

## Description

Sedona is a bollard unlike any other. It utilizes a decorative, edge lit glass block lens. This unique and patented concept provides a functional, low-glare source of light in an attractive, sculptural form. Model 1800-48 lamp source selections include metal halide, compact fluorescent or low voltage MR16 halogen. Our patented LumaLevel™ leveling system provides quick installation, easy adjustment, secure mounting and protection from vibration.

Catalog #	1800-48-MH39T6	Type	S1
Project	UNIVERSITY SQUARE DEVELOPMENT	Date	02-15-06
Comments			
Prepared by	KJWW ENGINEERING		

## SPECIFICATION FEATURES

### A ... Material

Housing is constructed from corrosion-resistant 6061 aluminum extrusion. Mounting base is cast from corrosion-resistant silicone aluminum alloy.

### B ... Finish

Fixture and mounting base are double protected by a chromate conversion undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. Fixture housing is available in a variety of standard colors. Mounting base is painted black.

### C ... Lens

Lens consists of an integral, edge lit decorative glass block, illuminated by a concealed lamp source.

### D ... Adjustable Mounting Base

Cast aluminum mounting base is equipped with the patented LumaLevel™ leveling system that includes mounting chassis, 70 shore neoprene base, stainless steel hardware and 3/4" conduit entry. It provides quick installation, easy adjustment, secure mounting and protection from vibration.

### E ... Anchor Bolts & Template

Three (3) 1/2" x 18" galvanized anchor bolts and a galvanized steel anchor bolt template are standard. Anchor bolts and template are available to ship in advance of fixtures for rough-in purposes (specify option -LAB and order anchor bolts/template kit separately).

### F ... Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

### G ... Socket

MH39T6: Ceramic socket with 250° C Teflon® coated lead wires and G12 base. CF42: Ceramic socket with 250° C Teflon® coated lead wires and GX24q universal base. 50MR16: Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

### H ... Electrical

MH39T6: Integral core & coil ballast is standard (120/208/240/277/347V). Rated for -20° C starting temperature. Integral electronic ballast (120/277V) is available (specify option -EL). CF42: Universal voltage (120/277V) electronic ballast is standard. Rated for -18° C starting temperature. 50MR16: 12V transformer required (not included). Remote transformers are available from Lumière as an accessory - see the Accessories & Technical Data section of this catalog for details. Integral 12V transformer is available as an option (specify option -IT).

### I ... Lamp

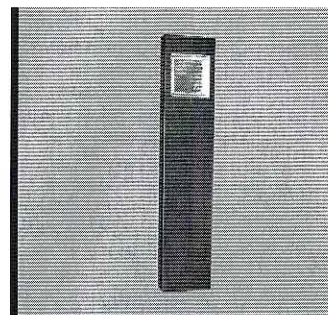
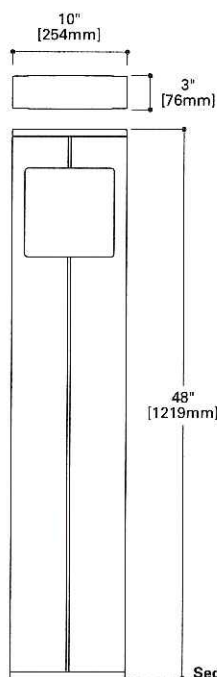
Not included. Available from Lumière as an accessory - see reverse side of this page.

### J ... Labels & Approvals

UL and cUL listed, standard wet label. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made.

### K ... Warranty

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.



**SEDONA**

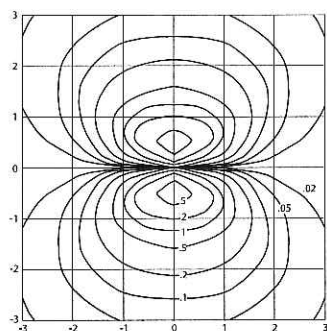
**1800-48**

**39W (max.) T6**  
Metal Halide

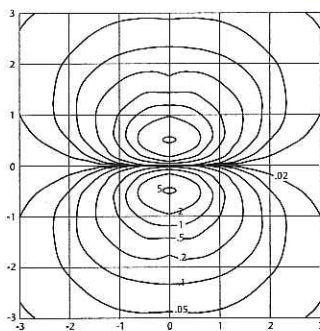
**42W (max.)**  
Compact Fluorescent  
Line Voltage

**(2) 20W (max.) MR16**  
Halogen  
Low Voltage

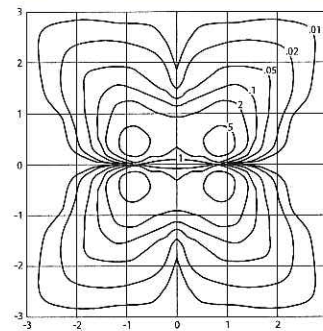
**48" Bollard**



1800-48-MH39T6



1800-48-CF42



1800-48-(2) 20MR16

## LAMP INFORMATION

Lamp	ANSI Code	Watts	Beam Spread	CBCP	°K	Life (hrs.)	Base	Volts
CDM39/T6	M130PO-REM/J/E	39	---	---	3000	12,000	G12 bi-pin	120-347
42TTT	---	42	---	---	2900	10,000	universal GX24q	120/277
20MR16/NSP	ESX	20	10°	3400	---	300 0	GU5.3 bi-pin	12

NOTE: Inferior quality lamps may adversely affect the performance of this product. Use only name brand lamps from reputable lamp manufacturers.

## NOTES AND FORMULAS

- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.





**KIM LIGHTING**

**AR**

The Archetype®

revision 2/14/00 • ar.pdf

Type: S2

Job: UNIVERSITY SQUARE DEVELOPMENT

Catalog number:

Approvals:

1A / 250HPS277 / A-25

Mtg. Fixture Electrical Module Finish Options  
See page 2 See pages 3-4

Optional  
Vertical  
Slipfitter Mount  
See page 5

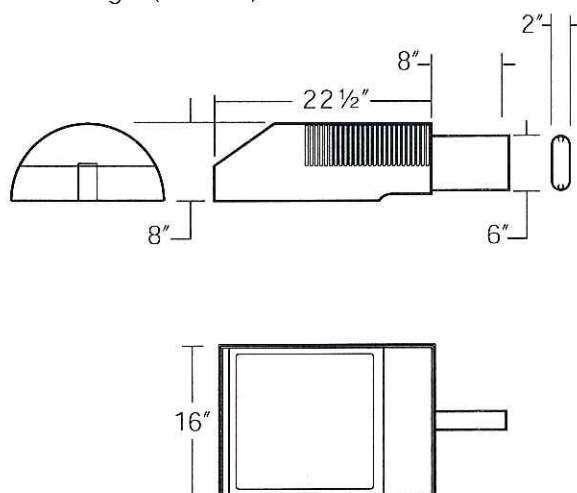
Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

Date:

Page: 1 of 5

## Specifications

Max weight (400HPS) = 45 lb



**Housing:** One piece die-cast aluminum with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece die-cast aluminum lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/16" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak® optical segments rigidly mounted in an aluminum frame, which attaches to the housing as a one piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

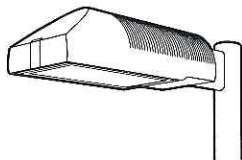
**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is audited to ISO9001 standards.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

Type: S2

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 2 of 5










## Standard Features

### Mounting

**3Y** configuration is available for round poles only.






Plan View:

						
EPA: 1.2	EPA: 2.4	EPA: 2.0	EPA: 3.2	EPA: 3.2	EPA: 3.9	n/a
Cat. No.: <input checked="" type="checkbox"/> <b>1A</b>	Cat. No.: <input type="checkbox"/> <b>2B</b>	Cat. No.: <input type="checkbox"/> <b>2L</b>	Cat. No.: <input type="checkbox"/> <b>3T</b>	Cat. No.: <input type="checkbox"/> <b>3Y</b>	Cat. No.: <input type="checkbox"/> <b>4C</b>	Cat. No.: <input type="checkbox"/> <b>1W</b>

### Fixture

Cat. No. designates fixture and light distribution.

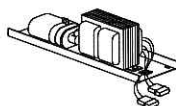
Also see the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.

