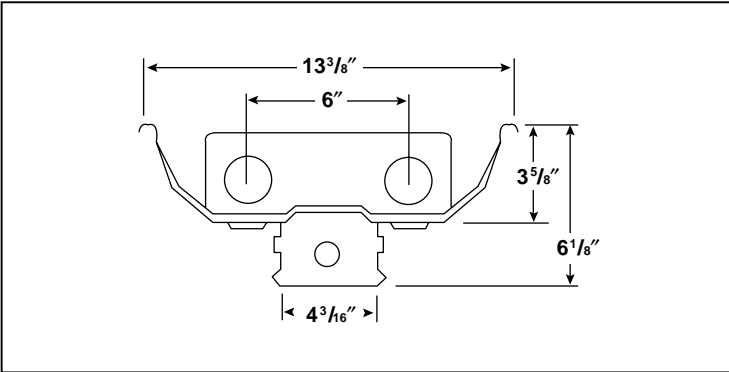
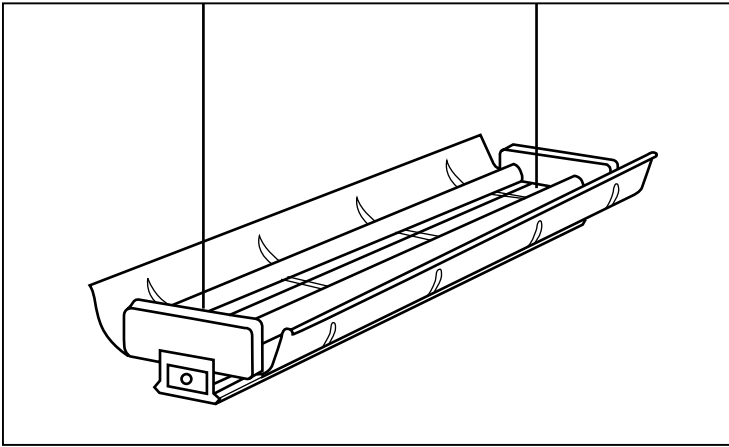


KLINV4-2 KLINV8-2 INVERTED INDUSTRIAL 1, 2, 3, OR 4 LAMPS



Type: _____

Job Description: _____

FEATURES:

- Available in 4' and 8' lengths.
- Aircraft cable, pendant or chain mounting options.
- Reflector standard with 15% downlight.
- Perforated reflector available.
- Spring loaded turret lampholders.
- For individual or continuous row mounting.
- 6" lamp spacing on two-lamp units.
- Channel ends double as joiners.
- Reflector end closures available on most models.

SPECIFICATIONS:

Housing

Heavy steel with longitudinal reinforcing ribs for extra strength.

Reflector

Standard die embossed with transverse ribs for maximum rigidity. Smooth extruded apertures for 15% downlight. Perforated reflector optional.

Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

Finish

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").

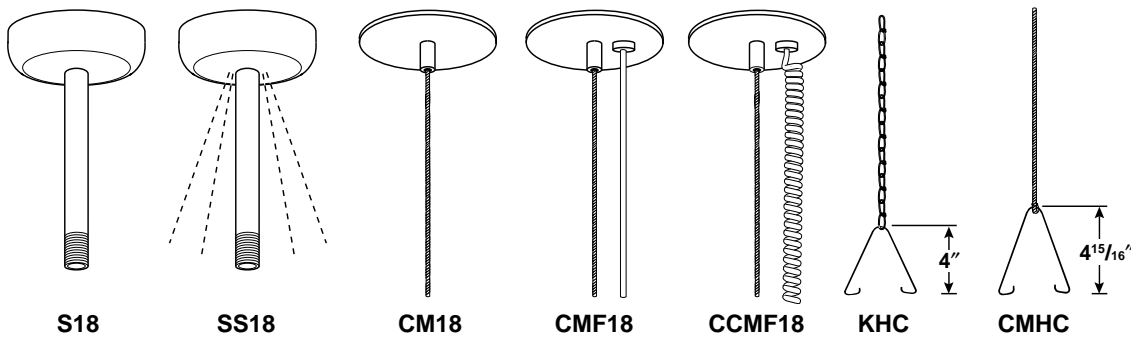
Product Availability Chart

#/Lamps	CMI (Cable)	PMI (Pendant)	CHI (Hook)
1			X (T8 only)
2	X	X	X
3			X (T8 only)
4	X	X	

Mounting Hardware Compatibility Chart

Housing Type	CMI (Cable)	PMI (Pendant)	CHI (Hook)
Hanger	CM18	S18	KHC
	CMF18	SS18	CMHC
	CCMF18		

Mounting Methods (Hangers)





PO Box 2787 (99220) 3808 North Sullivan Road Spokane WA 99216 Tel 509 924 7000

Environmental Laboratories

REPORT # 11954
DATE: 1/7/97

LUMINAIRE: KLINV4-232-APER-EBB

1 X 4 2-LAMP T-8 INDUSTRIAL WITH APERTURED REFLECTOR
BAL.: B232I120; LAMPS: F32TB; BAL. FAC.: .95; WATTS: 61
LAMPS RATED AT 2900 LUMENS EACH
LUMINOUS AREA: 48 X 4.0

