

P904

Sloped Ceiling Directionals One 26- 32- 42W Triple Tube Lamp 7 1/4" Conoid Apertures

Optics and Applications

A multi-contoured primary reflector maintains a constant focal position regardless of ceiling slope. Output is delivered through a parabolic low brightness shielding cone designed for sloped ceilings. Use in flat or sloped ceilings to 30° for vertical downlighting or for directional highlighting.

Design Features

Accepts Philips, Osram Sylvania, GE or other compatible lamps despite the variance in lamp base dimensions. The lampholder rotates full 360° and locks in position. A 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 7/8". Ballast and lamp service from below.

Finish

A specular clear Alzak cone is standard. Optional colors and Softglow® finishes are available. The housing and all structural parts are phosphated for corrosion resistance before being painted optical matte black for control of stray light leaks.

Ballast

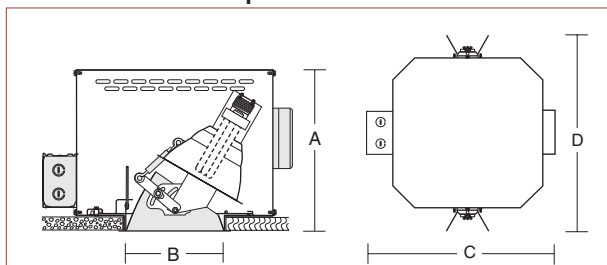
Fully electronic, microprocessor controlled with variable starting current for inrush protection to assure rated lamp life. Input voltage ranges from 120V through 277V. Operates 26W, 32W or 42W triple tube lamps interchangeably. Power factor .98, starting temperature 0° F (-18° C), THD < 10%. Pre-heat 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 Ratings (LER) do not apply to directional fixtures.



Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps
P904	13 1/4" 337mm	7 1/4" 184mm	16 1/2" 419mm	19 1/2" 495mm	26-32-42W Triple Tube

Factory sets focal position for 42W, adjusts on the job as required.

Accessories

- 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.
- F Fuse.

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

- DM Dimming ballast. Specify watts and volts.
- 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 narrow beam [Page P53](#)
- Medium wide beam [Page P55](#)
- Surface mount [Page P41](#)
- Wall washers [Pages P64, P65, P66](#)

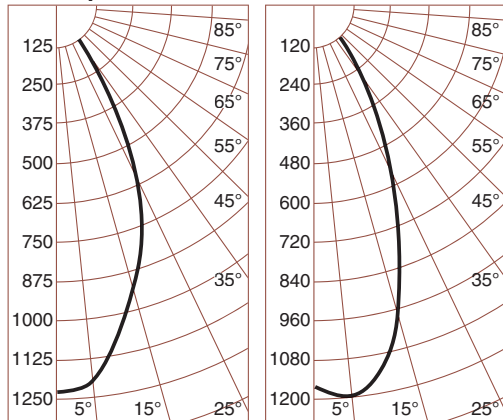
** Click for link to pages in blue.

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Footcandle Values at Nadir

Distance	8'					10'					12'					14'				
	Nadir		10°	20°		Nadir		10°	20°		Nadir		10°	20°		Nadir		10°	20°	
Lamps	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam	FC	FC	Diam	FC	Diam
P904 32W Osram Sylvania	20	16	3	9	6	12	10	4	6	7	9	7	4	4	9	6	5	5	3	10
P904 32W Philips	18	16	3	10	6	12	10	4	6	7	8	7	4	4	9	6	5	5	3	10
P904 42W Osram Sylvania	24	21	3	12	6	15	13	4	8	7	11	9	4	5	9	8	7	5	4	10
P904 42W Philips	19	18	3	12	6	12	12	4	8	7	8	8	4	5	9	6	6	5	4	10

Candlepower Distribution



P904 32W Triple Tube Osram Eff. 33% S/M .70 Data collected at 0°
 P904 32W Triple Tube Philips Eff. 34% S/M .77 Data collected at 0°

Candelas

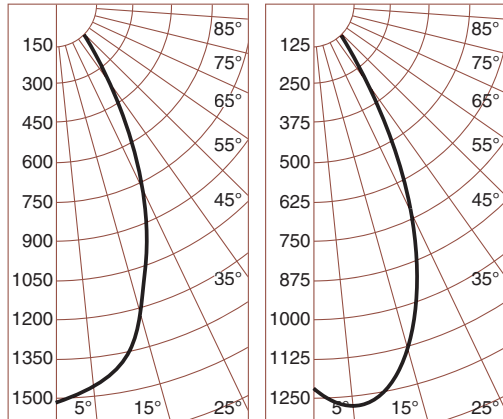
o	O 32W	P 32W
	2400*	2400*
0	1248	1168
5	1209	1202
10	1042	1091
15	918	989
20	706	762
25	535	575
30	390	407
35	251	246
40	129	113
45	41	24
50	5	4
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
 * Initial Lamp Lumens
 Data collected at 0°

