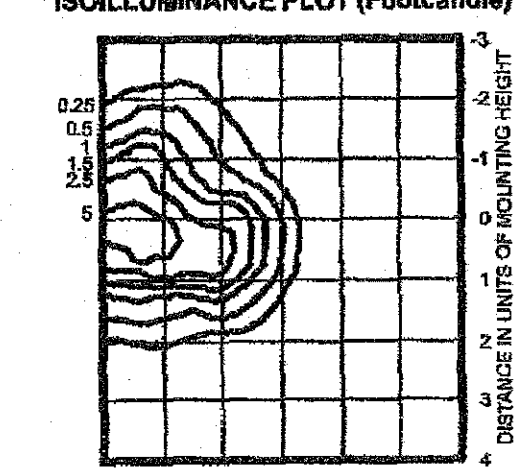


KSF1 Arm-Mounted Rectilinear Cutoff Lighting

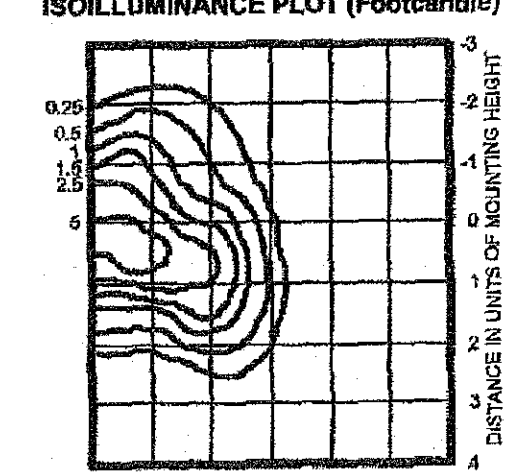
Coefficient of Utilization
Initial Footcandle

KSF1 250M R2 TEST NO: 1194080301P
ISOILLUMINANCE PLOT (Footcandle)



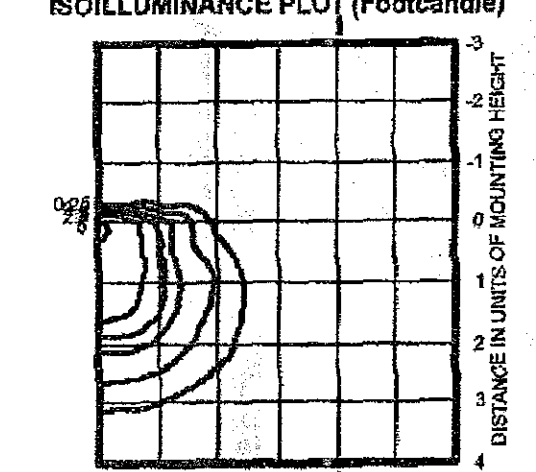
250W pulse start metal halide lamp, rated 22500 lumens. Footcandle values based on 25' mounting height.
Classification: Type II, Short, Full Cutoff

KSF1 250M R3 TEST NO: 1194080302P
ISOILLUMINANCE PLOT (Footcandle)



250W pulse start metal halide lamp, rated 22500 lumens. Footcandle values based on 25' mounting height.
Classification: Type II, Short, Full Cutoff

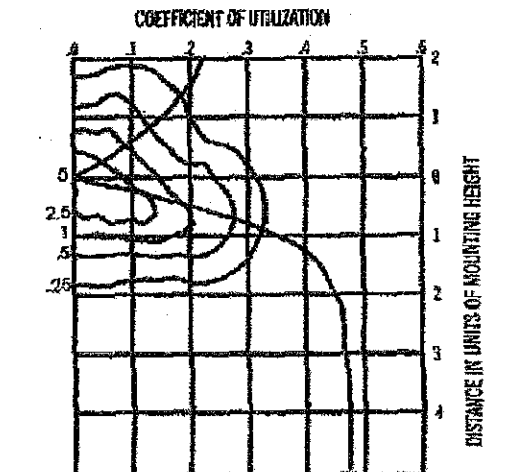
KSF1 250M R4SC TEST NO: 1194080301P
ISOILLUMINANCE PLOT (Footcandle)



250W pulse start metal halide lamp, rated 22500 lumens. Footcandle values based on 25' mounting height.
Classification: Type IV, Very Short, Full Cutoff

