector. (CP x .83)

-93 Pewter specular Alzak lower reflector. (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 C#73 flat glass lens instead.

-28 UV absorbing clear tempered glass instead.

### Other Options
-99 Special modification. Consult factory.

-TA Top access; for servicing from above ceiling.

KIRLIN

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PS MET HALIDE
REV OCT 2014

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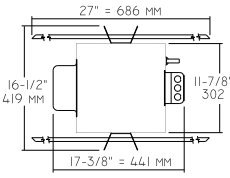
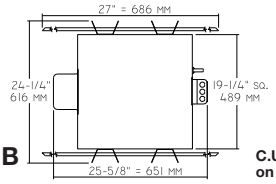
# KIRLIN *lighting since 1895*

## Performance at a Glance

# HRR-07045
# HRR-08046
# HRR-11047




**Plan View A**



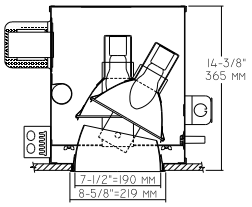

**Plan View B**

**Cone of Light Key**

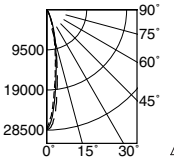
- **Ft.** Distance from fixture
- **FC** Footcandles (average)
- **Dia.** Circle of light at 50% of FC
- * Dia. (in ft.) shown is where FC value is half the FC at nadir.

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

## HRR-07045 150W (Plan View A)




### HRR-07045 (Clear Lamp)




**Cone of Light***

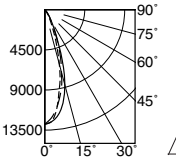
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 282.8 | 3.1 |
| 15 | 125.7 | 4.7 |
| 20 | 70.7 | 6.3 |
| 25 | 45.3 | 7.8 |
| 30 | 31.4 | 9.4 |
| 35 | 23.1 | 10.9 |

**S/MH 0.3**
**EFFIC: 38.2%**
**ITL TEST #52256**
***LER = 32.8**
**•AEC = $7.31**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 28281 | 28281 | 28281 | 28281 | 28281 |
| 5 | 19816 | 20550 | 21538 | 22109 | 24097 |
| 15 | 6605 | 7074 | 7767 | 7472 | 7808 |
| 25 | 1875 | 2018 | 2222 | 2110 | 1937 |
| 35 | 428 | 489 | 551 | 469 | 449 |
| 45 | 102 | 102 | 122 | 102 | 102 |
| 55 | 21 | 21 | 21 | 21 | 21 |
| 65 | 21 | 21 | 10 | 10 | 21 |
| 75 | 0 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-07045-15 (Clear Lamp)




**Cone of Light***

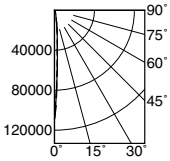
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 128.4 | 5.9 |
| 15 | 57.1 | 8.8 |
| 20 | 32.1 | 11.8 |
| 25 | 20.5 | 14.7 |
| 30 | 14.3 | 17.6 |
| 35 | 10.5 | 20.6 |

**S/MH 0.5**
**EFFIC: 37.3%**
**ITL TEST #52255**
***LER = 32.1**
**•AEC = $7.48**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 12841 | 12841 | 12841 | 12841 | 12841 |
| 5 | 12075 | 12401 | 12360 | 11989 | 11739 |
| 15 | 6317 | 8032 | 8748 | 8652 | 7243 |
| 25 | 1749 | 2095 | 2757 | 3291 | 2635 |
| 35 | 509 | 687 | 799 | 855 | 712 |
| 45 | 122 | 143 | 147 | 143 | 143 |
| 55 | 21 | 21 | 31 | 21 | 31 |
| 65 | 10 | 10 | 15 | 10 | 10 |
| 75 | 0 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-07045-28 (Clear Lamp)




**Cone of Light***

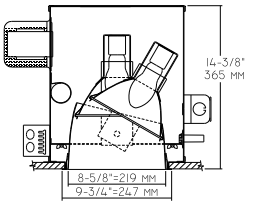
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 1091.4 | 1.0 |
| 15 | 485.1 | 1.6 |
| 20 | 272.8 | 2.1 |
| 25 | 174.6 | 2.7 |
| 30 | 121.3 | 3.2 |
| 35 | 89.1 | 3.7 |

