



June 12, 2024

## City of Sedona Planning and Development Application Submittal

Re: **The Villas on Shelby**  
2250 Shelby Drive  
Sedona, AZ 86336-5483

Please accept the enclosed documents as a formal submission for The Villas on Shelby, a proposed 30-unit affordable housing project, to Planning and Development.

Enclosed you will find a completed application submission package for the project, checklist and application payment submission.

If you have any questions or comments on this application package, please feel free to reach out to me directly.

Respectfully,

A handwritten signature in blue ink that reads 'Bonnie J. Demmy Harbage'.

Bonnie J. Demmy Harbage, Member  
**The Villas on Shelby, LLC**  
bharbage@hsdevpartners.com  
937.607.9755

30 S. Oak Street, London, Ohio 43140  
(614) 610-4627

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Respectfully,

Bonnie J. Demmy Harbage, Member  
**The Villas on Shelby, LLC**  
bharbage@hsdevpartners.com  
937.607.9755

**Application Submission for:**           **The Villas on Shelby**  
2250 Shelby Drive  
Sedona, Arizona

The Villas on Shelby is a proposed 30-unit, workforce housing project to be located within Sedona, at 2250 Shelby Drive. The project will be rent-and income restricted at 60% of the area median income. The Villas will provide 26 one-bedroom units and 6 three-bedroom units. The project will be a three-story, walk-up building and will include on-site management offices, fitness and community space (for residents, only) with a total of 37,274 gross square feet. The project will feature 42 on-site parking spaces, 22 of which will be covered parking, a on-site playground and bicycle parking.

When designing the project the following articles were reviewed and addressed as follows:

**Article 2: Zoning District:** The project is located in the IN – Light Industrial zoning district and the proposed project is a permitted-use under the zoning standard as a multifamily facility.

A project exception has been granted for building height, as documented in the *Development Agreement Between the City of Sedona and Villas on Shelby, LLC* with an effective date of May 28, 2024 as follows: The city agrees to permit a building height of up to 40 feet without requiring the largest unrelieved building plane to be reduced to a maximum of 400 square feet, as required by the Sunset Live/Work Community Plan.

**Article 3: Use Regulations:** The use proposed for the site is Multifamily residential; dwellings will be included on three-levels including the street-level in an effort to create as many affordable housing units as possible. Located north and east of the site are residential uses (single family and condominium units) which all have street-level dwelling units. Other surrounding uses are mixed commercial and industrial.

**Article 5: Development Standards:** All applicable development standards have been met except the following:

LDC Section 5.7.F(2)d.1. (Building length – Multifamily Residential and Lodging Uses) to allow the entirety of the building, exceeding 150 feet to be subject to the maximum height allowed by the LDA, CFA and this Agreement, and not require 25% of the building to be limited to 16 feet in height.

This exception was approved by the Sedona City Council and documented in an executed Development Agreement: *Development Agreement Between the City of Sedona and Villas on Shelby, LLC* with an effective date of May 28, 2024.

**Article 6: Signs:** The new sign will meet all standards as required by Article 6 as provided and included within this submission package. The proposed sign will be at the access point of the site along Shelby Road on the east side of site access.



**Article 8: Administration and Procedures:** Waivers to Sedona LDC and the DIGAH were approved by City Council as of the effective date of May 28, 2024 and are outlined as follows:

*Pursuant to LDC Section 8.8 and the DIGAH, to maximize the number of affordable housing units and for consistent design and layout of the site, the City agrees to permit a building height of up to 40 feet without requiring the largest relieved building plane to be reduced to a maximum of 400 square feet, as required by the Sunset Live/Work Community Focus Area Plan.*

*Pursuant to LDC Section 8.8 and the DIGAH, to maximize the number of affordable housing units, the City agrees to modify LDC Section 5.7.F(2)d.1. (Building Length – Multifamily Residential and Loading Units) to allow the entirety of the building, exceeding 150 feet, to be subject to the maximum height allowed by the Land Development Code, CFA and the Development Agreement, and not require 25% of the building to be limited to 16 feet in height.*

**Summary of Legal Restrictions:**

According to existing title work that was completed on May 2, 2024 there are no existing legal restrictions for the site. However, the proposed multifamily project will have a 75-year land lease agreement between the Vills on Shelby, LLC and the City of Sedona along with a 75-year affordability agreement for 100% of the project units.

The site is currently a vacant lot, located in a primarily industrial area; with a recycling center located to the south and storage facility located to the north. Sunset Park is located northwest of the site. The Villas on Shelby will be a single-story, three stories in height (39 feet) and will be a total of 37,274 GSF. The site will also feature 42 on-site parking spaces, half of which will be covered.

- a. Hight, intensity and character:** The Villas on Shelby will be a three-story building consisting of 39' even and a total of 37,274 gross square feet. The project will provide 30 apartment units with 42 on-site parking spaces.
- b. Mature Vegetation:** There is limited existing vegetation, as the site is a vacant gravel lot, the project will provide new landscaping designed to enhance and complement the project. Located north of the site is an existing waterway (Carroll Canyon Wash).
- c. Existing Sign Locations and Design:** There is no existing sign; the new sign location will be along Shelby at the entrance of the site; designed to meet local standards and to be provided by Sun Signs, a neighboring business. The proposed sign is detailed in the included architectural sheets and will be located on the east side of the proposed drive.
- c. Historical Structure:** The site is currently vacant and there are no historical structures on the site.
- d. Predominant building materials:** The project will be constructed completely with stucco with metal railings conforming well to the neighboring uses.
- f. Viewshed analysis:** The project is located in an industrial district with a variety of uses. North of the site is an existing waterway and Sunset Park. Located east of the site is a storage facility and west of the site is Sedona's recycling center. Located south of the site are a variety of commercial and industrial-type properties. Located north of the site, along Shelby there are both single-family residential and higher-density residential condominiums.
- g. Primary Pedestrian Circulation:** Primary pedestrian circulation are connections from Shelby Drive to the site with existing public infrastructure. Sidewalks will be designed to enhance connections from the parking areas to the building, enabling pedestrian access across the site connecting to existing public access points.
- h. Significant Development Features:** The entire site will be redeveloped from a vacant gravel lot into a 30-unit affordable housing apartment project. The site will feature 42 units of on-site parking including 22 units of covered parking. The main structure will be a single building with 3-stories (walk-up units and no elevator) with 37,274 gross square feet. There will be on-site features such as new connections to public sidewalks, new onsite sidewalks for on-site circulation, a playground and bike parking.

September 6, 2024

To Cari Meyer and Cynthia Lovely,

The Following responses to the comments are below in *red italics*.

**PZ24-00006 (DEV) Villas on Shelby**

Planning Comments, July 15, 2024

*LDC Section 8.3.C(7): If an application has not been resubmitted to address staff-noted deficiencies within three months, such application shall be deemed abandoned and all fees forfeited. The applicant may request three additional months to address staff-noted deficiencies. Abandoned applications shall require a new pre-application meeting and may be subject to additional fees.*

It is the applicant's responsibility to be aware of submittal deadlines. Staff may not alert an applicant that a deadline is approaching and may not accept submittals after the deadlines.

**1. Comprehensive Review** a) The application has been submitted for comprehensive review. The following comments identify areas where information is missing, does not comply with City codes, or areas of suggested changes to bring the project into greater compliance with City goals.

b) A public hearing date has not been scheduled for this project. A hearing date will be set after the applicant has had a chance to review the comments provided and either responds with resubmitted plans or requests that the project move forward without changes.

c) Contact the following Staff members if you have any questions regarding what will be required: • Cari Meyer, Planning Manager, [cmeyer@sedonaaz.gov](mailto:cmeyer@sedonaaz.gov), (928) 203-5049, for questions regarding development standards, submittal requirements, and the review process.

• Cynthia Lovely, Principal Planner, [clovely@sedonaaz.gov](mailto:clovely@sedonaaz.gov), (928) 203-5035, for questions regarding the Sunset CFA or other long-range plans (Community Plan, GO! Sedona Pathways Plan, Transportation Master Plan, etc.).

d) The following comments reference sections of the Land Development Code (LDC) and Design Review, Engineering, and Administrative Manual (Manual). These documents are available for review at the following links: • LDC: <https://sedona.municipal.codes/SLDC>

• Manual: <https://www.sedonaaz.gov/home/showdocument?id=38278>

**2. Overall Submittal** a) In the following comments, Staff has made every attempt to comprehensively outline the deficiencies and clearly explain where more information is needed. Additional comments may be generated once the plans are resubmitted. The applicant and their representatives should carefully review all applicable code sections and ensure the plans submitted clearly show compliance. Please contact staff with any questions.

**3. Fire District Review** a) Please contact Dori Booth, Fire Marshal ([dbooth@sedonafire.org](mailto:dbooth@sedonafire.org) or 928-204-8926), regarding Fire District requirements for this project. • Fire lanes are required to be a minimum of 26' wide.

• Roof Access for the building will be required.

*Roof Access Hatch Added*

• The property is within the Wildland-Urban Interface (WUI) and must follow WUI requirements.

*Project to be built to 1-HR construction*

• Provide information to the Fire District regarding fire flows and hydrant access for review.

*Flow Test included*

**4. Letter of Intent (LOI)** a) The LOI must discuss how the project addresses the requirements of the Land Development Code and any additional guidelines contained in the Administrative Manual. All applicable sections must be addressed, please refer to specific sections of these documents in the LOI. While the LOI has a general statement about each section, it must also include more specific details regarding the various requirements of each. See Manual Sections 1.1.D, 1.1.E(2), 1.1.H, 1.2.A(1).

b) The LOI must discuss how the project meets the required findings for a Development Review application (LDC Section 8.3.E(5)).

*LOI appears to address all requirements.*

**5. Site Plans** a) Connect the sidewalk coming off of Shelby Drive at the driveway entrance to the site with the sidewalk/pedestrian walkway in front of the parking spaces.

*Connection added.*

**6. Heights (LDC Section 2.24.E)** a) The preliminary plans provided to staff for review showed the parapet roofs above the "B" units at a height of 4346'-6" and the lowest point at natural grade within this section of the building at 4306'-6", for an overall height of 40 feet above natural grade (ANG). This height was used as the basis for the development agreement that City Council approved on May 28, 2024.

The plans submitted for development review show this height at 4349'-0" above the same ground level of 4306'-6", for an overall height of 42.5' ANG, which exceeds the 40 foot height approved by Council. This appears to have been a result of the finish floor of the building being raised from 4308 on the preliminary plans to 4310.5 on the submitted plans. The City measures heights of buildings to the existing grade of the property, not the finished floor, so raising the finished floor but not adjusting the building heights results in a taller building.

Reduce height to no more than 40'-0" ANG as required by the development agreement. If this is not possible, a change to the development agreement may be needed before this project can move forward.

- Please note that the heights above the "A" units and the overhangs are also greater than the heights shown on the preliminary plans. While these are within the 40'0" height ANG approved by City Council, the massing requirements of LDC Section 5.7.F(2) require a minimum vertical difference of 2 feet between the two rooflines. If the roof over the "B" units is lowered, ensure that the roofs in the remainder of the building are adjusted as needed to meet massing requirements.

*Parapets adjusted to have height max 40 feet above the lowest adjacent natural grade.*

**7. Grading and Drainage (LDC Section 5.3)** a) The landscape plan shows a different arrangement of the parking area than is shown on the other project plans. Ensure all project plans use the same base site plan.

*Drawing shave been coordinated.*

**8. Access, Connectivity, and Circulation (LDC Section 5.4)** a) Show visibility triangles (LDC Section 5.4.F) and ensure these areas will not be blocked by site elements (including landscaping).

b) The site must be designed to provide cross-access to adjacent non-residential properties (LDC Section 5.4.G). Indicate how/where this access will be provided.

*Walkway for connection has been added*

**9. Off-Street Parking and Loading (LDC Section 5.5)** a) The parking calculations indicate 3 one-bedroom units. There are 24 one-bedroom units. Update calculation.

b) The requirement for covered parking is 0.5 spaces per unit, or 15 spaces for this development (30 units x 0.5 spaces per unit), not 50% of all parking, as indicated on the plans.

*Parking count and covered parking numbers updated.*

c) While the minimum number of bicycle parking spaces is 1 per every 10 vehicles parking space, for residential uses, additional bicycle parking is encouraged. Consider adding additional bicycle parking.

**10. Landscaping, Buffering, and Screening (LDC Section 5.6)** a) The landscape plan shows a different arrangement of the parking area than is shown on the other project plans. Ensure all project plans use the same base site plan.

b) Provide a calculation for total landscape area and clearly show which area is included in those calculations. Ensure plant quantities proposed meet the requirement of 1 tree and 3 shrubs per 400 square feet of landscape area. (LDC Section 5.6.C(1)a.2).

*Quantities added.*

c) Provide proposed plant quantities for all proposed plants. Ensure a minimum of 50% of proposed plants are native species, as listed on the City's native plant list. (LDC Section 5.6.C(1)b.1, Plant list in Manual Section 4.1, Appendix A)

*Quantities added.*

d) A minimum of 10% of the site area devoted to parking shall consist of landscape islands (LDC Section 5.6.C(2)b.2). Provide calculation of area within parking lot devoted to landscaping and clearly show on plans the area counting towards this requirement.

*Calculation shown.*

e) A number of the proposed species are not on the City's native or adaptive plant list. While they may be appropriate for the area, choosing plants off of the City's plant list is encouraged. Review plant list in Appendix A of the Manual.

*New plan submitted.*

f) The landscape plan shows plants going down the slope into the wash. Ensure that the slope in this area is appropriate for plants and that the plants do not obstruct the drainage.

*Plants removed from drainage way.*

**11. Site and Building Design (LDC Section 5.7)** a) Building Articulation (LDC Section 5.7.F(2)c) • Transparency (Windows, Door, and Openings): Indicate percentage of windows and doorways on elevations for south elevation (elevation facing the street). The ground floor level must contain a minimum of 30% windows or doorways. Upper floors must contain a minimum of 15% windows.

**12. Exterior Lighting (LDC Section 5.8)** a) Complete the City's Outdoor Lighting Application or provide all information from the application on the lighting sheet. This form can be found at the following link:

*Lighting information is included.*

<https://www.sedonaaz.gov/home/showpublisheddocument/44952/637732617633670000>

**13. Signs (LDC Article 6)** a) Indicate whether signs will be lighted. If it is to be lit, include details on the sign plan and the lighting application. See LDC Section 6.7.E.

*Signs to be lit by ground mounted lights shown on lighting plan*



**Public Works Department** 102 Roadrunner Drive Sedona, AZ 86336 (928) 204-7111 • Fax: (928)

282-5348; Hanako Ueda, EIT (928) 203-5024

**PZ24-00006 (DEV)**

**Villas on Shelby (Comprehensive Review)**

**07/18/2024**

### **Engineering Comments**

**Please address all comments by the next submittal:**

**Please address all comments by the next submittal:**

1. Drainage report: post construction runoff coefficients should be higher than pre-development and we recommend using P for Pavement & rooftops rather than C1 Commercial.
  - a. Recommend making the “lower” (northwest) parking spaces and fire truck turnaround permeable (DG, Gravel, permeable pavers, etc.) to lessen impervious space and to utilize as retention areas. *Because the site is currently a gravel lot the existing runoff coefficient is higher than typical. A new composite ‘C’ has been calculated to justify the proposed condition in a more accurate manner. We can look into using permeable pavers but the cost will likely be prohibitive. The project does not want to take on the maintenance of DG but will also consider at the CD stage. For now we are assuming standard asphalt. Calcs have been revised in preliminary drainage report.*
2. Driveway slope shall not exceed 6% for the first 10’ from the shared-use path. *Noted 6% slope*
3. Provide ADEQ Approval to Construct Water & Wastewater facilities. *This project will not require ADEQ ATC approvals because we will not be installing any mains.*
4. Remove the Douglas fir from the right-of-way near the driveway to improve sight distances. *Noted, tree will be removed.*
5. Catch basins accepting runoff from paved parking areas (south half of parking lot) must filter oils. Please provide a catch basin filter or convert some of the southern parking spaces to permeable material that does not require filtration. *Note added to prelim grading plan for filter, more information will be provided with CDs including product specs.*
6. Recommend an additional 1’ of depth to the fence posts which parallels the floodway. *Noted, fence footing detail will be provided with CDs*
7. Provide curb ramps and handicap signage (specific verbiage per City requirements) at ADA parking spaces. *Note added to prelim grading plan more information will be provided with CDs*

### **Prior to Issuance of Building Permit:**

- 
- Property lies in a floodplain. An elevation Certificate from an Arizona Registered Land Surveyor is required.
- Provide Final Grading and Drainage Plans. The Site Plan shall meet the requirements of DREAM Chapter 3.1.
- Provide the Final Drainage Report.
- Applicant shall follow the City of Sedona Land Development Code in its entirety.
- Applicant shall provide a Storm Water Pollution Prevention Plan. SWPPP measures shall be in place prior to the start of construction (DREAM 3.1). Storm water quality measures shall also comply with City of Sedona Code requirements (City Code Chapter 13.5)
- Accessible sidewalks and parking areas will need to meet the current US Dept. of Justice ADA requirements.
- Accessible parking/signage shall meet the requirements of the City LDC and DREAM documents.
- All concrete within the City ROW shall be colored “Sedona Red” (Davis 160 color).

**\*\*DRAFT Checklist. The applicant should verify submittal requirements with City Staff and/or adopted City Documents (LDC or DREAM) prior to submittal\*\***

**Planning/Development Application Submittal Checklist**

The following are minimum submittal requirements. Additional requirements may be applicable based on the scope of the proposal. Deviations from this list must be approved by the Planning Manager prior to submittal. Please refer to the Design Review, Engineering, and Administrative Manual (DREAM) for further explanation.

