

ELECTRICAL LIGHTING LEVEL 1 SCALE: " $^{\prime \prime}-20^{\circ}-0^{\prime \prime}$


ELECTRICAL LIGHTING LEVEL 2-3



ELECTRICAL LIGHTING LEVEL 4




## ELECTRICAL LIGHTING LEVEL ROOF

ELECTRICAL

| Schedule |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Symbol | Label | ${ }^{\text {atr }}$ | Manutacturer | Cataog Number | Descripion | Lamp | Filename | $\begin{gathered} \text { Lumens per } \\ \text { Lamp } \end{gathered}$ | uF | Watage |
| $\bigcirc$ | SH | ${ }^{247}$ | Lithoia Lighting | VCPG LED P 4 40K TSW MVoLT (FINSH) | VCPG LED WITH P1 - PERFORMANCE PACKAGE, 4000K, T5W OPTIC TYPE | LED |  | ${ }^{326}$ | 0.91 | 26.57 |




ELECTRICAL LIGHTING CALCULATIONS LEVEL 1

| Scrooue |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Smman | Label | arr | Menutaturer | Cataog Number | Desesprion | Lanp | Fienane |  | uF | Watase |
| $\bigcirc$ | sH | ${ }^{24}$ | Lithoia Lighing |  |  | ${ }^{\text {LED }}$ |  | ${ }^{3226}$ | 0.9 | 26.5 |



Notice of IP Rights: 2016 DAVIS. THESE DESIGNS ARE THE EXCLUSIVE PROPERTY OF DAVIS. NO USE OR REPRODUCTION IS PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF DAVIS.

| Scrooue |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Smman | Label | arr | Menutaturer | Cataog Number | Desesprion | Lanp | Fienane |  | uF | Watase |
| $\bigcirc$ | sH | ${ }^{24}$ | Lithoia Lighing |  |  | ${ }^{\text {LED }}$ |  | ${ }^{3226}$ | 0.9 | 26.5 |



Notice of IP Rights: 2016 DAVIS. THESE DESIGNS ARE THE EXCLUSIVE PROPERTY OF DAVIS. NO USE OR REPRODUCTION IS PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF DAVIS.


| Stresule |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| smmol | ${ }^{\text {Lababa }}$ | arr | Mantacuruer | Cataos Sumber | Dosatioion | Lamp | Fienane | $\underbrace{\substack{\text { Leramp }}}_{\text {Lumers }}$ | uF | watase |
| $\begin{aligned} & \square \\ & \text { 口 } \end{aligned}$ | sF | ${ }^{12}$ | Lituria Ligning | (2) DSX0 LED P4 40K T5W MVOLT SPA (FINISH) / SSS 12.5' W/2.5' BASE | TWIN-HEAD DSX0 LED P4 40K T5W MVOLT | ${ }_{\text {LEO }}$ | $\begin{array}{\|l} \text { DSX0_LED_P4_ } \\ \text { 40K_T5W_MVO } \\ \text { LT.ies } \end{array}$ | 10889 | 0.91 | 184 |



Notice of IP Rights: 2016 DAVIS. THESE DESIGNS ARE THE EXCLUSIVE PROPERTY OF DAVIS. NO USE OR REPRODUCTION IS PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF DAVIS.




Inverted available with WLU option only.

Specifications

## Luminaire



Optional Back Box (BBW)

| Height: | $4^{\prime \prime}$ <br> $(10.2 \mathrm{~cm})$ |
| :--- | :--- |
| Width: | $5-1 / 2^{\prime \prime}$ <br> $(14.0 \mathrm{~cm})$ |
|  | $1-1 / 2^{\prime \prime}$ <br> $(3.8 \mathrm{~cm})$ |

## Notes

Type

## Introduction

Classic Architectural Wall Sconce with the LED technology. Long-life, maintenance-free product with typical energy savings of $80 \%$ compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity. The WSR LED is ideal for replacing existing 50 250 W metal halide wall-mounted products. The expected service life is $20+$ years of nighttime use.

## Ordering Information

EXAMPLE: WSR LED P2 40K SR3 MVOLT DDBTXD

| WSR LED |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Performance Package | Color <br> Temperature | Distribution | Voltage | Mounting | Options | Finish (required) |
| WSR LED | $\begin{aligned} & \text { P1 } \\ & \text { P2 } \\ & \hline \text { P3 } \\ & \hline \text { P4 } \end{aligned}$ | $\begin{aligned} & 30 \mathrm{~K} \\ & \hline 40 \mathrm{~K} \\ & \hline 50 \mathrm{~K} \end{aligned}$ | SR2 Type II <br> SR3 Type III <br> SR4 Type IV | MVOLT $^{1}$ <br> 120 <br> 208 <br> 240 <br> 277 <br> 347 <br> 480 | Shipped included <br> (blank) Surface mount <br> Shipped separately ${ }^{2}$ <br> BBW Surface-mounted back box |  | DDBXD Dark bronze <br> DBLXD Black <br> DNAXD Natural aluminum <br> DWHXD White <br> DSSXD Sandstone <br> DDBTXD Textured dark bronze <br> DBLBXD Textured black <br> DNATXD Textured natural <br>  aluminum <br> DWHGXD Textured white <br> DSSTXD Textured sandstone |

## Emergency Battery Operation

The emergency battery backup (E20WC \& E10WH options) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

All E20WC and E10WH configurations include an independent secondary driver with an integral relay to immediately detect AC power loss.
The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.
The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P 1 power package Type IV product in emergency mode

WSR P1 LED 40K SR4 MVOLT E20WC
$10^{\prime} \times 10^{\prime}$ Gridlines
$8^{\prime}$ and 12' Mounting Height


NOTES
1 MVOLT driver operates on any line voltage from $120-277 \mathrm{~V}(50 / 60 \mathrm{~Hz})$.
2 Not available with 480 V option.
33 PE requires specified voltage.
4 Single fuse (SF) requires $120 \mathrm{~V}, 277 \mathrm{~V}$ or 347 V options. Double fuse (DF) requires $208 \mathrm{~V}, 240 \mathrm{~V}$ or options. Doub
5 Not available with 347 V or 480 V . Not available with WLU.
6 WLU not available with PIR, E20WC or E10WH.
7 See PIR Table for default settings.
8 Only available with P3 \& P4 packages. Provides 50/50 luminaire operation via two independent drivers and light engines on two separate circuits. Not available with E20WC, E10WH, WLU, SF, or DF. When ordered with photocell (PE) or motion sensor (PIR), only the primary power source leads will be controlled.
9 See electrical section on page 2 for more details.

L/THON/A
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com
WSR-LED
L/GHTING.

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

| Performance Package | System <br> Watts <br> (MVOLT') | Dist. <br> Type | 30K (3000K, 70CRI) |  | 40K (4000K, 70CRI) |  | 50K (5000K, 70CRI) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lumens | LPW | Lumens | LPW | Lumens | LPW |
| P1 | 20W | SR2 | 2,111 | 108 | 2,251 | 115 | 2,305 | 118 |
|  |  | SR3 | 2,104 | 108 | 2,244 | 115 | 2,298 | 117 |
|  |  | SR4 | 2,053 | 105 | 2,189 | 112 | 2,242 | 115 |
| P2 | 29W | SR2 | 2,943 | 101 | 3,139 | 108 | 3,214 | 110 |
|  |  | SR3 | 2,934 | 101 | 3,129 | 107 | 3,204 | 110 |
|  |  | SR4 | 2,863 | 98 | 3,053 | 105 | 3,126 | 107 |
| P3 | 40W | SR2 | 4,500 | 114 | 4,799 | 122 | 4,913 | 125 |
|  |  | SR3 | 4,486 | 114 | 4,784 | 122 | 4,898 | 125 |
|  |  | SR4 | 4,377 | 111 | 4,667 | 119 | 4,779 | 122 |
| P4 | 61W | SR2 | 6,159 | 102 | 6,567 | 108 | 6,724 | 111 |
|  |  | SR3 | 6,139 | 101 | 6,547 | 108 | 6,703 | 110 |
|  |  | SR4 | 5,991 | 99 | 6,388 | 105 | 6,541 | 108 |


| Motion/Ambient Sensor Default Settings |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dimmed <br> State | High Level <br> (when triggered) | Phototcell <br> Operation | Ramp-up <br> Time | Dwell <br> Time | Ramp-down <br> Time |  |
| *PIR | 3 3V (37\%) Output | $10 \mathrm{~V}(100 \%)$ Output | Enabled @ 5FC | 3 sec | 5 min | 5 min |  |
| *PIR USES SFOD 7 |  |  |  |  |  |  |  |

Lumen Ambient Temperature (LAT) Multipliers
Use these factors to determine relative lumen output for average ambient temperatures from $0-40^{\circ} \mathrm{C}\left(32-104^{\circ} \mathrm{F}\right)$.

| Ambient |  | Normalized Lumen <br> Multiplier |
| :---: | :---: | :---: |
| $0^{\circ} \mathrm{C}$ | $32^{\circ} \mathrm{F}$ | 1.05 |
| $10^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{F}$ | 1.03 |
| $20^{\circ} \mathrm{C}$ | $68^{\circ} \mathrm{F}$ | 1.01 |
| $\mathbf{2 5 ^ { \circ }} \mathbf{C}$ | $\mathbf{7 7 ^ { \circ }} \mathbf{F}$ | $\mathbf{1 . 0 0}$ |
| $30^{\circ} \mathrm{C}$ | $86^{\circ} \mathrm{F}$ | 0.99 |
| $40^{\circ} \mathrm{C}$ | $104^{\circ} \mathrm{F}$ | 0.97 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the MRW LED P4 platform in a $\mathbf{2 5}^{\circ} \mathbf{C}$ ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25000 | 50000 | 100000 | L90 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lumen Maintenance <br> Factor | 1 | 0.96 | 0.95 | 0.92 | $>60000$ |

## Electrical Load

|  |  | Current (A) |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power <br> Package | System <br> Watts | 120 V | 208 V | 240 V | 277 V | 347 V | 480 V |  |  |
| P1 | 20 W | 0.17 | 0.10 | 0.09 | 0.08 | 0.06 | 0.05 |  |  |
| P2 | 29 W | 0.26 | 0.15 | 0.13 | 0.12 | 0.09 | 0.07 |  |  |
| P3 | 40 W | 0.37 | 0.21 | 0.18 | 0.16 | 0.13 | 0.09 |  |  |
| P4 | 61 W | 0.59 | 0.33 | 0.18 | 0.25 | 0.19 | 0.14 |  |  |

## Photometric Diagrams

 To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WSR LED homepage.Isofootcandle plots for the WSR LED P4 40K SR2, SR3, and SR4. Distances are in units of mounting height (12').


## FEATURES \& SPECIFICATIONS

## INTENDED USE

The classic architectural shape of the WSR LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

## CONSTRUCTION

The die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

## FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

## OPTICS

Precision-molded acrylic lenses are engineered for superior distribution, uniformity, and spacing in wall-mount applications. Light engines are 4000K (70 CRI). The WSR LED has zero uplight and qualifies as a Nighttime Friendly ${ }^{\text {TM }}$ product, meaning it is consistent with the LEED $®$ and Green Globes ${ }^{\text {TM }}$ criteria for eliminating wasteful uplight.

## ELECTRICAL

Light engine(s) consist of 8 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at $25^{\circ} \mathrm{C}, \mathrm{L} 77$ ). Class 2 electronic driver has a power factor $>90 \%, \mathrm{THD}<20 \%$. and a minimum 6 KV surge protection. When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/ IEEE C62.41.2).

## INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

## LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated and suitable for wet locations when mounted with the lenses down. WLU option offers wet location listing in "up" orientation. Rated for $-30^{\circ} \mathrm{C}$ minimum ambient. DesignLights Consortium ${ }^{\circledR}$ (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www. designlights.org/QPL to confirm which versions are qualified.

## WARRANTY

5 -year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at $25^{\circ} \mathrm{C}$. Specifications subject to change without notice.

