MILWAUKEE BUCKS ARENA DEVELOPMENT

BLOCK 8 - DETAILED PLANNED DEVELOPMENT (DPD) – PHASE 1 (TRAINING FACILITY)

Exhibit A

File No. 151656

May 9, 2016

DPD INDEX

Block 8 – Owner's Statement of Intent

PURPOSE

The Deer District, LLC requests that the zoning for the parcel of land known as Block 8 in the General Planned Development (GPD; File No. 150724) dated January 12, 2016 bounded by West McKinley Avenue on the North, North 6th Street on the East and West Juneau Avenue on the South, be rezoned to a Detailed Planned Development (DPD) to facilitate phased construction, the first of which is a training facility for the Milwaukee Bucks, in accordance with this submittal. This statement, together with the accompanying drawings and related materials, constitutes and supports the Detailed Planned Development (DPD).

ENUMERATION OF DOCUMENTS

See the following documents and drawings for additional detailed information:

TAB A Block 8 - Owner Statement of Intent

TAB B Block 8 – DPD Design Principles

TAB C Block 8 - DPD Design Standards and Site Statistics

TAB D Block 8 – Site Photographs and Lighting Cut Sheets

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PROJECT DESCRIPTION

The development outlined in this plan is based on the vision of the ownership of the Milwaukee Bucks to provide an economic catalyst for growth and revitalization in downtown Milwaukee surrounding a new arena for the Milwaukee Bucks. The plan is a result of an unprecedented partnership between the Milwaukee Bucks, the City of Milwaukee, Milwaukee County and the State of Wisconsin. There is a central focus by all the partners to see the project attract a vibrant community to live, work and play in the area, attract significant tourism to the region and spur future development in every direction.

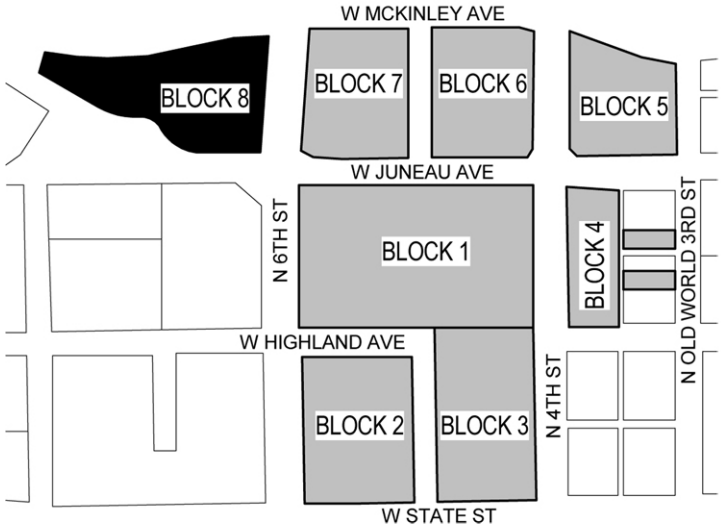
The 3-phased development will be located on Block 8 of the arena master plan, the first phase of which is the subject of this DPD, and entails a practice/training facility for the Milwaukee Bucks. The facility will be situated in an area known as the McKinley Avenue District in the Park East Redevelopment Plan. The McKinley Avenue District is located on the west side of the Milwaukee River and includes the section of the Park East Freeway corridor between McKinley Avenue to the north, Juneau Avenue to the south, the Milwaukee River to the east and Sixth Street to the west. Much of the land in this district is currently either vacant or used for surface parking. Through the planned redevelopment, McKinley Avenue will become a new gateway to downtown, providing access for both regional and local traffic. Although McKinley Avenue will become the largest east west thoroughfare, Juneau Avenue will continue to be a major arterial street because of its continuity to the lakefront. Sixth Street will also provide an important north to south link from Bronzeville through to the Menomonee River Valley.

Block 8 is bound by West McKinley Avenue to the north, North 6th Street to the east and West Juneau Avenue to the south. The majority of the existing site is currently covered by turf. In preparation for construction of the proposed building, the site will be cleared of all existing built features and a construction fence will be installed at the perimeter of the site.

A new Bucks practice facility will occupy the southeast corner of the site. The north and west portions of the site will be left open for potential future development, and this DPD will be amended to approve specifics of the future phases. The undeveloped portion of the site will be seeded and left open until future development takes place.

The proposed building will be designed to comply with the GPD Design Standards that have been established for this block.

PHYSICAL DESCRIPTION OF PROPERTY



This Detailed Planned Development for Block 8 will encompass land bound by West McKinley Avenue on the North, North 6th Street on the East and West Juneau Avenue on the South.

See the following drawings for additional detail:
C Alta Survey

Block 8 – DPD Design Principles

DESIGN PRINCIPLES

These Design Principles have been established to demonstrate compliance with the General Planned Development (GPD) Design Principles that have been established for this block.

These Principles will be utilized in the development of Block 8 for the Milwaukee Bucks Training Facility Detailed Planned Development (DPD). If there are any contradictions between these Principles and the GPD design standards, the DPD design standards will supersede these principles.

1. LAND USES

The following uses will be permitted on Block 8 as indicated in the use table below. All uses currently operating within the GPD boundary may continue to operate under the DPD zoning. Any new uses not defined in the table shall follow Downtown – Mixed Activity (C9G) standards.

Use	Training Facility Block 8
Residential Uses	
Single-family Dwelling	N
Two-family Dwelling	N
Multi-family Dwelling	Y
Permanent Supportive Housing	Y
Transitional Housing	Y
Street Level Residential Use	Y
Attached Single-Family Dwelling	N
Live-work Unit	Y
Mobile Home	N
Watchman/Service Quarters	N
Family Day Care Home	Y (Note 1)
Group Residential Uses	
Rooming House	N
Convent, Rectory, or Monastery	N
Dormitory	Y
Fraternity or Sorority	N
Adult Family Home	N
Foster Family Home	Y
Small Foster Home	Y
Group Home or Group Foster Home	N
Family Shelter Care Facility	N
Small Group Shelter Care Facility	N
Large Group Shelter Care Facility	N
Community Living Arrangement	N
Educational Uses	
Day Care Center	Y (note 1)
School, Elementary or Secondary	N
College	Y
School, Specialty or Personal Instruction	Y

Use	Training Facility Block 8
Community-Serving Uses	
Library	Y
Cultural Institution	Y
Community Center	Y
Religious Assembly	N
Cemetery or Other Place of Interment	N
Public Safety Facility	Y
Correctional Facility	N
Commercial and Office Uses	
General Office	Y
Government Office	Y
Bank or Other Financial Institution	Y
Currency Exchange, Payday Loan Agency, or Title Loan Agency	N
Installment Loan Agency	N
Cash for Gold Business	N
Pawn Shop	N
Retail Establishment, General	Y
Garden Supply or Landscaping Center	N
Home Improvement Center	Y
Secondhand Store	N
Outdoor Merchandise Sales	Y
Artist Studio	Y
Healthcare & Social Assistance Uses	
Medical Office	Y
Health Clinic	Y
Hospital	N
Medical Research Laboratory	Y

Use	Training Facility Block 8
Medical Service Facility	N
Social Service Facility	N
Emergency Residential Shelter	N
Nursing Home	Y
General Service Uses	
Personal Service	Y
Business Service	Y
Building Maintenance Service	Y
Catering Service	Y
Funeral Home	N
Laundromat	Y
Dry Cleaning Establishment	Y
Furniture and Appliance Rental and Leasing	N
Household Maintenance and Repair Service	N
Tool/Equipment Rental Facility	N
Animal Service Uses	
Animal Hospital/Clinic	N
Animal Boarding Facility	N
Animal Grooming or Training Facility	N
Motor Vehicle Uses Light Motor Vehicle	
Sales Facility	N
Rental Facility	Y
Repair Facility	N
Body Shop	N
Outdoor Storage	N
Wholesale Facility	N
Motor Vehicle Uses General Motor Vehicle	
Filling Station	N

Use	Training Facility Block 8
Car Wash	N
Drive-through Facility	N
Motor Vehicle Uses Parking	
Parking Lot, Principal Use	N
Parking Lot, Accessory Use	Y
Parking Structure, Principal Use	N
Parking Structure, Accessory Use	Y
Heavy Motor Vehicle Parking Lot, Principal Use	N
Heavy Motor Vehicle Parking Lot, Accessory Use	N
Temporary Parking Lot	N
Accomodation and Food Service Uses	
Bed and Breakfast	N
Hotel, Commercial	Y
Hotel, Residential	N
Tavern	Y
Brewpub	Y
Assembly Hall	N
Restaurant, Sit-down	Y
Restaurant, Fast-food / Carry-out	Y
Entertainment & Recreation Uses	
Park or Playground	Y
Festival Grounds	N
Recreation Facility, Indoor	Y
Recreation Facility, Outdoor	Y
Health Club	Y
Sports Facility	Y
Gaming Facility	N
Theater	N

Use	Training Facility Block 8
Convention and Exposition Center	Y
Marina	N
Outdoor Racing Facility	N
Storage, Recycling and Wholesale Trade Uses	
Recycling Collection Facility	N
Mixed-waste Processing Facility	N
Material Reclamation Facility	N
Salvage Operation, Indoor	N
Salvage Operation, Outdoor	N
Wholesale and Distribution Facility, Indoor	N
Wholesale and Distribution Facility, Outdoor	N
Storage Facility Uses	
Indoor Storage Facility	N
Outdoor Storage Facility	N
Hazardous Materials	N
Transportation Uses	
Ambulance Service	N
Ground Transportation Service	N
Passenger Terminal	N
Helicopter Landing Facility	N
Airport	N
Ship Terminal or Docking Facility	N
Truck Freight Terminal	N
Railroad Switching, Classification Yard, or Freight Terminal	N
Industrial Uses	
Alcoholic beverage faciliy, micro	Y
Alcoholic beverage faciliy, large	N
Food processing	N
Manufacturing, Light	N
Manufacturing, Heavy	N
Manufacturing, Intense	N
Research and Development	Y
Processing or Recycling of Mined Materials	N
Contractor's Shop	N
Contractor's Yard	N
Agricultural Uses	
Plant Nursery or Greenhouse	N
Raising of Crops or Livestock	N
Community Garden	Y
Commercial Farming Enterprise	N
Utility and Public Service Uses	
Broadcasting or Recording Studio	Y
Transmission Tower	N
Water Treatment Plant	N
Sewage Treatment Plant	N
Power Generation Plant	N
Small Wind Energy System	N
Solar Farm	N
Substation/Distribution Equipment, Indoor	N
Substation/Distribution Equipment, Outdoor	N
Temporary Uses	
Seasonal Market	Y
Temporary Real Estate Sales Office	Y
Concrete Batch Plant, Temporary	Y

Use	Training Facility Block 8
Live Entertainment Special Event	Y
Note 1:	
The daycare use shall be designed and operated per Wisconsin Administrative Code, Chapter DCF 251. This is the rule that governs Group Child Care and Supervision of 9 or more children for less than 24 hours a day.	
Note 2:	
The arena may function as a Community Center between games and in the off season. Uses related to community services and functions may be provided.	
General Notes:	
Accessory Uses Definition - All other uses that are accessory to the permitted principal uses. All accessory uses are acceptable and permitted. All uses that are currently operating within the extents of this General Planned Development (GPD) may continue to operate. Temporary Parking Lot Definition - The lot shall be accessory to this GPD and within the GPD boundaries, provided that the parking lot shall only serve the development within the GPD. A plan for the interim landscaping of open lots and duration of this use shall be submitted to the Commissioners of Neighborhood Services, Public Works and Department of City Development for approval prior to issuance of any permits. See the Development Agreement for the duration of the temporary surface parking lot use.	

2. BUILDING HEIGHT

The training center will have 3 stories and be a maximum height of approximately 45’-0” above grade along 6th Street and a maximum height of approximately 42’-0” above grade along Juneau Avenue. The building heights fall within the height range of the GPD standards.

See the following drawings for additional detail:
H3 Exterior Elevations
H6 Exterior Elevations

3. SETBACKS

The building facades fall within the setback ranges established in the GPD. North (McKinley) setback: 5'-0"; East (6th Street) setback: range from 7'-0" to 8'-1"; South (Winnebago/Juneau) setback: ranges from 1'-0" to 8'-0"" along Juneau Avenue and 40'-0" to 56'-0" where building steps back to the north; West setback: 10'-0". See sheet D2 for additional detail regarding setbacks. The setback ranges were slightly modified from the GPD to more accurately reflect the actual building footprint. The affected setback range is internal to the site, and does not affect setbacks along the streets. The maximum amount of land covered by the principal building is less than the 35% that is allowed in the GPD.

Build out requirements: The facades of the building will be built out to at least the minimum number of stories stated in the site statistics for this block for a minimum of 90% of the linear street frontage along North 6th Street and West Juneau Avenue.

See the following drawings for additional detail:
D2 Proposed Site Plan

4. BUILDING COMPOSITION

4.1. Street Activation Requirements

The design of the training center provides over 75% of glazing at the corner of 6th Street and Juneau Avenue, meeting the High Activation requirements of the GPD. The remainder of the building is identified as Low Activation by the GPD and does not have a glazing requirement.

The clear, non-tinted glazing in the high activation zone will be provided between 2 feet above grade and up to at least 8 feet above grade. The glass at the corner will be two stories in height and will provide visual interaction between the floors of the building.

The glazing will not be tinted or reflective.

Where required glazing is provided along the ground floor, the area behind the glazing will be a lobby reception, which is a qualifying Street Activating Use, for a minimum of 12 feet in depth.

See the following drawings for additional detail:
H3 Exterior Elevations
H6 Exterior Elevations
I2 First Floor Plan
I3 Mezzanine LEVEL Floor Plan

4.1.2 Street Activation Uses

At the corner of 6th Street and Juneau Avenue, the training center has high activation at the ground level that the façade will incorporates over 75% glazing. The use behind this transparent façade is the main lobby, reception, and waiting area for the training center. These spaces fulfill the GPD requirements for street activating uses.

See the following drawings for additional detail:
H3 Exterior Elevations
H6 Exterior Elevations
I2 First Floor Plan
I3 Mezzanine Level Floor Plan

4.1.3. Entries

The main pedestrian entrance is at the corner of 6th Street and Juneau Avenue where the building hugs the street corner and property line, and becomes a dominant corner entrance. It will be highly transparent and contain an interior vestibule that is transparent glass as well. The main entrance fulfills the GPD requirements.

The service entry is at the northwest corner of the building and hidden from view with screening walls and landscaping. The loading dock is screened from view and not located along street frontages per the GPD. The outdoor dumpster enclosure is also located in this area along with electrical utilities that are screened from view.

There are three fire exits that exist in addition to the main entrance. One is located along 6th street and is detailed to match the surrounding façade. A second is located on the west elevation near the roundabout and is detailed to match the surrounding façade. A third location is situated on the west elevation near the loading dock and is screened from view. This location may also serve as a secured staff entry from the adjacent parking lot.

Basketball players and coaching staff will enter the facility through an underground parking garage entrance along 6th street. This will be a secured overhead door that allows ingress and egress and is detailed to match the surrounding façade. The door will be inset approximately 8" from the façade of the building. The door will be constructed with a material that is similar to the material that is used on the building façade that is adjacent to the door opening. The door is being held close to the façade to overcome severe grade issues and to improve safety by eliminating unsafe areas that are hidden from public view. The sidewalk and street will have a curb cut at this location and will remain at an un-interrupted height for pedestrian traffic in order to meet GPD guidelines. The driveway will be a maximum of 20'-0" wide and falls in the range provided by the GPD.

Staff parking, truck deliveries, and occasional visitors will enter the site via a curb cut off of the roundabout in Juneau/Winnebago Avenue. This is the only allowed access point to the site off of the roundabout per DOT guidelines. The single curb cut will provide one lane for ingress and one lane for egress, which meets the GPD requirement of providing not more than 3 drive lanes.

See the following drawings for additional detail:
D2 Site Plan
I2 First Floor Plan

4.1.4. Materials

The training center exterior will be made of high quality materials, consistent with the GPD standards. The base of the facility that meets the grade will be clad in a stacked bond Norman sized brick

masonry. The majority of the building along 6th Street and Juneau Avenue will be clad in a zinc metal panel that provides depth and planar qualities. The main basketball court volume, as well as some accent strips around the building, are clad in a custom profile concealed fastener metal panel to provide depth and light shadows. The primary material of the north and west elevations are clad in the same Norman sized brick masonry as the base of the building. The glazing will be curtain wall and storefront with a mixture of translucent and clear glass to give a banding effect with the glazing. The glazing frames will be a painted gray color to match the adjacent metal panel. In summary, all sides of the training center will have highly desirable and durable materials.

See the following drawings for additional detail:
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.1.5. Detailing Enrichments

The training center is designed as a series of planar boxes that are pushed and pulled together to form scalable and textural facades with the use of zinc metal panel, gray profiled metal panel, and brick. The zinc panels are then further eroded with the introduction of horizontal bands of glazing that have a human scaled mullion module of 36" on center. The remaining panels and grid lines are situated on the 36" module and the zinc panels continue their march across the street elevations at an 18" on center module.

The Norman-sized brick is modular in height but extended to 12" long from the typical 8" length. The masonry is arranged in a stacked bond formation to provide crisp lines vertically and to maintain the modularity of the adjacent panels and glazing mullions. The majority of the brick is at street level to create a grounding base to the building while also providing the building with a durable material at grade. The street level of the building continues to add in a human touch with planter beds along the sidewalks and a simple and streamlined landscaping plan that mimics the simplicity of the overall building form.

The building exterior will be lit with LED lights that are recessed within the zinc metal panel to create a radiant effect on the edges of the zinc panel ends. The translucent band of glass that extends along Juneau Avenue and onto 6th Street will be backlit to create a glowing lantern at night that projects a soft light and proudly illuminates the home of the Milwaukee Bucks.

See the following drawings for additional detail:
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.2 Building Façade Requirements

4.2.1 Building Articulation

The building facades of the training center are designed with varying degrees of depth in the materials in order to create a dynamic design. The depth of the brick, the gray metal panel, and the zinc metal panel are all different to avoid "flat" facades and to provide appropriate transitions between the materials. The glazing systems are also set back from the exterior materials to provide shadows, the impression of thickness, and an active rhythm. The glazing system also has a vertical articulation with the use of typical end caps on the mullions while the horizontal mullions are butt glazed so they "disappear" in the façade and accentuate the verticality of the 36" glazing module.

<u>See the following drawings for additional detail:</u>
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.2.2 Low Activation /Ground Level Walls

As established in the GPD, the majority of the training center is labeled as Low Activation and no glazing is required, with the exception of the corner entrance. To mitigate the windowless features, the building facades have been layered with different types of metal panels and depths of materials, and high quality brick masonry is used at the base of the building where it meets grade. The building edges along 6th Street and Juneau Avenue also utilize planting beds and landscaping to provide a human scale to the streetscape. The brick is oriented in a stacked bond nature to provide a vertical rhythm to the facades and to keep a human scale.

The grade along 6th street slopes down from south to north. To help break up the façade, the building integrates metal panel above the brick at grade that extends in height from 4' to 8' above grade as the sidewalk grading moves north.

The grade along Juneau Avenue slopes down from west to east and houses the primary function of the building in the basketball courts. The windowless wall is broken up delicately with translucent curtain wall glazing that functions as a shadow box to give the façade scale and visual interest. At night, the shadow box will glow like a lantern with the help of backlit glass from LED lights.

<u>See the following drawings for additional detail:</u>
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.2.3 Alley and Side Facing Walls

The north and west facing facades, which will be side-facing walls adjacent to future development, continue the theme of high quality materials and layering of materials. The elevations both support brick masonry and the integration of metal panel and curtain wall to provide depth and expressive elements. The large ribbon of curtain wall on the northwest corner helps provide daylight to the interiors while also breaking up the long wall expanses.

Thoughtful screen walls and planes are introduced on the west side of the facility to screen unsightly utility equipment, dumpsters, and a loading dock from the street. These carefully choreographed planes provide depth to the façade and provide an architectural backdrop to the landscaping that welcomes guests into the site.

