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Consulting Engineers

Inc.

Millbury Fire Station Planning Board Narrative

Applicant: Town of Millbury c/o Town Manager, 127 Elm Street, Millbury, MA 01527
Owner: Town of Millbury c/o Town Manager, 127 Elm Street, Millbury, MA 01527
Project Location: 130 Elm Street, Millbury, MA 01527 (Identified as Lot 22 on Assessor's Map 53)
Proposed Use: Municipal Fire Station
Zoning District: Residential 1 (R-1)
Representative: Christopher M. Garcia, P.E.
Garcia, Galuska & DeSousa, Inc.
Revised: March 1, 2021

This report is intended to document how the project is in compliance with the requirements set forth by the Site Plan Review Submission Requirements and Procedures of the Millbury Planning Board.

A. INTRODUCTION

The project site proposed for the new Millbury Fire Station, is located on the north side of Elm Street in Millbury, MA, and sits on approximately 1.84 acres of land. The site is located at 127 Elm Street and is further identified on Millbury Assessor's Map 53 as Lot 22. The project site is located in the Residential 1 (R-1) Zoning District. Development on the site dates back to at least to the 1830s with previous school building. In the early 1900s the current building was constructed. The project site is bound by the residential properties on the west and north side, River Street on the west side, Elm Street to the South and Waters Street to the east.

The Millbury Fire Station construction project involves the removal of an existing three story, 7,400 square foot (footprint) building, removal of existing bituminous concrete driveways, walkways, play areas and parking facilities and selective tree, brush and branch removal on the parcel. In its place, a fire station structure with a footprint totaling approximately 17,535 gross square feet will be constructed on the site consisting of one and two story segments, along with new parking facilities located north, east and south of the proposed building. New water, sewer, drainage, natural gas, site lighting, electrical and communications utilities will be installed as well. The project is expected to be publically bid in the spring of 2021. Funding for the project will be considered for approval at the May Town Meeting.

The existing site grades will be lowered by 8 to 10 feet to provide safe access to Elm Street. To facilitate the lowering of the site, bedrock removal will need to be completed on the site, likely utilizing explosives and/or excavator-mounted hammers. The Planning Board will be notified once the selected contractor has determined the most feasible method of removal.

The building will be accessed by the public from the main entrance located on the east side of the building. An illuminated sidewalk will be provided from the parking lot to the entrance. Multiple employee entrance will be provided around the building with paved walkways from the parking areas.

The existing impervious coverage on the site is approximately 32,247 square feet consisting of the existing building, driveways, walkways, parking facilities and play areas. The proposed construction will result in a total impervious cover of approximately 50,709 square feet.

The fire station will connect to municipal water and sewer. There is an eight inch water main on

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the west side of Rivers Street that the project propose to connect to with the fire protection service piping. In coordination with Aquarion Water Company, the fire station's domestic water connection will connect to the existing domestic water service at the existing curb stop valve. The new sewer will discharge from the north side of the building, follow the route of the existing piping and connect to the existing municipal sewer main in Waters Street.

The entire site is located within the Zone X (Areas determined to be outside the 0.2% annual chance floodplain) as indicated on the FEMA Flood Insurance Rate Map, Community Panel 25027C 0809E, last revised July 7, 2011.

B. WAIVER REQUESTS:

Request #1:

We request that a waiver be granted for the Site Plan Review Application Fee (\$500 + \$20/parking space) and Stormwater Management Permit Application Fee (\$200). The proposal is to construct a municipal fire station on property owned by the Town of Millbury.

Request #2:

We request that a waiver be granted for the Traffic Impact Assessment at the proposed development. The existing Fire Station is currently located two parcels east of the proposed site, also on Elm Street. The proposed use type of the former fire station is unknown at this time. The proposed development should not represent a significant change in traffic in the area.

Request #3:

We request that a waiver be granted for the Fiscal Impact Assessment at the proposed development. The project has been brought forth by the citizens of Millbury based on an understanding that the existing fire station is in need of replacement. The new facility represents a betterment to the community in that it provides for the Town a modern fire station prepared to address emerging issues in the Town. Citizens will have an opportunity to vote to appropriate funding for the project at future Town Meeting.

C. ZONING

The site is located within the Residential 1 Zoning District, which permits a "Municipal use not elsewhere more specifically cited" (Fire Station) as an allowed use. Table 1 contains the proposed conditions as it relates to the dimensions for the site.

Residential 1 District Zoning Dimensions		
	Required	Proposed
Minimum Lot Size (sf)	40,000	80,193
Frontage (ft.)	100	236.5
Minimum Front Setback (ft.)	25	105.81
Minimum Side Setback (ft.)	10	10.17
Minimum Rear Setback (ft.)	10	78.77
Maximum Building Height (ft.)	30	30
Maximum Lot Coverage (%)	30 Percent	23.7 Percent

Table 1: Zoning Dimensions

D. PARKING FACILITIES

Section 33.2, Schedule of Requirements, of the Town of Millbury Zoning Bylaw does not have a “fire station” use. Fire Chief Richard P. Hamilton was consulted for present and future parking needs for the Fire Department and the public visiting the building. A total of 31 parking spaces, two of which will be fully compliant with the requirements of 521 CMR 23, are proposed for the site.

Access to the northern parking facilities (22 spaces) and apparatus apron will be from a 24 foot wide driveway from Waters Street at the northeast corner of the site. This driveway is similarly located to the existing site access driveway. The southern parking facilities (9 spaces) and apparatus apron will be from a 52.33 foot wide apron onto Elm Street. The Elm Street apron will service as the main entrance and exit point for fire apparatus. The 29 standard parking spaces located on the site will be constructed to the standard dimension of nine feet wide by eighteen feet deep. The accessible parking spaces will be constructed to the standard accessible dimensions of eight feet wide by eighteen feet deep. Two-way driveway aisle will be constructed to a width of 24 feet with no bumper overhang included for the parking spaces set at 90 degrees to the access aisle.

In addition, light fixtures within the parking lot will be LED with shields to prevent light trespass onto abutting properties. Light pole heights are proposed at 16 feet with 2.0 foot concrete bases.

The property is proposed to be screened with vegetation, particularly along the north and northwest edge where the property abuts residential buildings. Refer to the provided landscape drawing for further detail.

E. ENVIRONMENTAL IMPACT ASSESSMENT:

The 1.84 acre Town-Owned parcel is currently developed as a former school with associated school building structure, driveway, parking facilities, walkways, hardtop play surfacing and lawn areas. Approximately 32,247 square feet (40.2%) of the parcel consists of impervious cover with the balance of land developed as lawn.

Prior to the commencement of work, the selected contractor will hold a pre-construction meeting to establish supervisory and inspection procedures for sediment and erosion control measures. The meeting shall be attended by the Contractor, Architect, Engineer, Town Representative and the Owner. Erosion control measures consisting of straw wattles and siltation barrier shall be installed around the perimeter of the site. Stone entrance mats shall be established where heavy equipment will exit the site. At the same time, the contractor will install sediment control bags in existing catch basins. Sediment control bags will be installed in new catch basins once they have been installed. All erosion control shall be inspected weekly and after major rain events. Accumulated sediment shall be collected and removed or reused onsite or at a suitable offsite location. Damaged erosion controls will be repaired or replaced immediately. Dewatering shall be achieved by low point sump pumps. Dewatering discharges shall be pumped through a dewatering filter bag prior to discharge. The dewatering bags shall be surrounded by silt barrier. The contractor shall designate vehicle and concrete truck wash down areas. These areas shall be contained with stone reinforced silt barrier. Accumulated concrete shall be disposed of offsite. Fueling areas shall be scraped monthly to a depth approved by the Architect/Engineer and redressed. Scraped material shall be disposed of off-site at an approved disposal facility appropriate for the material. The contractor shall reduce surface and air movement of dust from exposed soil surfaces as required by construction activities. Construction activities shall be so scheduled so that the least area of disturbed soil is exposed at one time. In disturbed areas not

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subject to traffic, the contractor shall use temporary seeding and mulching operations. In disturbed areas subject to traffic, Contractor shall sprinkle surface with water to minimize dust. Dust control measures shall be maintained through dry weather periods until all disturbed areas have been permanently stabilized.

The project will be subject to a Construction General Permit (CGP) under the U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) for stormwater discharges associated with construction activities. It is required that the contractor submit the permit application at least 20 days prior to any site disturbance. The permit and associated Storm Water Pollution Prevention Plan (SWPPP) will be submitted to the Planning Board upon receipt of the contractor's submission. The permit drawings and Drainage Analysis include information regarding the long-term inspection and maintenance of the proposed drainage system on the site.

Under the proposed redevelopment condition, approximately 63.3% of the site will be rendered impervious. These impervious areas consist of the new driveways, apparatus aprons, parking facilities, walkways and the building.

The proposed drainage system will consist of deep-sump catch basins to collect runoff from the north apron, the driveways and parking facilities. Runoff from the south apron will be collected by a trench drain the entire width of the apron. The catch basins and trench drain will discharge to hydrodynamic water quality separators for total suspended solids (TSS) removal. The runoff will then be directed three subsurface detention chamber systems for flow attenuation. To meet the Total Phosphorus (TP) removal requirements, runoff accumulated in each of the subsurface detention chamber systems will pass through six inches of sand filter media prior to discharging from the system. Runoff from the current site sheet flows from the site to Waters and Elm Street, and the west and north abutters with no peak flow attenuation or water quality treatment. The proposed design is an improvement over the existing condition.

F. FISCAL IMPACT STATEMENT:

The proposed project is a public building located on municipally-owned land and will not generate revenue. Town Meeting has previously authorized the appropriation of funds to complete the design of the Fire Station. The project will be publicly bid in the spring of 2021. Upon receipt of bids, the Owner will seek a bond to fund construction at the spring 2021 Town Meeting.

G. HISTORIC IMPACT:

The project will result in the demolition of the existing school building on the site. Portions of the existing stone retaining walls will be removed to provide vehicular access on Elm Street. Pedestrian access will be accomplished from existing wall openings.

H. EXISTING UTILITY IMPACT:

Domestic & Fire Service Water:

The redevelopment will require a 2" domestic water service and 8" fire service. The proposed fire service will support the building's sprinkler system as well as a fire hydrant on the northern side of the building. There is an existing 8" water main that runs on west side of Waters Street. In coordination with Aquarion Water Company, the project will utilize the existing 2" domestic water service connection. The new 8" fire service will be connected to the existing 8" main by isolating a section of the main, cutting out a portion and installing a new tee connection.

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Aquarion Water Company indicated that the fire hydrant on Waters Street at Grove Street has a static pressure of 101 pounds per square inch (psi) with a calculated flow of 3,491 gallons per minute at 20 psi. It is estimated that the static pressure will be approximately 96 psi at the point of connection to the water main. The water main is capable of supporting the peak domestic demand and fire protection requirements without the need for booster pumps.

Sanitary Sewer:

The proposed sanitary flow will continue to connect to the same municipal sewer main as the existing building. The project proposes to remove and replace the existing sanitary sewer lateral that served the former school building with a new 6" PVC service connection. Utilizing bedrooms and office space from Title 5, the proposed average flow from the fire station is estimated to be 0.59 gallons per minute (gpm), with an estimated peak flow of 3.24 gpm based on a peak factor of 5.5 from the ASCE Manuals and Reports on Engineering Practice No. 37.

There is an existing 6" gravity sewer main in Waters Street that runs northerly to the intersection of Waters and Grove Streets. Assuming a minimum pipe slope of 0.005 ft/ft (velocity of 2.4 feet per second (fps)), pipe roughness of $n=0.011$, the half full pipe has the capacity to convey an average flow of approximately 105 gpm (0.1512 million gallons per day (mgd)). It is believed that the Town Library, the Lady of Assumption Church and residences with approximately 21 bedrooms are connected to this segment of the municipal sewer main. The estimated existing Title 5 flow is 6,221 gpd, assuming a library flow of 50 gpd/1,000 gross square feet, assuming 500 seats for place of worship with kitchen (6 gpd/seat) and 21 bedrooms for nearby residences. Based on the proposed redevelopment and existing development of Waters Street between Elm and Grove Street, the existing 6" main is adequate to serve the redevelopment and existing connections.

Storm Drainage:

The project proposes to connect to the municipal drainage system that connects five existing municipal catch basins to a municipal outfall. Refer to the Drainage Analysis for additional detail on capacity



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375 Faunce Corner Road, Suite D
Dartmouth, MA 02747-1217

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March 1, 2021

Town of Millbury
Planning Board
127 Elm Street
Millbury, MA 01527

Attn: Mr. Richard G. Gosselin, Jr., Chairman

Re: Site Plan Review
Millbury Fire Station

Dear Mr. Gosselin,

As you are aware, Laurie Connors, the Director of the Millbury Planning & Development Office, has reviewed the Planning Board Submission plan package, Drainage Analysis and the Site Plan Review Application package, all dated January 25, 2021. In response to the review items noted in the February 11, 2021, we provide the following:

Item 1: The Applicant seeks a waiver from the application fees (Site Plan Review and Stormwater Management Permit Application Fees).

GGD Response: No response required.

Item 2: The Applicant seeks a partial waiver from Zoning Bylaws, Section 12.44(f) – Requirement to submit a full Development Impact Statement. The Applicant seeks permission to waive both the Traffic Impact Assessment and Fiscal Impact Assessment.

Comment: I recommend that the Planning Board grant this waiver request as the Fire Station currently exists a few hundred feet from the proposed site therefore the level of traffic associated with the new station should replicate that of the existing condition. Also, this is a town-owned facility that does not generate tax revenue for the Town. The fiscal impact to the Town relates to the cost of design and construction.

GGD Response: No response required.

Item 3: In accordance with Zoning Bylaws, Section 12.44, please revise the plan as follows or submit written waiver request for Planning Board consideration:

- Provide a locus plan at a scale of 1"=100'.
- Provide an existing condition plan that includes Assessor's Map/Lot numbers for the subject property and at least 3 property boundary markers, remotely separated, with MA Grid Plane Coordinates. The existing conditions plan shall be stamped by a Registered Land Surveyor and the plan shall be drawn to NAD 83 and NAVD 88 datum.
- Identify Elm Street as a "public way".
- Identify the locations of proposed snow storage areas.
- Identify location of the dumpster and how it will be screened.
- Provide parking calculations.
- Provide a photometric plan demonstrating that lighting of parking spaces and walkways will be sufficient but not excessive, and will not negatively impact abutting properties. Include specifications/cut sheets for all proposed lights. Energy-efficient decorative LED lights are preferred.

- Location, structural design and dimensions of all signage.

GGD Response:

- *A locus plan has been provided on the updated plan cover page.*
- *The stamped existing conditions plan was not included in the drawing set. That plan has been included in the updated drawing set. In addition, the following changes have been made to the proposed drawing set:*
- *Elm Street has been identified as a “public way” on the revised drawing C1.1, Site Layout & Materials Plan.*
- *Proposed snow storage areas have been identified on the revised drawing C1.1, Site Layout & Materials Plan.*
- *No dumpster is being provided on the site. The Owner will be utilizing rolling trash & recycling bins, similar to the existing station. A dedicated space is provided within the proposed building to store the bins.*
- *The Millbury Zoning Bylaw does not identify a fire station use for calculating the minimum number of parking spaces. As discussed in the design narrative, the 31 parking spaces provides for projected future staffing and 4 visitor parking spaces on site. A table utilizing Dwelling Units (dorms) and Office space have been added to drawing C1.1, Site Layout & Materials Plan identifying a minimum of 25 spaces being required. The provided 31 spaces meets that quantity, provides 4 visitor spaces and allows for future staffing expansion.*
- *The requested photometric plan and cut sheets have been provided in this updated submission.*
- *Traffic signage is identified on drawing C1.1, Site Layout & Materials Plan with dimensions shown on detail 9/C0.2. The location of the proposed Fire Department sign has been identified on drawing C1.1, Site Layout & Materials Plan. It has been decided by the Owner that there will be no free-standing site identification signage on the site. Lettering will be provided on the building only.*

Item 4:

The Applicant proposes to install vertical granite curb around the perimeter of all driveways and parking areas except for a small portion of driveway along the south side off of Waters Street and a portion of the 6 space parking lot east of the garage access at the front of the building (south elevation). Was the curb in these areas removed for stormwater mitigation reasons? If so, the Applicant should specify that or revise the plan so that it conforms with Zoning Bylaws, Section 12.45(o).

GGD Response: *This portion of curbing on the south side of the Waters Street driveway was discontinued as it did not act as a gutter for stormwater. To meet the requirement of Section 12.45(o) of the Millbury Zoning Bylaws, the vertical granite curbing has been added to the revised drawing C1.1, Site Layout & Materials Plan.*

Item 5:

A gas-fired emergency generator is proposed for the northwesterly corner of the property less than 70 feet from the multi-family and single family properties N/F owned by Reginald Gauthier. What will the noise impact of the generator be on these abutting properties when in use? The Applicant may wish to consider a stockade or vinyl fence in lieu of the chain link fence if it will help attenuate the noise.

