

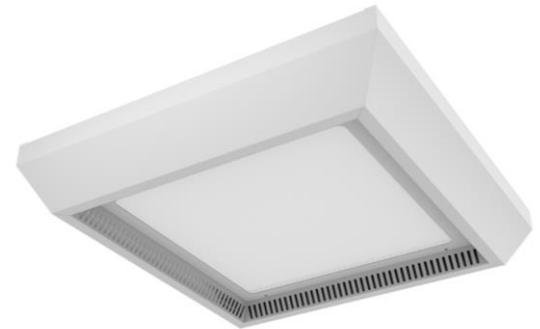
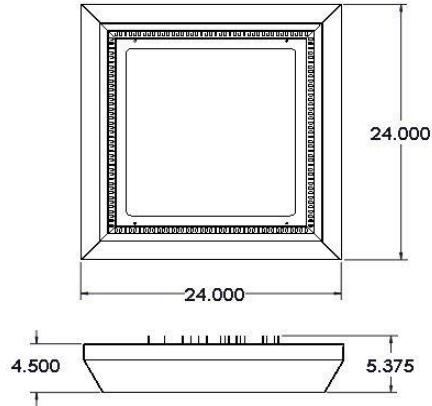
PROJECT:

NOTES:

ORDERING INFORMATION:

**EXAMPLE** PENE-S - 22L - LED - 200 - 9 - 40 - L1 - MV - WC8 - CL4 - DM  
 SERIES      NOM. LENGTH      SOURCE      LUMENS      CRI      KELVINS      LENS      VOLTAGE      OPTIONS      CONTROLS      DRIVER

SHOP DRAWINGS



ORDERING INFORMATION

<b>SERIES</b>	
PENE-S	
<b>NOMINAL LENGTH</b>	
22L	24"x 24"

<b>SOURCE</b>	
L	LED

<b>LUMENS</b>		
Lumen Package*	Nom. Lumens	Wattage
24" x 24"		
100	10,000	80
150	15,000	120
200	20,000	169

\*Other lumen packages available.

<b>SOURCE</b>	
BLANK	80 CRI
9	90 CRI

<b>KELVIN</b>	
30	3000K
35	3500K
40	4000K
50	5000K
TW	Tunable White*

\*Lumen package limitations for TW

<b>LENS</b>	
BLANK	No Lens
H1	White Opal
L1	Frosted
L3	Frosted White Polycarbonate

<b>VOLTAGE</b>	
MV	120-277V
347	347V

<b>OPTIONS</b>	
BC#	Black Cabtire Wire #ft
WC#	White Cabtire Wire #ft
AC#	Suspension Aircraft Cable #ft
EM	Emergency Power Pack

**CONTROLS**  
 None  
 Click on the following link for control options:  
<https://bit.ly/2KzMuAX>

<b>DRIVER</b>	
BLANK	Non-dimming applications
DM	0-10V dimming
DA	DALI Driver

Click on the following link for special driver options:  
<https://bit.ly/2FqZ6qU>

FEATURES

- > Specification grade architectural LED high/low bay luminaire for applications requiring both aesthetics and illumination performance
- > Sleek attractive design to complement a variety of interiors
- > Welded housing for additional strength
- > Integral ventilation slots and finned aluminum heatsink
- > Wide selection of LED packages available for a broad range of output levels and ceiling heights
- > Minimum 80 CRI; color range 3000K - 5000K available
- > Tunable White option available
- > Multiple dimming protocols available
- > Variety of lenses available for smooth and uniform illumination
- > Adjustable suspension cable available
- > Efficacies up to 115 lm/W
- > 100% made in Canada

APPLICATIONS

- > Schools
- > Atriums
- > Retail Applications
- > Commercial Offices
- > Showrooms
- > Sport Facilities
- > Car Dealerships
- > General Purpose Lighting

LED

FIXTURE PERFORMANCE DATA

SPECIFICATIONS

**Housing/Reflector** – Precision die-formed 22-gauge C.R.S.

**Shielding** – Variety of lenses available

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

**Electrical** – Quality mid-power LED boards. L85 >50,000 hours.

**Listings** –  
 ■ cUL certified as luminaire suitable for dry or damp locations.

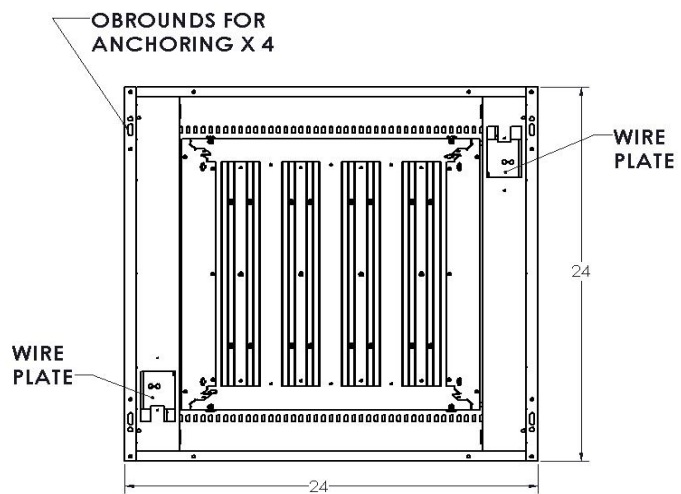
**Warranty** – 5-year limited warranty

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
24" x 24"			
100	10,212	80	128
150	15,341	120	128
200	20,422	169	121