				
Fixture Light Distribution: Type II	Fixture Light Distribution: Type III	Fixture Light Distribution: Type III	Fixture Light Distribution: Type IV Forward Throw	Fixture Light Distribution: Type V Square
Cat. No.: <input type="checkbox"/> <b>AR2</b>	Cat. No.: <input type="checkbox"/> <b>AR3</b>	Cat. No.: <input type="checkbox"/> <b>AR4</b>	Cat. No.: <input type="checkbox"/> <b>AR5</b>	

### Electrical Module

**HPS** = High Pressure Sodium

**MH** = Metal Halide

**PMH** = Pulse Start Metal Halide


Lamp Watts	Lamp Type	Line Volts
400	HPS	277

Cat. Nos. for Electrical Modules available:

	<input type="checkbox"/> <b>150HPS120</b> <input type="checkbox"/> <b>150HPS208</b> <input type="checkbox"/> <b>150HPS240</b> <input type="checkbox"/> <b>150HPS277</b> <input type="checkbox"/> <b>150HPS347</b> <input type="checkbox"/> <b>150HPS480</b>	<input type="checkbox"/> <b>250HPS120</b> <input type="checkbox"/> <b>250HPS208</b> <input type="checkbox"/> <b>250HPS240</b> <input checked="" type="checkbox"/> <b>250HPS277</b> <input type="checkbox"/> <b>250HPS347</b> <input type="checkbox"/> <b>250HPS480</b>	<input type="checkbox"/> <b>400HPS120</b> <input type="checkbox"/> <b>400HPS208</b> <input type="checkbox"/> <b>400HPS240</b> <input type="checkbox"/> <b>400HPS277</b> <input type="checkbox"/> <b>400HPS347</b> <input type="checkbox"/> <b>400HPS480</b>	<input type="checkbox"/> <b>175MH120</b> <input type="checkbox"/> <b>175MH208</b> <input type="checkbox"/> <b>175MH240</b> <input type="checkbox"/> <b>175MH277</b> <input type="checkbox"/> <b>175MH347</b> <input type="checkbox"/> <b>175MH480</b>
Lamp	E-23½, Clear 55 Volt	E-18, Clear	E-18, Clear	BT-28 or ED-28, Clear
Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base Pin-Oriented
ANSI Code	S-55	S-50	S-51	M-57
	<input type="checkbox"/> <b>250MH120</b> <input type="checkbox"/> <b>250MH208</b> <input type="checkbox"/> <b>250MH240</b> <input type="checkbox"/> <b>250MH277</b> <input type="checkbox"/> <b>250MH347</b> <input type="checkbox"/> <b>250MH480</b>	<input type="checkbox"/> <b>400MH120</b> <input type="checkbox"/> <b>400MH208</b> <input type="checkbox"/> <b>400MH240</b> <input type="checkbox"/> <b>400MH277</b> <input type="checkbox"/> <b>400MH347</b> <input type="checkbox"/> <b>400MH480</b>	<input type="checkbox"/> <b>250PMH120</b> <input type="checkbox"/> <b>250PMH208</b> <input type="checkbox"/> <b>250PMH240</b> <input type="checkbox"/> <b>250PMH277</b>	<input type="checkbox"/> <b>400PMH120</b> <input type="checkbox"/> <b>400PMH208</b> <input type="checkbox"/> <b>400PMH240</b> <input type="checkbox"/> <b>400PMH277</b> <input type="checkbox"/> <b>400PMH347</b> <input type="checkbox"/> <b>400PMH480</b>
Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clear
Socket	Mogul Base Pin-Oriented	Mogul Base Pin-Oriented	Mogul Base	Mogul Base
ANSI Code	M-58	M-59	M-138	M-135

### Finish

Super TGIC powder coat paint over a chromate conversion coating.

Color: Black Dark Bronze Light Gray Platinum Silver White \*Custom Color  
Cat. No.: ☐ **BL-P** ☐ **DB-P** ☐ **LG-P** ☐ **PS-P** ☐ **WH-P** ☐ **CC-P**

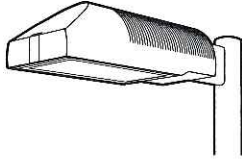
\* Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: \_\_\_\_\_



Type: S2

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 3 of 5



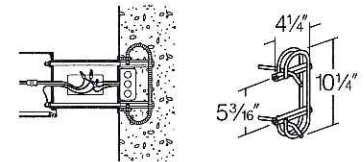
## Optional Features

### Wall Mounting

Cat. No. **1W**

Select from Mounting on page 2.

Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.



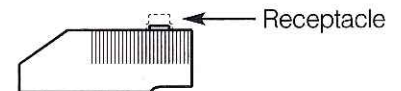
Wall mount using wall embedment bracket - J-box in wall (by others)

### Photocell Receptacle

Cat. No. ☒ **A-25**

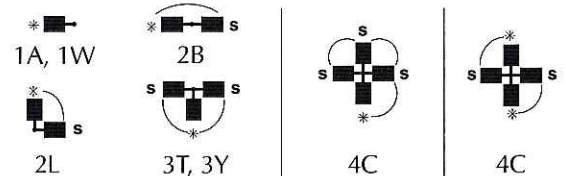
☐ No Option

Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.



Mounting (see page 2)

\* - Fixture with Photocell Receptacle  
S - slave unit(s)



Allowable wattage per fixture:

150-400W

150-250W

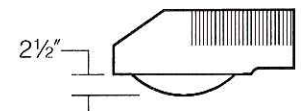
400W

### Convex Glass Lens

Cat. No. ☐ **CGL**

☒ No Option

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.



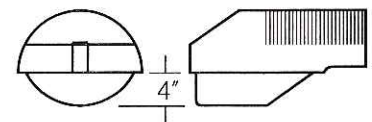
### Polycarbonate Shield

Cat. No. ☐ **LS**

☒ No Option

Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.



Type: S2

Job: UNIVERSITY SQUARE DEVELOPMENT

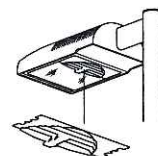
Page: 4 of 5

## Optional Features

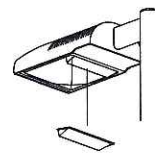
### Houseside Shield

Cat. No. (See right)  
☒ No Option

**(Types II, III, and IV only).** Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.



**HS**  
for flat lens



**HSC**  
for convex lens

Cat. No.

☐ **HS** Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions.

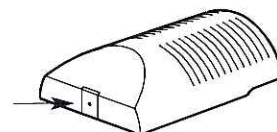
☐ **HSC** For use with all fixtures with convex glass lens. Not for use with Type V light distributions.

### Tamper-Resistant Latch

Cat. No. ☐ TL  
☒ No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

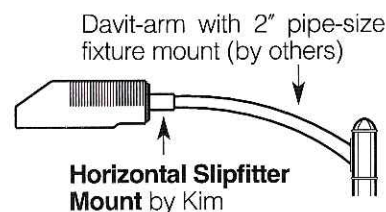
**NOTE:** Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.



### Horizontal Slipfitter Mount

Cat. No. ☐ HSF  
☒ No Option

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.

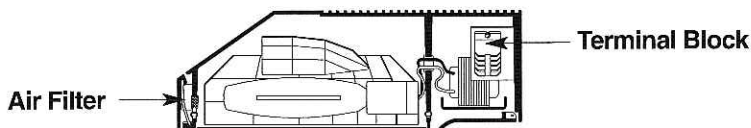


### Special Options for Street Lighting

Cat. No. ☐ AF  
☐ TB  
☒ No Option

**Air Filter (AF):** Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.

**Terminal Block (TB):** For field wire connections. 85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.





Type: S2

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 5 of 5

## Optional Features

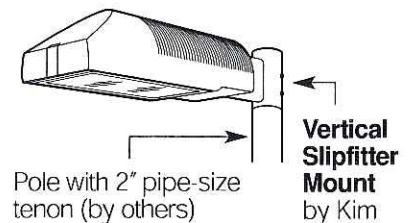
### Vertical Slipfitter Mounts

Cat. No. includes Mounting

Cat. No. (See right)

☐ No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.



Cat. No.

☐ VSF-1A

☐ VSF-2B

☐ VSF-2L

☐ VSF-3T

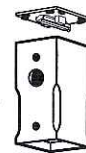
☐ VSF-3Y

☐ VSF-4C



Round

Stainless  
steel set  
screws



Square

Cat. No.

☐ SVSF-1A

☐ SVSF-2B

☐ SVSF-2L

☐ SVSF-3T

☐ SVSF-3Y

☐ SVSF-4C

Mounting Configuration

1A - single arm mount

2B - 2 at 180°

2L - 2 at 90°

3T - 3 at 90°

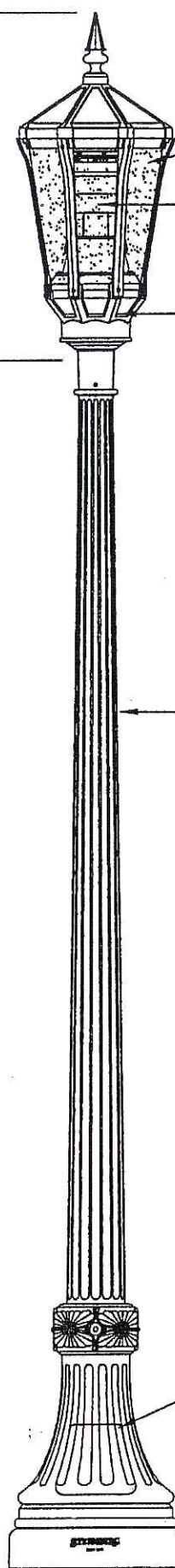
3Y - 3 at 120°

4C - 4 at 90°





13'-1 3/4"  
10'-2 1/2"



