

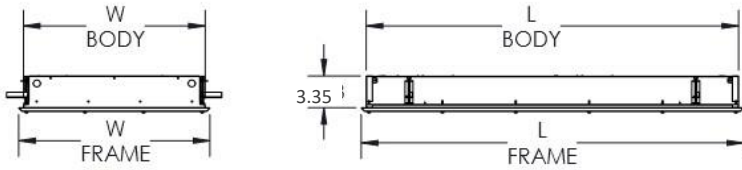
PROJECT:

NOTES:

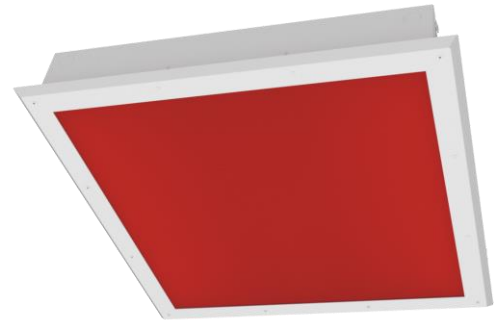
ORDERING INFORMATION:

**EXAMPLE** PRCL - SD - 24 - F - 90R12 - 9 - 40 - H1 - MV - EM - D  
 SERIES HOUSING NOM. LENGTH MOUNTING LUMENS CRI KELVINS LENS VOLTAGE OPTIONS DRIVER

SHOP DRAWINGS



PRCL	BODY		FRAME	
	W	L	W	L
2x4	22.83	46.75	24.00	48.00
2x2	22.83	22.75	24.00	24.00
1x4	10.83	46.75	12.00	48.00



ORDERING INFORMATION

**SERIES**  
PRCL

**HOUSING AND DOOR FRAME**  
**BLANK** 20-Ga CRS Housing / 18-Ga CRS Door  
**AD** 20-Ga CRS Housing / 18-Ga Alum. Door  
**ADH** 20-Ga Alum. Housing / 18-Ga Alum. Door  
**SD** 20-Ga CRS Housing / Brushed SS Door  
**SDH** Painted White SS Housing / Brushed SS Door

**NOMINAL LENGTH**  
 14 12"x 48"  
 22 24"x 24"  
 24 24"x 48"

**MOUNTING**  
**F** Flange  
**T** T-Bar

LUMENS

Lumen Package*	Nominal Lumens
<b>12"x 48"</b>	
50R11	5000 lm white / 1100 lm red
80R11	8000 lm white / 1100 lm red
R11	1100 lm red
<b>24"x 24"</b>	
50R11	5000 lm white / 1100 lm red
80R11	8000 lm white / 1100 lm red
R11	1100 lm red
<b>24"x 48"</b>	
90R11	9000 lm white / 1200 lm red
120R11	12,000 lm white / 1200 lm red
170R11	17,000 lm white / 1200 lm red
R12	1200 lm red

\*Other lumen packages available  
 \*\*Dual colors equal 2 different circuits

**CRI**  
**BLANK** 80 CRI  
**9** 90 CRI

**KELVINS**  
**30** 3000K  
**35** 3500K  
**40** 4000K  
**50** 5000K  
**TW** Tunable White

**LENS**  
**FA1** Prismatic Acrylic (1/8")  
**H1** White Opal Acrylic (1/8")  
**G1** Prismatic Polycarbonate (1/8")  
**L5** White Frosted Polycarbonate  
**L1** Slightly Frosted High Efficient Acrylic

**VOLTAGE**  
**MV** 120-277V  
**347** 347V

**OPTIONS**  
**ML** Compliant with MIL-STD 461G  
**EM** Emergency Power Pack  
**AM** Antimicrobial Finish  
**RA** Rear Access Door (not available in 12"x48")  
**NH** Special Sealed Housing and wireway  
**CC** COI Compliant  
**OS** Internal occupancy and daylight harvesting sensor

\*Lumen package to be confirmed (need a second circuit)