Coefficients of Utilization

Ceiling	80%				70%				50%				30%				0
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	
Wall %	RCR Zonal Cavity Method - Floor Reflectance 20%																
1	.38	.37	.36	.36	.36	.35	.35	.34	.34	.33	.31	.31	.32	.31	.29	.28	
2	.36	.35	.34	.34	.34	.32	.33	.31	.32	.31	.29	.30	.29	.29	.27	.26	
3	.35	.33	.31	.32	.32	.30	.31	.29	.30	.29	.27	.29	.27	.27	.25	.24	
4	.33	.31	.29	.30	.30	.27	.30	.27	.29	.26	.28	.25	.27	.25	.24	.23	
5	.31	.29	.27	.29	.29	.26	.28	.25	.27	.24	.26	.24	.26	.24	.22	.21	
6	.30	.27	.25	.27	.27	.24	.26	.24	.26	.24	.22	.24	.22	.22	.20	.19	
7	.29	.26	.24	.25	.25	.22	.25	.22	.25	.22	.22	.22	.22	.20	.19	.18	
8	.27	.24	.22	.24	.24	.21	.24	.21	.24	.21	.23	.21	.23	.21	.20	.19	
9	.26	.23	.21	.23	.23	.20	.23	.20	.23	.20	.22	.20	.22	.20	.19	.18	
10	.25	.22	.20	.22	.22	.19	.22	.19	.22	.19	.21	.19	.21	.19	.18	.18	

P904 One 32W Triple Tube Osram Sylvania at 0°
 P904 One 32W Triple Tube Philips at 0° x 1.05



P904 42W Triple Tube Osram Eff. 36% S/M .74 Data collected at 0°
 P904 42W Triple Tube Philips Eff. 33% S/M .86 Data collected at 0°

o	O 42W	P 42W
	3200*	3200*
0	1531	1218
5	1484	1261
10	1378	1220
15	1231	1154
20	941	933
25	725	718
30	529	504
35	367	325
40	230	192
45	127	86
50	33	14
55	7	6
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
 Data collected at 0°

Ceiling	80%				70%				50%				30%				0
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	
Wall %	RCR Zonal Cavity Method - Floor Reflectance 20%																
1	.41	.40	.39	.38	.39	.37	.38	.36	.36	.35	.35	.34	.33	.33	.31	.30	
2	.39	.37	.36	.34	.36	.34	.35	.33	.34	.33	.31	.32	.30	.30	.28	.27	
3	.37	.35	.33	.31	.34	.31	.33	.31	.32	.31	.29	.30	.28	.28	.26	.25	
4	.35	.32	.30	.29	.32	.29	.31	.28	.30	.28	.26	.29	.26	.26	.24	.23	
5	.33	.30	.28	.27	.30	.27	.29	.26	.29	.26	.24	.27	.24	.24	.22	.21	
6	.32	.28	.26	.25	.28	.25	.28	.24	.27	.24	.22	.24	.22	.22	.20	.19	
7	.30	.27	.25	.23	.26	.23	.26	.23	.26	.23	.22	.23	.22	.20	.19	.18	
8	.29	.25	.23	.22	.25	.22	.25	.21	.24	.21	.23	.21	.23	.20	.19	.18	
9	.27	.24	.22	.20	.24	.20	.23	.20	.23	.20	.22	.20	.22	.20	.19	.18	
10	.26	.23	.20	.19	.22	.19	.22	.19	.22	.19	.21	.19	.21	.19	.18	.18	

P904 One 42W Triple Tube Osram Sylvania at 0°
 P904 One 42W Triple Tube Philips at 0° x .92

Brightness

Number	Lamps	85°	75°	65°	55°	45°
P904	32W Osram Sylvania Triple Tube	11	25	49	130	5500
	32W Philips Triple Tube	15	35	67	171	6784
	42W Osram Sylvania Triple Tube	16	35	69	184	7793
	42W Philips Triple Tube	20	43	89	227	9140

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 5. Data collected at 25° lamp tilt.

Notes

- 1 Data with clear specular cones.
- 2 Colored cone multipliers vary with lamp source, beam orientation and degree of angulation. Contact the factory for specific data.
- 3 Candlepower distribution curves: solid lines show horizontal distribution at nadir.
- 4 Pattern diameters are determined from each side of nadir with 0° lamp tilt. The diameter includes both sides, so a 10° diameter represents a total 20° pattern width at the floor. Footcandles are measured at the diameter edge. Tilting the lamp changes all data.
- 5 Brightness data from the Average Luminance Method are inaccurate for downlights. They are theoretical calculations for large surfaces such as troffer lenses. We recommend the stricter standard of Maximum Brightness Method point data from direct photometer readings. They approximate what the human eye perceives when evaluating glare. For more information refer to Z section brochure Z1.