KIM LIGHTING®

DATE: | LOCATION:

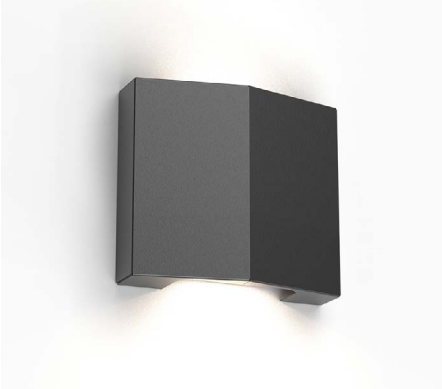
TYPE: | PROJECT:

CATALOG #:

# CY2

ARCHITECTURAL AREA/SITE

## CYPHER™



Cypher 14"

## FEATURES

- Integral Battery Backup Option
- 360° Light Distribution
- RGBW or Static White Luminous Front Option
- Multiple Fascia Options and Finishes
- 4G Vibration Tested

3000K and warmer CCTs only

## CONTROL TECHNOLOGY

## SPECIFICATIONS

### CONSTRUCTION

- Main housing shroud is made of fabricated 5052-H32 aluminum alloy
- Housing mounting interface has a stamped silicone gasket
- Luminaire housing is free of any visible heat fins, hardware or fasteners
- Bracketry and hardware is stainless steel
- Luminaire finish consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish
- Luminaire finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance

### LED/OPTICS

- LEDs are mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features
- Optical lenses is clear injection molded PMMA acrylic
- Optical array is recessed in order to shield each LED optic across the length of the aperture
- Optical array is sealed for IP66 rating
- Secondary lens is impact resistant 5/32" tempered glass

### INSTALLATION

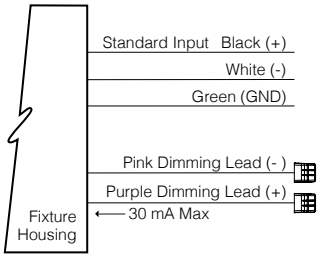
- JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates

### INSTALLATION (CONTINUED)

- Fixture attaches by two Allen-head hidden fasteners for tamper resistance
- Optional mounting arrangements utilize a die-cast mounting adaptor to allow for surface conduit and through branch wiring
- Housing is able to hang freely in an open service position for inspection of internal wire connections. Once in service position, the housing shall be able to be removed for service by lifting the assembly up off the rear mounting plate and disconnecting the wiring plugs
- Driver assembly is mounted to a prewired internal tray with quick disconnects for removal

### ELECTRICAL

- Drivers are in direct contact with the die-cast aluminum housing across the entire surface area of the widest face for maximum thermal transfer
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LED module and electronic components
- Drivers have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J. Surge protection device shall be wired in series
- Drivers are 0-10V dimming control with a dimming range of 100%-10%. Drivers are U.L. listed. All luminaires shall accept 120-277 volt input and have integral surge protection."Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components




### ELECTRICAL (CONTINUED)

- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for -20°C ambient environments
- Luminaire are capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C

### CONTROLS

- Button photocontrol for dusk to dawn energy savings
- Photocell is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others. Photocell adapter shall include an internal twist lock receptacle. Photocell by others

continued on page 3

| KEY DATA | |
|---|---|
| LUMEN RANGE | 1,906–5,083 |
| WATTAGE RANGE | 26–52 |
| EFFICACY RANGE (LPW) | 67–109 |
| WEIGHT | Refer to page 5 |



© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

# CY2

ARCHITECTURAL AREA/SITE

## ORDERING GUIDE

**Example:** CY2-35-3K7-1-2D-UNV-BLS-F-RGBW-FPP-PCU-SF

**CATALOG #**

| Series-Output (Base) | | CCT-CRI | | Model (Light Engine) [1] | | Main Distribution (Down) | | Secondary Distribution (Up, Sides) | | Voltage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CY2-25** | 25W, 2500 nominal lumens | **27K8** | 2700K, 80CRI | **1** | DownLight Only | **1** | IES Type I | **1** | IES Type I | **UNV** | 120-277V |
| **CY2-35** | 40W, 3500 nominal lumens | **3K7** | 3000K, 70CRI | **2** | 50/50 Down/Up, **Down/Up distributions must match** | **2** | IES Type II | **2** | IES Type II | **347** | 347V |
| **CY2-45** | 50W, 4500 nominal lumens | **3K8** | 3000K, 80CRI | **3** | 90/10 Down/Up | **3** | IES Type III | **3** | IES Type III | **480** | 480V |
| | | **4K7** | 4000K, 70CRI | **4** | 25/25/25/25 Split, **Down/Up/ Side Distributions must match** | **4** | IES Type IV | **4** | IES Type IV | | |
| | | **4K8** | 4000K, 80CRI | | | **SP** | 15° Spot/Column | **SP** | 15° Spot/Column | | |
| | | **5K7** | 5000K, 70CRI | **5** | 70/10/10/10 Spit, **Top/Side distributions must match** | **WG** | 60° Wall Graze | **WG** | 60° Wall Graze | | |
| | | | | | | **1D** | Type 1 Diffused | **PB** | Pencil Beam [2] | | |
| | | | | | | **2D** | Type 2 Diffused | **1D** | Type 1 Diffused | | |
| | | | | | | **3D** | Type 3 Diffused | **2D** | Type 2 Diffused | | |
| | | | | | | **4D** | Type 4 Diffused | **3D** | Type 3 Diffused | | |
| | | | | | | | | **4D** | Type 4 Diffused | | |

| Base Housing Finish | | Fascia Form [1] | | Luminous Front [4] | | Fascia Panel [5] | | Control Options [6] | | Options | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **BLS** | Black Gloss Smooth | **F** | Flat | **Blank** | Standard None | **FPP** | Full Panel Painted | **PCU** | Universal Button Photocell (120-277V) | **EM** | Battery Backup Unit -20° C [8] |
| **BLT** | Black Matte Textured | **R** | Radius/Curved | **RGBW** | RGBW Luminous Front | **FPS** | Full Panel Stainless Steel | **SCP** | Programmable Occupancy Sensor | **SF** | Single Fuse (120, 277, 347) |
| **DBS** | Dark Bronze Gloss Smooth | **T** | Triangle/Wedge | **LFSW** | Static White Luminous Front | **FPC** | Full Panel Copper | **WIR** | LightGRID+™ | **DF** | Double Fuse (208, 240, 480) |
| **DBT** | Dark Bronze Matte Textured | **E** | Rounded/Edge | | | **OPP** | Open Panel Painted [7] | **WiRC** | LightGRID+™ w/ Occupancy Sensor | **SCB** | Surface Conduit Box |
| **GTT** | Graphite Matte Textured | **C** | Circle/Curved | | | **OPS** | Open Panel Stainless Steel [7] | | | | |
| **LGS** | Light Gray Gloss Smooth | **CB** | Cylinder Balanced | | | **OPC** | Open Panel Copper [7] | | | | |
| **LGT** | Light Gray Matte Textured | **CT** | Cylinder Tall | | | **4PP** | 4-Square Panel Painted [7] | | | | |
| **PSS** | Platinum Silver Gloss Smooth | **CBM** | Custom Building Material Mount Ghost Fascia [9] | | | **4PS** | 4-Square Panel Stainless Steel [7] | | | | |
| **VGT** | Verde Green Matte Textured | | | | | **4PC** | 4-Square Panel Copper [7] | | | | |
| **WHS** | White Gloss Smooth | | | | | **PPP** | Perforated Panel Painted [7] | | | | |
| **WHT** | White Matte Textured | | | | | **PPS** | Perforated Panel Stainless Steel | | | | |
| **Color Options** | | | | | | **PPC** | Perforated Panel Copper | | | | |
| **CC** | Custom Color [3] | | | | | | | | | | |

Notes:

1 Consult factory for custom distributions. See Distribution Matrix on page 4 restrictions

2 PB distribution is available for 90/10 and 70/10/10/10 models only. Not all combinations are recommended. See Distribution Matrix on page 2 for restrictions.

3 Consult factory for custom color, marine and corrosive finish

4 RGBW and LFSW luminous fronts are only available with open, four square and perforated fascia panels

5 Flat and Radius Fascia forms only. Painted panels by default match base housing finish/color. Consult factory for custom panel finishes.

6 Occupancy sensors not available with CB, T, E or C fascia forms

7 Luminous front is required to select the Open Panel and 4-Square Panel fascia panels.

8 Consult factory for information on specific configurations with different fascia forms.

9 Custom Building Material Mount Ghost Fascia option allows the Cypher to blend seamlessly into the building architecture by matching the finish of the architectural background. See page 5 for dimensions and contact factory for additional information.



© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

# CY2

ARCHITECTURAL AREA/SITE

## SPECIFICATIONS (CONTINUED)

### CONTROL (CONTINUED)

- Each fixture comes equipment with a dual control driver that supports Bluetooth® operation of individual fixtures or DMX control of an entire system of fixtures.