CLEAR SEEDED ACRYLIC LENS

NIGHTSKY LOUVER OPTICS TYPE 5

BALLAST COMPARTMENT

150 WATT METAL HALIDE BALLAST

6" TO 3 1/2" DIA.  
TAPERED AND FLUTED  
CAST ALUMINUM POLE  
.250 TO .500 WALL  
THICKNESS

POLE WELDED FOR SINGLE  
UNIT CONSTRUCTION

BLACK FINISH

ACCESS DOOR SECURED  
WITH STAINLESS STEEL  
ALLEN HEAD SCREWS

18" DIA. BASE  
1.00 FLOOR THICKNESS  
FOUR ANCHOR BOLTS  
AND ONE GROUND LUG

UNIVERSITY OF WISCONSIN MADISON - MURRAY MALL MS805B-E 6210TFP6-3	POLE HEIGHTS HAVE A TOLERANCE OF + OR - 2"	3/4" = 1'	DRAWING NUMBER WM-1
	JGT	SINCE 1923	
<p><b>SOCKET TYPE</b></p> <p><input checked="" type="checkbox"/> MEDIUM BASE <input type="checkbox"/> MOGUL BASE</p>			
<p><b>VOLTAGE</b></p> <p><input checked="" type="checkbox"/> /120~WIRE TO <input type="checkbox"/> /208 <input type="checkbox"/> /240 <input type="checkbox"/> /277 <input type="checkbox"/> /480 <input checked="" type="checkbox"/> /MULTI <input type="checkbox"/> /ADVISE</p>			
<p><b>LIGHT SOURCE AND WATTAGE</b></p> <p><input type="checkbox"/> INCANDESCENT  <input type="checkbox"/> 50 MV  <input type="checkbox"/> 75 MV  <input type="checkbox"/> 100 MV  <input type="checkbox"/> 175 MV  <input type="checkbox"/> 250 MV  <input type="checkbox"/> 50 MH  <input type="checkbox"/> 70 MH  <input type="checkbox"/> 100 MH  <input type="checkbox"/> 175 MH  <input type="checkbox"/> 250 MH  <input type="checkbox"/> 35 HPS  <input type="checkbox"/> 50 HPS  <input type="checkbox"/> 70 HPS  <input type="checkbox"/> 100 HPS  <input type="checkbox"/> 150 HPS  <input type="checkbox"/> 250 HPS  <input type="checkbox"/> /ADVISE</p>			

**STERNBERG**

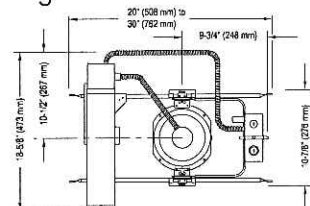




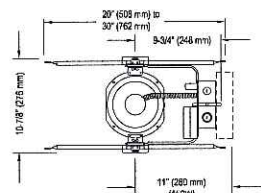
# Calculite® HID Downlight C6T6VW

Page 1 of 2

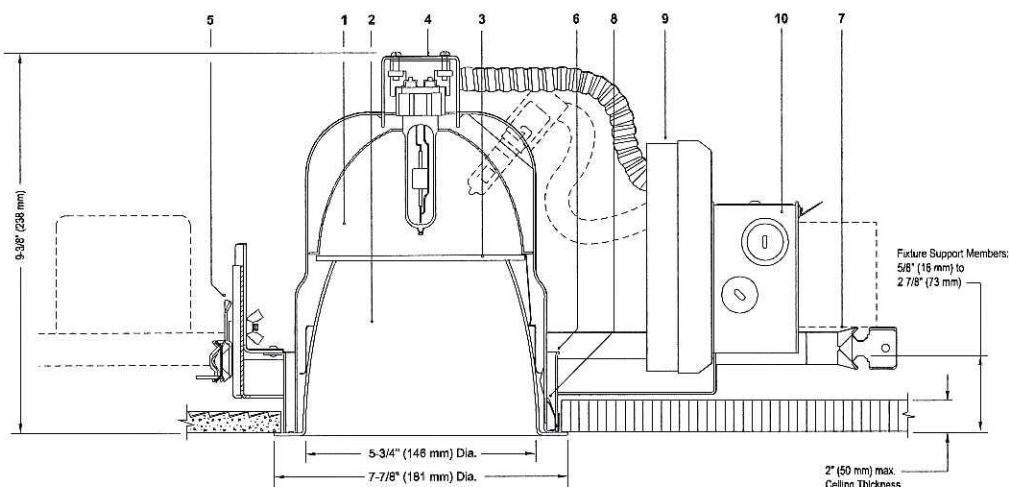
6" Aperture, 2pc Vertical, T6 Wide Beam



Top View: Magnetic Ballast



Top View: Electronic Ballast



Ceiling Cutout: 6 9/16" (167 mm) Dia.

Reflector Trim			Frame-In Kit		Lamp	
<b>C6T6VW</b>	<b>CLW</b>	Specular Clear, White Painted Flange.	<b>C639T6E1</b>	Electronic 120V	39W T6	Ceramic Metal Halide
	<b>CLP</b>	Specular Clear, Matching Flange.	<b>C639T6E2</b>	Electronic 277V	39W T6	Ceramic Metal Halide
	<b>CCDW</b>	Comfort Clear Diffuse, White Painted Flange.	<b>C670T6E1</b>	Electronic 120V	70W T6	Ceramic Metal Halide
	<b>CCDP</b>	Comfort Clear Diffuse, Matching Flange.	<b>C670T6E2</b>	Electronic 277V	70W T6	Ceramic Metal Halide
	<b>CCZW</b>	Champagne Bronze, White Painted Flange.	<b>C615T6E1</b>	Electronic 120V	150W T6	Ceramic Metal Halide
	<b>CCZP</b>	Champagne Bronze, Matching Flange.	<b>C615T6E2</b>	Electronic 277V	150W T6	Ceramic Metal Halide
			<b>C615T6U</b>	Magnetic 120V/277V	150W T6	Ceramic Metal Halide

## Features

- Upper Reflector:** Clear anodized aluminum, 0.040" (16-ga.). Provides wide beam optics ideal for general lighting. Also available in narrow and medium beam, see C6T6VN and C6T6VM specification sheets.
- Aperture Cone:** Provides 50° visual cut-off to lamp and lamp image; self-flange in painted white or aperture-matching polished flange. Consult factory for other finishes.
- Lamp Shield:** High-temperature glass as required by code, captive during re-lamping. Light diffusion provides exceptionally smooth beam.
- Socket Housing:** Galvanized steel, pre-wired with G12 pulse rated socket. Snaps onto upper reflector for secure attachment without tools; assures proper lamp alignment to optics for consistent performance..
- Mounting Frame:** 0.048" (18-ga.) galvanized steel. Vertical adjustment mechanism accommodates mounting to virtually any ceiling system using mounting bars (provided, or 1/2" EMT tubing (by others). Single locking feature secures all adjustments. Alignment holes and markings allow fixture to be preset prior to installation.
- Mounting Ring:** 0.048" (18-ga.) galvanized steel. Designed for vertical adjustment from above or below for ceilings from 0" to 2" thick. Center-line notches allow consistent alignment of multiple fixtures.
- Mounting Bars:** 0.048" (18-ga.) pre-installed, telescoping bars extend to 30" long and lock securely into position. Built-in locking tabs provide positive attachment to common T-bar systems. Self-centering feature simplifies installation in 24" O.C. grid systems. Attaches to steel or wood joists without accessories.
- Trim Retention Springs:** Rust resistant springs secure reflector/housing for quick, tool-less installation.
- Ballast / Socket Housing / Cover Assembly:** Snaps onto junction box without tools for inspection and ballast replacement, accessible from below.
- Junction Box:** 0.048" (18-ga.) galvanized steel. UL listed for 8 No. 12 AWG, 90°C through branch circuit conductors. Allows inspection from below.
- Thermal Protector:** (Not Shown) Meets NEC and UL requirements. Do not install insulation above nor within 3" (76mm) of any part of the luminaire.

## Electrical

**Electronic Ballast:** 120 or 277V, 50/60 Hz., encased, high power factor, T.H.D. <15%, thermally and transient protected, RMI/RFI complies with FCC Part 18 non-consumer equipment, shut-down circuit at end of lamp life, sound rating "A", -5°F (-20°F for 150W) minimum starting temperature, Type 1 outdoor rating.

## Electrical (cont.)

**150W Magnetic Ballast:** 120/277V dual voltage, 60 Hz., encased and potted, HX-HPF circuit type, high power factor, sound rating "B", -20°F minimum starting temperature, Type 1 Outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
39W MH	M130	120/277	0.39/0.17	44
70W MH	M139	120/277	0.67/0.29	78
150W MH	M142	120/277	1.40/0.60	169/166
* 150W MH	M142	120/277	3.70/1.60	180
* Magnetic Ballast				

## Options and Accessories

**Auxiliary:** Add suffix **A** to Frame-In Kit and Reflector Trim. See Spec. Sheet "A/E". For 277 electronic consult factory.

**Emergency:** Add suffix **E** to Reflector Trim and Frame-In Kit. See Spec. Sheet "A/E".

**Slope Ceiling Adapters:** See Specification Sheet SCA.

**Chicago Plenum:** Consult Factory.

## Labels

cULus (Suitable for Damp Locations), I.B.E.W.

For 150W, install fixtures with minimum spacing: 3 feet from center-to center of adjacent luminaires, 3" from top of luminaire to overhead building member; 1 1/2 feet from luminaire center to side building member.