GGD Response: *The proposed natural gas-fired emergency generator proposed at the northwest corner of the property will be contained within a sound attenuating enclosure to reduce noise. The proposed manufacturer’s literature indicates a noise level of 70 dB(A) at approximately 23 feet from the enclosure. With no further mitigation, the noise level would be approximately 60 dB(A) at 70 feet. The noise level is the equivalent of conversational speech from three feet away. The generator will typically be exercised once a week, during daylight hours and be used for emergency purposes during a grid*

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failure. Drawing C1.1, Site Layout & Materials Plan, has been revised to indicate an eight foot tall solid cedar plank fence. Detail 9/C0.4 is included for your review.

Item 6: All walls retaining 4' or more of unbalanced fill require a building permit and a structural engineer's design.

GGD Response: Grading in the area of the stone retaining walls on the east and west side of the Elm Street apron have been lowered. This results in the stone retaining walls being less than 4 feet in height.

Item 7: Please provide an Erosion Control Plan that specifies the location of site entrance mats, erosion control blankets, truck wash down area, contractor refueling area, and other erosion control measures. It should include the limit of disturbance and specify that sediment control bags should be installed within all catch basins until adjacent surface is permanently stabilized.

GGD Response: A dedicated Erosion & Sediment Control Plan has been developed and added to the drawing set as C1.0A. Said plan reflects the proposed locations of site entrance mats and silt fence/compost wattle limits. As well, truck wash down areas, dewatering pump discharge locations and contractor refueling areas will be diagrammatically shown. Notation will be added to indicate that in addition to the individual catch basins identified on the plan, the Contractor shall install and maintain sediment control bags in new catch basins until adjacent earthwork has been stabilized. Drawing C3.1, Site Grading Plan, has been updated to show the proposed locations where erosion control blankets will be placed.

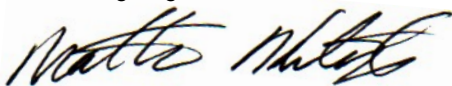
Item 8: Note #5 under the Erosion & Sediment Control Narrative on Sheet C0.1 states that the work is to be phased. Please submit the Phasing Plan for Planning Board review and approval.

GGD Response: The proposed work will not be phased. Erosion & Sediment Control Narrative Note #5 was inadvertently included and has been deleted on the updated drawing C0.1, Site Legend, Notes & Details.

If you should have any comments or questions regarding the above, please contact our office at your earliest convenience.

Very truly yours,

GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.



Nathan C. Ketchel, EIT

NCK:jfm

Enc.

Cc: Laurie Connors, Town of Millbury
Angela Campbell, AIA, Context Architecture
Christopher M. Garcia, PE, GGD



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March 1, 2021

Town of Millbury
Planning Board
127 Elm Street
Millbury, MA 01527

Attn: Mr. Richard G. Gosselin, Jr., Chairman

Re: Site Plan Review
Millbury Fire Station
130 Elm Street

Dear Mr. Gosselin,

As you are aware, Vannary Tan and David Glenn, PE of Stantec Consulting Services, Inc. have reviewed the Planning Board Submission plan package, Drainage Analysis and the Site Plan Review Application package, all dated January 25, 2021. In response to the review items noted in their February 18, 2021 letter, we provide the following:

Section 12.4 – Site Plan Review, Subsection 12.44 – Contents and Scope of Application of the Town’s Zoning Bylaws:

Item a. We recommend existing natural features such as stone retaining walls, steps, trees, chain link fence.... etc be labeled as retained or removed on sheet C1.0.

GGD Response: Additional notation has been added to the revised drawing C1.0, Site Demolition & Preparation Plan to indicate site features to remain.

Item b. Request Elm Street, River Street and Waters Street right-of-way width and public or private be labeled to the site plan.

GGD Response: Additional notation has been added to drawing C1.1, Site Layout & Materials Plan to address right-of-way width and status of ownership.

Item c. Location of proposed on-site snow storage be shown on the site plan.

GGD Response: Additional notation has been added to drawing C1.1, Site Layout & Materials Plan to indicate suggested locations of snow storage. These locations have been coordinated with the landscape drawings to not adversely impact plantings.

Item d. Provide property line plan with distances and bearing.

GGD Response: The included existing conditions survey plan has been added to the drawing set. Metes and bounds are indicated on that plan.

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Item e. We note zoning information/proposed set back dimensions included on sheet C1.1 are not in agreement with table provided in the Planning Board Narrative.

GGD Response: *The zoning table on drawing C1.1, Site Layout & Materials Plan and within the Planning Board Narrative has been updated.*

Item f. Request capacity of the existing off-site water, sewer and drainage utilities be addressed by the consultant engineer.

GGD Response: *Capacities of the existing off-site water, sewer and drainage utilities have been addressed in the updated Planning Board Narrative.*

Item g. We recommend location, type and intensity of proposed site lighting be identified on the site plan.

GGD Response: *A photometric plan has been included in the updated project submission. Cut sheets for the proposed fixtures has been included in the resubmission.*

Item h. Provide locus plan at scale 1-inch equals 100-feet.

GGD Response: *The locus plan has been added to the cover sheet.*

Item i. The Site Plan identifies a total of thirty-one (31) parking spaces with two (2) handicap accessible space within the paved parking areas. We recommend additional documentation be provided to confirm the number of parking spaces proposed are consistent with the proposed building use to illustrate compliance. Request loading, storage and drop off/service areas be shown on the site plan.

GGD Response: *Section 33, Parking & Loading Requirements, of the Millbury Zoning Bylaw does not provide a minimum quantity of parking calculation for a fire station or municipal building. The quantity of 31 overall parking spaces was determine based on projected future staff quantity (1 space per fire fighter) as well as including 4 visitor parking spaces.*

In an attempt to utilize values contained within Section 33.2 of the Millbury Zoning Bylaw, an alternative method utilizing dwelling units and offices were applied to determine a minimum quantity of parking spaces required, resulting in a direct need for 25 spaces. That quantity was determined based on the following computation:

*6 dorms (dwelling units) @ 2 spaces per dwelling unit = 12 spaces
2,408 gross square feet of office space @ 1 space per 200 gross square feet = 13 spaces
Total = 25*

Comparing this application of the Zoning Bylaw quantity to the project team determination would allow for the 4 visitor parking spaces and capacity to increase staffing by 2 in the future.

Item j. Request Site Plan be stamped and signed by a registered professional engineer and/or registered architect.

GGD Response: *Professional stamps have been added to the resubmitted documents.*

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Section 12.4 – Site Plan Review, Subsection 12.45 – Design Standards of the Town’s Zoning Bylaws:

Item a. Surface Water Drainage: See “Stormwater Management” for comment requesting additional documentation regarding hydraulic capacity of existing drainage system located on Elm Street.

GGD Response: Responses have been included in the comments in the “Stormwater Management” portion of this letter.

Item b. Ground Water Recharge: See “Stormwater Management” for comment regarding ground water recharge.

GGD Response: Responses have been included in the comments in the “Stormwater Management” portion of this letter.

Item c. We recommend the applicant address proposed exterior signage or signage affixed to the building.

GGD Response: It has been decided by the Owner that there will be no free-standing site identification signage on the site. Lettering will be provided on the building only.

Item d. Parking: Proposed parking area located along the northwest property line is located within the rear setback requirement of 10 feet. We recommend consideration of a guard rail be provided adjacent to proposed parking area located along the northwest property line adjacent to the approximate 8-foot-high stone retaining wall. Proposed parking area location in front of the building is not in compliance with the recommended location of on the side or rear of the building.

GGD Response: The parking area along the north property line has been relocated in compliance with the 10’ rear yard setback, resulting in reducing the parking along the western property line to 5 spaces. One additional parking space was added to the west side of the Elm Street apron as shown on the revised drawing C1.1, Site Layout & Materials Plan. A guard rail has been added in the area of the 5 parking spaces at the northwest corner of the site in the area of the 8 foot high stone retaining wall.

Stormwater Management:

Item 1. Request the Stormwater Checklist be stamped and signed by a registered professional engineer.

GGD Response: The Stormwater Checklist has been stamped and signed by a professional engineer in the resubmitted documents.

Item 2. Estimated seasonal high groundwater elevation in area of the infiltration chamber system was not provided by LDC. We recommend additional test pits be performed within the footprint of the infiltration subsurface chamber system to verify estimated seasonal high groundwater elevation and soil texture.

GGD Response: While no groundwater was observed at the time the test pits were dug, we have requested confirmation from the geotechnical engineer that no redoximorphic features were observed. We will provide a memorandum upon confirmation.

Item 3.

Stantec recommend additional site-specific details including cross section of the three proposed subsurface infiltration systems. Request cross section identifying items such as existing and proposed grades, refusal and/or seasonal high groundwater be provided on the site plan.

GGD Response: Detail 10/C0.4, Subsurface Detention Bed (SDB) Detail indicates the typical installation of the three subsurface detention systems. Detail 6/C0.6, Subsurface Infiltration Bed System Detail indicates the typical installation of the proposed subsurface infiltration bed northwest of the building. The schedules on drawing C2.1, Site Utility Plan, include system component elevations, minimum proposed grade and estimated bedrock elevations.

Item 4.

Provide calculations regarding the average annual load of Total Phosphorus and estimated pollution removal as per the Town's General Bylaw Municipal Code Chapter 13.15 Post-Construction Stormwater Management of New Developments and Redevelopments

GGD Response: The estimated Total Phosphorus removal calculation will be provided upon it's completion.

Item 5.

We recommend an Erosion & Sediment Control Plan Control identifying measures as noted on Sheet CO.1 be prepared by GGD.

GGD Response: The resubmission includes a dedicated drawing, C1.0A Site Erosion & Sediment Control Plan, to illustrate measures identified in the Erosion & Sediment Control Narrative on drawing C0.1.

Item 6.

We request hydraulic calculations of the closed drainage system including catch basins and pipe network s be provided in a separate analysis.

GGD Response: The Drainage Analysis has been updated to include a hydraulic analysis of the closed drainage system.

Item 7.

Description and drawings of all components of the proposed drainage system:

- a. We recommend perforated interceptor dimensions be provided on the site plan.
- b. Provide a detail of deep sump catch basin as noted in Stormwater Management Report (Sub-catchment N1B).
- c. Weir cutout is missing on the orifice plate detail for OCS#2 and #3.

GGD Response: Where applicable, the components have been updated and included in the resubmission with the following responses:

- a. The length information has been added to drawing C2.1, Site Utility Plan. Detail 3/C0.6 specifies that the trench shall be 5'-0" wide. The depth of the trench varies and is indicated by invert elevations on drawing C2.1, Site Utility Plan.
- b. The deep sump catch basin noted in Sub-catchment N1B is shown as Detail 5/C0.4.

- c. *The weir cutouts have been corrected on Detail 8/C0.5, Outlet Control Structure Detail.*

Item 8.

In the Drainage Analysis Narrative, the USDA indicates that the project site is composed of both Hydraulic Soil Groups 'B' and 'D'. In the HydroCAD analysis, summary subcatchments for both existing and proposed conditions list only areas with HSG D.

GGD Response: The drainage analysis has been updated to include a section with site figures. Included is the United States Department of Agriculture Natural Resources Conservation Service's soil map and soil description. As discussed in the Drainage Analysis narrative, the USDA NRCS soil map indicates the site consists of Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes with the exception of approximately 60 square feet of Merrimac fine sandy loam, 3 to 8 percent slopes (HSG 'B') at the northeast corner of the site.

The Chatfield-Hollis-Rock outcrop complex soil unit consists of three major components; Chatfield, Extremely Stony (HSG 'B'), Hollis, Extremely Stony (HSG 'D') and Rock Outcrop (HSG 'D'). Based on the USDA soil descriptions, the site consists of compact silt and sand with some gravel to silt with some sand.

Item 9.

Existing catchment volume for DP4 in the narrative (0.152 af) does not match with HydroCAD summary (0.191 af) for the 100-year rainfall.

GGD Response: The existing conditions summary table has been corrected to indicate 0.191 af of volume during the 100-year rainfall at Design Point (DP) 4.

Item 10. Proposed peak flow for DP2 in the narrative is listed as 0.03 cfs for the 25-year rainfall, but the HydroCAD summary is listed as 0.25 cfs.

GGD Response: The proposed conditions summary table has been corrected and updated based on minor drawing modifications.

MassDEP Stormwater Standards:

Item 1.

No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

As identified in the drainage analysis approximately 1.71 acres of the site runoff will be collected and discharged to the municipal drainage system located in Elm Street. We recommend additional documentation regarding the hydraulic capacity of existing catch basin no.1 and drainage system located on Elm Street be provided by GGD and recommend status of review by the Town Department of Public Works (DPW).

GGD Response: A closed pipe analysis for the 25 year storm event has been included in the revised documents. The calculation indicates the existing 12" concrete pipe is capable of conveying 2.5 cubic feet per second. It is estimate that the flow from the site and contributing area to XCB#1 results in a peak flow of 2.2 cubic feet per second.

Item 2.

Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

The post-development peak flow rates do not exceed pre-development peak flow rates; therefore, this standard is met.

GGD Response: No response required.

Item 3.

Loss of annual recharge to groundwater should be eliminated or minimized using infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. **We recommend GGE provide groundwater recharge calculations to confirm the annual recharge from the post-development approximated pre-development conditions.**

GGD Response: Calculations have been provided to illustrate required recharge based on the increased impervious cover on the site from the previous development to the proposed development.

Item 4.

Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:

- a) Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained.
- b) Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
- c) Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook

We note that TSS removal worksheets are provided and meet the 80% TSS requirement. The water quality volume provided meets the requirements for water quality. In Stantec's opinion the standard is met.

GGD Response: No response required.

Item 5.

For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Water Act, M.G.L. c. 0 21, §§26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00. **The project is not associated with a land use with higher potential pollutant load; therefore, this standard is not applicable.**

GGD Response: No response required.

Item 6.

Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural

stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, considering site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "stormwater discharge" as defined in 314 CMR 3.04(2)(a) 1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

The project is not within a critical area; therefore, this standard is not applicable.

GGD Response: No response required.

Item 7.

A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

This project is a redevelopment and is required to meet the above Stormwater Management Standards.

GGD Response: No response required.

Item 8.

A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

An erosion and sedimentation control plan has been included as part of the stormwater management plan, as shown on the site plans. In Stantec's opinion, the project will require coverage under the NPDES Construction General Permit and require the preparation of a Stormwater Pollution Prevention Plan (SWPPP). We recommend the SWPPP be provided to the Board prior to construction.

GGD Response: The project will be publicly bid. The selected General Contractor, whom will have control over the site, is responsible to engage an independent professional engineer or certified professional in erosion and sediment control to prepare and submit the US EPA Notice of Intent for stormwater discharges associated with construction activity under the US EPA National Discharge Elimination Systems (NPDES) Construction General Permit at least 20 days prior to site disturbance. As part of that submission, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted to the Planning Board and any other interested Town entities.

Item 9.

A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

An operation and maintenance plan has been included as a separate report. In Stantec's opinion the standard is met.

GGD Response: No response required.

Item 10. All illicit discharges to the stormwater management system are prohibited.

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Page 8

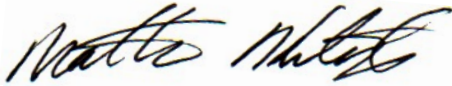
As stated by GGD, no illicit discharges are proposed to the stormwater management system. We recommend a signed illicit discharge statement be provided by the applicant.

GGD Response: A signed illicit discharge statement has been provided in the updated submission.

If you should have any comments or questions regarding the above, please contact our office at your earliest convenience.

Very truly yours,

GARCIA • GALUSKA • DESOUSA
Consulting Engineers Inc.



Nathan C. Ketchel, EIT

NCK:jfm

Enc.

