

## TECH DATA

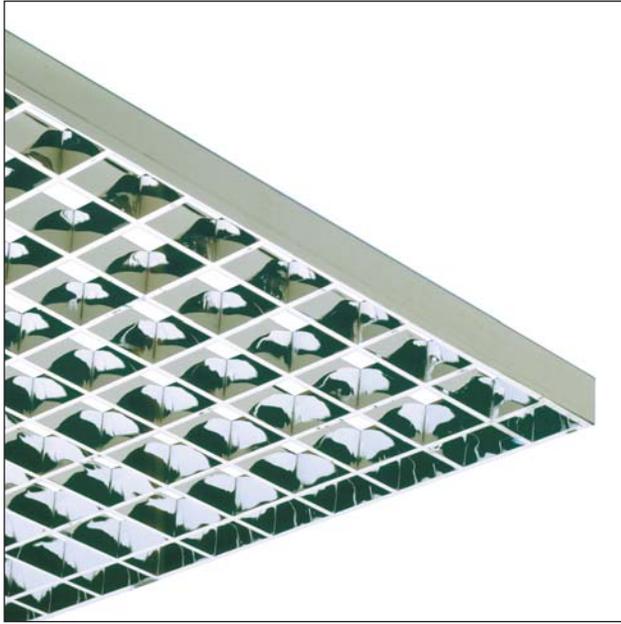
PROJECT: \_\_\_\_\_  
MATERIAL: \_\_\_\_\_  
FINISH: \_\_\_\_\_  
SIZE: \_\_\_\_\_  
OPTIONS: \_\_\_\_\_  
QUANTITY: \_\_\_\_\_



## PLASTIC PARABOLICS

# PL1

## PARA-LITE 1



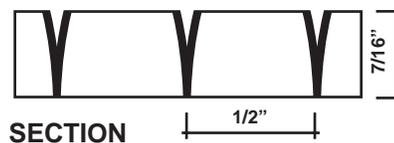
The unique design of Parabolic louvers represents the most sophisticated form of fluorescent lighting control in the lighting industry today. Optically perfect mirrored parabolic shapes are designed to reflect maximum light within 0°-45° working zone and shield glare zone. The brightness control provides efficient illumination while eliminating the discomfort and eyestrain normally associated with source brightness and glare.

Para-Lite 1 incorporates the typical design features creating the same low-key appearance often associated with incandescent downlighting. A soft understated visual image is produced by the small cell (1/2" x 1/2" x 7/16") overall louver pattern. Regardless of source intensity or size, the Para-Lite 1 permits complete brightness control within normal viewing angles.

### APPLICATIONS:

- Areas using CRT/VDT terminals
- Office buildings
- Hospitals

1/2" x 1/2" x 7/16"



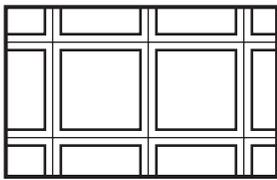
SECTION

### NOMINAL PANEL SIZES

1' x 4'

2' x 2'

2' x 4'



PLAN

1/2" x 1/2" x 7/16"



PLASTIC PARABOLICS

PL1

PARA-LITE 1

**SPECIFICATIONS:**

Parabolic louvers shall be Para-Lite 1 as manufactured by Liteline Corporation, and shall be one piece injection moulded of (polystyrene or acrylic) with all parabolic surfaces prepared with primary undercoat, and a (highly specular) vacuum metalized finish or a (semi-specular/satin) painted finish.

Cell dimensions shall be 1/2" x 1/2" x 7/16" and shall provide 44° shielding with a louver efficiency of not less than 41%. This louver has a .99 VCP rating (specular silver finish). Available in nominal panel sizes of 2' x 4', 2' x 2', and 1' x 4'.

**Note: Custom sizes are available, contact Liteline with your requirements.**

**ORDERING:**

Products listed below are Polystyrene.  
For Acrylic add suffix "A" to the end of the catalogue number.

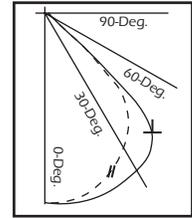
CATALOGUE No.	DESCRIPTION	DIMENSION
<b>SPECULAR FINISH</b>		
PL1-14 SP-S	Specular Silver	11 3/4" x 47 3/4"
PL1-22 SP-S	Specular Silver	23 11/16" x 23 3/4"
PL1-24 SP-S	Specular Silver	23 11/16" x 47 3/4"
PL1-24 SP-G	Specular Gold	23 11/16" x 47 3/4"
<b>SATIN FINISH</b>		
PL1-24 SF-S	Satin Silver	23 11/16" x 47 3/4"
PL1-24 SF-B	Satin Black	23 3/4" x 47 3/4"
PL1-24 SF-W	Satin White	23 3/4" x 47 3/4"
<b>SEMI-SPECULAR FINISH</b>		
PL1-24 SS-S	Semi-Specular Silver	23 3/4" x 47 3/4"

Louver panels are designed to fit any standard 1' x 4', 2' x 2' or 2' x 4' tee bar grid system.