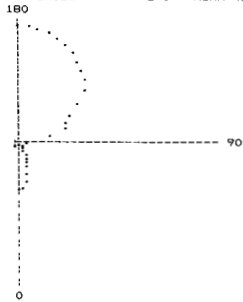
REFLECTANCE: BWE .88

MOUNTING: PENDANT

S/MH: PARL 1.40 NORM 0.69

SHIELDING: PARL 0 NORM 42

DEB	0	22.5	45	67.5	90
0	484.	484.	484.	484.	484.
5	499.	505.	466.	465.	476.
15	500.	452.	362.	331.	328.
25	487.	364.	247.	221.	216.
35	451.	257.	178.	140.	131.
45	377.	187.	105.	87.	56.
55	281.	117.	45.	40.	42.
65	174.	54.	37.	45.	48.
75	73.	30.	50.	94.	96.
85	16.	33.	40.	44.	45.
90	9.	40.	42.	44.	44.
95	82.	121.	98.	93.	93.
105	325.	367.	408.	427.	401.
115	583.	604.	579.	590.	611.
125	825.	834.	834.	823.	807.
135	1037.	1023.	970.	1009.	1030.
145	1214.	1191.	1119.	1114.	1117.
155	1348.	1321.	1217.	1214.	1218.
165	1439.	1408.	1298.	1284.	1282.
175	1484.	1453.	1337.	1321.	1319.
180	1497.	1458.	1336.	1324.	1329.



ZONE	LUMENS	LAMP	FIXT
0-30	290.	5.0	5.6
0-40	426.	7.3	8.2
0-60	620.	10.7	11.9
0-90	789.	13.6	15.1
90-120	1111.	19.1	21.3
90-130	1847.	31.8	35.4
90-150	3344.	57.7	64.0
90-180	4354.	76.4	84.9
0-180	5223.	90.1	100.0

LER = 81

TESTED BY: SL APPROVED BY: IR

TEST RUN IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PROCEDURES

This photometric test was performed using a specific ballast / lamp combination. Extrapolation of these data for other ballast / lamp combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamp(s) or to the candlepower values shown. Luminaire efficacy rating (LER) per NEMA LE5-1993.

Coefficients of Utilization

Zonal Cavity Method

Floor Reflectance - .20

RC RW	80				70				50				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	81	77	74	71	71	68	65	63	50	49	47	12	
2	74	68	62	58	65	59	55	52	44	41	39	10	
3	67	60	53	49	59	52	47	43	39	36	33	9	
4	62	53	46	41	54	46	41	37	35	31	28	8	
5	57	47	40	35	49	41	36	31	31	27	24	7	
6	52	42	35	30	45	37	31	27	28	24	21	6	
7	48	38	31	26	42	33	28	24	25	21	18	5	
8	44	34	27	23	39	30	24	21	23	19	16	5	
9	41	31	24	20	36	27	22	18	21	17	14	4	
10	38	28	22	18	33	25	20	16	19	15	13	4	

Coefficients of Utilization

Energy Data

LER: 81
Input Watts: 61

Energy Cost: \$2.96*
BF: .95

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

Ordering Information

Example: KLINV4-232-EB8277-CMI-CM18

Series

KLINV - Inverted
KL

Size

4 - 4'
8 - 8'

No. of Lamps

1 - One
2 - Two
3 - Three
4 - Four
(Refer to product availability table)

Lamp Type

32 - 4', T8, 32 Watt
40 - 4', T12, 40 Watt
48 - 4', T12, Slimline
48HO - 4', T12, High Output
59 - 8', T8, 59 Watt IS
96 - 8', T12, 96" IS
96HO - 8', T12, High Output

Reflector Type

Blank - Apertured Reflector for Downlight (Std.)
ST - Solid Reflector (No Downlight)
PERF - Perforated Reflector

Voltage

120 - 120V
277 - 277V
347 - 347V

Ballast

Blank - HPF, Non Energy Saving
EB8 - Electronic T8*
3EB8 - 3-Lamp Electronic T8*
4EB8 - 4-Lamp Electronic T8*
EB8Z - 0° F Electronic T8*
3EB8Z - 0° F 3-Lamp Electronic T8*
4EB8Z - 0° F 4-Lamp Electronic T8*
LE - Energy Saving Magnetic T12
OCT - Magnetic T8 (Octron)
Z - 0° F Magnetic T12

*For <10% THD add suffix LH (e.g. EB8LH).
For a specific ballast vendor, show as option.

Housing Type

CMI - Inverted, Cable Mount Housing
PMI - Inverted, Pendant Mount Housing
CHI - Inverted, Hook Hanger Housing

Options

GLR - Fast Blow Fuse
GMF - Slow Blow Fuse
PAF - Paint After Fabrication
CSA - Approved, Canadian Standards Association
KLEC - Reflector End Closure (Not available with CHSI housing)

Mounting Methods

S18 - 18" Stem, Canopy and 8° Aligner (Use PMI Housing)*
SS18 - 18", 45° Swivel Stem & Canopy (Use PMI Housing)*
CM18 - 18", Non-Feed Cable Mount (Use CMI Housing)*
CMF18 - 18", Straight Cord Feed Cable (Use CMI Housing)*
CCMF18 - 18", Coiled Cord Feed Cable (Use CMI Housing)*
KHC - 24", Chain Hanger, (2-Lamp) T8 (T12) (Use CHI Housing)*
CMHC - 18", Non-Feed Adjustable Cable Hook Hanger (Use CHI Housing)*

*Other lengths available.