Job Information		Type:	S4
<b>Job Name:</b> UNIVERSITY SQUARE DEVELOPMENT			
<b>Cat. No.:</b> C6T6VWCCDP			
<b>Lamp(s):</b> 39 WATT T6 METAL HALIDE			
<b>Notes:</b> KJWW ENGINEERING			

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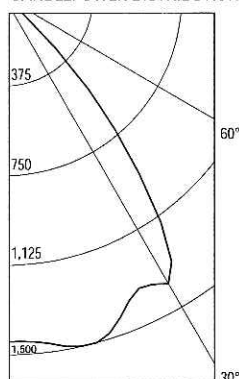
# Calculite® HID Downlight C6T6VW

Page 2 of 2

6" Aperture, 2pc Vertical, T6 Wide B 1

## 39W T6 PHILIPS CMH LAMP, LUMEN RATING = 3400 LMS, AROMAT ELECTRONIC BALLAST, CL FINISH TRIM

### CANDLEPOWER DISTRIBUTION



ANGLE	MEAN CP	LUMENS
0	1448	
5	1453	139
10	1489	
15	1502	420
20	1431	
25	1349	638
30	1390	
35	1157	695
40	726	
45	308	264
50	24	
55	3	7
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

### LUMINANCE SUMMARY CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	26087
55	338
65	0
75	0
85	0

### ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	1197	35.22	55.34
0-40	1893	55.68	87.47
0-60	2164	63.65	100
0-90	2164	63.65	100
40-90	271	7.97	12.53
60-90	0	0	0
90-180	0	0	0
0-180	2164	63.65	100

### Coefficients of Utilization

CEILING	80%				70%		50%		30%		
	70	50	30	10	50	10	50	10	50	10	
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.76	.76	.76	.76	.74	.74	.71	.71	.68	.68	.64
1	.73	.71	.70	.68	.70	.67	.67	.65	.65	.63	.60
2	.70	.67	.64	.62	.66	.62	.63	.60	.62	.59	.57
3	.66	.62	.59	.57	.61	.56	.60	.56	.58	.55	.53
4	.63	.58	.55	.53	.58	.52	.56	.52	.55	.51	.49
5	.60	.55	.51	.48	.54	.48	.53	.48	.52	.47	.46
6	.57	.51	.47	.45	.51	.44	.50	.44	.49	.44	.43
7	.53	.48	.44	.41	.47	.41	.46	.41	.45	.40	.39
8	.50	.44	.40	.38	.44	.37	.43	.37	.42	.37	.36
9	.47	.41	.37	.34	.41	.34	.40	.34	.39	.34	.33
10	.44	.38	.34	.31	.38	.31	.37	.31	.37	.31	.30

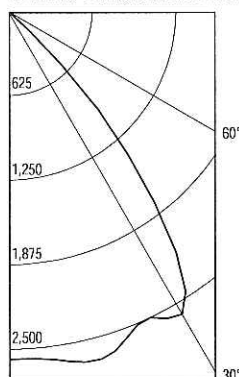
LUMINAIRE INPUT WATTS = 44

\*\* EFFICIENCY = 63.7% \*\*  
SC = 1.2

CERTIFIED TEST REPORT NO. 2327FR, DATE: OCT 25, 2003  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

## 70W T6 PHILIPS CMH LAMP, LUMEN RATING = 6600 LMS, AROMAT ELECTRONIC BALLAST, CL FINISH TRIM

### CANDLEPOWER DISTRIBUTION



ANGLE	MEAN CP	LUMENS
0	2579	
5	2582	248
10	2633	
15	2667	747
20	2575	
25	2503	1177
30	2594	
35	2181	1309
40	1382	
45	564	495
50	45	
55	8	14
60	2	
65	0	1
70	0	
75	0	0
80	0	
85	0	0
90	0	

### LUMINANCE SUMMARY CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	47753
55	792
65	11
75	0
85	0

### ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	2172	32.91	54.43
0-40	3481	52.75	87.24
0-60	3990	60.46	99.98
0-90	3990	60.47	100
40-90	509	7.72	12.76
60-90	0	0.01	0.02
90-180	0	0	0
0-180	3990	60.47	100

### Coefficients of Utilization

CEILING		80%				70%		50%		30%		
WALL		70	50	30	10	50	10	50	10	50	10	0
RCR		Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
REFLECTANCE 0 1 2 3 4 5 6 7 8 9 10	0	.72	.72	.72	.72	.71	.71	.67	.67	.65	.65	.61
	1	.69	.67	.66	.65	.66	.64	.64	.62	.61	.60	.57
	2	.66	.63	.61	.59	.62	.58	.60	.57	.58	.56	.54
	3	.63	.59	.56	.54	.58	.53	.57	.53	.55	.52	.50
	4	.60	.55	.52	.50	.55	.49	.53	.49	.52	.48	.47
	5	.56	.52	.48	.45	.51	.45	.50	.45	.49	.44	.43
	6	.54	.48	.45	.42	.48	.42	.47	.42	.46	.41	.40
	7	.50	.45	.41	.39	.44	.38	.44	.38	.43	.38	.37
	8	.48	.42	.38	.35	.41	.35	.41	.35	.40	.35	.34
	9	.45	.39	.35	.32	.38	.32	.38	.32	.37	.32	.31
10	.42	.36	.32	.29	.35	.29	.35	.29	.34	.29	.28	

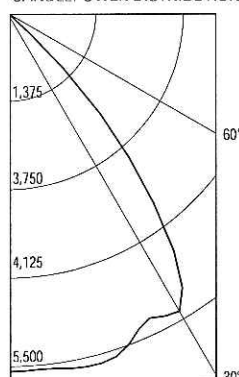
LUMINAIRE INPUT WATTS = 78

\*\* EFFICIENCY = 60.5% \*\*  
SC = 1.2

CERTIFIED TEST REPORT NO. 2323FR, DATE: OCT 04, 2003  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

## 150W T6 PHILIPS CMH LAMP, LUMEN RATING = 14000 LMS, AROMAT ELECTRONIC BALLAST, CL FINISH TRIM

### CANDLEPOWER DISTRIBUTION



ANGLE	MEAN CP	LUMENS
0	5583	
5	5573	533
10	5619	
15	5646	1588
20	5503	
25	5245	2472
30	5370	
35	4530	2727
40	2936	
45	1247	1071
50	102	
55	17	32
60	7	
65	1	2
70	0	
75	0	0
80	0	
85	0	0
90	0	

### LUMINANCE SUMMARY CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	105687
55	1783
65	209
75	0
85	0

### ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	4593	32.81	54.51
0-40	7321	52.29	86.88
0-60	8424	60.17	99.97
0-90	8426	60.19	100
40-90	1105	7.9	13.12
60-90	2	0.02	0.03
90-180	0	0	0
0-180	8426	60.19	100

### Coefficients of Utilization

CEILING	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR											
0	.72	.72	.72	.72	.70	.70	.67	.67	.64	.64	.60
1	.69	.67	.66	.64	.66	.63	.63	.61	.61	.59	.57
2	.65	.63	.61	.58	.62	.58	.60	.57	.58	.55	.53
3	.62	.58	.56	.53	.58	.53	.56	.52	.55	.51	.50
4	.59	.55	.52	.49	.54	.49	.53	.48	.52	.48	.46
5	.56	.51	.48	.45	.51	.45	.50	.45	.49	.44	.43
6	.53	.48	.44	.42	.47	.42	.47	.41	.46	.41	.40
7	.50	.45	.41	.38	.44	.38	.43	.38	.43	.38	.37
8	.47	.41	.38	.35	.41	.35	.40	.35	.40	.35	.34
9	.44	.38	.35	.32	.38	.32	.37	.32	.37	.32	.31
10	.42	.35	.32	.29	.35	.29	.35	.29	.34	.29	.28

LUMINAIRE INPUT WATTS = 167

\*\* EFFICIENCY = 60.2% \*  
SC = 1.25

CERTIFIED TEST REPORT NO. 2330FR, DATE: OCT 07, 2003  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

Job Information

Type:

S4

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www.lightolier.com

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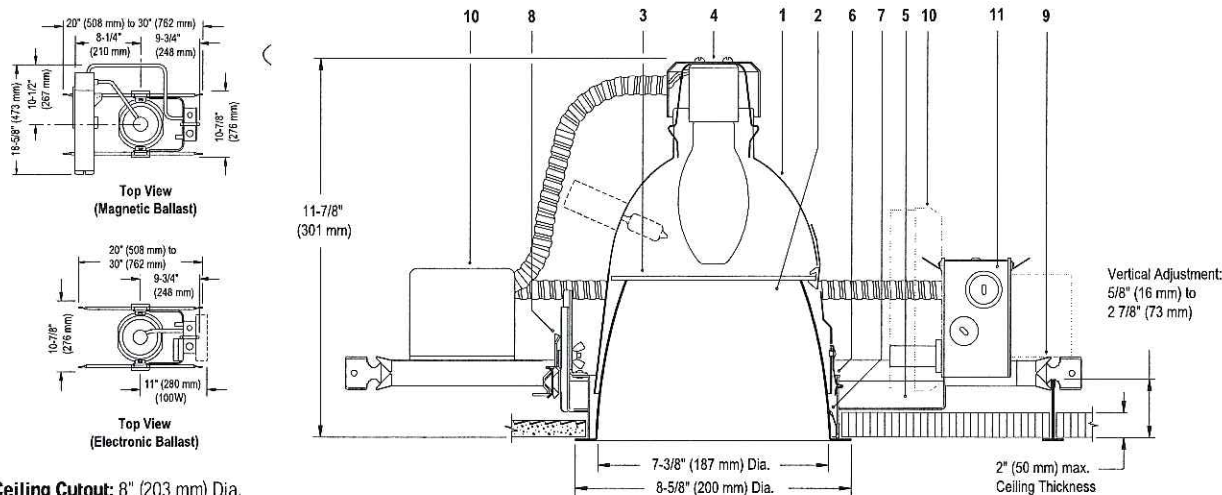
Lightolier®



# Calculite® HID Downlight **C7E17VW**

Page 1 of 2

7" Aperture, ED17 (Enclosed), Ceramic Metal Halide, Wide Beam



Ceiling Cutout: 8" (203 mm) Dia.

