

P973 One 26W or 32W Triple Tube Lamp
P974 One 42W Triple Tube Lamp

Medium-Narrow Beam
7 1/4" Conoid Apertures

Optics and Applications

Distribution from a single vertically mounted triple tube lamp is for general and task lighting. Spacing to mounting height ratio ranges from .76 to .97 depending upon the lamp used. Use in corridors, entries, over work stations or for open area lighting in low to medium height ceilings.

Design Features

The two reflector optical system is protected by a rigid steel housing which keeps the reflectors in proper relationship to each other. The twist and lock socket prevents the lamp from falling if it is not properly engaged. It is a dependable fail-safe mechanism. Maximum ceiling thickness is 2". Ballast and lamp service from below.

Finish

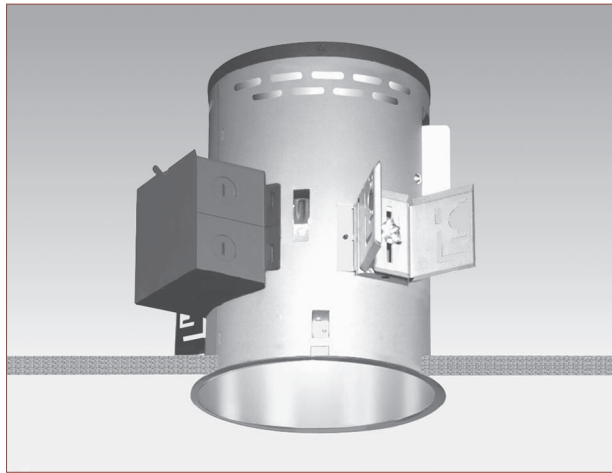
Specular clear Alzak cones are standard. Optional colors and Softglow® finishes are available. Housings and structural parts are painted optical matte black to suppress stray light leaks. Steel parts are phosphate conditioned for corrosion resistance before painting.

Ballasts

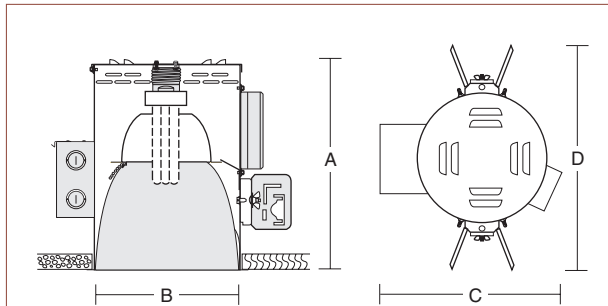
Fully electronic, microprocessor controlled with variable starting current for inrush protection to assure rated lamp life. Input voltage ranges from 120V through 277V. Power factor .98, starting temperature 0° F (-18° C), THD < 10%. Pre-heat start < 1.0 second. End of lamp life protection. Rated for > 50,000 starts.

General

Fixtures are pre-wired, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Luminaire Efficiency Rating (LER) data is in the photometric directory located in Section Z.



Dimensions and Lamps



Number	A Depth*	B Aperture	C Width	D Length	Lamps
P973	11" 279mm	7 1/4" 184mm	10 1/2" 267mm	13 1/4" 337mm	26W or 32W Triple Tube
P974	11 1/2" 292mm	7 1/4" 184mm	10 1/2" 267mm	13 1/4" 337mm	42W Triple Tube

* Recess depth increases to 13 1/2" with EM and DM accessories.

Accessories

- F Fuse.
 - G Gold cone.
 - H Mocha cone.
 - P Graphite cone.
 - T Titanium cone.
 - W Wheat cone.
 - Y Pewter cone.
 - Z Bronze cone.
 - R2 26" support rails.
 - R5 52" support rails.
 - WT White trim flange.
 - WHT White complete trim.
 - V347 347 volt ballast.
 - DM Dimming ballast.
- Specify watts and volts.

S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.

EM Emergency power includes integral charger light and test switch visible through aperture. Single lamp operation for 90 minutes. Specify volts.

WRL Wattage restriction label, specify wattage.

Matching Units

- Medium wide beam [Page P55](#)
- Sloped ceilings [Page P54](#)
- Surface mount [Page P41](#)
- Wall washers [Pages P64, P65, P66](#)

** Click for link to pages in blue.

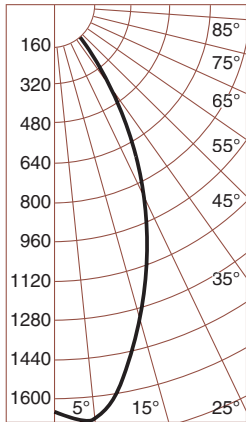
P53 P973 P974

Performance Datachart

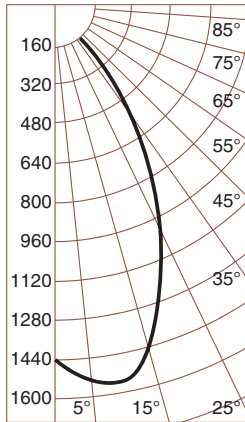
Single Unit Initial Footcandles, 30" Work Plane						Ceiling to Floor		Multiple Units Initial Footcandles, 30" Work Plane			
P973 One 32W Osram Triple Tube Read Top Data								Ceiling 80% Walls 50% Floor 20%			
P974 One 42W Osram Triple Tube Read Bottom Data								Spacing is Maximum Over Work Plane			
Nadir	10°		20°		30°						
FC	FC	Diam	FC	Diam	FC	Diam	Spacing	RCR 1	RCR 3	RCR 8	
55 73	49 65	2' 2'	30 39	4' 4'	15 19	6' 6'	8'	4' 4'	78 112	68 97	50 71
29 39	26 35	3' 3'	16 21	5' 5'	8 10	9' 9'	10'	6' 6'	42 60	36 52	27 38
18 25	16 22	3' 3'	10 13	7' 7'	5 6	11' 11'	12'	7' 7'	26 37	23 33	17 24
13 17	11 15	4' 4'	7 9	8' 8'	3 4	13' 13'	14'	9' 9'	18 26	16 22	11 16
9 12	8 11	5' 5'	5 6	10' 10'	2 3	16' 16'	16'	11' 10'	13 19	11 16	8 12

See notes 4, 5 and 6.

