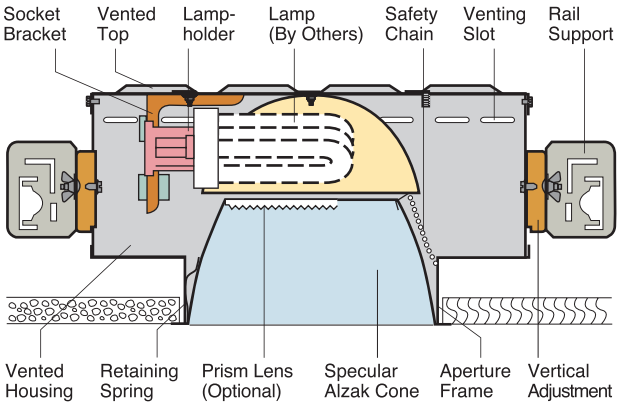
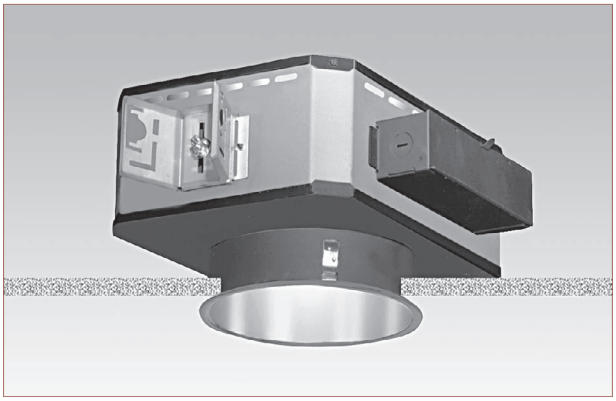




P931 One 26-32W Triple Tube Lamp
P932 One 42W Triple Tube Lamp

Medium Wide Beam
7 1/4" Conoid Apertures

Optics and Applications
Ellipsoidal primary reflectors and parabolic shielding cones produce classic symmetrical patterns for general use in corridors, open areas and transient spaces. Recess depths are shallow for limited plenums. Use in medium ceiling heights. Spacing to mounting height ratio is 1 to 1.2.

Design Features
Construction allows easy access to all components. Air flow design lowers fixture temperature for optimal lamp performance. Steel housings protect the reflectors and assures their proper relationship. Maximum ceiling thickness 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. Operates multiple wattage 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.

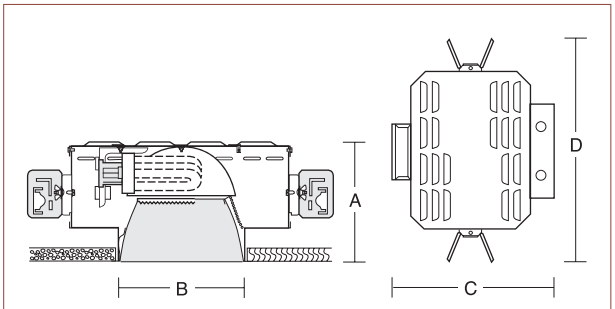
General
Fixtures are pre-wired, UL and C-UL listed for eight wire 75°C branch circuit wiring. Union made IBEW. Luminaire Efficiency Rating (LER) data is in the photometric directory located in Section Z.

Accessories
F Fuse.
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.
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.

R2 26" support rails.
R5 52" support rails.
WT White trim flange.
WHT White complete trim.
V347 347 volt ballast.
LS Lamp shield, acrylic.
LP Prism lens, acrylic.

Matching Units
Medium narrow beam Page P53
Sloped ceilings Page P54
Surface mount Pages P41, P42
Wall washers Pages P64, P65, P66
** Click for link to pages in blue.

Dimensions and Lamps



Number	A Depth	B Aperture	C Width	D Length	Lamps
P931	7 1/2" 191mm	7 1/4" 184mm	13 1/2" 343mm	19" 483mm	26-32W Triple Tube
P932	7 1/2" 191mm	7 1/4" 184mm	13 1/2" 343mm	19" 483mm	42W Triple Tube

Brightness

Number	Lamps	Plane	85°	75°	65°	55°	45°
P931	One 32W Philips Triple Tube	0°	11	32	58	4624	16126
		90°	10	30	53	10343	14362
	One 32W Osram Sylvania Triple Tube	0°	6	18	37	2206	12342
		90°	6	17	31	7898	11916
P932	One 42W Philips Triple Tube	0°	16	47	83	4878	16526
		90°	14	36	71	13192	16845
	One 42W Osram Sylvania Triple Tube	0°	14	44	69	2615	14563
		90°	12	31	53	11119	18113

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

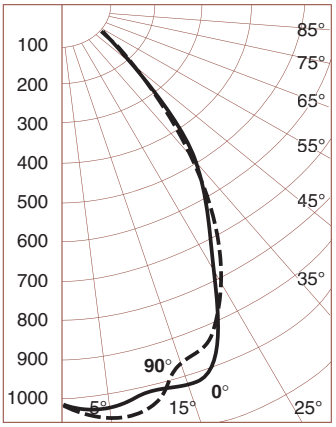
P55 P931 P932

Performance Datachart

Single Unit Initial Footcandles, 30" Work Plane							Ceiling to Floor	Multiple Units Initial Footcandles, 30" Work Plane			
P931 One 32W Philips Triple Tube Read Top Data P932 One 42W Philips Triple Tube Read Bottom Data								Ceiling 80% Walls 50% Floor 20%			
Nadir	15°		25°		35°			Spacing is Maximum Over Work Plane			
FC	FC	Diam	FC	Diam	FC	Diam		Spacing	RCR 1	RCR 3	RCR 8
34 39	30 35	3' 3'	20 27	5' 5'	9 14	8' 8'	8'	6' 6'	43 44	37 38	25 26
24 28	21 25	3' 3'	14 20	6' 6'	7 10	9' 9'	9'	7' 8'	31 32	26 27	18 18
18 21	16 19	4' 4'	11 15	7' 7'	5 7	11' 11'	10'	8' 9'	23 24	20 20	14 14
11 13	10 12	5' 5'	7 9	9' 9'	3 5	13' 13'	12'	10' 11'	14 15	12 13	9 9
8 9	7 8	6' 6'	4 6	11' 11'	2 3	16' 16'	14'	12' 14'	10 10	8 9	6 6

See notes 4, 5 and 6.