Cc: Laurie Connors, Town of Millbury
David Glenn, PE, Stantec Consulting Services, Inc.
Vannary Tan, Stantec Consulting Services, Inc.
Angela Campbell, AIA, Context Architecture
Christopher M. Garcia, PE, GGD



D-Series Size 0 LED Area Luminaire



d[#]series

Specifications

EPA: 0.95 ft²
(.09 m²)

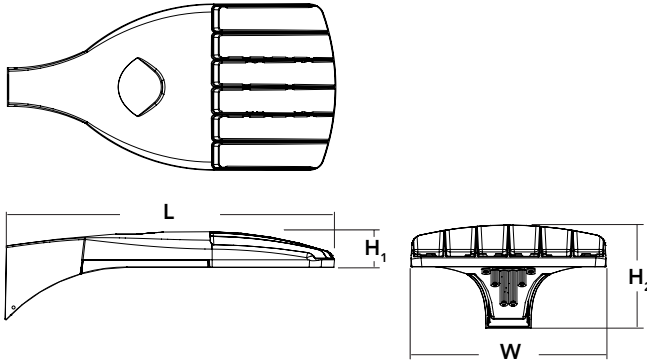
Length: 26"
(66.0 cm)

Width: 13"
(33.0 cm)

Height₁: 3"
(7.62 cm)

Height₂: 7"
(17.8 cm)

Weight (max): 16 lbs
(7.25 kg)



Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

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

DSX0 LED		Color temperature		Distribution		Voltage		Mounting	
Series	LEDs	Color temperature		Distribution		Voltage		Mounting	
DSX0 LED	Forward optics		30K	3000 K	T1S	Type I short (Automotive)	T5S	Type V short ³	Shipped included SPA Square pole mounting RPA Round pole mounting ¹⁰ WBA Wall bracket ³ SPUMBA Square pole universal mounting adaptor ¹¹ RPUMBA Round pole universal mounting adaptor ¹¹ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ¹²
	P1	P5	40K	4000 K	T2S	Type II short	T5M	Type V medium ³	
	P2	P6	50K	5000 K	T2M	Type II medium	T5W	Type V wide ³	
	P3	P7 ¹			T3S	Type III short	BLC	Backlight control ⁴	
	P4 ¹				T3M	Type III medium	LCCO	Left corner cutoff ⁴	
	Rotated optics				T4M	Type IV medium	RCCO	Right corner cutoff ⁴	
	P10 ²	P12 ²			TFTM	Forward throw medium			
	P11 ²	P13 ^{1,2}			T5VS	Type V very short ³			
							MVOLT	(120V-277V) ^{5,6}	
							XVOLT	(277V-480V) ^{2,8,9}	
						120 ⁶			
						208 ⁶			
						240 ⁶			
						277 ⁶			
						347 ⁶			
						480 ⁶			

Control options		Other options		Finish (required)		
Shipped installed		Shipped installed		Shipped installed		
NLTAIR2	nLight AIR generation 2 enabled ^{13,14}	PIR	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{19,20}	HS	House-side shield ²²	
PIRHN	Network, high/low motion/ambient sensor ¹⁵	PIRH	High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{19,20}	SF	Single fuse (120, 277, 347V) ⁶	
PER	NEMA twist-lock receptacle only (control ordered separate) ¹⁶	PIR1FC3V	High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{19,20}	DF	Double fuse (208, 240, 480V) ⁶	
PER5	Five-pin receptacle only (control ordered separate) ^{16,17}	PIRH1FC3V	High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{19,20}	L90	Left rotated optics ²	
PER7	Seven-pin receptacle only (leads exit fixture) (control ordered separate) ^{16,17}	FAO	Field adjustable output ²¹	R90	Right rotated optics ²	
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) ¹⁸			DDL	Diffused drop lens ²²	
				HA	50°C ambient operations ¹	
				Shipped separately		
				BS	Bird spikes ²³	
				EGS	External glare shield	
					DDBXD	Dark bronze
					DBLXD	Black
					DNAXD	Natural aluminum
					DWHXD	White
					DDBTXD	Textured dark bronze
					DBLBXD	Textured black
					DNATXD	Textured natural aluminum
					DWHGXD	Textured white



Ordering Information

Accessories

Ordered and shipped separately.

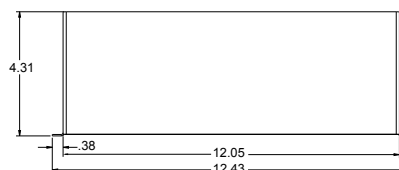
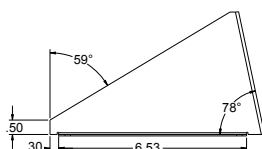
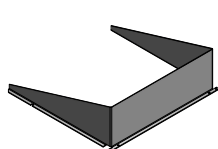
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²⁴
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²⁴
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²⁴
DSHORT SBK U	Shorting cap ²⁴
DSX0HS 20C U	House-side shield for P1,P2,P3 and P4 ²²
DSX0HS 30C U	House-side shield for P10,P11,P12 and P13 ²²
DSX0HS 40C U	House-side shield for P5,P6 and P7 ²²
DSX0DDL U	Diffused drop lens (polycarbonate) ²²
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) ²³
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ²³
DSX0EGS (FINISH) U	External glare shield

For more control options, visit [DTL](#) and [ROAM](#) online. Link to [nLight Air 2](#)

NOTES

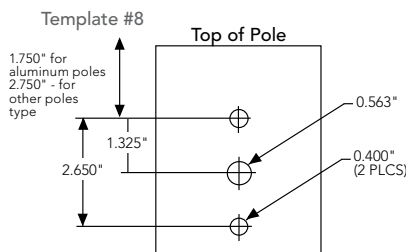
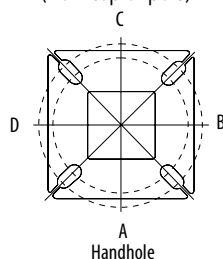
- 1 HA not available with P4, P7, and P13.
- 2 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
- 3 Any Type 5 distribution with photocell, is not available with WBA.
- 4 Not available with HS or DDL.
- 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 6 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
- 7 XVOLT only suitable for use with P4, P7 and P13.
- 8 XVOLT operates with any voltage between 277V and 480V.
- 9 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
- 10 Suitable for mounting to round poles between 3.5" and 12" diameter.
- 11 Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
- 12 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
- 13 Must be ordered with PIRHN.
- 14 Sensor cover available only in dark bronze, black, white and natural aluminum colors.
- 15 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit [this link](#).
- 16 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- 17 If ROAM[®] node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- 18 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
- 19 Reference Controls Options table on page 4.
- 20 Reference Motion Sensor Default Table on page 4 to see functionality.
- 21 Not available with other dimming controls options.
- 22 Not available with BLC, LCCO and RCCO distribution.
- 23 Must be ordered with fixture for factory pre-drilling.
- 24 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- 25 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8

EGS – External Glare Shield



Drilling

HANDHOLE ORIENTATION (from top of pole)



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

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

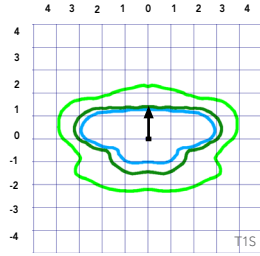
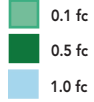
DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

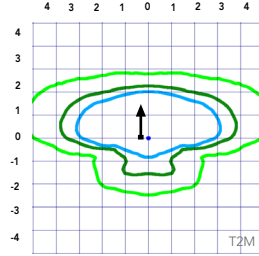
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').

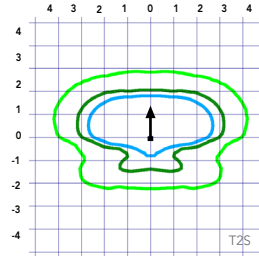
LEGEND



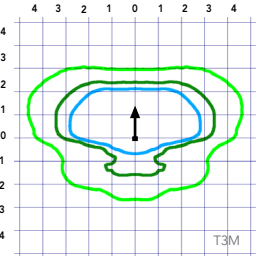
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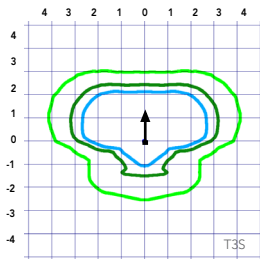
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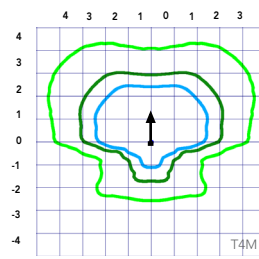
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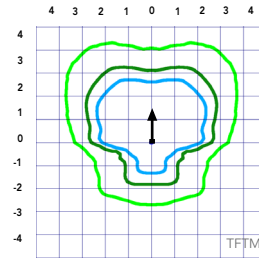
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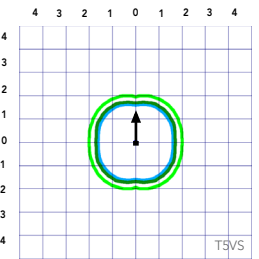
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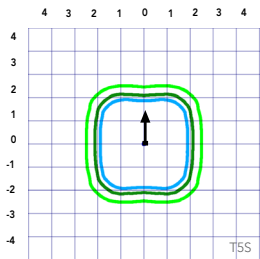
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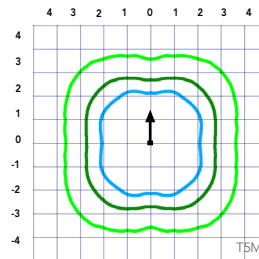
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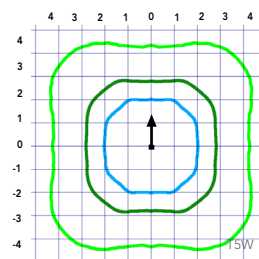
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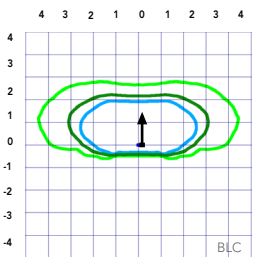
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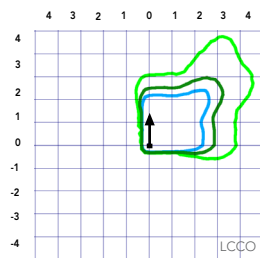
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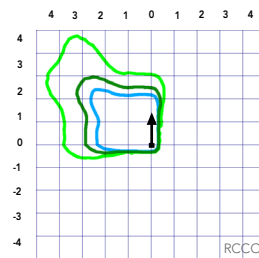
Test No. LTL23451P25 tested in accordance with IESNA LM-79-08.



Test No.



Test No.



Test No.

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°C	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

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

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

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*for use when motion sensor is used as dusk to dawn control.

Controls Options

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

Electrical Load

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

Performance Data

Lumen Output

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

Forward Optics																			
Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	20	530	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123
				TFTM	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126
				TSVS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130
				TSW	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
P2	20	700	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124
				T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124
				T2M	5,593	1	0	1	114	6,025	1	0	1	123	6,102	1	0	1	125
				T3S	5,417	1	0	2	111	5,835	1	0	2	119	5,909	2	0	2	121
				T3M	5,580	1	0	2	114	6,011	1	0	2	123	6,087	1	0	2	124
				T4M	5,458	1	0	2	111	5,880	1	0	2	120	5,955	1	0	2	122
				TFTM	5,576	1	0	2	114	6,007	1	0	2	123	6,083	1	0	2	124
				TSVS	5,799	2	0	0	118	6,247	2	0	0	127	6,327	2	0	0	129
				T5S	5,804	2	0	0	118	6,252	2	0	0	128	6,332	2	0	1	129
				T5M	5,789	3	0	1	118	6,237	3	0	1	127	6,316	3	0	1	129
				TSW	5,834	3	0	2	119	6,285	3	0	2	128	6,364	3	0	2	130
				BLC	4,572	1	0	1	93	4,925	1	0	1	101	4,987	1	0	1	102
				LCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
				RCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
P3	20	1050	71W	T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120
				T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118
				TFTM	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120
				TSVS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125
				TSW	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
P4	20	1400	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116
				T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116
				T2M	9,831	2	0	2	107	10,590	2	0	2	115	10,724	2	0	2	117
				T3S	9,521	2	0	2	103	10,256	2	0	2	111	10,386	2	0	2	113
				T3M	9,807	2	0	2	107	10,565	2	0	2	115	10,698	2	0	2	116
				T4M	9,594	2	0	2	104	10,335	2	0	3	112	10,466	2	0	3	114
				TFTM	9,801	2	0	2	107	10,558	2	0	2	115	10,692	2	0	2	116
				TSVS	10,193	3	0	1	111	10,981	3	0	1	119	11,120	3	0	1	121
				T5S	10,201	3	0	1	111	10,990	3	0	1	119	11,129	3	0	1	121
				T5M	10,176	4	0	2	111	10,962	4	0	2	119	11,101	4	0	2	121
				TSW	10,254	4	0	3	111	11,047	4	0	3	120	11,186	4	0	3	122
				BLC	8,036	1	0	2	87	8,656	1	0	2	94	8,766	1	0	2	95
				LCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71
				RCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71

Performance Data

Lumen Output

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

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

Performance Data

Lumen Output

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

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

FEATURES & SPECIFICATIONS

INTENDED USE

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

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft²) for optimized pole wind loading.

FINISH

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

OPTICS

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

ELECTRICAL

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

STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programming and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS

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

INSTALLATION

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

LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C to 50°C ambient with HA option. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY

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

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.





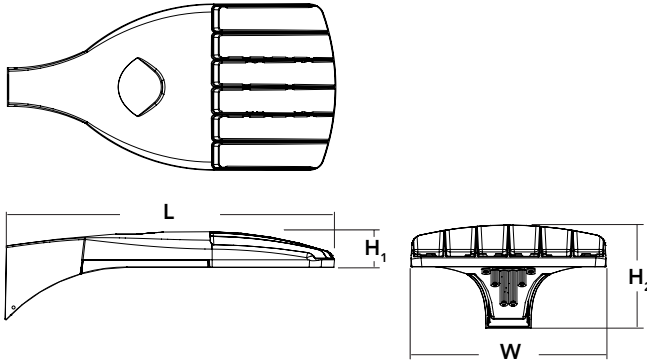
D-Series Size 0 LED Area Luminaire



d[#]series

Specifications

EPA:	0.95 ft ² (.09 m ²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height ₁ :	3" (7.62 cm)
Height ₂ :	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

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

DSX0 LED	Series	LEDs	Color temperature	Distribution	Voltage	Mounting	
DSX0 LED	Forward optics	P1 P5 P2 P6 P3 P7 ¹ P4 ¹	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short ³	T5S Type V short ³ T5M Type V medium ³ T5W Type V wide ³ BLC Backlight control ⁴ LCCO Left corner cutoff ⁴ RCCO Right corner cutoff ⁴	MVOLT (120V-277V) ^{5,6} XVOLT (277V-480V) ^{7,8,9} 120 ⁶ 208 ⁶ 240 ⁶ 277 ⁶ 347 ⁶ 480 ⁶	Shipped included SPA Square pole mounting RPA Round pole mounting ¹⁰ WBA Wall bracket ³ SPUMBA Square pole universal mounting adaptor ¹¹ RPUMBA Round pole universal mounting adaptor ¹¹ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ¹²
	Rotated optics	P10 ² P12 ² P11 ² P13 ^{1,2}					

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled ^{13,14} PIRHN Network, high/low motion/ambient sensor ¹⁵ PER NEMA twist-lock receptacle only (control ordered separate) ¹⁶ PER5 Five-pin receptacle only (control ordered separate) ^{16,17} PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separate) ^{16,17} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ¹⁸	Shipped installed HS House-side shield ²² SF Single fuse (120, 277, 347V) ⁶ DF Double fuse (208, 240, 480V) ⁶ L90 Left rotated optics ² R90 Right rotated optics ² DDL Diffused drop lens ²² HA 50°C ambient operations ¹ Shipped separately BS Bird spikes ²³ EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{19,20}		
PIRHN High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{19,20}		
PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{19,20}		
PIRHN1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{19,20}		
FAO Field adjustable output ²¹		



Ordering Information

Accessories

Ordered and shipped separately.

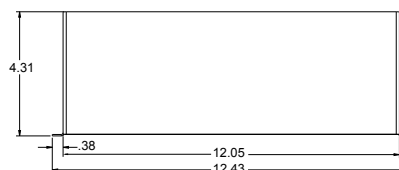
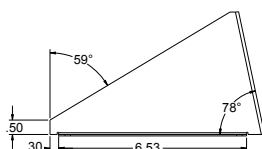
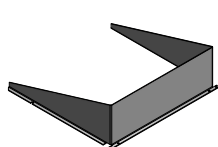
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²⁴
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²⁴
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²⁴
DSHORT SBK U	Shorting cap ²⁴
DSX0HS 20C U	House-side shield for P1,P2,P3 and P4 ²²
DSX0HS 30C U	House-side shield for P10,P11,P12 and P13 ²²
DSX0HS 40C U	House-side shield for P5,P6 and P7 ²²
DSX0DDL U	Diffused drop lens (polycarbonate) ²²
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) ²³
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) ²³
DSX0EGS (FINISH) U	External glare shield

For more control options, visit [DTL](#) and [ROAM](#) online. Link to [nLight Air 2](#)

NOTES

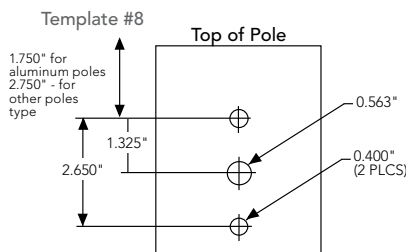
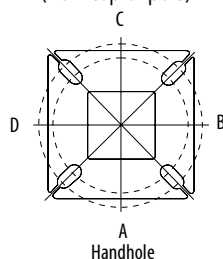
- 1 HA not available with P4, P7, and P13.
- 2 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
- 3 Any Type 5 distribution with photocell, is not available with WBA.
- 4 Not available with HS or DDL.
- 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 6 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
- 7 XVOLT only suitable for use with P4, P7 and P13.
- 8 XVOLT operates with any voltage between 277V and 480V.
- 9 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
- 10 Suitable for mounting to round poles between 3.5" and 12" diameter.
- 11 Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
- 12 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
- 13 Must be ordered with PIRHN.
- 14 Sensor cover available only in dark bronze, black, white and natural aluminum colors.
- 15 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit [this link](#).
- 16 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- 17 If ROAM[®] node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- 18 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
- 19 Reference Controls Options table on page 4.
- 20 Reference Motion Sensor Default Table on page 4 to see functionality.
- 21 Not available with other dimming controls options.
- 22 Not available with BLC, LCCO and RCCO distribution.
- 23 Must be ordered with fixture for factory pre-drilling.
- 24 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- 25 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8

EGS – External Glare Shield



Drilling

HANDHOLE ORIENTATION (from top of pole)



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

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

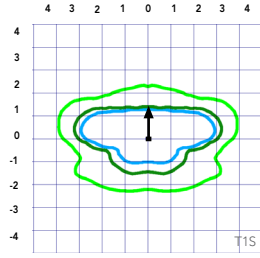
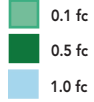
DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

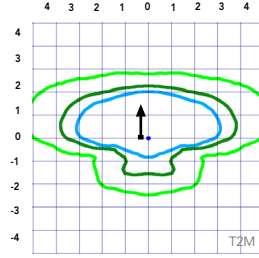
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').