**S/MH 0.1**
**EFFIC: 37.6%**
**ITL TEST #52257**
***LER = 32.3**
**•AEC = $7.42**
**MULTIPLY CANDELA BY 10.0**

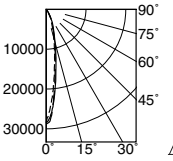
CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 10914 | 10914 | 10914 | 10914 | 10914 |
| 5 | 3321 | 3885 | 3401 | 3034 | 3140 |
| 15 | 500 | 580 | 553 | 468 | 564 |
| 25 | 191 | 191 | 170 | 139 | 139 |
| 35 | 21 | 21 | 21 | 16 | 11 |
| 45 | 0 | 0 | 0 | 0 | 0 |
| 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 |

## HRR-08046 150W (Plan View A)




### HRR-08046 (Clear Lamp)




**Cone of Light***

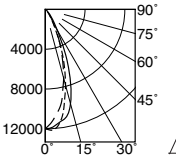
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 284.9 | 3.2 |
| 15 | 126.6 | 4.8 |
| 20 | 71.2 | 6.4 |
| 25 | 45.6 | 8.0 |
| 30 | 31.7 | 9.6 |
| 35 | 23.3 | 11.2 |

**S/MH 0.3**
**EFFIC: 47.1%**
**ITL TEST #52259**
***LER = 40.5**
**•AEC = $5.93**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 28492 | 28492 | 28492 | 28492 | 28492 |
| 5 | 20325 | 20529 | 22843 | 26557 | 21834 |
| 15 | 7278 | 7624 | 8715 | 8674 | 8256 |
| 25 | 2874 | 3170 | 3649 | 3710 | 3160 |
| 35 | 693 | 836 | 979 | 917 | 815 |
| 45 | 183 | 224 | 255 | 265 | 245 |
| 55 | 81 | 102 | 122 | 133 | 122 |
| 65 | 21 | 21 | 21 | 10 | 21 |
| 75 | 0 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-08046-15 (Clear Lamp)




**Cone of Light***

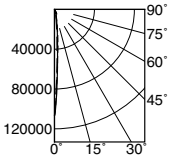
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 120.0 | 6.9 |
| 15 | 53.3 | 10.3 |
| 20 | 30.0 | 13.8 |
| 25 | 19.2 | 17.2 |
| 30 | 13.3 | 20.6 |
| 35 | 9.8 | 24.1 |

**S/MH 0.6**
**EFFIC: 47.2%**
**ITL TEST #52258**
***LER = 40.6**
**•AEC = $5.91**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 11994 | 11994 | 11994 | 11994 | 11994 |
| 5 | 12004 | 12045 | 11699 | 11215 | 10895 |
| 15 | 7884 | 9843 | 9807 | 8800 | 7141 |
| 25 | 2960 | 3810 | 4578 | 3866 | 3082 |
| 35 | 824 | 1093 | 1409 | 1211 | 977 |
| 45 | 234 | 310 | 437 | 437 | 377 |
| 55 | 132 | 143 | 193 | 213 | 203 |
| 65 | 10 | 10 | 10 | 15 | 21 |
| 75 | 0 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-08046-28 (Clear Lamp)




**Cone of Light***

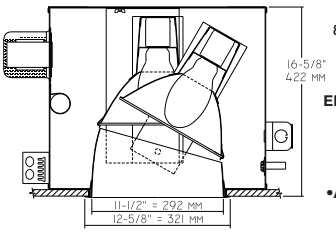
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 1068.2 | 1.1 |
| 15 | 474.8 | 1.7 |
| 20 | 267.0 | 2.3 |
| 25 | 170.9 | 2.8 |
| 30 | 118.7 | 3.4 |
| 35 | 87.2 | 3.9 |

**S/MH 0.1**
**EFFIC: 46.9%**
**ITL TEST #52260**
***LER = 40.3**
**•AEC = $5.95**
**MULTIPLY CANDELA BY 10.0**

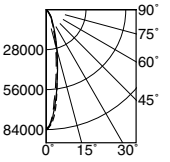
CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 10682 | 10682 | 10682 | 10682 | 10682 |
| 5 | 3874 | 3821 | 3534 | 3385 | 2821 |
| 15 | 521 | 591 | 612 | 607 | 468 |
| 25 | 330 | 378 | 410 | 505 | 437 |
| 35 | 43 | 48 | 59 | 43 | 43 |
| 45 | 11 | 5 | 5 | 5 | 0 |
| 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 |

