

## DESCRIPTION

8-inch LED recessed narrow, medium, or wide beam downlight specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Offered with 1000-15,000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K available in 80 or 90 CRI.

| Catalog #   |  | Type |
|-------------|--|------|
| Project     |  |      |
| Comments    |  | Date |
| Prepared by |  |      |

## SPECIFICATION FEATURES

### Lower Shielding Reflector

Self-flanged, spun .060" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

### Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

### Plaster Frame / Collar

Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

### Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

### Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12

AWG (four in, four out) 90°C conductors and feed thru branch wiring.

### Thermal

Forged aluminum heat sink conducts heat away from the LED module for improved performance and longer life.

### LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80 or 90 CRI.

### Driver

Combination 0-10V/trailing edge driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light,

DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture. 1000, 1500, 2000 lumen utilize one driver. 3000-10,000 utilize two drivers, 12,000-15,000 lumen utilizes three drivers.

### Code Compliance

Thermally protected and cULus listed for protected wet locations. cCSAus certified. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/ RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards. 8000 lumen and above are marked spacing and must follow spacing requirements.

### Warranty

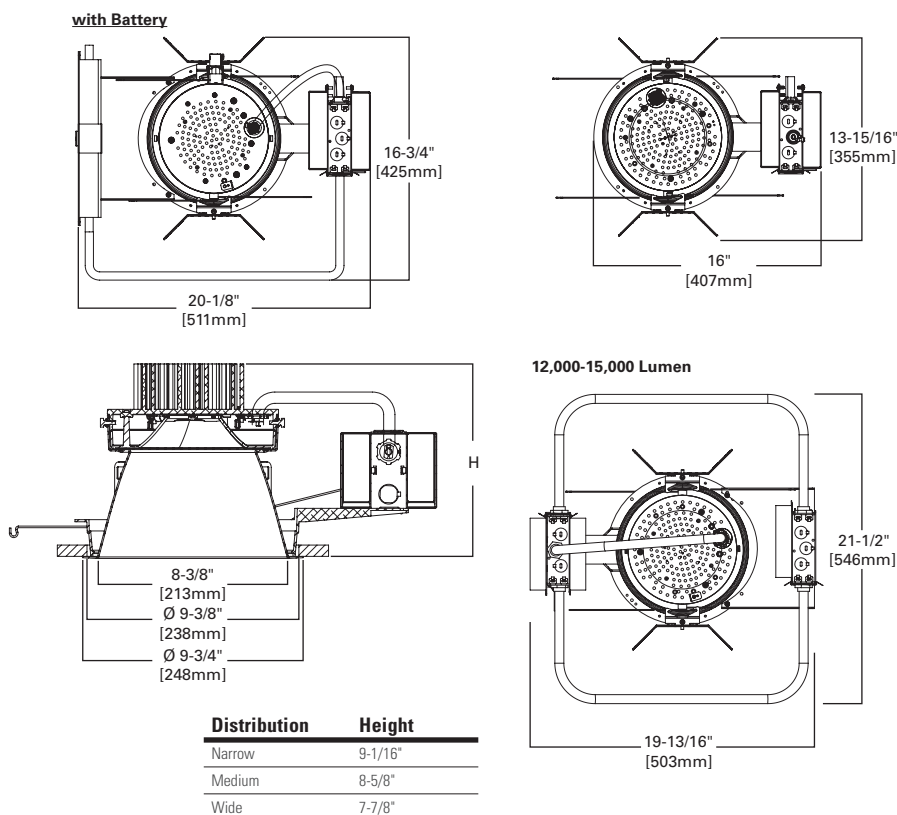
5 year warranty.