**BLUETOOTH®:**

- Free Bluetooth® Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the Internet at Apple App Store or Google Play.
- Modular wiring harness in the service area provides user access to the dimming circuitry via DMX.

**DMX:**

- Fully DMX/RDM Compatible
- Utilizes 4 DMX Channels per fixture

**DMX MAP**

- Start Address – Red
- Start Address +1 – Green
- Start Address +2 – Blue
- Start Address +3 – White

**DMX Addressing** is performed by using a compatible RDM handheld unit or via the Bluetooth® App.

- Performed by using a compatible RDM handheld unit or via the Bluetooth® App

**DMX WIRING COLOR CODE**

- Red Wire – DMX +
- Brown Wire – DMX-
- Yellow Wire – Shield/Ground
- DMX termination must be achieved by adding a DMX terminator to the last fixture in a Daisy-Chain. Fixture does not auto terminate.
- Kim Lighting is proud to offer the Pharos Architectural Controls DMX Controllers and Touch screens. See Pharos Spec Sheet for more details.
  See the Pharos® Spec Sheet for more details.

**MOBILE APP:**

- Mobile App specification in additional information section.
- Mobile App. dimming range from 0% to 100% through the use of Current RGBW app (available on IOS and Android).
- Color selection and adjustment.
- Camera function for color matching.
- Intensity slider for dimming/ramping up.
- Save and rename up to 10 presets.
- Group and rename fixtures.
- Fixture is password protected, refer to instructions to set unique password.

### CERTIFICATIONS

- Luminaire is listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250
- IP66 rated assembly
- IDA approved, 3000K and warmer CCTs only
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the most up-to-date list.
- ANSI C136.31-2010 4G Vibration tested and compliant
- Complies with “Americans with Disabilities Act” or "ADA" on select versions for low mounting height applications (fixtures extend maximum of 4 inches from wall for mounting heights of 80 inches or less)
- Emergency battery back options are California Energy Commission (CEC) Title 20 Compliant

### WARRANTY

- 5 year warranty

Bluetooth®

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth® SIG, Inc. and any use of such marks by Kim Lighting is under license. Other trademarks and trade names are those of their respective owners. Apple, the Apple logo, iPad, iPhone, and iPod Touch are trademarks of Apple Inc., Registered in the U.S. and other countries. App Store is a service mark of Apple Inc. Google Play is a trademark of Google Inc.