Candlepower Distribution



P973 32W Triple Tube Osram
Eff. 55% S/M .78



P973 32W Triple Tube Philips
Eff. 56% S/M .97

Candelas

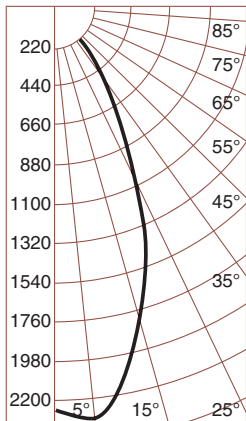
o	O 32W	P 32W
	2400*	2400*
0	1657	1421
5	1680	1535
10	1546	1540
15	1330	1420
20	1088	1219
25	905	1016
30	693	771
35	479	504
40	310	212
45	53	33
50	9	8
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
* Initial Lamp Lumens

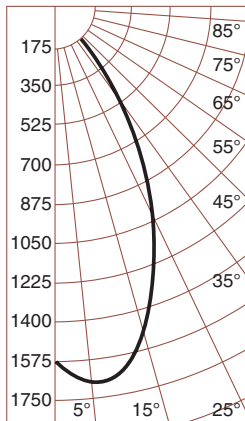
Coefficients of Utilization

Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	0
Wall %	Zonal Cavity Method - Floor Reflectance 20%										
RCR	.64	.63	.61	.60	.61	.59	.59	.57	.57	.55	.53
1	.64	.63	.61	.60	.61	.59	.59	.57	.57	.55	.53
2	.61	.58	.56	.54	.57	.54	.56	.53	.54	.51	.49
3	.58	.55	.52	.50	.54	.49	.52	.49	.51	.48	.46
4	.55	.51	.48	.46	.51	.46	.49	.45	.48	.45	.43
5	.53	.48	.45	.43	.48	.42	.47	.42	.46	.42	.40
6	.50	.45	.42	.40	.45	.39	.44	.39	.43	.39	.38
7	.48	.43	.39	.37	.42	.37	.41	.37	.41	.36	.35
8	.45	.40	.37	.35	.40	.35	.39	.34	.39	.34	.33
9	.43	.38	.35	.32	.38	.32	.37	.32	.37	.32	.31
10	.41	.36	.33	.31	.36	.31	.35	.30	.35	.30	.30

P973 One 32W Triple Tube Philips
P973 One 32W Triple Tube Osram Sylvania x .95



P974 42W Triple Tube Osram
Eff. 56% S/M .76



P974 42W Triple Tube Philips
Eff. 46% S/M .92

o	O 42W	P 42W
	3200*	3200*
0	2221	1574
5	2284	1721
10	2071	1695
15	1771	1552
20	1414	1294
25	1134	1047
30	891	785
35	636	544
40	487	276
45	152	38
50	9	9
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
* Initial Lamp Lumens

Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	0
Wall %	Zonal Cavity Method - Floor Reflectance 20%										
RCR	.61	.60	.58	.57	.58	.56	.56	.55	.54	.53	.50
1	.61	.60	.58	.57	.58	.56	.56	.55	.54	.53	.50
2	.58	.56	.54	.52	.55	.51	.53	.50	.51	.49	.47
3	.55	.52	.49	.47	.51	.47	.50	.46	.49	.46	.44
4	.53	.49	.46	.44	.48	.43	.47	.43	.46	.42	.41
5	.50	.46	.43	.41	.45	.40	.44	.40	.43	.40	.39
6	.48	.43	.40	.38	.43	.38	.42	.37	.41	.37	.36
7	.45	.41	.37	.35	.40	.35	.40	.35	.39	.35	.34
8	.43	.38	.35	.33	.38	.33	.37	.33	.37	.33	.32
9	.41	.36	.33	.31	.36	.31	.36	.31	.35	.31	.30
10	.39	.34	.31	.29	.34	.29	.34	.29	.33	.29	.28

P974 One 42W Triple Tube Osram Sylvania
P974 One 42W Triple Tube Philips x .84

Brightness

Number	Lamps	85°	75°	65°	55°	45°
P973	32W Osram Sylvania Triple Tube	8	29	49	145	8831
	32W Philips Triple Tube	10	30	52	134	6900
P974	42W Osram Sylvania Triple Tube	12	40	67	199	11298
	42W Philips Triple Tube	14	40	71	178	9022

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 7.

Notes

- 1 Data on all charts calculated with a clear specular cone finish.
- 2 Specular cone multipliers: Wheat x .84, Pewter x .79, Mocha x .78, Graphite x .75, Titanium x .75, Bronze x .72.
- 3 Softglow® cone multipliers: Wheat x .71, Mocha x .68, Pewter x .65, Graphite x .64, Titanium x .64, Bronze x .61.
- 4 Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 20° diameter represents a total 40° pattern width at the work plane 30" above the floor. Footcandle values are at the edge of that diameter.
- 5 Datachart spacing is rounded off to the nearest foot.
- 6 Data by IES methods. Compact fluorescent data vary due to lamp differences, power input, burning position, ambient temperature and ballast characteristics. Apply a modification factor.
- 7 Brightness data from the Average Luminance Method are inaccurate for small aperture downlights. They are theoretical calculations derived for large surfaces such as troffers. For a complete discussion refer to section Z brochure Z1.