## LD8A ER8A 8L

1,000-15,000 Lumen LED

8-Inch Narrow, Medium, or Wide  
Downlight  
New Construction



Refer to ENERGY STAR® Qualified Products List.

powered by

fifthlight  
technology



Powering Business Worldwide

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## ORDERING INFORMATION

EXAMPLE: LD8A501DE010 ER8A50835 8LW111LI= 8" LED Wide Beam Reflector, 5000 Lumen, 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

| Housing                                                                | Lumens <sup>1</sup>                                                                           | Voltage | Driver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Options <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                | Power Module                                                       | Lumens                                                                                                                                                                                                                                                                                                                                                                                                                | CRI                                  | Color                                                                                |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------|
| <b>LD8A</b> =8" Aperture<br><b>LD8ACP</b> =8" Aperture, Chicago Plenum | <b>1</b> =120V<br><b>2</b> =277V<br><b>Blank</b> =120-277V<br>1000, 1500, and 2000 lumen only |         | <b>1000, 1500, 2000, 3000, 4000, 5000, 6000, 8000, 9000, 10,000<sup>6</sup></b><br><b>12,000 AND 15,000 LUMEN</b><br><b>D010TE</b> =0-10V 10% Dimming or Trailing Edge Dimming <sup>4</sup><br><b>1000, 1500, 2000, 3000, 4000, 5000, 6000 AND 8000 LUMEN</b><br><b>D5LT</b> =Fifth Light® DALI 0% Dimming<br><b>DMX</b> =DMX 0% Dimming<br><b>DE010</b> =0-10V 0% Dimming<br><b>1000, 1500, 2000, 3000, 4000, 5000 AND 6000 LUMEN</b><br><b>DL3</b> =1% Lutron® Hi-Lume 3-Wire or Ecosystem<br><b>D010TR</b> =0-10V 10% Dimming or Leading Edge <sup>4</sup><br><b>6500 LUMEN</b><br><b>D010</b> =0-10V 10% Dimming<br><b>DE010</b> =0-10V 1% Dimming | <b>EM7</b> =7W Emergency Module with Remote Test Switch <sup>3</sup><br><b>EM14</b> =14W Emergency Module with Remote Test Switch <sup>3</sup><br><b>IEM7</b> =7W Emergency Module with Integral Test Switch <sup>3</sup><br><b>IEM14</b> =14W Emergency Module with Integral Test Switch <sup>3</sup><br><b>EMBOD</b> =7W Bodine® Emergency Module with Remote Test Switch<br><b>IEMBOD</b> =7W Bodine® Emergency Module with Integral Test Switch | <b>ER8A</b> =8" Module<br><b>ER8ACP</b> =8" Module, Chicago Plenum | <b>10</b> =1000 Lumens<br><b>15</b> =1500 Lumens<br><b>20</b> =2000 Lumens<br><b>30</b> =3000 Lumens<br><b>40</b> =4000 Lumens<br><b>50</b> =5000 Lumens<br><b>60</b> =6000 Lumens<br><b>65</b> =6500 Lumens<br><b>80</b> =8000 Lumens <sup>5</sup><br><b>90</b> =9000 Lumens <sup>5</sup><br><b>100</b> =10000 Lumens <sup>5</sup><br><b>120</b> =12000 Lumens <sup>5</sup><br><b>150</b> =15000 Lumens <sup>5</sup> | <b>8</b> =80 CRI<br><b>9</b> =90 CRI | <b>27</b> =2700° K<br><b>30</b> =3000° K<br><b>35</b> =3500° K<br><b>40</b> =4000° K |