ANDROID APP ON Google play

Available on the App Store



© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

# CY2

ARCHITECTURAL AREA/SITE

## DELIVERED LUMENS

| Nominal Output (Lm) | System Watts | Distribution | 3000K 70CRI | | | | | 4000K 70CRI | | | | | 5000K 70CRI | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumen | Bug Rating | | | Efficancy (Lm/W) | Lumen | Bug Rating | | | Efficancy (Lm/W) | Lumen | Bug Rating | | | Efficancy (Lm/W) |
| | | | | B | U | G | | | B | U | G | | | B | U | G | |
| 2,500 | 26 | Type 1 | 2499 | 0 | 0 | 0 | 96 | 2596 | 0 | 0 | 0 | 100 | 2836 | 0 | 0 | 0 | 109 |
| | | Type 2 | 2265 | 1 | 0 | 1 | 87 | 2353 | 1 | 0 | 1 | 90 | 2570 | 1 | 0 | 1 | 99 |
| | | Type 3 | 2413 | 1 | 0 | 1 | 93 | 2507 | 1 | 0 | 1 | 96 | 2739 | 1 | 0 | 1 | 107 |
| | | Type 4 | 2213 | 0 | 0 | 1 | 85 | 2299 | 0 | 0 | 1 | 88 | 2512 | 0 | 0 | 1 | 97 |
| | | Wall Graze | 2462 | 2 | 0 | 0 | 95 | 2558 | 2 | 0 | 0 | 98 | 2795 | 2 | 0 | 0 | 107 |
| | | Spot/Column | 2089 | 2 | 0 | 0 | 80 | 2171 | 2 | 0 | 0 | 83 | 2371 | 2 | 0 | 0 | 91 |
| | | Type 1 Diffused | 2193 | 1 | 0 | 1 | 84 | 2278 | 1 | 0 | 1 | 88 | 2488 | 1 | 0 | 1 | 96 |
| | | Type 2 Diffused | 2004 | 1 | 0 | 1 | 77 | 2082 | 1 | 0 | 1 | 80 | 2274 | 1 | 0 | 1 | 87 |
| | | Type 3 Diffused | 1906 | 1 | 0 | 1 | 73 | 1980 | 1 | 0 | 1 | 76 | 2163 | 1 | 0 | 1 | 83 |
| | | Type 4 Diffused | 1936 | 1 | 0 | 1 | 74 | 2011 | 1 | 0 | 1 | 77 | 2197 | 1 | 0 | 1 | 84 |
| 3,500 | 40 | Type 1 | 3534 | 1 | 0 | 0 | 88 | 3672 | 1 | 0 | 0 | 92 | 4011 | 88 | 1 | 0 | 100 |
| | | Type 2 | 3203 | 1 | 0 | 0 | 80 | 3328 | 1 | 0 | 1 | 83 | 3635 | 80 | 1 | 0 | 91 |
| | | Type 3 | 3413 | 1 | 0 | 1 | 85 | 3546 | 1 | 0 | 1 | 89 | 3874 | 85 | 1 | 0 | 97 |
| | | Type 4 | 3131 | 1 | 0 | 1 | 78 | 3252 | 1 | 0 | 1 | 81 | 3553 | 78 | 1 | 0 | 89 |
| | | Wall Graze | 3483 | 2 | 0 | 0 | 87 | 3618 | 2 | 0 | 0 | 90 | 3953 | 87 | 2 | 0 | 99 |
| | | Spot/Column | 2955 | 3 | 0 | 0 | 74 | 3070 | 3 | 0 | 0 | 77 | 3354 | 74 | 3 | 0 | 84 |
| | | Type 1 Diffused | 3101 | 1 | 0 | 1 | 78 | 3222 | 1 | 0 | 1 | 81 | 3519 | 78 | 1 | 0 | 88 |
| | | Type 2 Diffused | 2835 | 1 | 0 | 1 | 71 | 2945 | 1 | 0 | 1 | 74 | 3217 | 71 | 1 | 0 | 80 |
| | | Type 3 Diffused | 2695 | 1 | 0 | 1 | 67 | 2800 | 1 | 0 | 1 | 70 | 3059 | 67 | 1 | 0 | 76 |
| | | Type 4 Diffused | 2738 | 1 | 0 | 1 | 68 | 2844 | 1 | 0 | 1 | 71 | 3107 | 68 | 1 | 0 | 78 |
| 4,500 | 52 | Type 1 | 4390 | 1 | 0 | 0 | 84 | 4561 | 1 | 0 | 0 | 88 | 4982 | 1 | 0 | 1 | 97 |
| | | Type 2 | 4119 | 1 | 0 | 1 | 79 | 4280 | 1 | 0 | 1 | 82 | 4675 | 1 | 0 | 1 | 90 |
| | | Type 3 | 4240 | 1 | 0 | 1 | 82 | 4405 | 1 | 0 | 1 | 86 | 4812 | 1 | 0 | 1 | 95 |
| | | Type 4 | 4026 | 1 | 0 | 1 | 77 | 4183 | 1 | 0 | 1 | 80 | 4569 | 1 | 0 | 1 | 88 |
| | | Wall Graze | 4479 | 3 | 0 | 0 | 86 | 4653 | 3 | 0 | 0 | 89 | 5083 | 3 | 0 | 0 | 99 |
| | | Spot/Column | 3800 | 3 | 0 | 0 | 73 | 3948 | 3 | 0 | 0 | 76 | 4313 | 3 | 0 | 0 | 84 |
| | | Type 1 Diffused | 3988 | 1 | 0 | 1 | 77 | 4143 | 1 | 0 | 1 | 80 | 4526 | 2 | 0 | 1 | 88 |
| | | Type 2 Diffused | 3645 | 1 | 0 | 1 | 70 | 3787 | 1 | 0 | 1 | 73 | 4137 | 1 | 0 | 1 | 80 |
| | | Type 3 Diffused | 3466 | 1 | 0 | 1 | 67 | 3601 | 1 | 0 | 1 | 69 | 3934 | 1 | 0 | 1 | 76 |
| | | Type 4 Diffused | 3521 | 1 | 0 | 1 | 68 | 3658 | 1 | 0 | 1 | 70 | 3996 | 1 | 0 | 1 | 77 |