## HRR-11047 400W (Plan View B)




### HRR-11047 (Clear Lamp)




**Cone of Light***

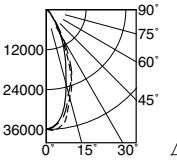
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 839.9 | 3.5 |
| 15 | 373.3 | 5.3 |
| 20 | 210.0 | 7.1 |
| 25 | 134.4 | 8.9 |
| 30 | 93.3 | 10.7 |
| 35 | 68.6 | 12.5 |

**S/MH 0.4**
**EFFIC: 54.4%**
**ITL TEST #51709**
***LER = 49.6**
**•AEC = $4.83**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 83988 | 83988 | 83988 | 83988 | 83988 |
| 5 | 71199 | 69165 | 68448 | 63927 | 64159 |
| 15 | 27860 | 28727 | 29327 | 25957 | 25124 |
| 25 | 10143 | 11211 | 11578 | 10994 | 10143 |
| 35 | 3769 | 4589 | 5588 | 5789 | 5504 |
| 45 | 1035 | 1284 | 1601 | 1869 | 1902 |
| 55 | 467 | 534 | 635 | 717 | 733 |
| 65 | 134 | 168 | 300 | 367 | 367 |
| 75 | 0 | 0 | 0 | 34 | 34 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-11047-15 (Clear Lamp)




**Cone of Light***

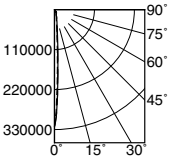
| Ft. | FC | Dia. |
|---|---|---|
| 10 | 358.7 | 7.1 |
| 15 | 159.4 | 10.7 |
| 20 | 89.7 | 14.3 |
| 25 | 57.4 | 17.8 |
| 30 | 39.9 | 21.4 |
| 35 | 29.3 | 24.9 |

**S/MH 0.7**
**EFFIC: 54.4%**
**ITL TEST #51708**
***LER = 49.6**
**•AEC = $4.83**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 35870 | 35870 | 35870 | 35870 | 35870 |
| 5 | 36033 | 35899 | 34516 | 34298 | 34699 |
| 15 | 27359 | 28910 | 23121 | 27043 | 25924 |
| 25 | 14413 | 16282 | 12395 | 15999 | 16581 |
| 35 | 4804 | 5839 | 5188 | 6223 | 6072 |
| 45 | 1735 | 2102 | 2018 | 2370 | 2303 |
| 55 | 666 | 834 | 935 | 1035 | 1035 |
| 65 | 168 | 249 | 467 | 601 | 635 |
| 75 | 0 | 0 | 0 | 34 | 34 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

### HRR-11047-28 (Clear Lamp)




**Cone of Light***

| Ft. | FC | Dia. |
|---|---|---|
| 10 | 3217.2 | 1.1 |
| 15 | 1429.9 | 1.7 |
| 20 | 804.3 | 2.3 |
| 25 | 514.8 | 2.8 |
| 30 | 357.5 | 3.4 |
| 35 | 262.6 | 3.9 |

**S/MH 0.1**
**EFFIC: 56.1%**
**ITL TEST #51438**
***LER = 51.2**
**•AEC = $4.69**
**MULTIPLY CANDELA BY 10.0**

CANDLEPOWER DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 |
|---|---|---|---|---|---|
| 0 | 32172 | 32172 | 32172 | 32172 | 32172 |
| 5 | 8433 | 10011 | 10896 | 11518 | 9485 |
| 15 | 1946 | 2419 | 2323 | 2945 | 2419 |
| 25 | 771 | 912 | 912 | 999 | 982 |
| 35 | 473 | 622 | 947 | 1043 | 912 |
| 45 | 35 | 44 | 70 | 96 | 70 |
| 55 | 0 | 0 | 9 | 9 | 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 |

* **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

JOB NAME

TYPE

WATTAGE VOLTAGE

CATALOG NUMBER

APPROVAL STAMP

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTIED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE, INSTALLED 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 offices 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 purchaser or any person. This warranty is supplied to the buyer in place of 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 the warranty void.