| Reflector                                                                                                                                                                                                                                                                                                                                                                                                                 | Finish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Options                                                                                                                                                                                                                                                                                                                                                 | Accessories                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>8LNO</b> =8" Narrow Reflector, Polymer Trim Ring<br><b>8LN1</b> =8" Narrow Reflector, Self-flanged<br><b>8LNOE</b> =8" Narrow Reflector, Polymer Trim Ring for use with IEM Integral Emergency option<br><b>8LN1E</b> =8" Narrow Reflector, Self-flanged Trim Ring for use with IEM Integral Emergency option<br><b>8LM0</b> =8" Medium Reflector, Polymer Trim Ring<br><b>8LM1</b> =8" Medium Reflector, Self-flanged | <b>8LM0E</b> =8" Medium Reflector, Polymer Trim Ring for use with IEM Integral Emergency option<br><b>8LM1E</b> =8" Medium Reflector, Self-flanged Trim Ring for use with IEM Integral Emergency option<br><b>8LW0</b> =8" Wide Reflector, Polymer Trim Ring<br><b>8LW1</b> =8" Wide Reflector, Self-flanged<br><b>8LW0E</b> =8" Wide Reflector, Polymer Trim Ring for use with IEM Integral Emergency option<br><b>8LW1E</b> =8" Wide Reflector, Self-flanged Trim Ring for use with IEM Integral Emergency option | <b>LI</b> =Specular Clear<br><b>H</b> =Semi-Specular Clear<br><b>WMH</b> =Warm Haze<br><b>G</b> =Specular Gold<br><b>WH</b> =Wheat<br><b>WHH</b> =Wheat Haze<br><b>GP</b> =Graphite<br><b>GPH</b> =Graphite Haze<br><br><b>B</b> =Specular Black<br><b>W</b> =Gloss White<br><br><b>8LM0 Only</b><br><b>BB</b> =Black Baffle<br><b>WB</b> =White Baffle | <b>Self-flanged Only</b><br><b>WF</b> =White Painted Flange<br><br><b>HB26</b> =C-channel Bar Hanger, 26" Long, Pair<br><b>HB50</b> =C-channel Bar Hanger, 50" Long, Pair<br><b>RMB22</b> =Wood Joist Bar Hanger, 22" Long, Pair<br><b>H347</b> =347 to 120V Step Down Transformer, 75VA<br><b>H347200</b> =347 to 120V Step Down Transformer, 200VA Housings, Specify Slope<br><b>HSA8</b> =Slope Adapter for 8" Aperture Housings, Specify Slope<br><b>LGSKT8IP65</b> =IP65 Gasket Kit |

- Notes:**
1. Nominal Lumens will vary depending on selected color, driver and reflector finish.
  2. Not available with Chicago Plenum.
  3. Not CSA approved.
  4. Trailing edge and leading edge 120V only.
  5. Product is marked spacing and must be installed with the following minimum spacing:  
Center to Center of adjacent luminaires : 36"  
Center of Luminaire to Side of Building Member : 18"  
Minimum Overhead Clearance: 9"
  6. 0-10V recommended

## ENERGY DATA

| ENERGY DATA                                                             |
|-------------------------------------------------------------------------|
| Sound Rating: Class A standards<br>(Values at non-dimming line voltage) |
| Minimum Starting Temperature: -20°C (-4°F)                              |
| Power Factor: >0.90                                                     |
| Input Frequency: 50-60Hz                                                |

| 1000 Lumen D010TE         |                           |
|---------------------------|---------------------------|
| 120V Input Power: 15W     | 277V Input Power: 16W     |
| 120V Input Current: 0.13A | 277V Input Current: 0.06A |
| Inrush 120 (Ap): 0.486    | Inrush 277 (Ap): 0.848    |
| Duration 120 (ms): 0.4    | Duration 277 (ms): 0.182  |
| THDi 120V: <13%           | THDi 277V: <20%           |

| 1500 Lumen D010TE         |                           |
|---------------------------|---------------------------|
| 120V Input Power: 23W     | 277V Input Power: 24W     |
| 120V Input Current: 0.19A | 277V Input Current: 0.09A |
| Inrush 120 (Ap): 0.717    | Inrush 277 (Ap): 0.531    |
| Duration 120 (ms): 1.58   | Duration 277 (ms): 1.24   |
| THDi 120V: <13%           | THDi 277V: <20%           |

| 2000 Lumen D010TE         |                           |
|---------------------------|---------------------------|
| 120V Input Power: 31.5W   | 277V Input Power: 31.5W   |
| 120V Input Current: 0.27A | 277V Input Current: 0.12A |
| Inrush 120 (Ap): 0.717    | Inrush 277 (Ap): 0.531    |
| Duration 120 (ms): 1.58   | Duration 277 (ms): 1.24   |
| THDi 120V: <13%           | THDi 277V: <20%           |

| 3000 Lumen                                             |                          |
|--------------------------------------------------------|--------------------------|
| EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) |                          |
| Input Power: 42W                                       | THD: <20%                |
| 120V Input Current: .35A                               | 277V Input Current: .16A |
| Inrush 120 (Ap): 0.531                                 | Inrush 277 (Ap): 1.15    |
| Duration 120 (ms): 0.405                               | Duration 277 (ms): 0.255 |