<u>See the following drawings for additional detail:</u>
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.2.4 Large Format Uses Façade Design

The façade along Juneau Avenue contains the edge of the basketball courts and therefore falls under the category of Large Format Uses per the GPD. The large volume is broken down into a layered effect of brick masonry, zinc metal panels, profiled gray metal panel, and curtain wall with a shadow box design. The glazing assembly of backlit translucent glass helps provide a scale to the edge of the street while giving the illusion of lightness and transparency. The metal panel and mullion spacing also helps to break down the façade into a vertical modularity more in tune with pedestrians. The varying degrees of depth in the brick and metal panel faces provides the façade with a dynamic elevation.

<u>See the following drawings for additional detail:</u>
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

4.2.5 Parking Structure Facade Standards

No Parking Structure Included, Not Applicable

4.2.6. Detailing and Enrichments

The training center provides additional façade details in many forms. The corner lobby carries its ground floor transparent glazing up to the second level providing additional activation as the space is used for reception and vertical circulation. The second level also provides for an outdoor covered patio in which groups of people are able to socialize. The vocabulary of all the facades indicates layering of materials and different depths of materials to create energetic elevations. The second level along 6th Street also carries a long ribbon window of curtain wall that displays group gathering spaces and commercial office space.

The rooftop mechanical equipment is skillfully hidden behind a screen wall on the north elevation so that viewers of the building do not perceive the function beyond. Likewise, the electrical equipment, along with dumpsters and metering equipment, are neatly tucked behind architectural site walls and landscaping that extends the length of the west façade.

The building exterior will be lit with LED lights that are recessed within the zinc metal panel to create a radiant effect on the edges of the zinc panel ends. The translucent band of glass that extends along Juneau Avenue and onto 6th Street will be backlit to create a glowing lantern at night that projects a soft light and proudly illuminates the home of the Milwaukee Bucks.

<u>See the following drawings for additional detail:</u>
H1 Exterior Renderings
H2 Exterior Renderings
H3 Exterior Elevations
H4 Exterior Renderings
H5 Exterior Renderings
H6 Exterior Elevations

5. Site Features

Bordering the parking lot between Winnebago Street and McKinley Avenue, a retaining wall is proposed to maintain appropriates grade. The wall begins 42-inches above grade on the west, rises out of the ground to the east, and is approximately 10-feet tall from the McKinley Avenue side at its highest point. The wall is approximately 42-inches tall from the parking lot surface grade to block headlights and prevent pedestrians and vehicles from falling over the wall. The cast-in-place concrete wall will have brick masonry facing McKinley Avenue, a stained and exposed finished concrete on the surface parking lot side, and a precast cap. Site Section AA is shown on sheet D1 and portrays the section through the surface parking lot, retaining wall, and street right of way.

<u>See the following drawings for additional detail:</u>
D1 Proposed Site Plan
I2 First Floor Plan

5.1 Bicycle Parking Minimum Requirements

Referencing 7,300 square feet of office space within the training facility, the project follows the GPD standards and provides 2 bicycle parking spaces for employees and 2 for visitors, with anticipated location near the front door on the corner of 6th Street and Juneau Avenue.

See the following drawings for additional detail:
D1 Proposed Site Plan
I2 First Floor Plan

5.2 Fencing

5.2.1 Temporary Fencing
During construction and phasing, a temporary construction fence will be installed at the perimeter of the site with an opaque fabric wrap that covers the entire area of the fence to limit access to the construction area for safety and security purposes. This will also help to limit views of the staging and enliven the area with graphics during construction.

5.2.2 Permanent Fencing
Permanent Fencing and gate will be provided on the north elevation of the trash enclosure. The fencing will be constructed with high quality opaque materials that are compatible with the building façade materials. These materials will be placed on a steel frame that is concealed on the trash enclosure side of the fence.

6. Exterior Site Lighting Standards

The color and materials of poles and other light components within the Planned Development district will be compatible and relate to the architectural character of the buildings. Lighting treatments will be used to establish a sense of place and to create visual interest and design continuity within the site. Walkway lighting will be scaled to the pedestrian to emphasize pedestrian activity and provide for safe use of pathways and pedestrian areas. Lighting features will be designed to aid in the geographic orientation of people. Lighting will also be used to accent landscaped areas, building entrances, special focal points, architectural details, signage or other special site features.

Consistent with s. 295-409 of the Milwaukee Code of Ordinances, the Planned Development district lighting will have cut-off fixtures to ensure lighting levels and glare are controlled so that no light source is visible from an adjoining property or public right of way. Also, the maximum illumination at a property line shall be 5 foot-candles.

7. Landscaping Standards

The majority of Block 8 will be screened according to the GPD Landscaping Standards for Interim Phases (see below for more details). In areas where development is occurring, the GPD Standards for internal and perimeter parking lot landscape requirements follow the City of Milwaukee zoning ordinance landscaping standards (295-405). The project is following the Modified Hard Urban Edge requirements, which incorporates an opaque wall and deciduous trees placed 25-feet on center along

McKinley Avenue. The retaining wall is approximately 10-feet tall at its highest point along the McKinley Avenue side, and 42-inches above the parking lot surface grade on the development side to block headlights and prevent pedestrians and vehicles from falling over the wall. Additional landscape treatments will be provided along the southwest corner of the building, adjacent to the entrance drive, to provide visual interest where glazing isn't possible. As noted previously, planter boxes will be placed along 6th Street and Winnebago to soften the edges of the building.

Required landscaping and perimeter features shall be kept free of refuse and debris. All plant materials shall be maintained on an ongoing basis, including seasonal tree and plant replacement. Established trees shall not be removed and replaced with trees of smaller caliper than when they were planted, even if those trees meet the standards of this subsection.

Prior to issuance of any permit or certificate of occupancy for a use or change of use for which perimeter landscaping and edge treatments are required, a landscaping and screening plan with specifications and an installation schedule shall be submitted to the commissioner for approval.

<u>See the following drawings for additional detail:</u>
G Site Landscape Plan

7B. Landscaping Standards for Interim Phases of Block 8

Following the GPD landscape standards for the interim phases of Block 8, trees are proposed within a 5-foot buffer around the perimeter of the future development areas, spaced every 25-feet, on-center. Trees will be installed at or greater than the 2.5-inch minimum with mulch rings. The areas of the site not currently scheduled for development are also planted with a no-mow fescue seed mix, creating minimal maintenance requirements, year round interest, and erosion control cover.

Required landscaping and perimeter features will be kept free of refuse and debris. All plant materials will be maintained on an ongoing basis, including seasonal tree and plant replacement. Established trees shall not be removed and replaced with trees of smaller caliper than when they were planted, even if those trees meet the standards of this subsection.

A plan for the interim landscaping of open lots shall be submitted to the Commissioners of Neighborhood Services, Public Works and Department of City Development for approval prior to issuance of any permits.

<u>See the following drawings for additional detail:</u>
G Site Landscape Plan

8. Signage

Signage will be a component of the building design and may be incorporated as follows:

East Elevation (North 6th Street): The following types of signs may be provided. See drawing I6 for quantity and location of signs.

Type A6 sign
Type A7 sign
Type B2 sign
Type B3 sign
Type C2 sign
Type C3 sign

South Elevation (West Juneau Avenue): The following types of signs may be provided. See drawing I6 for quantity and location of signs.

Type A2 sign
Type A4 sign
Type A5 sign
Type C2 sign
Type C3 sign

West Elevation (West Winnebago Avenue): The following types of signs may be provided. See drawing I7 for quantity and location of signs.

Type A3 sign
Type A4 sign
Type A5 sign
Type A6 sign
Type B2 sign
Type C2 sign
Type C3 sign

North Elevation (West McKinley Avenue): The following types of signs may be provided. See drawing I7 for quantity and location of signs.

Type A1 sign
Type A3 sign
Type A4 sign
Type A5 sign
Type B2 sign
Type B4 sign
Type C2 sign

Temporary Perimeter Signage: The following types of signs may be provided. See the designated drawing below for quantity, size and location of signs.

Temporary Perimeter site signage that will consist of a fabric sign material with graphics designed to obscure the construction activity and enliven the block. The fabric sign will cover between 50% and 100% of the perimeter construction fence.

Temporary Construction Signage:

Temporary Construction signage will be design per requirements of Milwaukee Zoning Code, section 295-407. The final location, quantity and size will be determined when the site construction layout is determined. Signage will be reviewed with DCD for final approval.

All signage will be reviewed and approved by DCD staff, provided it is consistent with the standards noted in these DPD standards and drawings I15 through I18.

<u>See the following drawings for additional detail:</u>

I15	SIGNAGE KEY
I16	LIGHTING & SIGNAGE ELEVATIONS
I17	LIGHTING & SIGNAGE ELEVATIONS
I18	SIGNAGE EXAMPLES

Block 8 –DPD Design Standards and Site Statistics		
Design Standard	**GPD Design Standards**	**DPD Design Standards**
Building Height	The buildings will be a minimum of 2 stories in height and up to a maximum of 8 stories.	3 stories, maximum of approximately 45'-0" in height from the lowest grade level. See Design Principle 2– Building Height (page 8).
Façade Requirements	See sheet A180 for location of street activation.	More than 75% glazing provided at the corner of 6th Street and Juneau Avenue. See: Design Principle 4.1 – Street Activation Requirements (page 9). Design Principle 4.1.2 – Street Activation Uses (pages 9-10). Design Principle 4.1.3 – Entries (page 10).
Site Statistics – Specific to Phase 1, unless where otherwise noted.		
Gross Land Area (295-907,2,b-1-a)	144,296 sf	143,913 sf
Maximum amount of land covered by principal buildings. (295-907,2,b-1-b)	50,500 sf 35%	45,848 sf 32%
Maximum amount of land devoted to parking, drives and parking structures. (295-907,2,b-1-c)	Surface parking = 45,000 sf 31%	29,853 sf 21%
Land devoted to landscaped open space and plazas.	48,800 sf to 61,700 sf 34% to 43%	68,212 sf 47%

(295-907,2,b-1-d) Open Space (295-907,3,g) Landscaping (295-907,3,i)	Open spaces will be landscaped per the Urban Planning and Design Principles**,** Design Principle 7 and 7B - Landscape Standards (pages 24-29) and will be maintained by the developer so as not to create a nuisance or hazardous conditions.	Open spaces will be landscaped per the Urban Planning and Design Principles**,** Design Principle 7 and 7B - Landscape Standards (pages 15-16)
Maximum proposed dwelling unit density, if residential, and/or total square footage devoted to non-residential uses. (295-907,2,b-1-e) Maximum number of dwelling units per building. (295-907,2,b-1-g)	Nonresidential = 150,000 sf Dwelling unit density = 144,296 sf / 961 units = 1,000 sf / unit Maximum of 144 units total for the site	N/A N/A
Proposed number of buildings. (295-907,2,b-1-f)	There may be up to three buildings proposed for development on this block.	1 building currently proposed, option for a maximum of 2 more buildings in future phases.
Bedrooms per unit. (295-907,2,b-1-h)	1-3 bedrooms and Studio units	N/A
Parking spaces provided, whether surface or in structures, and ratio per unit if residential, or per thousand square feet of building area if non-residential. (295-907,2,b-1-i)	Non-residential: 45 -75 parking stalls .25 - .5 / per thousand SF No minimum requirement for parking. Maximum will be determined as part of the DPD.	Maximum of 30 underground parking spaces for players and staff. Maximum of 40 spaces on grade to the north of the building.
Uses (295-907,3,a)	See Urban Planning and Design Principles**,** Design Principles 1 uses (page 9-15), for acceptable uses on this block.	Uses as allowed for Block 8 per Design Principle 1 – Land Uses (Pages 4-8)

Design standards (295-907,3,b)	See Urban Planning and Design Principles**,** Design Principles 1 through 7 (pages 7-29) for Design Principles that apply to this block.	See Design Principles 1 through 8 (pages 4-18) for Design Principles that apply to this block.
Space between structures (295-907,3,d)	All spaces between buildings will comply with the version of the IBC that in force at the time of building design and Department of Safety and Professional Services (DSPS) approval.	1 structure proposed
Setbacks (295-907,3,e)	Minimum setback: north side of block: 0 feet, east side of block: 0 feet, south side of block: 0 feet, west side of block: 0 feet. Maximum setback: north side of block: 170 feet, east side of block: 12 feet, south side of block: 76 feet, west side of block: 390 feet. See sheet A180 for setbacks.	North setback: 5'-0"; East setback: range from 7'-0" to 8'-1"; South setback: ranges from 1'-0" to 8'-0" along Juneau Avenue and 40'-0" to 56'-0" where building steps back to the north; West setback: 10'-0"
Screening (295-907,3,f)	The proposed GPD standards will not include any screening between the residential components and all other components on the site. If dumpsters and utilities are located outside, screening shall be provided that complies with Design Principle 4.2.2 (page 22).	Screening of dumpsters and utilities is provided via architectural site walls and landscaping. Screening will be provided that complies with Design Principle 4.2.6 (page 14).
Circulation, Parking and Loading (295-907,3,h)	Traffic circulation facilities will be planned and installed consistent with these Design Standards. Adequate access for pedestrians and public and private vehicles will be provided. Parking and loading facilities will be located near the uses they support and will be screened and landscaped with high quality materials per these design standards.	Pedestrian sidewalks and access is maintained around the site. Parking is provided underground for players and staff. Public parking and loading dock is screened to the north and west behind the building and via architectural site walls/retaining walls.
Lighting	See Urban Planning and Design Principles**,** Design	Lighting is provided per GPD standards. See Design Principle 6 – Exterior Site Lighting

(295-907,3,j)	Principle 6 -Exterior Site Lighting Standards (page 23)	Standards (Page 15)
Utilities (295-907,3,k)	All utility lines will be installed underground. Transformers and substations will be installed within buildings or otherwise screened from view.	All utility lines will be installed underground. Transformers and substations will be installed within buildings or otherwise screened from view.
Signage (295-907,3,L)	Signage Standards (except temporary signage) will be approved as part of the Detailed Planned Development (DPD). All signs listed below may be allowed to have changeable messaging. This will be determined as part of the Detailed Planned Development (DPD). Permitted signs will include: • Temporary construction signage. • Temporary Perimeter site signage that will consist of a fabric sign material with graphics designed to obscure the construction activity and enliven the block. The fabric sign will cover between 50% and 100% of the perimeter construction fence. • Awning signs • Canopy Signs • Wall signs • Roof signs • Projecting signs	The training center building will have unique signage located on each elevation. All signage will be design per requirements of Milwaukee Zoning Code, section 295-407. All signs listed below may be allowed to have changeable messaging. Signage types include: • Temporary construction signage. • Temporary Perimeter site signage that will consist of a fabric sign material with graphics designed to obscure the construction activity and enliven the block. The fabric sign will cover between 50% and 100% of the perimeter construction fence. • Wall sign: Internal face lit dimensional letters • Permanent Window sign: Applied glazing film • Off-premise sign: directing traffic ingress and egress • Off-premise sign: Building identification sign near streets. • Off-premise sign: Marquee sign

		Design Principle 8 – Signage Standards (Page 16-18) <u>See the following drawings</u> I5 Signage Key I6 Signage Elevations I7 Signage Elevations I8 Signage Examples

Block 8 – SITE PHOTOGRAPHS


PARKING
THIS WAY


BLAST
MATC
MATC


Injured?
Carlson Blue & Clemens
(414) 342-1000


BLAST


AHEAD


BLAST


Chicago
Madison
Fond Du Lac
Avenue
Green Bay

Block 8 – LIGHTING CUT SHEETS

Specification Sheet

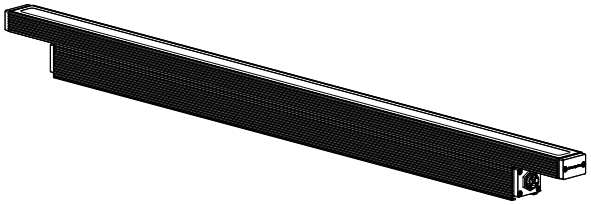
lumenfacade™
COLOR CHANGING

A

Client _____ **Project name** _____

Order# _____ **Type** _____ **Qty** _____

FEATURES AND BENEFITS



IK07*

Physical :

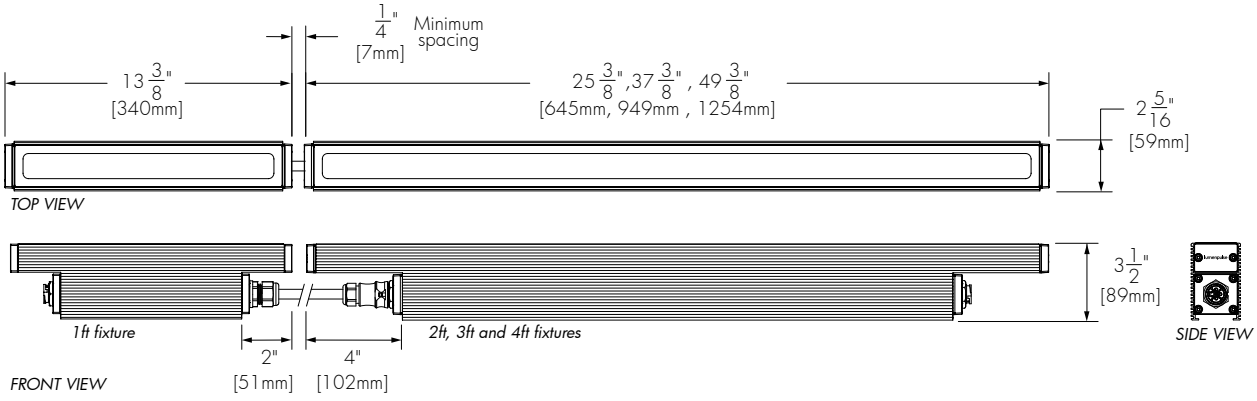
- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Clear tempered glass
- Asymmetric wallwash, 10° x 10°, 10° x 60°, 30° x 60° or 60° x 60° optics
- IP66
- IK07 rated (asymmetric wallwash lens is IK06 rated)
- Corrosion-resistant coating for hostile environments**
- Meets 3G ANSI C136.31 Vibration standard for bridge applications

Performance :

- Minimum 1fc (10.7 lux) @ 102 feet (31.1m) distance (RGB full white, 4' unit, 10° x 60° optic)
- 2,041 delivered lumens and 10,415 candelas at nadir (RGB full white, 4' unit, 10° x 60° optic)
- Color mixing options: RGB (3 channels) or RGBW (4 channels)
- Lumen maintenance L70 @ 25°C - 120,000 hrs
- Lumen measurements comply with LM - 79 - 08 standard
- Resolution per foot or per fixture (configured with LumenID V3 software & RDM)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- Up to 112 feet with 1 power & data feed (277V)
- 17.25W/ft
- DMX/RDM enabled



*Asymmetric wallwash lens is IK06 rated.
** Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure!