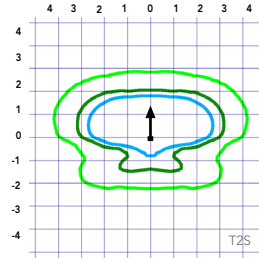
LEGEND



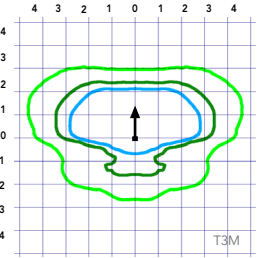
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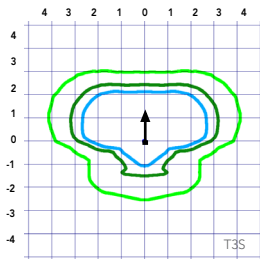
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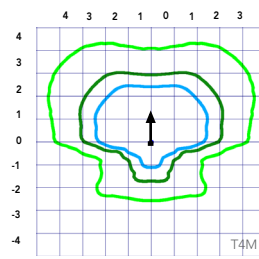
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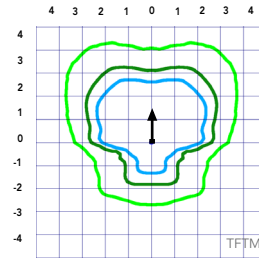
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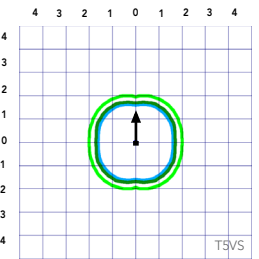
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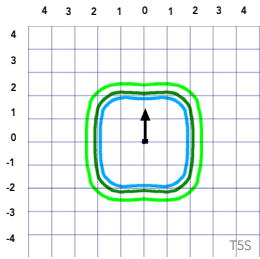
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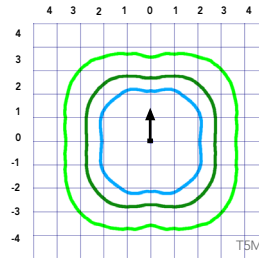
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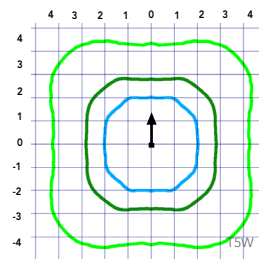
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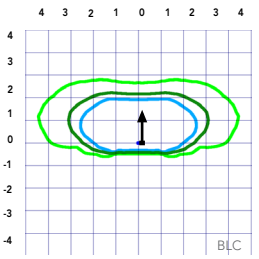
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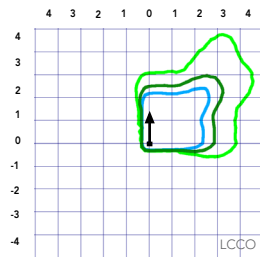
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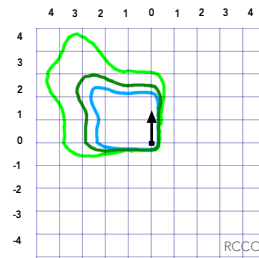
Test No. LTL23451P25 tested in accordance with IESNA LM-79-08.



Test No.



Test No.



Test No.

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

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

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

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*for use when motion sensor is used as dusk to dawn control.

Controls Options

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

Electrical Load

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

Performance Data

Lumen Output

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

Forward Optics																			
Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	20	530	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123
				TFTM	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126
				TSVS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130
				TSW	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
P2	20	700	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124
				T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124
				T2M	5,593	1	0	1	114	6,025	1	0	1	123	6,102	1	0	1	125
				T3S	5,417	1	0	2	111	5,835	1	0	2	119	5,909	2	0	2	121
				T3M	5,580	1	0	2	114	6,011	1	0	2	123	6,087	1	0	2	124
				T4M	5,458	1	0	2	111	5,880	1	0	2	120	5,955	1	0	2	122
				TFTM	5,576	1	0	2	114	6,007	1	0	2	123	6,083	1	0	2	124
				TSVS	5,799	2	0	0	118	6,247	2	0	0	127	6,327	2	0	0	129
				T5S	5,804	2	0	0	118	6,252	2	0	0	128	6,332	2	0	1	129
				T5M	5,789	3	0	1	118	6,237	3	0	1	127	6,316	3	0	1	129
				TSW	5,834	3	0	2	119	6,285	3	0	2	128	6,364	3	0	2	130
				BLC	4,572	1	0	1	93	4,925	1	0	1	101	4,987	1	0	1	102
				LCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
				RCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
P3	20	1050	71W	T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120
				T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118
				TFTM	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120
				TSVS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125
				TSW	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
P4	20	1400	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116
				T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116
				T2M	9,831	2	0	2	107	10,590	2	0	2	115	10,724	2	0	2	117
				T3S	9,521	2	0	2	103	10,256	2	0	2	111	10,386	2	0	2	113
				T3M	9,807	2	0	2	107	10,565	2	0	2	115	10,698	2	0	2	116
				T4M	9,594	2	0	2	104	10,335	2	0	3	112	10,466	2	0	3	114
				TFTM	9,801	2	0	2	107	10,558	2	0	2	115	10,692	2	0	2	116
				TSVS	10,193	3	0	1	111	10,981	3	0	1	119	11,120	3	0	1	121
				T5S	10,201	3	0	1	111	10,990	3	0	1	119	11,129	3	0	1	121
				T5M	10,176	4	0	2	111	10,962	4	0	2	119	11,101	4	0	2	121
				TSW	10,254	4	0	3	111	11,047	4	0	3	120	11,186	4	0	3	122
				BLC	8,036	1	0	2	87	8,656	1	0	2	94	8,766	1	0	2	95
				LCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71
				RCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71

Performance Data

Lumen Output

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

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

Performance Data

Lumen Output

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

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

FEATURES & SPECIFICATIONS

INTENDED USE

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

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft²) for optimized pole wind loading.

FINISH

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

OPTICS

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

ELECTRICAL

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

STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programming and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS

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

INSTALLATION

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

LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C to 50°C ambient with HA option. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY

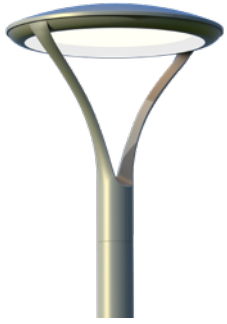
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.





Radean Post Top LED Area Luminaire



Catalog
Number

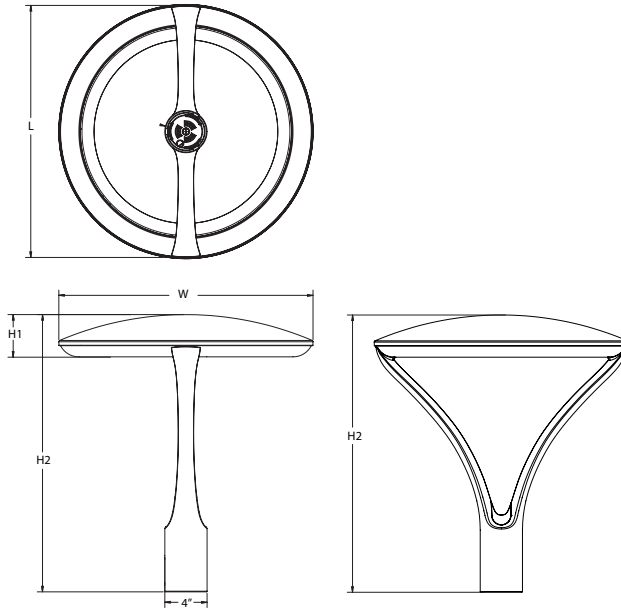
Notes

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Specifications

EPA:	1.02 ft ² (0.105 m ²)
Length:	24" (61cm)
Width:	24" (61cm)
H1 Luminaire Height:	4" (10.16cm)
H2 Luminaire Height:	26" (66.04cm)
Weight:	38lbs (17.24Kg)



Introduction

The architecturally-inspired shape of the RADEAN™ post top area luminaire embodies the grace and strength of the RADEAN family. The twin copper-core cast aluminum arms support the slender superstructure, creating a beautiful sculpture by day transforming into a beacon of comfort by night. Triangular arms redirect reflection maintaining its visually quiet appearance. With sleek lines and simple silhouettes, these LED luminaires use specialized lighting and visual comfort to transform common areas like courtyards, outdoor retail locations, universities and corporate campuses into pedestrian-friendly nighttime environments.

Ordering Information

EXAMPLE: RADPT LED P3 30K SYM MVOLT PT4 PIR DNAXD

Series	Performance package	Color temperature	Distribution	Voltage	Mounting (required)
RADPT LED	P1 3,000 Lumens P2 5,000 Lumens P3 7,000 Lumens P4 10,000 Lumens P5 15,000 Lumens	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	SYM Symmetric type V ASY Asymmetric type IV PATH Pathway Type III	MVOLT ¹ 277 ¹ 120 ¹ 347 208 ¹ 480 240 ¹	PT4 ² Slips inside a 4" OD round metal pole RADPT20 Slips over a 2 3/8" diameter tenon RADPT25 Slips over a 2 7/8" diameter tenon

Control options	Other options	Shipped installed	Finish (required)
Shipped installed NLTAIR2 nLight AIR 2.0 enabled ³ PIR Bi-level motion/sensor (100% to 30%) ^{4,5,6,7} PE Button photocell ⁶ FAO Field adjustable output ^{4,8}	SF Single Fuse ¹ DF Double Fuse ¹ R90 Rotated optics ⁹	Shipped installed HS Houseside shield ¹⁰	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white



COMMERCIAL OUTDOOR

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RADPT LED
Rev. 12/15/20

Ordering Information

Accessories

Ordered and shipped separately.

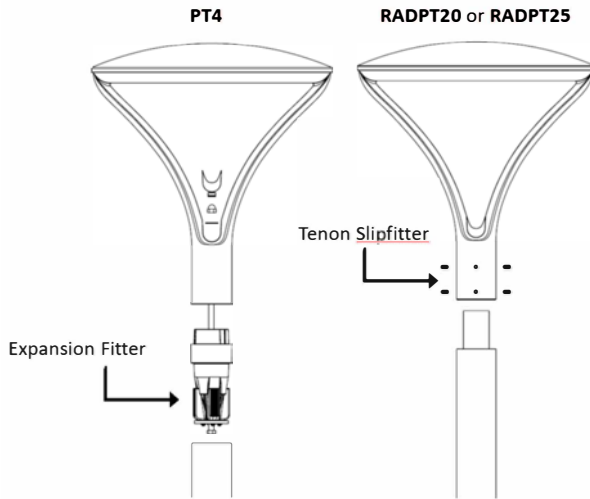
RADHS	Houseside shield (shield is white)
RADCS DDBXD U	Decorative clamshell base for 4" RSS pole (specify finish)
RADFBC DDBXD U	Full base cover for 4" RSS pole (specify finish)

For more control options, visit [DTL](#) and [ROAM](#) online.

NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- 2 Required nominal 4" round straight metal pole.
- 3 NLTAIR2 not available with PIR, PE or FAO. Must link to external nLight Air network.
- 4 PIR will work with FAO, if adjustable low-end trim is required.
- 5 PIR must specify 120V, 277V, 347V or 480V. Not available in MVOLT, 208V or 240V.
- 6 PE and PIR are available together.
- 7 PIR for use only on luminaires mounted under 15'.
- 8 Field adjustable high-end trim.
- 9 For left rotation, select R90 and rotate luminaire 180° on pole.
- 10 Also available as a separate accessory; see Accessories information at left. HS not available with R90. Shield is field rotatable shield in 180° increments.

Mounting

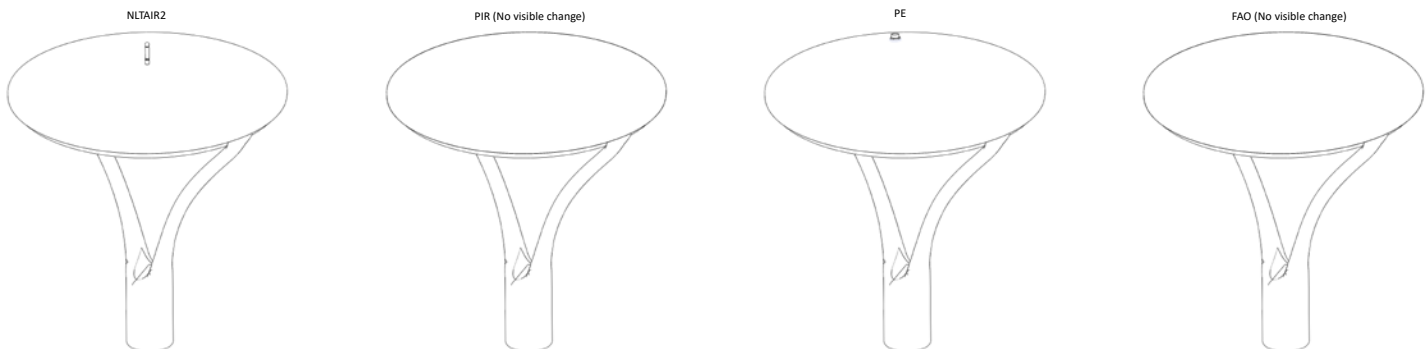


Recommended Poles for use with RADEAN RADPT LED Luminaires.

Acuity Part Number	Description	For luminaires	Used with Mounting
RSS 10 4B PT DDBXD	10' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 12 4B PT DDBXD	12' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 14 4B PT DDBXD	14' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 16 4B PT DDBXD	16' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 18 4B PT DDBXD	18' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 20 4B PT DDBXD	20' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 25 4B PT DDBXD	25' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 10 4B T20 DDBXD	10' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 12 4B T20 DDBXD	12' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 14 4B T20 DDBXD	14' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 16 4B T20 DDBXD	16' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 18 4B T20 DDBXD	18' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 20 4B T20 DDBXD	20' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 25 4B T20 DDBXD	25' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20

* Customer must verify pole loading per required design criteria and specified wind speed. Consult pole specification sheet for additional details.

Control Options



Performance Data

Lumen Output

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

Performance Package	Input Wattage	Distribution	2700K					3000K					3500K					4000K					5000K				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	25	ASY	2,924	2	1	2	115	3,022	2	2	2	119	3,095	2	2	2	122	3,168	2	2	2	125	3,168	2	2	2	125
		PATH	2,529	2	1	2	100	2,613	2	2	2	103	2,676	2	2	2	105	2,739	2	2	2	108	2,739	2	2	2	108
		SYM	3,086	2	1	1	121	3,189	2	1	1	126	3,266	2	1	1	129	3,344	2	1	1	132	3,344	2	1	1	132
P2	38	ASY	4,521	3	2	3	119	4,672	3	2	3	123	4,785	3	2	3	126	4,898	3	2	3	129	4,898	3	2	3	129
		PATH	3,909	2	2	2	103	4,040	2	2	2	106	4,137	2	2	2	109	4,235	3	2	3	111	4,235	3	2	3	111
		SYM	4,772	2	2	1	126	4,931	3	2	1	130	5,050	3	2	1	133	5,169	3	2	1	136	5,169	3	2	1	136
P3	54	ASY	6,387	3	2	3	119	6,600	3	2	3	123	6,760	3	2	3	126	6,919	3	2	3	129	6,919	3	2	3	129
		PATH	5,523	3	2	3	103	5,707	3	2	3	106	5,845	3	2	3	109	5,983	3	2	3	112	5,983	3	2	3	112
		SYM	6,741	3	2	2	126	6,966	3	2	2	130	7,135	3	2	2	133	7,303	3	2	2	136	7,303	3	2	2	136
P4	86	ASY	10,150	4	2	4	118	10,489	4	2	4	122	10,742	4	2	4	125	10,996	4	2	4	128	10,996	4	2	4	128
		PATH	8,777	3	2	3	102	9,070	3	2	3	106	9,289	3	2	3	108	9,509	3	2	3	111	9,509	3	2	3	111
		SYM	10,713	3	2	2	125	11,071	3	2	2	129	11,338	3	2	2	132	11,606	3	2	2	135	11,606	3	2	2	135
P5	123	ASY	14,250	4	2	4	116	14,724	4	2	4	120	15,081	4	3	4	123	15,437	4	3	4	126	15,437	4	3	4	126
		PATH	12,322	4	2	4	101	12,733	4	3	4	104	13,041	4	3	4	106	13,349	4	3	4	109	13,349	4	3	4	109
		SYM	15,040	4	2	3	123	15,541	4	2	3	127	15,917	4	2	3	130	16,293	4	2	3	133	16,293	4	2	3	133

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	LAT Factor	
0°C	32°F	1.06
5°C	41°F	1.05
10°C	50°F	1.04
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **RADPT LED** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