| ENERGY DATA                                                             |
|-------------------------------------------------------------------------|
| Sound Rating: Class A standards<br>(Values at non-dimming line voltage) |
| Minimum Starting Temperature: -20°C (-4°F)                              |
| Power Factor: >0.90                                                     |
| Input Frequency: 50-60Hz                                                |

| 4000 Lumen D010TE                                      |                         |
|--------------------------------------------------------|-------------------------|
| EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) |                         |
| Input Power: 58W                                       | THD: <20%               |
| 120V Input Current: 48A                                | 277V Input Current: 21A |
| Inrush 120 (Ap): 0.787                                 | Inrush 277 (Ap): 1.09   |
| Duration 120 (ms): 1.16                                | Duration 277 (ms): 1.75 |

| 5000 Lumen D010TE                                      |                         |
|--------------------------------------------------------|-------------------------|
| EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) |                         |
| Input Power: 62W                                       | THD: <17%               |
| 120V Input Current: 52A                                | 277V Input Current: 22A |
| Inrush 120 (Ap): 0.787                                 | Inrush 277 (Ap): 1.09   |
| Duration 120 (ms): 1.16                                | Duration 277 (ms): 1.75 |

| 6000 Lumen D010TE                                      |                          |
|--------------------------------------------------------|--------------------------|
| EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) |                          |
| Input Power: 77W                                       | THD: <17%                |
| 120V Input Current: .64A                               | 277V Input Current: .28A |
| Inrush 120 (Ap): 0.87                                  | Inrush 277 (Ap): 0.96    |
| Duration 120 (ms): 0.39                                | Duration 277 (ms): 0.31  |

| 6500 Lumen D010          |                         |
|--------------------------|-------------------------|
| Input Power: 84W         | THD: <17%               |
| 120V Input Current: 70A  | 277V Input Current: 30A |
| Inrush 120 (Ap): 2.88    | Inrush 277 (Ap): 3.68   |
| Duration 120 (ms): 0.815 | Duration 277 (ms): 1.29 |

| ENERGY DATA                                                             |
|-------------------------------------------------------------------------|
| Sound Rating: Class A standards<br>(Values at non-dimming line voltage) |
| Minimum Starting Temperature: -20°C (-4°F)                              |
| Power Factor: >0.90                                                     |
| Input Frequency: 50-60Hz                                                |

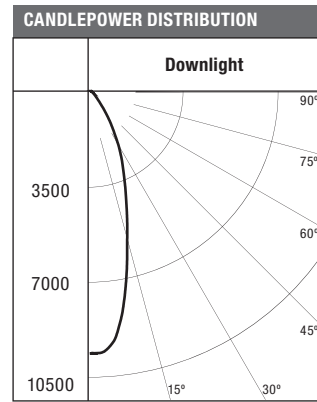
| 8000 Lumen D010TE       |                          |
|-------------------------|--------------------------|
| 120V Input Power: 96W   | 277V Input Power: 96W    |
| 120V Input Current: 79A | 277V Input Current: 36A  |
| Inrush 120 (Ap): 1.09   | Inrush 277 (Ap): 1.23    |
| Duration 120 (ms): 0.3  | Duration 277 (ms): 0.294 |
| THDi 120V: <13%         | THDi 277V: <20%          |

| 9000 Lumen D010TE       |                         |
|-------------------------|-------------------------|
| 120V Input Power: 108W  | 277V Input Power: 107W  |
| 120V Input Current: 89A | 277V Input Current: 39A |
| Inrush 120 (Ap): 0.48   | Inrush 277 (Ap): 1.316  |
| Duration 120 (ms): 0.1  | Duration 277 (ms): 0.52 |
| THDi 120V: <13%         | THDi 277V: <20%         |

| 10,000 Lumen D010TE       |                          |
|---------------------------|--------------------------|
| 120V Input Power: 126W    | 277V Input Power: 123W   |
| 120V Input Current: 1.05A | 277V Input Current: .47A |
| Inrush 120 (Ap): 1.312    | Inrush 277 (Ap): 1.856   |
| Duration 120 (ms): 0.05   | Duration 277 (ms): 0.1   |
| THDi 120V: <13%           | THDi 277V: <20%          |

| 12,000 Lumen D010TE       |                           |
|---------------------------|---------------------------|
| 120V Input Power: 140W    | 277V Input Power: 141W    |
| 120V Input Current: 1.17A | 277V Input Current: 0.51A |
| Inrush 120 (Ap): 1.09     | Inrush 277 (Ap): 1.23     |
| Duration 120 (ms): 0.3    | Duration 277 (ms): 0.294  |
| THDi 120V: <13%           | THDi 277V: <20%           |