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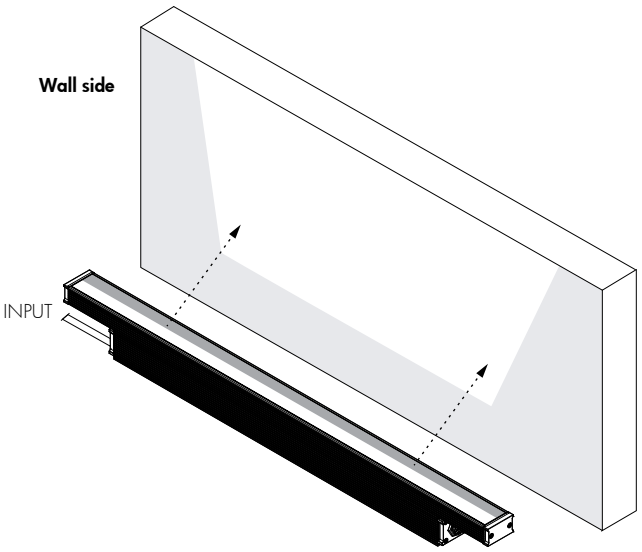
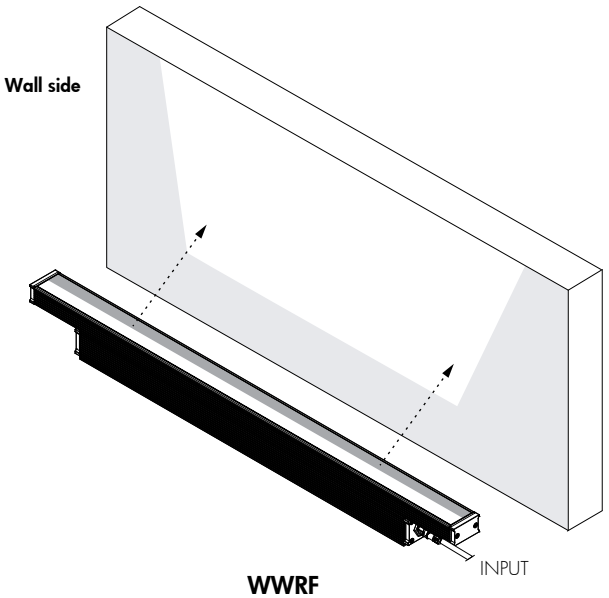
ASYMMETRIC WALLWASH OPTIC FEEDING SIDE DETAIL

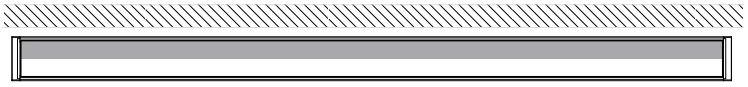


WWLF
Asymmetric Wallwash Optic, Left Feed



WWRF
Asymmetric Wallwash Optic, Right Feed

Always position frosted side toward the wall



TOP VIEW

FRONT VIEW

RIGHT SIDE VIEW
(Fixture pointing upwards)

*Fixture's feeding side is based on uplight installations. Feeding sides are reversed when fixture is used in a downlight application.

Recommended setback from wall is 1/10 of the wall height.

Example: 2ft setback for a 20ft wall.

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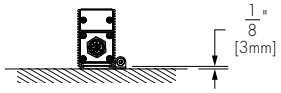
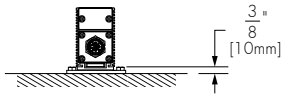
MOUNTING OPTIONS

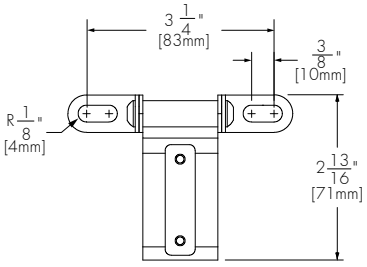
Surface Mount

SAM
Slim Adjustable Mounting



UMP
Fixed Mounting





SAM
Mounting Hole Pattern

Wall Mount

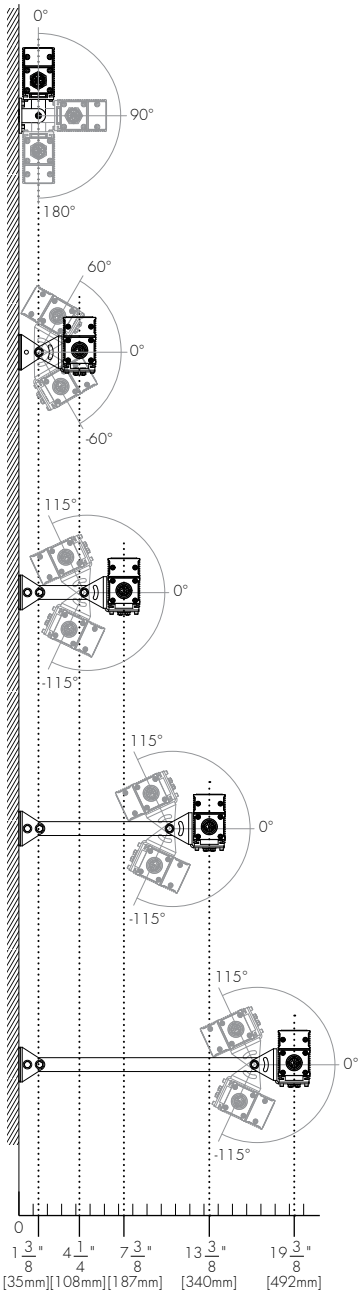
UMAS
Universal Adjustable Mounting

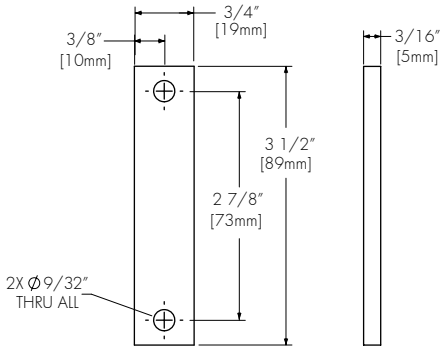
WAM2
Adjustable Wall Mounting 2"

WAM6
Adjustable Extended Arm Mounting 6"

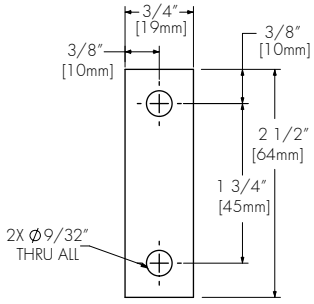
WAM12
Adjustable Extended Arm Mounting 12"

WAM18
Adjustable Extended Arm Mounting 18"

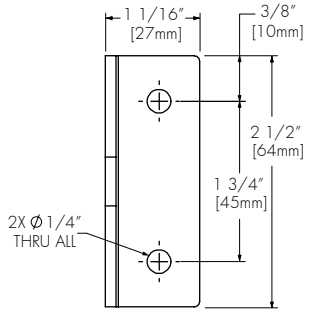




UMP
Mounting Hole Pattern



UMAS
Mounting Hole Pattern



WAM
Mounting Hole Pattern

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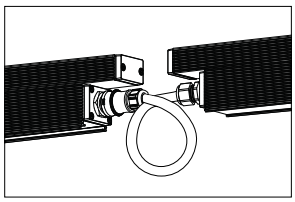
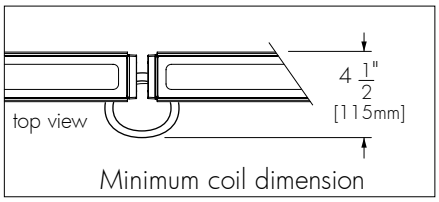
OPTION

ETE - End-to-end configuration,
no jumper cable needed.
16″ cable included at input.





ACCESSORIES

Order separately

Control Systems:

LTO2 Lumentouch is a wall mount DMX 512 controller keypad.

LCU Lumencue is a USB / mini SD DMX 512 controller.

LID LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.

LTN Lumentone is a simple pre-programmed DMX 512 controller
with a push button rotary dial and live feedback.

Control Boxes:

CBX DMX/RDM control box.
Up to six power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX specification sheet for details.

Leader Cable :

LOGLCD___ Leader Cable for Lumenfacade.
Please add desired cable length : 10′, 25′ or 50′ [3m, 7.6m or 15.2m] standard lengths
Sealing endcap is mandatory for any unused connector.
(1) included with every leader cable

LOGLCD___-ETE Leader Cable for Lumenfacade, ETE option.
Please add desired cable length : 10′, 25′ or 50′ [3m, 7.6m or 15.2m] standard lengths
Sealing endcap is mandatory for any unused connector.
(1) included with every leader cable

Jumper Cable :

LOGJCD___ Jumper Cable for Lumenfacade.
Please add desired cable length : 2′ or 4′ [0.6m, 1.2m] standard lengths

LOGJCD___-ETE Jumper Cable for Lumenfacade, ETE option.
Please add desired cable length : 2′ or 4′ [0.6m, 1.2m] standard lengths

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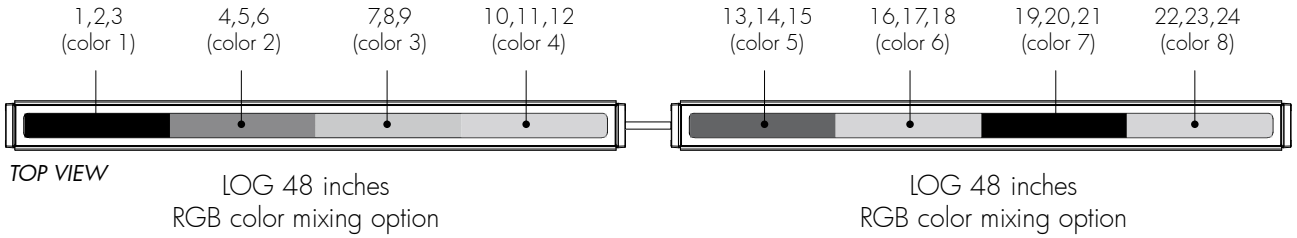
RESOLUTION DETAILS

Fixture resolution can be configured on-site within the LumenID V3 software. A DMX/RDM enabled CBX is required.

Resolution per foot: each foot is addressed independently

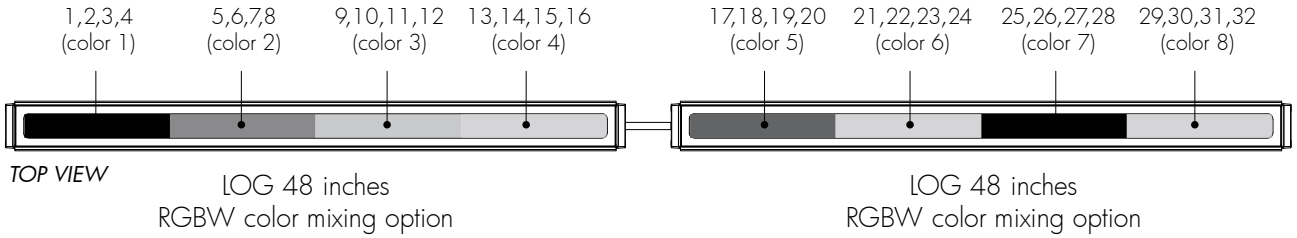
DMX ADDRESSES:



TOP VIEW

LOG 48 inches
RGB color mixing option

LOG 48 inches
RGB color mixing option



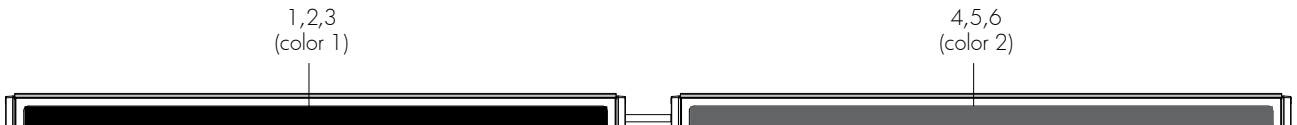
TOP VIEW

LOG 48 inches
RGBW color mixing option

LOG 48 inches
RGBW color mixing option

Resolution per fixture: each fixture is addressed independently

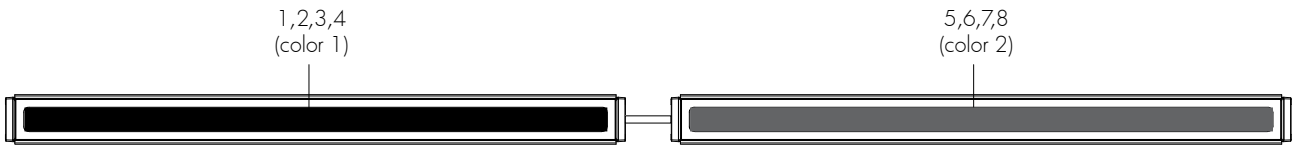
DMX ADDRESSES:



TOP VIEW

LOG 48 inches
RGB color mixing option

LOG 48 inches
RGB color mixing option



TOP VIEW

LOG 48 inches
RGBW color mixing option

LOG 48 inches
RGBW color mixing option

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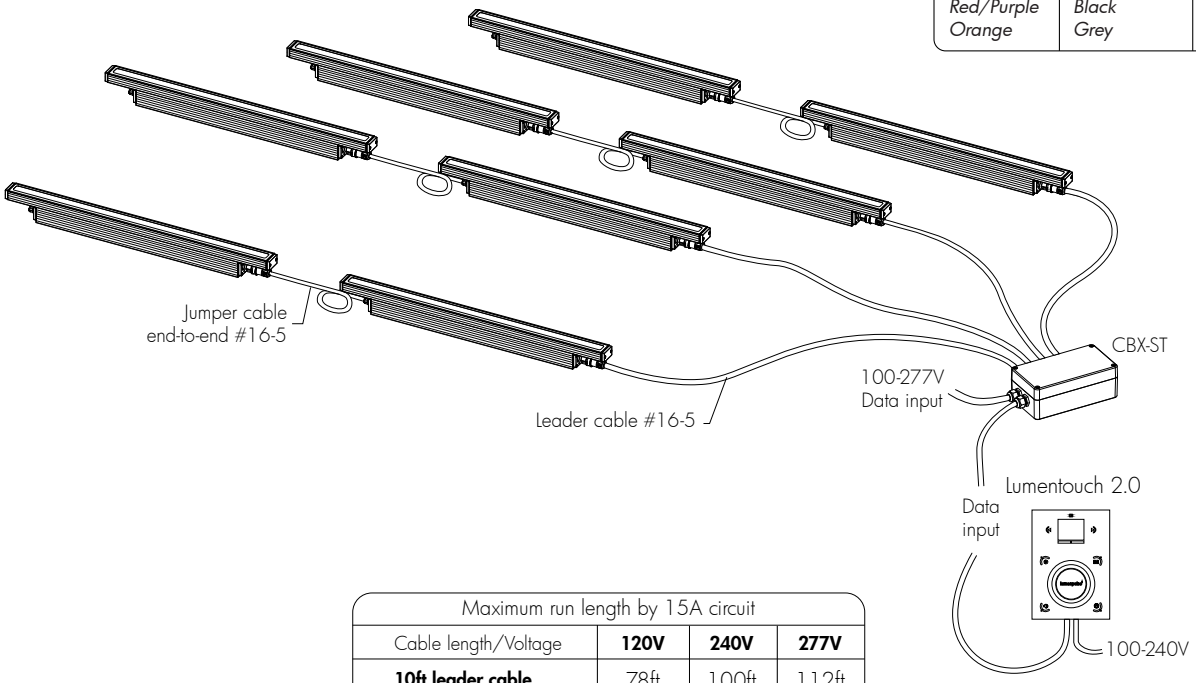
TYPICAL WIRING DIAGRAMS

American Color Code	*CE Color Code*	*USE*
Green	*Yellow/Green*	*Ground*
Black	*Brown*	*Live 100-277V*
White	*Blue*	*Neutral*
Red/Purple	*Black*	*0-10V / Data +*
Orange	*Grey*	*0-10V / Data -*

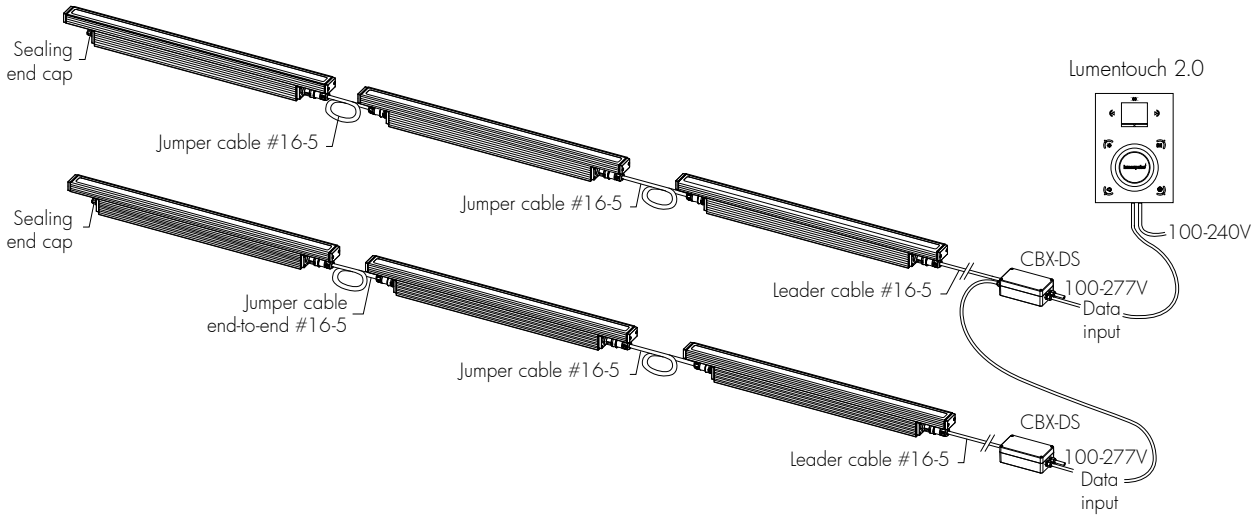
Star Layout (DMX/RDM)



Maximum run length by 15A circuit			
Cable length/Voltage	**120V**	**240V**	**277V**
10ft leader cable	78ft	100ft	112ft
50ft leader cable	68ft	80ft	88ft

*Up to 170 individually addressable 1 foot sections per RGB DMX/RDM run.
*Up to 128 individually addressable 1 foot sections per RGBW DMX/RDM run.
*Maximum run length calculations are typically based on 4ft fixtures.
Consult factory for specific installation requirements.

Daisy Chain Layout (DMX/RDM)



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HOW TO ORDER

LOG	Select:	Select:	Select:	Select:	Select:	Select:	DMX/RDM	Select:
1	2	3	4	5	6	7	8	9

1

Housing:

LOG - Lumenfacade™

2

Voltage:

100 - 100 volts
120 - 120 volts
208 - 208 volts
220 - 220 volts
240 - 240 volts
277 - 277 volts

3

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.5 lbs)
24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)
36 - 37 3/8 inches (949mm) (4.75 kg/10.5 lbs)
48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

4

Colors and Color temperatures:

RGB - Additive red, green and blue
RGBW - Additive red, green, blue and white 4000K

5

Optics:

WWLF - Asymmetric Wallwash optic, left feed*
WWRF - Asymmetric Wallwash optic, right feed*
10x10 - 10° x 10°**
10x60 - 10° x 60°
30x60 - 30° x 60°
60x60 - 60° x 60°

*Available September 2015. Right feeding side is standard unless otherwise specified.

**For best results, we recommend a 6-inch (15cm) setback from surface. Contact factory for application support.

6

Mounting Option:

SAM - Slim Adjustable Mounting
UMP - Fixed Mounting
(Suitable to use when **3GV** option is specified)
UMAS - Universal Adjustable Mounting
(Suitable to use when **3GV** option is specified)
WAM2 - Adjustable Wall Mounting 2″
WAM6 - Adjustable Extended Arm Mounting 6″
WAM12 - Adjustable Extended Arm Mounting 12″
WAM18 - Adjustable Extended Arm Mounting 18″

7

Finish:

SI - Silver SandText
BK - Black SandText
WH - White
CC - Custom (please specify RAL color)

8

Control:

DMX/RDM - DMX/RDM enabled
Fixtures come pre-addressed by fixture (consult Resolution Details page for the number of DMX addresses per color mixing option).

9

Option:

ETE - End - to - end configuration, no jumper cable needed
CRC - Corrosion-resistant coating for hostile environments
3GV - 3G ANSI C136.31 Vibration Rating
N.B. Available with UMP and UMAS mounting options only.