**A pre-application meeting is required before a submittal meeting. Staff will go over submittal requirements and project review timeframes at the pre-application meeting. A pre-application meeting may be virtual or in-person.**

**An appointment is required for submittal or resubmittal of a project. Projects that are mailed in or dropped off without an appointment will not be accepted. Submittal meetings must be in-person.**

**When resubmitting a project to address Staff-noted comments, the applicant shall provide a full resubmittal (not just the revised sheets/documents). Staff can provide previous submittal for the applicant to pull from (for documents that haven't changed), but City Staff will not assemble the resubmittal for the applicant.**

App. Initials	Staff Initials	Description of Item to Be Submitted
		<p><b>Paper Submittal:</b> Two complete sets of hard copies of the submittal are required. The submittal must be collated and, if binding is provided, needs to be easily removable (e.g., binder clips are preferred to comb binding) and should not affect the readability of the submittal. Rolled plans are preferred to folded plans.</p>
		<p><b>Digital Submittal:</b> A digital copy of all submittal items shall be provided. A full description of digital submittal requirements is in the application packet. All project documents (except for engineering reports) are limited to a maximum of 20MB combined (not a limit for individual documents). The file size limit is based on the capabilities of the City's website, which Staff does not control.</p> <p>As larger file sizes have the potential to create a significant additional workload for staff throughout the review process, requests for increased file size need to be carefully considered and will only be approved if justified by the size and/or complexity of the project and the detail of the submitted plans. These requests need to be submitted to the Planning Manager for review and potential approval prior to submittal of the project.</p>
		<p><b>Application</b></p> <ul style="list-style-type: none"> <li>• Project Name must be descriptive and wouldn't be used by another, similar project.               <ul style="list-style-type: none"> <li>○ "Sedona Lofts" should not be used; "Navajo Lofts" or "Sunset Lofts" (indicating the name of the street the project is located on) are appropriate.</li> </ul> </li> <li>• Project description needs to include specifics – number of dwelling units or hotel rooms, total amount of commercial square footage, type of uses being proposed, etc.               <ul style="list-style-type: none"> <li>○ "New mixed use project" is not specific enough. "Mixed use project including 15 dwelling units, 5,257 sq.ft. restaurant, and 10,392 sq.ft. retail" is appropriate.</li> </ul> </li> </ul>
		<p><b>Letter of Authorization</b> from current property owner (if applicant is not owner)</p>
		<p><b>Fees</b> – Fees are set by the City's Consolidated Fee Schedule and an estimate will be calculated at the pre-application meeting.</p>
RR		<p><b>ALTA Survey</b> completed within the last 2 years and current <b>Legal Description</b></p> <ul style="list-style-type: none"> <li>• For projects without new construction, an ALTA Survey may not be required. Not providing an ALTA Survey needs to be approved by the Planning Manager prior to submittal.</li> </ul>
		<p><b>Letters of Serviceability</b> from all proposed utility connections. The applicant should discuss their utility needs with utility providers to determine whether existing infrastructure can handle the</p>

		project or if the development will be responsible for upgrading the infrastructure or extending service lines.
RR		<p><b>Letter of Intent (LOI)</b> – See DREAM 1.1.D</p> <ul style="list-style-type: none"> <li>LOI must address all LDC requirements (Articles 2, 3, 5, and 6; Article 7 for Subdivisions) for a project as well as required findings (Article 8). When reviewing the submittal, Staff will briefly look through the LOI to ensure that code sections are being cited.</li> <li>Summary of legal restrictions: The LOI must include a summary of all known legal restrictions for development of a property. If there are no legal restrictions, a statement to that effect needs to be included in the LOI.</li> </ul>
RR		<p><b>Citizen Participation Plan</b></p> <ul style="list-style-type: none"> <li>At time of application submittal, only a plan of what the applicant intends to do is needed. A Citizen Participation Report must be provided by the applicant prior to scheduling the public hearing.</li> </ul>
RR		<p><b>Context Plan</b> – See DREAM 1.1.E</p> <ul style="list-style-type: none"> <li><b>Vicinity Map and Aerial Photograph:</b> Show all areas within 500 feet of the project site, highlight subject property and show: adjoining parcels, zoning boundaries and designations, existing buildings, significant geographical features (such as Oak Creek, USFS boundary, or rock formations), streets and street names, established trails, sidewalks, urban pathways, and trailheads</li> <li><b>Written Narrative:</b> May be included in the LOI, but must include: Height, intensity, use and character of existing development, Mature vegetation and natural features, Existing sign locations and design, Historical structures (landmarked, surveyed, and anything over 50 years old), Predominant building materials, Viewshed analysis, Primary pedestrian circulation, Significant development features such as parking lots, courtyards, pedestrian walkways, and service areas.</li> </ul>
		<p><b>Project Drawings</b> – See DREAM 1.1.F</p> <ul style="list-style-type: none"> <li>All sheets must be the same size and orientation and include the following: Project and Plan Sheet Titles, North Arrow, Scale (Written and Graphic), Sheet number and sheet’s place in drawing set (page X of Y), Date(s) of original drawing and revisions.</li> <li>A maximum size of 24” x 36” is permitted. Multiple sheets should be used rather than increasing the size of a sheet or reducing the scale. If multiple sheets are used, match lines should be provided on each sheet.</li> </ul>
RR		<ul style="list-style-type: none"> <li>○ <b>Site Plan(s)</b> – Includes <b>Overall Site Plan, Roof Plan (to review heights), Landscape Plan, Sign Plan, Lighting Plan.</b> Plans may be combined if the level of detail/ability to review is not lost. <ul style="list-style-type: none"> <li>▪ All site plans must be provided at the same scale (1”:10’ or 1”:20’ is preferred) and same orientation (“north” must be in the direction on all plans). Reducing the scale (reducing the size of the drawing, e.g., a 1”:40’ scale) is generally not acceptable as detail is reduced and the ability to review the plans for compliance with LDC requirements is often not possible at a smaller scale. If plans do not fit on a 24” x 36” sheet, multiple sheets with clearly indicated match lines should be used.</li> <li>▪ If the applicant thinks there are special circumstances that justify a smaller scale, this needs to be approved by the Planning Manager prior to submittal.</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>▪ <b>Roof Plan (Used to Review Building Height above natural grade):</b> A roof plan of all buildings overlaid on a topographic map of the property (1’ contours), with contours continuing through the building footprint and all roof ridges, eaves, and parapets</li> </ul>

		<p>labeled in the same format as the contours. Transitions in building heights (e.g., steps in parapets) need to be clearly shown.</p>
		<ul style="list-style-type: none"> <li>▪ <b>Landscape Plan:</b> Plans shall show how landscape areas are being calculated/which areas are being counted towards meeting the landscaping requirements. Plant list and quantities need to be shown.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ <b>Sign Plan:</b> Location, height, size, materials, etc., of all proposed signs (monument/freestanding, wall, informational, directional, etc.). The sign plan should highlight any requested deviations from the sign code (LDC Article 6).</li> </ul>
		<ul style="list-style-type: none"> <li>▪ <b>Lighting Plan:</b> A completed exterior lighting application shall be included with the lighting plan. Cut sheets with the relevant options selected shall be provided for every proposed lighting fixture.</li> </ul>
		<ul style="list-style-type: none"> <li>○ <b>Floor Plan(s) and Elevation(s)</b> <ul style="list-style-type: none"> <li>▪ All floor plans and elevations must be provided at the same scale. A scale of 1/4":1' or 1/8":1' is preferred. Reducing the scale (reducing the size of the drawing, e.g., a 1/16":1 scale) is generally not acceptable as detail is reduced and the ability to review the plans for compliance with LDC requirements is often not possible. If plans do not fit on a 24" x 36", multiple sheets with clearly indicated match lines should be used.</li> <li>▪ If the applicant thinks there are special circumstances that justify a smaller scale, this needs to be approved by the Planning Manager prior to submittal.</li> <li>▪ Elevations should be described by their compass orientation (i.e., "north", "southwest", etc.), rather than by using the notation "front", "side", "rear".</li> <li>▪ <b>Rooms on floor plans</b> should be labeled for their purpose. <b>Modular furniture</b> (chairs, beds, tables, etc.) should not be shown.</li> </ul> </li> </ul>
		<p><b>Color and Materials Board</b></p> <ul style="list-style-type: none"> <li>• All proposed exterior colors and materials (buildings, roofs, walls/fences, signs, etc.) for the development need to be provided. Physical samples (not copies or print outs) must be provided and labeled for where they are proposed within the development (which building, main color, accent, trim, etc.).</li> </ul>
		<p><b>Phasing Plan</b> NOT APPLICABLE</p> <ul style="list-style-type: none"> <li>• The LDC sets a timeframe of 2 years from date of final approval for permits to be issued. If the applicant is requesting a different timeframe or phasing plan for the project, this should be included as part of the application submittal.</li> </ul>

## Engineering Reports Submittal Checklist

The following are minimum submittal requirements for submittal of Engineering Reports in conjunction with a development application. Additional requirements may be applicable based on the scope of the proposal. Parameters of the reports must be discussed with the Public Works Department prior to submittal. Not all engineering reports will be required for all projects; the Public Works Department will make the final determination of which reports are required for each project. Please refer to the Design Review, Engineering, and Administrative Manual (DREAM) for further explanation.

App. Initials	Staff Initials	Description of Item to Be Submitted
		<p><b>Digital Submittal:</b> A digital copy of all submittal items shall be provided. A full description of digital submittal requirements is in the application packet. Engineering Reports are limited to a maximum of 25 MB each and should be submitted as separate documents. The size limitation is based on the capabilities of the City's website, which Staff does not control.</p> <p>Requests for increased file size may be justified by the size and/or complexity of the project, but these requests need to be submitted to the Public Works Department for review and potential approval prior to submittal of the project.</p>
		<p><b>Grading and Drainage Report and Plan</b></p> <ul style="list-style-type: none"> <li>• Grading plan shall be in the same scale as the site plans provided for development review.</li> </ul>
		<p><b>Trip Generation Report / Traffic Impact Analysis</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>
		<p><b>Sewer / Wastewater Report</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>
		<p><b>Geotechnical Report</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>
		<p><b>Water Report</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>



**Applicant and Permit Information**

Applicant Name:	Rose Rubo	Permit #:	
Phone:	630-270-9501	Date Rec'd:	
Email Address:	Rose@athenastudio.net	Initials:	
Action/Staff Initials:	<input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date:	

**Site Identification**

Property Address/Location:	2250 Shelby Dr
Parcel Number	APN 408-26-103C
Business Name (If applicable):	Villas on Shelby

**Lumen Information**

Gross acres of entire site:	1.28	Acres for Public Right-of-Way:	.11
Net Acreage of Site:	1.17	x 70,000 = Total initial lumens permitted*	81,900

*\*Total outdoor light output shall not exceed 70,000 initial lumens per net acre for all development except single-family residential uses. This cap is not intended to be achieved in all cases or as a design goal. Design goals should be the lowest level of lumens necessary to meet the lighting requirements of the site. Partially shielded light fixtures are limited to a maximum of 3,850 initial lumens per net acre and are counted towards the 70,000 initial lumens per net acre cap.*

**Type of Shielding and Lumens Proposed (See Lumen Calculation Table – page 2)**

Lumens: Fully Shielded Fixtures:	79347
Lumens: Partially Shielded Fixtures:	0
Total Lumens Proposed:	79347

**Applicant Signature**

Signature:		Date:	
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# Exterior Lighting Application

## Commercial and Multi-Family

See LDC Section 5.8: Exterior Lighting

### Lighting Inventory and Lumen Calculation Table

- Include a Site Plan identifying all lighting fixtures, keyed to the inventory table.
- Include all new/proposed lighting and all existing lighting.
- Include any lighting proposed for external illumination of signs.
- Attach cut sheets or manufacturer’s product description for all lights. If not available for existing fixtures, include photographs of the fixtures and any additional information to demonstrate compliance with code requirements.
- Attach additional sheets if necessary

*Lighting Classes (See LDC Section 5.8.D(1) for a complete explanation):*

- Class 1: High Activity Areas
- Class 2: Security and Public Safety
- Class 3: Decorative and Accent

*Correlated Color Temperature(CCT)/Kelvin Rating:* A maximum of 4,000K is permitted for all lighting; Class 2 Lighting is limited to a maximum of 2,700K

*Shielding:*

- F: Fully Shielded: Required for most lighting
- P: Partially Shielded: Limited to 3,850 lumens per acre
- U: Unshielded: Only permitted for existing, legal nonconforming lighting

**Site Plan:**     Attached     Provided with plans (Sheet S.4 )

Plan Key (ID)*	New or Existing (N or E)	Lighting Class (1, 2, or 3)	CCT/Kelvin Rating	Shielding (F, P, or U)	Initial Lumens	No. of Units	Total Lumens
A	N	2	2700	F	402	62	24924
B	N	1	3000	F	2757	6	16542
C	N	1	3000	F	2300	2	4600
D	N	2	2700	F	600	6	3600
E	N	1	3000	F	3449	8	27592
F	N	3	3000	F	818	2	1636
Total Lumens Proposed:							<b>78894</b>

\*Plan key identification in first column must correspond to labeling on site plan

## DESCRIPTION

The Entri LED luminaire features a classic and stylish design with the added benefits of solid state lighting technology, offering outstanding uniformity and energy savings. Using Cooper Lighting Solutions' proprietary LED LightSquare technology and AccuLED Optics™ system, the Entri LED luminaire offers designers vast versatility in system design, function and performance. Use Entri LED for wall mount architectural lighting applications and egress lighting requirements. UL/cUL listed for use in wet locations.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Construction

**HOUSING:** Heavy wall, one-piece, die-cast aluminum construction for precise tolerance control and repeatability in manufacturing. Integral extruded aluminum heat sink provides superior thermal heat transfer in +40°C ambient environments. **FACEPLATE / DOOR:** One-piece, die-cast aluminum construction. Captive, side hinged faceplate swings open via release of one flush mount die-cast aluminum latch on housing side panel. **GASKET:** One-piece molded silicone gasket mates perfectly between the door and housing for repeatable seal. **LENS:** Uplight lens is impact-resistant, 5/32" thick tempered frosted glass sealed to housing with continuous bead silicone gasket. Downlight lens is an LED LightSquare with integral optics sealed for IP66 rating. **HARDWARE:** Stainless steel mounting screws and latch hardware allow access to electrical components for installation and servicing.

### Optics

Choice of 9 patented, high efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the

scalability to meet customized application requirements. CRI and CCT offering includes 2200K, 2700K, 3000K, 3500K, 4000K, 5000K, and 5700K with minimum 70CRI and 2700K and 3000K with minimum 80CRI all within 5-step MacAdam ellipse.

### Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments and optional 50C construction available. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightSquare feature an IP66 enclosure rating and maintain greater than 98% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments, WaveLinX™, occupancy sensor, and dimming options available.

### Mounting

**JUNCTION BOX:** Standard with

zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box. LightSquare mounts facing downward. Fixture slides over mounting plate and is secured with two stainless steel fasteners. Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates. Optional mounting arrangements utilize a die-cast mounting adaptor box to allow for LED battery pack, surface conduit and trough branch wiring. The Entri LED luminaire is approved for mounting on combustible surfaces.

### Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightSquare cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.

### Warranty

Five year limited warranty, consult website for details.  
[www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)



## ENC/ENT/ENV ENTRI LED

LightSquare  
Solid State LED

ARCHITECTURAL WALL  
LUMINAIRE



### CERTIFICATION DATA

DesignLights Consortium® Qualified\*  
UL/cUL Listed  
ISO 9001  
IP66 LightSquares  
LM79 / LM80 Compliant

### ENERGY DATA

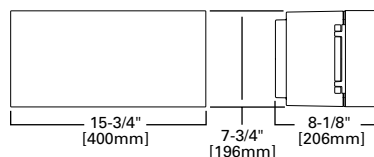
**Electronic LED Driver**  
>0.9 Power Factor  
<20% Total Harmonic Distortion  
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz  
-30°C Minimum Temperature  
40°C Ambient Temperature Rating (Optional)

### SHIPPING DATA

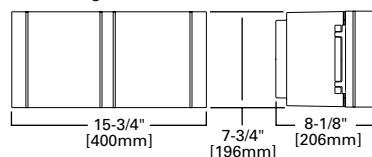
**Approximate Net Weight:**  
15.2 lbs. (6.9 kgs.) - Without backbox  
29.1 lbs. (13.2 kgs.) - With backbox

## DIMENSIONS

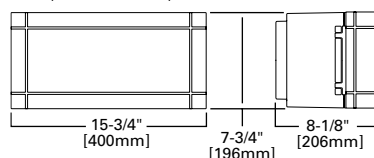
### ENC (Round Clean)



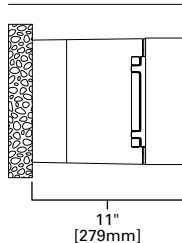
### ENT (Triangle Reveals)



### ENV (Round Reveals)



### CONDUIT MOUNT / BATTERY BACK BOX





**ORDERING INFORMATION**

Sample Number: ENC-SA1C-740-U-T4W-GM-ULG-HA-WPS2BK

Domestic Preferences <sup>24</sup>	Product Family <sup>1</sup>	Light Engine		Color Temperature	Voltage	Distribution	Finish
		Configuration	Drive Current				
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	ENC=Entri Round Clean ENT=Entri Triangle Reveals ENV=Entri Round Reveals	SA1=1 Square	A=350mA B=450mA C=600mA D=800mA E=1000mA F=1200mA	722=70CRI, 2200K <sup>3</sup> 727=70CRI, 2700K <sup>3</sup> 730=70CRI, 3000K <sup>3</sup> 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K <sup>3</sup> 760=70CRI, 5700K <sup>3</sup> 827=80CRI, 2700K <sup>3</sup> 830=80CRI, 3000K <sup>3</sup> 835=80CRI, 3500K <sup>3</sup>	U=UNV (120-277) 1=120 2=208 3=240 4=277 8=480 9=347	T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	BZ=Bronze AP=Grey BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
<b>Options (Add as Suffix)</b>				<b>Accessories (Order Separately) <sup>25</sup></b>			
F=Singled fused (Must specify voltage, fused on single hot leg of 120, 277, or 347) FF=Doubled fused (Must specify voltage, fused on both hot legs of 208, 240, or 480) X=Driver Surge Protection (6kV) Only 20K=Series 20kV UL 1449 Surge Protective Device 2L=Two-Circuit Light Engine <sup>23</sup> DIM=0-10V Dimming Driver <sup>5,6</sup> EBP=Battery Pack with Back Box (Must specify voltage, available in 120V or 277V) <sup>2,4,9</sup> CBP=Battery Pack with Back Box, Cold Weather Rated (Must specify voltage, available in 120V or 277V) <sup>2,4,10</sup> CBP-CEC=Battery Pack with Back Box, Cold Weather Rated, CEC compliant (Must specify voltage, available in 120V or 277V) <sup>2,4,10</sup> R90=Rotated Right 90° L90=Rotated Left 90° HSS=Factory Installed House Side Shield <sup>16</sup> LCF=LightSquare Trim Plate Matches Housing Finish <sup>15</sup> ULG=Uplight Glow <sup>7</sup> HA=50°C High Ambient <sup>8</sup> WG=Wire Guard TR=Tamper Resistant Hardware BOX=Empty back box (1/2" NPT, each side with plugs installed) BPC=Button Type Photocontrol (Must specify voltage, available in 120, 208, 240, 277V, 347, and 480) AHD145=After Hours Dim, 5 Hours, 50% <sup>17</sup> AHD245=After Hours Dim, 6 Hours, 50% <sup>17</sup> AHD255=After Hours Dim, 7 Hours, 50% <sup>17</sup> AHD355=After Hours Dim, 8 Hours, 50% <sup>17</sup> SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting <sup>13,21</sup> SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <sup>13,21</sup> SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <sup>13,21</sup> MS-L08=Motion Sensor for ON/OFF Operation, Up to 8' Mounting Height <sup>11,12,13</sup> MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height <sup>11,12,13</sup> MS/DIM-L08=Motion Sensor for Dimming Operation, Up to 8' Mounting Height <sup>11,12,13</sup> MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height <sup>11,12,13</sup> WPS2XX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting <sup>19,20</sup> WPS4XX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting <sup>19,20</sup> CC=Coastal Construction <sup>22</sup>				MA1253=10kV Circuit Module Replacement MA1253-480V=10kV Circuit Module Replacement (480V only) FSIR-100-PK=Wireless Configuration Tool for Occupancy Sensor <sup>11</sup> VA6172SA=Wireguard Accessory VA6173=Tamper-Resistant Driver Bit VA6174=Vandal Shield Accessory VA2001-XX=Thru-Way Conduit Box LS/HSS=House Side Shield (Works with all distributions listed for Entri) WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin)			