\*Results based on 4000K, 80 CRI, Lens (L3)

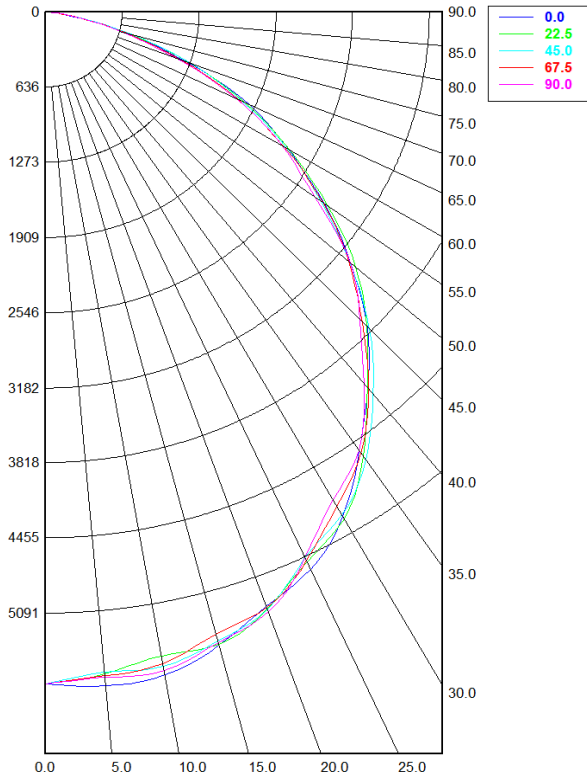
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

FIXTURE DETAILS



PHOTOMETRY

PENE-S-22L-LED-150-40-L1-MV Total Luminaire Output: 15,341 lumens; 120 Watts



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	5,689.85	5,689.85	5,689.85	5,689.85	5,689.85
5.00°	5,727.50	5,626.10	5,613.61	5,643.79	5,656.79
10.00°	5,701.81	5,539.13	5,628.20	5,603.21	5,663.88
15.00°	5,553.10	5,546.28	5,516.41	5,454.28	5,530.57
20.00°	5,354.40	5,376.49	5,380.59	5,367.29	5,406.72
25.00°	5,208.16	5,136.35	5,097.23	5,124.66	5,099.94
30.00°	4,937.20	4,955.96	4,921.33	4,837.02	4,773.61
35.00°	4,541.03	4,597.68	4,633.89	4,562.70	4,536.16
40.00°	4,159.08	4,153.75	4,228.83	4,168.80	4,112.36
45.00°	3,774.94	3,773.73	3,802.73	3,716.79	3,683.65
50.00°	3,305.16	3,362.13	3,297.37	3,284.54	3,302.21
55.00°	2,829.08	2,866.84	2,791.98	2,816.89	2,734.91
60.00°	2,318.93	2,335.19	2,307.80	2,276.88	2,264.11
65.00°	1,864.06	1,827.44	1,802.74	1,761.09	1,748.86
70.00°	1,255.08	1,281.94	1,295.53	1,208.21	1,166.06
75.00°	696.64	719.22	732.74	683.07	642.59
80.00°	247.96	263.87	271.70	266.41	253.13
85.00°	30.77	32.07	38.43	39.73	35.54
90.00°	2.51	2.11	2.59	2.60	2.16

Spacing Criterion:

Two luminaires, plane 0°	1.26
Two luminaires, plane 90°	1.25
Four luminaires	1.37

Zonal Lumen Summary

Zone	Lumens	% Fixture
0.00° - 10.00°	570.80	3.72%
10.00° - 20.00°	1,553.46	10.13%
20.00° - 30.00°	2,362.32	15.40%
30.00° - 40.00°	2,846.32	18.55%
40.00° - 50.00°	2,885.92	18.81%
50.00° - 60.00°	2,505.61	16.33%
60.00° - 70.00°	1,762.19	11.49%
70.00° - 80.00°	763.95	4.98%
80.00° - 90.00°	91.26	0.59%
90.00° - 100.00°	0.66	0.00%
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°	15,341.83	100.00%
90.00° - 180.00°	0.66	0.00%
0.00° - 180.00°	15,341.83	100.00%