LITHONIA
$\qquad$
Project: $\qquad$
Type: $\qquad$ Qty:

## Inula Bollard LED



Order Code: $\quad$ IBL ${ }^{-}$

| IBL |
| :--- |
| SeriesIBL <br> Inula Bollard <br> LED |

$\qquad$

| Height | 1.5 <br> 1.5 ft . (consult factory) | 2 <br> 2 ft . <br> (consult <br> factory) | $\begin{aligned} & 2.5 \\ & 2.5 \mathrm{ft} \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \mathrm{ft} \end{aligned}$ | $\begin{aligned} & 3.5 \\ & 3.5 \mathrm{ft} \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Engine | $\begin{aligned} & 1 Q^{1} \\ & 7.6 \mathrm{w} / 577 \mathrm{Im} \end{aligned}$ | 2Q90 <br> 14.1w/1156lm | 2Q180 <br> $14.1 \mathrm{w} / 1156 \mathrm{~lm}$ | $3 Q$ <br> $20.5 \mathrm{w} / 1689 \mathrm{~lm}$ | 4QS <br> 27.2w/2246 lm | 4QD <br> $27.2 \mathrm{w} / 2246 \mathrm{~lm}$ | *Based on 5000K CCT, 120-277V <br> 'Not available with EM |
| CCT | $\mathrm{AM}^{2,15}$ Amber | $\begin{aligned} & 30^{2} \\ & 3000 \mathrm{~K} \end{aligned}$ | $\begin{aligned} & 40 \\ & 4000 \mathrm{~K} \end{aligned}$ | $\begin{aligned} & 50 \\ & 5000 \mathrm{~K} \end{aligned}$ |  |  | ${ }^{2}$ \|DA Approved <br> For other CCT please consult factory |



Product Modifications

## Approvals

Please list modification requirements for review by factory:

## NRTL 5



IBL


Net Weight (35lbs)

## Specifications

1. Fixture Housing - Die cast low-copper and low-iron aluminum fixture body provide corrosion resistance in marine environments.
2. Gasketing - (not shown) Continuous gaskets provide weather-proofing, dust, and insect control between castings.
3. LED Light Engine - (not shown) High efficiency LED light engine equipped with brandname LEDs, available in $3000 \mathrm{~K}, 4000 \mathrm{~K}, 5000 \mathrm{~K}$ CCT tolerance within a 3 -step MacAdams ellipse, and Amber CCT. Suitable for max ambient temperatures up to $45^{\circ} \mathrm{C}$.
4. Optics - (not shown) Proprietary vandal and UV resistant acrylic optic provides optimal light blending between quadrants.
5. Surge Protector - (not shown) Designed to protect luminaire from electrical surge ( 10 kA ).
6. Hi-Lo Switching Option - (not shown) Controlled switching between $100 \%$ and $30 \%$ power. See wiring diagrams for additional details.
7. Low Power Option - (not shown) 60\% decrease in Lumen output in same physical package.
8. High Power Option - (not shown) 100\% increase in Lumen output in same physical package.
9. Light Chamber - Castings around Light Engine are painted with special matte black light absorbing powder coat paint. Meets International Dark-Sky Association (IDA) requirements $\mathrm{BO}, \cup 0$, and $G 0 \mathrm{BUG}$ ratings at 3000K CCT. Powers 2Q90, 2Q180, 3Q, or 4Q configurations (refer to lumen matrix on page 3).

## 10. Low-Temperature Emergency Battery

 Pack Option - (not shown) Provide 90 minutes of constant-power egress lighting when external power is lost. $-20^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ ambient temperature operation.Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultraviolet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Semi-Matte Black (BL), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty Selux offers a 5 Year Limited Warranty to the original purchaser that the Inula Bollard LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. For details, see "Selux Terms and Condition of Sale."

Listings and Ratings: Tested to INRTL Wet Location and IESNA LM-79-08 standards. LED tested to LM-80 standards.

Luminaire tested to IK10 standard, IDA Approved and Lighting Facts Certified.

Luminaire and LED tested at $25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)$ ambient temperature.

LED LIFE - LED light engine provides a reported lumen maintenance of $93 \%$ at 36,000 hours. L70 calculated greater than 100,000 hours. NRTL Listed (i.e. UL, CSA)

Visit selux.us for our LED End of Life recycling policy.

## Lumen Matrix

| ELECTRICAL SPECIFICATIONS at 120VAC-277VAC (at 347-480VAC) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Engine |  | 4QD/4QS |  |  |  | 3Q |  |  |  | 2Q180/2Q90 |  |  |  | 1Q |  |  |  |
| LED CCT |  | 3000K | 4000K | 5000K | AMBER | 3000K | 4000K | 5000K | AMBER | 3000K | 4000K | 5000K | AMBER | 3000K | 4000K | 5000K | AMBER |
| Standard Power | Delivered Lumens (Im) | 2101 |  | 2246 | 464 | 1580 |  | 1689 | 349 | 1083 |  | 1156 | 239 | 540 |  | 577 | 119 |
|  | Wattage <br> (W) | 27.2 (29.6) |  |  | $\begin{gathered} 20.7 \\ {[22.6]} \end{gathered}$ | 20.5 (22.3) |  |  | $\begin{gathered} 15.6 \\ {[17.0]} \end{gathered}$ | 14.1 [15.4] |  |  | $\begin{gathered} 10.6 \\ {[11.6]} \end{gathered}$ | 7.6 (8.3) |  |  | $\begin{gathered} \hline 5.6 \\ {[6.2]} \end{gathered}$ |
|  | Efficacy (Im/W) | 77.2 (71.0) |  | $\begin{gathered} 82.6 \\ (75.9) \end{gathered}$ | $\begin{gathered} 22.4 \\ {[75.9]} \end{gathered}$ | 77.1 | 0.9] | $\begin{gathered} 82.4 \\ (75.7) \end{gathered}$ | $\begin{gathered} 22.4 \\ {[20.5]} \end{gathered}$ | 76.8 | 70.3) | $\begin{aligned} & 82.0 \\ & (75.1) \end{aligned}$ | $\begin{gathered} 22.5 \\ {[20.6]} \end{gathered}$ |  | (65.1) | $\begin{gathered} 75.9 \\ (69.5) \end{gathered}$ | $\begin{gathered} 21.3 \\ {[19.2]} \end{gathered}$ |
| High Power (HP) Option | Delivered Lumens (Im) | 4202 |  | 4492 | N/A |  |  | 3378 | N/A |  |  | 2312 | N/A |  |  | 1155 | N/A |
|  | Wattage <br> (W) | 54.4 [59.2] |  |  |  | 41.0 [44.6] |  |  |  | 28.2 [30 |  |  |  | 15.2 [16.6] |  |  |  |
|  | Efficacy (Im/W) | 77.2 | (67.8) | $\begin{gathered} 82.6 \\ (75.9) \end{gathered}$ |  | 77.1 | 0.9) | $\begin{gathered} 82.4 \\ (75.7) \end{gathered}$ |  | 76.8 | 0.3) | $\begin{gathered} 82.0 \\ (75.1) \end{gathered}$ |  | 71.1 | 55.1) | $\begin{gathered} 75.9 \\ (69.5) \end{gathered}$ |  |
| $\begin{gathered} \text { EM } \\ \text { Option } \end{gathered}$ | Delivered Lumens (Im) | 2501 |  | 2674 | N/A | 1881 |  | 2011 | N/A | 1289 |  | 1376 | N/A |  |  |  |  |

Profiles IBL-XX-4QD


## Wiring



0-10V Dimming Option (DM) Wiring for 120-277V With (EM) Option $100 \%$ light output at 10 V , down to $1 \%$ light output at 0 V .


Hi-Lo Switching Option (HL30) Wiring With (EM) Option 120/240/277V. When red is energized, light output will be at "Lo" level.


## Optional Accessories

GFCI Receptacle (REC) - 120V 15A GFCI duplex receptacle with weather-proof, self-closing, non-lockable cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel. For use with 120 V applications only. For use with luminaires with other than 120 V rating, please consult factory for wire segregation.


USB \& Duplex Receptacle (REC3) (not shown) - 120V 15A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5 Amp, 5 Volt USB outlets. With weather-proof, self-closing cover; located 36 " $(915 \mathrm{~mm})$ from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

Note: Must be used in conjunction with GFCI breaker by others

GFCI Receptacle (REC2) - 120V 15A GFCI duplex receptacle with weather-proof, self-closing, padlockable in-use cover; located $36^{\prime \prime}$ $(915 \mathrm{~mm})$ from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel. For use with 120 V applications only. For use with luminaires with other than 120 V rating, please consult factory for wire segregation.


USB \& Duplex Receptacle (REC4) (not shown)- 120V 15A duplex receptacle with USB combination ports. (1) type A and (1) type C high power 5 Amp, 5 Volt USB outlets. With weather-proof, self-closing padlockable in-use cover; located 36" ( 915 mm ) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel.

Note: Must be used in conjunction with GFCI breaker by others

Photo Cell (PC) - Integrated in top cap for $360^{\circ}$ of orientation adjustment in the field.


## Mounting Information

NOTES:

1. BOLLARD ORIENTATION IS CRITICAL, ROD AND HAND HOLE LOCATIONS ARE CRITICAL.
2. LOCATE SINGLE BOLT AT HAND HOLE LOCATION.
3. ADEQUATE DRAINAGE MUST BE PROVIDED IN CONCRETE FOUNDATION.
4. CONDUIT SHOULD BE STUBBED UP ABOVE THE CONCRETE FOOTING.



BOLT CIRCLE DETAIL (NOT TO SCALE) USE CAUTION WHEN SETTING ANCHOR BOLTS. BOLTS MUST BE VERTICALLY STRAIGHT AND CENTERED ON DIMENSIONS SHOWN.

## Photometry

1Q / 8W LED / 5000K CCT
Catalog \#: IBL-X-1Q-50-XX-120-DS
Report \#: 1197031-50
Maximum candela of 1256 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
577 Delivered Lumens
75 Lumens per Watt
BO-UO-GO


## Photometry

2Q90 / 14W LED / 5000K CCT
Catalog \#: IBL-X-2Q90-50-XX-120-DS
Report \#: 1197029-50
Maximum candela of 1229 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
1158 Delivered Lumens
82 Lumens per Watt
BO-UO-GO



2Q180 / 14W LED / 5000K CCT
Catalog \#: IBL-X-2Q180-50-XX-120-DS
Report \#: 1197024-50
Maximum candela of 1249 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
1156 Delivered Lumens
81 Lumens per Watt
B1-U0-G0



## 3Q / 20W LED / 5000K CCT

Catalog \#: IBL-X-3Q-50-XX-120-DS
Report \#: 1197021-50
Maximum candela of 1223 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
1689 Delivered Lumens
82 Lumens per Watt
B1-U0-G0



## Photometry

4QS / 27W LED / 5000K CCT
Catalog \#: IBL-X-4QS-50-XX-120-DS
Report \#: 1197039-50
Maximum candela of 1232 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
2246 Delivered Lumens
83 Lumens per Watt
B1-U0-G0


4QD / 27W LED / 5000K CCT
Catalog \#: IBL-X-4QD-50-XX-120-DS
Report \#: 1197039-50
Maximum candela of 1232 at $42.5^{\circ}$ from vertical.
Mounting Height $=4^{\prime}(1.22 \mathrm{~m})$
2246 Delivered Lumens
83 Lumens per Watt
B1-U0-G0



| Submitted by R.C. Lurie | Catalog Number: | Type: |  |
| :--- | :--- | :--- | :--- |
|  |  | CH2HM-3-250PSMH-F-MT-WHT / <br> CHH-3-HSS <br> Notes: | SA1 |

## CHALLENGER ${ }^{\circledR}$ II MEDIUM

## LUMINAIRE ORDERING INFORMATION

| Luminaire Prefix | Distribution | Lamp Wattage | Light Source | Lens | $\begin{gathered} \text { Line } \\ \text { Voltage } \end{gathered}$ | Luminaire Finish | Options |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Horizontal Burn CH2HM | $\begin{aligned} & \text { 2-Typa Il } \\ & \begin{array}{l} \text { 3-Type III } \\ \hline \text { I-Forward Inrow } \\ 5 \text {-Type V } \end{array} \end{aligned}$ | $\begin{aligned} & \hline 100 \\ & 150 \\ & 175 \\ & \hline 250 \\ & \hline 320 \\ & 400 \end{aligned}$ | PSMH - Pulse-Start Metal Halide175, 250, 320 WattPSMHRR - Pulse-Starmet Met Halide ReducedEnvelope 400 WattCMH - Ceramic Metal Halide150 WattHPS - ing Pressure Sodium100, 150, 250, 400 Watt | F-Flat Clear Tempered Glass | 480 | BRZ - Bronze | PCR - Photoelectric Control |
|  |  |  |  |  | \| MT - Multi Tap | BLK - Black <br> PLP - Platinum Plus | Receptacle ${ }^{1}$ <br> TB. Terminal Block |
|  |  |  |  |  |  | $\begin{array}{\|l} \hline \text { PLP - Platinum Plus } \\ \hline \text { WHT - White } \\ \hline \end{array}$ | TB - Terminal Block <br> LL- Less Lamp |
|  |  |  |  |  |  | $\begin{aligned} & \text { SVG - Satin Verde Green } \\ & \text { GPT - Graphite } \\ & \text { MSV - Metalic Silver } \end{aligned}$ |  |
|  |  |  |  |  | MT - Multi Tap cons for highest voltage | sts of $120 \mathrm{~V}, 208 \mathrm{~V}, 240 \mathrm{~V}$ and 2 Alternate voltages wilf requir | 77 V and is prepared field adjustment. |
|  |  |  |  |  | $\Pi$-Tri-Tap consist for Canadian applica | of $120 \mathrm{~V}, 277 \mathrm{~V}$ and 347 V and ons and is prepared for highes ges will require field adjustm | is shipped standard t voltage. Alternate nt. |
|  |  |  |  |  | Consult Factory for International Voltages and Light Sources |  |  |

FOOTNOTES:

1. PCR factory installed and prewired to highest voltage. Alternate voltages will require field re-wiring. Photocell must be ordered separately. See Accessories.
2. Factory installed PCR option required
3. Fusing must be located in the hand-hole of the pole - not in the fixture.
4. Black only. House side shield adds to the fixture EPA. Consult factory.


