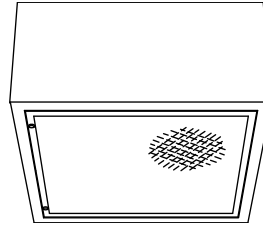


Surface Lensed E-Lamp Downlight : 150 to 400 Watt



20" 400W **HSS-20190**

Features

Lamp

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

Socket

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

Reflector

- GlasSurfaced™ clear specular aluminum.

Trim Assembly

- UV absorbing tempered low brightness prismatic flat glass.
- Rustfree die-formed door and captive thumb screw(s). Concealed hinges.
- Beveled cast aluminum frame tooled to

ensure close fit with door. White acrylic finish.

Ballast Assembly: Specify Voltage

- WhisperPack™ fully encapsulated 180°C rated HPF pulse start ballast.
- 150 watt: Class H, high reactance for 120 volt, linear reactor for 277 volt.
- 175-400 watt: CWA for 120 volt and Options -65, -66, -HL; Class H, reactor for 277 volt.
- Capacitor and ignitor supplied.
- Dimming (-39) and electronic (-96) ballasts available. See Options.
- Cool, quiet, long-life. Silicone leads.

Fuse

- Fused primary. Renewable. Not for 480 volt.

Housing

- Tempered, rigid rustproof aluminum:

Exceeds 1000 hour ASTM 5% salt spray test.

- Cool: Dissipates heat across entire surface.
- No visible housing hardware.

Installation

- Center point mounting with snug fit to ceiling. Mounting hardware furnished.
- Indoor or outdoor for covered ceiling use. (See Option -89)
- Collar for mounting beneath surface outlet box available. (Option -80)
- Pendant mount available. (Option -PM)
- Wall bracket mount available. (Option -WB)

UL, C-UL (Canada) Listings

- Wet, damp or dry locations, covered ceilings. (See Option -89)

Three Year Limited Warranty

- Complete standard fixture, including ballast.

Wattage Availability

Catalog No.	Lamp/Base	Standard Wattage		Option -43: Lower Wattage		Max. Standby Wattage (-49-65-66-LS)	Fixture Style
		PulseMH	-24 (HPS)	PulseMH	-24 (HPS)		
HSS-20190	ED-37/Mog	400	400	150-350	150-250	250	Downlight

Options

Sources and Ballasts

- 24 HPS ballast instead. See wattage chart above for available wattages. Specify voltage.
- 39 Remote (10' max.) electronic dimming ballast instead, for pulse start metal halide. Consult factory for wattage and voltage availability.
- 96 Remote (15' max.) electronic MH ballast instead. Consult factory for availability in 175W or above, or for internal mounting.

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, 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. Specify system separately.
- LP With lamp. Specify source, wattage, color temperature, and clear or coated. (3700°K standard for metal halide)
- LS With T-4 DCB tungsten halogen standby lamp. Use only with Options -49, -65 or -66.

Lenses and Trims

- 26 Tamperproof trim. One key / ten fixtures. See Option -27.
- 27 Clear 1/4" tempered glass beneath tempered prismatic C#73 flat glass lens for vandal resistance. Also see Option -26.
- 42 Drop polycarbonate prismatic lens instead.
- 46 Gasket between trim and lens.
- DG Drop Guard with tempered flat prismatic glass. Galvanized steel. White acrylic finish.
- TC Teflon coated safety lens; retains glass particles in event of breakage.

Luminaire (Housing) Finishes

- 35 Natural Aluminum enameled luminaire finish.
- 36 Gold enameled luminaire finish instead.
- 37 Dark Bronze enameled luminaire finish instead.
- 38 Black enameled luminaire finish instead.
- 94 Custom color luminaire finish. Consult factory.