**NOTES:**

- DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. DLC Family Code: MMMSPQ
- EBP or CBP options limited to 25°C. Control option limited to BPC=Button Type Photocontrol (must specify voltage).
- Extended lead times apply. Use dedicated IES files when performing layouts.
- Not available with HA option.
- Cannot be used with other control options.
- Low voltage control lead brought out 18" outside fixture.
- ULG only available in 740
- Not available with ULG option
- EBP is rated for minimum operating temperature of 0°C (32°F). Operates downlight for 90-minutes.
- CBP is rated for minimum operating temperature of -20°C (-4°F). Operates downlight for 90-minutes.
- The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting
- Replace LXX with the available mounting height options: L08, L20, L40 or L40W are the only choices.
- Includes integral photosensor.
- Bronze sensor is shipped with Bronze fixtures. White sensor shipped on all other housing color options.
- Not available with HSS option.
- Only for use with SL2, SL3 and SL4 distributions. The light square trim plate is painted black when the HSS option is selected.
- Requires the use of BPC photocontrol. See After Hours Dim supplemental guide for additional information.
- Control option limited to BPC=Button Type Photocontrol (must specify voltage).
- WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
- Replace XX with sensor color (WH, BZ, or BK).
- Smart device with mobile application required to change system defaults. See controls section for details.
- Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
- 2L not available with FF, ULG or AHD options. Controls and/or battery packs operate only one of the two circuits when 2L is specified.
- Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
- Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
722 CCT	T2 (Type II)	Lumens	565	2,000	2,508	3,300	4,131	5,147	5,696
		Lumens per Watt <sup>†</sup>	33.0	99.5	98.7	99.1	95.8	90.0	86.2
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	429	1,521	1,907	2,509	3,141	3,913	4,331
		Lumens per Watt <sup>†</sup>	43.5	75.7	75.1	75.3	72.9	68.4	65.5
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
	T3 (Type III)	Lumens	578	2,046	2,566	3,376	4,226	5,265	5,827
		Lumens per Watt <sup>†</sup>	44.5	101.8	101.0	101.4	4,226	92.0	88.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	436	1,544	1,936	2,548	3,189	3,973	4,398
		Lumens per Watt <sup>†</sup>	33.5	76.8	76.2	76.5	74.0	69.5	66.5
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	T4FT (Type IV Forward Throw)	Lumens	543	1,924	2,413	3,175	3,974	4,951	5,480
		Lumens per Watt <sup>†</sup>	41.8	95.7	95.0	95.3	92.2	86.6	82.9
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	402	1,423	1,785	2,349	2,939	3,662	4,054
		Lumens per Watt <sup>†</sup>	30.9	70.8	70.3	70.5	68.2	64.0	61.3
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T4W (Type IV Wide)	Lumens	567	2,009	2,520	3,316	4,150	5,171	5,723
		Lumens per Watt <sup>†</sup>	43.6	100.0	99.2	99.6	96.3	90.4	86.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	423	1,499	1,879	2,473	3,095	3,856	4,268
		Lumens per Watt <sup>†</sup>	32.5	74.6	74.0	74.3	71.8	67.4	64.6
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1
SL2 (Type II w/ Spill Control)	Lumens	560	1,985	2,489	3,275	4,099	5,108	5,653	
	Lumens per Watt <sup>†</sup>	43.1	98.8	98.0	98.3	95.1	89.3	85.5	
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL2-HSS (Type II w/ Spill Control, House Side Shield)	Lumens	459	1,624	2,037	2,680	3,355	4,180	4,626	
	Lumens per Watt <sup>†</sup>	35.3	80.8	80.2	80.5	77.8	73.1	70.0	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
SL3 (Type III w/ Spill Control)	Lumens	557	1,971	2,472	3,253	4,072	5,073	5,615	
	Lumens per Watt <sup>†</sup>	42.8	98.1	97.3	97.7	94.5	88.7	84.9	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL3-HSS (Type III w/ Spill Control, House Side Shield)	Lumens	475	1,684	2,111	2,779	3,478	4,333	4,796	
	Lumens per Watt <sup>†</sup>	36.5	83.8	83.1	83.5	80.7	75.8	72.6	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
SL4 (Type IV w/ Spill Control)	Lumens	538	1,905	2,389	3,144	3,935	4,903	5,427	
	Lumens per Watt <sup>†</sup>	41.4	94.8	94.1	94.4	91.3	85.7	82.1	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL4-HSS (Type IV w/ Spill Control, House Side Shield)	Lumens	466	1,649	2,068	2,721	3,406	4,243	4,696	
	Lumens per Watt <sup>†</sup>	35.8	82.0	81.4	81.7	79.0	74.2	71.0	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
722 CCT	SLR (90° Spill Light Eliminator Right)	Lumens	502	1,777	2,228	2,932	3,670	4,572	5,061
		Lumens per Watt <sup>†</sup>	38.6	88.4	87.7	88.0	85.2	79.9	76.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	427	1,511	1,895	2,493	3,121	3,888	4,303
		Lumens per Watt <sup>†</sup>	32.8	75.2	74.6	74.9	72.4	68.0	65.1
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL (90° Spill Light Eliminator Left)	Lumens	502	1,777	2,228	2,932	3,670	4,572	5,061
		Lumens per Watt <sup>†</sup>	38.6	88.4	87.7	88.0	85.2	79.9	76.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	427	1,511	1,895	2,493	3,121	3,888	4,303
		Lumens per Watt <sup>†</sup>	32.8	75.2	74.6	74.9	72.4	68.0	65.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
727 CCT	T2 (Type II)	Lumens	642	2,275	2,853	3,755	4,699	5,855	6,481
		Lumens per Watt <sup>†</sup>	49.4	113.2	112.3	112.8	109.0	102.4	98.0
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	488	1,730	2,169	2,855	3,573	4,452	4,927
		Lumens per Watt <sup>†</sup>	37.5	86.1	85.4	85.7	82.9	77.8	74.5
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
	T3 (Type III)	Lumens	657	2,328	2,919	3,841	4,807	5,990	6,630
		Lumens per Watt <sup>†</sup>	50.5	115.8	114.9	115.3	111.5	104.7	100.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	496	1,757	2,203	2,899	3,628	4,520	5,003
		Lumens per Watt <sup>†</sup>	38.2	87.4	86.7	87.1	84.2	79.0	75.7
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	T4FT (Type IV Forward Throw)	Lumens	618	2,189	2,745	3,612	4,521	5,633	6,234
		Lumens per Watt <sup>†</sup>	47.5	108.9	108.1	108.5	104.9	98.5	94.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	457	1,619	2,030	2,672	3,344	4,166	4,612
		Lumens per Watt <sup>†</sup>	35.2	80.5	79.9	80.2	77.6	72.8	69.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W (Type IV Wide)	Lumens	645	2,286	2,867	3,772	4,721	5,883	6,511
		Lumens per Watt <sup>†</sup>	49.6	113.7	112.9	113.3	109.5	102.8	98.5
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	481	1,705	2,138	2,813	3,521	4,387	4,856
		Lumens per Watt <sup>†</sup>	37.0	84.8	84.2	84.5	81.7	76.7	73.5
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2
SL2 (Type II w/Spill Control)	Lumens	638	2,258	2,832	3,726	4,664	5,811	6,431	
	Lumens per Watt <sup>†</sup>	49.1	112.3	111.5	111.9	108.2	101.6	97.3	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	522	1,848	2,317	3,049	3,817	4,755	5,263	
	Lumens per Watt <sup>†</sup>	40.2	91.9	91.2	91.6	88.6	83.1	79.6	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
727 CCT	SL3 (Type III w/Spill Control)	Lumens	633	2,243	2,813	3,701	4,632	5,771	6,388
		Lumens per Watt <sup>†</sup>	48.7	111.6	110.7	111.1	107.5	100.9	96.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	541	1,915	2,402	3,161	3,956	4,929	5,456
		Lumens per Watt <sup>†</sup>	41.6	95.3	94.6	94.9	91.8	86.2	82.5
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL4 (Type IV w/Spill Control)	Lumens	612	2,168	2,718	3,577	4,477	5,578	6,174
		Lumens per Watt <sup>†</sup>	47.1	107.9	107.0	107.4	103.9	97.5	93.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	530	1,876	2,352	3,096	3,874	4,827	5,343
		Lumens per Watt <sup>†</sup>	40.8	93.3	92.6	93.0	89.9	84.4	80.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLR (90° Spill Light Eliminator Right)	Lumens	571	2,021	2,535	3,336	4,175	5,202	5,758
		Lumens per Watt <sup>†</sup>	43.9	100.5	99.8	100.2	96.9	90.9	87.1
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	485	1,719	2,156	2,837	3,550	4,423	4,896
		Lumens per Watt <sup>†</sup>	37.3	85.5	84.9	85.2	82.4	77.3	74.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL (90° Spill Light Eliminator Left)	Lumens	571	2,021	2,535	3,336	4,175	5,202	5,758
		Lumens per Watt <sup>†</sup>	43.9	100.5	99.8	100.2	96.9	90.9	87.1
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	485	1,719	2,156	2,837	3,550	4,423	4,896
		Lumens per Watt <sup>†</sup>	37.3	85.5	84.9	85.2	82.4	77.3	74.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
730 CCT	T2 (Type II)	Lumens	700	2,478	3,107	4,089	5,117	6,376	7,057
		Lumens per Watt <sup>†</sup>	53.8	123.3	122.3	122.8	118.7	111.5	106.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	532	1,884	2,362	3,109	3,891	4,848	5,366
		Lumens per Watt <sup>†</sup>	40.9	93.7	93.0	93.4	90.3	84.8	81.2
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2
	T3 (Type III)	Lumens	716	2,535	3,179	4,183	5,235	6,523	7,219
		Lumens per Watt <sup>†</sup>	55.1	126.1	125.2	125.6	121.5	114.0	109.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	540	1,913	2,399	3,157	3,951	4,922	5,448
		Lumens per Watt <sup>†</sup>	41.5	95.2	94.4	94.8	91.7	86.0	82.4
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	T4FT (Type IV Forward Throw)	Lumens	673	2,384	2,989	3,933	4,923	6,134	6,789
		Lumens per Watt <sup>†</sup>	51.8	118.6	117.7	118.1	114.2	107.2	102.7
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	498	1,763	2,211	2,910	3,642	4,537	5,022
		Lumens per Watt <sup>†</sup>	38.3	87.7	87.0	87.4	84.5	79.3	76.0
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
730 CCT	T4W (Type IV Wide)	Lumens	703	2,489	3,122	4,108	5,141	6,406	7,090
		Lumens per Watt <sup>†</sup>	54.1	123.8	122.9	123.4	119.3	112.0	107.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	524	1,857	2,328	3,064	3,835	4,778	5,288
		Lumens per Watt <sup>†</sup>	40.3	92.4	91.7	92.0	89.0	83.5	80.0
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2
	SL2 (Type II w/Spill Control)	Lumens	694	2,459	3,084	4,058	5,079	6,328	7,004
		Lumens per Watt <sup>†</sup>	53.4	122.3	121.4	121.9	117.8	110.6	106.0
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2U0-G2
	SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	568	2,012	2,524	3,321	4,156	5,178	5,732
		Lumens per Watt <sup>†</sup>	43.7	100.1	99.4	99.7	96.4	90.5	86.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL3 (Type III w/Spill Control)	Lumens	690	2,442	3,063	4,030	5,044	6,285	6,956
		Lumens per Watt <sup>†</sup>	53.1	121.5	120.6	121.0	117.0	109.9	105.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	589	2,086	2,616	3,442	4,308	5,368	5,941
		Lumens per Watt <sup>†</sup>	45.3	103.8	103.0	103.4	100.0	93.8	89.9
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL4 (Type IV w/Spill Control)	Lumens	666	2,361	2,960	3,895	4,875	6,074	6,723
		Lumens per Watt <sup>†</sup>	51.2	117.5	116.5	117.0	113.1	106.2	101.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	577	2,043	2,562	3,371	4,219	5,257	5,818
		Lumens per Watt <sup>†</sup>	44.4	101.6	100.9	101.2	97.9	91.9	88.0
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
SLR (90° Spill Light Eliminator Right)	Lumens	622	2,201	2,761	3,633	4,547	5,665	6,270	
	Lumens per Watt <sup>†</sup>	47.8	109.5	108.7	109.1	105.5	99.0	94.9	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	529	1,872	2,347	3,089	3,866	4,817	5,331	
	Lumens per Watt <sup>†</sup>	40.7	93.1	92.4	92.8	89.7	84.2	80.7	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
SLL (90° Spill Light Eliminator Left)	Lumens	622	2,201	2,761	3,633	4,547	5,665	6,270	
	Lumens per Watt <sup>†</sup>	47.8	109.5	108.7	109.1	105.5	99.0	94.9	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	
SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	529	1,872	2,347	3,089	3,866	4,817	5,331	
	Lumens per Watt <sup>†</sup>	40.7	93.1	92.4	92.8	89.7	84.2	80.7	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
735 CCT	T2 (Type II)	Lumens	722	2,556	3,205	4,218	5,279	6,577	7,279
		Lumens per Watt <sup>†</sup>	55.5	127.2	126.2	126.7	122.5	115.0	110.1
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	549	1,943	2,437	3,207	4,013	5,000	5,535
		Lumens per Watt <sup>†</sup>	42.2	96.7	95.9	96.3	93.1	87.4	83.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
735 CCT	T3 (Type III)	Lumens	738	2,614	3,279	4,314	5,400	6,728	7,447
		Lumens per Watt <sup>†</sup>	56.8	130.0	129.1	129.5	125.3	117.6	112.7
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	557	1,973	2,474	3,256	4,075	5,077	5,620
		Lumens per Watt <sup>†</sup>	42.8	98.2	97.4	97.8	94.5	88.8	85.0
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T4FT (Type IV Forward Throw)	Lumens	694	2,459	3,083	4,057	5,078	6,327	7,003
		Lumens per Watt <sup>†</sup>	53.4	122.3	121.4	121.8	117.8	110.6	105.9
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	514	1,819	2,281	3,001	3,756	4,680	5,180
		Lumens per Watt <sup>†</sup>	39.5	90.5	89.8	90.1	87.1	81.8	78.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W (Type IV Wide)	Lumens	725	2,568	3,220	4,237	5,303	6,608	7,314
		Lumens per Watt <sup>†</sup>	55.8	127.8	126.8	127.2	123.0	115.5	110.7
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	541	1,915	2,402	3,160	3,955	4,928	5,455
		Lumens per Watt <sup>†</sup>	41.6	95.3	94.6	94.9	91.8	86.2	82.5
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL2 (Type II w/Spill Control)	Lumens	716	2,536	3,181	4,186	5,239	6,527	7,224
		Lumens per Watt <sup>†</sup>	55.1	126.2	125.2	125.7	121.6	114.1	109.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	586	2,076	2,603	3,425	4,287	5,341	5,912
		Lumens per Watt <sup>†</sup>	45.1	103.3	102.5	102.9	99.5	93.4	89.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL3 (Type III w/Spill Control)	Lumens	711	2,519	3,159	4,157	5,203	6,483	7,175
		Lumens per Watt <sup>†</sup>	54.7	125.3	124.4	124.8	120.7	113.3	108.5
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	608	2,152	2,698	3,551	4,444	5,537	6,128
		Lumens per Watt <sup>†</sup>	46.8	107.1	106.2	106.6	103.1	96.8	92.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
SL4 (Type IV w/Spill Control)	Lumens	687	2,435	3,053	4,018	5,029	6,266	6,935	
	Lumens per Watt <sup>†</sup>	52.8	121.1	120.2	120.7	116.7	109.5	104.9	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	595	2,107	2,642	3,477	4,352	5,422	6,001	
	Lumens per Watt <sup>†</sup>	45.8	104.8	104.0	104.4	101.0	94.8	90.8	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
SLR (90° Spill Light Eliminator Right)	Lumens	641	2,271	2,847	3,747	4,690	5,843	6,467	
	Lumens per Watt <sup>†</sup>	49.3	113.0	112.1	112.5	108.8	102.2	97.8	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	545	1,931	2,421	3,186	3,988	4,968	5,499	
	Lumens per Watt <sup>†</sup>	41.9	96.1	95.3	95.7	92.5	86.9	83.2	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
735 CCT	SLL (90° Spill Light Eliminator Left)	Lumens	641	2,271	2,847	3,747	4,690	5,843	6,467
		Lumens per Watt <sup>†</sup>	49.3	113.0	112.1	112.5	108.8	102.2	97.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	545	1,931	2,421	3,186	3,988	4,968	5,499
		Lumens per Watt <sup>†</sup>	41.9	96.1	95.3	95.7	92.5	86.9	83.2
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
T2 (Type II)	Lumens	768	2,721	3,412	4,490	5,619	7,001	7,749	
	Lumens per Watt <sup>†</sup>	59.1	135.4	134.3	134.8	130.4	122.4	117.2	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
T2-HSS (Type II, House Side Shield)	Lumens	584	2,069	2,594	3,414	4,272	5,323	5,892	
	Lumens per Watt <sup>†</sup>	44.9	102.9	102.1	102.5	99.1	93.1	89.1	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2	
T2-ULG (Type III, House Side Shield)	Lumens	768	4,499	5,190	6,268	7,397	8,779	9,527	
	Lumens per Watt <sup>†</sup>	59.1	122.3	123.3	125.4	123.7	118.8	115.1	
	BUG Rating	--	--	--	--	--	--	--	
T2-HSS-ULG (Type III, House Side Shield)	Lumens	584	3,847	4,372	5,192	6,050	7,101	7,670	
	Lumens per Watt <sup>†</sup>	44.9	104.5	103.8	103.8	101.2	96.1	92.6	
	BUG Rating	--	--	--	--	--	--	--	
T3 (Type III)	Lumens	786	2,783	3,490	4,593	5,748	7,162	7,927	
	Lumens per Watt <sup>†</sup>	60.5	138.5	137.4	137.9	133.4	125.2	119.9	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	
T3-HSS (Type III, House Side Shield)	Lumens	593	2,100	2,634	3,466	4,338	5,405	5,982	
	Lumens per Watt <sup>†</sup>	45.6	104.5	103.7	104.1	100.6	94.5	90.5	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	
T3-ULG (Type III, House Side Shield)	Lumens	786	4,561	5,268	6,371	7,526	8,940	9,705	
	Lumens per Watt <sup>†</sup>	60.5	123.9	125.1	127.4	125.9	121.0	117.2	
	BUG Rating	--	--	--	--	--	--	--	
T3-HSS-ULG (Type III, House Side Shield)	Lumens	593	3,878	4,412	5,244	6,116	7,183	7,760	
	Lumens per Watt <sup>†</sup>	45.6	105.4	104.8	104.9	102.3	97.2	93.7	
	BUG Rating	--	--	--	--	--	--	--	
T4FT (Type IV Forward Throw)	Lumens	739	2,617	3,282	4,319	5,406	6,735	7,455	
	Lumens per Watt <sup>†</sup>	56.8	130.2	129.2	129.7	125.4	117.7	112.8	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	547	1,936	2,428	3,195	3,999	4,982	5,514	
	Lumens per Watt <sup>†</sup>	42.1	96.3	95.6	95.9	92.8	87.1	83.4	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
T4FT-ULG (Type III, House Side Shield)	Lumens	739	4,395	5,060	6,097	7,184	8,513	9,233	
	Lumens per Watt <sup>†</sup>	56.8	119.4	120.2	121.9	120.1	115.2	111.5	
	BUG Rating	--	--	--	--	--	--	--	
T4FT-HSS-ULG (Type III, House Side Shield)	Lumens	547	3,714	4,206	4,973	5,777	6,760	7,292	
	Lumens per Watt <sup>†</sup>	42.1	100.9	99.9	99.5	96.6	91.5	88.1	
	BUG Rating	--	--	--	--	--	--	--	

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
740 CCT	T4W (Type IV Wide)	Lumens	772	2,733	3,428	4,511	5,646	7,034	7,785
		Lumens per Watt <sup>†</sup>	59.4	136.0	135.0	135.5	131.0	123.0	117.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	576	2,039	2,556	3,364	4,210	5,246	5,806
		Lumens per Watt <sup>†</sup>	44.3	101.4	100.6	101.0	97.7	91.7	87.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W-ULG (Type III, House Side Shield)	Lumens	772	4,511	5,206	6,289	7,424	8,812	9,563
		Lumens per Watt <sup>†</sup>	59.4	122.6	123.7	125.8	124.1	119.2	115.5
		BUG Rating	--	--	--	--	--	--	--
	T4W-HSS-ULG (Type III, House Side Shield)	Lumens	576	3,817	4,334	5,142	5,988	7,024	7,584
		Lumens per Watt <sup>†</sup>	44.3	103.7	102.9	102.8	100.1	95.0	91.6
		BUG Rating	--	--	--	--	--	--	--
	SL2 (Type II w/Spill Control)	Lumens	762	2,700	3,386	4,456	5,577	6,948	7,690
		Lumens per Watt <sup>†</sup>	58.6	134.3	133.3	133.8	129.4	121.5	116.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	"SL2-HSS (Type II w/Spill Control, House Side Shield)"	Lumens	624	2,210	2,771	3,646	4,564	5,686	6,293
		Lumens per Watt <sup>†</sup>	48.0	110.0	109.1	109.5	105.9	99.4	95.2
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	"SL2-ULG (Type III, House Side Shield)"	Lumens	762	4,478	5,164	6,234	7,355	8,726	9,468
		Lumens per Watt <sup>†</sup>	58.6	121.7	122.7	124.7	123.0	118.1	114.3
		BUG Rating	--	--	--	--	--	--	--
	"SL2-HSS-ULG (Type III, House Side Shield)"	Lumens	624	3,988	4,549	5,424	6,342	7,464	8,071
		Lumens per Watt <sup>†</sup>	48.0	108.4	108.1	108.5	106.1	101.0	97.5
		BUG Rating	--	--	--	--	--	--	--
	"SL3 (Type III w/Spill Control)"	Lumens	757	2,682	3,363	4,425	5,539	6,901	7,638
		Lumens per Watt <sup>†</sup>	58.2	133.4	132.4	132.9	128.5	120.6	115.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	"SL3-HSS (Type III w/Spill Control, House Side Shield)"	Lumens	647	2,290	2,872	3,780	4,731	5,894	6,524
		Lumens per Watt <sup>†</sup>	49.8	113.9	113.1	113.5	109.8	103.0	98.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
"SL3-ULG (Type III, House Side Shield)"	Lumens	757	4,460	5,141	6,203	7,317	8,679	9,416	
	Lumens per Watt <sup>†</sup>	58.2	121.2	122.1	124.1	122.4	117.4	113.7	
	BUG Rating	--	--	--	--	--	--	--	
"SL3-HSS-ULG (Type III, House Side Shield)"	Lumens	647	4,068	4,650	5,558	6,509	7,672	8,302	
	Lumens per Watt <sup>†</sup>	49.8	110.5	110.5	111.2	108.8	103.8	100.3	
	BUG Rating	--	--	--	--	--	--	--	
"SL4 (Type IV w/Spill Control)"	Lumens	732	2,592	3,250	4,277	5,353	6,670	7,383	
	Lumens per Watt <sup>†</sup>	56.3	129.0	128.0	128.4	124.2	116.6	111.7	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
"SL4-HSS (Type IV w/Spill Control, House Side Shield)"	Lumens	633	2,243	2,813	3,701	4,633	5,772	6,389	
	Lumens per Watt <sup>†</sup>	48.7	111.6	110.7	111.1	107.5	100.9	96.7	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	