Reflector Trim			Frame-In Kit		Lamp (Coated, Ceramic MH)	
<b>C7E17VW</b>	<b>CLW</b>	Specular Clear, White Painted Flange.	<b>C770MHE1</b>	Electronic 120V	70W ED17, BD17	(Enclosed)
	<b>CLP</b>	Specular Clear, Matching Flange.	<b>C770MHE2</b>	Electronic 277V	70W ED17, BD17	(Enclosed)
	<b>CCDW</b>	Comfort Clear Diffuse, White Painted Flange.	<b>C710MHE1</b>	Electronic 120V	100W ED17, BD17	(Enclosed)
	<b>CCDP</b>	Comfort Clear Diffuse, Matching Flange.	<b>C710MHE2</b>	Electronic 277V	100W ED17, BD17	(Enclosed)
	<b>CCZW</b>	Champagne Bronze, White Painted Flange.	<b>C770MHU</b>	Magnetic 120V/277V	70W ED17, BD17	(Enclosed)
	<b>CCZP</b>	Champagne Bronze, Matching Flange.	<b>C710MHU</b>	Magnetic 120V/277V	100W ED17, BD17	(Enclosed)

## Features

- Upper Reflector:** Clear anodized aluminum, 0.040" (16-ga.). Provides wide beam distribution.
- Aperture Cone:** Provides 50° visual cut-off to lamp and lamp image; self-flange in painted white or aperture-matching polished flange. Consult factory for other finishes.
- Lamp Guard:** High heat resistant glass as required by code.
- Socket Housing:** Galvanized steel, snaps onto upper reflector for secure attachment without tools; assures proper lamp alignment to optics for consistent performance.
- Mounting Frame:** 0.048" (18-ga.) galvanized steel includes pre-installed mounting bars.
- Mounting Ring:** 0.048" (18-ga.) galvanized steel. Designed for vertical adjustment from above or below for ceilings from 0" to 2" thick. Center-line notches allow consistent alignment of multiple fixtures.
- Retention Springs:** Rust resistant springs secure cone in place for quick, tool-less installation.
- Frame Vertical Adjustment Mechanism:** Vertical adjustment mechanism accommodates mounting to virtually any ceiling system using pre-installed mounting bars, or 1/2" EMT tubing (by others). Single locking feature secures all adjustments. Alignment holes and markings allow fixture to be pre-set prior to installation.
- Mounting Bars:** 0.048" (18-ga.) Pre-installed, telescoping bars extend to 30" long and lock securely into position. Built-in locking tabs provide positive attachment to common T-bar systems. Self-centering feature simplifies installation in 24" O.C. grid systems. Attaches to steel or wood joists without accessories.
- Ballast:** Electronic 120V or 277V. Magnetic dual voltage (120V & 277V). Accessible from below for inspection and/or replacement without tools.
- Junction Box:** 0.048" (18-ga.) galvanized steel. UL listed for 8 No. 12 AWG, 90°C through branch circuit conductors; allows inspection from below.
- Thermal Protector:** (Not Shown) Meets NEC and UL requirements. Do not install insulation above nor within 3" (76mm) of any part of the luminaire.

## Electrical

**Electronic Ballast:** 120V or 277V, 50/60 Hz., encased, high-power factor, T.H.D. <15%, thermally and transient protected, RMI / RFI complies with FCC Part 18 non-consumer equipment, shut-down circuit at end of lamp life, sound rating "A", -5°F minimum starting temperature, Type 1 outdoor rating.

## Electrical (cont)

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	0.67/0.28	78
100W MH	M90/M140	120/277	0.90/0.43	110

**Magnetic Ballast:** 120/277V dual voltage, 60 Hz., encased and potted, HX-HPF circuit type, high power factor, sound rating "B", -20°F minimum starting temperature, Type 1 Outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	1.90/0.80	94
100W MH	M90/M140	120/277	2.40/1.10	125

## Options and Accessories

**Auxiliary:** Add suffix **A** to Frame-In Kit and Reflector Trim. See Spec.Sheet "A".

**Emergency Lamp:** Add suffix **E** to Reflector Trim and Frame In Kit. See Spec.Sheet "E".

**Slope Ceiling Adapters:** See Specification Sheet SCA.

**Fuse** (magnetic ballast): Add suffix **F1** or **F2** to Frame In Kit (F1=120V, F2=277V)

**Chicago Plenum:** Consult Factory.

## Labels

UL (Suitable for Damp Locations), CSA (magnetic ballast only), I.B.E.W.  
For 100W electronic, install fixtures with minimum spacing: 2 feet from center-to-center of adjacent luminaires; 1/2 inch from top of luminaire to overhead building member; 1 foot from luminaire center to side building member.

Job Information	Type:	S5
<b>Job Name:</b> UNIVERSITY SQUARE DEVELOPMET		
<b>Cat. No.:</b>		
C7E17VWCCDP-C710MHE2		
<b>Lamp(s):</b> 100 WATT METAL HALIDE		
<b>Notes:</b> KJWW ENGINEERING		

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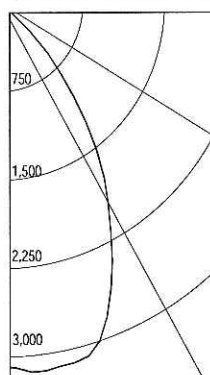
# Calculite® HID Downlight C7E17VW

Page 2 of 2

7" Aperture, ED17 (Enclosed), Ceramic Metal halide, Wide Beam

**70W ED17 (ENCLOSED) PHILIPS CMH, LUMEN RATING = 6000 LMS, AROMAT ELECTRONIC BALLAST, CL FINISH REFLECTOR TRIM**

## CANDLEPOWER DISTRIBUTION



ANGLE	MEAN CP	LUMENS
0	3077	
5	3138	298
10	3124	
15	3095	861
20	2830	
25	2407	1111
30	1960	
35	1523	949
40	1036	
45	609	461
50	130	
55	7	33
60	1	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

## LUMINANCE SUMMARY CD. / SQ. M.

ANGLE	MEAN CD/SQ. M.
45	34796
55	475
65	0
75	0
85	0

## ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	2269	37.83	61.13
0-40	3218	53.64	86.69
0-60	3712	61.87	99.99
0-90	3712	61.88	100
40-90	494	8.24	13.31
60-90	0	0	0.01
90-180	0	0	0
0-180	3712	61.88	100

## Coefficients of Utilization

CEILING	80%	70%	50%	30%
WALL	70 50 30 10	50 10	50 10	50 10 0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%			
0	.74 .74 .74 .74	.72 .72	.69 .69	.66 .66 .62
1	.71 .69 .68 .66	.68 .65	.65 .63	.63 .61 .58
2	.67 .65 .63 .61	.64 .60	.62 .59	.60 .57 .55
3	.64 .61 .58 .56	.60 .55	.58 .55	.57 .54 .52
4	.61 .57 .54 .52	.57 .51	.55 .51	.54 .50 .49
5	.59 .54 .50 .48	.53 .48	.52 .47	.51 .47 .46
6	.56 .51 .47 .45	.50 .45	.49 .44	.48 .44 .43
7	.53 .47 .44 .42	.47 .41	.46 .41	.45 .41 .40
8	.50 .44 .41 .38	.44 .38	.43 .38	.43 .38 .37
9	.47 .42 .38 .35	.41 .35	.41 .35	.40 .35 .34
10	.45 .39 .35 .33	.39 .33	.38 .33	.38 .33 .32

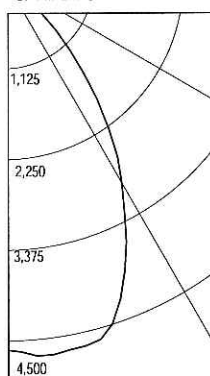
LUMINAIRE INPUT WATTS = 78.0

\*\* EFFICIENCY = 61.9% \*\*  
SC = 1.0

CERTIFIED TEST REPORT NO. 2412FR, DATE: JAN 12, 2004  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

**100W ED17 (ENCLOSED) PHILIPS CMH, LUMEN RATING = 9000 LMS, AROMAT ELECTRONIC BALLAST, CL FINISH REFLECTOR TRIM**

## CANDLEPOWER DISTRIBUTION



ANGLE	MEAN CP	LUMENS
0	4614	
5	4705	446
10	4685	
15	4641	1291
20	4244	
25	3609	1667
30	2940	
35	2283	1423
40	1553	
45	912	691
50	195	
55	9	48
60	1	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

## LUMINANCE SUMMARY CD. / SQ. M.

ANGLE	MEAN CD/SQ. M.
45	52135
55	639
65	0
75	0
85	0

## ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	3403	37.82	61.15
0-40	4826	53.62	86.71
0-60	5565	61.84	100
0-90	5565	61.84	100
40-90	739	8.22	13.29
60-90	0	0	0
90-180	0	0	0
0-180	5565	61.84	100

## Coefficients of Utilization

CEILING	80%	70%	50%	30%
WALL	70 50 30 10	50 10	50 10	50 10 0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%			
0	.74 .74 .74 .74	.72 .72	.69 .69	.66 .66 .62
1	.70 .69 .67 .66	.68 .65	.65 .63	.63 .61 .58
2	.67 .65 .63 .61	.64 .60	.62 .59	.60 .57 .55
3	.64 .61 .58 .56	.60 .55	.58 .54	.57 .54 .52
4	.61 .57 .54 .52	.57 .51	.55 .51	.54 .50 .49
5	.58 .54 .50 .48	.53 .48	.52 .47	.51 .47 .46
6	.56 .51 .47 .45	.50 .45	.49 .44	.48 .44 .43
7	.53 .47 .44 .42	.47 .41	.46 .41	.45 .41 .40
8	.50 .44 .41 .38	.44 .38	.43 .38	.43 .38 .37
9	.47 .42 .38 .35	.41 .35	.41 .35	.40 .35 .34
10	.45 .39 .35 .33	.39 .33	.38 .33	.38 .33 .32