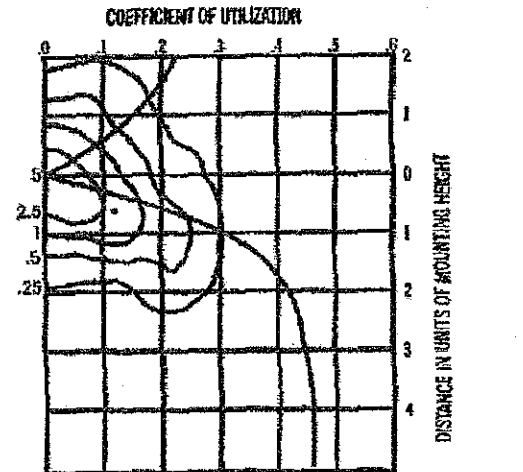
LIGHTING SL1

KSF1 150S R2 TEST NO: 1194090802Z
COEFFICIENT OF UTILIZATION



150W high pressure sodium lamp, 20000 rated lumens. Footcandle values based on 35' mounting height, Distribution II, full cutoff.

KSF1 150S R3 TEST NO: 1194091803Z
COEFFICIENT OF UTILIZATION



150W high pressure sodium lamp, 18000 rated lumens. Footcandle values based on 35' mounting height, Distribution III, full cutoff.

LIGHTING SL1A

NOTES:

- Photometric data for other distributions can be accessed from the Lithonia Lighting website, www.lithonia.com
- For electrical characteristics, consult outdoor technical data specification sheets on www.lithonia.com.
- Tested to current IES and MESA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory and actual field measurements. Dimensions and specifications are based on the most current available data and are subject to change.

Mounting Height Correction Factor

(Multiply the ft level by the correction factor)

35' mounting height	20' mounting height
15 ft = 1.78	30 ft = 0.45
30 ft = 1.36	40 ft = 0.25
40 ft = 0.77	

(Existing Mounting Height) - Correction Factor = New Mounting Height



FEATURES & SPECIFICATIONS

CONSTRUCTION — Weldable-grade, hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi (11-gauge), or 50,000 psi (7-gauge). Uniform wall thickness of .125" or .188". Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Fabricated shaft widths are 4, 5 and 6 inches.

Anchor base is fabricated from hot-rolled carbon steel plate conforming to ASTM A36 that meets or exceeds a minimum yield strength of 36,000 psi. Base plate and shaft are circumferentially welded top and bottom. Base cover is finished to match pole.

A handhole having nominal dimensions of 3" x 5" for all shafts. Included is a cover with attachment screws.

Top cap provided with oil drill-mount poles.

Fasteners are high-strength galvanized, zinc-plated or stainless steel.

FINISH — Must specify finish.

GROUNDING — Provision located immediately inside handhole rim. Grounding hardware is not included (provided by others).

ANCHOR BOLTS — Top portion of anchor bolt is galvanized per ASTM A-153. Made of steel rod having a minimum yield strength of 55,000 psi.

Catalog Number	SSS 15 4C DM19 DDB
Notes	
Type	SL1



Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

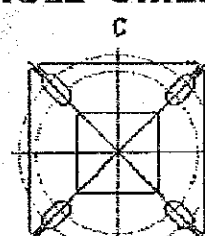
ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: SSS 20 5C DM19 DDB

SSS	15	4C	DM19	DDB
Series	SSS	Nominal fixture mounting height 10-39 feet (see back page.)	Nominal shaft base size/ wall thickness (See back page.)	Mounting ¹
Options				
Finish ²				

HANDHOLE ORIENTATION



Handhole

NOTES:

- When ordering tenon mounting and drill mounting for the same pole, follow this example: DM19/27B. The combination includes a required extra handhole.
- The drilling template to be used for a particular luminaire depends on the luminaire that is used. Refer to the Technical Data Section of the Outdoor Binder for Drilling Templates.
- Insert "1" or "2" to designate fixture size; e.g. DM19A5T2.
- Specify location and orientation when ordering option.
- Specify the height in feet above base of pole.
Example: 5ft = 5 and 20ft = 20
Specify orientation from handhole (A,B,C,D)
For 2nd and 3rd:
Refer to the Handhole Orientation diagram above.
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard.
- Combination of tenon-top and drill mount includes extra handhole.
- Additional colors available; see www.lithonia.com/architectural or Architectural Colors brochure (Form No. 794.3). Powder finish standard.