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

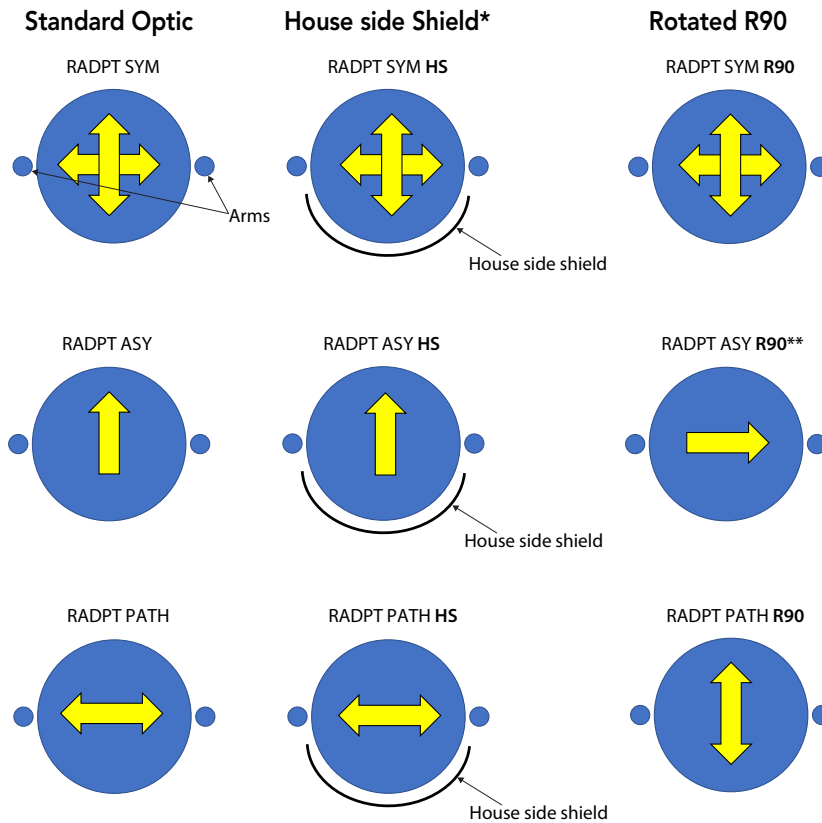
	Projected LED Lumen Maintenance			
	0	25,000	50,000	100,000
P1	1.00	0.96	0.91	0.82
P2	1.00	0.96	0.91	0.82
P3	1.00	0.96	0.91	0.82
P4	1.00	0.96	0.91	0.82
P5	1.00	0.95	0.89	0.78

Electrical Load

Lumen Package	LED Drive Current	Voltage	Wattage		Current (A)					
					120	208	240	277	347	480
P1	500	42.8	21.4	Input Current	0.22	0.13	0.11	0.1	0.08	0.06
				System Watts	26	26	26	27	25	26
P2	770	43	33.1	Input Current	0.33	0.19	0.16	0.14	0.11	0.08
				System Watts	39	39	39	39	38	38
P3	1100	43.2	47.5	Input Current	0.46	0.26	0.23	0.2	0.16	0.12
				System Watts	55	54	54	54	54	54
P4	900	87.3	78.6	Input Current	0.73	0.42	0.36	0.32	0.25	0.18
				System Watts	87	86	86	86	86	86
P5	1250	88.2	110.2	Input Current	1	0.58	0.5	0.44	0.35	0.25
				System Watts	120	119	119	119	120	120



Isofootcandle plots are considered to be representative of available optical distributions.



*HS not available with R90

**For L90, use R90 and rotate luminaire 180° on pole

FEATURES & SPECIFICATIONS

INTENDED USE

Pedestrian areas such as parks, campuses, pathways, courtyards and pedestrians malls.

CONSTRUCTION

Single-piece die-cast aluminum housing with nominal wall thickness of 0.125" on a 6mm thick acrylic waveguide is fully gasketed with a single piece tubular silicone gasket.

FINISH

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

OPTICS

6MM thick acrylic waveguide with 360° flexible LED board. Available in 2700K, 3000K, 3500K, 4000K and 5000K (70CRI) CCT configurations.

ELECTRICAL

Light engine consists of 96 high-efficacy LEDs mounted to a flexible circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low for operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Standard post-top mounting configuration fits into a 4" OD open pole top (round pole only). Alternate tenon (2-3/8" or 2-7/8") mounting also available.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color or less.

WARRANTY

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

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



WEDGE1 LED

Architectural Wall Sconce



Catalog Number

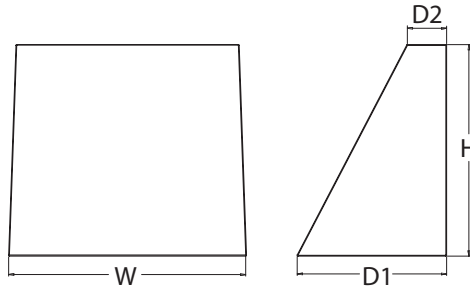
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

- Depth (D1):** 5.5"
- Depth (D2):** 1.5"
- Height:** 8"
- Width:** 9"
- Weight:** 9 lbs
(without options)



Introduction

The WEDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WEDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WEDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WEDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WEDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WEDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WEDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WEDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WEDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WEDGE1 LED	P1 P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K ¹ 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ⁵ Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.

Options	Finish
E4WH ³ Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD Dark bronze
PE ⁴ Photocell, Button Type	DBLXD Black
DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD Natural aluminum
DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD White
BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD Sandstone
	DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories

Ordered and shipped separately.

- WEDGEAWS DDBXD U WEDGE 3/8inch Architectural Wall Spacer (specify finish)
- WEDGE1PBBW DDBXD U WEDGE1 surface-mounted back box (specify finish)

NOTES

- 1 50K not available in 90CRI.
- 2 347V not available with E4WH, DS or PE.
- 3 E4WH not available with PE or DS.
- 4 PE not available with DS.
- 5 Not qualified for DLC. Not available with E4WH.



COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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WEDGE1 LED
Rev. 01/04/21

Performance Data

Lumen Output

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

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	10W	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
		VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0
P2	15W	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
		VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	10W	0.082	0.049	0.043	0.038	--
	13W	--	--	--	--	0.046
P2	15W	0.132	0.081	0.072	0.064	--
	18W	--	--	--	--	0.056

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.03
10°C / 50°F	1.02
20°C / 68°F	1.01
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

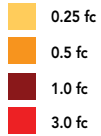
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91

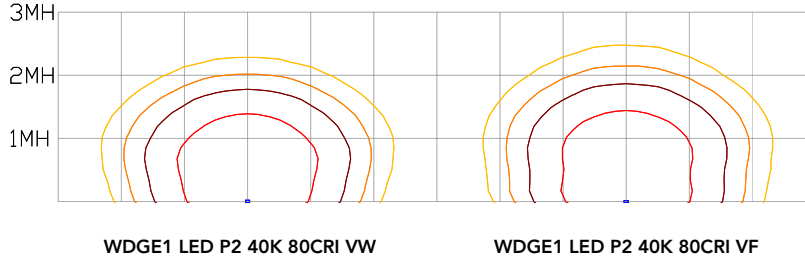
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 8ft
Grid = 8ft x 8ft



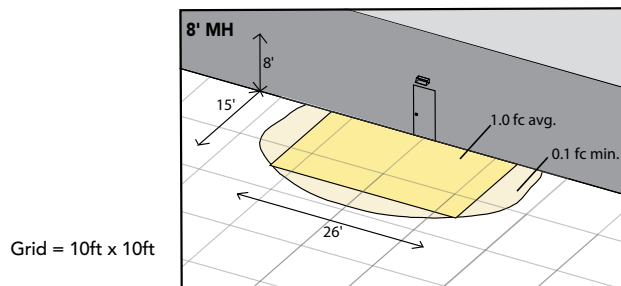
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.

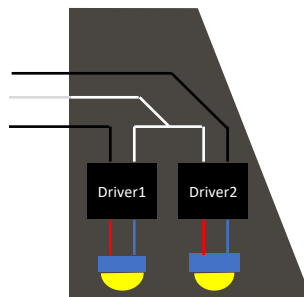


WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9





E4WH – 4W Emergency Battery Backup

D = 5.5"

H = 8"

W = 9"



PBBW – Surface-Mounted Back Box

Use when there is no junction box available.

D = 1.75"

H = 8"

W = 9"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WEDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

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

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WEDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

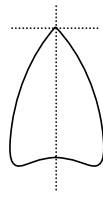
LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

WARRANTY

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

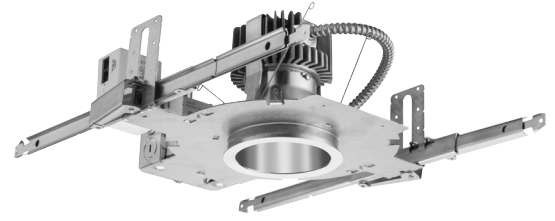
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



OVERVIEW

General Illumination Round Downlight

4"



Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution



Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500
Delivered Lumens	271	573	808	1001	1527	1994	2580	3110	3612
Wattage	3.1	7.2	7.9	8.8	13.7	19.5	25.7	31.2	38.4
Lumens per Watt	87.4	79.6	102.3	113.8	111.5	102.3	100.4	99.7	94.1

COMPLEMENTARY PRODUCTS

Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core	Downlight	Adjustable	Open Wallwash	Lensed Wallwash	Cylinder	Pinhole	Bevel	Hyperbolic
Healthcare	MRI	Surgical Suite	Patient Room					
Special Applications	Dynamic	Food Service	Vandal/Tamper	Clean Room	Shower	Steam Room		

A+ Capable options indicated by this color background.

DS Design2Ship Quick Ship Program: Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details. **Maximum Order Quantity: 100 units; 50 for Chicago Plenum.**

Luminaire Type:

Catalog Number:

EXAMPLE: EV04 35/25 AR MWD LSS 120 EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Distribution	Finish	Voltage
EV04	27/ 2700 K	02 250 lumens	AR Clear	(blank) Self-flanged	MD Medium (0.9 s/mh)	LSS Semi-specular	MVOLT
	30/ 3000 K	05 500 lumens	PR Pewter	FL Flangeless	MWD Medium wide (1.0 s/mh)	LD Matte-diffuse	120
	35/ 3500 K	07 750 lumens	WTR Wheat		WD Wide (1.2 s/mh)	LS Specular	277
	40/ 4000 K	10 1000 lumens	GR Gold				347 ^{2,3}
	50/ 5000 K	15 1500 lumens	WR ¹ White				
		20 2000 lumens	BR ¹ Black				
		25 2500 lumens	WRAMF ¹ White				
		30 3000 lumens					
		35 3500 lumens					

Driver ⁴	Control Interface	Options
GZ10 0-10V driver dims to 10%	NLT⁵ nLight [®] dimming pack controls	SF Single Fuse. Specify 120V or 277V
GZ1 0-10V driver dims to 1%	NLTER^{2,6,10} nLight [®] dimming pack controls emergency circuit	TRW⁷ White painted flange
EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	NLTAIR^{2,13} nLight [®] Air enabled	TRBL⁸ Black painted flange
EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	NLTAIRER2^{2,10,13} nLight [®] AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit	EL⁹ Emergency battery pack, 10W, with integral test switch
EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	NLTAIREM2^{2,13} nLight [®] AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit with battery pack options.	ELR⁹ Emergency battery pack, 10W, with remote test switch
EDAB⁴ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.		ELSD⁹ Emergency battery pack, 10W, with self-diagnostics, integral test switch
EDXB⁴ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Minimum 1000 lumens. Includes termination resistor. Refer to DMXR Manual .	EXA1 XPoint Wireless, eldoLED 0-10V ECOdrive. Linear dimming to 1%. Refer to XPoint tech sheet.	ELRSD⁹ Emergency battery pack, 10W, with self-diagnostics, remote test switch
ECOS2⁵ Lutron [®] Hi-Lume [®] 2-wire forward-phase driver. 120V only. Minimum dimming level 1%. Min: 1000LM; Max: 2500LM	EXAB XPoint Wireless, eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. Refer to XPoint tech sheet.	E10WCPR⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch
ECOD⁵ Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Min: 2500LM; Max: 4000LM.		E10WCPR⁹ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
		N80¹¹ nLight [®] Lumen Compensation
		BGTD Bodine generator transfer device. Specify 120V or 277V.
		90CRI High CRI (90+)
		CP¹² Chicago Plenum. Specify 120V or 277V for 5000lm and above.
		RRL RELOC [®] -ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature.

ACCESSORIES — order as separate catalog numbers (shipped separately)	
SCA4	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to TECH-190 .
CTA4-8 YK	Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). Adds ~4" to fixture height.
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC .

ORDERING NOTES	
1. Not available with finishes.	9. 11" of plenum depth or top access required for battery pack maintenance.
2. Not available with emergency battery pack options.	10. ER for use as UL924 Emergency Operation via power sense lead. Will require an emergency hot feed and normal hot feed. EM for use as UL924 Emergency Operation via power interrupt detection.
3. Supplied with factory installed step down transformer.	11. Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
4. Refer to TECH-240 for compatible dimmers.	12. Not available with ELR, HAO, EXA1, or EXAB options.
5. Not available with nLight [®] and XPoint options.	13. Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.
6. Must specify voltage.	
7. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.	
8. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.	

Optical Assembly

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from below the ceiling. Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control. Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Electrical

The luminaire shall operate from a 50 or 60 Hz ±3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output. The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output. Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages. Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Luminaire shall be equipped with interface for nLight wired or wireless network with integral power supply as per specification.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%. eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered. Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

Construction

Luminaire housing shall be constructed of 16-gauge galvanized steel and have preinstalled telescopic mounting bars with maximum 32" and minimum 15" extension and 4" vertical adjustment. Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 2"). Tool-less adjustments shall be possible after installation. The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration. 25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise). For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling. Luminaire configurations are Energy Star certified through testing in EPA-recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit www.energystar.gov for specific configurations listed.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours. Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by a point at the intersection of the CCT line and the black body locus line in CIE chromaticity space.

Warranty

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

Note:

Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

A+ Capable Luminaire

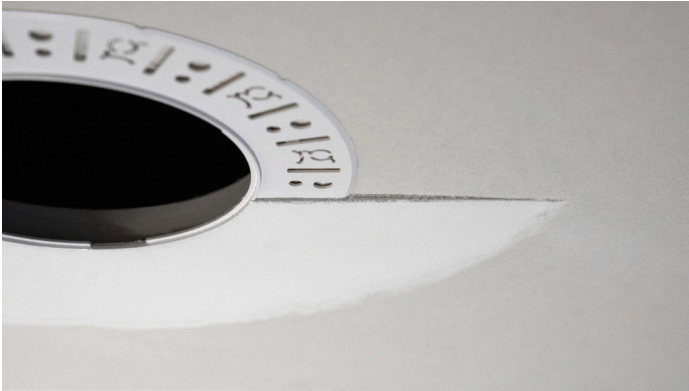
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

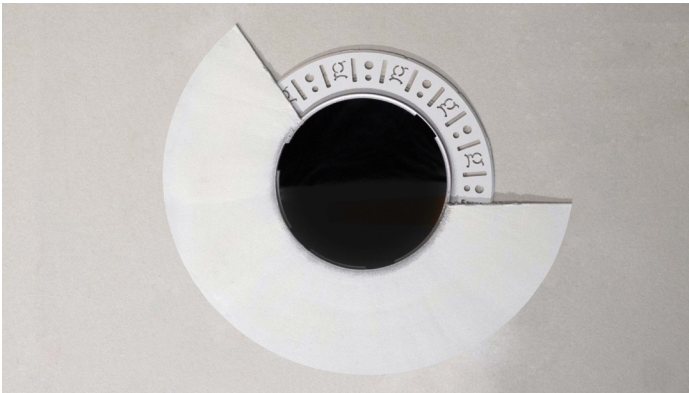
To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

Flangeless



Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.



EVO with flangeless trim

Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.