## PHOTOMETRICS



Test Number P112471  
LD8A50D010TE ER8A50835 8LN0LI  
Lumens 4603 Lm  
Efficacy 74 Lm/W  
CCT 3500K  
SC 0.6

**CONE OF LIGHT**

| Distance<br>Fixture to<br>Lighted Plane | Initial<br>Footcandles<br>at Nadir | Beam<br>Diameter |
|-----------------------------------------|------------------------------------|------------------|
| 12.5'                                   | 64                                 | 6                |
| 15'                                     | 45                                 | 8                |
| 20'                                     | 25                                 | 10               |
| 24'                                     | 17                                 | 13               |
| 28'                                     | 13                                 | 15               |

**CANDELA TABLE**

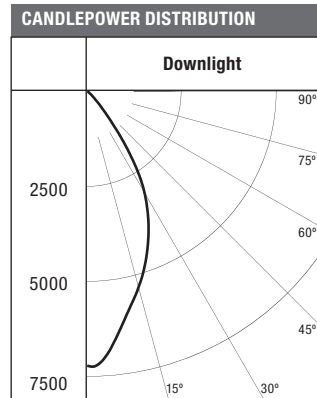
| Degrees<br>Vertical | Candela |
|---------------------|---------|
| 0                   | 10069   |
| 5                   | 9738    |
| 15                  | 5643    |
| 25                  | 2940    |
| 35                  | 1045    |
| 45                  | 118     |
| 55                  | 10      |
| 65                  | 11      |
| 75                  | 0       |
| 85                  | 13      |
| 90                  | 0       |

**ZONAL LUMEN SUMMARY**

| Zone   | Lumens | %Fixture |
|--------|--------|----------|
| 0-30   | 3785   | 82       |
| 0-40   | 4441   | 96       |
| 0-60   | 4567   | 99       |
| 0-90   | 4603   | 100      |
| 90-180 | 0      | 0        |
| 0-180  | 4603   | 100      |

**LUMINANCE**

| Average Candela<br>Degrees | Average 0°<br>Luminance |
|----------------------------|-------------------------|
| 45                         | 5157                    |
| 55                         | 524                     |
| 65                         | 812                     |
| 75                         | 0                       |
| 85                         | 4430                    |



Test Number P112343  
LD8A50D010TE ER8A50835 8LM0LI  
Lumens 4962 Lm  
Efficacy 80 Lm/W  
CCT 3500K  
SC 0.8

**CONE OF LIGHT**

| Distance<br>Fixture to<br>Lighted Plane | Initial<br>Footcandles<br>at Nadir | Beam<br>Diameter |
|-----------------------------------------|------------------------------------|------------------|
| 12.5'                                   | 42                                 | 10               |
| 15'                                     | 29                                 | 12               |
| 20'                                     | 16                                 | 16               |
| 24'                                     | 11                                 | 19               |
| 28'                                     | 8                                  | 22               |

**CANDELA TABLE**

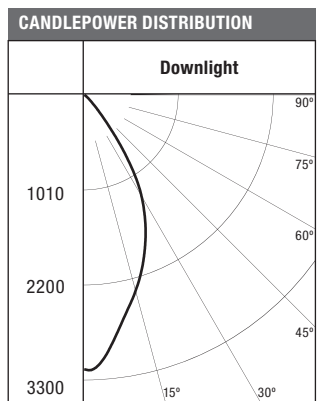
| Degrees<br>Vertical | Candela |
|---------------------|---------|
| 0                   | 6445    |
| 5                   | 6573    |
| 15                  | 5323    |
| 25                  | 3488    |
| 35                  | 1582    |
| 45                  | 316     |
| 55                  | 26      |
| 65                  | 0       |
| 75                  | 1       |
| 85                  | 0       |
| 90                  | 0       |