Drill mounting¹
DM19 1 at 90°
DM19 2 at 180°
DM19 2 at 180° with one side plugged
DM19 2 at 90°
DM19 3 at 90°
DM19 4 at 90°
DM19 4 at 90°

Drill mounting¹
DM19AS 1 at 90°
DM19AS 2 at 180°
DM19AS 2 at 90°
DM19AS 3 at 90°
DM19AS 4 at 90°

AERISSM Suspended drill mounting^{1,3}
DM19ASST 1 at 90°
DM19ASST 2 at 180°
DM19ASST 2 at 90°
DM19ASST 3 at 90°
DM19ASST 4 at 90°

DM190SM Suspended drill mounting^{1,3}
DM190MRT 1 at 90°
DM190MRT 2 at 180°
DM190MRT 2 at 90°
DM190MRT 3 at 90°
DM190MRT 4 at 90°

DM190SM Suspended drill mounting^{1,3}
DM190MRT 1 at 90°
DM190MRT 2 at 180°
DM190MRT 2 at 90°
DM190MRT 3 at 90°
DM190MRT 4 at 90°

DM190SM Suspended drill mounting^{1,3}
DM190MRT 1 at 90°
DM190MRT 2 at 180°
DM190MRT 2 at 90°
DM190MRT 3 at 90°
DM190MRT 4 at 90°

DM190SM Suspended drill mounting^{1,3}
DM190MRT 1 at 90°
DM190MRT 2 at 180°
DM190MRT 2 at 90°
DM190MRT 3 at 90°
DM190MRT 4 at 90°

ESF1	150M	RLC R2	TB	SCWA	SP04
Series	ESF1	RLC R2	TB	SCWA	SP04
Material	100M ¹ 125M ¹ 200M ¹ 150M ¹ 250M ¹	R2 Type II roadway 24W T1P R3 Type III asymmetric 24W T1P R4SC Type IV forward throw, sharp cutoff	120 347 206 ¹ 480 ¹ 24W T1P 277 23056H2 ¹	(blank) Magnetic CWA Constant wattage isolated ballast SCWA Super CWA pulse-start ballast NOTE: For shipments to U.S. territories, SCWA must be specified to comply with EISA.	Type SP Square pole RP Round pole WB Wall bracket WW Wood pole or wall bracket
Arm length ³	04 4" arm 06 6" arm 09 9" arm 12 12" arm				DA12P Degree arm, pole DA12WS Degree arm, wall KMA Mount arm adapter KTM Twin mounting bar
Shipped separately					

Shipped installed in fixture	EC Emergency circuit ⁴	Slipped separately ⁵	(Blank) Dark bronze	CR Corrosion resistant finish	LPI Lamp included
PER NEMA twist-lock receptacle only (no photocell)	CSA CSA Certified NOM NOM Certified ⁶	PE1 NEMA twist-lock PE (120, 208, 240V) PE2 NEMA twist-lock PE (240V) PE3 NEMA twist-lock PE (480V) PE4 NEMA twist-lock PE (277V) SC Shorting cap for PER option H5 House side shield (R2, R3) ^{1,5} VG Vandal guard ⁷	DWA White DBL Black DMB Medium bronze DMA Bronze DPA Aluminum	CRY Non-stick protective coating ⁸	LPI Lamp included LPLP Less lamp
SF Single fuse (120, 277, 347V) n/a TB	INTL Available for MH probe-start shipping outside the U.S.				
BF Double fuse (208, 240, 480V) n/a TB	KW1 kWMax ⁹ 277V control relay ¹⁰ KW4 kWMax ⁹ 277V control relay ¹⁰ RSC1 California Title 20 effective 1/1/2010				
ORS Quartz restrike system ¹¹					
QRSD Quartz restrike system ¹¹					