**DRIVER**  
**ND** Non-dimming applications  
**D** 0-10V dimming  
**D1** 0-10V dimming to 1%  
**DA** DALI driver

FEATURES

- > Recessed luminaire designed for contamination controlled environments such as pharmaceutical processing, chemical labs, medical applications, electronic assembly or semiconductor manufacturing
- > One-piece 18 gauge C.R.S. seamless external frame
- > Fully gasketed border between internal and external frames
- > Outer edge of frame is gasketed and fits snugly against the ceiling
- > Lens retaining internal frame attached to external frame with stainless steel gasketed screws
- > Minimum 80 CRI; color range 3000K - 5000K available
- > Tunable White option available
- > Multiple dimming protocols available
- > Variety of lenses available for optimized illumination
- > IC Rated
- > IP66 for recessed applications\*
- > FED-STD-209E/Class 100 (ISO5-9) suitable
- > NSF Certified for Splash Zone Installations
- > Compliant with MIL-STD 461G (optional)
- > Operating temperature (-30 to 45 Celsius / -22 to 113 Fahrenheit)

\* Faceplate is sealed with multiple gaskets and luminaire is IP66 certified as providing protection against dust and water entering the luminaire through the faceplate in a recessed application against dust and water entering the luminaire through the faceplate in a recessed application. Note that the housing (which is designed to be recessed into the ceiling and is not visible once installed) does not provide ingress protection against dust and water entering the luminaire from the plenum.

APPLICATIONS

- > Medical applications
- > Electronic Assembly
- > Semiconductor Manufacturing
- > Pharmaceutical processing
- > Chemical labs
- > Food processing facilities

LED

FIXTURE PERFORMANCE DATA

SPECIFICATIONS

**Housing/Reflector** – Precision die-formed 20-gauge C.R.S housing with mitered and welded corners (optional aluminum and stainless steel)

**External Frame** – 18-gauge C.R.S. seamless external overlapping frame with welded corners secured to housing (optional aluminum and stainless steel)

**Shielding** – Variety of lens options available.

**Finish** – Baked white enamel powder finish applied post production on all surfaces for smooth edges and safe handling

**Electrical** – High quality mid-power LED boards. L70 >72,000 hours reported / 129,200 hours calculated at maximum allowable output current. L85 >50,000 hours

**Mounting** – Recessed (plaster or T-Bar ceiling). We strongly recommend to add wire hangers on each earthquake clips/brackets (see fixture details)

Listings

- UL certified
- IP66 rated
- NSF certified for splash zone installations.

**Warranty** – 5-year limited warranty

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
12" x 48"			
40 (H1 lens)	4,102	39	105
60 (H1 lens)	6,232	66	94
24" x 24"			
40 (H1 lens)	4,046	39	107
80 (H1 lens)	7,970	80	99
24" x 48"			
40 (H1 lens)	4,098	36	114
100 (H1 lens)	9,893	93	106

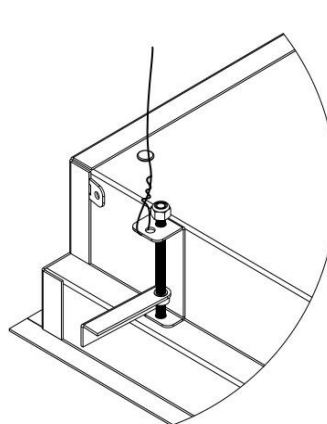
\*Results based on 4000K, 80 CRI

\*\*Luminaire is available in all wattages ranging from 10 watts to 95 watts for 1x4/2x2 and 10 watts to 190 watts for 2x4

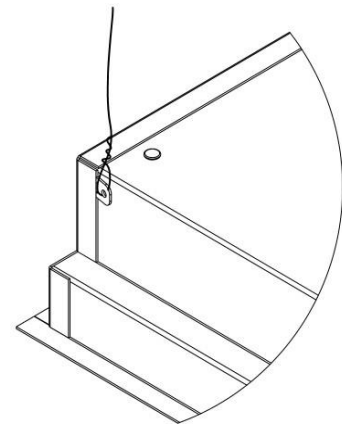
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

FIXTURE DETAILS

Hanging brackets to secure housing to structure (wires not supplied by PA-CO)