Candlepower Distribution

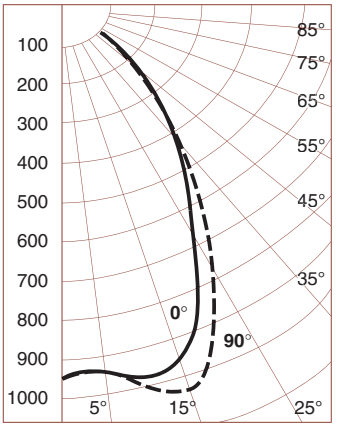


P931 One 32W Triple Tube Philips
Eff. 52% S/M 0° 1.03 S/M 90° 1.03

Candelas

o	0° 2400*	90° 2400*
0	1016	1016
5	1014	1032
10	1003	1013
15	1020	987
20	975	964
25	786	829
30	643	613
35	548	457
40	380	318
45	212	193
50	97	125
55	30	60
60	6	6
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

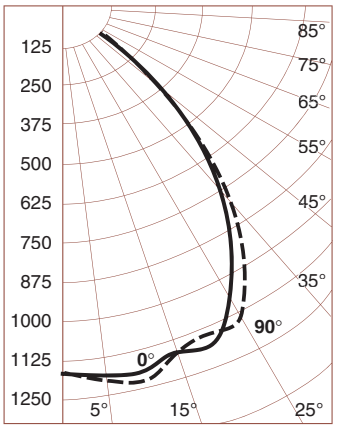
o Vertical Angles
* Initial Lamp Lumens



P931 One 32W Triple Tube Osram Sylvania
Eff. 49% S/M 0° .98 S/M 90° 1.05

o	0° 2400*	90° 2400*
0	955	955
5	939	954
10	964	998
15	960	1014
20	857	956
25	685	790
30	562	622
35	478	434
40	351	296
45	209	185
50	111	118
55	32	51
60	6	6
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

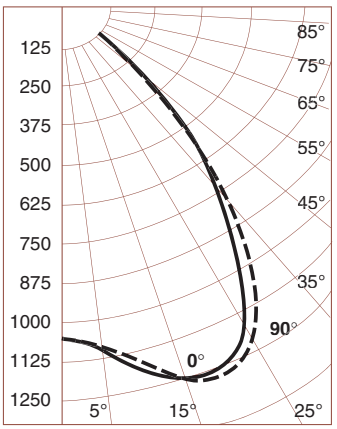
o Vertical Angles
* Initial Lamp Lumens



P932 One 42W Triple Tube Philips
Eff. 54% S/M 0° 1.17 S/M 90° 1.19

o	0° 3200*	90° 3200*
0	1177	1177
5	1190	1210
10	1184	1226
15	1159	1163
20	1215	1148
25	1092	1143
30	932	966
35	762	753
40	531	517
45	277	282
50	129	161
55	49	77
60	9	11
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
* Initial Lamp Lumens



P932 One 42W Triple Tube Osram Sylvania
Eff. 56% S/M 0° 1.24 S/M 90° 1.28

o	0° 3200*	90° 3200*
0	1061	1061
5	1097	1092
10	1184	1184
15	1241	1246
20	1257	1262
25	1154	1231
30	942	1034
35	732	767
40	558	505
45	297	257
50	129	148
55	44	67
60	9	8
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

o Vertical Angles
* Initial Lamp Lumens

Notes

1 Data on all charts calculated with a clear specular cone finish.

2 Specular cone multipliers: Gold x .98, Wheat x .97, Pewter x .86, Mocha x .86, Graphite x .84, Titanium x .84, Bronze x .81.

3 Softglow® cone multipliers: Gold x .90, Wheat x .87, Mocha x .75, Pewter x .72, Graphite x .70, Titanium x .70, Bronze x .68.

4 Single unit Datachart pattern diameters are determined by the number of degrees from each side of nadir. Therefore a 15° diameter represents a total 30° 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
Wall %	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Floor Reflectance 20%										
1	.60	.58	.57	.56	.57	.55	.55	.53	.53	.52	.49
2	.57	.54	.51	.49	.53	.49	.51	.48	.49	.47	.45
3	.53	.50	.47	.44	.49	.44	.47	.43	.46	.42	.41
4	.50	.46	.42	.40	.45	.40	.44	.39	.43	.39	.37
5	.47	.42	.39	.36	.42	.36	.41	.36	.40	.35	.34
6	.44	.39	.35	.33	.39	.33	.38	.33	.37	.32	.31
7	.42	.36	.33	.30	.36	.30	.35	.30	.34	.30	.29
8	.39	.34	.30	.28	.33	.28	.33	.27	.32	.27	.26
9	.37	.31	.28	.25	.31	.25	.31	.25	.30	.25	.24
10	.35	.29	.26	.24	.29	.24	.29	.23	.28	.23	.23

P931 One 32W Triple Tube Philips
P932 One 42W Triple Tube Philips
P931 One 32W Triple Tube Osram x .93
P932 One 42W Triple Tube Osram x 1.03