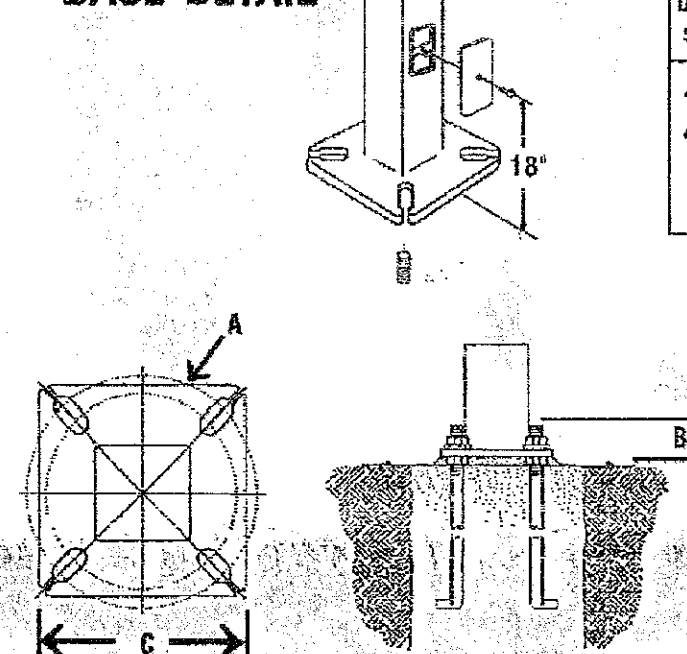
Notes
1 Not available with SCWA.
2 These wattages do not comply with California Title 20 regulations.
3 Must be ordered with SCWA.
4 These wattages apply to the BECU system to be shown for shipment to California Title 20 compliance. 277V/480V is not available in 3/4" pole size.
5 Not available with LUP.
6 Not available with 480V.
7 Must specify CWA for use in Canada.
8 Optional multi-tap ballast (120, 208, 240, 277V) (120, 277, 240V) in Canada.
9 Consult factory for available wattages.
10 Use "0" arm when two or more luminaires are ordered on a "0" mounting pattern.
11 Maximum allowable wattage lamp included.
12 KMA/KTM controls are available only with 1905.
13 May be ordered as an accessory.
14 Profile with 1/2" hole and 1/4" hole is necessary.
15 Available with R2 and TB drill-mount poles.
16 SCWA will not be shipped with 1/2" hole and 1/4" hole.
17 Black finish only.
18 Must be specified.
19 Must use 80/20 or 80/12.

KSF1-M-S

SSS Square Straight Steel Poles

TECHNICAL INFORMATION													
EPA (H) with 1.3 gust													
Catalog Number	Nominal shaft length (feet)	Pole Shaft Size (in x ft)	Wall Thickness (inches)	Gauge	80 mph weight	Max. weight	90 mph weight	Max. weight	100 mph weight	Max. weight	Bolt Circle (inches)	Bolt Size (in x in)	Approximate ship weight (pounds)
SSS 10 4C	10	4.0 x 10.0	0.125	11	30.6	765	23.8	595	18.9	473	8-9	3/4 x 16 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.125	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 16 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.125	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 16 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.125	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 16 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.125	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 16 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.125	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 16 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.188	7	14.0	350	11.0	275	8.0	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.125	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.188	7	28.1	703	21.4	535	16.2	405	10-12	1 x 36 x 4	285
SSS 25 4C	25	4.0 x 25.0	0.125	11	4.8	150	2.6	100	1.0	50	8-9	3/4 x 16 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.188	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.125	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.188	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
SSS 30 4C	30	4.0 x 30.0	0.188	7	6.0	150	4.0	100	2.5	75	8-9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.125	11	4.7	150	2.0	50	--	--	10-12	1 x 36 x 4	285
SSS 30 5G	30	5.0 x 30.0	0.188	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.188	7	19.0	473	13.2	330	9.0	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.188	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.188	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.188	7	7.2	181	3.0	75	--	--	11-13	1 x 36 x 4	635

BASE DETAIL



IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.

IMPORTANT:

- These specifications are intended for general purposes only. Lithonia reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.



FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for car lots, street lighting or parking areas.

