

P942

Medium Wide Beam
Two 26-32-42W Triple Tube Lamps
8 3/8" Conoid Apertures

Optics and Applications

The optical system features an elliptical primary reflector and a parabolic shielding cone. Pattern edges blend softly with adjacent units. See model P949 on page 57 for deeper shielding and slightly narrower distribution.

Design Features

Construction allows easy access to all components. Vented air flow design lowers fixture temperature for optimal lamp performance. Fixtures accept Philips, Osram Sylvania, GE or other compatible lamps despite the variance in lamp bases. Maximum ceiling thickness 2". 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 Rating (LER) data is in the photometric directory located in Section Z.

Accessories

- G Gold cone.
- H Mocha cone.
- P Graphite cone.
- T Titanium cone.
- W Wheat cone.
- Y Pewter cone.
- Z Bronze cone.
- S Softglow® finishes: add S before color letters. e.g. SW for Softglow® wheat cone, SC for Softglow® clear cone.
- R2 26" support rails.
- R5 52" support rails.
- WT White trim flange.
- WHT White complete trim.
- DCE Double circuiting.
- V347 347 volt ballast.
- F Fuse.

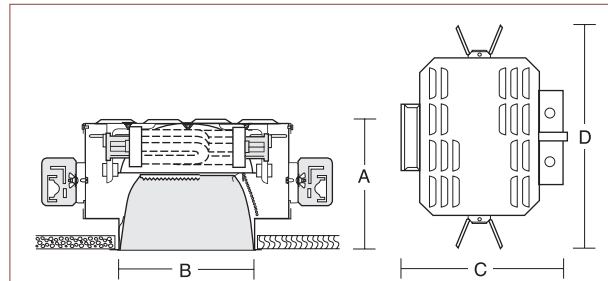
- DM Dimming ballast, 26 or 32W. Specify watts and volts.
- DM2 Dimming ballasts, two 42W. Specify volts.
- LS Lamp shield, acrylic, 26-32W only.
- LP Prism lens, acrylic, 26-32W only.
- EM Emergency power includes integral charger light and test switch visible through aperture. Single lamp operation for 90 minutes. Specify volts.
- WRL Wattage restriction label, specify wattage.

Matching Units

- Sloped ceilings [Page P58](#)
- Deep cone downlight [Page P57](#)
- Wall washer [Page P67](#)
- Surface cylinder [Pages P42, P43](#)

* Click for link to pages in blue.

Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps
P942	7 3/4" 197mm	8 3/8" 213mm	13 1/2" 343mm	19" 483mm	Two 26-32-42W Triple Tube

Brightness

Number	Lamps	Plane	85°	75°	65°	55°	45°
P942	Two 32W Triple Tube Philips	0°	41	98	178	11004	13566
		90°	41	99	185	12390	17105
	Two 42W Triple Tube Philips	0°	54	131	237	14672	18087
		90°	54	131	247	16520	22806
	Two 32W Triple Tube Osram/Sylvania	0°	35	81	140	3471	12726
		90°	32	84	164	9732	15826
Two 42W Triple Tube Osram/Sylvania	0°	45	105	183	4520	16570	
	90°	42	109	214	12671	20606	

Data in footlamberts. Photometer readings, Maximum Brightness Method. See note 7 on the other side.

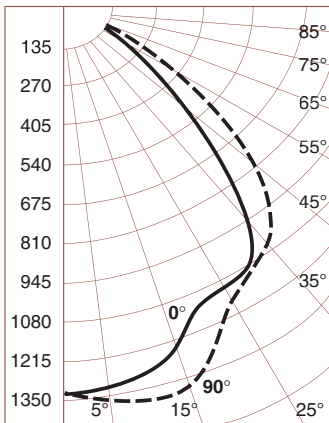
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Performance Datachart

Single Unit Initial Footcandles, 30" Work Plane							Ceiling to Floor		Multiple Units Initial Footcandles, 30" Work Plane							
P942 Two 32W Philips Triple Tube Read Top Data P942 Two 42W Philips Triple Tube Read Bottom Data									Ceiling 80% Walls 50% Floor 20%							
Nadir									Spacing is Maximum Over Work Plane							
15°		25°		35°					Spacing		RCR 1		RCR 3		RCR 8	
FC	FC	Diam	FC	Diam	FC	Diam										
44	39	3'	28	5'	18	8'	8'		7'	59	48	30				
57	51	3'	37	5'	24	8'			7'	76	62	39				
31	28	3'	20	6'	13	9'	9'		8'	42	35	22				
40	36	3'	26	6'	17	9'			8'	54	45	28				
24	21	4'	15	7'	10	11'	10'		9'	32	26	16				
30	27	4'	20	7'	13	11'			9'	41	33	21				
15	13	5'	9	9'	6	13'	12'		12'	20	16	10				
19	17	5'	12	9'	8	13'			12'	25	21	13				
10	9	6'	6	11'	4	16'	14'		14'	13	11	7				
13	12	6'	8	11'	6	16'			14'	17	14	9				

See notes 4, 5 and 6.

