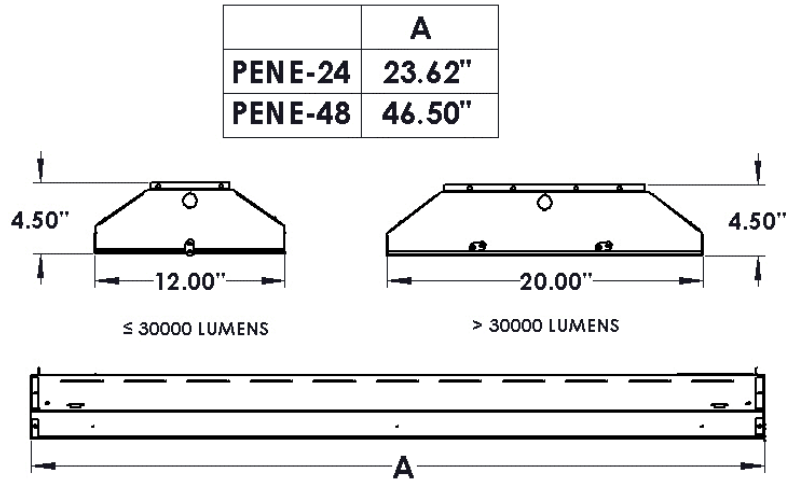


| | |
|----------|--------|
| PROJECT: | NOTES: |
|----------|--------|

| |
|-----------------------|
| ORDERING INFORMATION: |
|-----------------------|

| | | | | | | | | | |
|----------------|---|--------|--------|-----|---------|------|---------|---------|--------|
| EXAMPLE | PENE - 48 - L - 300 - 9 - 50 - L1 - MV - WG - D | | | | | | | | |
| SERIES | NOM. LENGTH | SOURCE | LUMENS | CRI | KELVINS | LENS | VOLTAGE | OPTIONS | DRIVER |

SHOP DRAWINGS



ORDERING INFORMATION

| | |
|---------------|------|
| SERIES | PENE |
|---------------|------|

| | | |
|-----------------------|--------|--------|
| NOMINAL LENGTH | 24 24" | 48 48" |
|-----------------------|--------|--------|

| | |
|---------------|-------|
| SOURCE | L LED |
|---------------|-------|

| | |
|---------------|--|
| LUMENS | |
|---------------|--|

| Lumen Package* | Nominal Lumens |
|----------------|----------------|
| 24" | |
| 100 | 10,000 |
| 150 | 15,000 |
| 48" | |
| 200 | 20,000 |
| 240 | 24,000 |
| 300 | 30,000 |
| 400 | 40,000 |
| 500 | 50,000 |
| 630 | 63,000 |

*Other lumen packages available.

| | | |
|------------|--------------|----------|
| CRI | BLANK 80 CRI | 9 90 CRI |
|------------|--------------|----------|

| | | | | | |
|---------------|----------|----------|----------|----------|------------------|
| KELVIN | 30 3000K | 35 3500K | 40 4000K | 50 5000K | TW Tunable White |
|---------------|----------|----------|----------|----------|------------------|

| | | | | | | | |
|-------------|------------|------------------------------------|-------------------------|---------------|------------|---------------------------------|-------------------------------|
| LENS | 00 No Lens | A0 Acrylic K12 - 0.095" (standard) | A1 Acrylic K12 - 0.125" | H1 White Opal | L1 Frosted | M1 Clear Polycarbonate (0.125") | G1 Polycarbonate K12 (0.125") |
|-------------|------------|------------------------------------|-------------------------|---------------|------------|---------------------------------|-------------------------------|

| | | |
|----------------|-------------|----------|
| VOLTAGE | MV 120-277V | 347 347V |
|----------------|-------------|----------|

| | | | | | | | | | |
|----------------|-----------------------------|-----------------------------|-----------------------------------|------------------------------|---------------|------------------------|----------------------|------------------------|------------------------------------|
| OPTIONS | BC# Black Cab Tire Wire #ft | WC# White Cab Tire Wire #ft | AC# Suspension Aircraft Cable #ft | CS# Chain Suspension Kit #ft | WG Wire Guard | EM Emergency Powerpack | WD Wide Distribution | ND Narrow Distribution | OF External Mount Occupancy Sensor |
|----------------|-----------------------------|-----------------------------|-----------------------------------|------------------------------|---------------|------------------------|----------------------|------------------------|------------------------------------|

| | | | |
|----------------|-----------------------------|-----------------|----------------|
| DRIVERS | ND Non-dimming applications | D 0-10V dimming | DA DALI driver |
|----------------|-----------------------------|-----------------|----------------|