LUMINAIRE INPUT WATTS = 110.0

\*\* EFFICIENCY = 61.8% \*\*  
SC = 1.0

CERTIFIED TEST REPORT NO. 2509FR, DATE: MAR 3, 2004  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

**LIGHTOLIER**

**Job Information**

**Type:**

**S5**

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The Archetype®

revision 2/14/00 • ar.pdf

**Type: S6**

**Job: UNIVERSITY SQUARE DEVELOPMENT**

**Catalog number:**

**Approvals:**

**2B / AR2 / 250HPS277 / A-25**

Mtg. Fixture Electrical Module Finish Options  
See page 2 See pages 3-4

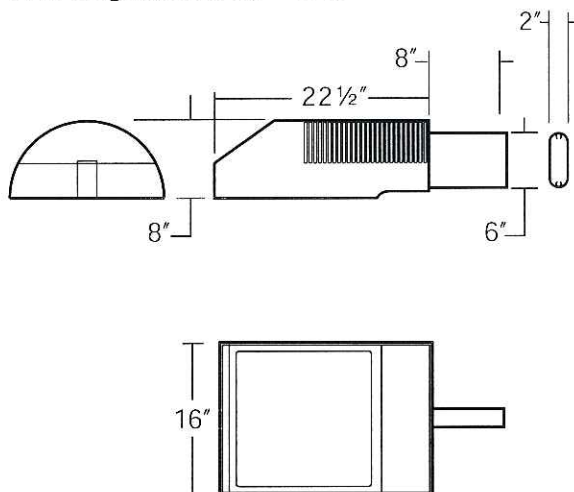
Optional  
Vertical  
Slipfitter Mount  
See page 5

Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

**Date:**  
**Page: 1 of 5**

## Specifications

Max weight (400HPS) = 45 lb



**Housing:** One piece die-cast aluminum with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece die-cast aluminum lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/16" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak® optical segments rigidly mounted in an aluminum frame, which attaches to the housing as a one piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is audited to ISO9001 standards.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

**KIM LIGHTING****AR**

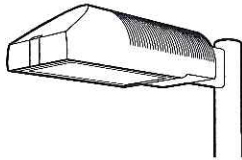
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Type: S6

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 2 of 5



## Standard Features

### Mounting

3Y configuration is available for round poles only.

Plan View:

EPA: 1.2	EPA: 2.4	EPA: 2.0	EPA: 3.2	EPA: 3.2	EPA: 3.9	EPA: n/a
Cat. No.: <input type="checkbox"/> 1A	Cat. No.: <input checked="" type="checkbox"/> 2B	Cat. No.: <input type="checkbox"/> 2L	Cat. No.: <input type="checkbox"/> 3T	Cat. No.: <input type="checkbox"/> 3Y	Cat. No.: <input type="checkbox"/> 4C	Cat. No.: <input type="checkbox"/> 1W

### Fixture

Cat. No. designates fixture and light distribution.

Also see the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.

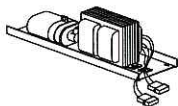
Fixture Light Distribution: Type II	Fixture Light Distribution: Type III	Fixture Light Distribution: Type IV Forward Throw	Fixture Light Distribution: Type V Square
Cat. No.: <input checked="" type="checkbox"/> AR2	Cat. No.: <input type="checkbox"/> AR3	Cat. No.: <input type="checkbox"/> AR4	Cat. No.: <input type="checkbox"/> AR5

### Electrical Module

HPS = High Pressure Sodium

MH = Metal Halide

PMH = Pulse Start Metal Halide



Lamp Watts	Lamp Type	Line Volts
400	HPS	277

Cat. Nos. for Electrical Modules available:

	<input type="checkbox"/> 150HPS120 <input type="checkbox"/> 150HPS208 <input type="checkbox"/> 150HPS240 <input type="checkbox"/> 150HPS277 <input type="checkbox"/> 150HPS347 <input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS120 <input type="checkbox"/> 250HPS208 <input type="checkbox"/> 250HPS240 <input checked="" type="checkbox"/> 250HPS277 <input type="checkbox"/> 250HPS347 <input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS120 <input type="checkbox"/> 400HPS208 <input type="checkbox"/> 400HPS240 <input type="checkbox"/> 400HPS277 <input type="checkbox"/> 400HPS347 <input type="checkbox"/> 400HPS480	<input type="checkbox"/> 175MH120 <input type="checkbox"/> 175MH208 <input type="checkbox"/> 175MH240 <input type="checkbox"/> 175MH277 <input type="checkbox"/> 175MH347 <input type="checkbox"/> 175MH480
Lamp	E-23½, Clear 55 Volt	E-18, Clear	E-18, Clear	BT-28 or ED-28, Clear
Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base Pin-Oriented
ANSI Code	S-55	S-50	S-51	M-57
	<input type="checkbox"/> 250MH120 <input type="checkbox"/> 250MH208 <input type="checkbox"/> 250MH240 <input type="checkbox"/> 250MH277 <input type="checkbox"/> 250MH347 <input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH120 <input type="checkbox"/> 400MH208 <input type="checkbox"/> 400MH240 <input type="checkbox"/> 400MH277 <input type="checkbox"/> 400MH347 <input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH120 <input type="checkbox"/> 250PMH208 <input type="checkbox"/> 250PMH240 <input type="checkbox"/> 250PMH277	<input type="checkbox"/> 400PMH120 <input type="checkbox"/> 400PMH208 <input type="checkbox"/> 400PMH240 <input type="checkbox"/> 400PMH277 <input type="checkbox"/> 400PMH347 <input type="checkbox"/> 400PMH480
Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clear
Socket	Mogul Base Pin-Oriented	Mogul Base Pin-Oriented	Mogul Base	Mogul Base
ANSI Code	M-58	M-59	M-138	M-135

### Finish

Super TGIC powder coat paint over a chromate conversion coating.

Color: Black Dark Bronze Light Gray Platinum Silver White \*Custom Color  
Cat. No.: ☐ BL-P ☐ DB-P ☐ LG-P ☐ PS-P ☐ WH-P ☐ CC-P

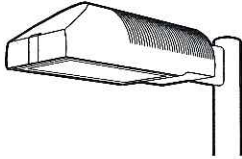
\* Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: \_\_\_\_\_



Type: S6

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 3 of 5



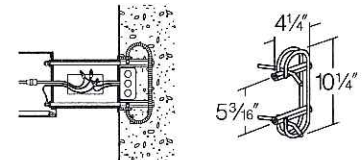
## Optional Features

### Wall Mounting

Cat. No. **1W**

Select from Mounting on page 2.

Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.



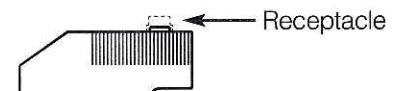
Wall mount using wall embedment bracket - J-box in wall (by others)

### Photocell Receptacle

Cat. No. ☒ **A-25**

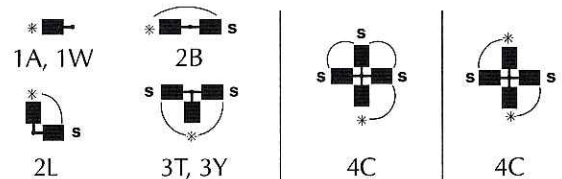
☐ No Option

Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.



Mounting (see page 2)

\* - Fixture with Photocell Receptacle  
S - slave unit(s)



Allowable wattage per fixture:

150-400W

150-250W

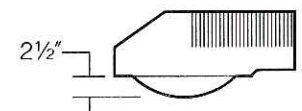
400W

### Convex Glass Lens

Cat. No. ☐ **CGL**

☒ No Option

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.



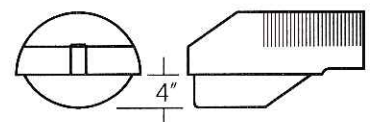
### Polycarbonate Shield

Cat. No. ☐ **LS**

☒ No Option

Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.





Type: S6

Job: UNIVERSITY SQUARE DEVELOPMENT

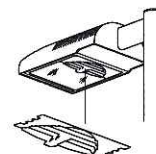
Page: 4 of 5

## Optional Features

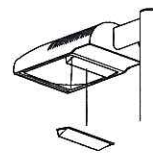
### Houseside Shield

Cat. No. (See right)  
☒ No Option

(Types II, III, and IV only). Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.



**HS**  
for flat lens



**HSC**  
for convex lens

Cat. No.

☐ **HS** Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions.

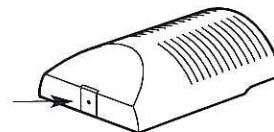
☐ **HSC** For use with all fixtures with convex glass lens. Not for use with Type V light distributions.

### Tamper-Resistant Latch

Cat. No. ☐ TL  
☒ No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

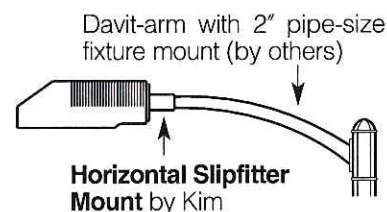
**NOTE:** Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.