Panels can also be specified with the Avoida-Notch optional frame:  
- to specify add suffix - "AN50" to the base catalogue number.  
- colour designation: B-Black, W-White.  
- finish designation: SP-Specular, SF-Satin, HS-Hot Stamped White

**TECHNICAL SUPPORT**

Independent Testing Laboratories Inc. Certified  
Test Report No. 31193. Date: 8-23-85. Description:  
Commercially Available 2' x 4' Troffer with Specular  
Parabolic Plastic Louver - **PARA-LITE 1 (PL1)**  
Lamps. Four F40T12/CW. Each 3150 lumens.



Total Luminaire Efficiency:	41.9%	
Plane:	0°	90°
Spacing Criteria:	1.2	1.4
Shielding Angles:	44°	44°

**CANDLEPOWER DISTRIBUTION**

VER. ANG.	HORIZONTAL ANGLE					FLUX	ZONAL LUMENS
	00.0	22.5	45.0	67.5	90.0		
0.0	2945	2945	2945	2945	2945		
5.0	2937	2965	2968	2958	2965	282	282
15.0	2826	2874	2916	2950	2950	824	824
25.0	2586	2659	2745	2846	2864	1268	1268
35.0	2243	2317	2516	2687	2747	1571	1571
45.0	1353	1554	1717	1836	1861	1218	1218
55.0	50	68	121	54	21	109	109
65.0	0	0	0	0	0	0	0
75.0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0

**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	%LAMP	%FIXT.
0-30	2374	18.8	45.0
0-40	2945	31.3	74.8
0-60	5273	41.8	100.0
0-90	5273	41.9	100.0
90-180	0	0.0	0.0
0-180	5273	41.9	100.0

**LUMINANCE IN FOOTLAMBERTS**

ANGLE IN DEG.	AVG. 0-DEG.	AVG. 90-DEG.
0	1387	1387
45	301	1240
55	41	17
65	0	0
75	0	0
85	0	0

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20																		
RC	.80			.70			.50			.30			.10			0		
	RW	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10
1	.47	.46	.45	.44	.46	.45	.44	.43	.43	.43	.42	.42	.41	.41	.40	.40	.39	.39
2	.45	.43	.41	.39	.44	.42	.40	.39	.40	.39	.39	.38	.37	.38	.37	.36	.36	.36
3	.42	.39	.37	.35	.41	.39	.36	.35	.37	.36	.34	.36	.35	.34	.35	.34	.33	.32
4	.40	.36	.33	.31	.39	.36	.33	.31	.35	.33	.31	.34	.32	.31	.33	.31	.30	.29
5	.37	.33	.30	.28	.36	.33	.30	.28	.32	.30	.28	.31	.29	.28	.30	.29	.27	.27
6	.35	.30	.28	.26	.34	.30	.27	.26	.29	.27	.25	.29	.27	.25	.28	.26	.25	.24
7	.32	.28	.26	.23	.32	.28	.25	.23	.27	.25	.23	.26	.24	.23	.26	.24	.22	.22
8	.30	.25	.22	.20	.29	.25	.22	.20	.25	.22	.20	.24	.22	.20	.24	.22	.20	.19
9	.28	.23	.20	.18	.27	.23	.20	.18	.22	.20	.18	.22	.19	.18	.21	.19	.18	.17
10	.26	.21	.18	.16	.25	.21	.18	.16	.20	.18	.16	.20	.17	.16	.19	.17	.16	.15

**VISUAL COMFORT PROBABILITY TABLE**

100FC Work Plane Illumination. Work Plane FC = 100

ROOM DIMENSIONS	LUMINAIRES 0 DEGREE PLANE										LUMINAIRES 90 DEGREE PLANE			
	MOUNTING HEIGHT													
	W	L	8.5	10	13	16	8.5	10	13	16	8.5	10	13	16
20	20	96	96	94	88	97	95	92	85					
20	30	96	96	95	88	97	95	92	86					
20	40	96	96	95	88	97	95	93	86					
20	60	97	96	95	89	97	95	93	86					
30	20	96	96	95	90	97	95	92	87					
30	30	96	96	95	90	97	95	93	88					
30	40	97	96	95	90	97	95	93	88					
30	60	97	96	95	90	97	95	93	88					
30	80	97	96	95	90	97	95	93	88					
40	20	96	96	95	90	97	95	93	87					
40	30	97	96	95	90	97	95	93	88					
40	40	97	96	95	90	97	95	93	88					
40	60	97	96	95	90	97	95	93	88					
40	80	97	96	95	90	97	95	93	88					
40	100	97	96	95	90	97	95	93	88					
60	30	97	96	95	90	97	95	93	88					
60	40	97	96	95	90	97	95	93	88					
60	60	97	96	95	90	97	95	93	88					
60	80	97	96	95	90	97	95	93	88					
60	100	97	96	95	90	97	95	93	88					
100	40	97	96	95	90	97	95	93	88					
100	60	97	96	95	90	97	95	93	88					
100	80	97	96	95	91	97	95	94	88					
100	100	97	96	95	91	97	95	94	89					