**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
740 CCT	SL4-ULG (Type III, House Side Shield)	Lumens	732	4,370	5,028	6,055	7,131	8,448	9,161
		Lumens per Watt <sup>†</sup>	56.3	118.8	119.4	121.1	119.2	114.3	110.6
		BUG Rating	--	--	--	--	--	--	--
	SL4-HSS-ULG (Type III, House Side Shield)	Lumens	633	4,021	4,591	5,479	6,411	7,550	8,167
		Lumens per Watt <sup>†</sup>	48.7	109.3	109.0	109.6	107.2	102.2	98.6
		BUG Rating	--	--	--	--	--	--	--
	SLR (90° Spill Light Eliminator Right)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885
		Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854
		Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SLR-ULG (Type III, House Side Shield)	Lumens	682	4,195	4,809	5,767	6,770	7,998	8,663
		Lumens per Watt <sup>†</sup>	52.5	114.0	114.2	115.3	113.2	108.2	104.6
		BUG Rating	--	--	--	--	--	--	--
	SLR-HSS-ULG (Type III, House Side Shield)	Lumens	580	3,833	4,355	5,170	6,023	7,067	7,632
		Lumens per Watt <sup>†</sup>	44.6	104.2	103.4	103.4	100.7	95.6	92.2
		BUG Rating	--	--	--	--	--	--	--
	SLL (90° Spill Light Eliminator Left)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885
		Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854
		Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL-ULG (Type III, House Side Shield)	Lumens	682	4,195	4,809	5,767	6,770	7,998	8,663
		Lumens per Watt <sup>†</sup>	52.5	114.0	114.2	115.3	113.2	108.2	104.6
		BUG Rating	--	--	--	--	--	--	--
	SLL-HSS-ULG (Type III, House Side Shield)	Lumens	580	3,833	4,355	5,170	6,023	7,067	7,632
		Lumens per Watt <sup>†</sup>	44.6	104.2	103.4	103.4	100.7	95.6	92.2
		BUG Rating	--	--	--	--	--	--	--
750 CCT	T2 (Type II)	Lumens	768	2,721	3,412	4,490	5,619	7,001	7,749
		Lumens per Watt <sup>†</sup>	59.1	135.4	134.3	134.8	130.4	122.4	117.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	584	2,069	2,594	3,414	4,272	5,323	5,892
		Lumens per Watt <sup>†</sup>	44.9	102.9	102.1	102.5	99.1	93.1	89.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2
	T3 (Type III)	Lumens	786	2,783	3,490	4,593	5,748	7,162	7,927
		Lumens per Watt <sup>†</sup>	60.5	138.5	137.4	137.9	133.4	125.2	119.9
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	593	2,100	2,634	3,466	4,338	5,405	5,982
		Lumens per Watt <sup>†</sup>	45.6	104.5	103.7	104.1	100.6	94.5	90.5
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
750 CCT	T4FT (Type IV Forward Throw)	Lumens	739	2,617	3,282	4,319	5,406	6,735	7,455
		Lumens per Watt <sup>†</sup>	56.8	130.2	129.2	129.7	125.4	117.7	112.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	547	1,936	2,428	3,195	3,999	4,982	5,514
		Lumens per Watt <sup>†</sup>	42.1	96.3	95.6	95.9	92.8	87.1	83.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W (Type IV Wide)	Lumens	772	2,733	3,428	4,511	5,646	7,034	7,785
		Lumens per Watt <sup>†</sup>	59.4	136.0	135.0	135.5	131.0	123.0	117.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	576	2,039	2,556	3,364	4,210	5,246	5,806
		Lumens per Watt <sup>†</sup>	44.3	101.4	100.6	101.0	97.7	91.7	87.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL2 (Type II w/Spill Control)	Lumens	762	2,700	3,386	4,456	5,577	6,948	7,690
		Lumens per Watt <sup>†</sup>	58.6	134.3	133.3	133.8	129.4	121.5	116.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	624	2,210	2,771	3,646	4,564	5,686	6,293
		Lumens per Watt <sup>†</sup>	48.0	110.0	109.1	109.5	105.9	99.4	95.2
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL3 (Type III w/Spill Control)	Lumens	757	2,682	3,363	4,425	5,539	6,901	7,638
		Lumens per Watt <sup>†</sup>	58.2	133.4	132.4	132.9	128.5	120.6	115.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	647	2,290	2,872	3,780	4,731	5,894	6,524
		Lumens per Watt <sup>†</sup>	49.8	113.9	113.1	113.5	109.8	103.0	98.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL4 (Type IV w/Spill Control)	Lumens	732	2,592	3,250	4,277	5,353	6,670	7,383
		Lumens per Watt <sup>†</sup>	56.3	129.0	128.0	128.4	124.2	116.6	111.7
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	633	2,243	2,813	3,701	4,633	5,772	6,389
		Lumens per Watt <sup>†</sup>	48.7	111.6	110.7	111.1	107.5	100.9	96.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
SLR (90° Spill Light Eliminator Right)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885	
	Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854	
	Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	
SLL (90° Spill Light Eliminator Left)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885	
	Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854	
	Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
760 CCT	T2 (Type II)	Lumens	768	2,721	3,412	4,490	5,619	7,001	7,749
		Lumens per Watt <sup>†</sup>	59.1	135.4	134.3	134.8	130.4	122.4	117.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	584	2,069	2,594	3,414	4,272	5,323	5,892
		Lumens per Watt <sup>†</sup>	44.9	102.9	102.1	102.5	99.1	93.1	89.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2
	T3 (Type III)	Lumens	786	2,783	3,490	4,593	5,748	7,162	7,927
		Lumens per Watt <sup>†</sup>	60.5	138.5	137.4	137.9	133.4	125.2	119.9
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	593	2,100	2,634	3,466	4,338	5,405	5,982
		Lumens per Watt <sup>†</sup>	45.6	104.5	103.7	104.1	100.6	94.5	90.5
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T4FT (Type IV Forward Throw)	Lumens	739	2,617	3,282	4,319	5,406	6,735	7,455
		Lumens per Watt <sup>†</sup>	56.8	130.2	129.2	129.7	125.4	117.7	112.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	547	1,936	2,428	3,195	3,999	4,982	5,514
		Lumens per Watt <sup>†</sup>	42.1	96.3	95.6	95.9	92.8	87.1	83.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W (Type IV Wide)	Lumens	772	2,733	3,428	4,511	5,646	7,034	7,785
		Lumens per Watt <sup>†</sup>	59.4	136.0	135.0	135.5	131.0	123.0	117.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	576	2,039	2,556	3,364	4,210	5,246	5,806
		Lumens per Watt <sup>†</sup>	44.3	101.4	100.6	101.0	97.7	91.7	87.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
SL2 (Type II w/Spill Control)	Lumens	762	2,700	3,386	4,456	5,577	6,948	7,690	
	Lumens per Watt <sup>†</sup>	58.6	134.3	133.3	133.8	129.4	121.5	116.3	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	
SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	624	2,210	2,771	3,646	4,564	5,686	6,293	
	Lumens per Watt <sup>†</sup>	48.0	110.0	109.1	109.5	105.9	99.4	95.2	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL3 (Type III w/Spill Control)	Lumens	757	2,682	3,363	4,425	5,539	6,901	7,638	
	Lumens per Watt <sup>†</sup>	58.2	133.4	132.4	132.9	128.5	120.6	115.6	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	647	2,290	2,872	3,780	4,731	5,894	6,524	
	Lumens per Watt <sup>†</sup>	49.8	113.9	113.1	113.5	109.8	103.0	98.7	
	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL4 (Type IV w/Spill Control)	Lumens	732	2,592	3,250	4,277	5,353	6,670	7,383	
	Lumens per Watt <sup>†</sup>	56.3	129.0	128.0	128.4	124.2	116.6	111.7	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	
SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	633	2,243	2,813	3,701	4,633	5,772	6,389	
	Lumens per Watt <sup>†</sup>	48.7	111.6	110.7	111.1	107.5	100.9	96.7	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
760 CCT	SLR (90° Spill Light Eliminator Right)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885
		Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854
		Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SLL (90° Spill Light Eliminator Left)	Lumens	682	2,417	3,031	3,989	4,992	6,220	6,885
		Lumens per Watt <sup>†</sup>	52.5	120.2	119.3	119.8	115.8	108.7	104.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	580	2,055	2,577	3,392	4,245	5,289	5,854
		Lumens per Watt <sup>†</sup>	44.6	102.2	101.5	101.9	98.5	92.5	88.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
827 CCT	T2 (Type II)	Lumens	565	2,000	2,508	3,300	4,131	5,147	5,696
		Lumens per Watt <sup>†</sup>	43.5	99.5	98.7	99.1	95.8	90.0	86.2
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	429	1,521	1,907	2,509	3,141	3,913	4,331
		Lumens per Watt <sup>†</sup>	33.0	75.7	75.1	75.3	72.9	68.4	65.5
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
	T3 (Type III)	Lumens	578	2,046	2,566	3,376	4,226	5,265	5,825
		Lumens per Watt <sup>†</sup>	44.5	101.8	101.0	101.4	98.1	92.0	88.1
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	436	1,544	1,936	2,548	3,189	3,973	4,398
		Lumens per Watt <sup>†</sup>	33.5	76.8	76.2	76.5	74.0	69.5	66.5
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	T4FT (Type IV Forward Throw)	Lumens	543	1,924	2,413	3,175	3,974	4,951	5,480
		Lumens per Watt <sup>†</sup>	41.8	95.7	95.0	95.3	92.2	86.6	82.9
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	402	1,423	1,785	2,349	2,939	3,662	4,054
		Lumens per Watt <sup>†</sup>	30.9	70.8	70.3	70.5	68.2	64.0	61.3
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T4W (Type IV Wide)	Lumens	567	2,009	2,520	3,316	4,150	5,171	5,723
		Lumens per Watt <sup>†</sup>	43.6	100.0	99.2	99.6	96.3	90.4	86.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	423	1,499	1,879	2,473	3,095	3,856	4,268
		Lumens per Watt <sup>†</sup>	32.5	74.6	74.0	74.3	71.8	67.4	64.6
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1
SL2 (Type II w/Spill Control)	Lumens	560	1,985	2,489	3,275	4,099	5,108	5,653	
	Lumens per Watt <sup>†</sup>	43.1	98.8	98.0	98.3	95.1	89.3	85.5	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	
SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	459	1,624	2,037	2,680	3,355	4,180	4,626	
	Lumens per Watt <sup>†</sup>	35.3	80.8	80.2	80.5	77.8	73.1	70.0	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	

POWER AND LUMENS

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
827 CCT	SL3 (Type III w/Spill Control)	Lumens	557	1,971	2,472	3,253	4,072	5,073	5,615
		Lumens per Watt <sup>†</sup>	42.8	98.1	97.3	97.7	94.5	88.7	84.9
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	475	1,684	2,111	2,779	3,478	4,333	4,796
		Lumens per Watt <sup>†</sup>	36.5	83.8	83.1	83.5	80.7	75.8	72.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SL4 (Type IV w/Spill Control)	Lumens	538	1,905	2,389	3,144	3,935	4,903	5,427
		Lumens per Watt <sup>†</sup>	41.4	94.8	94.1	94.4	91.3	85.7	82.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	466	1,649	2,068	2,721	3,406	4,243	4,696
		Lumens per Watt <sup>†</sup>	35.8	82.0	81.4	81.7	79.0	74.2	71.0
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2
	SLR (90° Spill Light Eliminator Right)	Lumens	502	1,777	2,228	2,932	3,670	4,572	5,061
		Lumens per Watt <sup>†</sup>	38.6	88.4	87.7	88.0	85.2	79.9	76.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	427	1,511	1,895	2,493	3,121	3,888	4,303
		Lumens per Watt <sup>†</sup>	32.8	75.2	74.6	74.9	72.4	68.0	65.1
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL (90° Spill Light Eliminator Left)	Lumens	502	1,777	2,228	2,932	3,670	4,572	5,061
		Lumens per Watt <sup>†</sup>	38.6	88.4	87.7	88.0	85.2	79.9	76.6
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	427	1,511	1,895	2,493	3,121	3,888	4,303
		Lumens per Watt <sup>†</sup>	32.8	75.2	74.6	74.9	72.4	68.0	65.1
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
830 CCT	T2 (Type II)	Lumens	610	2,162	2,711	3,568	4,465	5,563	6,158
		Lumens per Watt <sup>†</sup>	46.9	107.6	106.7	107.1	103.6	97.3	93.2
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T2-HSS (Type II, House Side Shield)	Lumens	464	1,644	2,061	2,713	3,395	4,230	4,682
		Lumens per Watt <sup>†</sup>	35.7	81.8	81.1	81.5	78.8	74.0	70.8
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
	T3 (Type III)	Lumens	624	2,212	2,773	3,650	4,568	5,691	6,299
		Lumens per Watt <sup>†</sup>	48.0	110.0	109.2	109.6	106.0	99.5	95.3
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T3-HSS (Type III, House Side Shield)	Lumens	471	1,669	2,093	2,754	3,447	4,295	4,754
		Lumens per Watt <sup>†</sup>	36.2	83.0	82.4	82.7	80.0	75.1	71.9
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	T4FT (Type IV Forward Throw)	Lumens	587	2,080	2,608	3,432	4,296	5,352	5,924
		Lumens per Watt <sup>†</sup>	45.2	103.5	102.7	103.1	99.7	93.6	89.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	T4FT-HSS (Type IV Forward Throw, House Side Shield)	Lumens	434	1,538	1,929	2,539	3,177	3,959	4,382
		Lumens per Watt <sup>†</sup>	33.4	76.5	75.9	76.2	73.7	69.2	66.3
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2

**POWER AND LUMENS**

1 LightSquare (SA Series)		ENC (Entri - Round Clean) / ENT (Entri - Triangle Reveals) / ENV (Entri - Round Reveals)							
Drive Current (mA)		EBP / CBP	SA1A (350mA)	SA1B (450mA)	SA1C (600mA)	SA1D (800mA)	SA1E (1000mA)	SA1F (1200mA)	
Power (Watts)	120-277V±	13	20.1	25.4	33.3	43.1	57.2	66.1	
Current (A)	120V	--	0.17	0.22	0.29	0.38	0.48	0.56	
	277V	--	0.09	0.1	0.13	0.17	0.21	0.25	
Power (Watts)	347V or 480V	--	23.3	28.7	36.6	49.5	60.7	70.1	
Current (A)	347V	--	0.07	0.08	0.11	0.15	0.18	0.21	
	480V	--	0.05	0.06	0.08	0.11	0.13	0.16	
<b>Optics</b>									
830 CCT	T4W (Type IV Wide)	Lumens	613	2,172	2,724	3,584	4,486	5,590	6,187
		Lumens per Watt <sup>†</sup>	47.2	108.1	107.2	107.6	104.1	97.7	93.6
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	T4W-HSS (Type IV Wide, House Side Shield)	Lumens	457	1,620	2,032	2,673	3,346	4,169	4,614
		Lumens per Watt <sup>†</sup>	35.2	80.6	80.0	80.3	77.6	72.9	69.8
		BUG Rating	B0-U0-G0	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2
	SL2 (Type II w/Spill Control) <sup>1</sup>	Lumens	606	2,146	2,691	3,541	4,431	5,521	6,111
		Lumens per Watt <sup>†</sup>	46.6	106.8	105.9	106.3	102.8	96.5	92.5
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL2-HSS (Type II w/Spill Control, House Side Shield)	Lumens	496	1,756	2,202	2,898	3,626	4,518	5,001
		Lumens per Watt <sup>†</sup>	38.2	87.4	86.7	87.0	84.1	79.0	75.7
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SL3 (Type III w/Spill Control)	Lumens	602	2,131	2,672	3,517	4,401	5,484	6,070
		Lumens per Watt <sup>†</sup>	46.3	106.0	105.2	105.6	102.1	95.9	91.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL3-HSS (Type III w/Spill Control, House Side Shield)	Lumens	514	1,820	2,282	3,004	3,759	4,684	5,184
		Lumens per Watt <sup>†</sup>	39.5	90.5	89.8	90.2	87.2	81.9	78.4
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	SL4 (Type IV w/Spill Control)	Lumens	582	2,060	2,583	3,399	4,254	5,300	5,867
		Lumens per Watt <sup>†</sup>	44.8	102.5	101.7	102.1	98.7	92.7	88.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	SL4-HSS (Type IV w/Spill Control, House Side Shield)	Lumens	503	1,782	2,235	2,941	3,681	4,587	5,077
		Lumens per Watt <sup>†</sup>	38.7	88.7	88.0	88.3	85.4	80.2	76.8
		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U0-G2	B1-U0-G2
	SLR (90° Spill Light Eliminator Right)	Lumens	542	1,921	2,409	3,170	3,967	4,943	5,471
		Lumens per Watt <sup>†</sup>	41.7	95.6	94.8	95.2	92.0	86.4	82.8
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	SLR-HSS (90° Spill Light Eliminator Right, House Side Shield)	Lumens	461	1,633	2,048	2,695	3,373	4,203	4,652
Lumens per Watt <sup>†</sup>		35.5	81.2	80.6	80.9	78.3	73.5	70.4	
BUG Rating		B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
SLL (90° Spill Light Eliminator Left)	Lumens	542	1,921	2,409	3,170	3,967	4,943	5,471	
	Lumens per Watt <sup>†</sup>	42	96	95	95	92	86	83	
	BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
SLL-HSS (90° Spill Light Eliminator Left, House Side Shield)	Lumens	461	1,633	2,048	2,695	3,373	4,203	4,652	
	Lumens per Watt <sup>†</sup>	35.5	81.2	80.6	80.9	78.3	73.5	70.4	
	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	

**LUMEN MAINTENANCE**

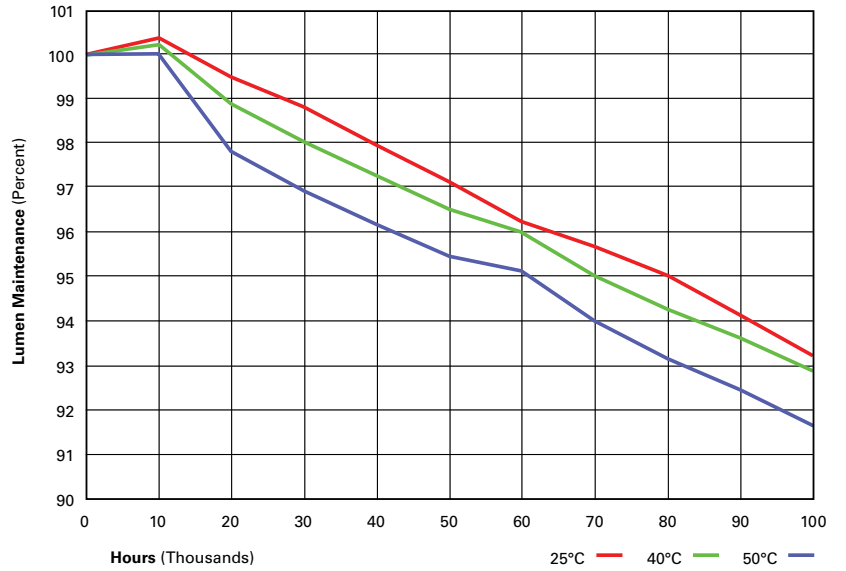
SA1 (All Drive Currents)					
Hours	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 (Hours)**
25 °C	99.4%	99.0%	98.9%	98.3%	2,471,000
40 °C	99.4%	99.0%	98.9%	98.3%	2,471,000
50 °C	99.4%	99.0%	98.9%	98.3%	2,471,000

\* Supported by IES TM-21 standards

\*\* Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

**LUMEN MULTIPLIER**

Ambient Temperature	SA1 (All Drive Currents)
0 °C	1.02
10 °C	1.01
25 °C	1.00
40 °C	0.99
50 °C	0.97



**CONTROL OPTIONS**

**0-10V**

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

**Photocontrol (BPC)**

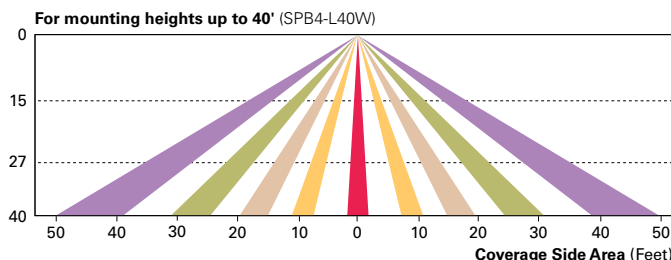
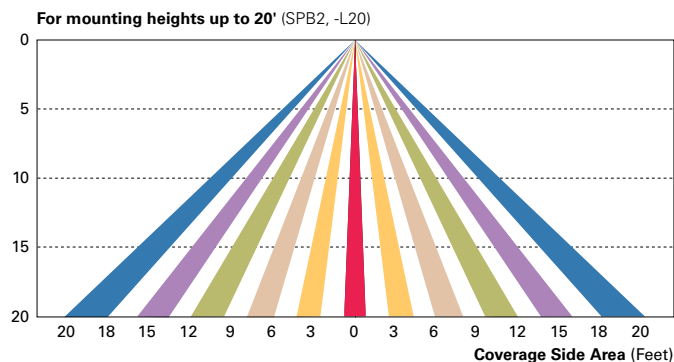
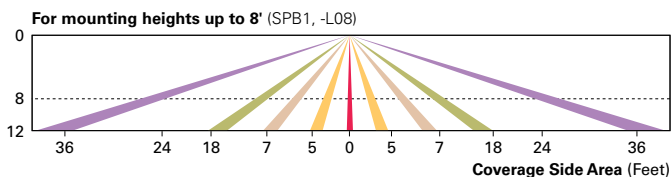
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

**After Hours Dim (AHD)**

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

**Dimming Occupancy Sensor (MS/DIM-LXX and MS-LXX)**

These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



**WaveLinx Wireless Control and Monitoring System**

Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. Use the WaveLinx Mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn. WaveLinx Wireless Sensor (WPS2 and WPS4) These outdoor sensors offer passive infrared (PIR) occupancy and a photocell for closed loop daylight sensing. These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or daylight harvesting that is factory-enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-20', only applies for typical wall packs.



