

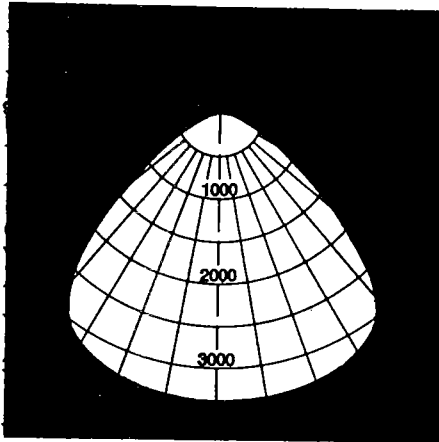
# plaskolite PL-21 Acrylic

## Specifications

Prismatic panels shall be precision-embossed PL-21 as manufactured by **plaskolite, inc.** Material shall be virgin (acrylic) (light-stabilized polystyrene) and shall meet IES-NEMA-SPI joint specifications for (acrylic) (light-stabilized polystyrene). Prismatic pattern PL-21 shall be a uniform array of  $\frac{3}{16}$ " square-based, female, conical prisms as shown in plaskolite drawing PL-21.

### Nominal 2' x 4'

Photometric Test Report  
plaskolite, Inc., Columbus, Ohio



Test: Plaskolite PL-21 ACRYLIC in commercial 2' x 4' fluorescent troffer with diffuse white reflector.	Angle degrees	Candelas
	0	3462
	5	3443
Lamp Position: Lamp centers 2 1/4" above lens spaced 3 1/2"-5"-3 1/2" on centers.	15	3399
	25	3307
Lamps: 4-F40T12/CW/RS	35	3022
	45	2067
Lumens: 12,440	55	1123
	65	535
Remarks: Vertical distribution across lamp axis. Data from ITL Test Report No. 10762 dated 6/21/68.	75	219
	85	51
	90	0

### Average Luminance Data

PL-21 ACRYLIC with diffuse white reflector  
4-F40T12/CW/RS fluorescent lamps 3110 lumens each.

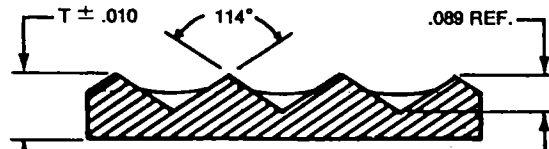
Footlamberts			Output Data	
Vertical angle	Across axes	Along axes	Zone degrees	% Total lamp lumens
55°	919	931	0-90	55.9
65°	594	608	60-90	5.8
75°	397	397	0-90	61.7
85°	275	329		

A complete set of photometric data for calculation purposes including along-axes; 45° and maximum luminance figures is available on request.

### Coefficients of Utilization

#### Zonal Cavity Method PL-21 ACRYLIC

Nominal 1' x 4'/2-F40T12/CW/RS										Nominal 2' x 4'/4-F40T12/CW/RS									
ptc = 20%										ptc = 20%									
Doc	80%			50%			10%			Doc	80%			50%			10%		
Pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	Pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
1	.70	.68	.66	.66	.64	.63	.61	.60	.59	1	.67	.65	.63	.63	.61	.60	.59	.58	.56
2	.63	.60	.57	.60	.57	.55	.56	.54	.52	2	.61	.57	.54	.57	.55	.52	.54	.52	.50
3	.57	.53	.49	.54	.51	.48	.51	.49	.47	3	.55	.51	.47	.52	.49	.46	.50	.47	.45
4	.52	.47	.43	.49	.46	.43	.47	.45	.41	4	.50	.45	.41	.47	.44	.41	.45	.42	.40
5	.47	.42	.38	.45	.40	.37	.42	.39	.37	5	.45	.40	.36	.43	.38	.35	.40	.37	.34
6	.42	.37	.34	.41	.36	.33	.39	.35	.33	6	.40	.35	.32	.39	.34	.31	.37	.33	.31
7	.38	.33	.30	.37	.33	.29	.35	.32	.29	7	.37	.32	.29	.36	.31	.28	.34	.30	.28
8	.35	.30	.26	.33	.29	.26	.32	.28	.26	8	.32	.27	.24	.31	.27	.24	.29	.26	.24
9	.31	.26	.23	.30	.26	.23	.29	.25	.22	9	.30	.25	.21	.29	.24	.21	.27	.24	.21
10	.28	.24	.20	.28	.23	.20	.26	.23	.20	10	.27	.22	.19	.26	.22	.19	.25	.21	.19



PL-21 ACRYLIC Cross-section

Section through PL-21 Acrylic prismatic panel showing precision optical design for low glare and high illumination efficiency.