10/22/15


CHALLENGER ${ }^{\circledR}$ II MEDIUM (Various reflectors are protected by U.S. Patent No. 6,464,378.)


DIMENSIONS

${ }_{2}^{\text {Brachet Pattern }}$

HOUSING - Radiused, rectangular-shaped aluminum housing with stainless steel or electro-zinc plated steel mounting hardware.
DOOR FRAME-Aluminum with two stainless steel captive fasteners for easy access into the fixture. A one-piece extruded EPDM gasket seals the door frame against the housing.

LENS/GASKET - Available with a tempered flat glass lens. The lens is sealed to the door frame with EPDM gasketing.
SOCKETS - Porcelain mogul-base sockets. All sockets are factory prewired. All sockets are pulse-rated.
LIGHT SOURCES - Pulse-Start Metal Halide, Pulse-Start Metal Halide Reduced Envelope, Ceramic Metal Halide or High Pressure Sodium. Clear lamp is supplied as standard.

BALLASTS - Hgh-power factor ballast. Pulse-Start Metal Halide, Metal Halide, and High Pressure Sodium fixtures feature a CWA type ballast. All ballasts are designed for $-20^{\circ}$ F operation.

## REFLECTORS/DISTRIBUTION PATTERNS

- Available with reflector distribution patterns of Type V (5), Forward Throw (FT), Type III (3), and Type II (2). Photometric data is tested in accordance with IESNA guidelines.
BRACKETS - Use with 5 " traditional drilling pattern. An extruded radius 8 " arm is shipped standard and compatible with all fixture mounting configurations. The fixture may also be mounted to round poles using the round pole plate adaptor accessory (RPP2), which must be ordered separately.

FINISHES - Each fixture is finished with LSI's DuraGrip ${ }^{\oplus}$ polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, white, satin verde green, metallic silver, and graphite.
PHOTOMETRICS - Please visit our web site at www. Isi-industries.com for
detailed photometric data.

ARRA
Funding Compliant

LUMINAIRE EPA CHART - Challenger II Medium


Note: House Side Shield adds to fixture EPA.
Consult factory

| SHIPPING WEIGHTS - Challenger II Medium <br> Catalog Number |  |  |  |  |  |  | Est. Weight (kg/bs.) | Length (mm/in.) | Width (mm/in.) | Height (mm/in.) |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| CH2HM | $19 / 42$ | $699 / 27.5$ | $559 / 22$ | $432 / 17$ |  |  |  |  |  |  |

## TYPES SG \& SH

## Specifications

| Diameter: | $19 "$ |
| :--- | ---: |
| Height: | $3.75 "$ |
|  | (4.85" with Up-light) |
| Weight <br> (max, with <br> no options): | 18 lbs |



A+Capable options indicated by this color background.

| Catalog <br> Number |
| :--- |
| Notes |
| Type |

## Introduction

The all new VCPG LED (Visually Comfortable Parking Garage) luminaire is designed to bring glare control, optical performance and energy savings into one package. The recessed lens design of VCPG LED minimizes high angle glare, while its precision molded acrylic lens eliminates LED pixilation and delivers the required minimums, verticals and uniformity. The dedicated up-light module option reduces the contrast between the luminaire and the ceiling creating a more visually comfortable environment.

The VCPG LED delivers up to $87 \%$ in energy savings when replacing 175 W metal halide luminaires. With over 100,000 hour life expectancy ( $12+$ years of 24/7 continuous operation), the VCPG LED luminaire provides significant maintenance savings over traditional luminaires.

## Ordering Information

EXAMPLE: VCPG LED V4 P4 40K 70CRI T5M MVOLT SRM DNAXD


LITHONIA
LIGHTING.

Ordering Information Cont.

|  | Accessories Ordered and shipped separately |
| :---: | :---: |
| VCPGBDS DWHXD U | Bird shroud for PM (specify finish) |
| VCPGBDS YK DWHXDU | Bird shroud for YK (specify finish) |
| VCPGUBDS DWHXDU | Bird shroud for PM with Up-Light (specify finish) |
| VCPGUBDS YK DWHXD U | Bird shroud for Yk with Up-Light (specify finish) |
| VCPGSRMU | Surface mount kit, with no Up-Light |
| VCPGUSRM U | Surface mount kit, with Up-Light |
| VCPGWG U | Wire guard |
| SLVSQ | Quick mount pendant swivel kit, square |
| SLVRD | Quick mount pendant swivel kit, round |
| VCPG YK DWHXD U | Yoke mount kit (specify finish) |
| RSXWBA DWHXD U | RSXWBA wall bracket (specify finish) |

## NOTES

1 P1-P6 not available with V8. P7 not available with V4.
2 Not available with P7.
3 Only vertical height adjustment. No angle adjustment. Use PM and SLVSQ or SLVRD for mounting to angled ceiling or canopies
4 Not available with 347 V or 480 V .
5 E8WC and E10WH only rated up to $35^{\circ} \mathrm{C}$ ambient.
6 E8WC \& E10WH only available with P1-P4 packages.
7 DMG option not available with standalone or networked sensors/controls.
8 Power interruption delay $>30$ milliseconds required for operation. Refer sequence of operations on page 4 for more details. BDS not available with UPL1 or UPL2.
9 Not available with P6 \& P7. Power interruption delay >200 milliseconds required for operation. Refer sequence of operations on page 4 for more details.
10 XAD \& XAD924 not available with PIR3FC3V924 and PIRH3FC3V924.

## Performance Data

Lumen Output Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown,

| Performance Package | Watts | Distribution Type | $\begin{gathered} 30 \mathrm{~K} \\ (3000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  | $\begin{gathered} 35 \mathrm{~K} \\ (3500 \mathrm{~K}, 70 \mathrm{CRI}) \\ \hline \end{gathered}$ |  | $\begin{gathered} 40 \mathrm{~K} \\ (4000 \mathrm{~K}, 70 \mathrm{CRI}) \\ \hline \end{gathered}$ |  | $\begin{gathered} 50 \mathrm{~K} \\ (5000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  | Up-light Lumen Output |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lumens | LPW | Lumens | LPW | Lumens | LPW | Lumens | LPW |  |  |  |
| P1 | 27W | T5E | 3,581 | 135 | 3,670 | 138 | 3,815 | 144 | 3,876 | 146 | Up-light Option | Watts | Lumens |
|  |  | T5M | 3,620 | 136 | 3,710 | 140 | 3,856 | 145 | 3,917 | 147 | UPL1 | 6.5W | 519 |
|  |  | T5W | 3,592 | 135 | 3,681 | 139 | 3,827 | 144 | 3,888 | 146 |  | 8.5 W | 715 |
|  |  | T5R | 3,464 | 130 | 3,550 | 134 | 3,690 | 139 | 3,749 | 141 | UPL2 |  |  |

Lumen Multiplier for 80CRI

| CCT | Multiplier |
| :---: | :---: |
| 30 K | 0.926 |
| 35 K | 0.945 |
| 40 K | 0.967 |
| 50 K | 0.965 |

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from $0-40^{\circ} \mathrm{C}\left(32-104^{\circ} \mathrm{F}\right)$.

| Ambient |  | Lumen Multiplier |
| :---: | :---: | :---: |
| $0^{\circ} \mathrm{C}$ | $32^{\circ} \mathrm{F}$ | 1.03 |
| $10^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{F}$ | 1.02 |
| $20^{\circ} \mathrm{C}$ | $68^{\circ} \mathrm{F}$ | 1.01 |
| $25^{\circ} \mathrm{C}$ | $77^{\circ} \mathrm{F}$ | 1 |
| $30^{\circ} \mathrm{C}$ | $86^{\circ} \mathrm{F}$ | 0.99 |
| $40^{\circ} \mathrm{C}$ | $104^{\circ} \mathrm{F}$ | 0.98 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a $25^{\circ} \mathrm{C}$ ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25,000 | 50,000 | 100,000 |
| :---: | :---: | :---: | :---: | :---: |
| Lumen Maintenance Factor | 1.0 | 0.97 | 0.94 | 0.89 |

Electrical Load

| Power <br> Package | System <br> Watts | 120 V |  |  |  |  |  |  |  | 208 V | 240 V | 277 V | 347 V | 480 V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 27 W | 0.22 | 0.13 | 0.12 | 0.10 | 0.08 | 0.06 |  |  |  |  |  |  |  |
| P2 | 34 W | 0.28 | 0.16 | 0.14 | 0.13 | 0.10 | 0.08 |  |  |  |  |  |  |  |
| P3 | 43 W | 0.37 | 0.21 | 0.18 | 0.16 | 0.13 | 0.09 |  |  |  |  |  |  |  |
| P4 | 56 W | 0.48 | 0.28 | 0.24 | 0.21 | 0.16 | 0.12 |  |  |  |  |  |  |  |
| P5 | 82 W | 0.68 | 0.40 | 0.35 | 0.30 | 0.24 | 0.18 |  |  |  |  |  |  |  |
| P6 | 108 W | 0.91 | 0.52 | 0.45 | 0.39 | 0.32 | 0.23 |  |  |  |  |  |  |  |
| P7 | 124 W | 1.03 | 0.59 | 0.51 | 0.44 | 0.37 | 0.27 |  |  |  |  |  |  |  |

LITHONIA
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800-705-SERV (7378) • www.lithonia.com

VCPG LED P4 T5M 40K


VCPG LED P4 T5E 40K



VCPG LED P4 T5R 40K


VCPG LED P4 LANE 4OK


## Control/Sensor Options

Motion/Ambient Sensor (PIR_, PIRH)
Motion/Ambeint sensor (Sensor Switch MSOD, Xpoint MSOD) is integrated into the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100\% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between $8-15 \mathrm{ft}$, while PIRH is optimized for 15-40ft mounting height.

## Networked Control (NLTAIR2)

$n$ Light ${ }^{\circledR}$ AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY ${ }^{\top M}$ Pro) based configurability combined together make nLight ${ }^{\circledR}$ AIR a secure, reliable and easy to use platform.



PIRH


TOP VIEW


## Motion/Ambient Sensor Default Settings

| Option | Dim Level | High Level <br> (when triggered) | Photocell <br> Operation | Motion Time <br> Delay | Ramp-down <br> Time | Ramp-up Time |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Sequence of Operations for UL924 Listed Controls/Sensors

## (PIR3FC3V924, PIRH3FC3V924, XAD924, NLTAIR2 PIR924, NLTAIR2 PIRH924)

The UL924 listed control/sensor ("device") is designed to provide full light output for 90 minutes following power loss ("Egress Mode"), ignoring both manual and automatic dimming/occupancy/daylight control signals during this time. The sequence of operations is as follows:

- Normal condition: device can dim and turn off the luminaire as normal, in response to automatic and manual control.
- Utility power fails, and luminaire loses power.
- Backup power source activates, transfer switch moves the emergency circuit powering the luminaire onto the backup source, and luminaire regains power.
- The device detects this power interruption, if it is $>30 \mathrm{~ms}$ (for PIR3FC3V924, PIRH3FC3V924, XAD924) or $>200 \mathrm{~ms}$ (for NLTAIR2 PIR924, NLTAIR2 PIRH924).
- The device ignores all dimming commands and controls the driver to full light output for 90 minutes.
- The device resumes normal dimming controls after 90 minutes.