## ELECTRICAL CHARACTERISTICS

| LUMEN PACKAGE | SYSTEM WATTAGE (W) | LINE VOLTAGE | | INPUT | | | | MIN. POWER FACTOR | MAX THD (%) | DIMMING RANGE | SOURCE CURRENT OUT OF 0-10V | | ABSOLUTE VOLTAGE RANGE ON 0-10V (+) PURPLE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | VAC | HZ | 120 | 277 | 347 | 480 | | | | MIN. | MAX. | MIN. | MAX. |
| 2,500 | 26 | 120-480 | 50/60 | 0.22 | 0.09 | 0.07 | 0.05 | >0.9 | 20 | 10% to 100% | 0 mA | 1 mA | 0V | 10V |
| 3,500 | 40 | | | 0.33 | 0.14 | 0.12 | 0.08 | | | | | | | |
| 4,500 | 52 | | | 0.43 | 0.19 | 0.15 | 0.11 | | | | | | | |

### TM-21 LIFETIME CALCULATION (500mA)

| LUMEN PACKAGE | AMBIENT ENVIRONMENT °C | PROJECTED LUMEN MAINTENANCE (KHRS) | | | | | REPORTED L70 |
|---|---|---|---|---|---|---|---|
| | | 15 | 25 | 50 | 60 (TM-21) | 100 | |
| 4,500 | 25 | 95% | 94% | 90% | 89% | 83% | >60Khrs. |
| | 40 | 93% | 91% | 84% | 82% | 73% | |



© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

KIM LIGHTING®

DATE: LOCATION:

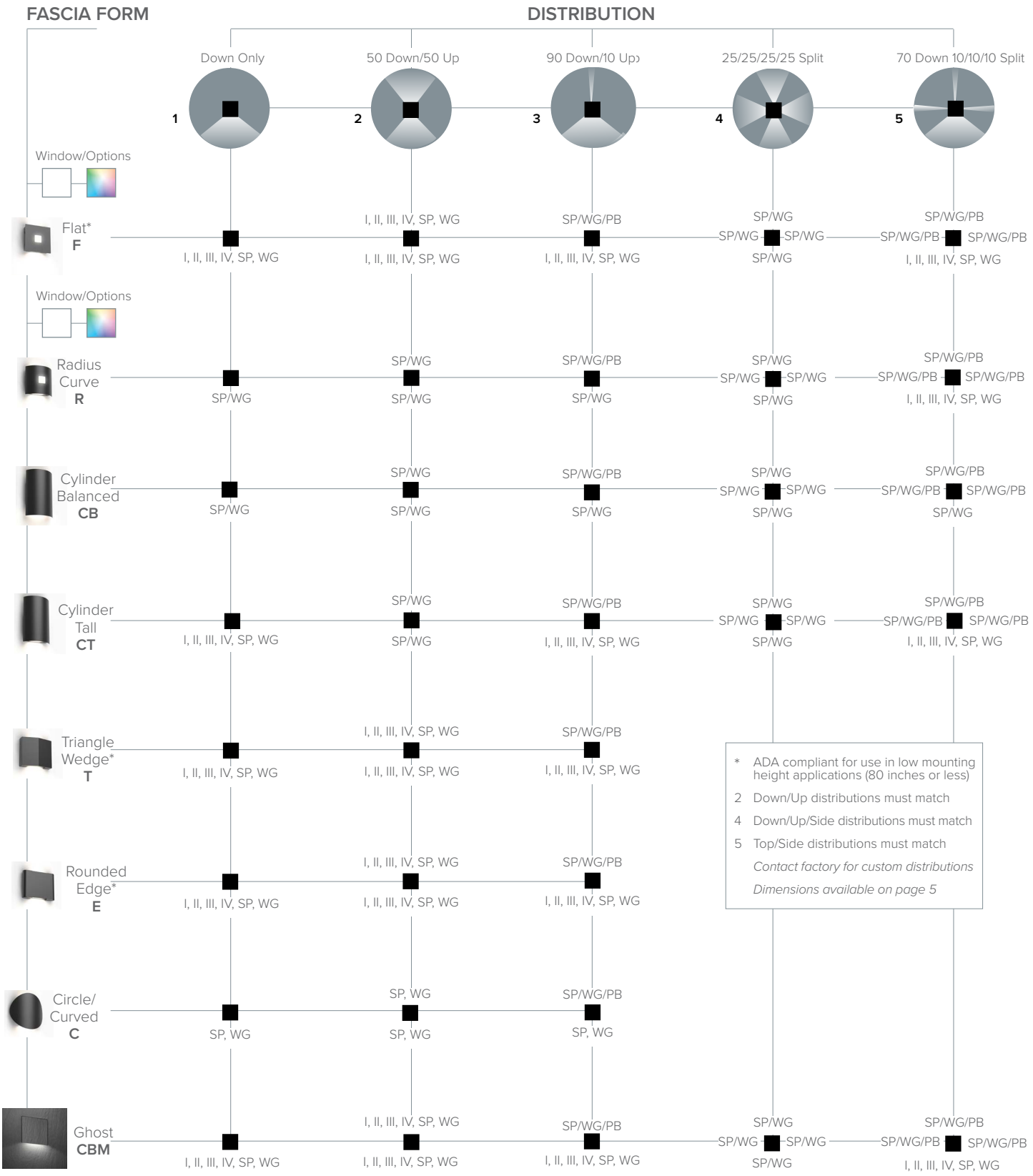
TYPE: PROJECT:

CATALOG #:

# CY2

ARCHITECTURAL AREA/SITE

## DISTRIBUTION MATRIX




* ADA compliant for use in low mounting height applications (80 inches or less)

2 Down/Up distributions must match

4 Down/Up/Side distributions must match

5 Top/Side distributions must match

*Contact factory for custom distributions*

*Dimensions available on page 5*



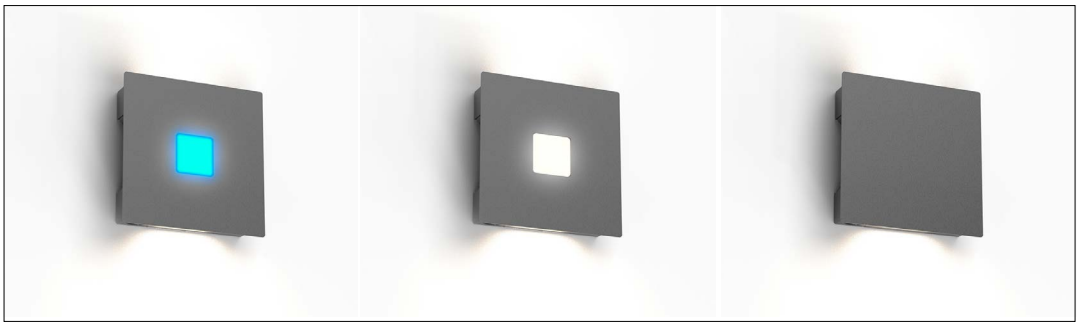
© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

# CY2

ARCHITECTURAL AREA/SITE

## FASCIA

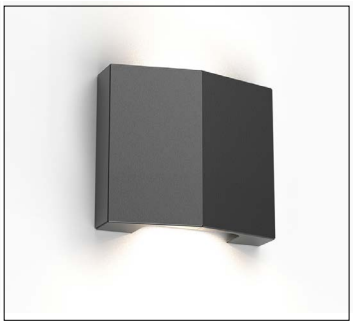
### FLAT



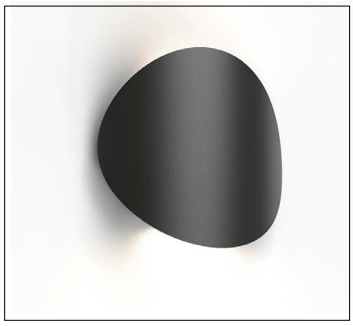
### CURVE

### ROUNDED EDGE

### TRIANGLE



### CIRCLE



### CYLINDER TALL

### CYLINDER BALANCED

© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

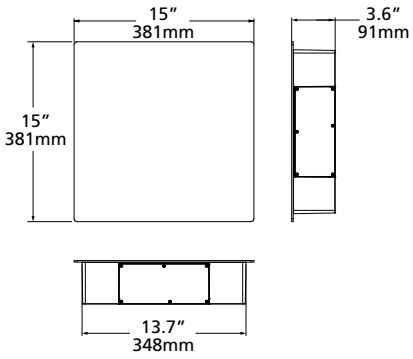
# CY2

ARCHITECTURAL AREA/SITE

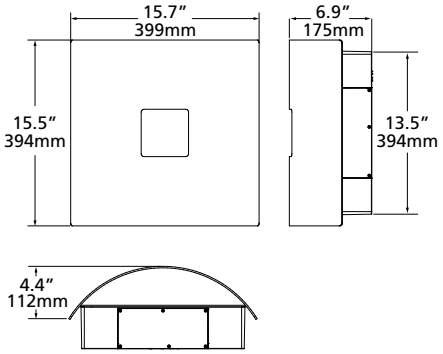
## DIMENSIONS

### F - FLAT

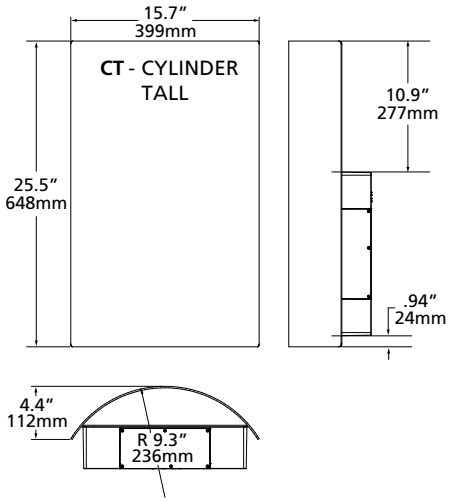
ADA approved.