Project		Catalog #		Type	
Prepared by		Notes		Date	



# McGraw-Edison

## TT TopTier

Parking Garage Luminaire

### Product Features



### Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Configurations [page 2](#)
- Mounting Details [page 3](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 6](#)

### Product Certifications



### Quick Facts

- Lumen packages range from 2,757 - 22,831
- Efficacies up to 146 lumens per watt
- Utilizes patented waveguide technology for maximum visual comfort
- Surface, pendant, trunnion, wall and direct conduit mount options

### Connected Systems

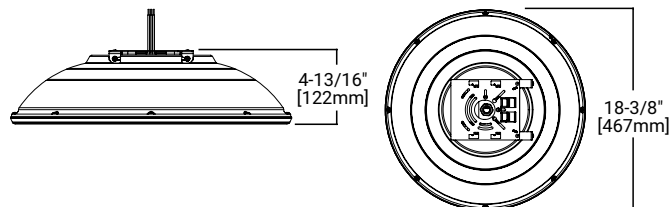
- WaveLinx Lite
- Synapse

### Dimensional Details

#### SURFACE MOUNT

CQ, MQ, WQ and RW: D1-D6  
DL: D1-D4

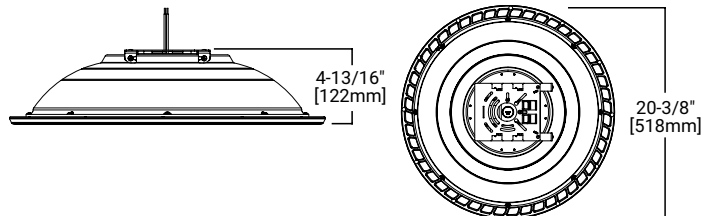
Base luminaire weight: 18.2 lbs (8.3 kg)



#### SURFACE MOUNT

CQ, MQ, WQ and RW: D7+  
DL: D5+

Base luminaire weight: 20.1 lbs (9.1 kg)



**NOTES:**

1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: TT-D3-740-U-WQ-STM-30L-AP

Product Family	Configuration	Color Temperature	Voltage	Distribution	Mounting <sup>30</sup>	Lead Length <sup>7</sup>	Finish
<b>TT</b> =TopTier <sup>1</sup> <b>BAA-TT</b> =TopTier, Buy American Act Compliant <sup>24</sup> <b>TAA-TT</b> =TopTier, Trade Agreements Act Compliant <sup>24</sup>	<b>D1</b> =4,000 Nominal Lumens <b>D2</b> =5,500 Nominal Lumens <b>D3</b> =6,500 Nominal Lumens <b>D4</b> =8,000 Nominal Lumens <b>D5</b> =10,000 Nominal Lumens <b>D6</b> =13,000 Nominal Lumens <b>D7</b> =15,000 Nominal Lumens <b>D8</b> =18,000 Nominal Lumens <b>D9</b> =20,000 Nominal Lumens <b>D10</b> =22,000 Nominal Lumens	<b>735</b> =70 CRI, 3500K CCT <b>740</b> =70 CRI, 4000K CCT <b>750</b> =70 CRI, 5000K CCT <b>830</b> =80 CRI, 3000K CCT <b>AMB</b> =Amber 590nm <sup>28</sup>	<b>U</b> =120-277V <b>H</b> =347-480V <sup>21, 25</sup> <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <b>9</b> =347V	<b>CQ</b> =Concentrated <b>MQ</b> =Medium <b>WQ</b> =Wide <b>RW</b> =Rectangular Wide <sup>29</sup> <b>DL</b> =Drive Lane / Type 4 <sup>29</sup>	<b>[Blank]</b> =Surface Mount <sup>16</sup> <b>TMB</b> =Trunnion Mount with Connection Box <b>DPM</b> =Decorative Pendant Mount <sup>4</sup> <b>WM</b> =Wall Mount <b>STM</b> =Stem Mount to 1/2" conduit <sup>16</sup>	<b>[Blank]</b> =6" <b>30L</b> =30" <b>36L</b> =36" <b>48L</b> =48" <b>72L</b> =72" <b>108L</b> =108" <b>120L</b> =120" <b>144L</b> =144"	<b>NW</b> =White <b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic
Options (Add as Suffix)					Accessories (Order Separately) <sup>27</sup>		
<b>F</b> =Single Fuse (120, 277 or 347V Specify Voltage) <b>FF</b> =Double Fuse (208, 240 or 480V Specify Voltage) <b>IBP</b> =Integral Battery Pack <sup>5, 23</sup> <b>IBP-CEC</b> =Integral Battery Pack, CEC compliant <sup>5</sup> <b>ITS</b> =Integral Transfer Switch <sup>4</sup> <b>924</b> =UL924 listed luminaire <sup>19</sup> <b>CG</b> =Clear Glass <sup>9</sup> <b>SG</b> =Solite® Glass <sup>9</sup> <b>UPL</b> =Uplight <sup>6</sup> <b>TR</b> =Tamper Resistant Hardware <b>NAT</b> =Natorium finish <b>DALI</b> =DALI Driver <sup>15</sup> <b>MS/DIM-L08</b> =Dimming Occupancy Sensor (<9' Mounting) <sup>11, 17</sup> <b>MS/DIM-L20</b> =Dimming Occupancy Sensor (9' - 20' Mounting) <sup>11, 17</sup> <b>SPB1</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting <sup>11, 20</sup> <b>SPB2</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting <sup>11, 20</sup>		<b>WLS2WH</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WLS4WH</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting <sup>21, 22</sup> <b>WPS2WH</b> =WaveLinx Pro, Dimming Motion, SR Driver and Daylight, WAC Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WPS4WH</b> =WaveLinx Pro, Dimming Motion, SR Driver and Daylight, WAC Programmable, 15' - 40' Mounting <sup>21, 22</sup> <b>LWR-LW</b> =Enlighted Wireless Sensor, Wide Lens 8' - 16' Mounting Height <sup>11, 18</sup> <b>LWR-LN</b> =Enlighted Wireless Sensor, Narrow Lens 16' - 40' Mounting Height <sup>11, 18</sup> <b>DIM10-L08</b> =Synapse occupancy sensor (<8' Mounting) <sup>21</sup> <b>DIM10-L20</b> =Synapse occupancy sensor (8'-20' Mounting) <sup>21</sup>			<b>MA1252</b> =Replacement 10kV Surge Module <b>TT/WG</b> =Wire Guard <sup>24</sup> <b>TT/BG-UP-XX</b> =Bird Guard <sup>12, 13</sup> <b>TT/HSS-XX</b> =House Side Shield <sup>24</sup> <b>DPMS36-XX</b> =36" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS48-XX</b> =48" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS96-XX</b> =96" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS36-XX-36"</b> =36" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMS48-XX-48"</b> =48" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMS96-XX-96"</b> =96" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>FSIR-100</b> =Wireless Configuration Tool for Occupancy Sensor <sup>17</sup> <b>SPB4</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 20' - 40' Mounting <sup>11, 20</sup>		
<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>DesignLights Consortium® Qualified. Refer to <a href="http://www.designlights.org">www.designlights.org</a> Qualified Products List under Family Models for details.</li> <li>Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).</li> <li>Not available with D7 - D10 configurations.</li> <li>Order Pendant Mount Stem accessory.</li> <li>IBP ambient operating temperature -20°C to 35°C (D1-D3), -20°C to 25°C (D4-D6). Not available with D7-D10 configurations or DALI options.</li> <li>Additional 8.0W. Provides 920 lumens. Not available with D10 configuration.</li> <li>Choose lead length for Surface Mount and Stem Mount only. TMB, DPM and WM lengths predetermined.</li> <li>Not available with CQ.</li> <li>Standard with CQ, option available with WQ only.</li> <li>U voltage only. Ambient operating temperature -20°C to 50°C (D1-D4) or -20°C to 40°C (D5-D6). UL924 listed component.</li> <li>Includes integral photocell.</li> <li>Specify color in place of XX.</li> <li>Designed for use with Stem Mount and Decorative Pendant Mount only.</li> <li>Designed for use with Decorative Pendant Mount only.</li> <li>Not available with H voltage or IBP. Not compatible with MS/DIM or LWR sensors.</li> <li>Specify Lead Length for wire harness length.</li> <li>The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay and more.</li> <li>Enlighted wireless sensors are factory installed only, and require network components in appropriate quantities.</li> <li>924 option provides luminaire UL924 listing, used in conjunction with ITS or IBP-CEC.</li> <li>Sensor configuration mobile application required for configuration. See controls page for details.</li> <li>Cannot be used with other control options.</li> <li>For WaveLinx applications, WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Not required for WaveLinx Lite Commercial (LC) applications.</li> <li>Specify 120V or 277V.</li> <li>TT/WG and TT/HSS cannot be installed together. TT/HSS &amp; TT/WG not available on D7-D10 configurations.</li> <li>D4-D10 only. Not compatible with battery.</li> <li>Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="http://DOMESTIC.PREFERENCES">DOMESTIC.PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.</li> <li>Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.</li> <li>Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose lumen package D1.</li> <li>Not available in D10 configuration.</li> <li>For installations in locations such as gymnasiums, arenas, sports complexes, multi-purpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, DPM mounting is required, utilizing the stem kit with tether (DPMST*). Surface Mount, Trunnion Mount (TMB), Wall Mount (WM) and Stem Mount (STM) are prohibited in these applications.</li> </ol>							

Product Specifications

Construction

- Low profile, die-cast aluminum housing provides a clean, symmetric aesthetic

Optics

- Five optical distributions utilizing visual comfort waveguide technology
- 10 lumen packages, ranging from 2,757 to 22,831
- Integral uplight option utilizes a dedicated, 8W light engine, producing 920 lumens for reduced visual contrast and cave effect
- IDA Certified for 3000k CCT and warmer only. Not available with uplight option.

Electrical

- D1-D6: -40C - 50C operating temperature
- D7-D10: -40C - 40C operating temperature

- Greater than 90% lumen maintenance at 50,000 hours
- IP66 rated
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- 10kV surge module standard
- 0-10V dimming standard

Mounting

- Surface mount directly to square or octagonal 4" surface or recessed junction box using quick mount bracket
- Optional stem mount bracket with set screw for direct 1/2" NPS conduit mounting
- Trunnion, decorative pendant, and wall mount options also available
- For installations in locations such as

gymnasiums, arenas, sports complexes, multipurpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, the stem kit with tether (DPMST\*) is required.

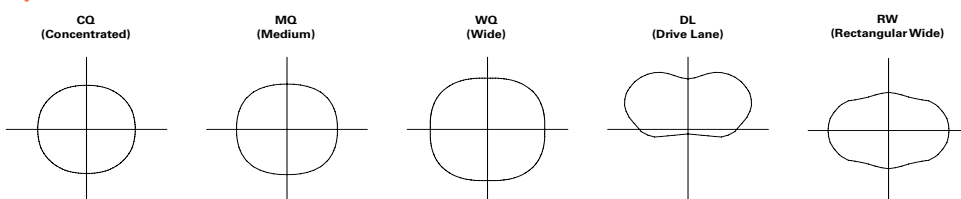
Finish

- 2.5 mil nominal TGIC powder coat thickness
- Finishes include white, black, bronze, gray, dark platinum and graphite metallic
- RAL and custom color matches available
- Natorium option (NAT) available, providing 5,000 hour salt spray rating per ASTM B117, with a scribe rating of 9 per ASTM D1654

Warranty

- Five-year warranty

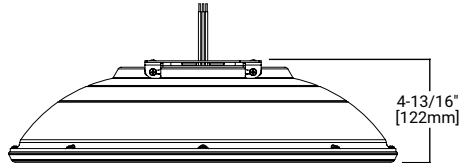
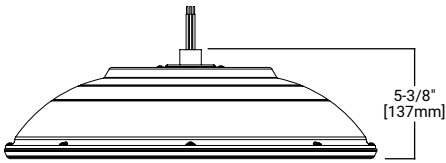
Optical Distributions



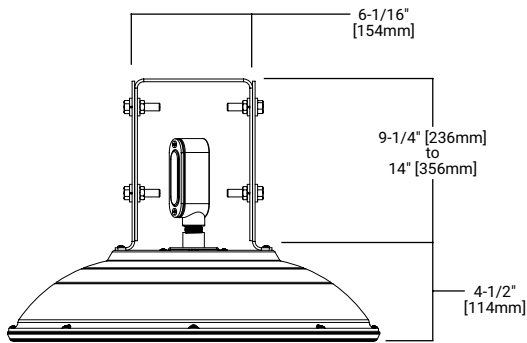
Mounting Details

\*D1-D6 configuration shown (D1-D4 for DL distribution)

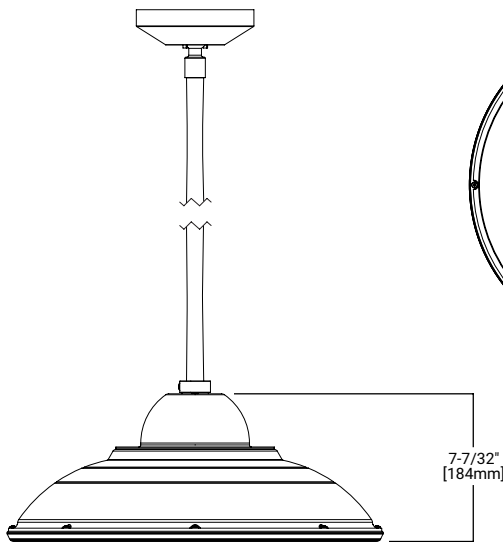
Stem Mount



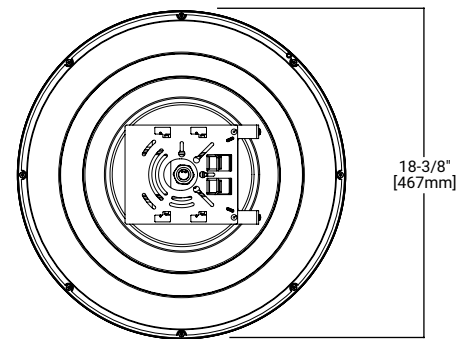
Trunnion Mount



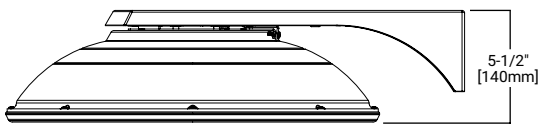
Decorative Pendant Mount



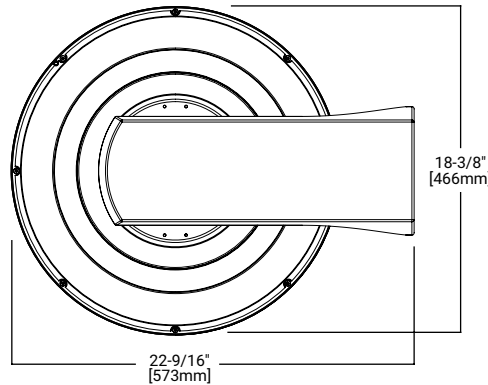
Top View



Wall Mount

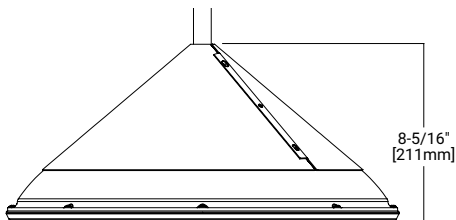


Top View - Wall Mount

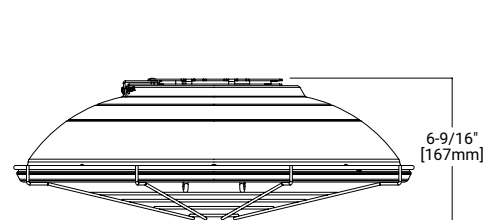


Accessories

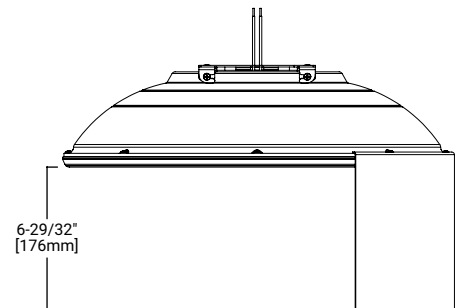
Bird Guard (TT/BG-UP-XX)



Wire Guard (TT/WG)



House Side Shield (TT/HSS-XX)



Energy and Performance Data

[View TopTier IES files](#)

Power and Lumens (3000K/3500K/4000K/5000K)

Lumen Package		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10		
Power (Wattage) CQ, MQ, WQ		28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8		
Power (Wattage) RW Only		28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0	--		
Power (Wattage) DL Only		28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0	--		
Distribution													
3000K CCT 80 CRI	CQ Concentrated	Lumens	3,409	4,640	5,595	6,660	8,383	11,030	12,307	14,411	16,430	18,001	
		BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2
		Lumens per Watt	122	118	119	116	112	105	99	97	95	93	
	MQ Medium	Lumens	3,647	4,964	5,986	7,125	8,969	11,800	12,854	15,053	17,161	18,802	
		BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	130	127	127	124	120	112	103	101	99	97	
	WQ Wide	Lumens	3,449	4,695	5,662	6,740	8,483	11,161	12,350	14,463	16,489	18,065	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	123	120	120	117	114	106	99	97	95	93	
	RW Rectangular Wide	Lumens	2,757	3,753	4,526	5,387	6,781	8,922	11,977	13,619	15,122	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	98	96	96	94	91	85	94	89	85	--	
	DL Drive Lane / Type 4	Lumens	2,959	3,985	4,762	5,622	6,537	8,771	11,834	13,337	14,768	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	--	
		Lumens per Watt	103	98	98	94	105	90	93	87	83	--	
	3500K CCT 70 CRI	CQ Concentrated	Lumens	3,618	4,925	5,940	7,070	8,899	11,708	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	129	126	126	123	119	111	120	118	115	113
MQ Medium		Lumens	3,872	5,270	6,355	7,564	9,520	12,527	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	138	134	135	131	127	119	125	123	120	118	
WQ Wide		Lumens	3,662	4,984	6,011	7,154	9,005	11,848	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	131	127	127	124	121	113	120	118	116	113	
RW Rectangular Wide		Lumens	2,927	3,984	4,805	5,719	7,198	9,471	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	105	102	102	99	96	90	114	108	103	--	
DL Drive Lane / Type 4		Lumens	3,141	4,230	5,055	5,968	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	109	104	104	100	127	109	113	106	101	--	
4000K/ 5000K CCT 70 CRI		CQ Concentrated	Lumens	3,828	5,211	6,284	7,480	9,415	12,387	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	137	133	133	130	126	118	120	118	115	113
	MQ Medium	Lumens	4,096	5,575	6,723	8,002	10,072	13,253	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	146	142	142	139	135	126	125	123	120	118	
	WQ Wide	Lumens	3,874	5,273	6,359	7,569	9,527	12,535	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	138	135	135	131	128	119	120	118	116	113	
	RW Rectangular Wide	Lumens	3,097	4,215	5,083	6,050	7,615	10,020	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	111	108	108	105	102	95	114	108	103	--	
	DL Drive Lane / Type 4	Lumens	3,323	4,475	5,348	6,314	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	115	110	110	106	127	109	113	106	101	--	