**ZONAL LUMEN SUMMARY**

| Zone   | Lumens | %Fixture |
|--------|--------|----------|
| 0-30   | 3598   | 72       |
| 0-40   | 4641   | 93       |
| 0-60   | 4952   | 99       |
| 0-90   | 4962   | 100      |
| 90-180 | 0      | 0        |
| 0-180  | 4962   | 100      |

**LUMINANCE**

| Average Candela<br>Degrees | Average 0°<br>Luminance |
|----------------------------|-------------------------|
| 45                         | 13773                   |
| 55                         | 1421                    |
| 65                         | 0                       |
| 75                         | 166                     |
| 85                         | 0                       |



Test Number P110167  
LD8A50D010TE ER8A50835 8LW0LI  
Lumens 5083 Lm  
Efficacy 81.9 Lm/W  
CCT 3500K  
SC 1

**CONE OF LIGHT**

| Distance<br>Fixture to<br>Lighted Plane | Initial<br>Footcandles<br>at Nadir | Beam<br>Diameter |
|-----------------------------------------|------------------------------------|------------------|
| 12.5'                                   | 22                                 | 15               |
| 15'                                     | 15                                 | 18               |
| 20'                                     | 8                                  | 24               |
| 24'                                     | 6                                  | 29               |
| 28'                                     | 4                                  | 34               |

**CANDELA TABLE**

| Degrees<br>Vertical | Candela |
|---------------------|---------|
| 0                   | 3304    |
| 5                   | 3395    |
| 15                  | 3658    |
| 25                  | 3398    |
| 35                  | 2268    |
| 45                  | 967     |
| 55                  | 203     |
| 65                  | 18      |
| 75                  | 1       |
| 85                  | 0       |
| 90                  | 0       |

**ZONAL LUMEN SUMMARY**

| Zone   | Lumens | %Fixture |
|--------|--------|----------|
| 0-30   | 2740   | 54       |
| 0-40   | 4147   | 81       |
| 0-60   | 5052   | 99       |
| 0-90   | 5083   | 100      |
| 90-180 | 0      | 0        |
| 0-180  | 5083   | 100      |

**LUMINANCE**

| Average Candela<br>Degrees | Average 0°<br>Luminance |
|----------------------------|-------------------------|
| 45                         | 42170                   |
| 55                         | 10921                   |
| 65                         | 1320                    |
| 75                         | 166                     |
| 85                         | 0                       |

## EM MULTIPLIER DATA

| LUMENS | EM MULTIPLIER |
|--------|---------------|
|        | 7             |
| 1000   | 0.47          |
| 1500   | 0.30          |
| 2000   | 0.30          |
| 3000   | 0.17          |
| 4000   | 0.12          |
| 5000   | 0.11          |
| 6000   | 0.09          |
| 6500   |               |
| 8000   |               |
| 9000   |               |
| 10000  |               |
| 120000 |               |
| 150000 |               |

| MULTIPLIER FROM 5000 LUMENS |
|-----------------------------|
| 3000                        |
| 4000                        |
| 5000                        |
| 6000                        |
| 6500                        |
| 8000                        |
| 9000                        |
| 10000                       |

| LPW   | NARROW | MEDIUM | WIDE |
|-------|--------|--------|------|
| 1000  | 70.6   | 76.1   | 77.9 |
| 1500  | 69.8   | 75.2   | 77.0 |
| 2000  | 60.3   | 65.0   | 66.5 |
| 3000  | 83.0   | 89.5   | 91.7 |
| 4000  | 64.3   | 72.7   | 75.4 |
| 5000  | 74.2   | 80.0   | 82.0 |
| 6000  | 71.6   | 77.2   | 79.1 |
| 6500  | 73.7   | 79.5   | 81.4 |
| 8000  | 75.6   | 81.5   | 83.5 |
| 9000  | 75.1   | 81.0   | 83.0 |
| 10000 | 71.9   | 77.5   | 79.4 |
| 12000 | 74.2   | 80.0   | 82.0 |
| 15000 | 88.1   | 95.0   | 97.3 |