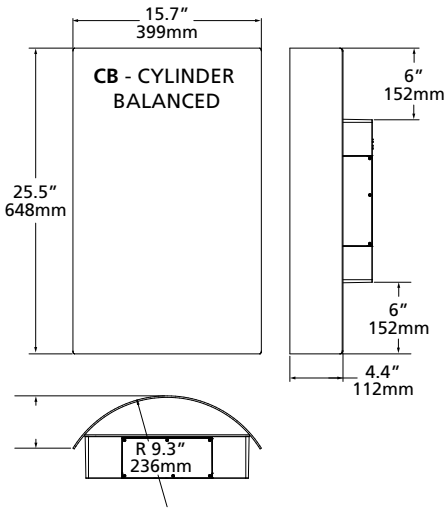

### R - RADIUS/CURVED



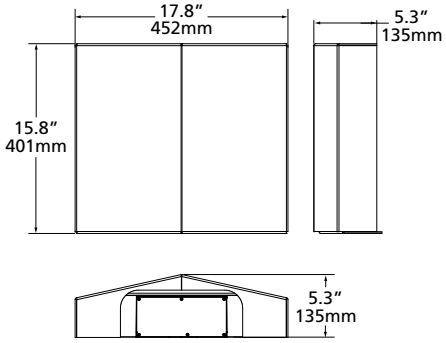

### CT - CYLINDER TALL




### CB - CYLINDER BALANCED

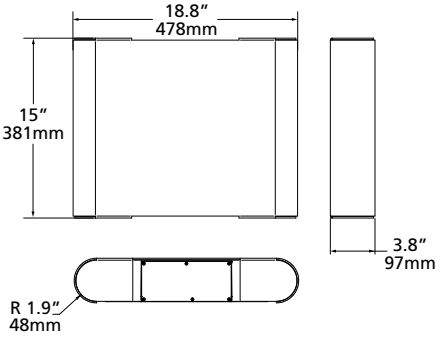



### T - TRIANGLE/WEDGE

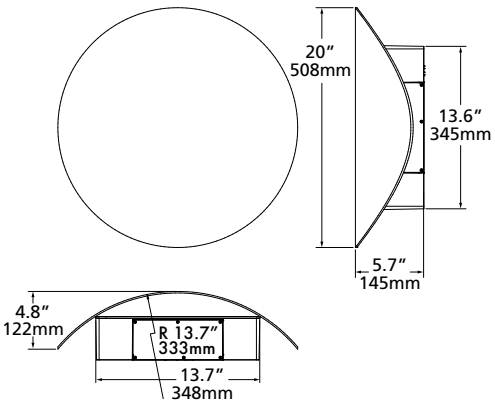



### E - ROUNDED EDGE

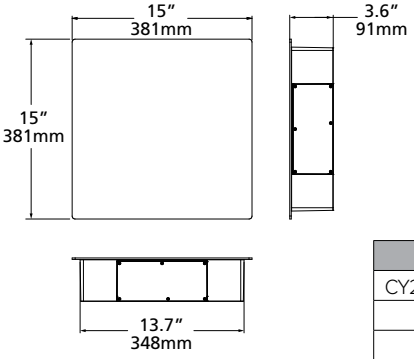
ADA approved.



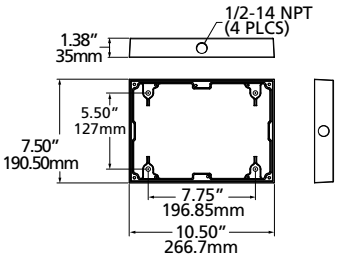

### C - CIRCLE/CURVED




### CBM - CUSTOM BUILD MATERIAL MOUNT GHOST FASCIA




### SCB - SURFACE CONDUIT BOX




| CY2 WEIGHT | | FIXTURE + FASCIA WEIGHT | |
|---|---|---|---|
| CY2 base fixture | 20 lb | | |
| F | 2.5 lb | CY2 + F | 22.5 lb |
| R | 2.5 lb | CY2 + R | 22.5 lb |
| CB | 3.5 lb | CY2 + CB | 23.5 lb |
| CT | 3.5 lb | CY2 + CT | 23.5 lb |
| T | 3.5 lb | CY2 + T | 23.5 lb |
| E | 3.5 lb | CY2 + E | 23.5 lb |
| C | 2.5 lb | CY2 + C | 22.5 lb |