These UL924 listed controls/sensors are not intended for use with Non-interruptible central emergency power systems. The power interruption, when transferring from normal utility power to emergency backup power, is required for the controller to activate its Egress Mode and provide full light output.

L/THONIA

Mounting, Options \& Accessories


## FEATURES \& SPECIFICATIONS

## INTENDED USE

The visually comfortable optics, energy savings, and long life of the VCPG LED Parking Garage luminaire make it an ideal choice for new commercial installations and retrofit parking garage opportunities. It is designed to meet or exceed recommended illuminance criteria when installed as a direct replacement of most HID parking garage luminaires. Its modern dayform and aesthetics also make it appealing for indoor low-bay applications.

## CONSTRUCTION

Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED driver is separated from the heat generating light engines and mounted in direct contact with the casting to promote low operating temperatures, higher lumen maintenance and long life. The housing is completely sealed against moisture and environmental contaminants (IP66) and is suitable for hose-down application.

## FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

## OPTICS

Light guide technology provides a diffused light source, reducing glare from direct view of the LEDs. The light source is recessed into the luminaire, further reducing the high angle glare from the luminaire. A combination of precision molded micro prismatic acrylic lenses and back reflectors provide five different photometric distributions tailored specifically to parking garage applications. Up-light option comes with a dedicated light engine and custom optic designed to efficiently spread light on to the ceiling, thus reducing the cave effect.

## ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L89/100,000 hours at $25^{\circ} \mathrm{C}$ ). The electronic driver has a power factor of $>90 \%$, THD $<20 \%$, and a minimum 6.0 KV surge rating. When ordering the SPD10KV option, a separate $10 \mathrm{kV}(5 \mathrm{kA})$ surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

## INSTALLATION

Standard configuration accepts a rigid or free-swinging 3/4" NPT stem for pendant mounting. The surface mount option attaches to a $4 \times 4^{\prime \prime}$ recessed or surface mount outlet box using a quick-mount kit (included); kit contains galvanized steel luminaire and outlet box plates and a full pad gasket. Kit has an integral mounting support that allows the luminaire to hinge down for easy electrical connections. Luminaire and plates are secured with set screws. Also, available with a yoke/trunnion mount option with $3 / 4$ " NPT provision for flexible conduit entry (conduit by others); height can be adjusted from 10-18". Supply leads are 24 " in length as standard. Longer supply leads are available as additional options. Design can withstand up to a 3.0 G vibration load rating per ANSI C136.31.

## LISTINGS

CSA certified to U.S. and Canadian standards. IP66 rated for outdoor applications. PIR options are rated for wet location. Rated for $-40^{\circ} \mathrm{C}$ minimum ambient. DesignLights Consortium ${ }^{\circledR}$ (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www. designlights.org/ QPL to confirm which versions are qualified.

## WARRANTY

5 -year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/terms-and-conditions
Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at $25^{\circ} \mathrm{C}$. Specifications subject to change without notice.

LITHONIA
Job
Type
Part \#

Notes n

## SPECIFICATIONS

Source Xicato XTM LED module - up to 5000 lumens
CCT $2700 \mathrm{~K}, 3000 \mathrm{~K}, 3500 \mathrm{~K}$ or 4000 K
Color Consistency $1 \times 2$ SDCM (MacAdam) along BBL, CCT +/- 40K to 70K, Duv +/-. 001
CRI (Ra) 83 or 98
Driver / Location Included / Internal with remote or deep canopy options
Dimming $0-10 \mathrm{~V}$ or phase dimming to $10 \%$ standard; DALI, DMX and $1 \%$ dimming available
Input Voltage 100 to 277 VAC , phase dimmable versions are 120VAC only
Power Up to 57 watts max, depending on LED module / driver
Reflector $11^{\circ}, 25^{\circ}, 41^{\circ}, 51^{\circ}$, or $83^{\circ}$ - field replaceable without tools
Material CNC machined aluminum with stainless steel hardware
Finish Powder coat - TGIC polyester for exterior and interior use
Weight $8.5 \mathrm{lb} .[3.9 \mathrm{~kg}$ ]
Location Listed for Wet \& Damp locations
Approvals ETL Listed to UL 1598, 2108, 8750 and CSA C22.2\# 9 \& \#250.0
L80 Life > 50,000 hours at 80\% lumen maintenance based on IESNA LM-80-08
Warranty Lifetime Limited Warranty - see warranty for details
IES Files LM-79-08 IES files available
Modifications Any modification or customization is possible - consult factory


## ORDERING LOGIC

| Model | Driver Location | Dimming | Mounting Location | Output | CRI * | C.C.T. | Reflector | Shell Color | Options |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C4LS |  |  |  |  |  |  |  |  |  |
|  | $\mathrm{N}=$ Internal | $\mathrm{N}=$ None | D=Damp | 07=700 Im | 83=83 | 27=2700K | 11 $=11^{\circ}$ ** | xx |  |
|  | R=Remote | $\mathrm{P}=$ Phase | W=Wet | 10=950 lm | 98=98* | 30=3000 | $25=25^{\circ}$ | (see chart on page 4) |  |
|  | D=Deep | $\mathrm{V}=0-10 \mathrm{~V}$ |  | 13=1300 lm |  | 35=3500K | $41=41^{\circ}$ |  |  |
|  | Canopy | $\mathbf{Z}=$ Other |  | 20=2000 m m |  | $40=4000 \mathrm{~K}$ | $51=51^{\circ}$ | zZ=Custom |  |
|  |  |  |  | 30 $=3000 \mathrm{~lm}$ |  |  | $83=83^{\circ}$ ** |  |  |
|  |  |  |  | $40=4000 \mathrm{~lm}$ |  |  |  |  |  |
|  |  |  |  | 50=5000 lm |  |  |  |  |  |
|  |  |  |  |  | * 98 CRI not available in 4000 or 5000 lm |  | ** Not available with wet location |  |  |

Example Part Number: C4LS-NND-13832741-S3
CORE $\mathbf{4 0 0}$ LX Sconce - INternal Driver, No Dimming, Damp Location - $\mathbf{2 0 0 0} \mathrm{Im}, \mathbf{8 3} \mathrm{CRI}, \mathbf{2 7 0 0 K}, \mathbf{4 1}{ }^{\circ}$ Reflector - S3 Red Shell


LED OPTIONS
CONTROL OPTIONS

| Reflector Option | LED Specifications |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LES ${ }^{1}$ | CRI | Lumens ${ }^{\text {2,3 }}$ | Wattage ${ }^{4}$ (W) | Efficacy ${ }^{5}$ ( $\mathrm{lm} / \mathrm{W}$ ) |
| $\begin{array}{r} 11^{\circ}, 25^{\circ}, 41^{\circ}, \\ 51^{\circ} \& 83^{\circ} \end{array}$ | 19 mm | $\mathrm{Ra}=83 \pm 3$ | 700 | 5.6 | 129 |
|  |  |  | 950 | 8.2 | 118 |
|  |  |  | 1300 | 11.7 | 111 |
|  |  |  | 2000 | 19.5 | 102 |
|  |  |  | 3000 | 29.3 | 102 |
|  |  |  | 4000 | 39.1 | 102 |
|  |  |  | 5000 | 46.8 | 107 |
|  |  | $\begin{aligned} R a & =98 \\ R 9 & \geq 90 \\ R 15 & \geq 95 \end{aligned}$ | 700 | 7.4 | 97 |
|  |  |  | 950 | 10.9 | 89 |
|  |  |  | 1300 | 15.6 | 83 |
|  |  |  | 2000 | 26.4 | 76 |
|  |  |  | 3000 | 34.1 | 88 |


| Standard LED Drivers* <br> (included in base price) | Order Code V = 0-10V dimming to 10\% <br> Order Code $\mathbf{P}=$ Phase dimming to 10\% <br> Compatible with both forward and <br> reverse phase dimmers |
| :---: | :--- |
| Optional LED Drivers* | eldoLED 0-10V, DALI, or DMX dimming to 0\% <br> Lutron Hi-lume ${ }^{\text {TM }}$ A-series, EcoSystem or <br> forward phase dimming to 1\% <br> Lutron Hi-lume ${ }^{\text {TM }}$ 5-series, EcoSystem dimming to 5\% |

* Standard LED drivers are suitable for Wet Location
* Optional LED drivers are suitable for Damp Location
* For EM applications:

All LED drivers may be used with 3rd party inverter style systems
${ }^{1}$ LES: Light Emitting Surface diameter
$2 \pm 10 \%$
3 Source lumens - see photometrics on page 3 for LOR to calculate delivered lumens
4 Maximum luminaire wattage including LED driver $=$ LED wattage $\times 1.2$
5 Higher efficacies are available via lower drive currents - consult factory

## PHOTOMETRICS

LM-79-08 IES files available


## Beam Shaping Options

Add the order code shown below to the options box at the end of the part number:

| Order Code | Description |
| :---: | :---: |
| -HL | Honeycomb Louver |
| -DF | Diffusion Lens |
| -SF | Satin finish on any standard reflector |
| -LS | Linear Spread Lens ( $60^{\circ} \times 1^{\circ}$ ) |
| -WW | Wall Wash Lens (shifts beam $20^{\circ}$ from vertical) |

## COLOR OPTIONS

| Basic Powder Coat | GW <br> Gloss White | SW <br> Satin White AW 주ํ <br> Antimicrobial option | TW <br> Textured Matte White | TB <br> Textured Matte Black |
| :---: | :---: | :---: | :---: | :---: |
| Satin <br> Anodized Effect Powder Coat | CS <br> Clear Silver | OB <br> Oil-Rubbed <br> Bronze | DB <br> Dark Bronze | SB <br> Satin Black |
| Metallic Powder Coat | SG <br> Silver Gray | CG <br> Charcoal Gray | CU Copper | $\begin{aligned} & \text { BR } \\ & \text { Brass } \end{aligned}$ |
| Gloss Powder Coat (80-95\% Gloss) | GO <br> Orange (RAL 2003) | GR <br> Red <br> (RAL 3020) | GM <br> Magenta (RAL 4010) | $\begin{aligned} & \text { GB } \\ & \text { Blue } \\ & \text { (RAL 5015) } \end{aligned}$ |
| Aluminum | BA <br> Brushed Aluminum Cost adder applies |  |  |  |

Special Order


RAL
Most RAL Classic Colors (80-95\% Gloss)
are available for powder coat - consult ALW. Minimum setup fee applies.
See: alwusa.com/finishes for more information

## Custom



## CCM

CM----
Custom powder coat color matching
is available - consult ALW.
Premium setup fee applies.

CAT
The complete range of powder coat colors from the Tiger Drylac and TCI catalogs are available - consult ALW. Minimum setup fee applies.

Printed or on-screen colors are only approximations - consult actual Color Chip Set before specifying
Note: An individual setup fee will apply to each unique Special Order/Custom Finish per purchase order. (ex: RAL 5023 and RAL 2008 are specified for multiple line items on a purchase orer. $2 x$ setup fees will apply)


## DESCRIPTION

The Gem series is a wet location, Indoor/Outdoor rated, wall mounted luminaire designed to discreetly illuminate in a single direction. Machined from billet aluminum, stainless steel hardware, optically clear heat strengthen borosilicate glass and powder coated with a super durable TGIC powder coat finish, this fixture is designed to withstand the test of time. Designed with a wide range input voltage ( $11 \mathrm{Vac}-14 \mathrm{Vac}$ ) giving a nearly constant light output to combat voltage drop, yet is dimmable using most standard low voltage magnetic dimmers. LED units and optics are replaceable. This fixture requires a remote 12Vac Transformer, purchased separately, to function.

