

Recessed Square Open
E-Lamp Downlights
39 to 250 Watt



4" 100W HRS-04157
6" 150W HRS-06158
8" 250W HRS-08159

THIS PRODUCT IS NO LONGER AVAILABLE

Features

Lamp

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

Socket

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

Reflectors

- Upper: Ellipsoidal specular Alzak aluminum.
- Lower: SoftTex softly etched pre-pewter aluminum. Self-flanged. Gasketing standard for HRS-04157.

Ballast Assembly

- WhisperPac™ fully encapsulated 180°C rated HPF pulse start ballast.

PLEASE CONSULT QUOTATIONS FOR THE BEST ALTERNATIVE.

- Entire luminaire serviced from below through removable reflector.
- Built-in plastic 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).

Limited Warranty

- One year standard fixture, including ballast.

Thermal Protection

- Per current NEC.

Wattage Availability and Cut-out Dimensions

| Catalog No. | Lamp/Base | Standard Wattage | | Option -43: Lower Wattage | | Ceiling Cut-Out |
|-------------|-----------|------------------|-----------|---------------------------|-----------|-----------------|
| | | Pulse MH | -24 (HPS) | Pulse MH | -24 (HPS) | |
| HRS-04157 | ED-17/Med | 100 | 100 | 50-70 | 35-70 | 5.25" Sq. |
| HRS-06158 | ED-17/Med | 150 | 150 | 50-125 | 35-100 | 6.75" Sq. |
| HRS-08159 | ED-28/Mog | 250 | 250 | 150-200 | 50-150 | 9.5" Sq. |

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. Consult factory.

Relays, Lamps (See Chart)

- HL Hi-Lo wiring modification for HRS-08159 only. For use with external relay systems (by others). Specify system separately.
- LP With lamp. Specify source, wattage, color temperature, and clear or coated. (3700°K standard for metal halide)

Reflectors and Trims (Self-flanged)

- 16 Champagne Gold specular Alzak lower reflector. (CP x 1.10)
- 30 All White lower reflector. (CP x 1.10)
- 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. Standard for HRS-04157.
- 62 Clear specular Alzak lower reflector. (CP x 1.16)
- 63 Dune specular Alzak lower reflector. (CP x 1.08)
- 69 Wheat specular Alzak lower reflector. (CP x 1.07)
- 71 SoftTex Dune etched lower reflector. (CP x .97)

- 72 Black specular Alzak lower reflector. (CP x .89)
- 77 SoftTex Pewter etched lower reflector. (CP x .92)
- 90 SoftTex Champagne Gold lower reflector. (CP x .97)
- 91 SoftTex Wheat etched lower reflector. (CP x .95)
- 92 Umber specular Alzak lower reflector. (CP x .96)
- 93 Pewter specular Alzak lower reflector. (CP x 1.02)
- 94 Custom color lower reflector instead. Consult factory.

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.
- TA Top access; for servicing from above ceiling.

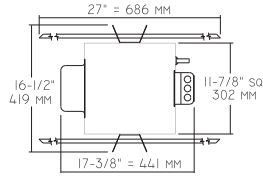
KIRLIN

THE KIRLIN COMPANY

3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232
(313) 259-6400 • Fax: (313) 259-9409 or (313) 259-3121 • www.kirlinlighting.com

HRS-04157
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Plan View

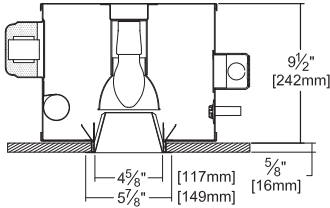


Cone of Light Key
Ft. Distance from fixture
FC Footcandles (average)
Dia. Circle of light at 50% of FC
 * Dia. (in ft.) shown is where FC value is half the FC at nadir.

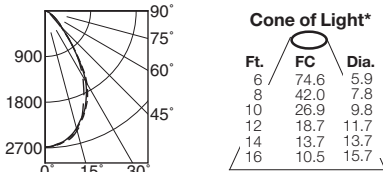
C.U. (Coefficients of Utilization)
Tables are available on request.
Please contact your Kirlin representative.

LIMITED WARRANTY: CATALOGUED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. 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 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 purchaser or any person. This warranty is supplied to the buyer in place of all other warranties, expressed or implied. Seller disclaims warranty 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 void the warranty void.

HRS-04157 100W



HRS-04157 (Coated Lamp)



Cone of Light*

| Ft. | FC | Dia. |
|-----|------|------|
| 6 | 74.6 | 5.9 |
| 8 | 42.0 | 7.8 |
| 10 | 26.9 | 9.8 |
| 12 | 18.7 | 11.7 |
| 14 | 13.7 | 13.7 |
| 16 | 10.5 | 15.7 |

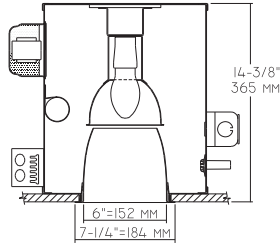
S/MH 1.0

| CANDLEPOWER DISTRIBUTION | | | | | |
|--------------------------|------|------|------|------|------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 2686 | 2686 | 2686 | 2686 | 2686 |
| 5 | 2655 | 2656 | 2647 | 2643 | 2638 |
| 15 | 2410 | 2444 | 2440 | 2428 | 2393 |
| 25 | 1966 | 1982 | 1812 | 1931 | 1918 |
| 35 | 1168 | 1279 | 1125 | 1235 | 1138 |
| 45 | 452 | 464 | 400 | 467 | 465 |
| 55 | 229 | 192 | 139 | 197 | 235 |
| 65 | 97 | 81 | 66 | 82 | 97 |
| 75 | 35 | 32 | 28 | 32 | 36 |
| 85 | 7 | 7 | 5 | 7 | 8 |
| 90 | 0 | 0 | 0 | 0 | 0 |

