

FEATURES

- Available in 4' and 8' lengths
- Apertured reflectors have 15% uplight
- Spring loaded turret lampholders
- 6' lamp spacing
- For individual or continuous row mounting
- Channel ends double as joiners
- Full depth end closures available

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Heavy steel housing with longitudinal reinforcing ribs for extra strength. Reflector die-embossed with transverse ribs for maximum rigidity. Solid top or 15% uplight versions with extruded openings available.

FINISH

White painted parts are treated with a five stage phosphate bonding process and finished with a high reflectance baked enamel. LSR and M4R reflectors specular room side, Mill finish aluminum top surface.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated

A, unless otherwise specified. CEE NEMA Premium compliant.

ELECTRICAL

Standard class "P", thermally protected, auto-resetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

ORDERING INFORMATION

EXAMPLE KL4-232-U-EU-GLR-PAF

KL							
MODEL	SIZE	NO. OF LAMPS IN CROSS SECTION	LAMP TYPE	REFLECTOR TYPE	VOLTAGE	OPTIONS	
KL Premium Industrial	4 4' 8 8'	2 Two 3 Three 4 Four	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	U Apertured Reflector for Uplight ST Solid Top (No Uplight) M4RST Solid Top Reflector with 95% Reflective Specular Silver Finish M4RU Apertured Reflector with 95% Reflective Silver Finish	U 120V-277V 347 347V	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack BC Branch Circuit Plug-on Wiring System (See options section for details.) PAF Paint After Fabrication	
ACCESSORIES (ORDER SEPARATELY) KZT Zip Tee Hanger - 1½" spacer on T-bar ceiling KTH Slide Clamp Tong Hanger S18 18" Stem, canopy and 8° aligner SS18 18", 45° Swivel Stem & Canopy KHC 24" Chain Hanging Assembly KLEC Full Depth End Closure KLWG4 Wire Guard 4' lg. - 2 required per 8' fixture OS1360K Occupancy/Daylight sensor kit, 120/277/347V, one relay, 360 Lens, snap on drop down adaptor, quick connect wiring¹							
BALLAST E Electronic T8, Instant Start 4E 4-Lamp Electronic T8, Instant Start EP Electronic, Program Start 4EP 4-Lamp Electronic, Program Start For others available, see Ballast Options.							

¹ Use programmed start ballast. Not recommended for use with instant start. For more occupancy/daylight harvesting sensor accessories see Technical section.

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	KL4-232-U KL Industrial 1" x 4" 2-Lamp Industrial with Apertured White Reflector
Ballast	R2P32
Ballast Factor	0.95
Lamp	F032/41K
Lumens per Lamp	2900
Watts	74
Shielding Angle	N/A
Spacing Criterion	0° = 1.27 90° = 1.30
Luminous Opening in Feet	Length: 4.00 Width: 1.02 Height: 0.00

ZONAL LUMEN SUMMARY

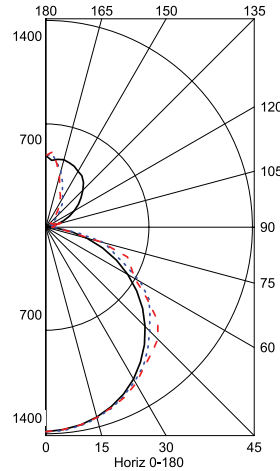
Zone	Lumens	% Lamp	% Fixt.
0-30	1090	18.8	20.9
0-40	1807	31.1	34.7
0-60	3314	57.1	63.6
0-90	4396	75.8	84.3
90-120	179	3.1	3.4
90-130	263	4.5	5.0
90-150	518	8.9	9.9
90-180	817	14.1	15.7
0-180	5212	89.9	100.0

Test 10183 Test Date 1/8/03

ENERGY DATA

Total Luminaire Efficiency	89.9%
Luminaire Efficacy Rating (LER)	67
IESNA RP-1-1993 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.58 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	3654	3654	3654	3654	3654
30	3616	3622	3671	3726	3717
40	3578	3595	3706	3788	3833
45	3544	3582	3712	3921	4000
50	3509	3579	3776	4104	4059
55	3459	3569	3923	3905	3827
60	3387	3493	3894	3704	3667
65	3296	3477	3652	3839	3964
70	3155	3595	3718	4327	4536
75	2956	3374	4210	4353	3955
80	2674	3464	3342	2370	2355
85	2149	2967	2876	2785	2815