FEATURES

- > High performance LED luminaire replacing conventional HID and fluorescent high bay
- > 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
- > Energy-saving occupancy sensor option available
- > Wire guard option available
- > Variety of lenses available for smooth, uniform illumination
- > Medium lighting distribution as standard

APPLICATIONS

- > Warehouse
- > Manufacturing Plants
- > Retail
- > Commercial
- > Industrial
- > Sport Facilities

FIXTURE PERFORMANCE DATA

SPECIFICATIONS

Housing/Reflector – Precision die-formed aluminum housing

Shielding – Variety of lenses available based on customer preference

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 – Suspended or surface

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

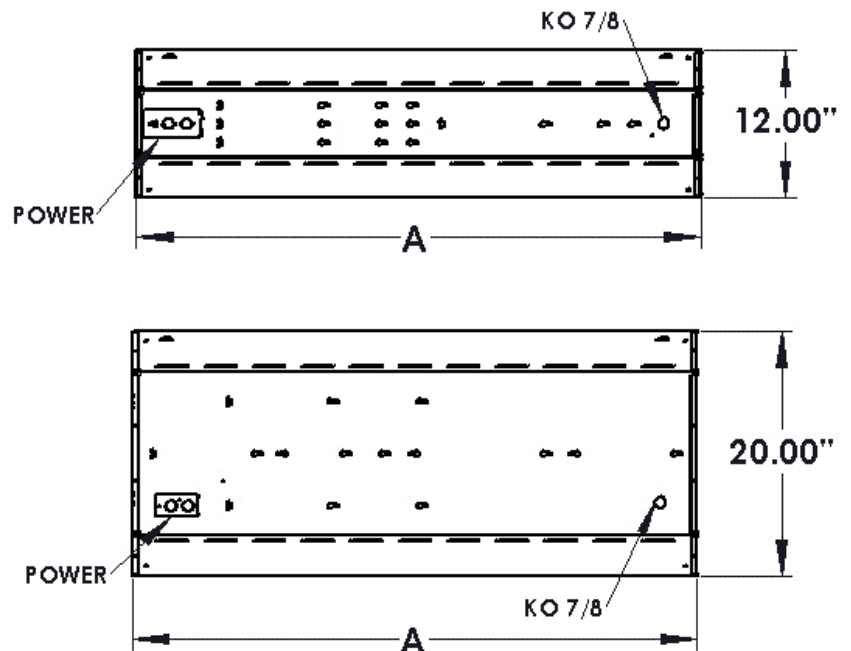
Warranty – 5-year limited warranty

| LED PACKAGE | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-------------|------------------|---------|-----------------|
| 24" | | | |
| 100 | 10,110 | 63 | 160 |
| 150 | 15,136 | 92 | 165 |
| 48" | | | |
| 200 | 20,119 | 126 | 160 |
| 240 | 24,128 | 154 | 157 |
| 300 | 30,142 | 185 | 163 |
| 400 | 40,551 | 255 | 158 |
| 500 | 50,552 | 317 | 159 |
| 630 | 63,493 | 433 | 146 |