Suitable For Wet Locations

ORDERING INFORMATION

| Series* | Source* |  | Color Temperature* | Voltage* | Distribution* |  | Mounting Accessories* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GEM | 3LED16 | LED 3up Round | 30K | $12^{1}$ | NSP | Narrow Spot | CN4 Rectangular canopy |
|  |  |  | 40K |  | NFL | Narrow Flood | CN5 Round 5" canopy |
|  |  |  | 50K |  | FL | Flood |  |


| Options ${ }^{2}$ |  |  | External Caps* |  | Finish* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Internal Louver | Internal Filters |  | C1 | Short Flush | BL Black Textured | DNA | Natural Aluminum |
| IHL Honeycomb Louver | FA | Amber | C2 | Recessed Lens | BRS Bronze Smooth | NBS ${ }^{3}$ | Natural Bronze Smooth |
| Internal Accessory | FG | Green | C3 | $45^{\circ}$ Angle Cut | BRT Bronze Textured | VET | Verde Textured |
| L1 Prismatic Lens | FGD | Green Dichroic | C4 | Long Flush | CHS Chrome Smooth | WH | White Textured |
| L2 Linear Spread Lens | FLB | Light Blue |  |  | DBL Black Smooth | WHS | White Smooth |
| L3 Softening Lens | FM | Mercury Vapor |  |  | DDB Designer Bronze | CF | Custom Finish |
|  | FMB | Medium Blue |  |  |  |  |  |
|  | FMBD | Medium Blue Dichroic |  |  | VERIFY FINISH |  |  |
|  | FR | Red |  |  | PROVIDED SILVER |  |  |
|  | FRD | Red Dichroic |  |  | ON PREVIOUS PHASE |  |  |

## MOUNTING DETAIL



CN4


CN5
*Required Fields
Notes:
Remote transformer required.
Up to 3 Optional items can be specified.
NBS paint uses specialty pigments to give a natural appearance that may vary by fixture.

9144 Deering Avenue, Second Floor • Chatsworth, CA 91311 - www.hydrel.com Phone: 866.533.9901 • Fax: 866.533.5291

$\qquad$

## Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400 W metal halide with typical energy savings of $70 \%$ and expected service life of over 100,000 hours.

## Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

## DSXO LED



## Ordering Information

## Accessories

Ordered and shipped separately.
DLL127F $1.5 \mathrm{JU} \quad$ Photocell - SSL twist-lock (120-277V) ${ }^{20}$
1 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together
2 Any Type 5 distribution with photocell, is not available with WBA

DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) ${ }^{20}$
4 MVOLT driver operates on any line voltage from $120-277 \mathrm{~V}(50 / 60 \mathrm{~Hz})$.
Single fuse (SF) requires $120 \mathrm{~V}, 277 \mathrm{~V}$ or 347 V . Double fuse (DF) requires $208 \mathrm{~V}, 240 \mathrm{~V}$ or 480 V .
DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) ${ }^{20}$
Not available with BL30, BL50 or PNMT options.
7 Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C 136.31 .
8 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
9 Must be ordered with PIRHN.
DSXOHS 2OCU House-side shield for P1,P2,P3 and P4 ${ }^{18}$ DSXOHS 30CU House-side shield for P10,P11,P12 and P13 ${ }^{18}$

10 Sensor cover available only in dark bronze, black, white and natural aluminum colors
11 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link
12 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
13 If $\mathrm{ROAM}^{\oplus}$ node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included
14 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V.
15 Reference Motion Sensor table on page 3.
16 Reference PER Table on page 3 to see functionality
17 Not available with other dimming controls options.
18 Not available with BLC, LCCO and RCCO distributio
19 Must be ordered with fixture for factory pre-drilling.
20 Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3
21 For retrofit use only.
For more control options, visit DTL and ROAM online.

Link to nLight Air 2

## EGS - External Glare Shield



## Drilling

HANDHOLE ORIENTATION
(from top of pole)


Tenon Mounting Slipfitter

| Tenon 0.D. | Single Unit | 2 at $180^{\circ}$ | 2 at $90^{\circ}$ | 3 at $120^{\circ}$ | 3 at $90^{\circ}$ | 4 at $90^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-3 / 8^{\prime \prime}$ | AST20-190 | AST20-280 | AST20-290 | AST20-320 | AST20-390 | AST20-490 |
| $2-7 / 8^{\prime \prime}$ | AST25-190 | AST25-280 | AST25-290 | AST25-320 | AST25-390 | AST25-490 |
| $4^{\prime \prime}$ | AST35-190 | AST35-280 | AST35-290 | AST35-320 | AST35-390 | AST35-490 |


|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mounting Option | Drilling Template | Single | 2 @ 180 | 2 @ 90 | 3 @ 90 | 3 @ 120 | $4 @ 90$ |
| Head Location |  | Side B | Side B \& D | Side B \& C | Side B, C \& D | Round Pole Only | Side A, B, C \& D |
| Drill Nomenclature | \#8 | DM19AS | DM28AS | DM29AS | DM39AS | DM32AS | DM49AS |
| Minimum Acceptable Outside Pole Dimension |  |  |  |  |  |  |  |
| SPA | \#8 | 2-7/8" | 2-7/8" | 3.5 " | 3.5 " |  | 3.5" |
| RPA | \#8 | 2-7/8" | 2-7/8" | 3.5" | 3.5" | 3" | 3.5" |
| SPUMBA | \#5 | 2-7/8" | 3" | $4 "$ | 4" |  | 4" |
| RPUMBA | \#5 | 2-7/8" | 3.5" | 5" | 5" | 3.5" | 5" |

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height ( $20^{\prime}$ ).

## LEGEND





Test No. LTL23451P25 tested in accordance
with IESNA LM-79-08.


Lumen Ambient Temperature (LAT) Multipliers
Use these factors to determine relative lumen output for average ambient temperatures from $0-40^{\circ} \mathrm{C}\left(32-104^{\circ} \mathrm{F}\right)$.

| Ambient |  | Lumen Multiplier |
| :---: | :---: | :---: |
| $0^{\circ} \mathrm{C}$ | $32^{\circ} \mathrm{F}$ | 1.04 |
| $5^{\circ} \mathrm{C}$ | $41^{\circ} \mathrm{F}$ | 1.04 |
| $10^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{F}$ | 1.03 |
| $15^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{F}$ | 1.02 |
| $20^{\circ} \mathrm{C}$ | $68^{\circ} \mathrm{F}$ | 1.01 |
| $\mathbf{2 5 ^ { \circ } \mathrm { C }}$ | $\mathbf{7 7}^{\circ} \mathbf{C}$ | $\mathbf{1 . 0 0}$ |
| $30^{\circ} \mathrm{C}$ | $86^{\circ} \mathrm{F}$ | 0.99 |
| $35^{\circ} \mathrm{C}$ | $95^{\circ} \mathrm{F}$ | 0.98 |
| $40^{\circ} \mathrm{C}$ | $104^{\circ} \mathrm{F}$ | 0.97 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a $\mathbf{2 5}{ }^{\circ} \mathrm{C}$ ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | Lumen Maintenance Factor |
| :---: | :---: |
| 25,000 | 0.96 |
| 50,000 | 0.92 |
| 100,000 | 0.85 |


| Motion Sensor Default Settings |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Option | Dimmed <br> State | High Level <br> (when <br> triggered) | Phototcell <br> 0peration | Dwell <br> Time | Ramp-up <br> Time | Ramp-down <br> Time |
| PIR or PIRH | $3 V(37 \%)$ <br> Output | $10 \mathrm{~V}(100 \%)$ <br> Output | Enabled @ 5FC | 5 min | 3 sec | 5 min |
| *PIR1FC3V or <br> PIRH1FC3V | $3 V$ (37\%) <br> Output | $10 \mathrm{~V}(100 \%)$ <br> Output | Enabled @ 1FC | 5 min | 3 sec | 5 min |
| *for use with separate Dusk to Dawn or timer. |  |  |  |  |  |  |


| Electrical Load |  |  |  |  | Current (A) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Performance Package | LED Count | Drive Current | Wattage | 120 | 208 | 240 | 277 | 347 | 480 |
| Forward Optics (Non-Rotated) | P1 | 20 | 530 | 38 | 0.32 | 0.18 | 0.15 | 0.15 | 0.10 | 0.08 |
|  | P2 | 20 | 700 | 49 | 0.41 | 0.23 | 0.20 | 0.19 | 0.14 | 0.11 |
|  | P3 | 20 | 1050 | 71 | 0.60 | 0.37 | 0.32 | 0.27 | 0.21 | 0.15 |
|  | P4 | 20 | 1400 | 92 | 0.77 | 0.45 | 0.39 | 0.35 | 0.28 | 0.20 |
|  | P5 | 40 | 700 | 89 | 0.74 | 0.43 | 0.38 | 0.34 | 0.26 | 0.20 |
|  | P6 | 40 | 1050 | 134 | 1.13 | 0.65 | 0.55 | 0.48 | 0.39 | 0.29 |
|  | P7 | 40 | 1300 | 166 | 1.38 | 0.80 | 0.69 | 0.60 | 0.50 | 0.37 |
| Rotated Optics (Requires L90 or R90) | P10 | 30 | 530 | 53 | 0.45 | 0.26 | 0.23 | 0.21 | 0.16 | 0.12 |
|  | P11 | 30 | 700 | 72 | 0.60 | 0.35 | 0.30 | 0.27 | 0.20 | 0.16 |
|  | P12 | 30 | 1050 | 104 | 0.88 | 0.50 | 0.44 | 0.39 | 0.31 | 0.23 |
|  | P13 | 30 | 1300 | 128 | 1.08 | 0.62 | 0.54 | 0.48 | 0.37 | 0.27 |

## Controls Options

| Nomenclature | Descripton | Functionality | Primary control device | Notes |
| :---: | :---: | :---: | :---: | :---: |
| FAO | Field adjustable output device installed inside the lumiaire; wired to the driver dimming leads. | Allows the lumiaire to be manually dimmed, effectively trimming the light output. | FAO device | Cannot be used with other controls options that need the $0-10 \mathrm{~V}$ leads |
| DS | Drivers wired independantly for 50/50 luminaire operation | The luminaire is wired to two separate circuits, allowing for $50 / 50$ operation. | Independently wired drivers | Requires two seperately switched circuits. Consider nLight AIR as a more cost effective alternative. |
| PER5 or PER7 | Twist-lock photocell receptacle | Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide $0-10 \mathrm{~V}$ dimming signals. | Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM. | Pins 4 \& 5 to dimming leads on driver, Pins 6 \& 7 are capped inside luminaire |
| PIR or PIRH | Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting | Luminaires dim when no occupancy is detected. | Acuity Controls SBGR | Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation. |
| NLTAIR2 PIRHN | nLight AIR enabled luminaire for motion sensing, photocell and wireless communication. | Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Edypse. | nLight Air SDGR | nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. |

## Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Forward Optics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power Package | LED Count | Drive Current | System Watts | Dist. <br> Type | $\begin{gathered} 30 \mathrm{~K} \\ (3000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  | $\begin{gathered} 40 \mathrm{~K} \\ (4000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  | $\begin{gathered} 50 \mathrm{~K} \\ (5000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  |
|  |  |  |  |  | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW |
| P1 | 20 | 530 | 38W | T15 | 4,369 | 1 | 0 | 1 | 115 | 4,706 | 1 | 0 | 1 | 124 | 4,766 | 1 | 0 | 1 | 125 |
|  |  |  |  | T2S | 4,364 | 1 | 0 | 1 | 115 | 4,701 | 1 | 0 | 1 | 124 | 4,761 | 1 | 0 | 1 | 125 |
|  |  |  |  | T2M | 4,387 | 1 | 0 | 1 | 115 | 4,726 | 1 | 0 | 1 | 124 | 4,785 | 1 | 0 | 1 | 126 |
|  |  |  |  | T3S | 4,248 | 1 | 0 | 1 | 112 | 4,577 | 1 | 0 | 1 | 120 | 4,634 | 1 | 0 | 1 | 122 |
|  |  |  |  | T3M | 4,376 | 1 | 0 | 1 | 115 | 4,714 | 1 | 0 | 1 | 124 | 4,774 | 1 | 0 | 1 | 126 |
|  |  |  |  | T4M | 4,281 | 1 | 0 | 1 | 113 | 4,612 | 1 | 0 | 2 | 121 | 4,670 | 1 | 0 | 2 | 123 |
|  |  |  |  | TFTM | 4,373 | 1 | 0 | 1 | 115 | 4,711 | 1 | 0 | 2 | 124 | 4,771 | 1 | 0 | 2 | 126 |
|  |  |  |  | T5VS | 4,548 | 2 | 0 | 0 | 120 | 4,900 | 2 | 0 | 0 | 129 | 4,962 | 2 | 0 | 0 | 131 |
|  |  |  |  | T5S | 4,552 | 2 | 0 | 0 | 120 | 4,904 | 2 | 0 | 0 | 129 | 4,966 | 2 | 0 | 0 | 131 |
|  |  |  |  | T5M | 4,541 | 3 | 0 | 1 | 120 | 4,891 | 3 | 0 | 1 | 129 | 4,953 | 3 | 0 | 1 | 130 |
|  |  |  |  | T5W | 4,576 | 3 | 0 | 2 | 120 | 4,929 | 3 | 0 | 2 | 130 | 4,992 | 3 | 0 | 2 | 131 |
|  |  |  |  | BLC | 3,586 | 1 | 0 | 1 | 94 | 3,863 | 1 | 0 | 1 | 102 | 3,912 | 1 | 0 | 1 | 103 |
|  |  |  |  | LCCO | 2,668 | 1 | 0 | 1 | 70 | 2,874 | 1 | 0 | 2 | 76 | 2,911 | 1 | 0 | 2 | 77 |
|  |  |  |  | RCCO | 2,668 | 1 | 0 | 1 | 70 | 2,874 | 1 | 0 | 2 | 76 | 2,911 | 1 | 0 | 2 | 77 |
| P2 | 20 | 700 | 49W | T15 | 5,570 | 1 | 0 | 1 | 114 | 6,001 | 1 | 0 | 1 | 122 | 6,077 | 2 | 0 | 2 | 124 |
|  |  |  |  | T2S | 5,564 | 1 | 0 | 2 | 114 | 5,994 | 1 | 0 | 2 | 122 | 6,070 | 2 | 0 | 2 | 124 |
|  |  |  |  | T2M | 5,593 | 1 | 0 | 1 | 114 | 6,025 | 1 | 0 | 1 | 123 | 6,102 | 1 | 0 | 1 | 125 |
|  |  |  |  | T3S | 5,417 | 1 | 0 | 2 | 111 | 5,835 | 1 | 0 | 2 | 119 | 5,909 | 2 | 0 | 2 | 121 |
|  |  |  |  | T3M | 5,580 | 1 | 0 | 2 | 114 | 6,011 | 1 | 0 | 2 | 123 | 6,087 | 1 | 0 | 2 | 124 |
|  |  |  |  | T4M | 5,458 | 1 | 0 | 2 | 111 | 5,880 | 1 | 0 | 2 | 120 | 5,955 | 1 | 0 | 2 | 122 |
|  |  |  |  | TFTM | 5,576 | 1 | 0 | 2 | 114 | 6,007 | 1 | 0 | 2 | 123 | 6,083 | 1 | 0 | 2 | 124 |
|  |  |  |  | T5VS | 5,799 | 2 | 0 | 0 | 118 | 6,247 | 2 | 0 | 0 | 127 | 6,327 | 2 | 0 | 0 | 129 |
|  |  |  |  | T5S | 5,804 | 2 | 0 | 0 | 118 | 6,252 | 2 | 0 | 0 | 128 | 6,332 | 2 | 0 | 1 | 129 |
|  |  |  |  | T5M | 5,789 | 3 | 0 | 1 | 118 | 6,237 | 3 | 0 | 1 | 127 | 6,316 | 3 | 0 | 1 | 129 |
|  |  |  |  | T5W | 5,834 | 3 | 0 | 2 | 119 | 6,285 | 3 | 0 | 2 | 128 | 6,364 | 3 | 0 | 2 | 130 |
|  |  |  |  | BLC | 4,572 | 1 | 0 | 1 | 93 | 4,925 | 1 | 0 | 1 | 101 | 4,987 | 1 | 0 | 1 | 102 |
|  |  |  |  | LCCO | 3,402 | 1 | 0 | 2 | 69 | 3,665 | 1 | 0 | 2 | 75 | 3,711 | 1 | 0 | 2 | 76 |
|  |  |  |  | RCCO | 3,402 | 1 | 0 | 2 | 69 | 3,665 | 1 | 0 | 2 | 75 | 3,711 | 1 | 0 | 2 | 76 |
| P3 | 20 | 1050 | 71W | T15 | 7,833 | 2 | 0 | 2 | 110 | 8,438 | 2 | 0 | 2 | 119 | 8,545 | 2 | 0 | 2 | 120 |
|  |  |  |  | T2S | 7,825 | 2 | 0 | 2 | 110 | 8,429 | 2 | 0 | 2 | 119 | 8,536 | 2 | 0 | 2 | 120 |
|  |  |  |  | T2M | 7,865 | 2 | 0 | 2 | 111 | 8,473 | 2 | 0 | 2 | 119 | 8,580 | 2 | 0 | 2 | 121 |
|  |  |  |  | T3S | 7,617 | 2 | 0 | 2 | 107 | 8,205 | 2 | 0 | 2 | 116 | 8,309 | 2 | 0 | 2 | 117 |
|  |  |  |  | T3M | 7,846 | 2 | 0 | 2 | 111 | 8,452 | 2 | 0 | 2 | 119 | 8,559 | 2 | 0 | 2 | 121 |
|  |  |  |  | T4M | 7,675 | 2 | 0 | 2 | 108 | 8,269 | 2 | 0 | 2 | 116 | 8,373 | 2 | 0 | 2 | 118 |
|  |  |  |  | TFTM | 7,841 | 2 | 0 | 2 | 110 | 8,447 | 2 | 0 | 2 | 119 | 8,554 | 2 | 0 | 2 | 120 |
|  |  |  |  | T5VS | 8,155 | 3 | 0 | 0 | 115 | 8,785 | 3 | 0 | 0 | 124 | 8,896 | 3 | 0 | 0 | 125 |
|  |  |  |  | T5S | 8,162 | 3 | 0 | 1 | 115 | 8,792 | 3 | 0 | 1 | 124 | 8,904 | 3 | 0 | 1 | 125 |
|  |  |  |  | T5M | 8,141 | 3 | 0 | 2 | 115 | 8,770 | 3 | 0 | 2 | 124 | 8,881 | 3 | 0 | 2 | 125 |
|  |  |  |  | T5W | 8,204 | 3 | 0 | 2 | 116 | 8,838 | 4 | 0 | 2 | 124 | 8,950 | 4 | 0 | 2 | 126 |
|  |  |  |  | BLC | 6,429 | 1 | 0 | 2 | 91 | 6,926 | 1 | 0 | 2 | 98 | 7,013 | 1 | 0 | 2 | 99 |
|  |  |  |  | LCCO | 4,784 | 1 | 0 | 2 | 67 | 5,153 | 1 | 0 | 2 | 73 | 5,218 | 1 | 0 | 2 | 73 |
|  |  |  |  | RCCO | 4,784 | 1 | 0 | 2 | 67 | 5,153 | 1 | 0 | 2 | 73 | 5,218 | 1 | 0 | 2 | 73 |
| P4 | 20 | 1400 | 92W | T15 | 9,791 | 2 | 0 | 2 | 106 | 10,547 | 2 | 0 | 2 | 115 | 10,681 | 2 | 0 | 2 | 116 |
|  |  |  |  | T2S | 9,780 | 2 | 0 | 2 | 106 | 10,536 | 2 | 0 | 2 | 115 | 10,669 | 2 | 0 | 2 | 116 |
|  |  |  |  | T2M | 9,831 | 2 | 0 | 2 | 107 | 10,590 | 2 | 0 | 2 | 115 | 10,724 | 2 | 0 | 2 | 117 |
|  |  |  |  | T3S | 9,521 | 2 | 0 | 2 | 103 | 10,256 | 2 | 0 | 2 | 111 | 10,386 | 2 | 0 | 2 | 113 |
|  |  |  |  | T3M | 9,807 | 2 | 0 | 2 | 107 | 10,565 | 2 | 0 | 2 | 115 | 10,698 | 2 | 0 | 2 | 116 |
|  |  |  |  | T4M | 9,594 | 2 | 0 | 2 | 104 | 10,335 | 2 | 0 | 3 | 112 | 10,466 | 2 | 0 | 3 | 114 |
|  |  |  |  | TFTM | 9,801 | 2 | 0 | 2 | 107 | 10,558 | 2 | 0 | 2 | 115 | 10,692 | 2 | 0 | 2 | 116 |
|  |  |  |  | T5VS | 10,193 | 3 | 0 | 1 | 111 | 10,981 | 3 | 0 | 1 | 119 | 11,120 | 3 | 0 | 1 | 121 |
|  |  |  |  | T5S | 10,201 | 3 | 0 | 1 | 111 | 10,990 | 3 | 0 | 1 | 119 | 11,129 | 3 | 0 | 1 | 121 |
|  |  |  |  | T5M | 10,176 | 4 | 0 | 2 | 111 | 10,962 | 4 | 0 | 2 | 119 | 11,101 | 4 | 0 | 2 | 121 |
|  |  |  |  | T5W | 10,254 | 4 | 0 | 3 | 111 | 11,047 | 4 | 0 | 3 | 120 | 11,186 | 4 | 0 | 3 | 122 |
|  |  |  |  | BLC | 8,036 | 1 | 0 | 2 | 87 | 8,656 | 1 | 0 | 2 | 94 | 8,766 | 1 | 0 | 2 | 95 |
|  |  |  |  | LCCO | 5,979 | 1 | 0 | 2 | 65 | 6,441 | 1 | 0 | 2 | 70 | 6,523 | 1 | 0 | 3 | 71 |
|  |  |  |  |  | 5,979 | 1 | 0 | 2 | 65 | 6,441 | 1 | 0 | 2 | 70 | 6,523 | 1 | 0 | 3 | 71 |

## Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Forward Optics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power | LED Count | Drive Current | System Watts | Dist. Type | $\begin{gathered} 30 \mathrm{~K} \\ (3000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  | $\begin{gathered} 40 \mathrm{~K} \\ (4000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  | $\begin{gathered} 50 \mathrm{~K} \\ (5000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  |
|  |  |  |  |  | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW |
| P5 | 40 | 700 | 89W | T1S | 10,831 | 2 | 0 | 2 | 122 | 11,668 | 2 | 0 | 2 | 131 | 11,816 | 2 | 0 | 2 | 133 |
|  |  |  |  | T2S | 10,820 | 2 | 0 | 2 | 122 | 11,656 | 2 | 0 | 2 | 131 | 11,803 | 2 | 0 | 2 | 133 |
|  |  |  |  | T2M | 10,876 | 2 | 0 | 2 | 122 | 11,716 | 2 | 0 | 2 | 132 | 11,864 | 2 | 0 | 2 | 133 |
|  |  |  |  | T3S | 10,532 | 2 | 0 | 2 | 118 | 11,346 | 2 | 0 | 2 | 127 | 11,490 | 2 | 0 | 2 | 129 |
|  |  |  |  | T3M | 10,849 | 2 | 0 | 2 | 122 | 11,687 | 2 | 0 | 2 | 131 | 11,835 | 2 | 0 | 2 | 133 |
|  |  |  |  | T4M | 10,613 | 2 | 0 | 3 | 119 | 11,434 | 2 | 0 | 3 | 128 | 11,578 | 2 | 0 | 3 | 130 |
|  |  |  |  | TFTM | 10,842 | 2 | 0 | 2 | 122 | 11,680 | 2 | 0 | 2 | 131 | 11,828 | 2 | 0 | 2 | 133 |
|  |  |  |  | T5VS | 11,276 | 3 | 0 | 1 | 127 | 12,148 | 3 | 0 | 1 | 136 | 12,302 | 3 | 0 | 1 | 138 |
|  |  |  |  | T5S | 11,286 | 3 | 0 | 1 | 127 | 12,158 | 3 | 0 | 1 | 137 | 12,312 | 3 | 0 | 1 | 138 |
|  |  |  |  | T5M | 11,257 | 4 | 0 | 2 | 126 | 12,127 | 4 | 0 | 2 | 136 | 12,280 | 4 | 0 | 2 | 138 |
|  |  |  |  | T5W | 11,344 | 4 | 0 | 3 | 127 | 12,221 | 4 | 0 | 3 | 137 | 12,375 | 4 | 0 | 3 | 139 |
|  |  |  |  | BLC | 8,890 | 1 | 0 | 2 | 100 | 9,576 | 1 | 0 | 2 | 108 | 9,698 | 1 | 0 | 2 | 109 |
|  |  |  |  | LCCO | 6,615 | 1 | 0 | 3 | 74 | 7,126 | 1 | 0 | 3 | 80 | 7,216 | 1 | 0 | 3 | 81 |
|  |  |  |  | RCCO | 6,615 | 1 | 0 | 3 | 74 | 7,126 | 1 | 0 | 3 | 80 | 7,216 | 1 | 0 | 3 | 81 |
| P6 | 40 | 1050 | 134W | T15 | 14,805 | 3 | 0 | 3 | 110 | 15,949 | 3 | 0 | 3 | 119 | 16,151 | 3 | 0 | 3 | 121 |
|  |  |  |  | T2S | 14,789 | 3 | 0 | 3 | 110 | 15,932 | 3 | 0 | 3 | 119 | 16,134 | 3 | 0 | 3 | 120 |
|  |  |  |  | T2M | 14,865 | 3 | 0 | 3 | 111 | 16,014 | 3 | 0 | 3 | 120 | 16,217 | 3 | 0 | 3 | 121 |
|  |  |  |  | T3S | 14,396 | 3 | 0 | 3 | 107 | 15,509 | 3 | 0 | 3 | 116 | 15,705 | 3 | 0 | 3 | 117 |
|  |  |  |  | T3M | 14,829 | 2 | 0 | 3 | 111 | 15,975 | 3 | 0 | 3 | 119 | 16,177 | 3 | 0 | 3 | 121 |
|  |  |  |  | T4M | 14,507 | 2 | 0 | 3 | 108 | 15,628 | 3 | 0 | 3 | 117 | 15,826 | 3 | 0 | 3 | 118 |
|  |  |  |  | TFTM | 14,820 | 2 | 0 | 3 | 111 | 15,965 | 3 | 0 | 3 | 119 | 16,167 | 3 | 0 | 3 | 121 |
|  |  |  |  | T5VS | 15,413 | 4 | 0 | 1 | 115 | 16,604 | 4 | 0 | 1 | 124 | 16,815 | 4 | 0 | 1 | 125 |
|  |  |  |  | T5S | 15,426 | 3 | 0 | 1 | 115 | 16,618 | 4 | 0 | 1 | 124 | 16,828 | 4 | 0 | 1 | 126 |
|  |  |  |  | T5M | 15,387 | 4 | 0 | 2 | 115 | 16,576 | 4 | 0 | 2 | 124 | 16,786 | 4 | 0 | 2 | 125 |
|  |  |  |  | T5W | 15,506 | 4 | 0 | 3 | 116 | 16,704 | 4 | 0 | 3 | 125 | 16,915 | 4 | 0 | 3 | 126 |
|  |  |  |  | BLC | 12,151 | 1 | 0 | 2 | 91 | 13,090 | 1 | 0 | 2 | 98 | 13,255 | 1 | 0 | 2 | 99 |
|  |  |  |  | LCCO | 9,041 | 1 | 0 | 3 | 67 | 9,740 | 1 | 0 | 3 | 73 | 9,863 | 1 | 0 | 3 | 74 |
|  |  |  |  | RCCO | 9,041 | 1 | 0 | 3 | 67 | 9,740 | 1 | 0 | 3 | 73 | 9,863 | 1 | 0 | 3 | 74 |
| P7 | 40 | 1300 | 166W | T15 | 17,023 | 3 | 0 | 3 | 103 | 18,338 | 3 | 0 | 3 | 110 | 18,570 | 3 | 0 | 3 | 112 |
|  |  |  |  | T2S | 17,005 | 3 | 0 | 3 | 102 | 18,319 | 3 | 0 | 3 | 110 | 18,551 | 3 | 0 | 3 | 112 |
|  |  |  |  | T2M | 17,092 | 3 | 0 | 3 | 103 | 18,413 | 3 | 0 | 3 | 111 | 18,646 | 3 | 0 | 3 | 112 |
|  |  |  |  | T3S | 16,553 | 3 | 0 | 3 | 100 | 17,832 | 3 | 0 | 3 | 107 | 18,058 | 3 | 0 | 3 | 109 |
|  |  |  |  | T3M | 17,051 | 3 | 0 | 3 | 103 | 18,369 | 3 | 0 | 3 | 111 | 18,601 | 3 | 0 | 3 | 112 |
|  |  |  |  | T4M | 16,681 | 3 | 0 | 3 | 100 | 17,969 | 3 | 0 | 3 | 108 | 18,197 | 3 | 0 | 3 | 110 |
|  |  |  |  | TFTM | 17,040 | 3 | 0 | 3 | 103 | 18,357 | 3 | 0 | 4 | 111 | 18,590 | 3 | 0 | 4 | 112 |
|  |  |  |  | T5VS | 17,723 | 4 | 0 | 1 | 107 | 19,092 | 4 | 0 | 1 | 115 | 19,334 | 4 | 0 | 1 | 116 |
|  |  |  |  | T5S | 17,737 | 4 | 0 | 2 | 107 | 19,108 | 4 | 0 | 2 | 115 | 19,349 | 4 | 0 | 2 | 117 |
|  |  |  |  | T5M | 17,692 | 4 | 0 | 2 | 107 | 19,059 | 4 | 0 | 2 | 115 | 19,301 | 4 | 0 | 2 | 116 |
|  |  |  |  | T5W | 17,829 | 5 | 0 | 3 | 107 | 19,207 | 5 | 0 | 3 | 116 | 19,450 | 5 | 0 | 3 | 117 |
|  |  |  |  | BLC | 13,971 | 2 | 0 | 2 | 84 | 15,051 | 2 | 0 | 2 | 91 | 15,241 | 2 | 0 | 2 | 92 |
|  |  |  |  | LCCO | 10,396 | 1 | 0 | 3 | 63 | 11,199 | 1 | 0 | 3 | 67 | 11,341 | 1 | 0 | 3 | 68 |
|  |  |  |  |  | 10,396 | 1 | 0 | 3 | 63 | 11,199 | 1 | 0 | 3 | 67 | 11,341 | 1 | 0 | 3 | 68 |

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here

| Rotated Optics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power Package | LED Count | Drive Current | System <br> Watts | Dist. <br> Type | $\begin{gathered} 30 \mathrm{~K} \\ (3000 \mathrm{~K}, 70 \mathrm{CRI}) \end{gathered}$ |  |  |  |  | $\begin{gathered} 40 \mathrm{~K} \\ (4000 \mathrm{~K}, 70 \mathrm{CRI}) \\ \hline \end{gathered}$ |  |  |  |  | $\begin{gathered} 50 \mathrm{~K} \\ (5000 \mathrm{~K}, 70 \mathrm{CRI}) \\ \hline \end{gathered}$ |  |  |  |  |
|  |  |  |  |  | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW |
| P10 | 30 | 530 | 53W | T1S | 6,727 | 2 | 0 | 2 | 127 | 7,247 | 3 | 0 | 3 | 137 | 7,339 | 3 | 0 | 3 | 138 |
|  |  |  |  | T2S | 6,689 | 3 | 0 | 3 | 126 | 7,205 | 3 | 0 | 3 | 136 | 7,297 | 3 | 0 | 3 | 138 |
|  |  |  |  | T2M | 6,809 | 3 | 0 | 3 | 128 | 7,336 | 3 | 0 | 3 | 138 | 7,428 | 3 | 0 | 3 | 140 |
|  |  |  |  | T3S | 6,585 | 3 | 0 | 3 | 124 | 7,094 | 3 | 0 | 3 | 134 | 7,183 | 3 | 0 | 3 | 136 |
|  |  |  |  | T3M | 6,805 | 3 | 0 | 3 | 128 | 7,331 | 3 | 0 | 3 | 138 | 7,424 | 3 | 0 | 3 | 140 |
|  |  |  |  | T4M | 6,677 | 3 | 0 | 3 | 126 | 7,193 | 3 | 0 | 3 | 136 | 7,284 | 3 | 0 | 3 | 137 |
|  |  |  |  | TFTM | 6,850 | 3 | 0 | 3 | 129 | 7,379 | 3 | 0 | 3 | 139 | 7,472 | 3 | 0 | 3 | 141 |
|  |  |  |  | T5VS | 6,898 | 3 | 0 | 0 | 130 | 7,431 | 3 | 0 | 0 | 140 | 7,525 | 3 | 0 | 0 | 142 |
|  |  |  |  | T5S | 6,840 | 2 | 0 | 1 | 129 | 7,368 | 2 | 0 | 1 | 139 | 7,461 | 2 | 0 | 1 | 141 |
|  |  |  |  | T5M | 6,838 | 3 | 0 | 1 | 129 | 7,366 | 3 | 0 | 2 | 139 | 7,460 | 3 | 0 | 2 | 141 |
|  |  |  |  | T5W | 6,777 | 3 | 0 | 2 | 128 | 7,300 | 3 | 0 | 2 | 138 | 7,393 | 3 | 0 | 2 | 139 |
|  |  |  |  | BLC | 5,626 | 2 | 0 | 2 | 106 | 6,060 | 2 | 0 | 2 | 114 | 6,137 | 2 | 0 | 2 | 116 |
|  |  |  |  | LCCO | 4,018 | 1 | 0 | 2 | 76 | 4,328 | 1 | 0 | 2 | 82 | 4,383 | 1 | 0 | 2 | 83 |
|  |  |  |  | RCCO | 4,013 | 3 | 0 | 3 | 76 | 4,323 | 3 | 0 | 3 | 82 | 4,377 | 3 | 0 | 3 | 83 |
| P11 | 30 | 700 | 72W | T1S | 8,594 | 3 | 0 | 3 | 119 | 9,258 | 3 | 0 | 3 | 129 | 9,376 | 3 | 0 | 3 | 130 |
|  |  |  |  | T2S | 8,545 | 3 | 0 | 3 | 119 | 9,205 | 3 | 0 | 3 | 128 | 9,322 | 3 | 0 | 3 | 129 |
|  |  |  |  | T2M | 8,699 | 3 | 0 | 3 | 121 | 9,371 | 3 | 0 | 3 | 130 | 9,490 | 3 | 0 | 3 | 132 |
|  |  |  |  | T3S | 8,412 | 3 | 0 | 3 | 117 | 9,062 | 3 | 0 | 3 | 126 | 9,177 | 3 | 0 | 3 | 127 |
|  |  |  |  | T3M | 8,694 | 3 | 0 | 3 | 121 | 9,366 | 3 | 0 | 3 | 130 | 9,484 | 3 | 0 | 3 | 132 |
|  |  |  |  | T4M | 8,530 | 3 | 0 | 3 | 118 | 9,189 | 3 | 0 | 3 | 128 | 9,305 | 3 | 0 | 3 | 129 |
|  |  |  |  | TFTM | 8,750 | 3 | 0 | 3 | 122 | 9,427 | 3 | 0 | 3 | 131 | 9,546 | 3 | 0 | 3 | 133 |
|  |  |  |  | T5VS | 8,812 | 3 | 0 | 0 | 122 | 9,493 | 3 | 0 | 0 | 132 | 9,613 | 3 | 0 | 0 | 134 |
|  |  |  |  | T5S | 8,738 | 3 | 0 | 1 | 121 | 9,413 | 3 | 0 | 1 | 131 | 9,532 | 3 | 0 | 1 | 132 |
|  |  |  |  | T5M | 8,736 | 3 | 0 | 2 | 121 | 9,411 | 3 | 0 | 2 | 131 | 9,530 | 3 | 0 | 2 | 132 |
|  |  |  |  | T5W | 8,657 | 4 | 0 | 2 | 120 | 9,326 | 4 | 0 | 2 | 130 | 9,444 | 4 | 0 | 2 | 131 |
|  |  |  |  | BLC | 7,187 | 3 | 0 | 3 | 100 | 7,742 | 3 | 0 | 3 | 108 | 7,840 | 3 | 0 | 3 | 109 |
|  |  |  |  | LCCO | 5,133 | 1 | 0 | 2 | 71 | 5,529 | 1 | 0 | 2 | 77 | 5,599 | 1 | 0 | 2 | 78 |
|  |  |  |  | RCCO | 5,126 | 3 | 0 | 3 | 71 | 5,522 | 3 | 0 | 3 | 77 | 5,592 | 3 | 0 | 3 | 78 |
| P12 | 30 | 1050 | 104W | T1S | 12,149 | 3 | 0 | 3 | 117 | 13,088 | 3 | 0 | 3 | 126 | 13,253 | 3 | 0 | 3 | 127 |
|  |  |  |  | T2S | 12,079 | 4 | 0 | 4 | 116 | 13,012 | 4 | 0 | 4 | 125 | 13,177 | 4 | 0 | 4 | 127 |
|  |  |  |  | T2M | 12,297 | 3 | 0 | 3 | 118 | 13,247 | 3 | 0 | 3 | 127 | 13,415 | 3 | 0 | 3 | 129 |
|  |  |  |  | T3S | 11,891 | 4 | 0 | 4 | 114 | 12,810 | 4 | 0 | 4 | 123 | 12,972 | 4 | 0 | 4 | 125 |
|  |  |  |  | T3M | 12,290 | 3 | 0 | 3 | 118 | 13,239 | 4 | 0 | 4 | 127 | 13,407 | 4 | 0 | 4 | 129 |
|  |  |  |  | T4M | 12,058 | 4 | 0 | 4 | 116 | 12,990 | 4 | 0 | 4 | 125 | 13,154 | 4 | 0 | 4 | 126 |
|  |  |  |  | TFTM | 12,369 | 4 | 0 | 4 | 119 | 13,325 | 4 | 0 | 4 | 128 | 13,494 | 4 | 0 | 4 | 130 |
|  |  |  |  | T5VS | 12,456 | 3 | 0 | 1 | 120 | 13,419 | 3 | 0 | 1 | 129 | 13,589 | 4 | 0 | 1 | 131 |
|  |  |  |  | T5S | 12,351 | 3 | 0 | 1 | 119 | 13,306 | 3 | 0 | 1 | 128 | 13,474 | 3 | 0 | 1 | 130 |
|  |  |  |  | T5M | 12,349 | 4 | 0 | 2 | 119 | 13,303 | 4 | 0 | 2 | 128 | 13,471 | 4 | 0 | 2 | 130 |
|  |  |  |  | T5W | 12,238 | 4 | 0 | 3 | 118 | 13,183 | 4 | 0 | 3 | 127 | 13,350 | 4 | 0 | 3 | 128 |
|  |  |  |  | BLC | 10,159 | 3 | 0 | 3 | 98 | 10,944 | 3 | 0 | 3 | 105 | 11,083 | 3 | 0 | 3 | 107 |
|  |  |  |  | LCCO | 7,256 | 1 | 0 | 3 | 70 | 7,816 | 1 | 0 | 3 | 75 | 7,915 | 1 | 0 | 3 | 76 |
|  |  |  |  | RCCO | 7,246 | 3 | 0 | 3 | 70 | 7,806 | 4 | 0 | 4 | 75 | 7,905 | 4 | 0 | 4 | 76 |
| P13 | 30 | 1300 | 128W | T1S | 14,438 | 3 | 0 | 3 | 113 | 15,554 | 3 | 0 | 3 | 122 | 15,751 | 3 | 0 | 3 | 123 |
|  |  |  |  | T2S | 14,355 | 4 | 0 | 4 | 112 | 15,465 | 4 | 0 | 4 | 121 | 15,660 | 4 | 0 | 4 | 122 |
|  |  |  |  | T2M | 14,614 | 3 | 0 | 3 | 114 | 15,744 | 4 | 0 | 4 | 123 | 15,943 | 4 | 0 | 4 | 125 |
|  |  |  |  | T3S | 14,132 | 4 | 0 | 4 | 110 | 15,224 | 4 | 0 | 4 | 119 | 15,417 | 4 | 0 | 4 | 120 |
|  |  |  |  | T3M | 14,606 | 4 | 0 | 4 | 114 | 15,735 | 4 | 0 | 4 | 123 | 15,934 | 4 | 0 | 4 | 124 |
|  |  |  |  | T4M | 14,330 | 4 | 0 | 4 | 112 | 15,438 | 4 | 0 | 4 | 121 | 15,633 | 4 | 0 | 4 | 122 |
|  |  |  |  | TFTM | 14,701 | 4 | 0 | 4 | 115 | 15,836 | 4 | 0 | 4 | 124 | 16,037 | 4 | 0 | 4 | 125 |
|  |  |  |  | T5VS | 14,804 | 4 | 0 | 1 | 116 | 15,948 | 4 | 0 | 1 | 125 | 16,150 | 4 | 0 | 1 | 126 |
|  |  |  |  | T5S | 14,679 | 3 | 0 | 1 | 115 | 15,814 | 3 | 0 | 1 | 124 | 16,014 | 3 | 0 | 1 | 125 |
|  |  |  |  | T5M | 14,676 | 4 | 0 | 2 | 115 | 15,810 | 4 | 0 | 2 | 124 | 16,010 | 4 | 0 | 2 | 125 |
|  |  |  |  | T5W | 14,544 | 4 | 0 | 3 | 114 | 15,668 | 4 | 0 | 3 | 122 | 15,866 | 4 | 0 | 3 | 124 |
|  |  |  |  | BLC | 7919 | 3 | 0 | 3 | 62 | 8531 | 3 | 0 | 3 | 67 | 8639 | 3 | 0 | 3 | 67 |
|  |  |  |  | LCCO | 5145 | 1 | 0 | 2 | 40 | 5543 | 1 | 0 | 2 | 43 | 5613 | 1 | 0 | 2 | 44 |
|  |  |  |  |  | 5139 | 3 | 0 | 3 | 40 | 5536 | 3 | 0 | 3 | 43 | 5606 | 3 | 0 | 3 | 44 |