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Specification Sheet

lumenfacade™

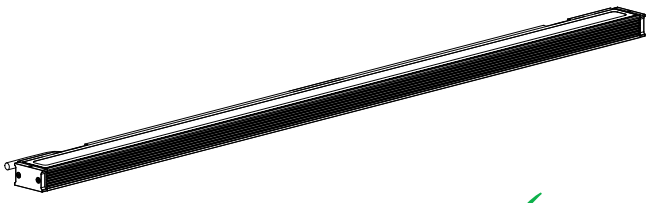
REMOTE POWER SUPPLY
COLOR CHANGING

A1

Client _____ **Project name** _____

Order# _____ **Type** _____ **Qty** _____

FEATURES AND BENEFITS



Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Clear tempered glass
- Asymmetric wallwash, 10° x 10°,10° x 60°, 30° x 60° or 60° x 60° optics
- IP66
- IK07 rated (asymmetric wallwash lens is IK06 rated)
- Corrosion-resistant option for marine environments**
- Meets 3G ANSI C136.31 Vibration standard for bridge applications

c UL us CE RoHS IK07*

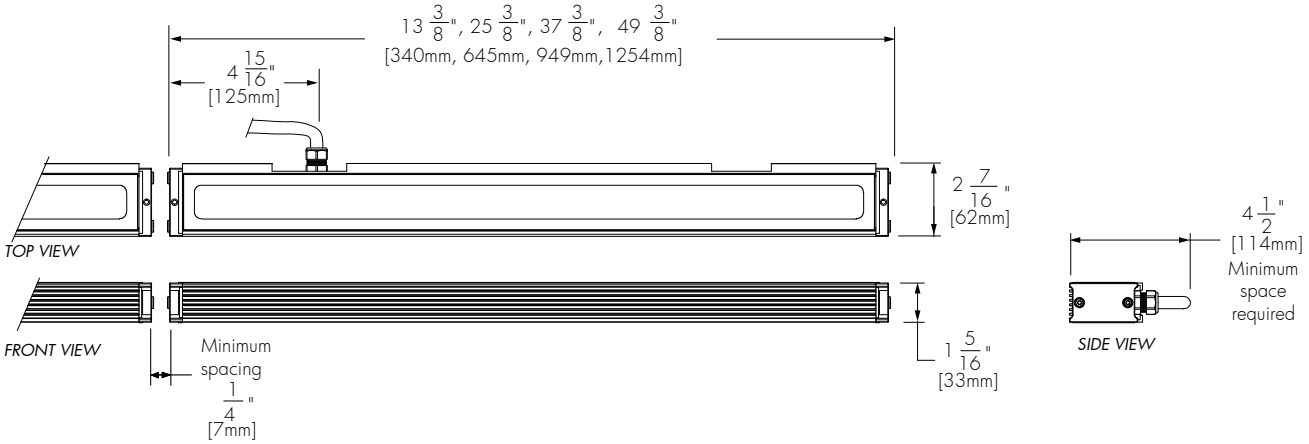
*Strain relief connectors and cables by others.

Performance :

- Minimum 1fc (10.7 lux) @ 102 feet (31.1m) distance (RGB full white, 4' unit, 10° x 60° optic)
- 2,041 delivered lumens and 10,415 candelas at nadir (RGB full white, 4' unit, 10° x 60° optic)
- Color mixing options: RGB (3 channels) or RGBW (4 channels)
- Lumen maintenance 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM - 79 - 08 standard
- Resolution per foot or per fixture (see page 5)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

Electrical :

- RGB color mixing option:15V DC luminaire, remote power & data supply available for 100 to 277V (required but not included, see page 4 for details)
- RGBW color mixing option:12V DC luminaire, remote power & data supply available for 100 to 277V (required but not included, see page 4 for details)
- Power and data in 1 cable (#16-4)
- 17.25W/ft
- DMX 512 ready



*Asymmetric wallwash lens is IK06 rated.

** Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure!

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www.lumenpulse.com

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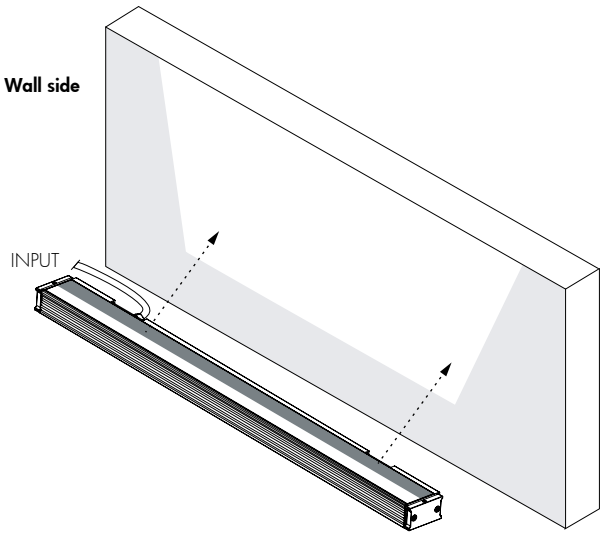
EM - R27

ASYMMETRIC WALLWASH OPTIC DETAIL

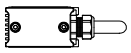


WW
Asymmetric Wallwash Optic

Always position frosted side toward the wall

TOP VIEW

FRONT VIEW



RIGHT SIDE VIEW
(Fixture pointing upwards)

Recommended setback from wall is 1/10 of the wall height.

Example: 2ft setback for a 20ft wall.

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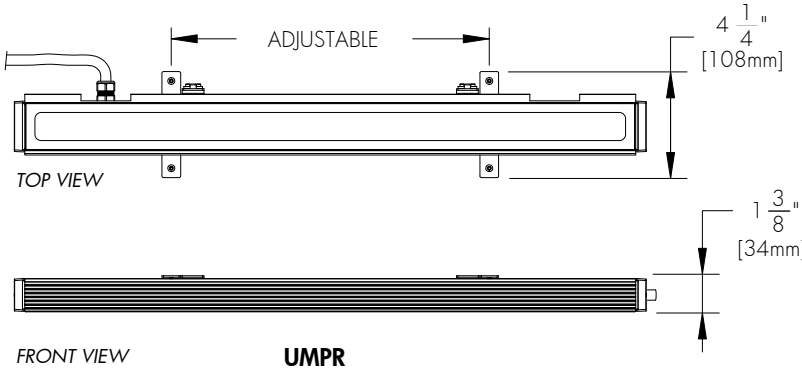
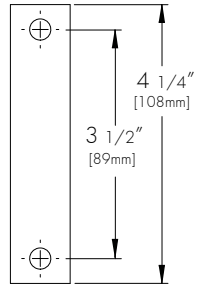
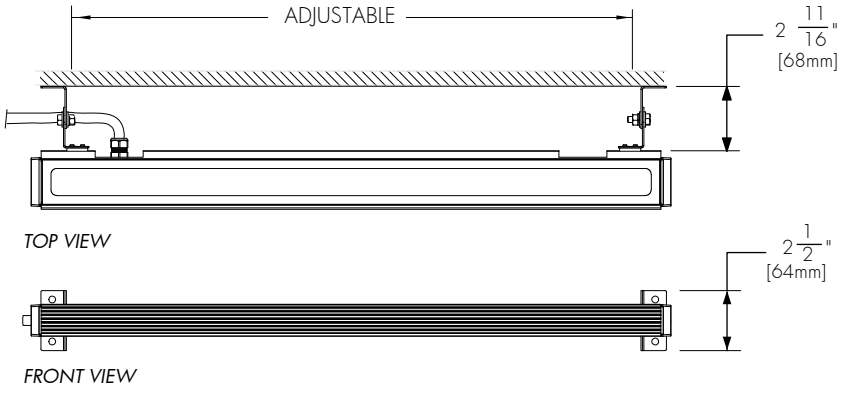
MOUNTING OPTIONS



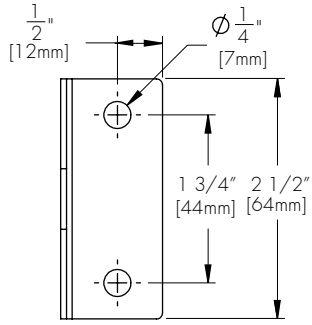
UMPR
Fixed Mounting
Remote Version



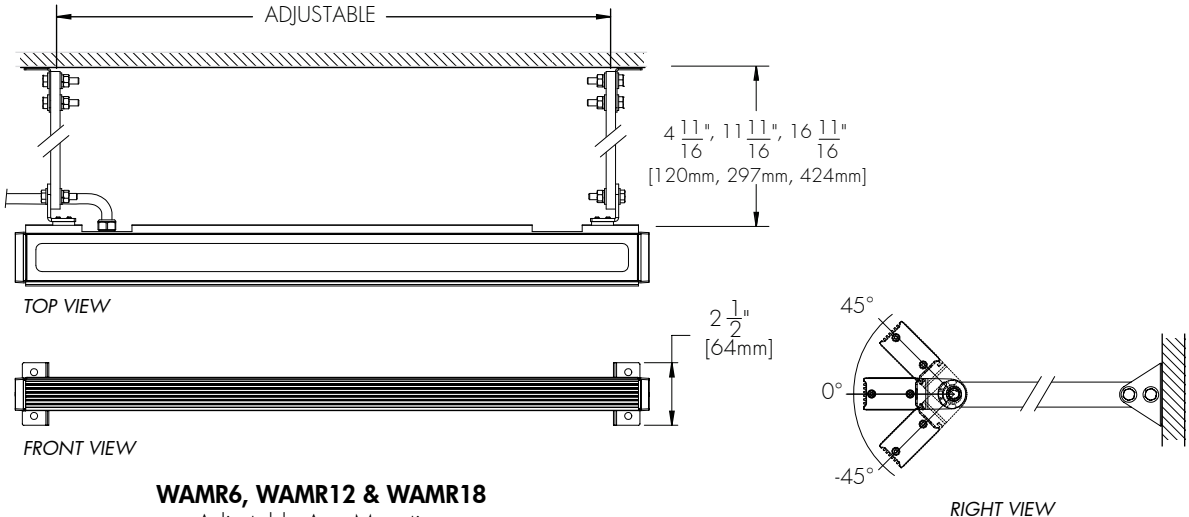
UMPR
Mounting Hole Pattern



WAMR3
Adjustable Arm Mounting
Remote version



WAMR
Mounting Hole Pattern



WAMR6, WAMR12 & WAMR18
Adjustable Arm Mounting
Remote version

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ACCESSORIES

Order separately

Control Systems:

LTO2 Lumentouch is a wall mount DMX 512 controller keypad.

LCU Lumencue is a USB / mini SD DMX 512 controller.

LID LumenID is a diagnostic and addressing DMX 512 controller.
It must be specified on all DMX applications.
Refer to LID specification sheet for details.

LTN Lumentone is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

Control and Power Supply Boxes:

CBX60, CBX100 DMX/RDM control box.
Up to six low voltage power and data outputs to fixtures or fixture runs.
Ethernet enabled option.
Refer to CBX60, CBX100 specification sheet for details.

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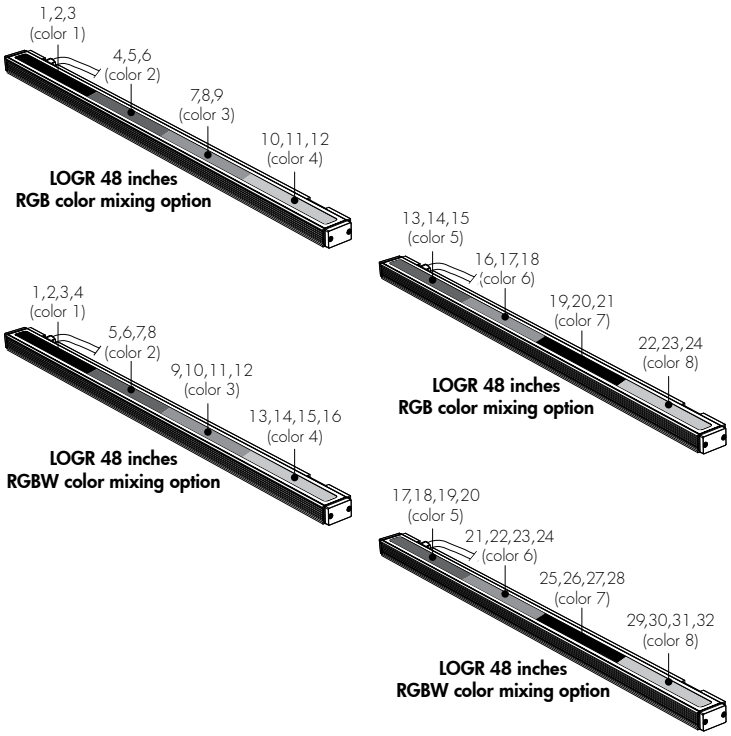
RESOLUTION DETAILS

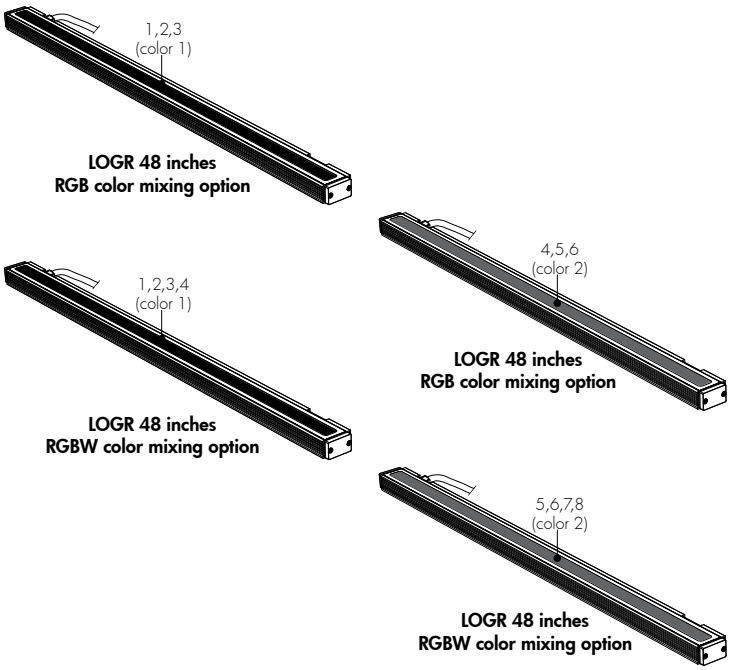
1FT - Resolution per foot: each foot is addressed independently (recommended for most installations).

DMX ADDRESSES:



1FX - Resolution per fixture: each fixture is addressed independently

DMX ADDRESSES:



*Warning: resolution is a factory setting and cannot be changed in the field.

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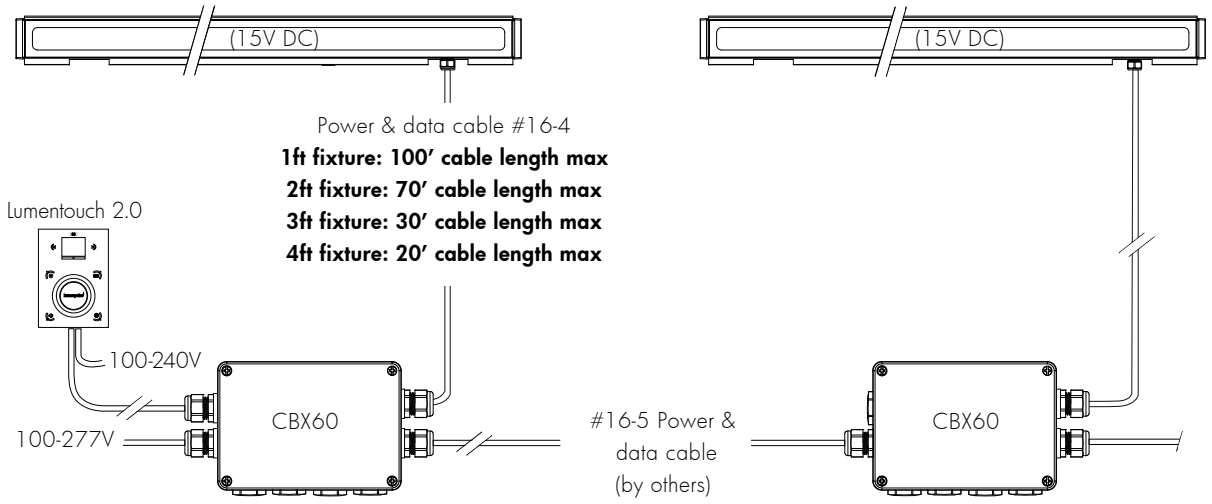
TYPICAL WIRING DIAGRAM

RGB Version

Maximum run length by 15A circuit:
48 linear feet of fixture. (Consult factory for custom applications).

American Color Code	*CE Color Code*	*USE*
Red	*Black*	*0-10V / Data +*
Green	*Grey*	*0-10V / Data -*
Black	*Brown*	*Live 100-277V*
White	*Blue*	*Neutral*



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Specification Sheet

lumenfacade™

REMOTE POWER SUPPLY
COLOR CHANGING

HOW TO ORDER

LOGR	Select:	Select:	Select:	Select:	Select:	Select:	Select:	Select:	Select:
1	2	3	4	5	6	7	8	9	10

1

Housing:

LOGR - Lumenfacade™ Remote Power Supply

2

Cable Length:

10 - 10' (3m)	Up to 30ft with no additional charges.
20 - 20' (6m)	1ft fixture - 100' cable length max
30 - 30' (9.1m)	2ft fixture - 70' cable length max
50 - 50' (15.2m)	3ft fixture - 30' cable length max
70 - 70' (21.3m)	4ft fixture - 20' cable length max
100 - 100' (30.5m)	

3

Voltage:

***See Colors and Color Temperatures section for input voltage.**

4

Length:

12 - 13 3/8 inches (340mm) (0.95 kg/2.10 lbs)
24 - 25 3/8 inches (645mm) (1.78 kg/3.90 lbs)
36 - 37 3/8 inches (949mm) (2.55 kg/5.60 lbs)
48 - 49 3/8 inches (1254mm) (3.40 kg/7.40 lbs)

5

Colors and Color temperatures:

RGB - Additive red, green and blue (15V DC)
RGBW - Additive red, green, blue and white 4000K (12V DC)

6

Resolution:

1FT - Resolution per foot
1FX - Resolution per fixture

7

Optics:

WW - Asymmetric Wallwash optic*
10x10 - 10° x 10°**
10x60 - 10° x 60°
30x60 - 30° x 60°
60x60 - 60° x 60°
*Available September 2015.
*For best results use with 10° x 10° fixtures at a 6-inch (15cm) setback from surface. Contact factory for application support.