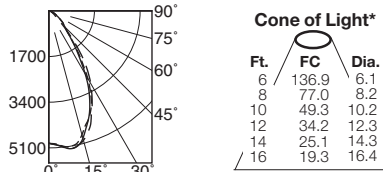
EFFIC: 39.6%

ITL TEST #51798
***LER = 23.6**
***AEC = \$10.16**

HRS-06158 150W



HRS-06158 (Coated Lamp)



Cone of Light*

| Ft. | FC | Dia. |
|-----|-------|------|
| 6 | 136.9 | 6.1 |
| 8 | 77.0 | 8.2 |
| 10 | 49.3 | 10.2 |
| 12 | 34.2 | 12.3 |
| 14 | 25.1 | 14.3 |
| 16 | 19.3 | 16.4 |

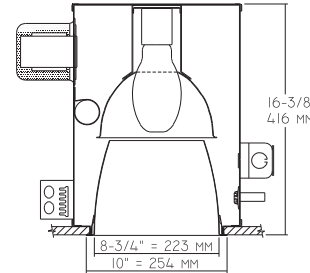
S/MH 1.0

| CANDLEPOWER DISTRIBUTION | | | | | |
|--------------------------|------|------|------|------|------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 4928 | 4928 | 4928 | 4928 | 4928 |
| 5 | 5030 | 5025 | 5055 | 5045 | 5040 |
| 15 | 4773 | 4842 | 4901 | 5005 | 4912 |
| 25 | 3755 | 3938 | 3824 | 3750 | 3597 |
| 35 | 1947 | 2164 | 2327 | 2031 | 1828 |
| 45 | 870 | 776 | 677 | 770 | 850 |
| 55 | 484 | 400 | 257 | 385 | 474 |
| 65 | 247 | 193 | 153 | 183 | 237 |
| 75 | 99 | 89 | 74 | 79 | 99 |
| 85 | 30 | 20 | 20 | 30 | 30 |
| 90 | 0 | 0 | 0 | 0 | 0 |

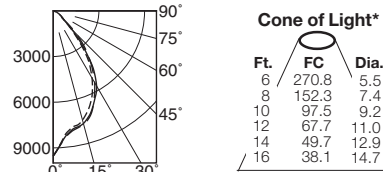
EFFIC: 49.0%

ITL TEST #51799
***LER = 31.7**
***AEC = \$7.57**

HRS-08159 250W



HRS-08159 (Coated Lamp)



Cone of Light*

| Ft. | FC | Dia. |
|-----|-------|------|
| 6 | 270.8 | 5.5 |
| 8 | 152.3 | 7.4 |
| 10 | 97.5 | 9.2 |
| 12 | 67.7 | 11.0 |
| 14 | 49.7 | 12.9 |
| 16 | 38.1 | 14.7 |

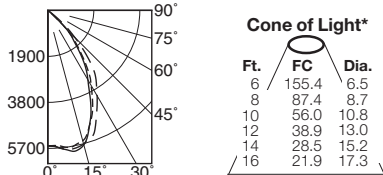
S/MH 0.9

| CANDLEPOWER DISTRIBUTION | | | | | |
|--------------------------|------|------|------|------|------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 9749 | 9749 | 9749 | 9749 | 9749 |
| 5 | 8469 | 8571 | 8632 | 8673 | 8575 |
| 15 | 7600 | 7743 | 7898 | 7944 | 7834 |
| 25 | 6193 | 6326 | 6507 | 6598 | 6579 |
| 35 | 4174 | 4443 | 4496 | 4764 | 4658 |
| 45 | 1656 | 1924 | 2212 | 2045 | 1800 |
| 55 | 703 | 594 | 397 | 605 | 711 |
| 65 | 340 | 269 | 193 | 276 | 340 |
| 75 | 129 | 102 | 83 | 98 | 129 |
| 85 | 23 | 15 | 15 | 15 | 15 |
| 90 | 0 | 0 | 0 | 0 | 0 |

EFFIC: 49.7%

ITL TEST #51801
***LER = 36.2**
***AEC = \$6.64**

HRS-06158-62 (Coated Lamp)



Cone of Light*

| Ft. | FC | Dia. |
|-----|-------|------|
| 6 | 155.4 | 6.5 |
| 8 | 87.4 | 8.7 |
| 10 | 56.0 | 10.8 |
| 12 | 38.9 | 13.0 |
| 14 | 28.5 | 15.2 |
| 16 | 21.9 | 17.3 |

S/MH 1.0

| CANDLEPOWER DISTRIBUTION | | | | | |
|--------------------------|------|------|------|------|------|
| | 0.0 | 22.5 | 45.0 | 67.5 | 90.0 |
| 0 | 5595 | 5595 | 5595 | 5595 | 5595 |
| 5 | 5619 | 5658 | 5701 | 5708 | 5711 |
| 15 | 5574 | 5632 | 5713 | 5761 | 5748 |
| 25 | 4387 | 4962 | 4756 | 4564 | 4198 |
| 35 | 2762 | 3358 | 3467 | 3073 | 2578 |
| 45 | 1121 | 1471 | 1564 | 1389 | 1103 |
| 55 | 26 | 29 | 67 | 27 | 24 |
| 65 | 9 | 7 | 5 | 7 | 7 |
| 75 | 5 | 5 | 2 | 3 | 5 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

EFFIC: 57.5%

ITL TEST #52144
***LER = 37.2**
***AEC = \$6.45**

* 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 _____