### Horizontal Slipfitter Mount

Cat. No. ☐ HSF  
☒ No Option

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.

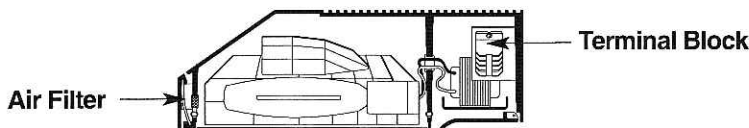


### Special Options for Street Lighting

Cat. No. ☐ AF  
☐ TB  
☒ No Option

**Air Filter (AF):** Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.

**Terminal Block (TB):** For field wire connections. 85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.



Type: S6

Job: UNIVERSITY SQUARE DEVELOPMENT

Page: 5 of 5

## Optional Features

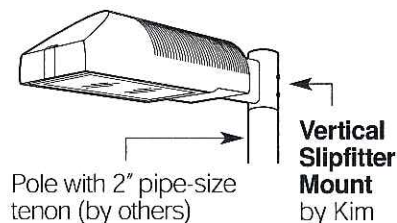
### Vertical Slipfitter Mounts

Cat. No. includes Mounting

Cat. No. (See right)

☐ No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.



Cat. No.

- ☐ VSF-1A
- ☐ VSF-2B
- ☐ VSF-2L
- ☐ VSF-3T
- ☐ VSF-3Y
- ☐ VSF-4C



Round

Stainless  
steel set  
screws



Square

Cat. No.

- ☐ SVSF-1A
- ☐ SVSF-2B
- ☐ SVSF-2L
- ☐ SVSF-3T
- ☐ SVSF-4C

Mounting Configuration

- 1A** - single arm mount
- 2B** - 2 at 180°
- 2L** - 2 at 90°
- 3T** - 3 at 90°
- 3Y** - 3 at 120°
- 4C** - 4 at 90°





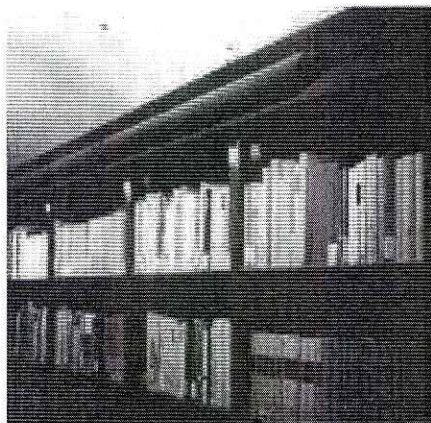
## Commercial Applications Signlighter



The Signlighter length may be varied to meet the job requirements.



End mounting brackets may be modified to suit unique conditions.



Many applications suit the Signlighter's versatile capabilities.

## SL SERIES

The Signlighter provides illumination for vertical surfaces with close mounting requirements. The unique fixture design provides greater lumen output as the illuminated surface becomes farther from the fixture, providing even illumination for signage, stack lighting, or wallwashing applications. Mounting arms may be customized as required. The remote ballast allows a minimal fixture profile. The Signlighter is suitable for wet locations when aimed in a downward direction.

**COLE**  
*Lighting*

C. W. Cole & Company, Inc.  
2560 N. Rosemead Boulevard  
South El Monte, CA 91733-1593

Fax (626) 443-9253  
Tel. (626) 443-2473  
info@colelighting.com  
www.colelighting.com



## Commercial Applications Signlighter

### SL SERIES

#### Specifications

##### Construction

- Fixture housing is extruded aluminum; maximum continuous length is 20'-0"
- Finish is metallic aluminum polyester coating. Other finishes are available.
- Lens is clear acrylic with linear prisms
- Reflector is adjustable for vertical light distribution
- Suitable for wet locations with lamp above lens
- ETL/cETL listed

##### Electrical

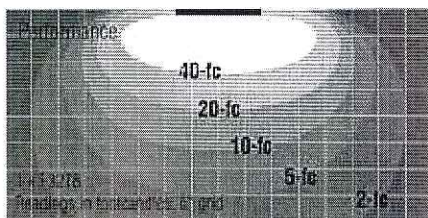
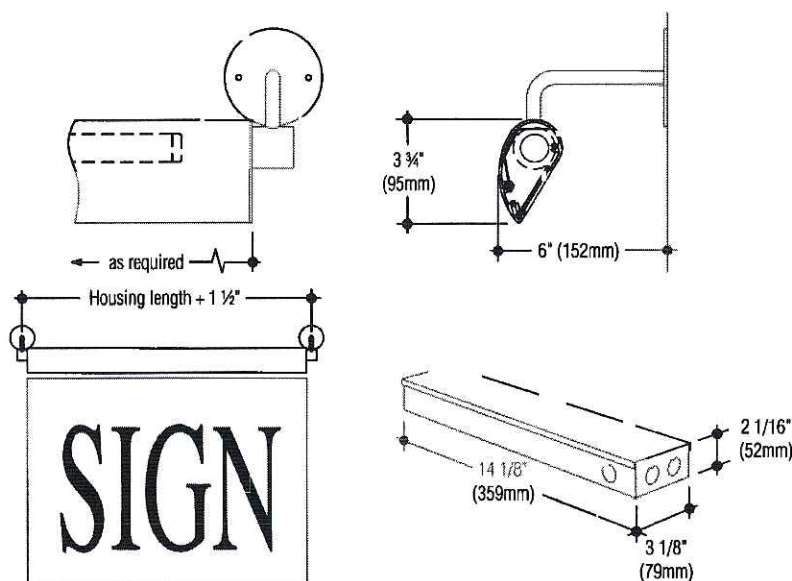
- Fixture is wired for T8 rapid-start or T8 or T5 high output fluorescent lamp(s), available in various lengths, as required
- Remote ballast is standard electronic 120V-277V (347V optional). Connecting flexible conduit not included.

##### Mounting

- Brackets mount with two screws (not included).
- Left bracket to be mounted over conduit flush with wall, unless otherwise specified
- Remote ballast to be within 18' of lamp

##### How to Specify

1. Select catalog number and add length required.
2. Add suffix(es) for desired options.



Isolux Footcandle Conversion Chart

Lamp Type	Lumens/foot	Multiplier
T8 Rapid Start fluor.	725	1.00
T8 High Output fluor.	1020	1.41
T5 High Output fluor.	1210	1.67

The isolux curves illustrated show the footcandle distribution for a Signlighter with a F32T8 rapid-start fluorescent lamp. The conversion chart provides the footcandles for T5 and T8 high output fluorescent lamps. The grid is 6". To calculate the footcandles for each iso curve for the high output lamps, use the multipliers in the chart. The lamp lengths available for each type of lamp are not necessarily consistent. For longer lengths, use the centerline values until nearing the ends. Adjustment of the reflector will change the values indicated. IES format photometric files are available.

#### Catalog Number

17W, 25W, 32W, 40W, or 59W T8 fluorescent  
44W, 55W, 65W, or 86W T8 high output fluorescent  
24W, 39W, or 54W T5 high output fluorescent

SL- (Housing length)  
SL- (Housing length) -T8HO  
SL- (Housing length) -T5HO

- Notes: 1. Housing length must be at least 3 1/2' more than the nominal lamp length.  
Example: SL-39 1/2" is minimum for 36" F25T8 lamp.  
2. Maximum continuous housing length is 20'-0" (6100mm)

#### Options

**Alternate Arms:** Provide detail. To specify, add suffix -ARM.

#### Alternate Painted Finishes:

Black, add suffix -BLK.  
Medium bronze, add suffix -MBZ.  
White, add suffix -WHT.  
Other color, add suffix -SP/ (color).

#### Ballasts:

277V ballast. To specify, add suffix -277.  
347V ballast. To specify, add suffix -347.  
**Brushed Natural Finish:** Clear anodized. To specify, add suffix -BNF.  
**Weatherproof:** Only with lamp above lens. To specify, add suffix -W.

**COLE**  
*Lighting*

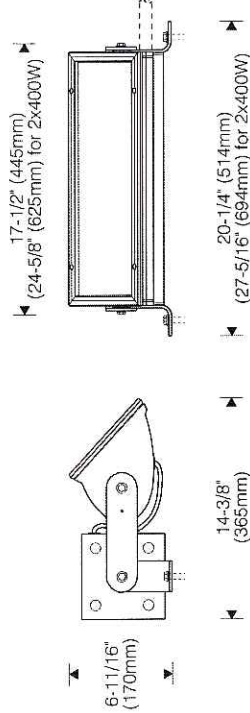
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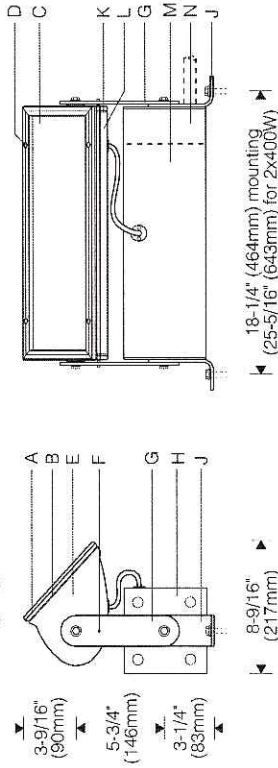
## S Mount: Low Profile Position

1:12 Scale



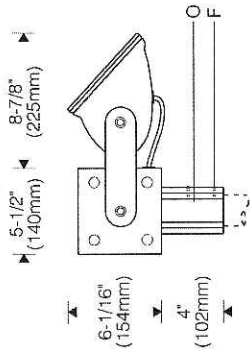
## S Mount: Upright Position

1:12 Scale



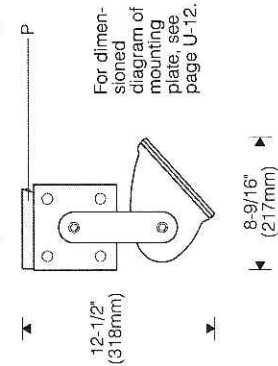
For 1000W metal halide, consult factory.