Energy and Performance Data

CQ, MQ and WQ Distributions

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.09	1.31	1.53	1.72
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.57	0.67	0.78	0.88
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.66	0.76	0.85
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.49	0.58	0.67	0.74
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.40	0.47	0.55	0.62
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.35	0.41	0.45

RW Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.11	1.34	1.58
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.36	0.42

DL Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0
Input Current @ 120V (A)	0.24	0.34	0.41	0.50	0.55	0.86	1.11	1.34	1.58
Input Current @ 208V (A)	0.14	0.19	0.23	0.29	0.28	0.44	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.17	0.20	0.25	0.28	0.43	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.15	0.18	0.22	0.24	0.37	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.12	0.14	0.17	0.21	0.31	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.15	0.23	0.30	0.36	0.42

Lumen Maintenance

Lumen Package	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
D1-D6 (D1 - D4 DL/T4)	25°C	98.0%	95.2%	94.1%	89.8%	> 300,000
	40°C	97.9%	94.8%	93.6%	89.0%	> 290,000
	50°C	97.7%	94.5%	93.2%	88.4%	> 270,000
D7 - D10 (D5+ DL/T4)	25°C	95.8%	93.2%	92.2%	88.2%	> 300,000
	40°C	93.9%	89.7%	88.1%	81.9%	> 180,000

\* Supported by IES TM-21 standards

\*\*Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

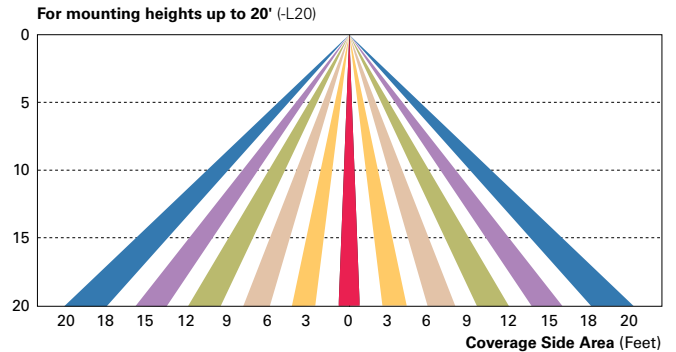
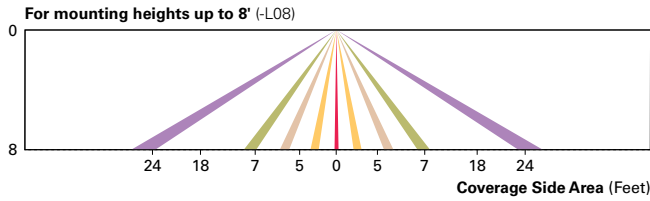
Lumen Multiplier

Ambient Temperature	Multiplier
0°C	1.03
10C	1.02
25°C	1.00
40°C	0.98
50°C	0.97

Control Options

0-10V (D) 0-10V dimming comes standard on all TopTier configurations for use with integrated or external lighting controls.

**Dimming Occupancy Sensor (MS/DIM)** These sensors are factory installed in the luminaire, dimming to 50% after five minutes of no motion detected. When motion is detected, the luminaire output is 100%. Includes an integral photocell that can be programmed for "dusk-to-dawn" operation. The FSIR-100 programming tool can be utilized to adjust dimming level, time delay, sensitivity and other parameters. Two lens options provide optimal coverage patterns up to 20' mounting height.



**Dimming Occupancy Sensor (SPB)**

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

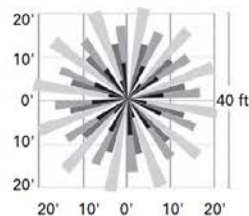
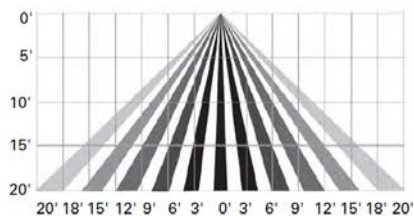
SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

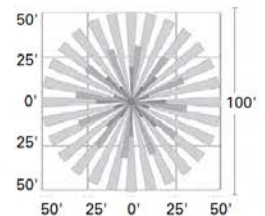
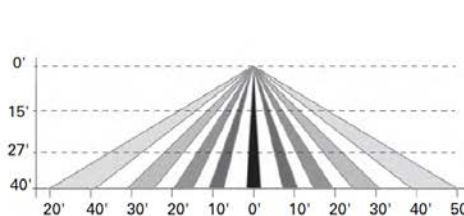
**WaveLinX Wireless Control and Monitoring System**

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinX Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX Lite mobile application for set-up and configuration. WAC not required. WaveLinX Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

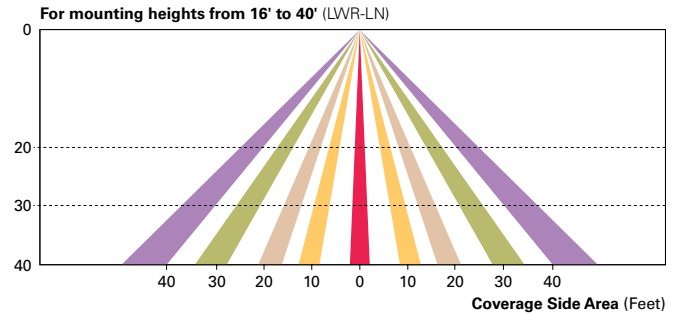
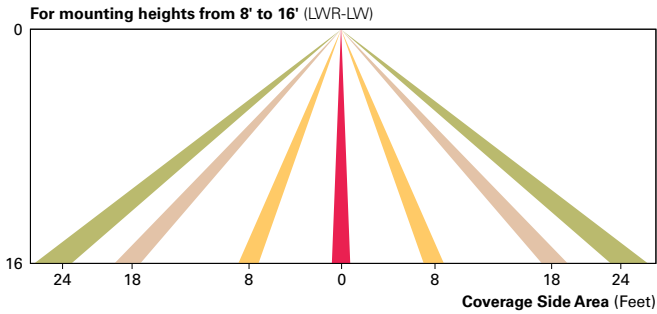
For mounting heights up to 15' (WPS2 and WLS2)



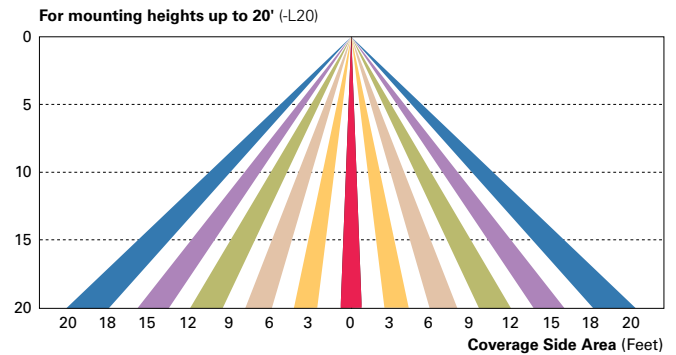
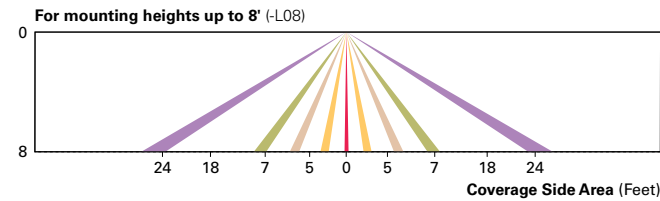
For mounting heights up to 40' (WPS4 and WLS4)



**Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)** The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.



**Synapse (DIM10)** SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 control module and FSP-20 motion sensor; requires additional Synapse system components for operation. Contact Synapse at [www.synapsewireless.com](http://www.synapsewireless.com) for product support, warranty, and terms and conditions.



## DESCRIPTION

The LuxeScape Collection presents a contemporary, architectural dayform providing superior uniformity and efficient illumination. Designed to enhance urban spaces with beautiful visual appearances and integral control solutions, LuxeScape integrates into any environment while providing high visibility by utilizing industry-leading WaveStream™ LED optics.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## SPECIFICATION FEATURES

### Construction

Housing assembly is IP66 rated and cast from low copper content corrosion resistant aluminum, maintaining strength and precision to sustain long term dayform appearance. 3G rated construction avoids damages from installation generated vibration. Corrosion-resistant color matching hardware are minimized to enhance appearance.

### Optics

Designed for complex site or pedestrian applications, WaveStream™ LED optical waveguide technology produces both symmetric NEMA Type V and asymmetric NEMA II, III, IV distributions. The waveguide is manufactured from precision injection molded acrylic delivering visual comfort and optically controlled illumination for improved glare control. Luminaire efficacy measures in excess of 100 lm/W for 4000K (+/- 275K) CCT at 70 CRI (min). Optional 3000K CCT at 70 CRI or 3000K CCT at 80 CRI also available.

### Electrical

LED drivers are uniquely positioned and mounted for

maximum thermal performance and extended life. Standard 0-10V dimming drivers and surge protection module are designed to withstand 10kV of transient line surge. Drivers operate at 120-277V 50/60Hz with 347V 60Hz or 480V 60Hz operation optional. Suitable for ambient temperature applications as low as -40°C (40°F) to 40°C (104°F). High ambient options available allow for 50°C operation.

### Controls

Control options are designed to be simple, cost-effective, energy code, and regulation compliant solutions featuring WaveLinX. See control options page for more details.

### Mounting

Invue's aluminum round decorative pole (ARP) offering provides a seamless transition and compliments the contemporary design architecture with its unique sleek taper and base design. The tenon mount pole comes standard with an access door feature integrated into the base.

### Arm Mount

The integrated aluminum contemporary upsweep arm is bolted directly to the pole using

an "N" drill pattern. Provides a seamless transition to a 4" or 5" round pole.

### Spider & Cantilever Mount

Fitter assembly mounts over 3" O.D. tenon and can be adapted to a 2-3/8" tenon. It is secured via concealed, corrosion resistant set screw and jam screw pairs in six inconspicuous locations. Fitter design provides seamless transition to 4" O.D. round pole top. Optional mounting accessories include a twin arm mount and wall mount arm.

### Finish

Cooper Lighting Solutions utilizes premium ultra-weatherable TGIC based polyester powder coatings specifically formulated to withstand extended outdoor exposure while providing decorative appeal. Finish is compliant to 3,000 hour salt spray standard (per ASTM B117). RAL and custom color matches available. Options to meet Buy American Act requirements.

### Warranty

Five year limited warranty, consult website for details.

[www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)



## LXS LUXESCAPE COLLECTION

### DECORATIVE LUMINAIRE

### CERTIFICATION DATA

UL/cUL Listed  
 FCC Class A  
 IEC 60529 IP66 Housing  
 ANSI C136.31 3G Vibration  
 ASTM A356.0 Low Copper Alloy  
 ASTM B117 Salt Spray Tested  
 RoHS  
 ISO 9001  
 DesignLights Consortium® Qualified\*  
 Dark Sky Approved (3000K CCT and warmer only)

### ENERGY DATA

**Electronic LED Driver**  
 >0.9 Power Factor  
 <20% Total Harmonic Distortion  
 120-277V 50/60Hz, 347V 60Hz, 480V 60Hz  
 40°C Ambient Temperature Rating  
 As low as -40°C (-40°F) minimum temperature  
 \*See MINIMUM TEMPERATURE table

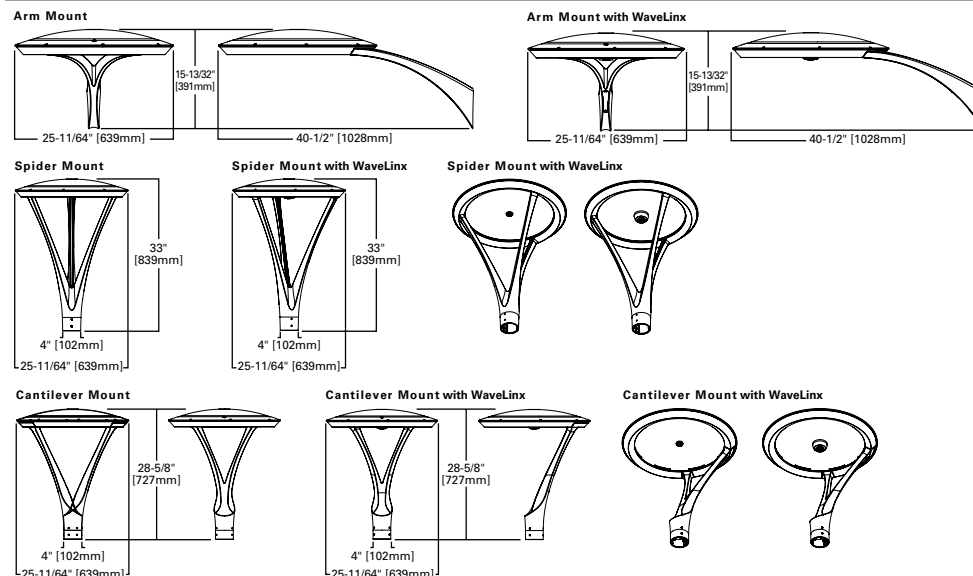
### EPA

**Effective Projected Area:** (Sq. Ft.)  
**Arm Mount:** 1.0  
**Cantilever Mount:** 1.3  
**Spider Mount:** 1.6

### SHIPPING DATA

**Approximate Net Weight:**  
**Arm Mount Weight:** 41 lbs. [18.6 kgs.]  
**Cantilever Mount Weight:** 46 lbs. [20.8 kgs.]  
**Spider Mount Weight:** 53 lbs. [24 kgs.]

## DIMENSIONS





**ORDERING INFORMATION**

Sample Number: LXS-VA3-LED-D1-T2-GM-S

Product Family <sup>1,2</sup>	Optic Type	Lumen Package <sup>3</sup>	CRI/CCT	Voltage	Distribution	Mounting	Finish			
LXS=LuxeScape Collection BAA-LXS=LuxeScape Collection Buy American Act Compliant <sup>34</sup>	VA=Visual Comfort / WaveStream	1=Nominal 2,300 Lumens 2=Nominal 4,500 Lumens 3=Nominal 8,500 Lumens 4=Nominal 9,500 Lumens <sup>4</sup>	730=70 CRI / 3000K 735=70 CRI / 3500K 740=70 CRI / 4000K 830=80 CRI / 3000K 835=80 CRI / 3500K AMB=Amber 590nm <sup>21,33</sup>	U=120- 277 1=120 2=208 3=240 4=277 8=480 <sup>5,6</sup> 9=347 <sup>5</sup>	ASC=Asymmetric Curbline <sup>7</sup> ASW=Asymmetric Wide <sup>8</sup> AST=Asymmetric Transverse <sup>9</sup> SYM=Symmetric Round <sup>10</sup>	A=Arm Mount S=Spider Mount C=Cantilever Mount	AP=Grey BK=Black BZ=Bronze DP=Dark Platinum GM=Graphite Metallic WH=White RALXX=Custom Color <sup>11</sup>			
<b>Options (Add as Suffix)</b>					<b>Accessories (Order Separately) <sup>19,35</sup></b>					
F=Single Fuse <sup>12</sup> FF=Double Fuse <sup>13</sup> X=Driver Surge only 10MSP=10K MOV Surge Protective Device 20MSP=20kV MOV Surge Protective Device 20K=20kV UL 1449 Fused Surge Protective Device DIM=External 0-10V Dimming Leads <sup>14</sup> HA=50°C High Ambient Temperature <sup>15</sup> VS=Vandal Shield <sup>16</sup> CC=Coastal Construction <sup>17</sup> DALI=DALI Driver <sup>18</sup> BPC=Button Type Photocontrol <sup>19</sup> PR=NEMA 3-PIN Twistlock Photocontrol Receptacle <sup>20</sup> PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle <sup>20</sup> PC=Twistlock NEMA Photocontrol LLPC=Long Life Twistlock NEMA Photocontrol <sup>22</sup> SC=Shorting Cap MS-L08=Motion Sensor for ON/OFF Operation, Up to 8' Mounting Height <sup>21,22,23</sup>					MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height <sup>21,22,23</sup> MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height <sup>21,22,23</sup> MS/DIM-L08=Motion Sensor for Dimming Operation, Up to 8' Mounting Height <sup>21,22,23</sup> MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height <sup>21,22,24</sup> MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height <sup>21,22,25</sup> DIM10=Synapse Integrated Control Module WLS2WH=WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting WLS4WH=WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting WPS2WH=WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting <sup>26,27,36</sup> WPS4WH=WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting <sup>26,27,36</sup>			FSIR-100=Wireless Configuration Tool for Occupancy Sensor <sup>28</sup> ARPA2=2-3/8" O.D. Tenon Sleeve Adapter <sup>30</sup> VA6028-XX=Twin Mount Arm (EPA 1.36 sq./ft.) <sup>30,31</sup> VA6029-XX=Wall Mount Arm <sup>30,31</sup> MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1037-XX=2 @ 180° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1197-XX=3 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1188-XX=4 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1189-XX=2 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1190-XX=3 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1191-XX=2 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon <sup>31</sup> MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> MA1039-XX=2 @ 180° Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> MA1192-XX=3 @ 120° Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> MA1193-XX=4 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> MA1194-XX=2 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> MA1195-XX=3 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon <sup>31</sup> WOLC-7P-10A=WaveLinX Outdoor Control Module (7-PIN) <sup>29</sup>		

**NOTES:**  
 1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. Lumens are nominal. See lumen table for more information. 4. 9,500 Lumen package available only on SYM distribution. 5. Requires the use of a step-down transformer. 6. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 7. IESNA Type III typical. 8. IESNA Type IV typical. 9. IESNA Type IV typical. 10. IESNA Type V typical. 11. Specify RAL number for Custom Color. Custom color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information. 12. Must specify voltage (120V, 277V, or 347V) to fuse the single hot leg. 13. Must specify voltage (208V, 240V, or 480V) to fuse the both hot legs. 14. Low voltage control leads brought out 18" outside fixture. Not available with control options. 15. Not available in VA3 with Type ASC, ASW and AST distributions. 16. Reduce total lumens by a 0.95 multiplier to accommodate losses. 17. Post-coating over the primary finish providing 7,000+ salt spray hours. Extended lead-times can be 4-10 additional weeks. 18. Only available with VA3 and VA4 lumen packages. 19. Not available with MS-LXX, MS/DIM-LXX, LWR-LW, LWR-LN or 347V or 480V options. 20. Not available with MS-LXX, MS/DIM-LXX, LWR-LW, LWR-LN or 347V or 480V options. 21. Not available with HA option. 22. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 23. Approximately 22" detection diameter at 8' mounting height. 24. Approximately 40" detection diameter at 20' mounting height. 25. Approximately 100" detection diameter at 40' mounting height. 26. Cannot be used in conjunction with photocontrol or other controls systems (BPC, PR, PR7, MS). 27. WAC Gateway required to enable field-configurability. Order WAC-POE and WPOE-120 (10V to POE injector) power supply if needed. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 28. This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. 29. Requires 7-PIN NEMA twistlock photocontrol receptacle. WOLC-7P-10A cannot be used in conjunction with additional sensors or controls. 30. Not vibration rated at this time. Consult your lighting representative at Cooper Lighting Solutions for more information. 31. Replace XX with color designation. 32. Requires photocontrol receptacle PR or PR7. 33. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose Lumen Package 1. See IES files for photometric performance. 34. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 35. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 36. Not available with 5LTD option. 37. Not available with 2300 or 9500 lumen package.