COEFFICIENTS OF UTILIZATION (%)

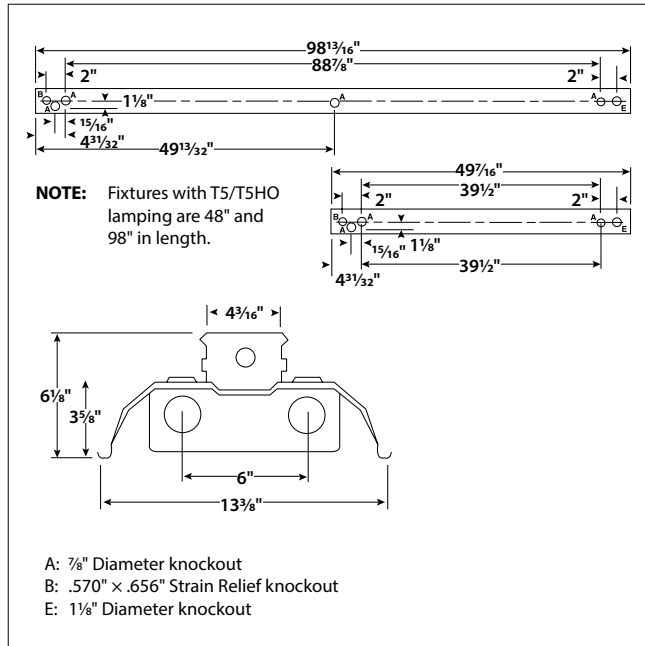
RCR	RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0	
	1	94	90	86	82	90	86	83	79	80	77	74	62	
	2	85	78	71	66	81	75	69	64	69	64	61	51	
	3	77	68	60	54	74	65	58	53	60	55	50	42	
	4	71	60	52	46	67	58	50	45	53	47	42	36	
	5	65	53	45	39	62	51	44	38	48	41	36	31	
	6	60	48	39	34	57	46	38	33	43	36	32	27	
	7	55	43	35	30	53	42	34	29	39	32	28	24	
	8	51	39	31	26	49	38	31	26	35	29	25	21	
9	48	36	28	23	46	35	28	23	33	26	22	19		
10	45	33	26	21	43	32	25	21	30	24	20	17		

RCR = Room Cavity Ratio

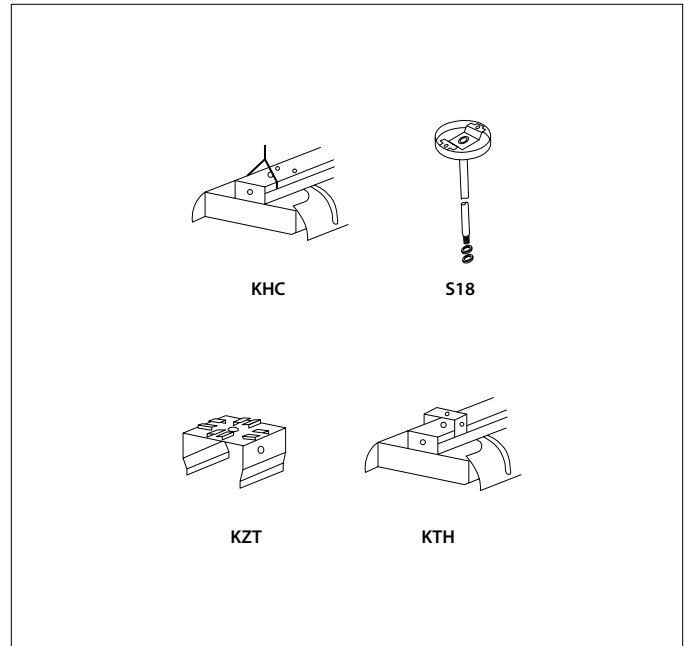
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

0.0 ——— 45.0 - - - - - 90.0 - - - - -

DIMENSIONAL DATA



MOUNTING ACCESSORIES



NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.