8

Mounting Option:

UMPR - Fixed Mounting remote version
WAMR3 - Adjustable arm mounting 3" remote version
(Suitable to use when **3GV** option is specified)
WAMR6 - Adjustable arm mounting 6" remote version
WAMR12 - Adjustable arm mounting 12" remote version
WAMR18 - Adjustable arm mounting 18" remote version

9

Finish:

SI - Silver SandText
BK - Black SandText
WH - White
CC - Custom (please specify RAL color)

10

Option:

CRC - Corrosion-resistant coating for hostile environments
3GV - 3G ANSI C136.31 Vibration Rating
N.B. Available with WAMR3 mounting options only

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EM - R27

Type B in lengths per plans

Description

MINI MERCURE LED

24V-DC

- Inground linear fixture for monochromatic LEDs.
- Die Cast aluminium body anodized black. Anti-slip, flush, tempered safety glass, white silk-screen printed sealed to the fixture body.
- Resistant to static loads up to 12KN and dynamic loads up to 20KN.
- Electronic driver available as an accessory. Precabled with H07RN-F (2x1,5mm^2) resinate cable to ensure a perfect watertight seal.
- Pre-set for looping connections with dedicated accessories to be ordered separately.
- Aluminium insertion boxes with horizontal or vertical development to be ordered separately.
- IP67
- IK09
- Class III

TARGETTI

MINI MERCURE LED

230V

- Inground linear fixture for monochromatic LEDs.
- Die Cast aluminium body anodized black. Anti-slip, flush, tempered safety glass, white silk-screen printed sealed to the fixture body.
- Resistant to static loads up to 12KN and dynamic loads up to 20KN.
- Integrated electronic driver. Precabled with H07RN-F (2x1,5mm^2) resinate cable to ensure a perfect watertight seal.
- Pre-set for looping connections with dedicated accessories to be ordered separately.
- Aluminium insertion boxes with horizontal or vertical development to be ordered separately.
- IP67
- IK09
- Class II

Type B in lengths per plans

Description

MINI MERCURE RGB

- Inground linear fixture for RGB multi-chip full color LEDs.
- Die Cast aluminium body anodized black. Anti-slip, flush, tempered safety glass, white silk-screen printed sealed to the fixture body.
- Resistant to static loads up to 12KN and dynamic loads up to 20KN.
- To be fed in constant voltage by a PWM technology driver available as accessory. Precabled with H07RN-F (2x1,5mm²) resinate cable to ensure a perfect watertight seal.
- Pre-set for looping connections with dedicated accessories to be ordered separately.
- Aluminium insertion boxes with horizontal or vertical development to be ordered separately.
- IP67
- IK09
- Class III

1,8 IP67

Technical data

LED Power	Power supply	LED Color	Code
10W	remote power supply	warm white 3000K	**1E2378**
10W	remote power supply	neutral white 4000K	**1E2379**
10W	remote power supply	RGB	**1E2381**
10W	integrated	warm white 3000K	**1E2384**
10W	integrated	neutral white 4000K	**1E2385**

Remote power supply

75W	24V	225x47x38 mm	IP67	**1T3586**
100W	24V	230x87x43 mm	IP67	**1T3587**
200W	24V	238x63x43 mm	IP67	**1T3588**

2x120W	**Controller DALI** 2x 5A 12/24V	**1T3589**
240W	**Controller 1-10V** 12/24V active/passive 1x 10A	**1T3590**
144W/ch	**Controller DMX RGB** 6A/ch 12/24V	**1T3591**

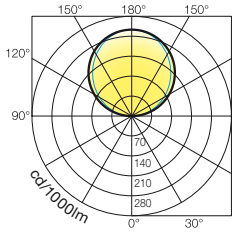
Controllers can only be used with the 24V-DC versions

Insertion Box

INSERTION BOX VERTICAL	**1E2382**
INSERTION BOX HORIZONTAL	**1E2383**

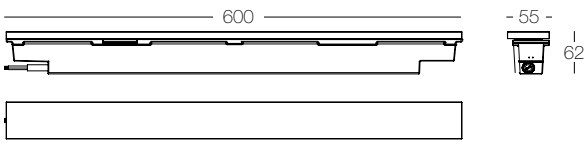
Photometric files

TS 775

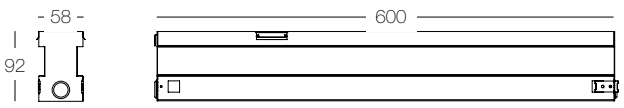


LED	Imax
α = 117° β = 128°	3000K WW 67 cd
	4000K NW 74 cd
	RGB 25 cd

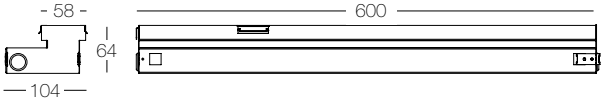
Drawings



INSERTION BOX VERTICAL



INSERTION BOX HORIZONTAL



TARGETTI

Type C,C1,C2

McGraw-Edison

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightBAR™ technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics
Choice of six patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature an IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

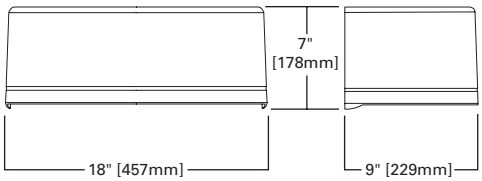
Mounting
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish
Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

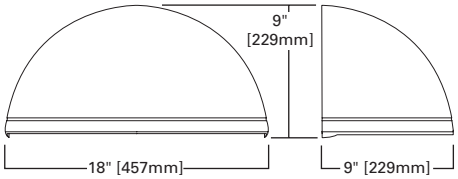
Warranty
Five-year warranty.

DIMENSIONS

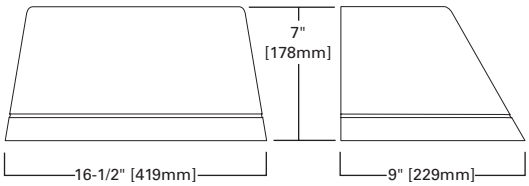
Cylinder



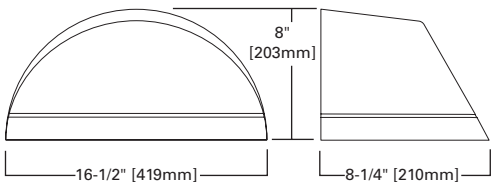
Quarter Sphere



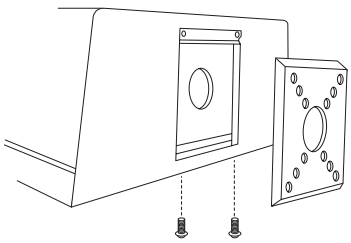
Trapezoid



Wedge



HOOK-N-LOCK MOUNTING



ISC/ISS/IST/ISW
IMPACT ELITE LED

1 - 2 LightBARs
Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA
UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
ISO 9001
DesignLights Consortium® Qualified*

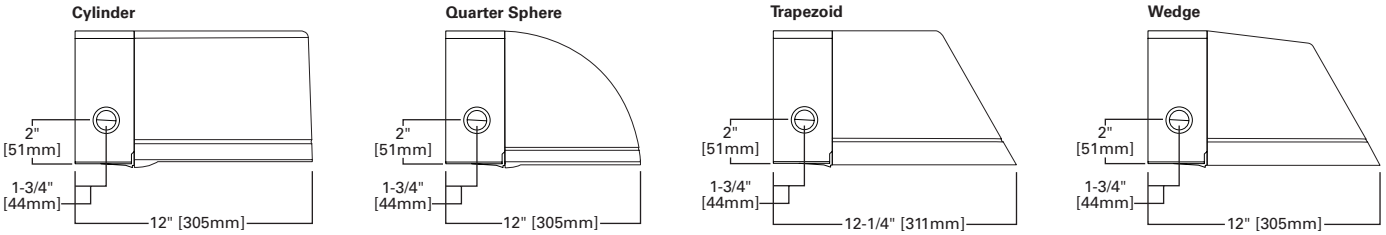
ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA
Approximate Net Weight:
18 lbs. (8 kgs.)

Powering Business Worldwide

*www.designlights.org

THRUWAY BACK BOX



POWER AND LUMENS BY BAR COUNT

Number of LightBARs		E01	E02	F01	F02
		21 LED LightBAR		7 LED LightBAR	
Drive Current		350mA		1A	
Power (Watts)	120-277V	25W	47W	26W	50W
Current (A)	120V	0.22	0.40	0.22	0.42
	277V	0.10	0.18	0.10	0.19
Power (Watts)	347V or 480V	31W	52W	32W	55W
Current (A)	347V	0.11	0.16	0.11	0.17
	480V	0.16	0.18	0.16	0.18
Optics					
BL2	Lumens	2,738	5,476	2,260	4,521
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
BL3	Lumens	2,702	5,405	2,231	4,462
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1
BL4	Lumens	2,613	5,225	2,157	4,313
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1
GZW	Lumens	2,785	5,570	2,299	4,598
	Bug Rating	B2-U0-G2	B3-U0-G3	B1-U0-G1	B2-U0-G2
SLR/SLL	Lumens	2,435	4,869	2,010	4,020
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G2

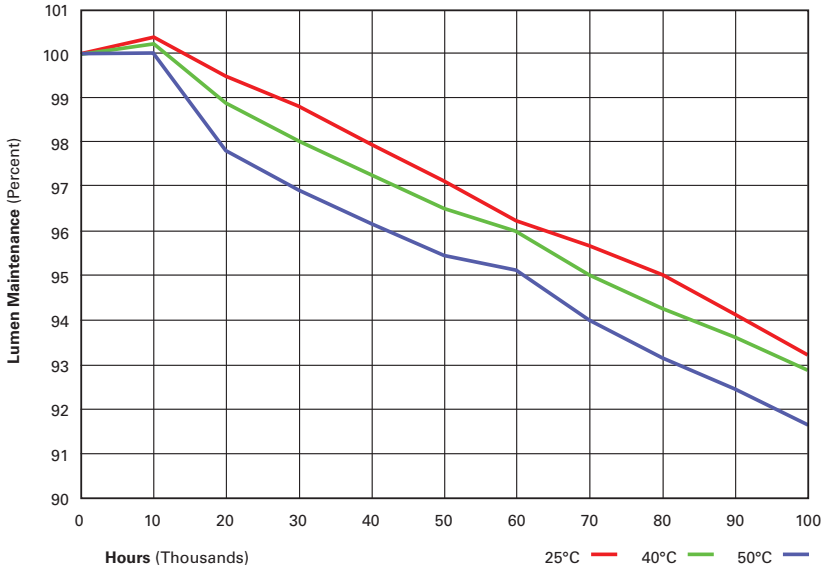
LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25ºC	> 99%	> 97%	> 96%	> 93%	> 450,000
40ºC	> 98%	> 97%	> 96%	> 92%	> 425,000
50ºC	> 97%	> 96%	> 95%	> 91%	> 400,000

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10ºC	1.02
15ºC	1.01
25ºC	1.00
40ºC	0.99



ORDERING INFORMATION

Sample Number: ISC-E02-LED-E1-BL3-GM

Product Family [1]	Number of LightBARs [2,3]	Lamp Type	Voltage	Distribution	Color [5]
ISC=Impact Elite LED Small Cylinder **ISS**=Impact Elite LED Small Quarter Sphere **IST**=Impact Elite LED Small Trapezoid **ISW**=Impact Elite LED Small Wedge	**E01**=(1) 21 LED LightBAR **E02**=(2) 21 LED LightBARs **F01**=(1) 7 LED LightBAR **F02**=(2) 7 LED LightBARs	**LED**=Solid State Light Emitting Diodes	**E1**=Electronic (120-277V) **347**=347V **480**=480V [4]	**BL2**=Type II w/Back Light Control **BL3**=Type III w/Back Light Control **BL4**=Type IV w/Back Light Control **GZW**=Wall Grazer Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	**Accessories** (Order Separately) [11]
2L=Two Circuits [6] **7030**=70 CRI / 3000K CCT [7] **7050**=70 CRI / 5000K CCT [7] **7060**=70 CRI / 5700K CCT [7] **8030**=80 CRI / 3000K CCT [7] **P**=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) **OSB**=Occupancy Sensor with Back Box (Specify 120V or 277V) [8] **BBB-XX**=Battery Pack with Back Box (Specify 120V or 277V) [9] **CWB-XX**=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) [10] **DIM**=0-10V Dimming Drivers **LCF**=LightBAR Cover Plate Matches Housing Finish **ULG**=Uplight Glow **TR**=Tamper Resistant Hardware	**MA1253**=10kV Circuit Module Replacement **MA1254-XX**=Thruway Back Box - Impact Elite Trapezoid **MA1255-XX**=Thruway Back Box - Impact Elite Cylinder **MA1256-XX**=Thruway Back Box - Impact Elite Quarter Sphere **MA1257-XX**=Thruway Back Box - Impact Elite Wedge

NOTES:
1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Standard 4000K CCT and greater than 70 CRI. LightBARs for downlight use only.
3. 21 LED LightBAR powered by 350mA and 7 LED LightBAR powered by 1A.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Custom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information.
6. Low-level output varies by bar count. Consult factory. Not available with 347V or 480V. Available with two bars (E02 or F02) only.
7. Extended lead times apply.
8. Available with E02 or F02, only one bar on street side will be wired to sensor. Time delay factory setting 15-minutes. When ordered with PC option, both bars are connected to photocontrol as primary switching means. Standard sensor lens covers 8' mounting height, 360° coverage, maximum 48' diameter. Not available in all configurations or with BBB or CWB options.
9. Specify 120V or 277V. LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory.
10. Specify 120V or 277V. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory.
11. Replace XX with color suffix.

Powering Business Worldwide

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

E

Portfolio

DESCRIPTION

4 inch LED recessed medium beam downlight with 50° cut off specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 900, 1300, 1800 and 2800 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Lower Shielding Reflector
Self-flanged, spun .050" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

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

Plaster Frame / Collar
New Construction Housing: Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

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

Junction Box
(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring.

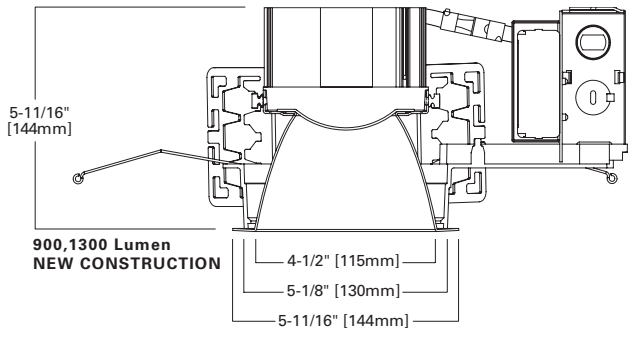
Thermal
Extruded aluminum heat sink conducts heat away from the LED module for optimal performance and long life.

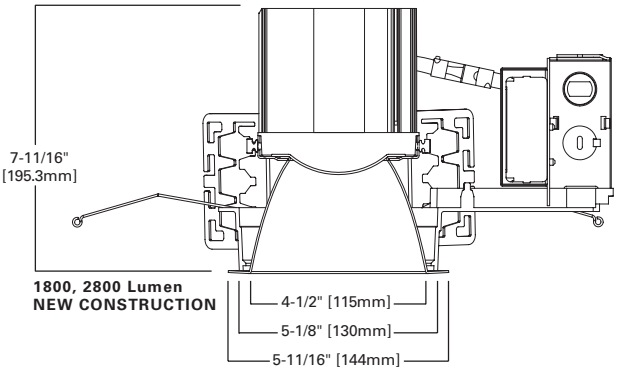
LED
LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting, thermally protected, LED's are turned off when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

Driver
Combination 120-277V 0-10V or 120V trailing edge phase cut driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture.

Code Compliance
Thermally protected and cULus listed for protected wet locations. IP66 rated when used with IP66 gasket kit accessory. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards.

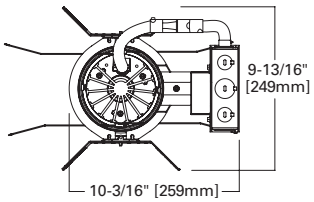
Warranty
5 year warranty.



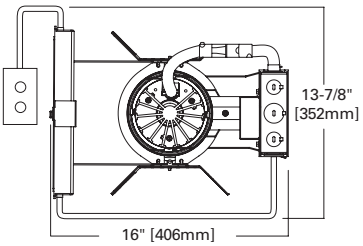


Note: Max Opening 4-3/8" [111mm]

TOP VIEW - NEW CONSTRUCTION



TOP VIEW - NEW CONSTRUCTION WITH BATTERY



LD4A09 LD4A13 LD4A18 LD4A28 4LM

900, 1300 Lumen LED

1800, 2800 Lumen LED

4-Inch

Medium Beam Downlight

New Construction

Refer to ENERGY STAR® Qualified Products List.

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Powering Business Worldwide

ORDERING INFORMATION

EXAMPLE: LD4A13D010TE ERM4A13835 4LM0LI=4" LED Medium Beam Reflector Lens, 1300 lumen, 3,500 K Color with Universal 120 - 277V, 0 - 10 Driver

Housing

LD4A=4" Aperture
LD4ACP=4" Aperture, Chicago Plenum

Lumens[1]

09=900 Lumens
13=1300 Lumens
18=1800 Lumens
28=2800 Lumens

Driver

900, 1300, 1800 and 2800 Lumen
D010TE=120-277V 0-10V 10% Dimming or Trailing Edge 120V Dimming
D5LT=Fifth Light® (DALI) 0% Dimming
DE010=1 to 100% Dimming, 120-277V 50/60Hz, 0-10V
DL3=1 to 100% Dimming, 120-277V Lutron® Hi-Lume, Ecosystem or 3 Wire
DLT=Hi-Lume Forward Phase 2-wire Dimming 120V
DMX=DMX 0% Dimming

900, 1300 and 1800 Lumen
D010TR=120-277V 0-10V 10% Dimming or Leading Edge 120V Dimming

Options[3, 4]

EMBOD=7W Bodine® Emergency Module with Remote Test Switch
IEMBOD=7W Bodine® Emergency Module with Integral Test Switch
EM7=7W Emergency Module with Remote Test Switch
EM14=14W Emergency Module with Remote Test Switch
IEM7=7W Emergency Module with Integral Test Switch
IEM14=14W Emergency Module with Integral Test Switch

Power Module

ERM4A09=4", 900 Lumen Module for Medium Beam Reflector
ERM4A13=4", 1300 Lumen Module for Medium Beam Reflector
ERM4A18=4", 1800 Lumen Module for Medium Beam Reflector
ERM4A28=4", 2800 Lumen Module for Medium Beam Reflector

CRI

8=80 CRI
9=90 CRI

Color

27=2700° K
30=3000° K
35=3500° K
40=4000° K
27CP=2700° K, Chicago Plenum
30CP=3000° K, Chicago Plenum
35CP=3500° K, Chicago Plenum
40CP=4000° K, Chicago Plenum

Reflector

4LM0=4" Medium Reflector Lens Assembly, White Polymer Trim Ring
4LM1=4" Medium Reflector, Self-flanged
4LM0E=4" Medium Reflector Lens Assembly, White Polymer Trim Ring for Integral Emergency Option
4LM1E=4" Medium Reflector Self-flanged for Integral Emergency Option

Finish

LI=Specular Clear
H=Semi-Specular Clear
WMH=Warm Haze
G=Specular Gold
WH=Wheat
WHH=Wheat Haze
GP=Graphite
GPH=Graphite Haze

B=Specular Black
W=Gloss White

4LM0 Only
BB=Black Baffle
WB=White Baffle

Options

Self-flanged Only
WF= White Painted Flange

Accessories

HB26=C-channel Bar Hanger, 26" Long, Pair
HB50=C-channel Bar Hanger, 50" Long, Pair
RMB22=Wood Joist Bar Hanger, 22" Long, Pair
H347= 347 to 120V Step Down Transformer, 75VA
H347200=347 to 120V Step Down Transformer, 200VA
TRM4P= Metal Trim Ring, White[2]
TRM4MB=Metal Trim Ring, Black[2]
TRR4=Rimless Trim Ring[2]
LGSKT4IP66=IP66 Gasket Kit

Notes: **1** Nominal Lumens will vary depending on selected color, driver and reflector finish.
2 Order trim with polymer trim ring (Consult specification sheet for color ordering information and options)

ENERGY

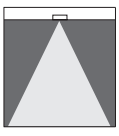
ENERGY DATA			
Sound Rating: Class A standards			
(Values at non-dimming line voltage)			
Minimum Starting Temperature: -30°C (-22°F)			
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)			
Input Voltage: UNV (120V - 277V)			
Power Factor: >0.90 (at nominal input 120-277 VAC & 100% of Rated Output Power)			
2800 Lumen D010TE		**1800 Lumen D010TE**	
Input Power: 43.4W	THD: <17%	Input Power: 31.5W	THD: <20%
120V Input Current: .36A	277V Input Current: .16A	120V Input Current: .27A	277V Input Current: .06A
Maximum Non-IC Ambient Continuous		Maximum Non-IC Ambient Continuous	
Input Frequency: 50/60Hz		Input Frequency: 50/60Hz	

1300 Lumen D010TE		**900 Lumen D010TE**	
Input Power: 22.4W	THD: <20%	Input Power: 14.1W	THD: <20%
120V Input Current: .12A	277V Input Current: .09A	120V Input Current: .12A	277V Input Current: .06A
Maximum Non-IC Ambient Continuous		Maximum Non-IC Ambient Continuous	
Input Frequency: 50/60Hz		Input Frequency: 50/60Hz	