**ARP ORDERING INFORMATION (ALUMINUM DECORATIVE POLE)**

SAMPLE NUMBER: ARP5L310ABZ2

Product Family	Shaft Size (Inches) <sup>1</sup>	Wall Thickness (Inches)	Pole Top Diameter (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Options (Add as Suffix)
ARP=Aluminum Round Tapered Decorative BAA-ARP=Aluminum Round Tapered Decorative Buy American Act Compliant <sup>36</sup>	5=5"	L=0.156" M=0.188"	3=3" O.D. <sup>2</sup> 6=4" O.D. <sup>3</sup>	10=10' 12=12' 14=14' 16=16' 18=18' <sup>4</sup> 22=22' <sup>4</sup>	A=Aluminum (Round 4-Bolt Pole)	AP=Grey BA=Anodized Bronze BK=Black BZ=Bronze CA=Anodized Clear DA=Anodized Black DP=Dark Platinum GM=Graphite Metallic GN=Hartford Green WH=White	2=2-3/8" O.D. Tenon (4" Long) 5=3" O.D. Tenon (4" Long)	X=None	C=Convenience Outlet <sup>5</sup> E=GFCI Convenience Outlet <sup>5</sup> G=Ground Lug V=Vibration Dampener <sup>4</sup>

**NOTES** 1 All shaft sizes nominal. 2 Provides 3" O.D. pole top suited for Arbor Post Top. 3 Provides 4" O.D. pole top suited for LuxeScape post tops. 4 Vibration damper recommended over 18 feet add suffix "V" to catalog number. 5 Specify outlet location. Receptacle not included, provision only.

**POWER AND LUMENS**

Lumen Package			VA1	VA2	VA3	VA4	
<b>Drive Current</b>							
<b>Power Wattage (Watts)*</b>			24W	48W	96W	99W	
Input Current (mA) @ 120V			200	400	800	830	
Input Current (mA) @ 277V			90	180	350	360	
<b>Power Wattage (Watts)*</b>			28W	55W	114W	108W	
Input Current (mA) @ 347V			79	161	325	328	
Input Current (mA) @ 480V			58	117	235	237	
CRI/CCT (Nominal)	Mounting	Distribution					
730: 70CRI/3000K	A: Arm	ASC: Asymmetric Curbline	Lumens	1,949	3,740	6,730	--
			Lumens per Watt	81.2	77.9	68.0	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,323	4,458	8,022	--
			Lumens per Watt	96.8	92.9	81.0	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,400	4,607	8,291	--
			Lumens per Watt	100.0	96.0	83.7	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
	SYM: Symmetric Round	Lumens	2,485	4,958	9,111	10,571	
		Lumens per Watt	118.3	120.9	105.9	110.1	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3	
		IESNA Type	V	V	V	V	
	S: Spider Mount	ASC: Asymmetric Curbline	Lumens	1,780	3,417	6,148	--
			Lumens per Watt	74.2	71.2	62.1	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,097	4,024	7,242	--
			Lumens per Watt	87.4	83.8	73.2	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	--
			IESNA Type	IV	IV	IV	--
AST: Asymmetric Transverse		Lumens	2,198	4,218	7,590	--	
		Lumens per Watt	91.6	87.9	76.7	--	
		BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--	
		IESNA Type	IV	IV	IV	--	
SYM: Symmetric Round	Lumens	2,305	4,600	8,452	9,807		
	Lumens per Watt	109.8	112.2	98.3	102.2		
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3		
	IESNA Type	V	V	V	V		

POWER AND LUMENS

Lumen Package			VA1	VA2	VA3	VA4	
CRI/CCT (Nominal)	Mounting	Distribution					
730: 70CRI/3000K	C: Cantilever Mount	ASC: Asymmetric Curbline	Lumens	1,857	3,564	6,414	--
			Lumens per Watt	77.4	74.3	64.8	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,213	4,248	7,645	--
			Lumens per Watt	92.2	88.5	77.2	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,324	4,460	8,025	--
			Lumens per Watt	96.8	92.9	81.1	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
	SYM: Symmetric Round	Lumens	2,342	4,674	8,588	9,965	
		Lumens per Watt	111.5	114.0	99.9	103.8	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G3	
		IESNA Type	V	V	V	V	
740: 70CRI/4000K	A: Arm	ASC: Asymmetric Curbline	Lumens	2,105	4,040	7,270	--
			Lumens per Watt	87.7	84.2	73.4	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,509	4,816	8,666	--
			Lumens per Watt	104.5	100.3	87.5	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,593	4,977	8,956	--
			Lumens per Watt	108.0	103.7	90.5	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
	SYM: Symmetric Round	Lumens	2,684	5,356	9,842	11,420	
		Lumens per Watt	127.8	130.6	114.4	119.0	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3	
		IESNA Type	V	V	V	V	

POWER AND LUMENS

Lumen Package			VA1	VA2	VA3	VA4	
CRI/CCT (Nominal)	Mounting	Distribution					
740: 70CRI/4000K	S: Spider Mount	ASC: Asymmetric Curbline	Lumens	1,923	3,691	6,642	--
			Lumens per Watt	80.1	76.9	67.1	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,265	4,347	7,823	--
			Lumens per Watt	94.4	90.6	79.0	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,374	4,557	8,200	--
			Lumens per Watt	98.9	94.9	82.8	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
	SYM: Symmetric Round	Lumens	2,490	4,969	9,131	10,595	
		Lumens per Watt	118.6	121.2	106.2	110.4	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3	
		IESNA Type	V	V	V	V	
	C: Cantilever Mount	ASC: Asymmetric Curbline	Lumens	2,006	3,850	6,929	--
			Lumens per Watt	83.6	80.2	70.0	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
ASW: Asymmetric Wide		Lumens	2,391	4,589	8,258	--	
		Lumens per Watt	99.6	95.6	83.4	--	
		BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--	
		IESNA Type	IV	IV	IV	--	
AST: Asymmetric Transverse		Lumens	2,510	4,818	8,669	--	
		Lumens per Watt	104.6	100.4	87.6	--	
		BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--	
		IESNA Type	IV	IV	IV	--	
SYM: Symmetric Round		Lumens	2,530	5,049	9,277	10,765	
		Lumens per Watt	120.5	123.1	107.9	112.1	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3	
		IESNA Type	V	V	V	V	

POWER AND LUMENS

Lumen Package			VA1	VA2	VA3	VA4	
CRI/CCT (Nominal)	Mounting	Distribution					
830: 80CRI/3000K	A: Arm	ASC: Asymmetric Curbline	Lumens	1,758	3,374	6,072	--
			Lumens per Watt	73.2	70.3	61.3	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	2,096	4,022	7,238	--
			Lumens per Watt	87.3	83.8	73.1	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,166	4,157	7,480	--
			Lumens per Watt	90.2	86.6	75.6	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
		SYM: Symmetric Round	Lumens	2,242	4,473	8,220	9,538
			Lumens per Watt	106.8	109.1	95.6	99.4
			BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2
			IESNA Type	V	V	V	V
	S: Spider Mount	ASC: Asymmetric Curbline	Lumens	1,606	3,083	5,547	--
			Lumens per Watt	66.9	64.2	56.0	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	1,892	3,631	6,534	--
			Lumens per Watt	78.8	75.6	66.0	--
			BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	1,983	3,806	6,848	--
			Lumens per Watt	82.6	79.3	69.2	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
SYM: Symmetric Round	Lumens	2,080	4,150	7,626	8,849		
	Lumens per Watt	99.0	101.2	88.7	92.2		
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G3		
	IESNA Type	V	V	V	V		

**POWER AND LUMENS**

Lumen Package			VA1	VA2	VA3	VA4	
CRI/CCT (Nominal)	Mounting	Distribution					
830: 80CRI/3000K	C: Cantilever Mount	ASC: Asymmetric Curbline	Lumens	1,675	3,216	5,787	--
			Lumens per Watt	69.8	67.0	58.5	--
			BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	--
			IESNA Type	III	III	III	--
		ASW: Asymmetric Wide	Lumens	1,997	3,833	6,897	--
			Lumens per Watt	83.2	79.9	69.7	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	--
			IESNA Type	IV	IV	IV	--
		AST: Asymmetric Transverse	Lumens	2,096	4,024	7,241	--
			Lumens per Watt	87.3	83.8	73.1	--
			BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	--
			IESNA Type	IV	IV	IV	--
		SYM: Symmetric Round	Lumens	2,113	4,217	7,748	8,991
			Lumens per Watt	100.6	102.9	90.1	93.7
			BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G3
			IESNA Type	V	V	V	V

**LUMEN MULTIPLIER**

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

**MINIMUM AMBIENT TEMPERATURE**

Lumen Package	Temperature
VA1	-40°C
VA2	-35°C
VA3	-35°C
VA4	-40°C
All DALI powered lumen packages	-20°C

**LUMEN MAINTENANCE (TM-21)**

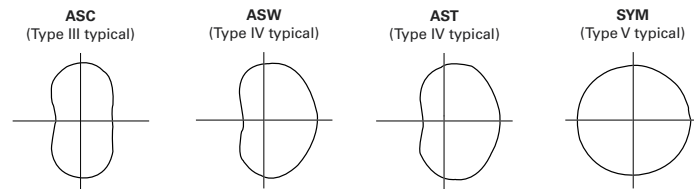
Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 (Hours)**
25°C	94.4%	90.4%	89.0%	83.0%	>199,000
40°C	94.6%	90.9%	89.4%	83.9%	>212,000
50°C	91.8%	87.0%	85.2%	78.2%	>151,000

**NOTES:**

\* Supported by IESTM-21 standards

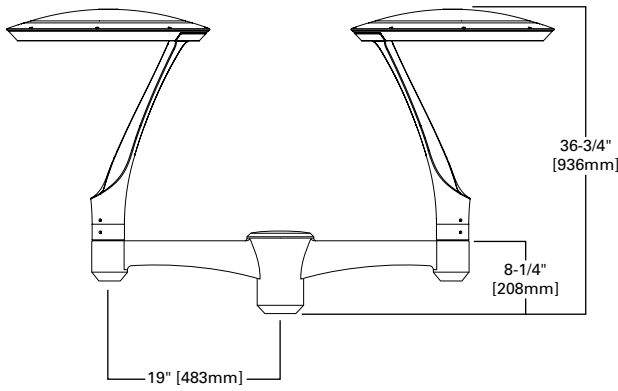
\*\* Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IESTM-21 and LM-80.

**OPTICAL DISTRIBUTIONS (Arm mount shown, distribution dependent on mounting)**

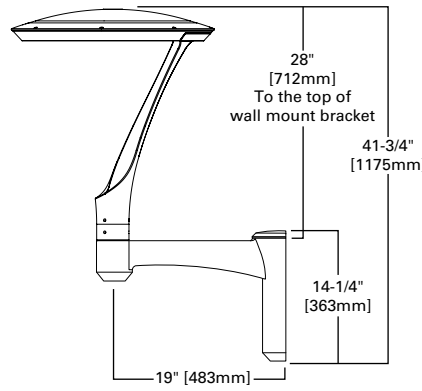


**MOUNTING CONFIGURATIONS (EPAS INCLUDES FIXTURE)**

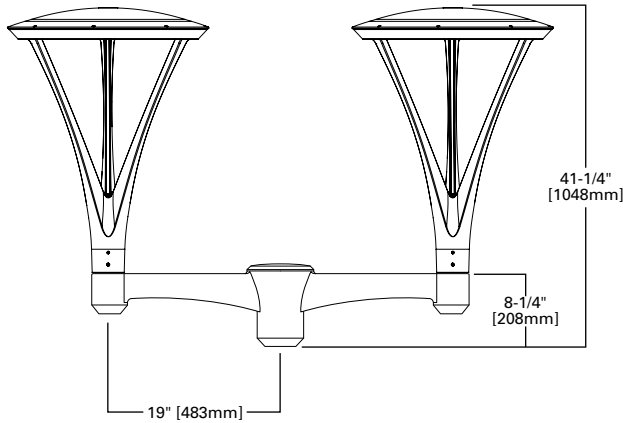
**Twin mount arm (shown with Cantilever mount)**



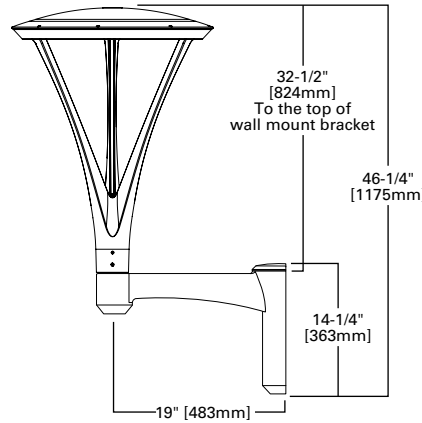
**Wall mount arm (shown with Cantilever mount)**



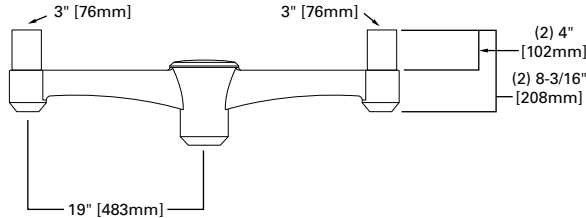
**Twin mount arm (shown with Spider mount)**



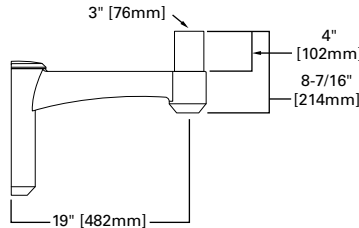
**Wall mount arm (shown with Spider mount)**



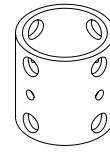
**Twin mount arm (EPA 1.36)**



**Wall Mount Arm**



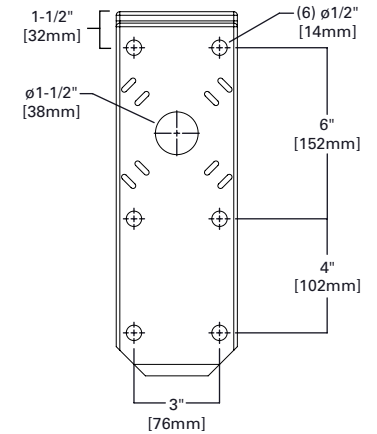
**MOUNTING REQUIREMENTS CHART**



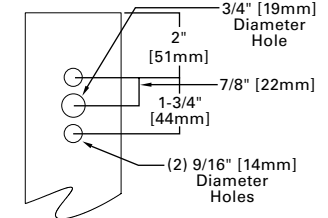
<b>Pole Top O.D.</b> (Inches)	<b>4"</b>	
<b>Tenon O.D.</b> (Inches)	<b>2-3/8" Tenon</b>	<b>3" Tenon</b>
<b>Post Top</b>	ARPA2*	Standard
<b>Twin Mount Arm</b>	ARPA2*	Standard

\* Required for stability. Order separately.

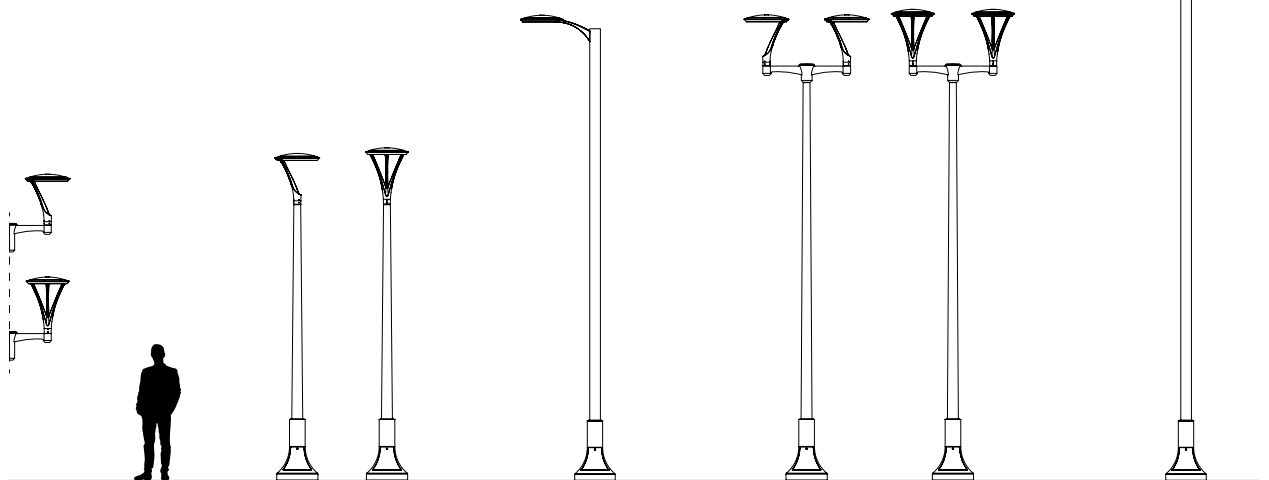
**WALL MOUNT ARM DRILL PATTERN**



**TYPE "N"**



**POLE CONFIGURATIONS (ARP DECORATIVE POLE SHOWN)**



**Wall mount arm**  
8-10 ft. Mounting heights  
(Spider / Cantilever mount only)

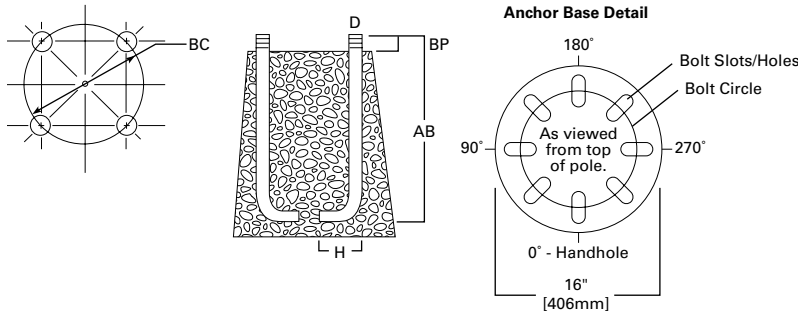
**Single post top**  
10-18 ft. Mounting heights  
(Spider / Cantilever mount only)

**Single mount arm**  
18-22 ft. Mounting heights

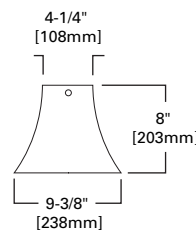
**Twin mount arm**  
18-22 ft. Mounting heights  
(Spider / Cantilever mount only)

**Twin mount arm**  
18-25 ft. Mounting heights

**ANCHORAGE DATA**



**ACCESS DOOR**



Pole	Anchor Bolt and Template Package	Shaft Diameter (inches)	Bolt Circle (inches)	Number of Bolts	Bolt Size (inches)	Template Only
Aluminum Round Decorative Pole (ARP)	317AVE30	4 x 5	9	4	3/4 x 17	407040D

**Effective Projected Area (At Pole Top)**

Mounting Height (Feet)	Catalog Number	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection (Inches)	Shaft Taper (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) (1.3 gust factor)			Max. Load (Pounds)
								80 mph	90 mph	100 mph	
MH			BC	BP	B	AB <sup>1</sup>					
10	ARP5L310A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	57	20.0	17.5	14.1	120
10	ARP5L610A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	57	17.0	13.3	10.7	120
12	ARP5L312A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	62	18.2	14.1	11.2	120
12	ARP5L612A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	62	14.1	10.9	8.7	120
14	ARP5L314A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	67	14.8	11.4	9.0	120
14	ARP5L614A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	67	11.7	9.0	7.1	120
16	ARP5L316A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	72	12.0	9.1	7.0	120
16	ARP5L616A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	72	9.4	7.1	5.6	120
18	ARP5L318A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	77	9.5	7.1	5.4	120
18	ARP5L618A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	77	7.6	5.6	4.3	120
18	ARP5M618A	0.188	9.0	3.5	5 X 4	3/4 x 17 x 3	83	9.5	7.1	5.6	120

**Effective Projected Area (18" Above Pole Top)**

Mounting Height (Feet)	Catalog Number	Wall Thickness (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection (Inches)	Shaft Taper (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) (1.3 gust factor)			Max. Load (Pounds)
								80 mph	90 mph	100 mph	
MH			BC	BP	B	AB <sup>1</sup>					
10	ARP5L310A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	57	19.6	15.3	12.3	120
10	ARP5L610A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	57	17.0	13.3	10.7	120
12	ARP5L312A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	62	16.1	12.5	9.9	120
12	ARP5L612A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	62	14.1	10.9	8.7	120
14	ARP5L314A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	67	13.2	10.1	8.0	120
14	ARP5L614A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	67	11.7	9.0	7.1	120
16	ARP5L316A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	72	10.6	8.0	6.2	120
16	ARP5L616A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	72	9.4	7.1	5.6	120
18	ARP5L318A	0.156	9.0	3.5	5 x 3	3/4 x 17 x 3	77	8.5	6.4	4.8	120
18	ARP5L618A	0.156	9.0	3.5	5 X 4	3/4 x 17 x 3	77	7.6	5.6	4.3	120
18	ARP5M618A	0.188	9.0	3.5	5 X 4	3/4 x 17 x 3	83	9.5	7.1	5.6	120



CONTROL OPTIONS

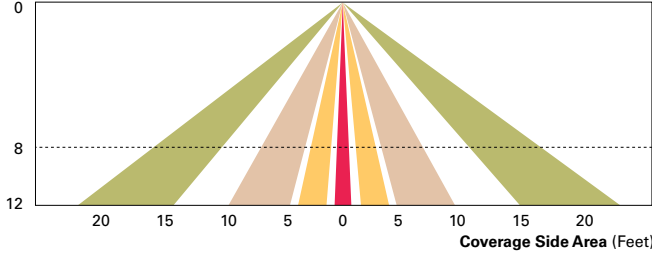
0-10V (D) The dimming option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (PER and PER7) Photocontrol receptacles provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

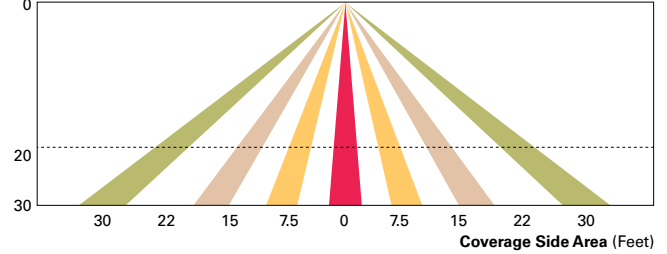
Dimming Occupancy Sensor (MS) These sensors are factory installed in the luminaire housing. When a sensor for dimming operation (/DIM) option is selected, the luminaire will dim down to approximately 50 percent power after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation is selected, the luminaire will turn off after five minutes of no activity.