Candlepower Distribution

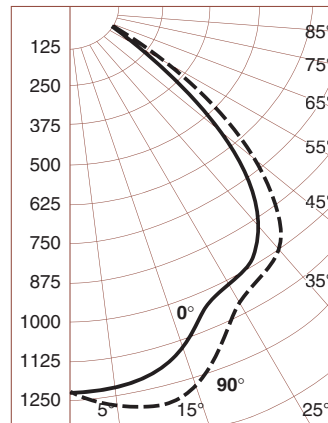


P942 Two 32W Triple Tube Philips
Eff. 51% S/M 0° 1.20 S/M 90° 1.26

Candelas

°	0°	90°
	4800*	4800*
0	1323	1323
5	1319	1361
10	1304	1393
15	1251	1382
20	1105	1267
25	1084	1167
30	1089	1115
35	950	1073
40	763	983
45	544	751
50	392	538
55	299	384
60	47	97
65	20	21
70	11	11
75	0	0
80	0	0
85	0	0
90	0	0

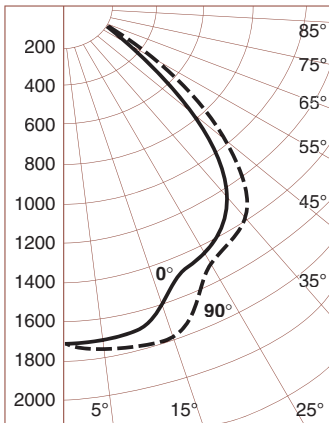
° Vertical Angles
* Initial Lamp Lumens



P942 Two 32W Triple Tube Osram Sylvania
Eff. 48% S/M 0° 1.19 S/M 90° 1.27

°	0°	90°
	4800*	4800*
0	1230	1230
5	1227	1284
10	1212	1300
15	1170	1290
20	1045	1191
25	1023	1082
30	986	1046
35	893	1011
40	715	910
45	511	703
50	368	505
55	281	350
60	44	93
65	19	19
70	10	11
75	0	0
80	0	0
85	0	0
90	0	0

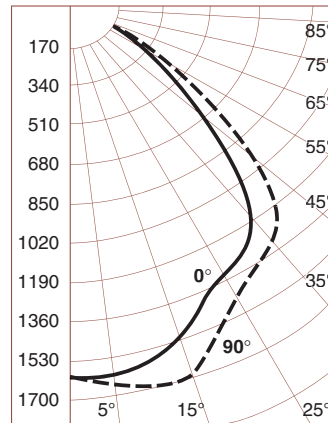
° Vertical Angles
* Initial Lamp Lumens



P942 Two 42W Triple Tube Philips
Eff. 50% S/M 0° 1.21 S/M 90° 1.28

°	0°	90°
	6400*	6400*
0	1710	1710
5	1705	1761
10	1684	1797
15	1617	1787
20	1463	1638
25	1473	1514
30	1406	1457
35	1241	1406
40	989	1272
45	709	974
50	512	692
55	389	492
60	61	123
65	26	27
70	14	14
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Initial Lamp Lumens



P942 Two 42W Triple Tube Osram Sylvania
Eff. 47% S/M 0° 1.20 S/M 90° 1.28

°	0°	90°
	6400*	6400*
0	1609	1609
5	1607	1663
10	1591	1698
15	1514	1673
20	1382	1561
25	1352	1438
30	1311	1372
35	1168	1326
40	932	1188
45	667	917
50	481	655
55	365	455
60	58	115
65	24	26
70	13	14
75	0	0
80	0	0
85	0	0
90	0	0

° Vertical Angles
* Initial Lamp Lumens

Notes

- 1 Data on all charts calculated with a clear specular cone finish.
- 2 Specular cone multipliers: Gold x .92, Wheat x .88, Pewter x .80, Mocha x .78, Graphite x .78, Titanium x .78, Bronze x .75.
- 3 Softglow® cone multipliers: Clear x .93, Gold x .92, Wheat x .87, Pewter x .78, Mocha x .78, Graphite x .77, Titanium x .77, Bronze x .76.
- 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 lumen differences, power input, burning position, ambient temperature and ballast characteristics. A modification factor should be applied.
- 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.

Coefficients of Utilization

Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	0
Wall %	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Floor Reflectance 20%										
1	.58	.56	.54	.53	.55	.52	.53	.51	.51	.49	.47
2	.54	.51	.48	.46	.50	.45	.48	.44	.46	.43	.41
3	.50	.46	.43	.40	.45	.40	.44	.39	.42	.38	.37
4	.47	.42	.38	.35	.41	.35	.40	.34	.39	.34	.33
5	.43	.38	.34	.31	.37	.31	.36	.31	.35	.30	.29
6	.40	.34	.31	.28	.34	.28	.33	.27	.32	.27	.26
7	.38	.32	.28	.25	.31	.25	.30	.25	.30	.24	.23
8	.35	.29	.25	.22	.29	.22	.28	.22	.27	.22	.21
9	.33	.27	.23	.20	.26	.20	.26	.20	.25	.20	.19
10	.31	.25	.21	.19	.24	.19	.24	.18	.24	.18	.18