## S4+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability 1
- This luminaire is part of an A+Certified solution for ROAM ${ }^{\circledR}$ or XPoint ${ }^{T M}$ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background ${ }^{1}$

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

## FEATURES \& SPECIFICATIONS

## NTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

## CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA ( $0.95 \mathrm{ft}^{2}$ ) for optimized pole wind loading.

## FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

## OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly ${ }^{\top M}$ product, meaning it is consistent with the LEED ${ }^{\circledR}$ and Green Globes ${ }^{\top M}$ criteria for eliminating wasteful uplight.

## ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at $25^{\circ} \mathrm{C}$ ). Class 1 electronic drivers are designed to have a power factor $>90 \%$, THD $<20 \%$, and an expected life of 100,000 hours with $<1 \%$ failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

## STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

## nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight $®$ AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

## INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS ${ }^{\top M}$ series pole drilling pattern (template \#8). Optional terminal block and NEMA photocontrol receptacle are also available.

## LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for $-40^{\circ} \mathrm{C}$ minimum ambient. U.S. Patent No. D672,492 S International patent pending

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www. designlights.org/OPL to confirm which versions are qualified.
International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

## WARRANTY

5 -year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at $25^{\circ} \mathrm{C}$.
Specifications subject to change without notice.

| Submitted by R.C. Lurie |  | Catalog Number: <br> CH2HM-FT-250PSMH-F-MT-WHT <br> RC. | Type: <br> Notes: |
| :--- | :--- | :--- | :--- |

## CHALLENGER ${ }^{\circledR}$ II MEDIUM

## LUMINAIRE ORDERING INFORMATION

| Luminaire Prefix | Distribution | Lamp Wattage | Light Source | Lens | $\begin{gathered} \text { Line } \\ \text { Voltage } \end{gathered}$ | Luminaire Finish | Options |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Horizontal Burn CH2HM | $\begin{aligned} & \text { 2-Type II } \\ & \text { 3-Type III } \\ & \hline \text { FT- Forward Throw } \\ & \hline \text { 5- lype V } \end{aligned}$ | 100 <br> 150 <br> 175 <br> 250 <br> 320 <br> 400 | PSMH - Pulse-Start Metal Halide$175,250,320$ WattPSMHR - Pulse-start Meta Halide ReducedEnvelope 400 WattCMH - Ceramic Metal Halide150 WattHPS - High Pressure Sodium$100,150,250,400$ Watt | F-Flat Clear Tempered Glass | 480 <br> MT-Multi Tap <br> II - In-lap | $\begin{array}{\|l\|} \hline \text { BRZ - Bronze } \\ \text { BLK - Black } \\ \text { PLP- Platinum Plus } \\ \hline \end{array}$ | PCR - Photoelectric Control Receptacie ${ }^{1}$ <br> TB - Terminal Block |
|  |  |  |  |  |  | WHT - White | LL- Less Lamp |
|  |  |  |  |  |  | ```SVG-Satin Verde Green GPI - Graphite MSV - Metallic Silver``` |  |
|  |  |  |  |  | MT - Multi Tap consis for highest voltage. | sts of $120 \mathrm{~V}, 208 \mathrm{~V}, 240 \mathrm{~V}$ and 27 Alternate voltages wilf requir | 277 V and is prepared field adjustment. |
|  |  |  |  |  | $\Pi$-Tri-Tap consist for Canadian applicat | of 120V, 277V and 347V and ons and is prepared for highe ges will require field adjustme | is shipped standard t voltage. Alternate nt. |
|  |  |  |  |  | Consult Factory for International Voltages and Light Sources |  |  |

FOOTNOTES:

1. PCR factory installed and prewired to highest voltage. Alternate voltages will require field re-wiring. Photocell must be ordered separately. See Accessories.
2. Factory installed PCR option required.
3. Fusing must be located in the hand-hole of the pole - not in the fixture.
4. Black only. House side shield adds to the fixture EPA Consult factory.


10/22/15

| Submitted by R．C．Lurie | Catalog Number： | Type： |  |
| :--- | :--- | :--- | :--- |
|  |  | CH2HM－3－250PSMH－F－MT－WHT <br> Notes： | $\mathbf{S A 2}$ |

## CHALLENGER ${ }^{\circledR}$ II MEDIUM

| LUMINAIRE ORDERING INFORMATION |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | VERIFY FINISH |  |  |
| Luminaire Prefix | Distribution | $\begin{aligned} & \text { Lamp } \\ & \text { Wattage } \end{aligned}$ | Light Source | Lens | Line Voltage | Luminaire Finish | Options |
| Horizontal Burn CH2HM | $\begin{aligned} & \frac{\text { 2-Type II }}{\text { 3-Type III }} \\ & \hline \text { fr--⿰亻⿱丶⿻工二木ard inirow } \\ & \text { 5-Type V } \end{aligned}$ | 100 <br> 150 <br> 175 <br> 250 | PSMH－Pulse－Start Metal Halide <br> 175，250，320 Watt <br> PSMHR－Puls－Start Hetal Halide Reduced <br> Envelope 400 Watt <br> CMH－Ceramic Metal Halide <br> 150 Watt <br> HPS－High Pressure Sodium <br> 100，150，250， 400 Watt | F－Flat Clear Tempered Glass | 480 <br> MT－Multi Tap <br> IT－Ir－lap | $\begin{array}{\|l} \hline \text { BRZ - Bronze } \\ \text { BLK - Black } \\ \text { PLP - Platinum Plus } \\ \hline \text { WHT - White } \\ \hline \end{array}$ | PCR－Photoelectric Control Receptacle ${ }^{1}$ <br> TB－Terminal Block <br> LL－Less Lamp |
|  | $\begin{array}{\|l\|} \hline \text { 3 - Type III } \\ \hline \text { F-Forward Inrow } \\ \text { 5-Type V } \end{array}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | $\begin{aligned} & 320 \\ & 400 \end{aligned}$ |  |  |  | SVG－Satin Verde Green GPT－Graphite MSV－Metallic Silver |  |
|  |  |  |  |  | $\begin{array}{\|c} \begin{array}{c} \text { MT - Multi Tap consis } \\ \text { for highest voltage. } \end{array} \\ \hline \text { IT - Tri-Tap consists } \\ \text { for Canadian applicatifi } \\ \text { volia } \end{array}$ | sts of $120 \mathrm{~V}, 208 \mathrm{~V}, 240 \mathrm{~V}$ and 27 Alternate voltages will require of $120 \mathrm{~V}, 277 \mathrm{~V}$ and 347 V and ons and is prepared for highest ges will require field adjustme | 77 V and is prepared field adjustment． is shipped standard st voltage．Alternate int． |
|  |  |  |  |  | Consult Factory for International Voltages and Light Sources |  |  |

FOOTNOTES：
1．PCR factory installed and prewired to highest voltage．Alternate voltages will require field re－wiring．Photocell must be ordered separately．See Accessories．
2．Factory installed PCR option required．
3．Fusing must be located in the hand－hole of the pole－not in the fixture．
4．Black only．House side shield adds to the fixture EPA Consult factory．


10／22／15