## F Mount: Slipfitter



## W Mount

(shown mounted on ceiling)



For dimensioned diagram of mounting plate, see page U-12.

## Specifications

- A** Mitted extruded aluminum door frame
- B** Pre-cured silicone door and lens gasket
- C** Clear, flat, thermal and impact resistant, tempered glass lens
- D** Tamper-resistant captive door screws
- E** Die-cast end plates
- F** Locking set screws
- G** Aluminum sidearms
- H** Cast end plates

## Finish:

Exterior surfaces - 6 stage pretreatment and electrostatically applied thermoset polyester powder coating for a durable abrasion, fade and corrosion resistant finish. Choice of semi-gloss colors (see ordering information).

Reflector and internal end plates - extruded high purity aluminum with clear anodized specular finish. All hardware and components - non corrosive stainless steel or aluminum. Door secured with captive tamper-resistant (#10 Torx) screws in stainless steel threaded reflector inserts to prevent seizing.

## Mounting:

Sidearms can be rotated 90° in the field to position the reflector above or to the side of the ballast housing.

**S** mount - L-shaped mounting feet attach under sidearms. 13/32" dia. (10mm) clearance holes (3/8" fasteners by others).

**F** mount - slipfitter mounts over 2-3/8" O.D. stanchion, pole or tenon (by others).

**W** mount - latch/hinge mounting plate fastens over recessed outlet box and allows hands free access to splices. For wall or ceiling only; suitable backing structure required (by others).

- J** Aluminum mounting feet
- K** Aluminum reveal plates (black)
- L** Specular extruded aluminum reflector
- M** Extruded ballast housing
- N** Internal splice compartment with (2) 1/2" NPT entries (S mount only)
- O** Aluminum slipfitter for 2-3/8" O.D. pipe or tenon
- P** Stainless steel latch/hinge mounting plate (black)

## Electrical:

Use 90°C wire for supply connections. Leads exit reflector and enter ballast housing through watertight flush cord entries and silicone coated fiberglass sleeving.

**S** mount - two 1/2" NPT entries (conduit, fittings by others).

**F** mount - 10" (254mm) leads within slipfitter for splicing inside conduit or tenon. For poles higher than 8', specify **OS** option.

Metal halide - position oriented mogul lampholder for use with either POMB horizontal or universal position lamp (medium base for 175W). Rotating bracket allows horizontal lamp to be locked in proper position after aiming (hinged lampholders for 2x400W are fixed in position to light up a vertical surface). End-of-lamp aligner ensures consistent optical performance.

HPS - pulse rated mogul lampholder (medium base for 150W).

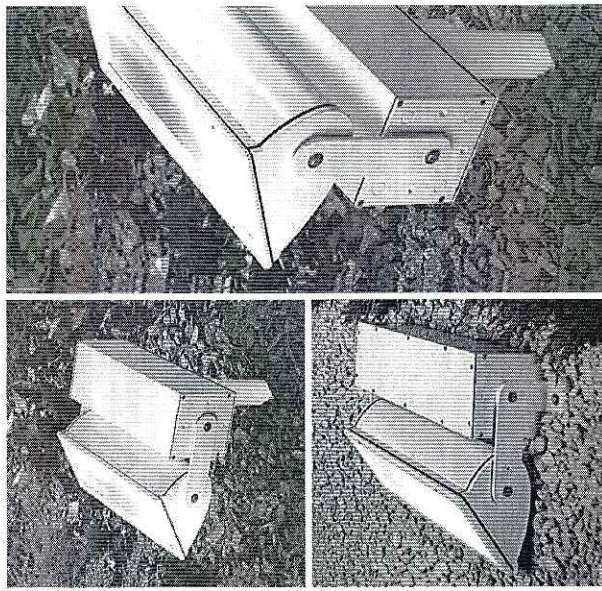
Ballast - integral HPF constant wattage autotransformer (CWA) rated for -20°F/-29°C starting (high reactance autotransformer (HX-HPF) for 150W HPS).

## Standard:

UL listed or CSA certified for wet locations.

When ceiling mounting with reflector positioned adjacent to ceiling, mount to non-combustible surface only.

REV. 11/02

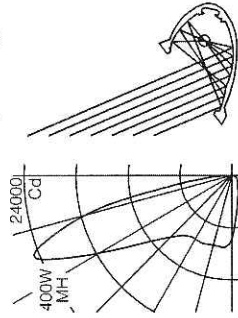


## Features

- Low unobtrusive profile - up to 2x400W metal halide, HPS
- Unequaled asymmetric performance with wide lateral distribution - allows closer setbacks, greater spacings
- Design flexibility - adjustable sidearms, choice of mountings
- Durable aluminum construction - extruded reflector, door frame and ballast housing; die-cast end plates

## Performance

Two parabolic reflector sections drive light up (or down) the vertical plane from one edge. An elliptical section redirects its light to a parabola and shields the lamp. Asymmetry is maximized resulting in high beam efficiency and superior surface uniformity. The fast "runback" minimizes glare and spill light. Wide lateral distribution permits greater spacings.



For complete photometrics, visit [www.elliptipar.com](http://www.elliptipar.com).

**elliptipar**



To form a Catalog Number

1 2 3 4 5 6 7 8

1 Source

M = Metal halide  
H = High pressure sodium

2 Style

454 = Large outdoor, integral ballast

3 Lamp

Lamp Code	Wattage	Lamp Number	Voltage(s)	Ballast
Metal Halide*				
0175	175	MH175/JMED	A, B, H	CWA
0250	250	MH250/HOR	A, B, H	CWA
0400	400	MH400/HOR	A, B, H	CWA
2400+	2x400+	(2) MH400/HOR	A, B, H	CWA

High Pressure Sodium

0150	150	LU150/MED	A, B, H	HX-HPF
0250	250	LU250	A, B, H	CWA
0400	400	LU400	A, B, H	CWA
2400	2x400	(2) LU400	A, B, H	CWA



\* For complete lamp and ballast information, see Accessories Section.

Use clear metal halide horizontal or universal position lamp with compact envelope. 250 and 400W lamps are horizontal position oriented mogul base (POMB) that yield higher light output than universal position lamps. Standard lamp colors are 4000K for 175W and 3200K for 250 and 400W.

For 1000W metal halide with integral ballast, consult factory.

+ 2x400W metal halide uses position oriented mogul lampholders that are hinged in position to light up a vertical surface ( $\pm 15^\circ$ ). To light down a vertical surface, consult local sales representative.

4 Mounting

F = Slipfitter for 2-3/8" O.D. stanchion, pole or tenon. For poles higher than 8' (2.4m), specify **0S** option code.  
S = L-shaped feet for surface mounting. Internal splice compartment with (2) 1/2" NPT threaded entries.  
W = Latch/hinge mounting plate fastens over recessed outlet box. Wall or ceiling mounting only.  
**Note:** When mounting on ceiling with reflector positioned adjacent to ceiling, mount to non-combustible surface only.

Project:

5 Finish

02 = Semi-gloss white  
06 = Dark bronze  
07 = Silver  
08 = Semi-gloss black  
12 = Green  
99 = Custom RAL or computer matched color to be specified, consult sales representative.

6 Voltage

A = 120V  
B = 277V  
H = 347V

7 Option (See Accessories Section for specifications)

00 = No options  
0S = F mount with slipfitter for mounting on pole higher than 8' (2.4m). Supplied with 30' (9m) wire leads.  
TL = Micro-prismatic tempered glass lens (replaces clear flat lens), offers smoother light pattern at reduced peak candlepower.  
XX = For modification not listed. Include detailed description. Consult factory prior to specification.

8 Standard

0 = UL, Underwriters Laboratories  
J = CSA, Canadian Standards Association

Example

M454 - 0250 - S - 02 - H - 00J

Large outdoor model for use with 250W metal halide lamp. Surface mounted with L-shaped feet. Internal splice compartment (liquidtight conduit and fittings by others). Semi-gloss white powder coat finish. Integral 347V ballast. CSA.

Type:

Accessories

Order separately. See Accessories Section for specifications.

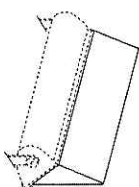
AE ☐ V ☐ 0D0 = External vertical blade baffle, black, for lengthwise shielding



2 = 25° shielding  
4 = 45°  
D = 150W-400W HID  
F = 2x400W HID

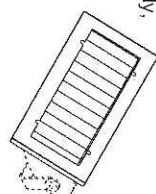
AV ☐ ☐ 0D0 = Cutoff visor

D = 150W-400W HID  
F = 2x400W HID



AXF = Wet location color filter assembly, interchangeable frame with stripped color glass.

**Not suitable for all lamp wattages.** Consult factory for complete specifications and ordering information.



AFK000X ☐ = Ballast fuse kit

0 = UL  
J = CSA