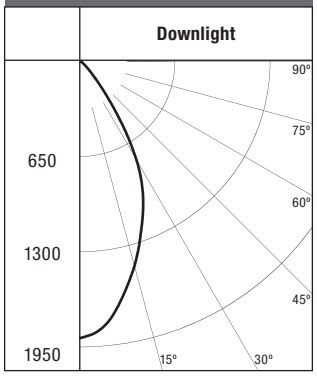
	120V		277V	
Lumens	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
900/1000	0.486	0.4	0.848	0.182
1300/1500	0.717	1.58	0.531	1.24
1800/2000	0.832	0.405	1.25	0.788
2800/3000	1.09	0.3	1.23	0.294

PHOTOMETRICS

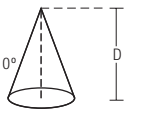
Test Number	P133802
Platform	LD4A13D010TE
Element	ERM4A13835 4LM1H
Lumens	1453
Efficacy	64.3 Lm/W
SC	0.8



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



D	FC	L	W
5.5'	62	4.2	4.2
7'	38	5.4	5.4
8'	29	6.2	6.2
9'	23	7	7
10'	19	7.8	7.8
12'	13	9.4	9.4

CANDELA TABLE

Degrees Vertical	Candela
0	1879
5	1814
15	1447
25	1032
35	467
45	105
55	19
65	7
75	2
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30	1039	71.5
0-40	1334	91.8
0-60	1445	99.4
0-90	1453	100.0
90-180	0	0.0
0-180	1453	100.0

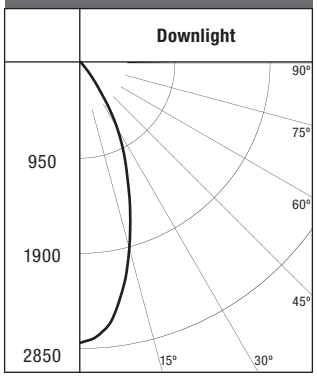
LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	14513
55	3296
65	1499
75	602
85	0

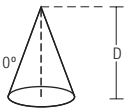
PHOTOMETRICS

Test Number	P133714
Platform	LD4A13D010TE
Element	ERM4A13835 4LM1LI
Lumens	1558
Efficacy	68.9 Lm/W
SC	0.7

CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



D	FC	L	W
5.5'	92	3.6	3.6
7'	57	4.6	4.6
8'	44	5.2	5.2
9'	34	5.8	5.8
10'	28	6.6	6.6
12'	19	7.8	7.8

CANDELA TABLE

Degrees Vertical	Candela
0	2787
5	2682
15	1930
25	1088
35	369
45	27
55	0
65	0
75	0
85	0
90	0

ZONAL LUMEN SUMMARY

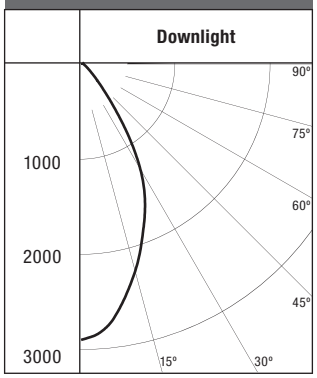
Zone	Lumens	%Fixture
0-30	1277	82.0
0-40	1522	97.7
0-60	1555	99.8
0-90	1558	100.0
90-180	0	0.0
0-180	1558	100.0

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	3694
55	0
65	0
75	0
85	0

Test Number	P133834
Platform	LD4A18D010TE
Element	ERM4A18835 4LM1H
Lumens	2218
Efficacy	67.6 Lm/W
SC	0.8

CANDLEPOWER DISTRIBUTION



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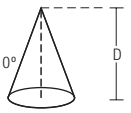


D	FC	L	W
5.5'	95	4.2	4.2
7'	59	5.4	5.4
8'	45	6.2	6.2
9'	35	7	7
10'	29	7.8	7.8
12'	20	9.4	9.4

CANDELA TABLE

Degrees Vertical	Candela
0	2868
5	2770
15	2208
25	1575
35	712
45	161
55	30
65	10
75	3
85	0
90	0

ZONAL LUMEN SUMMARY

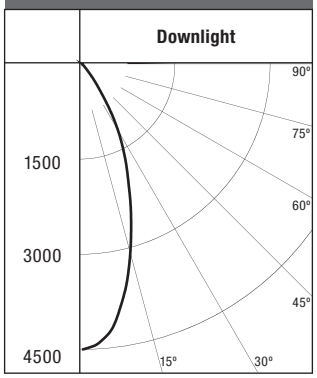
Zone	Lumens	%Fixture
0-30	1585	71.5
0-40	2037	91.8
0-60	2205	99.4
0-90	2218	100.0
90-180	0	0.0
0-180	2218	100.0

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	22149
55	5046
65	2283
75	941
85	0

Test Number	P133746
Platform	LD4A18D010TE
Element	ERM4A18835 4LM1LI
Lumens	2507
Efficacy	76.4 Lm/W
SC	0.7

CANDLEPOWER DISTRIBUTION



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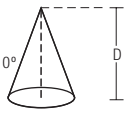


D	FC	L	W
5.5'	148	3.6	3.6
7'	92	4.6	4.6
8'	70	5.2	5.2
9'	55	5.8	5.8
10'	45	6.6	6.6
12'	31	7.8	7.8

CANDELA TABLE

Degrees Vertical	Candela
0	4483
5	4316
15	3105
25	1751
35	594
45	43
55	0
65	0
75	0
85	0
90	0

ZONAL LUMEN SUMMARY

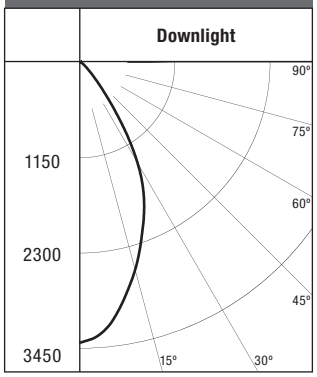
Zone	Lumens	%Fixture
0-30	2055	82.0
0-40	2449	97.7
0-60	2503	99.8
0-90	2507	100.0
90-180	0	0.0
0-180	2507	100.0

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	5954
55	0
65	0
75	0
85	0

Test Number	P133858
Platform	LD4A28D010TE
Element	ERM4A28835 4LM1H
Lumens	2599
Efficacy	57.2 Lm/W
SC	0.8

CANDLEPOWER DISTRIBUTION



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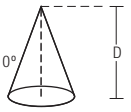


D	FC	L	W
5.5'	111	4.2	4.2
7'	67	5.4	5.4
8'	53	6.2	6.2
9'	42	7	7
10'	34	7.8	7.8
12'	23	9.4	9.4

CANDELA TABLE

Degrees Vertical	Candela
0	3361
5	3245
15	2587
25	1845
35	834
45	188
55	35
65	12
75	3
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30	1857	71.5
0-40	2386	91.8
0-60	2584	99.4
0-90	2599	100.0
90-180	0	0.0
0-180	2599	100.0

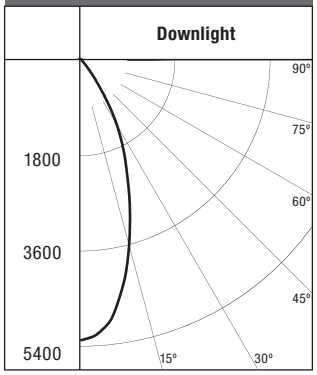
LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	25953
55	5913
65	2675
75	1092
85	0

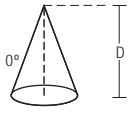
PHOTOMETRICS

Test Number	P133770
Platform	LD4A28D010TE
Element	ERM4A28835 4LM1LI
Lumens	2937
Efficacy	64.7 Lm/W
SC	0.7

CANDLEPOWER DISTRIBUTION



CONE OF LIGHT



D	FC	L	W
5.5'	174	3.6	3.6
7'	107	4.6	4.6
8'	82	5.2	5.2
9'	65	5.8	5.8
10'	53	6.6	6.6
12'	37	7.8	7.8

CANDELA TABLE

Degrees Vertical	Candela
0	5253
5	5057
15	3638
25	2052
35	696
45	51
55	0
65	0
75	0
85	0
90	0

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30	2408	82.0
0-40	2870	97.7
0-60	2932	99.8
0-90	2937	100.0
90-180	0	0.0
0-180	2937	100.0

LUMINANCE

Average Candela Degrees	Average 0° Luminance
45	6974
55	0
65	0
75	0
85	0

EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
900/1000	0.50	0.99
1300/1500	0.29	0.57
1800/2000	0.22	0.44
2800/3000	0.16	0.32

The E1 AT UNDERGROUND GARAGE DOOR

wet BEAM4 LED SURFACE MOUNT

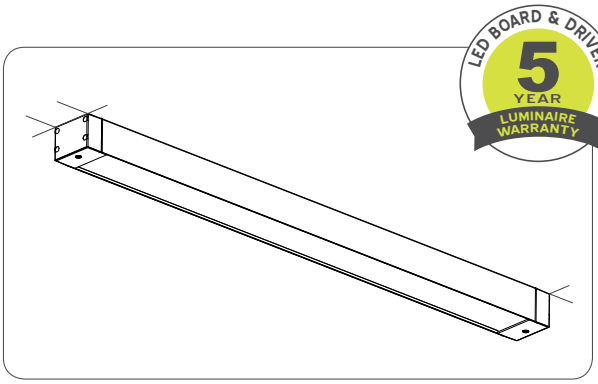
ÉCLAIRAGE axis LIGHTING
1.800.263.AXIS
[T] 514.948.6272
[F] 514.948.6271
www.axislighting.com

PROJECT INFORMATION

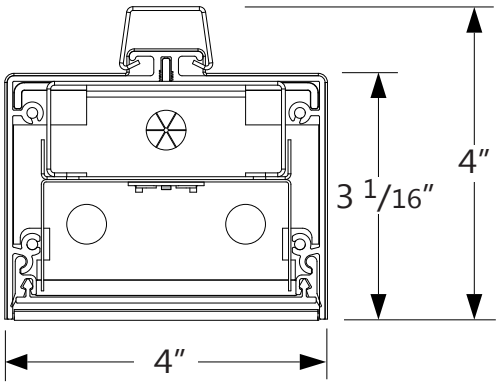
Project:

Type:

Notes:



DIMENSIONS -SECTION VIEWS



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY
500 lm/ft	5.5 W/ft	91 lm/W
750 lm/ft	8.3 W/ft	90 lm/W

Please consult factory for custom lumen output and wattage.

MidFlex

ORDERING CODE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

PRODUCT SPECIFICATIONS

1 PRODUCT ID	2 VERSION	3 LIGHT ENGINE	4 NOM.LUMENS/FT	5 CRI	6 COLOR TEMP.	7 SHIELDING	8 LENGTH (FT)
WBSLED surface led	**B3** version 3	**MF** mid flex LED	**500** 500 lm/ft	**80** 80 CRI	**30** 3000 K	**S** satin lens	**2** 2′
			750 750 lm/ft	**90** 90 CRI (1)	**35** 3500 K		**3** 3′
					40 4000 K		**4** 4′
							5 5′
							8 8′
							S# System Run
				(1) Please consult factory			

9 FINISH	10 VOLTAGE	11 DRIVER	12 CIRCUITS	13 MOUNTING/SUSPENSION
AP aluminum paint	**120** 120 V	**D** dimming (0-10V) standard (2)	**1** 1 circuit	**S** surface drywall ceiling
W white	**277** 277 V	**LT** lutron (3)	**2** 2 circuits	**SB** surface t-bar ceiling
C custom	**347** 347 V	**BI** bi-level dimming (4)	**+E(#)** emergency circuit(6)	**SC** surface solid ceiling
	UNV universal	**O** other (5)	**+NL(#)** night light circuit(6)	
			+GTD(#) generator transfer device(6)	
		(2) Standard with LED; operating up to -20°C (3) Operating up to 0°C (4) Operating up to -20°C (5) Please consult factory	(6) Specify quantity	

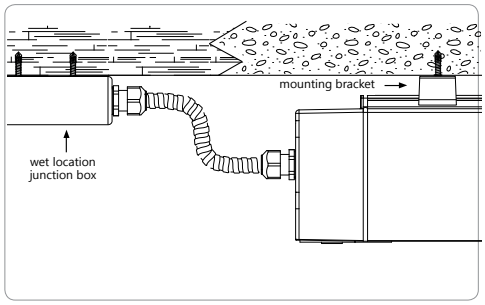
14 BATTERY (OPTIONAL)	15 OTHER (OPTIONAL)	16 CUSTOM (OPTIONAL)
B# battery pack (integral)	**F** fuse (7)	**C** custom
	TF top feed	
	EF end feed	
Requires 120V or 277V Please consult factory	(7) Requires 120V or 277V	Please specify

FILE NAME:WBS.LED-B3.SPEC September 1, 2015

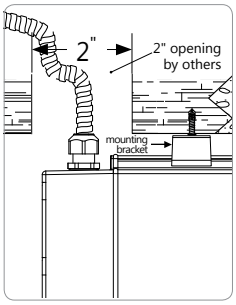
ÉCLAIRAGE axis LIGHTING
1.800.263.AXIS
[T] 514.948.6272
[F] 514.948.6271
www.axislighting.com

MOUNTING OPTIONS

SC **SURFACE SOLID CEILING**



Power end feed



Power top feed

OTHER MOUNTING OPTIONS

WET BEAM is available with recessed, pendant, and wall mounted options.

SPECIFICATIONS

CONSTRUCTION

Housing	Extruded Aluminum (0.062'' nominal) Up to 70% Recycled Content
End Cap	Die Cast Zinc (0.070" nominal)
Interior Brackets	Die Formed Sheet Steel (16 ga)
Gaskets	Moulded Elastomer (0.100" nominal)
Lens Gaskets	Extruded Elastomer (0.045" nominal)
Frosted Lens	Frosted Acrylic 68% transmissive

ELECTRICAL

Lutron driver	L3D - Hi-Lume A-Series EcoSystem 3-Wire Control (1%) LDE1 - EcoSystem H-Series (1%) LDE5 - EcoSystem 5-Series (5%) LTE - Hi-Lume® A-series 2Wires Forward Phase (1%)
Other drivers	DALI - Digital Addressable Lighting Interface DMX - Digital Multiplex ELV - Electronic Low Voltage dimming LV - line voltage - Advance Mark 10 redwood - Building Intelligence Platform Xitanium SR - For wireless sensor
Emergency	Integral emergency battery pack or emergency circuit optional.
Input Voltage	120V, 277V, 347V, UNV.

Incorporating these components may have limitations or effect the length of the luminaire, please contact factory for more details.

WARRANTY

Axis lighting will warrant defective LEDs, boards, and drivers for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specifications. If defective, Axis will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Axis.

OPTICS

SATIN LENS
PMMA satin finish (0.060" nominal) 68% trans.

S satin lens

WEIGHT

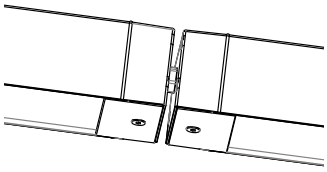
4 ft	12.8 lbs / 5.8 kg
8 ft	24.5 lbs / 11.1 kg

GASKETTED FIXTURE

With its gasketted end cap and lens the Wet Beam is made for wet locations, and is ideal for exterior soffits and canopies of malls, hospitals and other institutions.

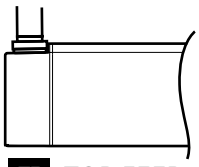
JOINER SYSTEM

Wet Beam modular system consist of smaller modules joined and gasketted together allowing for system runs in lengths of 4' and 8' as well as custom lengths up to 8'.

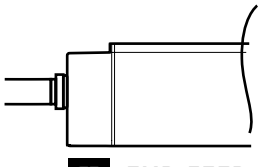


* For continuous rows allow 2" for connectors between each fixture.

POWER FEED



TF **TOP FEED**



EF **END FEED**

FINISH

Aluminum paint, Powder Coated and custom finishes are also available.

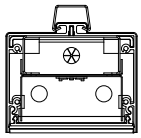
APPROVALS

Certified wet locations to UL and CUL standards

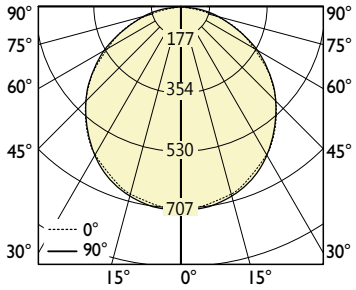
Row configuration, specification sheets and mounting spacing guides are available for download at: www.axislighting.com

ÉCLAIRAGE axis LIGHTING
1.800.263.AXIS
[T] 514.948.6272
[F] 514.948.6271
www.axislighting.com

500 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 500 lm/ft
Input Watts: 5.5 W/ft
Efficacy: 91 lm/W
IES FILE: WBSLED-B3-MF-500-80-35-S.IES

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles				
Vertical Angle	0	22.5	45	67.5	90
0	704	704	704	704	704
5	697	701	700	703	706
15	672	677	677	679	682
25	623	626	627	628	631
35	552	555	555	554	555
45	465	466	466	465	465
55	363	365	364	362	361
65	249	250	249	246	244
75	129	130	126	123	121
85	29	25	20	17	16
90	0	0	0	0	0

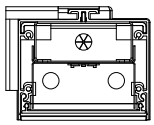
ZONAL LUMENS

	Lumens
Zone	
0	
0-10	67
10-20	191
20-30	289
30-40	347
40-50	359
50-60	324
60-70	245
70-80	133
80-90	28
90	

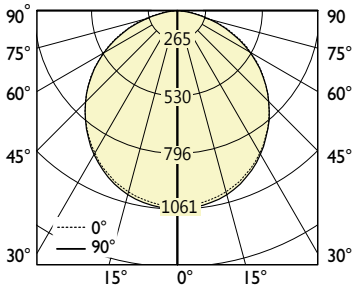
LUMINANCE DATA (CD/M²)

	Horizontal Angles		
Vertical Angle	0	45	90
45	5567	5579	5567
55	5357	5372	5328
65	4987	4987	4887
75	4219	4121	3957
85	2817	1942	1554

750 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 750 lm/ft
Input Watts: 8.3 W/ft
Efficacy: 90 lm/W
IES FILE: WBSLED-B3-MF-750-80-35-S.IES

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

	Horizontal Angles				
Vertical Angle	0	22.5	45	67.5	90
0	1056	1056	1056	1056	1056
5	1046	1052	1050	1055	1059
15	1008	1016	1016	1019	1023
25	935	939	941	942	947
35	828	833	833	831	833
45	698	699	699	698	698
55	545	548	546	543	542
65	374	375	374	369	366
75	194	195	189	185	182
85	44	38	30	26	24
90	0	0	0	0	0

ZONAL LUMENS

	Lumens
Zone	
0	
0-10	100
10-20	287
20-30	433
30-40	520
40-50	539
50-60	486
60-70	368
70-80	200
80-90	43
90	

LUMINANCE DATA (CD/M²)

	Horizontal Angles		
Vertical Angle	0	45	90
45	8350	8368	8350
55	8036	8058	7992
65	7481	7481	7331
75	6329	6181	5936
85	4225	2914	2331

Cree Edge™ Series

LED Area/Flood Luminaire

Product Description

The Cree Edge™ Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.
Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

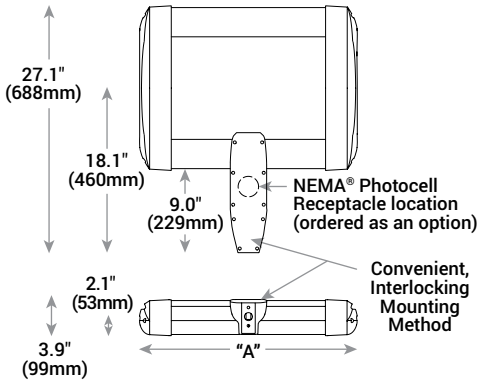
- Patented NanoOptic® Product Technology
- Made in the U.S.A. of U.S. and imported parts
- **CRI:** Minimum 70 CRI
- **CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard
- **Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

† See www.cree.com/lighting/products/warranty for warranty terms

Accessories

Field-Installed	
Bird Spikes XA-BRDSPK **Hand-Held Remote** XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	**Backlight Control Shields** XA-20BLS-4 - Four-pack - Unpainted stainless steel