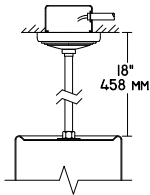
Mounting Options

- 54 Safety cable through pendant stem. 12" longer than specified stem length. Anchored to fixture. Use with Option -PM.
- 80 2" white extension collar for surface outlet box. Also see Option -89.
- 87 Custom -PM length. Specify up to 4 feet or consult factory for longer lengths with couplers.
- 88 Swivel canopy for sloped ceilings up to 45°. Earthquake rated. Use with Option -PM.
- 89 Sealed top feature prevents moisture and insect intrusion from above in outdoor or high humidity areas. Must add to Options -80, -PM or -WB for Wet Label listing.
- PM Pendant mount instead. 3/8" T.S. x 18" standard. Also see Options -54, -87, -88, -89.

Other Options

- 99 Special modification. Consult factory.

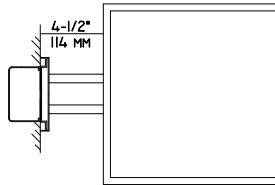
HSS-20190



Representative Views:

(Right) With optional wall bracket (Option -WB)

(Left) With optional pendant mount (Option -PM)

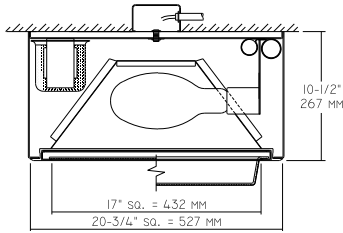


Cone of Light Key

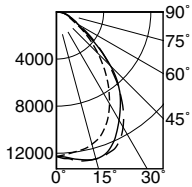
- Ft.** Distance from fixture
- FC** Footcandles (average)
- Dia.** Circle of light at 50% of FC
- * Dia. (in ft.) shown is where FC value is half the FC at nadir.

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

HSS-20190 400W



HSS-20190 (Coated Lamp)



Cone of Light*

Ft.	FC	Dia.
6	340.9	7.5
8	191.8	10.0
10	122.7	12.5
12	85.2	15.0
14	62.6	17.5
16	47.9	20.0

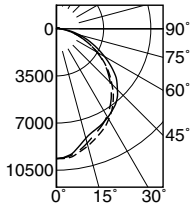
- 0° S/MH 1.1
- 90° S/MH 1.3
- 180° S/MH 1.3

EFFIC: 69.7%

ITL TEST #51635
*LER = 54.6
•AEC = \$4.39

	CANDLEPOWER DISTRIBUTION				
	0.0	45.0	90.0	135.0	180.0
0	12274	12274	12274	12274	12274
5	12085	12204	12444	12575	12515
15	11630	12169	12922	13293	12922
25	10195	11068	11786	12981	12348
35	7682	8352	9453	10314	9811
45	4977	5492	6509	6784	6294
55	2704	2956	2979	3553	3350
65	1316	1568	1640	1831	1579
75	838	849	861	982	982
85	336	275	287	311	311
90	0	0	0	0	0

HSS-20190-42 (Coated Lamp)



Cone of Light*

Ft.	FC	Dia.
6	96.4	11.8
8	42.8	17.6
10	24.1	23.5
12	15.4	29.4
14	10.7	35.3
16	7.9	41.1

- 0° S/MH 1.2
- 90° S/MH 1.2
- 180° S/MH 1.2

EFFIC: 72.6%

ITL TEST #52261
*LER = 56.9
•AEC = \$4.22

	CANDLEPOWER DISTRIBUTION				
	0.0	45.0	90.0	135.0	180.0
0	9638	9638	9638	9638	9638
5	9625	9572	9475	9486	9539
15	9001	8689	8420	8527	8785
25	8226	7967	7859	7849	7946
35	7214	7224	7300	7095	6955
55	4307	5362	4996	5265	4242
75	1400	2272	1787	2197	1400
90	280	431	312	431	280
105	151	172	162	172	151
125	43	0	43	0	43
145	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

APPROVAL STAMP

JOB NAME

TYPE

WATTAGE

VOLTAGE

CATALOG NUMBER

LIMITED WARRANTY: CATALOGED 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 its option will replace or repair such fixture or refund the purchase price on presentation of a written warranty claim. This warranty does not cover damage to the fixture caused by misuse, abuse, or modification of the fixture without prior written authorization from the manufacturer will render the warranty void.