*Results based on 4000K, 80 CRI, No Lens

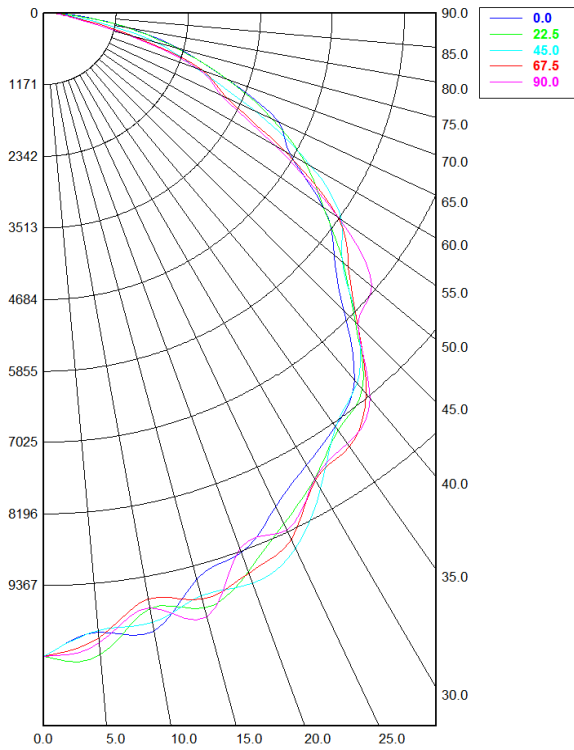
| MULTIPLIER TABLE | |
|-------------------|-------------------|
| COLOR TEMPERATURE | |
| CCT/CRI | CONVERSION FACTOR |
| 3000K / 80 CRI | 0.95 |
| 3500K / 80 CRI | 0.97 |
| 4000K / 80 CRI | 1 |
| 5000K / 80 CRI | 1.03 |

FIXTURE DETAILS



PHOTOMETRY

PENE-48-L-300-40-MV Total Luminaire Output: 30,142 lumens; 185 Watts



Candela Table

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-----|----------|----------|----------|----------|----------|
| 0° | 10,522.4 | 10,522.4 | 10,522.4 | 10,522.4 | 10,522.4 |
| 5° | 10,168.2 | 10,538.2 | 10,135.9 | 10,255.4 | 10,346.3 |
| 10° | 10,269.7 | 9,895.64 | 10,124.3 | 9,737.62 | 9,878.69 |
| 15° | 9,582.69 | 10,073.6 | 9,872.5 | 9,928.74 | 10,228.7 |
| 20° | 9,386.76 | 9,717.01 | 9,921.61 | 9,745.96 | 9,309.16 |
| 25° | 8,903.02 | 9,214.45 | 9,668.96 | 9,494.8 | 9,333.94 |
| 30° | 8,543.17 | 8,807.47 | 8,991.62 | 8,824.41 | 8,812.46 |
| 35° | 8,260.22 | 8,333.79 | 8,265.94 | 8,660.36 | 8,598.67 |
| 40° | 7,846.02 | 8,045.9 | 7,913.4 | 8,137.63 | 8,238.42 |
| 45° | 6,894.12 | 7,155.94 | 7,207.27 | 7,220.12 | 7,223.6 |
| 50° | 6,154.18 | 6,348.96 | 6,327.53 | 6,460.54 | 6,946.85 |
| 55° | 5,555.33 | 5,552.32 | 5,907.07 | 5,843.82 | 5,877.47 |
| 60° | 4,603.93 | 4,907.64 | 5,027.53 | 4,490.67 | 4,305.29 |
| 65° | 4,179.41 | 4,074.73 | 3,746.82 | 3,261.61 | 3,168.81 |
| 70° | 3,149.7 | 3,168.77 | 2,635.04 | 2,726.32 | 2,673.15 |
| 75° | 2,270.45 | 2,229.8 | 1,915.18 | 1,583.55 | 1,419.92 |
| 80° | 1,380.41 | 1,355.46 | 886.43 | 636.37 | 511.56 |
| 85° | 570.46 | 515.56 | 296.65 | 272.79 | 269.48 |
| 90° | 58.05 | 69.07 | 65.01 | 62.56 | 53.59 |

Luminaire Spacing Criterion (spacing to mounting height ratio)

- Two luminaires, plane 0° 1.21
- Two luminaires, plane 90° 1.26
- Four luminaires 1.39

Zonal Lumen Summary

| Zone | Lumens | % Lamp | % Fixture |
|------------|----------|-----------|-----------|
| 0° - 30° | 8,109.83 | 8,673.47% | 26.91% |
| 0° - 40° | 13,382.7 | 14,312.8% | 44.4% |
| 0° - 60° | 23,974.4 | 25,640.6% | 79.54% |
| 0° - 90° | 30,142.1 | 32,237% | 100% |
| 90° - 120° | 17.3 | 18.5% | 0.06% |
| 90° - 150° | 17.3 | 18.5% | 0.06% |
| 90° - 180° | 17.3 | 18.5% | 0.06% |
| 0° - 180° | 30,142.1 | 32,237% | 100% |