DA Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

AA/DL/SA Mount - see page 22 for weight & dimensions

Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

					E				
Product	**Optic**			**Mounting***	**LED Count (x10)**	**Series**	**Voltage**	**Color Options**	**Drive Current**	**Options**
ARE-EDG	**2M** Type II Medium **2MB** Type II Medium w/BLS **2MP** Type II Medium w/ Partial BLS **3M** Type III Medium	**3MB** Type III Medium w/BLS **3MP** Type III Medium w/Partial BLS **4M** Type IV Medium **4MB** Type IV Medium w/BLS	**4MP** Type IV Medium w/Partial BLS **5M** Type V Medium **5S** Type V Short	**AA** Adjustable Arm **DA** Direct Arm **DL** Direct Long Arm **SA** Side Arm - Available with 20-60 LEDs	**02** **04** **06** **08** **10** **12** **14** **16**	**E**	**UL** Universal 120-277V **UH** Universal 347-480V	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**350** 350mA **525** 525mA **700** 700mA - Available with 20-60 LEDs	**DIM** **0-10V Dimming** - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current **F** **Fuse** - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - When code dictates fusing, use time delay fuse **HL** **Hi/Low (Dual Circuit Input)** - Refer to HL spec sheet for details - Sensor not included **ML** **Multi-Level** - Refer to ML spec sheet for details - Intended for downlight applications at 0˚ tilt **P** **Photocell** - Refer to ML spec sheet for availability with ML options - Available with UL voltage only **PML** **Programmable Multi-Level, 20-40' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0˚ tilt **PML2** **Programmable Multi-Level, 10-30' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0˚ tilt **R** **NEMA® Photocell Receptacle** - Intended for downlight applications with maximum 45˚ tilt - Photocell by others - Refer to ML spec sheet for availability with ML options **40K** **4000K Color Temperature** - Minimum 70 CRI - Color temperature per luminaire
FLD-EDG	**25** 25˚ Flood **40** 40˚ Flood	**70** 70˚ Flood **SN** Sign	**N6** NEMA® 6							

* Reference EPA and pole configuration suitability data beginning on page 19
NOTE: Price adder may apply depending on configuration

US: www.cree.com/lighting T (800) 236-6800 F (262) 504-5415
Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga–20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **Maximium 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15 standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified. Exceptions apply when ordered with full backlight control or 3MP optic with 20 LEDs. Please refer to www.designlights.org/QPL for most current information
- Meets Buy American requirements within ARRA

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current					
		120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0.35
16	179	1.49	0.87	0.77	0.68	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
08	133	1.13	0.66	0.58	0.51	0.39	0.28
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25˚C (77˚F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF)[1]

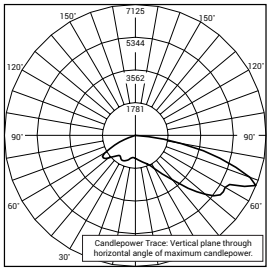
Ambient	Initial LMF	25K hr Projected[2] LMF	50K hr Projected[2] LMF	75K hr Calculated[3] LMF	100K hr Calculated[3] LMF
5˚C (41˚F)	1.04	0.99	0.97	0.95	0.93
10˚C (50˚F)	1.03	0.98	0.96	0.94	0.92
15˚C (59˚F)	1.02	0.97	0.95	0.93	0.91
20˚C (68˚F)	1.01	0.96	0.94	0.92	0.90
25˚C (77˚F)	1.00	0.95	0.93	0.91	0.89

[1] Lumen maintenance values at 25˚C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing
[2] In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)
[3] In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

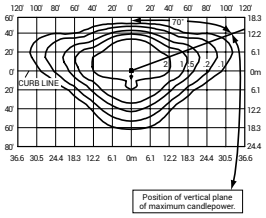
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2M



CSA Test Report #: 6371
ARE-EDG-2M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,985



ARE-EDG-2M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,710
Initial FC at grade

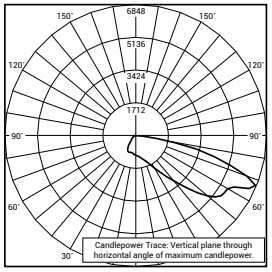
Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,138	B1 U0 G1	2,220	B1 U0 G1
04	4,276	B1 U0 G1	4,440	B1 U0 G1
06	6,340	B2 U0 G1	6,584	B2 U0 G2
08	8,454	B2 U0 G2	8,779	B2 U0 G2
10	10,542	B2 U0 G2	10,947	B2 U0 G2
12	12,650	B2 U0 G2	13,137	B3 U0 G3
14	14,665	B3 U0 G3	15,229	B3 U0 G3
16	16,760	B3 U0 G3	17,405	B3 U0 G3
525mA				
02	2,993	B1 U0 G1	3,108	B1 U0 G1
04	5,986	B2 U0 G1	6,216	B2 U0 G1
06	8,876	B2 U0 G2	9,218	B2 U0 G2
08	11,835	B2 U0 G2	12,290	B2 U0 G2
10	14,759	B3 U0 G3	15,326	B3 U0 G3
12	17,710	B3 U0 G3	18,391	B3 U0 G3
14	20,531	B3 U0 G3	21,321	B3 U0 G3
16	23,464	B3 U0 G3	24,367	B3 U0 G3
700mA				
02	3,656	B1 U0 G1	3,796	B1 U0 G1
04	7,311	B2 U0 G2	7,593	B2 U0 G2
06	10,842	B2 U0 G2	11,259	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

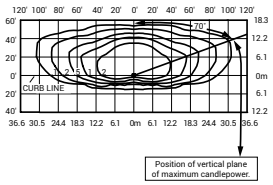
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2MB



CSA Test Report #: 6447
ARE-EDG-2MB-**-06-E-UL-700-40K
Initial Delivered Lumens: 7,953



ARE-EDG-2MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,340
Initial FC at grade

Type II Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,610	B0 U0 G1	1,672	B0 U0 G1
04	3,221	B0 U0 G1	3,345	B0 U0 G1
06	4,776	B1 U0 G1	4,959	B1 U0 G1
08	6,368	B1 U0 G1	6,613	B1 U0 G2
10	7,941	B1 U0 G2	8,246	B1 U0 G2
12	9,529	B1 U0 G2	9,895	B1 U0 G2
14	11,046	B1 U0 G2	11,471	B1 U0 G2
16	12,624	B1 U0 G2	13,110	B1 U0 G2
525mA				
02	2,254	B0 U0 G1	2,341	B0 U0 G1
04	4,509	B1 U0 G1	4,682	B1 U0 G1
06	6,686	B1 U0 G2	6,943	B1 U0 G2
08	8,915	B1 U0 G2	9,258	B1 U0 G2
10	11,117	B1 U0 G2	11,544	B1 U0 G2
12	13,340	B1 U0 G2	13,853	B1 U0 G2
14	15,465	B2 U0 G2	16,060	B2 U0 G3
16	17,674	B2 U0 G3	18,354	B2 U0 G3
700mA				
02	2,754	B0 U0 G1	2,860	B0 U0 G1
04	5,507	B1 U0 G1	5,719	B1 U0 G1
06	8,167	B1 U0 G2	8,481	B1 U0 G2

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Photometry

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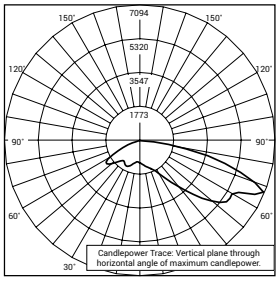
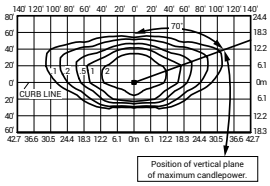
2MP



CSA Test Report #: 6361
ARE-EDG-2MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,912



ARE-EDG-2MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,640
Initial FC at grade

Type II Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,888	B1 U0 G1	1,961	B1 U0 G1
04	3,776	B1 U0 G1	3,921	B1 U0 G1
06	5,599	B1 U0 G1	5,815	B1 U0 G1
08	7,466	B2 U0 G2	7,753	B2 U0 G2
10	9,310	B2 U0 G2	9,668	B2 U0 G2
12	11,172	B2 U0 G2	11,601	B2 U0 G2
14	12,951	B2 U0 G2	13,449	B2 U0 G2
16	14,801	B2 U0 G2	15,370	B2 U0 G3
525mA				
02	2,643	B1 U0 G1	2,745	B1 U0 G1
04	5,286	B1 U0 G1	5,490	B1 U0 G1
06	7,839	B2 U0 G2	8,140	B2 U0 G2
08	10,452	B2 U0 G2	10,854	B2 U0 G2
10	13,034	B2 U0 G2	13,535	B2 U0 G2
12	15,640	B2 U0 G3	16,242	B3 U0 G3
14	18,131	B3 U0 G3	18,829	B3 U0 G3
16	20,722	B3 U0 G3	21,519	B3 U0 G3
700mA				
02	3,228	B1 U0 G1	3,353	B1 U0 G1
04	6,457	B2 U0 G1	6,705	B2 U0 G1
06	9,575	B2 U0 G2	9,943	B2 U0 G2

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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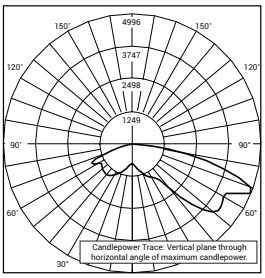
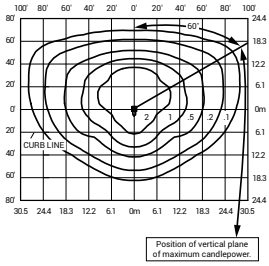
3M



CSA Test Report #: 6401
ARE-EDG-3M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,657



ARE-EDG-3M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,790
Initial FC at grade

Type III Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,027	B1 U0 G1	2,105	B1 U0 G1
04	4,054	B1 U0 G1	4,209	B1 U0 G1
06	6,011	B2 U0 G2	6,242	B2 U0 G2
08	8,015	B2 U0 G2	8,323	B2 U0 G2
10	9,994	B3 U0 G3	10,379	B3 U0 G3
12	11,993	B3 U0 G3	12,454	B3 U0 G3
14	13,903	B3 U0 G3	14,438	B3 U0 G3
16	15,889	B3 U0 G3	16,501	B3 U0 G3
525mA				
02	2,837	B1 U0 G1	2,947	B1 U0 G1
04	5,675	B2 U0 G2	5,893	B2 U0 G2
06	8,415	B2 U0 G2	8,739	B2 U0 G2
08	11,220	B3 U0 G3	11,652	B3 U0 G3
10	13,992	B3 U0 G3	14,530	B3 U0 G3
12	16,790	B3 U0 G3	17,436	B3 U0 G3
14	19,465	B3 U0 G3	20,213	B3 U0 G3
16	22,245	B3 U0 G3	23,101	B3 U0 G3
700mA				
02	3,466	B1 U0 G1	3,599	B1 U0 G1
04	6,932	B2 U0 G2	7,198	B2 U0 G2
06	10,279	B3 U0 G3	10,674	B3 U0 G3

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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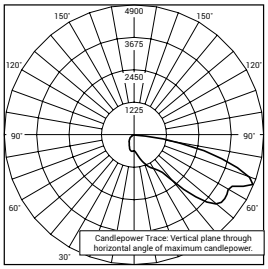
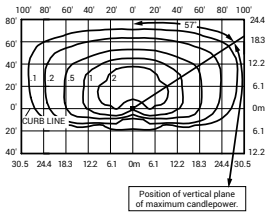
3MB



CSA Test Report #: 6448
ARE-EDG-3MB-**-06-E-UL-700
Initial Delivered Lumens: 7,740



ARE-EDG-3MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,420
Initial FC at grade

Type III Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,499	B1 U0 G1	1,557	B1 U0 G1
04	2,999	B1 U0 G1	3,114	B1 U0 G1
06	4,446	B1 U0 G1	4,617	B1 U0 G1
08	5,929	B1 U0 G2	6,157	B1 U0 G2
10	7,393	B1 U0 G2	7,677	B1 U0 G2
12	8,872	B1 U0 G2	9,213	B1 U0 G2
14	10,285	B1 U0 G2	10,680	B1 U0 G2
16	11,754	B1 U0 G3	12,206	B1 U0 G3
525mA				
02	2,099	B1 U0 G1	2,180	B1 U0 G1
04	4,198	B1 U0 G1	4,359	B1 U0 G1
06	6,225	B1 U0 G2	6,464	B1 U0 G2
08	8,300	B1 U0 G2	8,619	B1 U0 G2
10	10,350	B1 U0 G2	10,748	B1 U0 G2
12	12,420	B1 U0 G3	12,898	B1 U0 G3
14	14,398	B1 U0 G3	14,952	B2 U0 G3
16	16,455	B2 U0 G3	17,088	B2 U0 G3
700mA				
02	2,564	B1 U0 G1	2,662	B1 U0 G1
04	5,127	B1 U0 G2	5,325	B1 U0 G2
06	7,603	B1 U0 G2	7,896	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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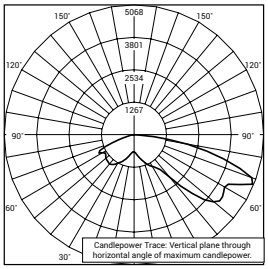
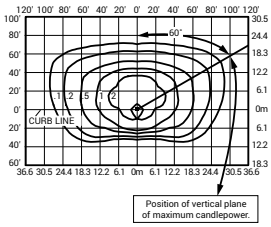
3MP



CSA Test Report #: 6385
ARE-EDG-3MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,619



ARE-EDG-3MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 14,720
Initial FC at grade

Type III Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,777	B1 U0 G1	1,845	B1 U0 G1
04	3,554	B1 U0 G1	3,690	B1 U0 G1
06	5,270	B1 U0 G2	5,473	B1 U0 G2
08	7,026	B2 U0 G2	7,297	B2 U0 G2
10	8,762	B2 U0 G2	9,099	B2 U0 G2
12	10,514	B2 U0 G3	10,919	B2 U0 G3
14	12,189	B2 U0 G3	12,658	B2 U0 G3
16	13,930	B3 U0 G3	14,466	B3 U0 G3
525mA				
02	2,488	B1 U0 G1	2,583	B1 U0 G1
04	4,975	B1 U0 G2	5,167	B1 U0 G2
06	7,378	B2 U0 G2	7,662	B2 U0 G2
08	9,837	B2 U0 G2	10,215	B2 U0 G2
10	12,267	B2 U0 G3	12,739	B2 U0 G3
12	14,720	B3 U0 G3	15,286	B3 U0 G3
14	17,065	B3 U0 G3	17,721	B3 U0 G3
16	19,503	B3 U0 G3	20,253	B3 U0 G3
700mA				
02	3,039	B1 U0 G1	3,155	B1 U0 G1
04	6,077	B1 U0 G2	6,311	B1 U0 G2
06	9,011	B2 U0 G2	9,358	B2 U0 G2

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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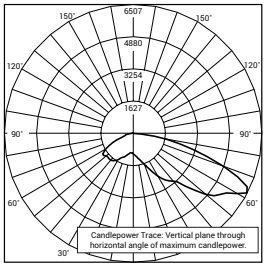
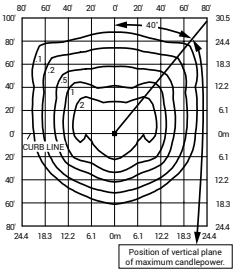
4M



CSA Test Report #: 6438
ARE-EDG-4M-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,367



ARE-EDG-4M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,710
Initial FC at grade

Type IV Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,138	B1 U0 G1	2,220	B1 U0 G1
04	4,276	B1 U0 G1	4,440	B1 U0 G1
06	6,340	B2 U0 G2	6,584	B2 U0 G2
08	8,454	B2 U0 G2	8,779	B2 U0 G2
10	10,542	B2 U0 G2	10,947	B2 U0 G2
12	12,650	B3 U0 G3	13,137	B3 U0 G3
14	14,665	B3 U0 G3	15,229	B3 U0 G3
16	16,760	B3 U0 G3	17,405	B3 U0 G3
525mA				
02	2,993	B1 U0 G1	3,108	B1 U0 G1
04	5,986	B2 U0 G1	6,216	B2 U0 G2
06	8,876	B2 U0 G2	9,218	B2 U0 G2
08	11,835	B2 U0 G2	12,290	B3 U0 G3
10	14,759	B3 U0 G3	15,326	B3 U0 G3
12	17,710	B3 U0 G3	18,391	B3 U0 G3
14	20,531	B3 U0 G3	21,321	B3 U0 G3
16	23,464	B3 U0 G3	24,367	B4 U0 G3
700mA				
02	3,656	B1 U0 G1	3,796	B1 U0 G1
04	7,311	B2 U0 G2	7,593	B2 U0 G2
06	10,842	B2 U0 G2	11,259	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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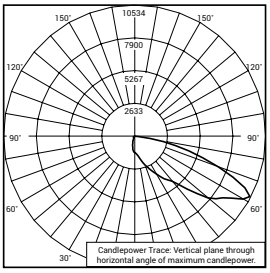
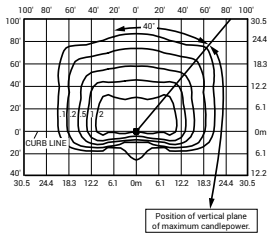
4MB



CSA Test Report #: 6449
ARE-EDG-4MB-**-12-E-UL-525-40K
Initial Delivered Lumens: 13,155



ARE-EDG-4MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,340
Initial FC at grade

Type IV Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,610	B0 U0 G1	1,672	B0 U0 G1
04	3,221	B1 U0 G1	3,345	B1 U0 G1
06	4,776	B1 U0 G1	4,959	B1 U0 G1
08	6,368	B1 U0 G2	6,613	B1 U0 G2
10	7,941	B1 U0 G2	8,246	B1 U0 G2
12	9,529	B1 U0 G2	9,895	B1 U0 G2
14	11,046	B1 U0 G2	11,471	B1 U0 G2
16	12,624	B1 U0 G2	13,110	B1 U0 G2
525mA				
02	2,254	B0 U0 G1	2,341	B0 U0 G1
04	4,509	B1 U0 G1	4,682	B1 U0 G1
06	6,686	B1 U0 G2	6,943	B1 U0 G2
08	8,915	B1 U0 G2	9,258	B1 U0 G2
10	11,117	B1 U0 G2	11,544	B1 U0 G2
12	13,340	B1 U0 G2	13,853	B2 U0 G2
14	15,465	B2 U0 G2	16,060	B2 U0 G3
16	17,674	B2 U0 G3	18,354	B2 U0 G3
700mA				
02	2,754	B0 U0 G1	2,860	B0 U0 G1
04	5,507	B1 U0 G1	5,719	B1 U0 G2
06	8,167	B1 U0 G2	8,481	B1 U0 G2

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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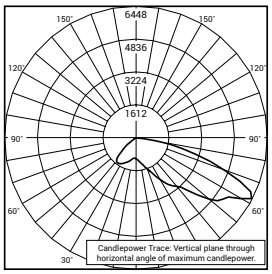
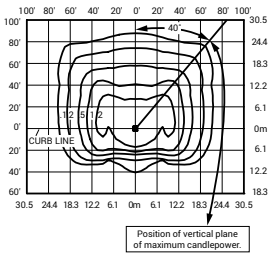
4MP



CSA Test Report #: 6417
ARE-EDG-4MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,989



ARE-EDG-4MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,640
Initial FC at grade