CONSTRUCTION — Rugged, .063" thick, aluminum rectilinear housing. Formed for weather-tight seal and integrity. Naturally anodized, extruded aluminum door frame with reinforced corners, is retained with two .188" diameter hinge pins and secured with one quarter-turn, quick-release fastener. Weatherproof seal between housing and door frame is accomplished with an integrally designed, extruded silicone gasket that snaps into the door frame, and another gasket applied to the housing.

Finish: Standard finish is dark bronze (008), polyester powder finish with other architectural colors available.

OPTICS — Reflectors are anodized and segmented for superior uniformity and control. Reflectors attach with tool-less fasteners and are rotatable and interchangeable. Three cutoff distributions available: Type II (roadway), Type III (asymmetric), Type IV (forward throw, sharp cutoff). Lens is .125" thick impact-resistant tempered glass with thermally applied silk-screened shield.

ELECTRICAL — Ballast: High pressure sodium: 70-150W & high-reaction, high power factor. Constant wattage autotransformer for 200-250W. Metal halide: 100-150W is high-reaction, high power factor and standard with pulse-start ignitor technology. "SCWA" not required. Constant wattage autotransformer for 175-200W. Super CWA (pulse start ballast), 88% efficient and EISA regulation compliant, is required for 151-200W SCWA option (for U.S. shipments only). CSA or IHL required for probe-start shipments outside the U.S. Pulse-start ballast (SCWA) required for 200M.

Ballasts are 100% factory-tested.

Socket is porcelain, horizontally mounted medium base socket for 70-150W and position-oriented mogul base socket for 175W and above, with copper alloy, nickel-plated screw shell and center contact. UL listed 150W-400W.

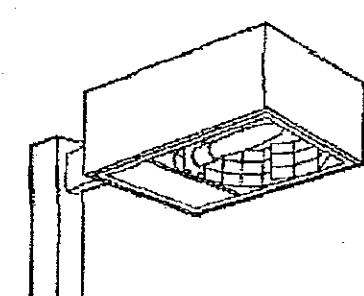
INSTALLATION — Extruded aluminum arm for pole or wall mounting is shipped in fixture carton. Optional mountings available.

LISTING — UL listed for wet locations. Listed and labeled to comply with Canadian standards (see Options).

Note: Specifications subject to change without notice.

ORDERING INFORMATION — For shortest lead times, configure product using banded options.

Catalog Number	KSF1 RLC 150M R2 TB SCWA SP04 DDB
Notes	
Type	SL1



Specifications

ENL: 1.5 ft (14 m)
(includes arm)
Length: 21-1/4 (18.4)
Width: 15-1/2 (12.3)
Depth: 7-1/4 (18.4)
Arm: 4 (10.2)
Weight: 35 lbs (15.9 kg)

*Weight as configured in example below. All dimensions are inches (centimeters) unless otherwise specified.

Mounting options

SPax, RPax, DA1P

WBax, DA12W

WWax

Drilling template

5

6

7

Area Lighting

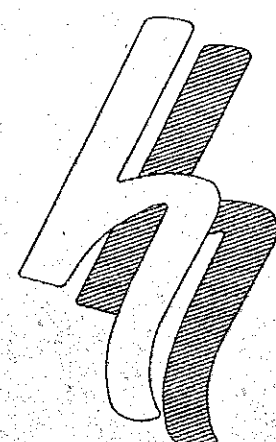
KSF1

METAL HALIDE: 100-250W

HIGH PRESSURE SODIUM: 70-200W

15' to 25' Mounting

Example: KSF1 150S R3 TB SP04 LPI



HERSHBERG & HERSHBERG

Consulting Engineers
and Land Surveyors

18 Locust Street
Albany, New York 12203

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DATE	REVISIONS
2/4/11	GENERAL REVISIONS
3/1/11	COMMENT LETTER (2/2/11)
3/28/11	COMMENT LETTER (3/18/11)
4/20/11	GENERAL REVISIONS
5/1/11	COMMENTS/FLOOR PLAN
5/12/11	FLOOR PLAN

PROPOSED APARTMENT COMPLEX
LIGHTING DETAILS
HAGUE BLVD. & ROUTE 9W
TOWN OF BETHLEHEM
ALBANY COUNTY, NY

RECEIVED
JUN 01 2011
Town of Bethlehem
Planning Board

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