Tables of Use

EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EXA1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic	Linear
EXAB	<1%	Logarithmic	Linear
EDXB	<1%	Logarithmic	Linear

Distributions	
Distribution	Beam
MD	51
MWD	57
WD	73

CCT/CRI Multiplier Table		
CRI	CCT	Multiplier
80	2700K	0.96
	3000K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	3000K	0.83
	3500K	0.85
	4000K	0.87
	5000K	0.91

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73

Driver	Control Provided (note: 347V/UVOLT versions provided with 347 option selected)					
	Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIR2ER
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2	RPP20 D 24V ER G2

How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

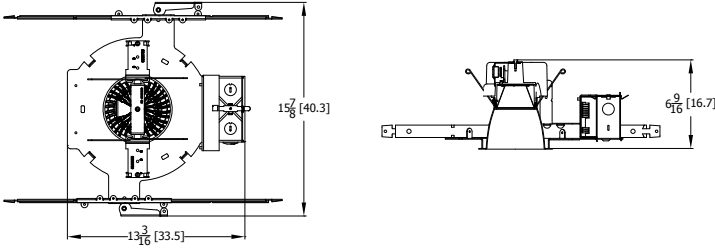
P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

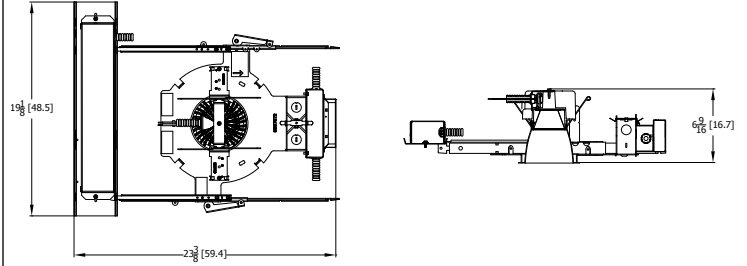
DIMENSIONAL DATA

Aperture: 4-5/16" (11) Ceiling Opening: 5-1/8" (13) self-flanged
 Overlap trim: 5-7/16" (13.8) 5-1/4" (13.3) flangeless

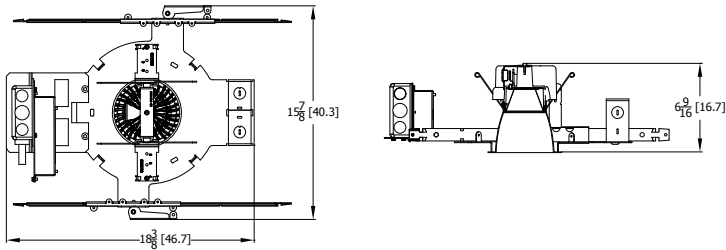
Standard



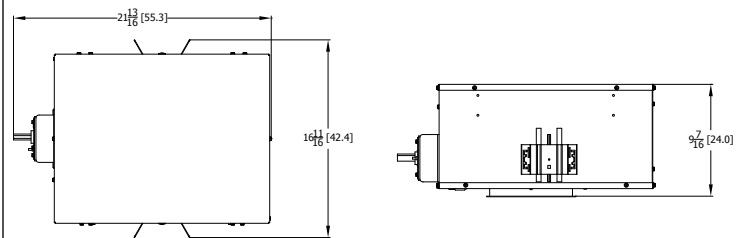
Battery Pack



CP Standard

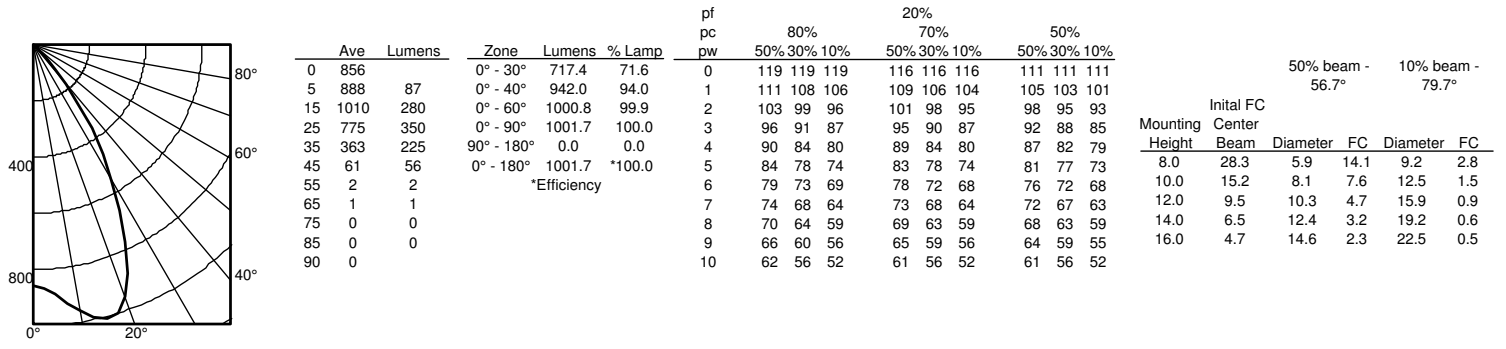


CP Enclosed For Use With Battery Pack & nLight

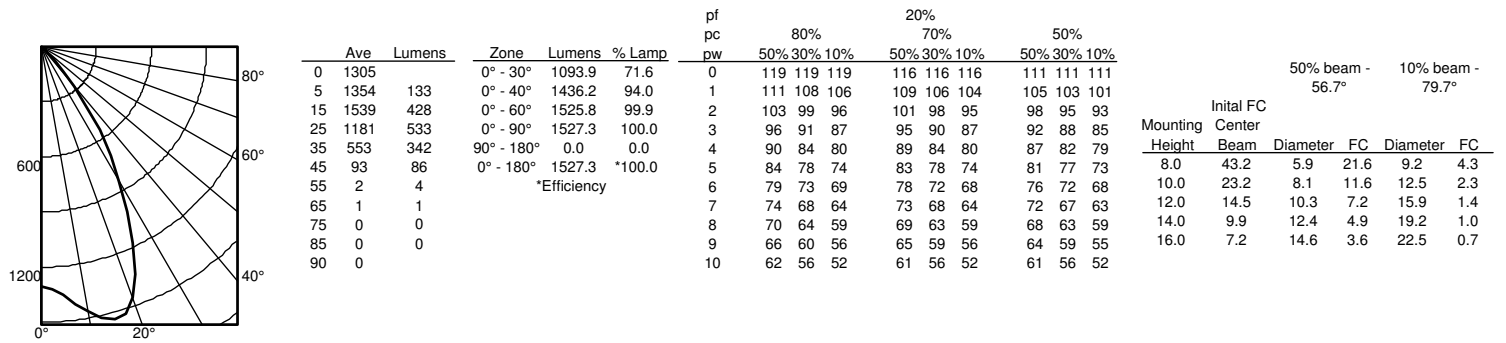


Photometry

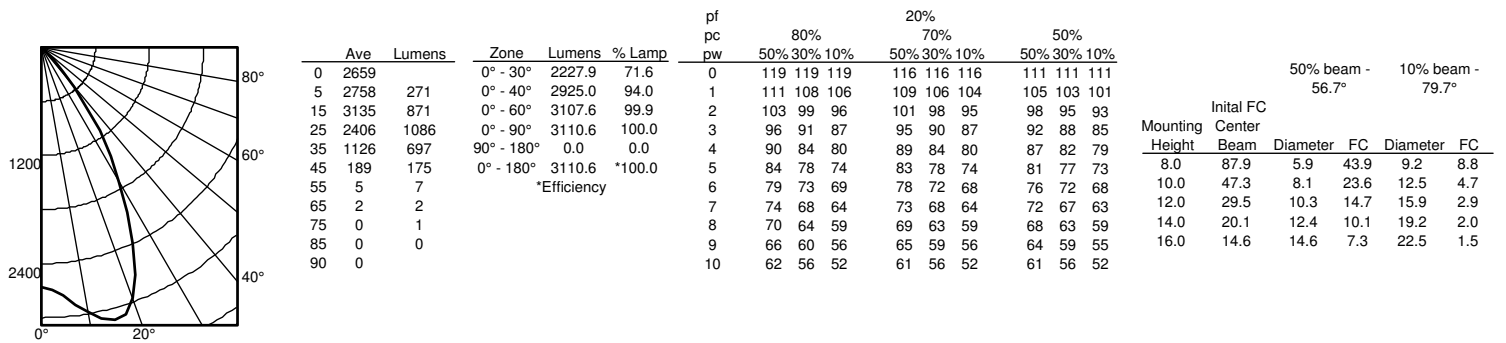
EVO4 35/10 MWD LS INPUT WATTS: 8.8W, DELIVERED LUMENS: 1001.7LM, LPW = 113.8, 1.08 S/MH, TEST NO. LTL27786P131



EVO4 35/15 MWD LSS INPUT WATTS: 13.7W, DELIVERED LUMENS: 1527.3LM, LPW = 111.4, 1.08 S/MH, TEST NO. LTL27786P137



EVO4 35/30 MWD LSS INPUT WATTS: 31.2W, DELIVERED LUMENS: 3110.6LM, LPW = 99.6, 1.08 S/MH, TEST NO. LTL27786P155



nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

nLight® AIR Control Accessories

Order as separate catalog number. Visit [nLight AIR](#).

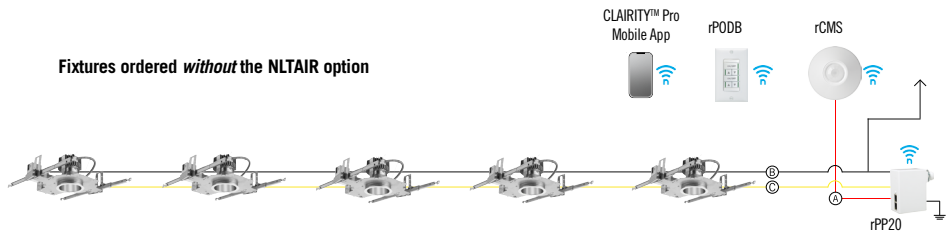
Wall Switches	Model Number
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

nLight® AIR Control Accessories (cont.)

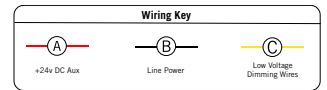
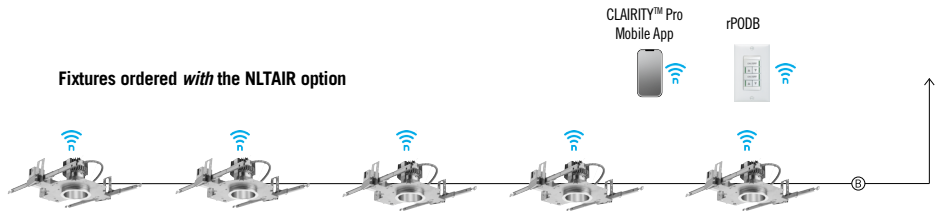
Occupancy Sensors (PIR/dual tech)	Model Number
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

Possibilities for nLight® AIR

Fixtures ordered *without* the NLTAIR option



Fixtures ordered *with* the NLTAIR option



nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit [nLight](#).

Wall Switches	Model Number
On/Off single pole	nPODM (color)
On/Off two pole	nPODM 2P (color)
On/Off & raise/lower single pole	nPOD DX (color)
On/Off & raise/lower two pole	nPODM 2P DX (color)
Graphic touchscreen	nPOD GFX (color)

Photocell Controls

Dimming	nCM ADCX
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nLight® Wired Control Accessories (cont.)

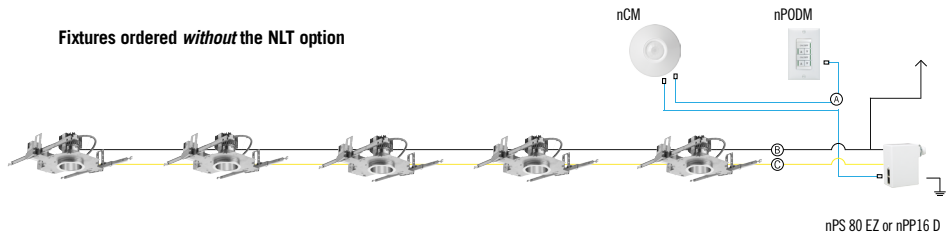
Occupancy Sensors (PIR/dual tech)	Model Number
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

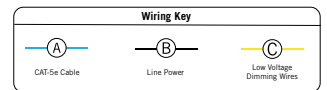
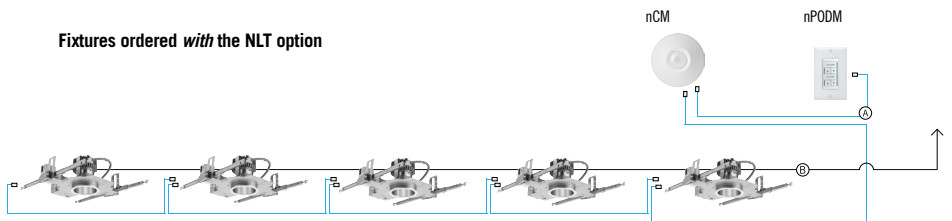
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

Possibilities for nLight® wired

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option



TARGETTI

KEPLERO ZOOM Flexibility Professional Inground LED Fixture

Concept: Professional single LED COB fully adjustable landscape inground fixture. As landscaping matures and changes, shape and size zoom optics can be adjusted in beam spread and direction to adjust with the changing landscape.

Housing: 8" tall x 11" diameter die-cast aluminum housing.

Materials: Anodized and powder coated black die-cast aluminum heat sink with PVC installation sleeve and stainless steel (AISI316L) trim ring with extra clear glass (anti-slip available). Body completed with marine grade cataphoresis painting treatment. Fixtures located in marine environments are not to be in direct contact with salt for extended periods of time or used with corrosive agents. Stainless steel trim will need to be maintained and cleaned regularly to avoid mineral deposits.

Trim: Stainless steel (AISI316L) trim available in ultra flat round decorative ring, with beveled edge in brushed natural, bronze or black finishes. Features tamper-proof Torx screws.

Optic: Zoom optical system which slides and locks on vertical axis according to four different positions to provide four different beam spreads; 19°, 26°, 42° and 64° beam spreads. Light beam adjusted horizontally 0.79" from center to change adjacent illumination pattern by 20° narrow, and rotated 360° on the horizontal plane with integral locking system.

Mounting: Flush and semi-flush installation sleeves with stainless steel extension sleeve or optional raised installation tube for landscape. Fixture includes screw down holes and stainless steel screws for attachment to installation sleeve. Includes optional stainless steel L brackets for mounting support. Installation sleeve required for flush or semi-flush mounting (sold separately).

Driver: Integrated 4/1 driver (Non-dimmable / 0-10V / Reverse Phase / Forward Phase).

Installation: Fixture flush mount installation includes 9" tall x 11" diameter sleeve, extension sleeve for wire slack and accessibility. Fixture is provided with 6ft IP68 connector cable, direct burial brass ingrade jbox (required, sold separately).

Wattage: 36W

Color Temperature: 2700K / 3000K / 3500K / 4000K

CRI: Ra84 (2700K, 3000K, 4000K) / 90Ra (3500K)

Lumen Maintenance (L70): 50,000hrs

Calculation for LED fixtures are based on measurements that comply with IES LM-80.

Voltage: Universal Voltage 120-277V AC 50/60Hz

IK Rating: IK10

IP Rating: IP67*, IP68 Tested**

Load Rating: Resistant to static loads up to 4,496lbs in flush mounted cement and pavement installations.

Certifications: cULus Wet Listed E477426

Tested in accordance with LM-79-08

Energy efficient for California installations.

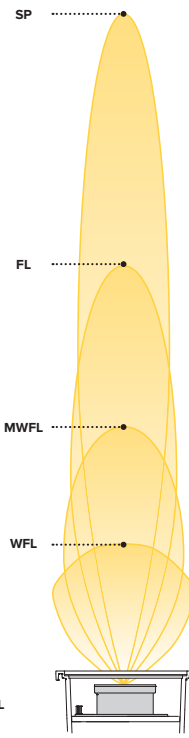
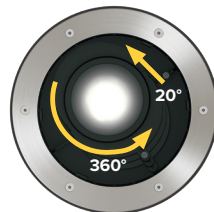
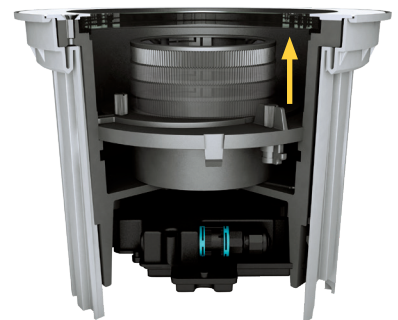
Warranty: 5 year limited warranty

* Up to 1 METER DEPTH of water for up to a maximum of 30 MINUTES

** Not suitable for submersible installations



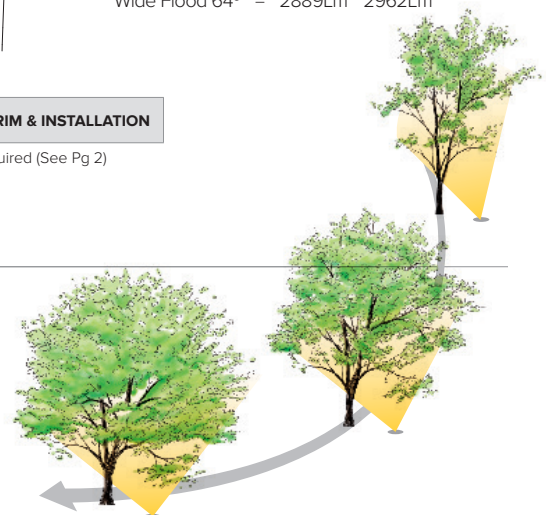
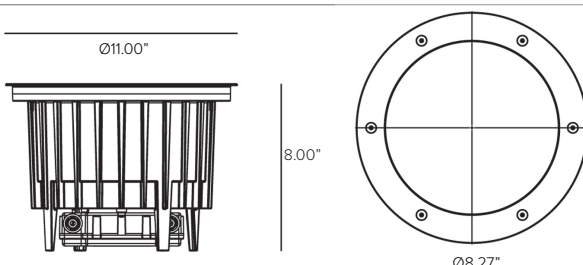
KEPLERO® Zoom with Clear Lens






Delivered Lumens:	3000K	4000K
Spot 19°	= 1666Lm	1708Lm
Flood 26°	= 2205Lm	2261Lm
Medium Wide Flood 42°	= 2756Lm	2826Lm
Wide Flood 64°	= 2889Lm	2962Lm

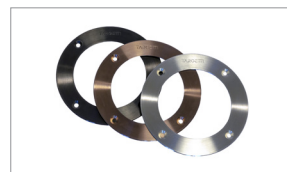
PRODUCT CODE	DRIVER	TYPE	WATTAGE	COLOR TEMP	+ TRIM & INSTALLATION
KPL — KEPLERO	41 — 4/1 Dimming (Non-Dimming / 0-10V / Reverse Phase / Forward Phase)	ZM — Zoom	L2 — 36W	27 — 2700K 30 — 3000K 35 — 3500K 40 — 4000K	Required (See Pg 2)

Views



TRIM RING (REQUIRED) - CHOOSE 1			
Round Trim Ring (Available in Brushed Natural, Bronze, and Black PVD finishes)			
			Description
1DU2325	1DU2325B	1DU2325K	Round stainless steel (AISI316L) decorative ring. 10mm thick extra clear protective glass. Silicone gasket. Tamper proof (AISI316L) Torx screws.
1DU2325A	1DU2325BA	1DU2325KA	Round stainless steel (AISI316L) decorative ring with anti-slip glass. 10mm thick extra clear protective glass. Silicone gasket. Tamper proof (AISI316L) Torx screws.
1DU2325E	1DU2325BE	1DU2325KE	Round stainless steel (AISI316L) decorative ring with half frosted glass. 10mm thick extra clear protective glass. Silicone gasket. Tamper proof (AISI316L) Torx screws.