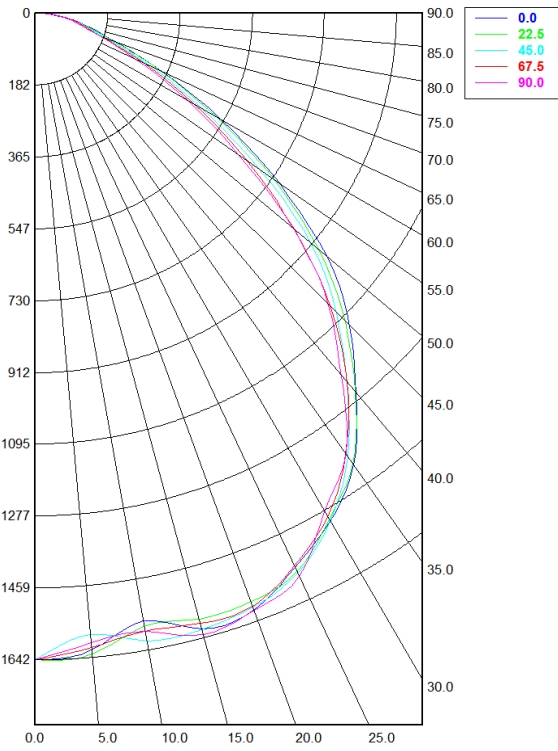
Plaster ceiling / Flange



T-Bar

PHOTOMETRY

PRCL-22-80-40-H1 Total Luminaire Output: 7,970 lumens; 80 Watts



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	1,641.79	1,641.79	1,641.79	1,641.79	1,641.79
5.00°	1,623.79	1,634.06	1,584.11	1,616.62	1,604.97
10.00°	1,567.53	1,581.39	1,618.02	1,593.91	1,593.74
15.00°	1,618.39	1,592.68	1,620.34	1,604.29	1,634.32
20.00°	1,611.92	1,590.29	1,605.56	1,602.08	1,613.68
25.00°	1,553.64	1,565.62	1,569.21	1,549.23	1,578.79
30.00°	1,490.15	1,485.32	1,491.33	1,478.15	1,461.30
35.00°	1,402.28	1,398.79	1,375.84	1,367.72	1,368.58
40.00°	1,261.78	1,258.40	1,225.50	1,227.15	1,203.09
45.00°	1,124.03	1,107.43	1,076.49	1,057.29	1,048.88
50.00°	964.11	936.70	911.48	853.58	854.73
55.00°	748.33	733.62	690.01	648.02	625.22
60.00°	541.85	523.59	484.86	459.94	443.95
65.00°	352.56	350.53	321.50	299.00	282.72
70.00°	216.69	211.70	193.81	179.97	175.35
75.00°	139.41	132.71	125.60	122.51	114.16
80.00°	83.43	83.41	84.20	85.41	82.13
85.00°	34.22	36.95	39.94	37.86	36.18
90.00°	8.73	8.58	8.59	8.61	8.52

Spacing Criterion:

Two luminaires, plane 0°	1.32
Two luminaires, plane 90°	1.3
Four luminaires	1.37

Zonal Lumen Summary

Zone	Lumens	% Fixture
0.00° - 10.00°	162.68	3.93%
10.00° - 20.00°	454.61	10.97%
20.00° - 30.00°	715.38	17.27%
30.00° - 40.00°	855.37	20.65%
40.00° - 50.00°	826.60	19.95%
50.00° - 60.00°	615.56	14.86%
60.00° - 70.00°	326.74	7.89%
70.00° - 80.00°	140.17	3.38%
80.00° - 90.00°	45.49	1.10%
90.00° - 100.00°	2.36	0.06%
100.00° - 110.00°	0.00	0.00%
110.00° - 120.00°	0.00	0.00%
120.00° - 130.00°	0.00	0.00%
130.00° - 140.00°	0.00	0.00%
140.00° - 150.00°	0.00	0.00%
150.00° - 160.00°	0.00	0.00%
160.00° - 170.00°	0.00	0.00%
170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	4,142.59	100.00%
90.00° - 180.00°	2.36	0.06%
0.00° - 180.00°	4,142.59	100.00%