Type IV Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,888	B1 U0 G1	1,961	B1 U0 G1
04	3,776	B1 U0 G1	3,921	B1 U0 G1
06	5,599	B1 U0 G1	5,815	B1 U0 G1
08	7,466	B2 U0 G2	7,753	B2 U0 G2
10	9,310	B2 U0 G2	9,668	B2 U0 G2
12	11,172	B2 U0 G2	11,601	B2 U0 G2
14	12,951	B2 U0 G2	13,449	B2 U0 G2
16	14,801	B3 U0 G2	15,370	B3 U0 G2
525mA				
02	2,643	B1 U0 G1	2,745	B1 U0 G1
04	5,286	B1 U0 G1	5,490	B1 U0 G1
06	7,839	B2 U0 G2	8,140	B2 U0 G2
08	10,452	B2 U0 G2	10,854	B2 U0 G2
10	13,034	B2 U0 G2	13,535	B2 U0 G2
12	15,640	B3 U0 G2	16,242	B3 U0 G2
14	18,131	B3 U0 G2	18,829	B3 U0 G3
16	20,722	B3 U0 G3	21,519	B3 U0 G3
700mA				
02	3,228	B1 U0 G1	3,353	B1 U0 G1
04	6,457	B2 U0 G1	6,705	B2 U0 G1
06	9,575	B2 U0 G2	9,943	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Photometry

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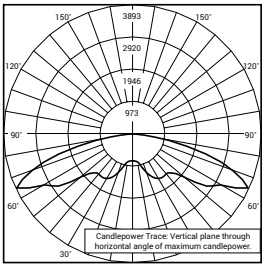
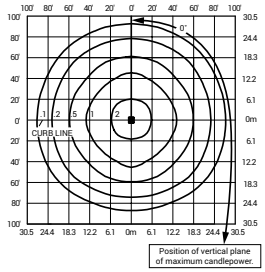
5M



CSA Test Report #: 6416
ARE-EDG-5M-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,022



ARE-EDG-5M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 18,630
Initial FC at grade

Type V Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,249	B2 U0 G1	2,335	B2 U0 G1
04	4,498	B3 U0 G1	4,671	B3 U0 G1
06	6,670	B3 U0 G2	6,926	B3 U0 G2
08	8,893	B3 U0 G2	9,235	B3 U0 G2
10	11,089	B4 U0 G2	11,516	B4 U0 G2
12	13,307	B4 U0 G3	13,819	B4 U0 G3
14	15,427	B4 U0 G3	16,020	B4 U0 G3
16	17,631	B4 U0 G3	18,309	B4 U0 G3
525mA				
02	3,148	B2 U0 G1	3,270	B2 U0 G1
04	6,297	B3 U0 G2	6,539	B3 U0 G2
06	9,338	B3 U0 G2	9,697	B3 U0 G2
08	12,450	B4 U0 G3	12,929	B4 U0 G3
10	15,525	B4 U0 G3	16,122	B4 U0 G3
12	18,630	B4 U0 G3	19,347	B4 U0 G3
14	21,598	B5 U0 G3	22,428	B5 U0 G3
16	24,683	B5 U0 G3	25,632	B5 U0 G3
700mA				
02	3,846	B2 U0 G1	3,994	B2 U0 G1
04	7,691	B3 U0 G2	7,987	B3 U0 G2
06	11,405	B4 U0 G2	11,844	B4 U0 G3

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Photometry

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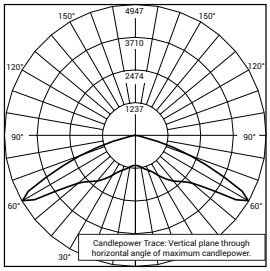
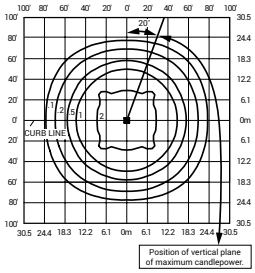
5S



CSA Test Report #: 6362
ARE-EDG-5S-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,798



ARE-EDG-5S-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 20,700
Initial FC at grade

Type V Short Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,499	B1 U0 G0	2,595	B1 U0 G1
04	4,998	B2 U0 G1	5,190	B2 U0 G1
06	7,411	B3 U0 G1	7,696	B3 U0 G1
08	9,881	B3 U0 G2	10,261	B3 U0 G2
10	12,322	B3 U0 G2	12,796	B3 U0 G2
12	14,786	B4 U0 G2	15,355	B4 U0 G2
14	17,141	B4 U0 G2	17,800	B4 U0 G2
16	19,590	B4 U0 G2	20,343	B4 U0 G2
525mA				
02	3,498	B2 U0 G1	3,633	B2 U0 G1
04	6,997	B3 U0 G1	7,266	B3 U0 G1
06	10,375	B3 U0 G2	10,774	B3 U0 G2
08	13,833	B4 U0 G2	14,365	B4 U0 G2
10	17,250	B4 U0 G2	17,914	B4 U0 G2
12	20,700	B4 U0 G2	21,496	B4 U0 G2
14	23,997	B4 U0 G2	24,920	B4 U0 G2
16	27,426	B5 U0 G3	28,480	B5 U0 G3
700mA				
02	4,273	B2 U0 G1	4,437	B2 U0 G1
04	8,546	B3 U0 G1	8,874	B3 U0 G1
06	12,672	B3 U0 G2	13,160	B3 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

Photometry

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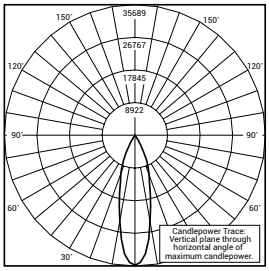
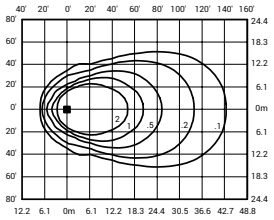
25˚



RESTL Test Report #: 2014-0006
FLD-EDG-25-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,924



FLD-EDG-25-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 21,160
Initial FC at grade

25˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,554	2,653
04	5,109	5,305
06	7,575	7,867
08	10,101	10,489
10	12,595	13,080
12	15,115	15,696
14	17,522	18,196
16	20,025	20,795
525mA		
02	3,576	3,714
04	7,152	7,427
06	10,606	11,013
08	14,141	14,685
10	17,634	18,312
12	21,160	21,974
14	24,531	25,474
16	28,035	29,113
700mA		
02	4,368	4,536
04	8,736	9,072
06	12,954	13,452

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Photometry

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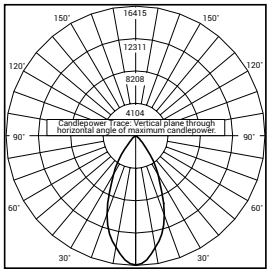
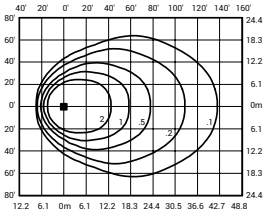
40˚



ITL Test Report #: 79679
CAN-EDG-40-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,889



FLD-EDG-40-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 20,700
Initial FC at grade

40˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,499	2,595
04	4,998	5,190
06	7,411	7,696
08	9,881	10,261
10	12,322	12,796
12	14,786	15,355
14	17,141	17,800
16	19,590	20,343
525mA		
02	3,498	3,633
04	6,997	7,266
06	10,375	10,774
08	13,833	14,365
10	17,250	17,914
12	20,700	21,496
14	23,997	24,920
16	27,426	28,480
700mA		
02	4,273	4,437
04	8,546	8,874
06	12,672	13,160

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Photometry

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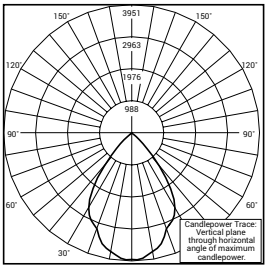
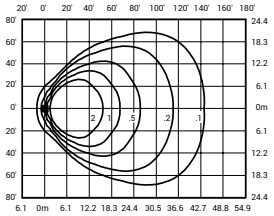
70˚



RESTL Test Report #: 2014-0007
FLD-EDG-70-**-04-E-UL-350-40K
Initial Delivered Lumens: 4,734



FLD-EDG-70-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 18,860
Initial FC at grade

70˚ Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,277	2,364
04	4,553	4,728
06	6,752	7,012
08	9,003	9,349
10	11,226	11,658
12	13,472	13,990
14	15,617	16,218
16	17,848	18,535
525mA		
02	3,187	3,310
04	6,375	6,620
06	9,453	9,816
08	12,604	13,088
10	15,717	16,321
12	18,860	19,586
14	21,864	22,705
16	24,988	25,949
700mA		
02	3,893	4,043
04	7,786	8,086
06	11,546	11,990

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Photometry

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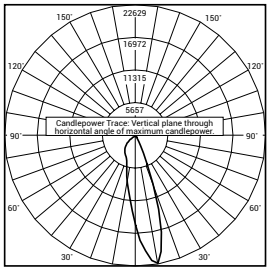
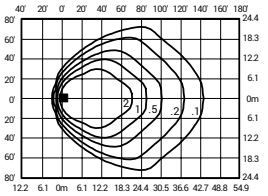
SN



RESTL Test Report #: 2014-0013
FLD-EDG-SN-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,885



FLD-EDG-SN-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 19,090
Initial FC at grade

SN Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,304	2,393
04	4,609	4,786
06	6,834	7,097
08	9,112	9,463
10	11,363	11,800
12	13,636	14,160
14	15,808	16,416
16	18,066	18,761
525mA		
02	3,226	3,350
04	6,452	6,701
06	9,568	9,936
08	12,757	13,248
10	15,909	16,520
12	19,090	19,825
14	22,131	22,982
16	25,293	26,265
700mA		
02	3,941	4,092
04	7,881	8,184
06	11,687	12,136

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Photometry

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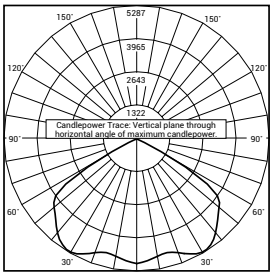
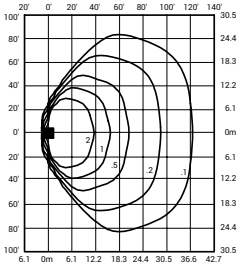
N6



RESTL Test Report #: 2014-0014
FLD-EDG-N6-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,253



FLD-EDG-N6-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60˚ Tilt
Initial Delivered Lumens: 21,160
Initial FC at grade

NEMA® 6 Flood Distribution		
LED Count (x10)	4000K Initial Delivered Lumens*	5700K Initial Delivered Lumens*
350mA		
02	2,554	2,653
04	5,109	5,305
06	7,575	7,867
08	10,101	10,489
10	12,595	13,080
12	15,115	15,696
14	17,522	18,196
16	20,025	20,795
525mA		
02	3,576	3,714
04	7,152	7,427
06	10,606	11,013
08	14,141	14,685
10	17,634	18,312
12	21,160	21,974
14	24,531	25,474
16	28,035	29,113
700mA		
02	4,368	4,536
04	8,736	9,072
06	12,954	13,452

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Luminaire EPA

Fixed Arm Mount – ARE-EDG-DA						
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	3 @ 90˚	3 @ 120˚	4 @ 90˚
						
02	0.60	0.87	1.20	1.47	1.47	1.75
04	0.60	0.87	1.20	1.47	1.47	1.75
06	0.60	0.92	1.20	1.51	1.51	1.83
08	0.60	0.96 N/A with 3" poles	1.20	1.55 N/A with 3" poles	1.55	1.91 N/A with 3" poles
10	0.60	1.00 N/A with 3" poles	1.20	1.60 N/A with 3" poles	1.60	2.00 N/A with 3" poles
12	0.60	1.04 N/A with 3" poles	1.20	1.64 N/A with 3" poles	1.64	2.08 N/A with 3" poles
14	0.60	1.08 N/A with 3" or 4" poles	1.20	1.68 N/A with 3" or 4" poles	1.68	2.16 N/A with 3" or 4" poles
16	0.60	1.12 N/A with 3" or 4" poles	1.20	1.72 N/A with 3" or 4" poles	1.72	2.24 N/A with 3" or 4" poles
Fixed Arm Mount – ARE-EDG-DL						
02	0.75	1.02	1.50	1.77	1.77	1.91
04	0.75	1.02	1.50	1.77	1.77	1.91
06	0.75	1.07	1.50	1.82	1.82	1.98
08	0.75	1.11	1.50	1.86	1.86	2.04
10	0.75	1.15	1.50	1.90	1.90	2.10
12	0.75	1.19	1.50	1.94	1.94	2.16
14	0.75	1.23	1.50	1.98	1.98	2.22
16	0.75	1.27	1.50	2.02	2.02	2.28

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	In-Line 2 @ 180˚	3 @ 90˚	3 @ 120˚	In-Line 3 @ 180˚	4 @ 90˚	In-Line 4 @ 180˚
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
0˚ Tilt									
02	0.66	0.98	1.32	1.32	1.77	1.64	1.98	1.91	2.64
04	0.66	0.98	1.32	1.32	1.64	1.64	1.98	1.97	2.64
06	0.66	1.02	1.32	1.32	1.68	1.68	1.98	2.05	2.64
08	0.66	1.07	1.32	1.32	1.80	1.72	1.98	2.29	2.64
10	0.66	1.11	1.32	1.32	1.76	1.76	1.98	2.21	2.64
12	0.66	1.15	1.32	1.32	1.80	1.80	1.98	2.29	2.64
14	0.66	1.19	1.32	1.32	1.84	1.84	1.98	2.38	2.64
16	0.66	1.23	1.32	N/A	1.89	1.89	N/A	2.46	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	In-Line 2 @ 180˚	3 @ 90˚	3 @ 120˚	In-Line 3 @ 180˚	4 @ 90˚	In-Line 4 @ 180˚
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
30˚ Tilt									
02	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
04	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
06	0.82	1.48	1.64	1.64	2.30	2.30	2.46	2.95	3.28
08	0.93	1.59	1.86	1.86	2.52	2.52	2.79	3.17	3.72
10	1.04	1.70	2.08	2.08	2.74	2.74	3.12	3.40	4.16
12	1.15	1.81	2.30	2.30	2.96	2.96	3.45	3.62	4.60
14	1.26	1.92	2.52	2.52	3.18	3.18	3.78	3.84	5.04
16	1.37	2.03	2.74	N/A	3.40	3.40	N/A	4.06	N/A
45˚ Tilt									
02	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
04	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
06	1.03	1.69	2.06	2.06	2.72	2.72	3.09	3.38	4.12
08	1.17	1.83	2.34	2.34	3.00	3.00	3.51	3.66	4.68
10	1.31	1.97	2.62	2.62	3.28	3.28	3.93	3.94	5.24
12	1.45	2.11	2.90	2.90	3.56	3.56	4.35	4.21	5.80
14	1.59	2.25	3.18	3.18	3.83	3.83	4.77	4.49	6.36
16	1.73	2.38	3.46	N/A	4.11	4.11	N/A	4.77	N/A
60˚ Tilt									
02	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
04	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
06	1.39	2.05	2.78	2.78	3.44	3.44	4.17	4.10	5.56
08	1.58	2.23	3.16	3.16	3.81	3.81	4.74	4.47	6.32
10	1.77	2.42	3.54	3.54	4.19	4.19	5.31	4.84	7.08
12	1.95	2.61	3.90	3.90	4.56	4.56	5.85	5.22	7.80
14	2.14	2.80	4.28	4.28	4.94	4.94	6.42	5.59	8.56
16	2.33	2.98	4.66	N/A	5.31	5.31	N/A	5.97	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90˚	2 @ 180˚	In-Line 2 @ 180˚	3 @ 90˚	3 @ 120˚	In-Line 3 @ 180˚	4 @ 90˚	In-Line 4 @ 180˚
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
90˚ Tilt									
02	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
04	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
06	2.14	2.80	4.28	4.22	4.94	4.94	6.42	5.59	8.56
08	2.43	3.09	4.86	4.78	5.51	5.51	7.29	6.17 N/A with horizontal tenon	9.72
10	2.71	3.37	5.42	5.34	6.08	6.08	8.13	6.74 N/A with horizontal tenon	10.84
12	3.00	3.66	6.00	5.90	6.66	6.66	9.00	7.31 N/A with horizontal tenon	12.00
14	3.29	3.95 N/A with PW-2A3**	6.58	6.48	7.23	7.23	9.87	7.89 N/A with horizontal tenon	13.16
16	3.57	4.23 N/A with PW-2A3**	7.14	N/A	7.81	7.81	N/A	8.46 N/A with horizontal tenon	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenon EPA

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25
WM-DM	None

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenons and Brackets‡ (must specify color)

Square Internal Mount Vertical Tenons (Steel)
- Mounts to 3-6" (76-152mm) square aluminum or steel poles

PB-1A* – Single
PB-2A* – 180˚ Twin
PB-3A* – 180˚ Triple
PB-4A*(90) – 90˚ Quad
PB-4A*(180) – 180˚ Quad

Square Internal Mount Horizontal Tenons (Aluminum)
- Mounts to 4" (102mm) square aluminum or steel poles

PD-2A4(90) – 90˚ Twin
PD-2A4(180) – 180˚ Twin
PD-3A4(90) – 90˚ Triple
PD-4A4(90) – 90˚ Quad

Wall Mount Brackets
- Mounts to wall or roof

WM-2 – Horizontal for AA and SA mounts
WM-4 – L-Shape for AA and SA mounts
WM-DM – Plate for DA and DL mounts

Round External Mount Vertical Tenons (Steel)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons

PB-2R2.375 – Twin
PB-3R2.375 – Triple
PB-4R2.375 – Quad

Round External Mount Horizontal Tenons (Aluminum)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons
- Mounts to square pole with PB-1A* tenon

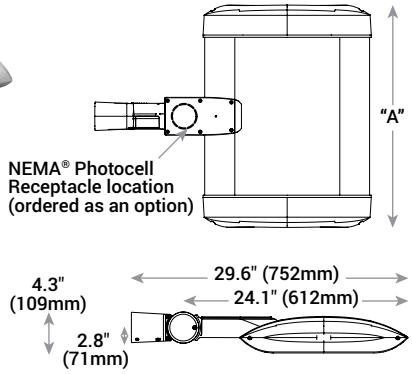
PT-1 – Single (Vertical)
PT-2(90) – 90˚ Twin
PT-2(180) – 180˚ Twin
PT-3(90) – 90˚ Triple
PT-4(90) – 90˚ Quad

Mid-Pole Bracket
- Mounts to square pole

PW-1A3** – Single
PW-2A3** – Double

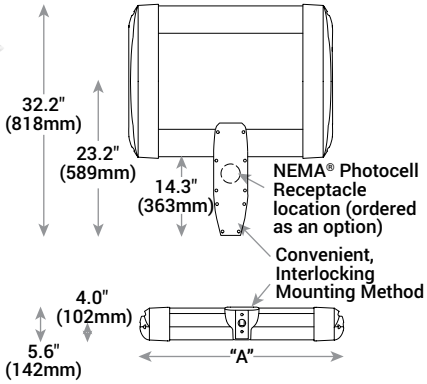
‡ Refer to the Bracket and Tenons spec sheet for more details

AA Mount



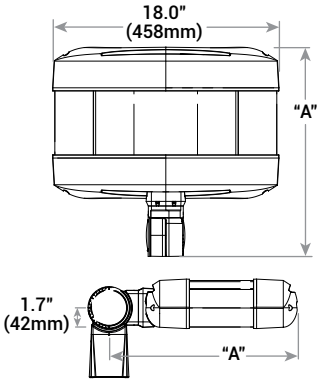
LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

DL Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	23 lbs. (10kg)
04	12.1" (306mm)	26 lbs. (12kg)
06	14.1" (357mm)	29 lbs. (13kg)
08	16.1" (408mm)	30 lbs. (14kg)
10	18.1" (459mm)	34 lbs. (15kg)
12	20.1" (510mm)	36 lbs. (16kg)
14	22.1" (560mm)	42 lbs. (19kg)
16	24.1" (611mm)	44 lbs. (20kg)

SA Mount



LED Count (x10)	Dim. "A"	Weight
02	16.0" (406mm)	25 lbs. (11kg)
04	18.0" (457mm)	26 lbs. (12kg)
06	20.0" (508mm)	28 lbs. (13kg)

US: www.cree.com/lighting T (800) 236-6800 F (262) 504-5415 **Canada: www.cree.com/canada** T (800) 473-1234 F (800) 890-7507