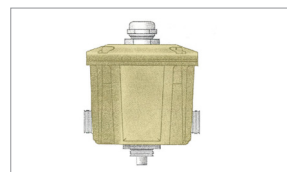
INSTALLATION SLEEVE (REQUIRED) - CHOOSE 1	
1DU2394	Installation sleeve for concrete pour applications. Grey Nylon 9" casing with 4.5" aluminum extension sleeve. Complete with dedicated cover cap for installations in concrete. Round ring for flush or semi-flush installations.
1DU4343	Raised installation sleeve for landscape applications. 36"H stainless steel painted deep black finish, includes 9" inner sleeve. (Field cuttable. Used for fixture elevation 21" above ground). Not suitable with 1DU2394.
1DU434318	Raised installation sleeve for ground cover (succulents and low level planting) applications. 18"H stainless steel painted deep black finish, includes 9" inner sleeve. (Field cuttable. Used for fixture elevation 3" above ground). Not suitable with 1DU2394.
1DU434312	At grade or raised installation sleeve for turf or ground cover applications. Raised installation sleeve for turf applications. 12"H stainless steel painted deep black finish, includes 9" inner sleeve. (Field cuttable. Used for fixture elevations at grade to 3" above grade). Not suitable with 1DU2394.



Trim Ring



1DU2394



1DU2530



1E2495



1E2496



1E0388

OPTICAL ACCESSORIES:	
Maximum of one optical filter or louver accessory per fixture.	
1T1700	Chromatic filter Red. Glass made, with dichroic treatment. Diameter 3.98".
1T1701	Chromatic filter Green. Glass made, with dichroic treatment. Diameter 3.98".
1T1702	Chromatic filter Blue. Glass made, with dichroic treatment. Diameter 3.98".
1T1703	Chromatic filter Yellow. Glass made, with dichroic treatment. Diameter 3.98".
1T1704	Chromatic filter Magenta. Glass made, with dichroic treatment. Diameter 3.98".
1T1781	Chromatic filter Cold tone. Interference glass filter to vary the colour temperature of light. Diameter 3.98".
1T1790	Chromatic filter Gold tone. Interference glass filter to vary the colour temperature of light. Diameter 3.98".
1T1766	Chromatic filter Peach tone. Interference glass filter to vary the colour temperature of light. Diameter 3.98".
1T1696	Parallel ribbed glass light blade filter. This makes the beam take on an oval shape and when combined with spotlights, the light blade appears more prominent. Diameter 3.98".
1T1699	Anti-glare grid. Black lacquered metal honeycomb structure. Diameter 3.98".
1E2402	Half Moon Anti glare shutter. Black finish. Can be used as one per fixture with a filter or louver, not considered as part of the maximum optical accessories.

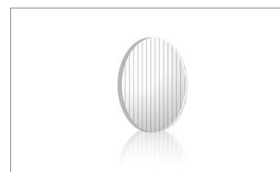
INSTALLATION ACCESSORIES:	
1DU2530	Direct burial brass ingrade j-box. Features stainless steel cover screws and strain relief for power cord. (2) 3/4" NPT bottom holes and (2) 3/4" NPT side holes. Includes (4) 3/4" to 1/2" adaptors and (2) 1/2" NPT plugs. (REQUIRED)
1E2495	Anti-vandal torx head. Suggested one per 5 fixture.
1E2496	Fixture metal maintenance removal handle. Helpful one per 10 fixtures.
1E0388	Glass suction removal tool. Helpful one per 20 fixtures.



Chromatic Filters



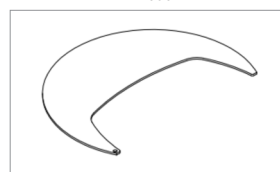
Tonal Filters



1T1696



1T1699



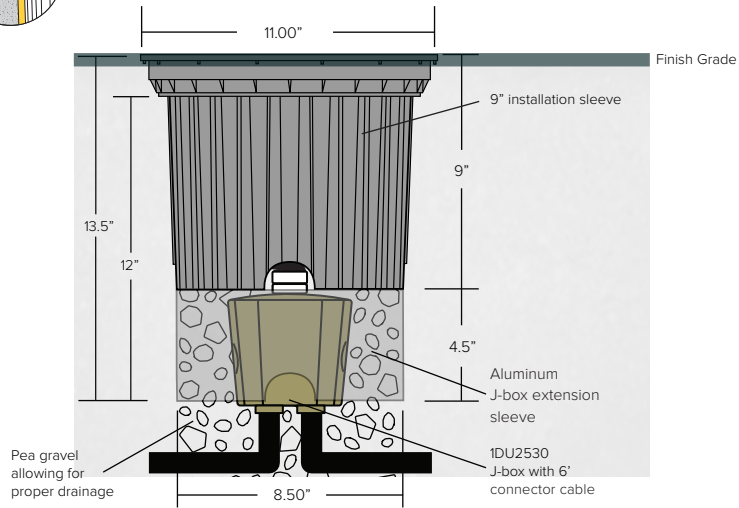
1E2402

INSTALLATION DIAGRAM - Concrete Pour Applications



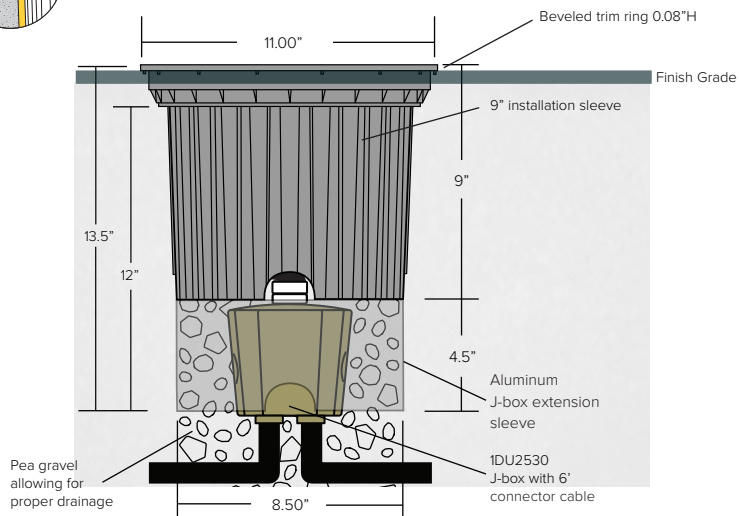
Flush Mount Sleeve Assembly

1DU2394 Sleeve



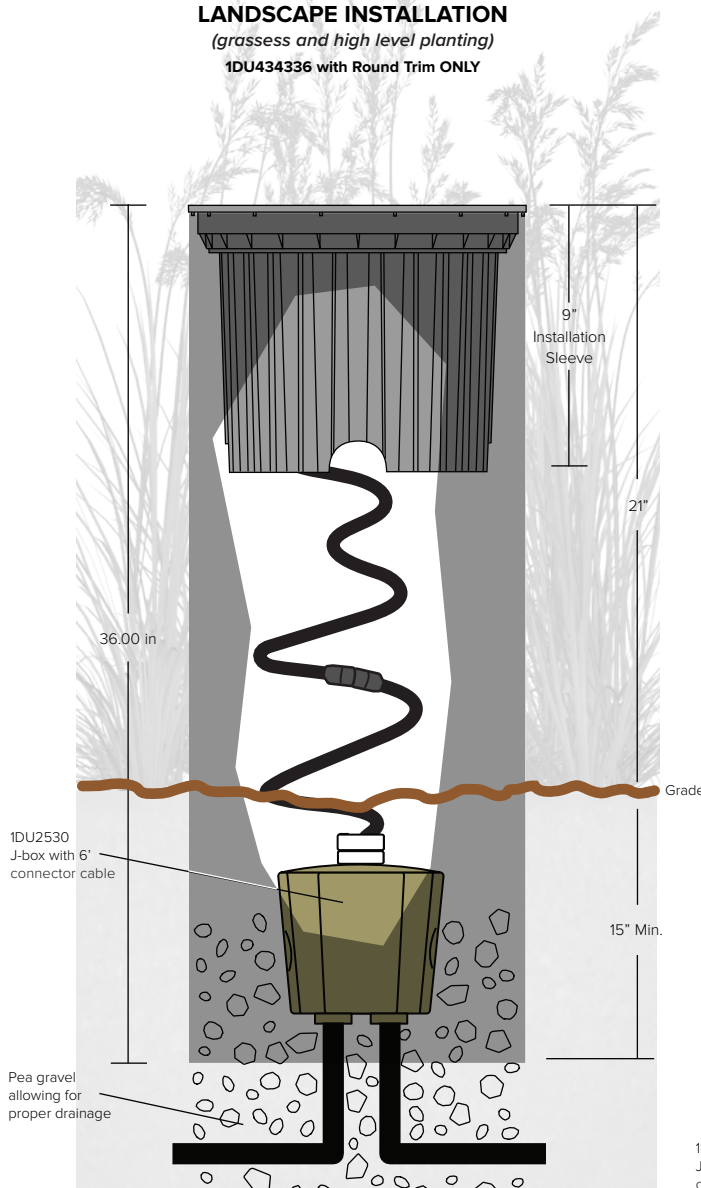
Semi-Flush Mount Sleeve Assembly

1DU2394 Sleeve

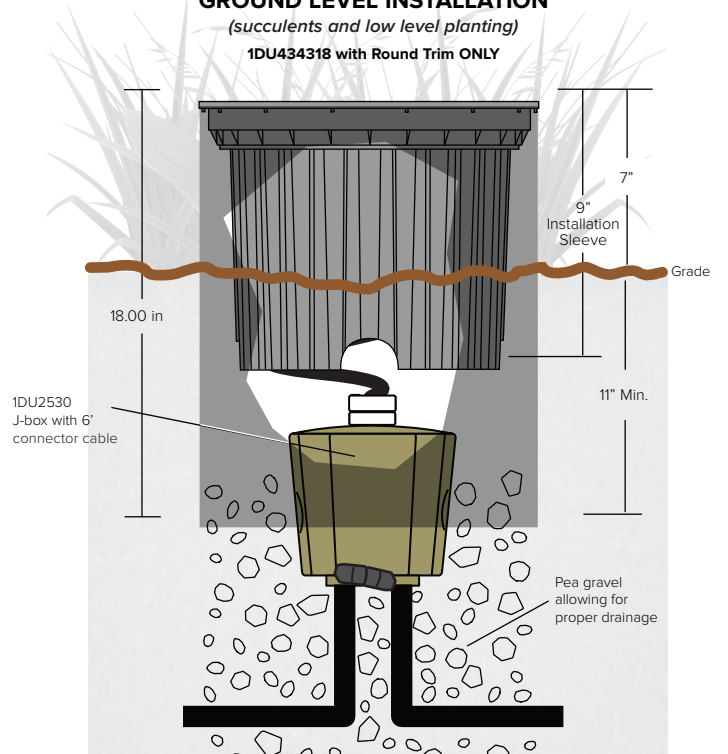


INSTALLATION DIAGRAM - Landscape Applications

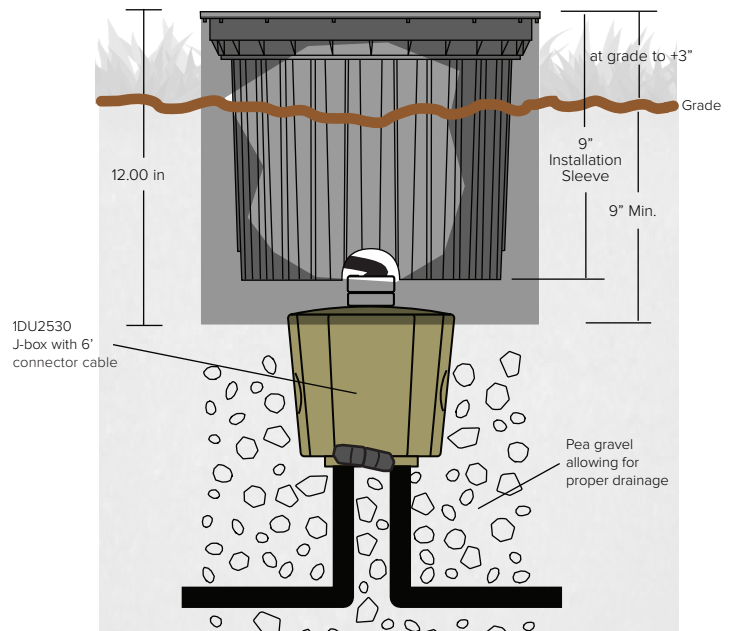
RAISED TUBE INSTALLATION ASSEMBLY
 Recommended for
LANDSCAPE INSTALLATION
(grassess and high level planting)
1DU434336 with Round Trim ONLY



RAISED TUBE INSTALLATION ASSEMBLY
 Recommended for
GROUND LEVEL INSTALLATION
(succulents and low level planting)
1DU434318 with Round Trim ONLY



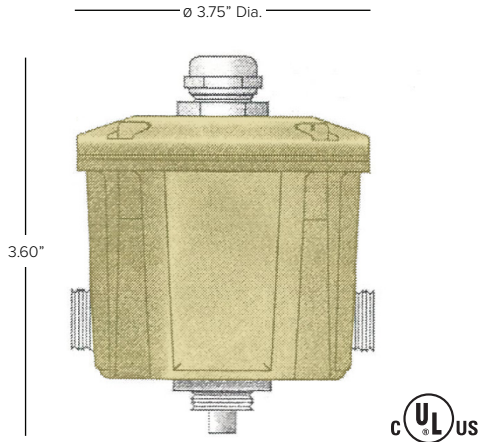
AT GRADE OR RAISED TUBE INSTALLATION ASSEMBLY
 Recommended for
TURF OR GROUND COVER INSTALLATIONS
1DU434312 with Round Trim ONLY



TARGETTI

KEPLERO ZOOM

INSTALLATION DIAGRAM - 1DU2530 J-Box

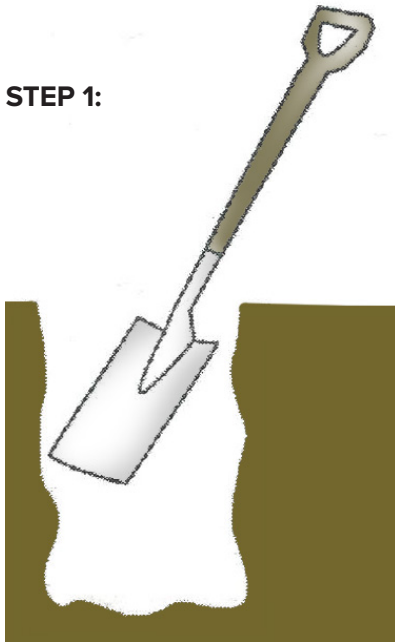


NOTE: Box fill size = 15.94 IN³
Certifications: cULus Wet Listed E496240

Brass junction box is supplied with the following components:

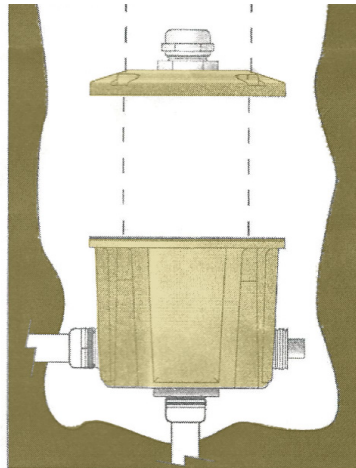
- (4) 3/4" side/bottom NPT holes
- (4) 1/2" reduction NPT adapters
- (2) 1/2" cap plugs

STEP 1:



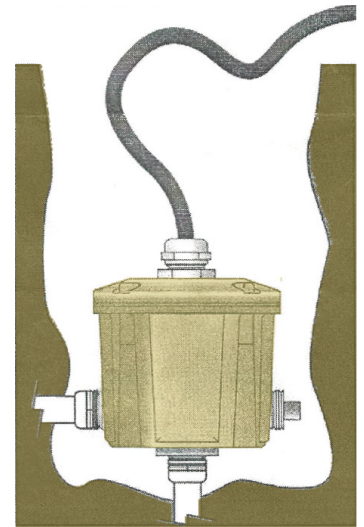
Dig a hole large enough to accommodate the junction box.