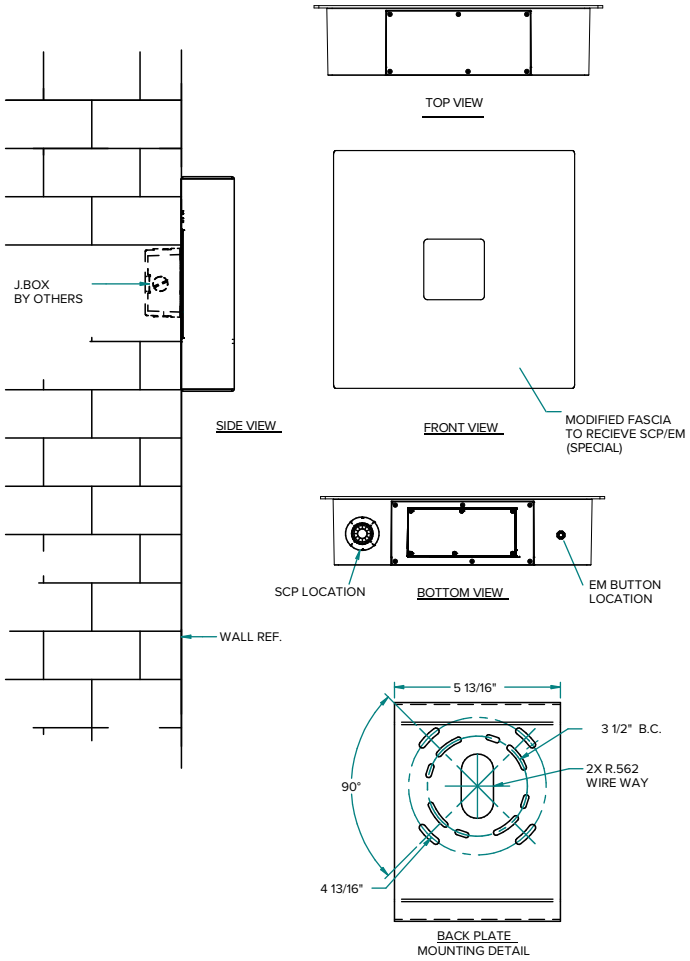

© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

# CY2

ARCHITECTURAL AREA/SITE

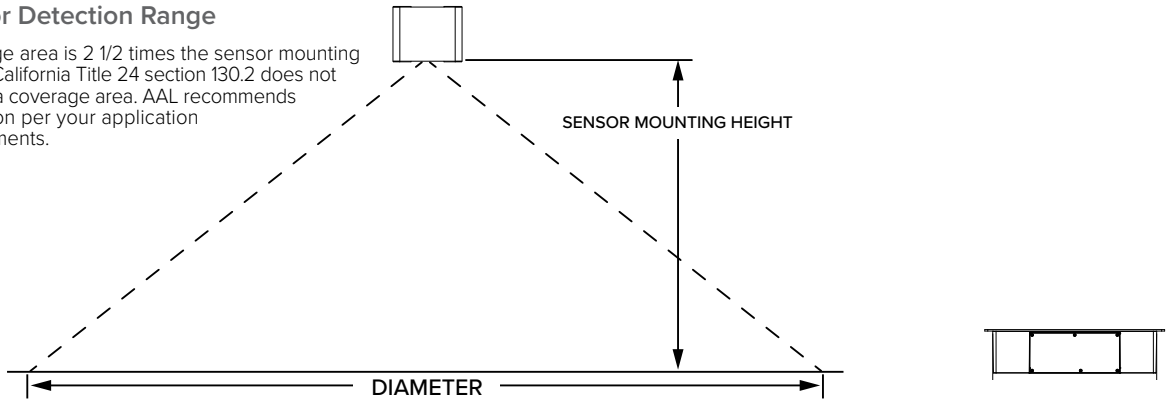
## DIMENSIONS (CONTINUED)

### Flat Sensor Location




### Sensor Detection Range

Coverage area is 2 1/2 times the sensor mounting height. California Title 24 section 130.2 does not specify a coverage area. AAL recommends discretion per your application requirements.






© 2025 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.