STEP 2:



Connect brass junction box to conduit system. Seal conduit entries inside junction box with a good grade RTV sealant per sealant manufacturer's instructions.
Note: Drainage must be in place below junction box.

STEP 3:



Seal threads. Tighten locking screw on bottom of cover. Connect all wires observing polarity (ie. green-to-ground, white-to-common, and black-to-voltage). Comes with 1/2" strain relief.

TARGETTI

KEPLERO ZOOM

Photometry

SPOT



3000K		H(m)	D(m)	Emax(lx)		
Ra84			19°			
Fixture Power	36W	1	0.34	11460		
Source Flux	4550lm	2	0.67	2865		
Fixture Flux	1666lm	3	1.01	1273		
Efficacy	47lm/W	4	1.34	716		
TS782	I _{max} =2519cd/klm	I _{max}	11460cd	5	1.68	458



4000K		H(m)	D(m)	Emax(lx)		
Ra84			19°			
Fixture Power	36W	1	0.34	11749		
Source Flux	4665lm	2	0.67	2937		
Fixture Flux	1708lm	3	1.01	1305		
Efficacy	48lm/W	4	1.34	734		
TS782	I _{max} =2519cd/klm	I _{max}	11749cd	5	1.68	470

FLOOD



3000K		H(m)	D(m)	Emax(lx)		
Ra84			26°			
Fixture Power	36W	1	0.46	7939		
Source Flux	4550lm	2	0.93	1985		
Fixture Flux	2205lm	3	1.39	882		
Efficacy	62lm/W	4	1.85	496		
TS781	I _{max} =1745cd/klm	I _{max}	7939cd	5	2.31	318



4000K		H(m)	D(m)	Emax(lx)		
Ra84			26°			
Fixture Power	36W	1	0.46	8139		
Source Flux	4665lm	2	0.93	2035		
Fixture Flux	2261lm	3	1.39	904		
Efficacy	63lm/W	4	1.85	509		
TS781	I _{max} =1745cd/klm	I _{max}	8139cd	5	2.31	326

MEDIUM WIDE FLOOD



3000K		H(m)	D(m)	Emax(lx)		
Ra84			43°			
Fixture Power	36W	1	0.79	4579		
Source Flux	4550lm	2	1.57	1145		
Fixture Flux	2756lm	3	2.36	509		
Efficacy	77lm/W	4	3.14	286		
TS780	I _{max} =1006cd/klm	I _{max}	4579cd	5	3.93	183



4000K		H(m)	D(m)	Emax(lx)		
Ra84			43°			
Fixture Power	36W	1	0.79	4695		
Source Flux	4665lm	2	1.57	1174		
Fixture Flux	2826lm	3	2.36	522		
Efficacy	79lm/W	4	3.14	293		
TS780	I _{max} =1006cd/klm	I _{max}	4695cd	5	3.93	188

WIDE FLOOD



3000K		H(m)	D(m)	Emax(lx)		
Ra84			64°			
Fixture Power	36W	1	1.25	2724		
Source Flux	4550lm	2	2.50	681		
Fixture Flux	2889lm	3	3.75	303		
Efficacy	81lm/W	4	5.00	170		
TS779	I _{max} =599cd/klm	I _{max}	2724cd	5	6.25	109



4000K		H(m)	D(m)	Emax(lx)		
Ra84			64°			
Fixture Power	36W	1	1.25	2793		
Source Flux	4665lm	2	2.50	698		
Fixture Flux	2962lm	3	3.75	310		
Efficacy	83lm/W	4	5.00	175		
TS779	I _{max} =599cd/klm	I _{max}	2793cd	5	6.25	112



WEDGE3 LED

Architectural Wall Sconce



Catalog Number

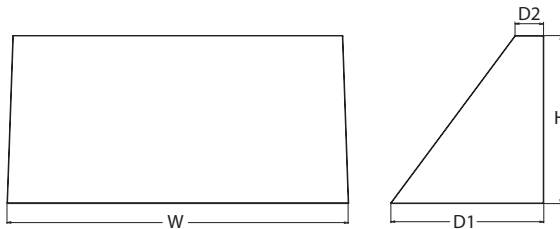
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 8"
Depth (D2): 1.5"
Height: 9"
Width: 18"
Weight: 19.5 lbs
 (without options)



Introduction

The WEDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WEDGE family provides additional energy savings and code compliance.

WEDGE3 has been designed to deliver up to 12,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

WEDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WEDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WEDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WEDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WEDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WEDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	
WEDGE3 LED	P1	30K 3000K	70CRI	R2 Type 2	MVOLT	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)*	
	P2	40K 4000K	80CRI	R3 Type 3	347 ¹		Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.
	P3	50K 5000K		R4 Type 4	480 ¹		
	P4			RFT Forward Throw			

Options	Finish
E15WH Emergency battery backup, Certified in CA Title 20 MAEDBS (15W, 5°C min) E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min) PE² Photocell, Button Type DMG³ 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points. SPD10KV 10kV Surge pack	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone
Standalone Sensors/Controls PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching. PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation. PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation. Networked Sensors/Controls NLTAIR2 PIR nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights. NLTAIR2 PIRH nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights. See page 4 for out of box functionality	

Accessories

Ordered and shipped separately.

WEDGEAWS DDBXD U WEDGE 3/8inch Architectural Wall Spacer (specify finish)
 WEDGE3PBBW DDBXD U WEDGE3 surface-mounted back box (specify finish)

NOTES

- 347V and 480V not available with E15WH and E20WC.
- PE not available in 480V and with sensors/controls.
- DMG option not available with sensors/controls.
- Not qualified for DLC. Not available with emergency battery backup or sensors/controls



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WEDGE3 LED
 Rev. 01/04/21

Performance Data

Lumen Output

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

Performance Package	System Watts	Dist. Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	52W	R2	7,037	136	1	0	1	7,649	148	2	0	1	7,649	148	2	0	1
		R3	6,922	134	1	0	2	7,524	145	1	0	2	7,524	145	1	0	2
		R4	7,133	138	1	0	2	7,753	150	1	0	2	7,753	150	1	0	2
		RFT	6,985	135	1	0	2	7,592	147	1	0	2	7,592	147	1	0	2
P2	59W	R2	7,968	135	2	0	1	8,661	147	2	0	1	8,661	147	2	0	1
		R3	7,838	133	1	0	2	8,519	144	1	0	2	8,519	144	1	0	2
		R4	8,077	137	1	0	2	8,779	149	1	0	2	8,779	149	1	0	2
		RFT	7,909	134	1	0	2	8,597	146	2	0	2	8,597	146	2	0	2
P3	71W	R2	9,404	132	2	0	1	10,221	143	2	0	1	10,221	143	2	0	1
		R3	9,250	130	2	0	2	10,054	141	2	0	2	10,054	141	2	0	2
		R4	9,532	134	2	0	2	10,361	145	2	0	2	10,361	145	2	0	2
		RFT	9,334	131	2	0	2	10,146	142	2	0	2	10,146	142	2	0	2
P4	88W	R2	11,380	129	2	0	1	12,369	140	2	0	1	12,369	140	2	0	1
		R3	11,194	127	2	0	2	12,167	138	2	0	2	12,167	138	2	0	2
		R4	11,535	131	2	0	2	12,538	142	2	0	2	12,538	142	2	0	2
		RFT	11,295	128	2	0	2	12,277	139	2	0	2	12,277	139	2	0	2

Electrical Load

Performance Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	52W	0.437	0.246	0.213	0.186	0.150	0.110
P2	59W	0.498	0.287	0.251	0.220	0.175	0.126
P3	71W	0.598	0.344	0.300	0.262	0.210	0.152
P4	88W	0.727	0.424	0.373	0.333	0.260	0.190

Lumen Output in Emergency Mode (4000K, 70 CRI)

Option	Dist. Type	Lumens
E15WH	R2	3,185
	R3	3,133
	R4	3,229
	RFT	3,162
E20WC	R2	3,669
	R3	3,609
	R4	3,719
	RFT	3,642

Lumen Multiplier for 80CRI

CCT	Multiplier
30K	0.891
40K	0.906
50K	0.906

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.05
10°C / 50°F	1.03
20°C / 68°F	1.01
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

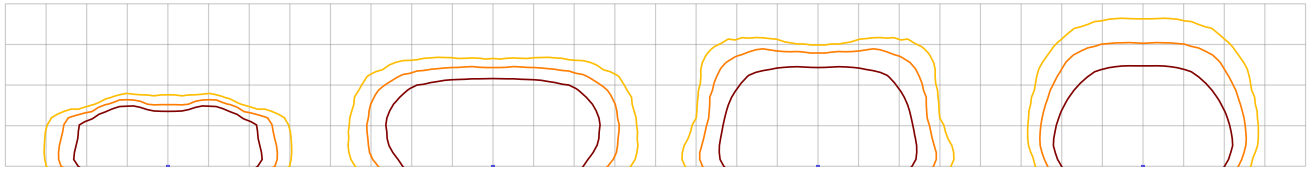
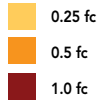
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.98	>0.97	>0.92

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 15ft
Grid = 15ft x 15ft

WDGE3 LED P3 40K 70CRI R2

WDGE3 LED P3 40K 70CRI R3

WDGE3 LED P3 40K 70CRI R4

WDGE3 LED P3 40K 70CRI RFT

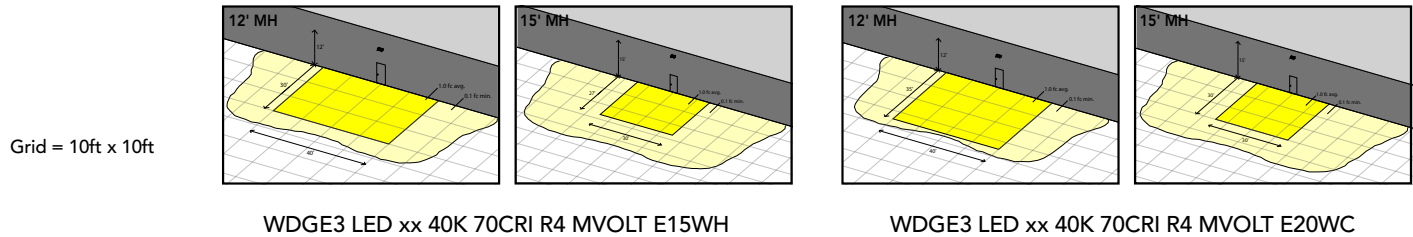
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain, minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E15WH or E20WC and R4 distribution.



Motion/Ambient Sensor (PIR, PIRH)

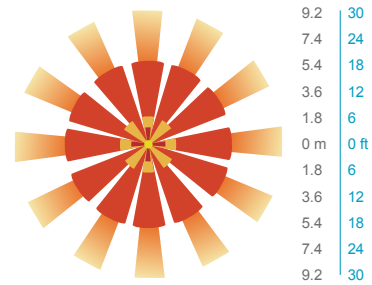
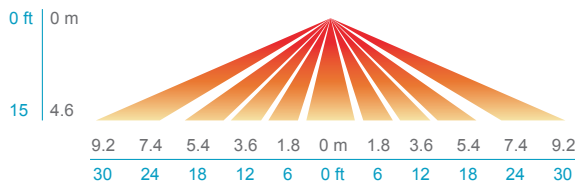
Motion/Ambient sensor (Sensor Switch MSOD) is integrated into the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false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

Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

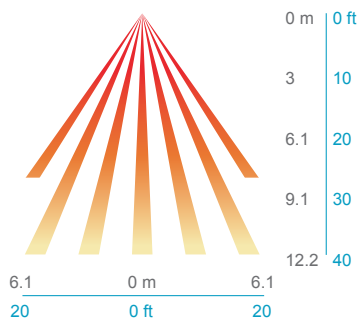
PIR

HIGH VIEW

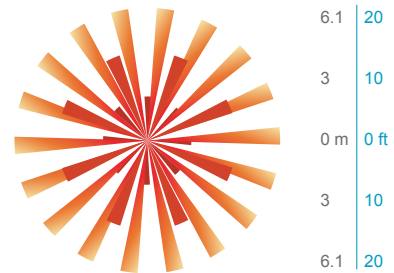


PIRH

SIDE VIEW



TOP VIEW



Motion/Ambient Sensor Default Settings

Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 1fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec



**NLTAIR2 PIR – nLight AIR
Motion/Ambient Sensor**

D = 8"
H = 11"
W = 18"



PBBW – Surface-Mounted Back Box
Use when there is no junction box available.

D = 1.75"
H = 9"
W = 18"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"
H = 4.4"
W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WEDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

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

FINISH

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

OPTICS

Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. Light engines are available in 3000 K, 4000 K or 5000 K configurations. The WEDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature and SRM mounting only.

WARRANTY

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

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



WEDGE1 LED

Architectural Wall Sconce



Catalog Number

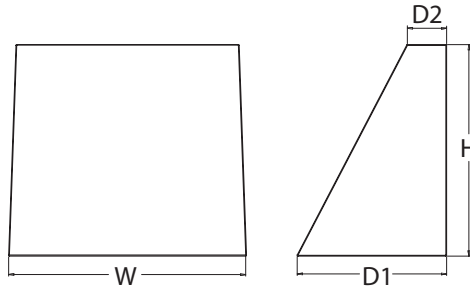
Notes

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Specifications

- Depth (D1):** 5.5"
- Depth (D2):** 1.5"
- Height:** 8"
- Width:** 9"
- Weight:** 9 lbs
(without options)



Introduction

The WEDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WEDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WEDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WEDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WEDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WEDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WEDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WEDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WEDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WEDGE1 LED	P1 P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K ¹ 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ⁵ Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.

Options	Finish
E4WH ³ Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD Dark bronze
PE ⁴ Photocell, Button Type	DBLXD Black
DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD Natural aluminum
DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD White
BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD Sandstone
	DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories

Ordered and shipped separately.

- WEDGEAWS DDBXD U WEDGE 3/8inch Architectural Wall Spacer (specify finish)
- WEDGE1PBBW DDBXD U WEDGE1 surface-mounted back box (specify finish)

NOTES

- 1 50K not available in 90CRI.
- 2 347V not available with E4WH, DS or PE.
- 3 E4WH not available with PE or DS.
- 4 PE not available with DS.
- 5 Not qualified for DLC. Not available with E4WH.



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WEDGE1 LED
Rev. 01/04/21

Performance Data

Lumen Output

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

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	10W	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
		VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0
P2	15W	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
		VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	10W	0.082	0.049	0.043	0.038	--
	13W	--	--	--	--	0.046
P2	15W	0.132	0.081	0.072	0.064	--
	18W	--	--	--	--	0.056

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.03
10°C / 50°F	1.02
20°C / 68°F	1.01
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

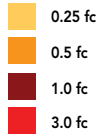
To calculate LMF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91

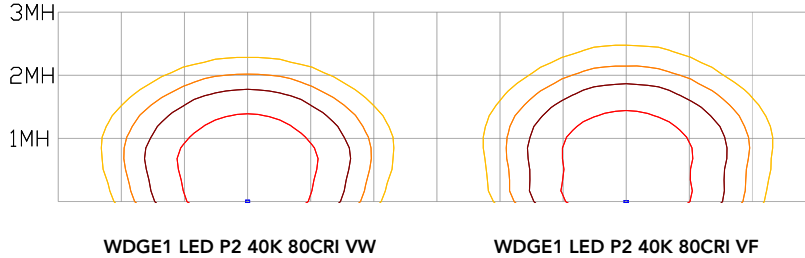
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 8ft
Grid = 8ft x 8ft



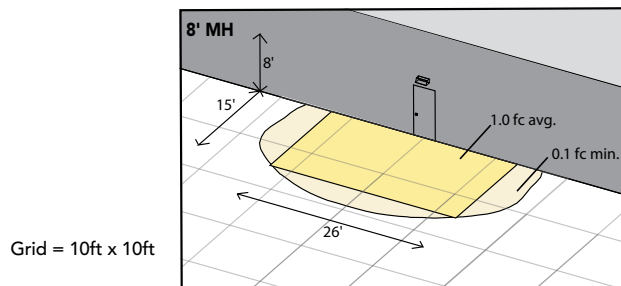
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.

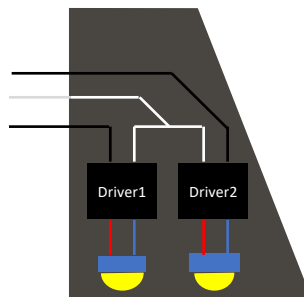


WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9





E4WH – 4W Emergency Battery Backup

D = 5.5"

H = 8"

W = 9"



PBBW – Surface-Mounted Back Box
Use when there is no junction box available.

D = 1.75"

H = 8"

W = 9"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

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

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficiency LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

WARRANTY

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

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

PARKING NEEDS SUMMARY

Department	Present	Future
Garaged		
Ladder Trucks / Snorkel	1	1
Engine	2	2
Brush Truck	1	1
Rescue Truck	1	1
Hazmat Trailer	0	1
Gator (w/ trailer) [UTV]	0	1
Ambulance	1	2
Fire Chief	0	1
Fire Alarm Bucket Truck	1	1
Inspector's Vehicles	0	1
Boats	0	1
TOTAL	7	13
Parking		
Personal Vehicles	7	27
Public Vehicles	0	4
TOTAL	7	31
Site Features		
50' Radio Tower		
Training Tower (see Dayville Fire Company)		