These occupancy sensors include an integral photocell that can be activated or inactivated with the programming remote / configuration tool for "dusk-to-dawn" control or "daylight harvesting". Note: For MS sensors, the factory preset is OFF (Disabled). The programming remote / tool is a wireless tool that can be utilized to change the dimming level, time delay, sensitivity and other parameters. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'.

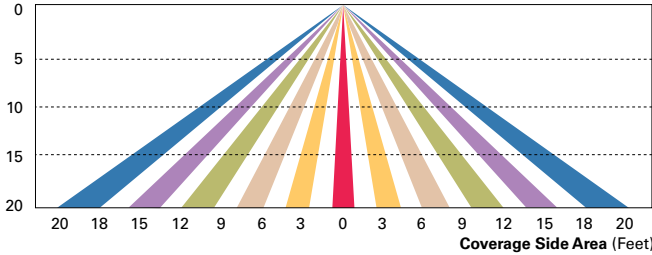
For mounting heights from 8' to 12' (-L12)



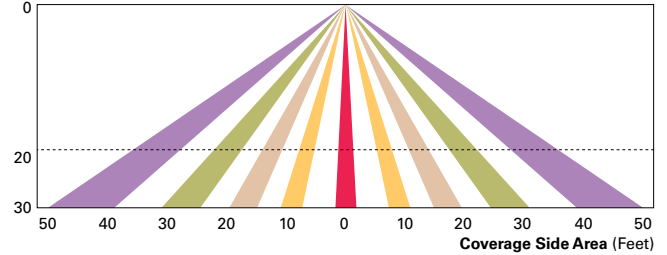
For mounting heights from 12' to 30' (-L30)



For mounting heights from 9' to 20' (-L20)



For mounting heights from 21' to 40' (-L40W)

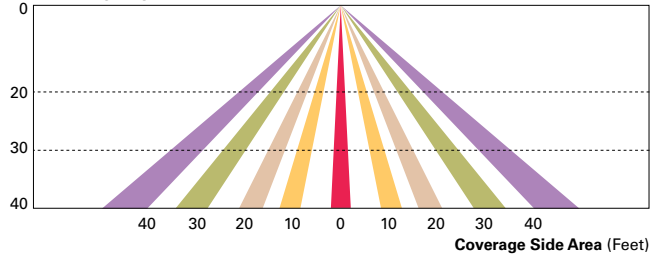


WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. Use the WaveLinx Mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

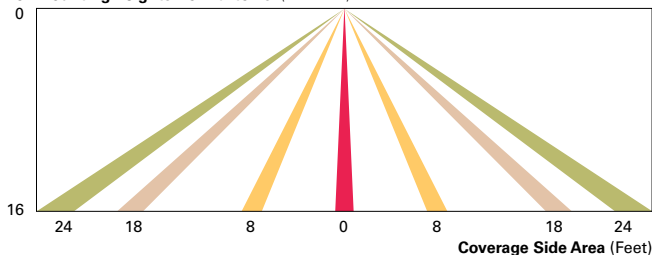
WaveLinx Wireless Sensor (WPS2 and WPS4) These outdoor sensors offer passive infrared (PIR) occupancy and a photocell for closed loop daylight sensing. These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or daylight harvesting that is factory-enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.

For mounting heights from 16' to 40' (WPS)

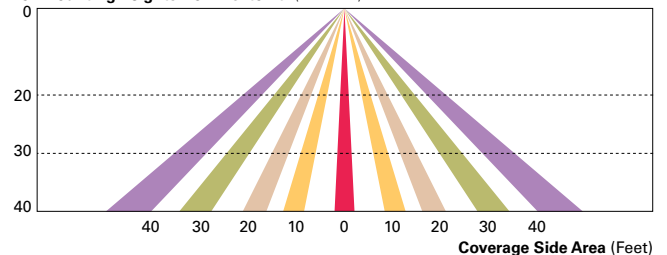


Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN) Enlighted is a connected lighting solution that combines LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of other resources beyond lighting.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

## SMD6 Series

6" Round and Square Surface Mount Downlight  
SMD6R & SMD6S

**Typical Applications**  
Residential

### Interactive Menu

- Order Information page 2
- Product Specifications page 4
- Photometric Data page 5
- Product Warranty

### Product Certification



Refer to ENERGY STAR® Certified Products List.  
Can be used to comply with California Title 24 High Efficacy requirements.  
Certified to California Appliance Efficiency Database under JAB.

### Product Features

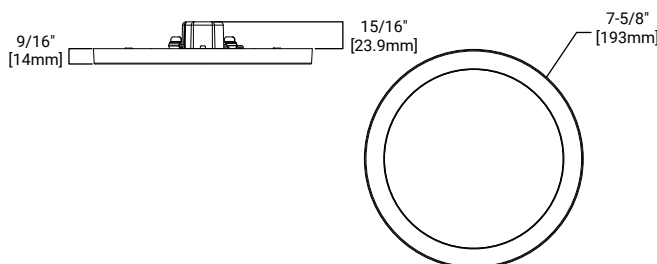


### Top Product Features

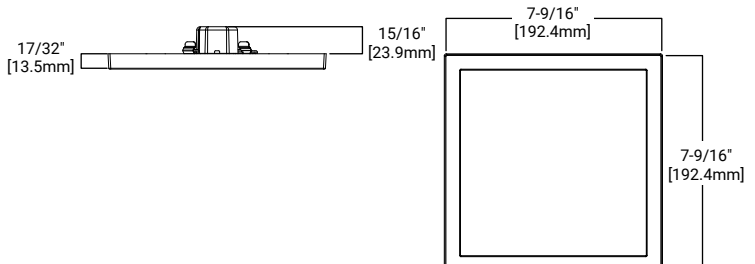
- Ultra-low profile surface luminaire with wide distribution
- Ceiling or wall mounting in compatible junction boxes
- 600 & 1200 lumen; 2700K, 3000K, 3500K, 4000K or 5000K field selectable CCT; 90 CRI
- 120V only and Universal Voltage 120V – 277V options
- Dimmable with 120V dimmers

### Dimensional and Mounting Details

SMD6RXXXWH



SMD6SXXXWH



additional product diagrams

## Ordering Information

SAMPLE NUMBER: **SMD6R69SWH** = 6" Round Surface Mount Downlight, 600 lumen, 90CRI, Selectable CCT, White, 120V

**Junction Box Installation:** Order junction box separately, as supplied by others, to complete installation.

**Recessed Installation:** Order HALO recessed housing and SMD6ACCKIT separately to complete installation.

Models	Lumens	CRI/CCT	Finish	Voltage
Models <b>SMD6R</b> = 6" Round Surface Mount Downlight <b>SMD6S</b> = 6" Square Surface Mount Downlight	Lumens <b>6</b> = 600 lumen series (120V only) <b>12</b> = 1200 lumen series	CRI/CCT <b>9S</b> = 90CRI, 2700K - 5000K Field Selectable CCT	Finish <b>WH</b> = Matte White	Voltage <b>Blank</b> = 120V standard <b>E</b> = UNV Universal 120-277V <sup>(1)</sup>
Notes	Notes	Notes	Notes	Notes <sup>(1)</sup> UNV voltage configuration is offered only in the 1200 lumen series

## Accessories

Accessories
<p><b>Designer Trims</b>  <b>SMD6RTRMSN</b> = 6" Round SMD Satin Nickel  <b>SMD6RTRMTBZ</b> = 6" Round SMD Tuscan Bronze  <b>SMD6RTRMWH</b> = 6" Round SMD White (paintable)  <b>SMD6STRMSN</b> = 6" Square SMD Satin Nickel  <b>SMD6STRMTBZ</b> = 6" Square SMD Tuscan Bronze  <b>SMD6STRMWH</b> = 6" Square SMD White (paintable)  <b>T24HWKIT</b> = Title 24 Cable harness kit used to convert incandescent and low voltage housings to LED  <b>SMD6ACCKIT</b> = SMD6 accessory kit includes friction clips, torsion springs and a Edison screwbase adapter for recessed housing installation.</p>
Notes

## Accessories

### Designer Trims



**SMD6RTRMWH**  
round, white (paintable)



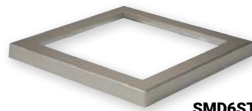
**SMD6RTRMSN**  
round, satin nickel



**SMD6RTRMTBZ**  
round, tuscan bronze



**SMD6STRMWH**  
square, white (paintable)



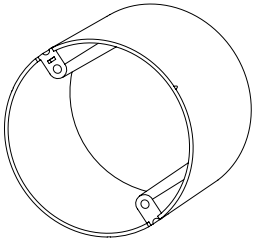
**SMD6STRMSN**  
square, satin nickel



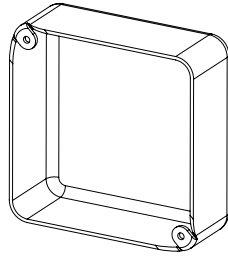
**SMD6STRMTBZ**  
square, tuscan bronze

## Junction Box Compatibility

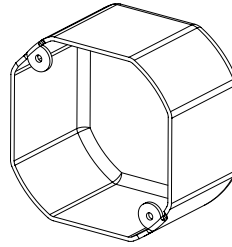
**NOTE:** The SMD6 1200LM Series has a taller driver. The 4inch x 2-1/8 deep Square junction box is recommended for installation. The depth of the junction box must be a MINIMUM 2-1/8inch deep. The 4inch x 2-1/8 deep Octagon junction box can be used with limited number of wires or smaller gauge wires and wire caps.



**Round**  
Recommend 2" depth  
(1-1/2" minimum)



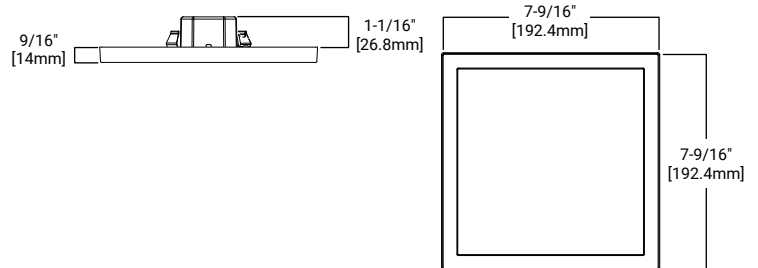
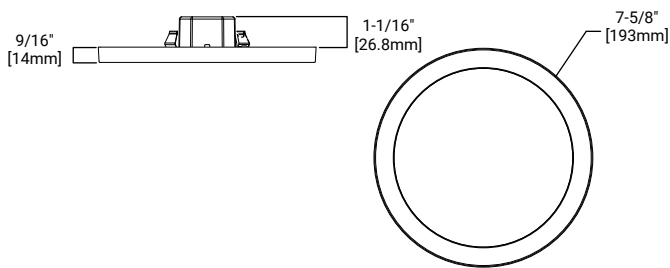
**Square**  
1-1/2" minimum depth



**Octagonal**  
Recommend 4" depth  
(2-1/8" minimum)

This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the mounting bracket in the box.

## Dimensional and Mounting Details Continued



## Product Specifications

### Housing

- Non-electrically conductive polycarbonate frame.
- High impact diffuse polystyrene lens provides shielding to the light guide with no pixilation
- Stamped aluminum housing provides thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications

### Gaskets

- Closed cell gasket achieves restrictive airflow and wet location requirements without additional caulking

### Optics

- Precision acrylic light guide organizes source flux into wide distribution with 1.2 – 1.4 spacing criteria useful for general area illumination

### LED

- Mid power LED array provide a uniform source with high efficiency and long life
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity

### Driver

#### SMD 120V

- Integral 120V 50/60Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers
- Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect and E26 adapter (provided) provides mains connections

#### SMD 120-277V

- Integrated 120-277V 60Hz constant current driver provides noise free operation
- SMD Universal Voltage (120-277V) configurations are recommended for use with compatible 0-10V DC
- low voltage dimmers only

### Mounting/Retention

- Adjustable spider plate allows for quick installation into both junction boxes and recessed housings
- Torsion springs and friction blades included

### Electrical Junction Box Mounting

- The SMD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 3-1/2" and 4" square, octagon, and round electrical junction boxes  
**Note:** SMD120-277V UNV is only compatible with junction boxes that provide minimum depth of 2-1/8"
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building coded

### Recessed Housing Mounting

**Note:** Use the SMDACCKIT which includes torsion springs and Edison base adapter. (SOLD SEPERATELY)

- May be installed in IC recessed housings in direct contact with insulation

**Note:** Not for use in recessed housing in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013

### Designer Skins (Sold Separately)

- SMD skins are accessory rings in both round and square. These skins attach to the SMD for a permanent finish. Refer to the SMD accessories specification sheet for details
  - Matte White (Paintable)
  - Satin Nickel
  - Tuscan Bronze

### Compliance

- cULus Certified for use with Halo housings and for use with other's housings, , when used with SMDACCKIT (Sold Separately) see instruction sheet for conditions of acceptability
- Wet and Damp Location listed, airtight per ASTM-E283
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- EMI/RFI emissions per FCC 47CFR Part 15B
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Can be used for State of California Title 24 high efficacy luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings
- Can be used for International Energy Conservation Code (IECC) and high efficiency luminaire compliance
- ENERGY STAR® listed, reference database for current listings

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

## Energy Data

### SMD6R6 / SMD6S6

	Round	Square
Lumens (5000K models)	777	800
Input Power	9 W	9 W
Input Current	0.085 A	0.085 A
Efficiency	86 lm/W	85 lm/W
THDi	8	8
Input Voltage	120V	
Frequency	60 Hz	
CRI	90 CRI	
Power Factor	0.98	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

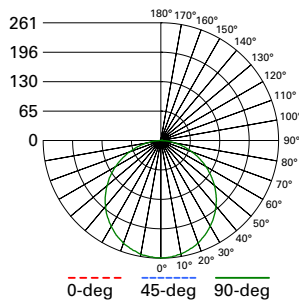
### SMD6R12 / SMD6S12

	Round	Square
Lumens (5000K models)	1271	1345
Input Power	15	15
Input Current	0.129 A	0.129 A
Efficiency	85 lm/W	88 lm/W
THDi	12.6	12.6
Input Voltage	120V	
Frequency	60 Hz	
CRI	90 CRI	
Power Factor	0.98	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

### SMD6R12-E / SMD6S12-E

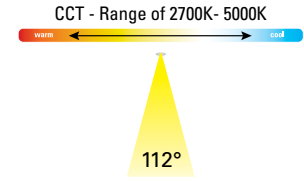
	Round	Square
Lumens (5000K models)	1357	1364
Input Power	14.5	14.5
Input Current	0.125 A (120V) 0.058 A (277V)	0.125 A (120V) 0.058 A (277V)
Efficiency	94 lm/W	94 lm/W
THDi	12.8	12.8
Input Voltage	120 - 277V	
Frequency	60 Hz	
CRI	90 CRI	
Power Factor	0.99 (120V) 0.94 (277V)	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

## Photometric Data



**SMD6R69SWH - 3000K.IES**  
 Spacing criterion: (0-180) 1.26  
 (90-270) 1.26  
 (Diagonal) 1.38  
 Beam Angle: 112°  
 Lumens: 757  
 Input Watts: 8.9 W  
 Efficacy: 85 LPW  
 Test Report:  
 SMD6R69SWH - 3000K.IES

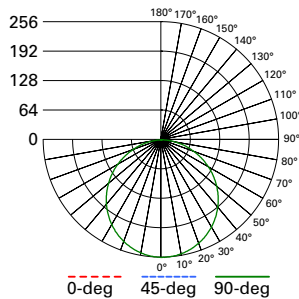
Zonal Lumen	Lumens	% Lumens
0-30	201	26.6
0-40	330	43.6
0-60	585	77.4
0-90	752	99.4



SMD6R69SWH	CCT	Watts	Lumens	LPW	CRI
600 Lumen 6" Round Selectable CCT	2700K	9.2	704	76.6	93
	3000K	9.2	716	77.8	93
	3500K	9.2	729	79.2	94
	4000K	9.2	742	80.5	94
	5000K	9.2	756	82.0	93

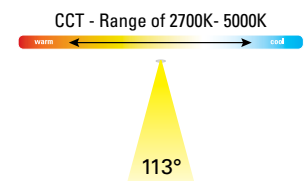
### PRODUCT SPECIFICATIONS

Lumens	716
Watts	9.2
Lumens Per Watt (Efficacy)	77.8
Color Accuracy (CRI)	93
Light Color (CCT) <small>Correlated Color Temperature (CCT)</small>	3000K



**SMD6S69SWH - 3000K.IES**  
 Spacing criterion: (0-180) 1.28  
 (90-270) 1.28  
 (Diagonal) 1.40  
 Beam Angle: 113°  
 Lumens: 752  
 Input Watts: 9.2 W  
 Efficacy: 82 LPW  
 Test Report:  
 SMD6S69SWH - 3000K.IES

Zonal Lumen	Lumens	% Lumens
0-30	199	26.4
0-40	326	43.4
0-60	580	77.2
0-90	748	99.5

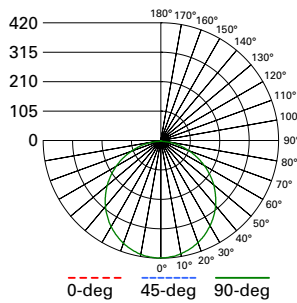


SMD6S69SWH	CCT	Watts	Lumens	LPW	CRI
600 Lumen 6" Square Selectable CCT	2700K	9.6	720	75.3	93
	3000K	9.6	735	76.7	93
	3500K	9.6	750	78.2	94
	4000K	9.6	764	79.5	94
	5000K	9.6	774	80.7	92

### PRODUCT SPECIFICATIONS

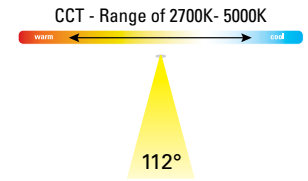
Lumens	735
Watts	9.6
Lumens Per Watt (Efficacy)	76.6
Color Accuracy (CRI)	93
Light Color (CCT) <small>Correlated Color Temperature (CCT)</small>	3000K

## Photometric Data



**SMD6R129SWH - 3000K.IES**  
 Spacing criterion: (0-180) 1.26  
 (90-270) 1.26  
 (Diagonal) 1.38  
 Beam Angle: 112°  
 Lumens: 1221  
 Input Watts: 14.9 W  
 Efficacy: 82 LPW  
 Test Report:  
 SMD6R129SWH - 3000K.IES

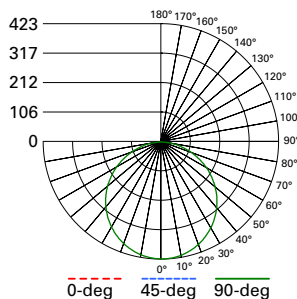
Zonal Lumen	Lumens	% Lumens
0-30	325	26.6
0-40	533	43.6
0-60	945	77.4
0-90	1215	99.5



SMD6R129SWH	CCT	Watts	Lumens	LPW	CRI
1200 Lumen 6" Round Selectable CCT	2700K	15.2	1135	74.7	92
	3000K	15.2	1156	76.1	93
	3500K	15.2	1178	77.5	94
	4000K	15.2	1198	78.8	95
	5000K	15.2	1226	80.7	93

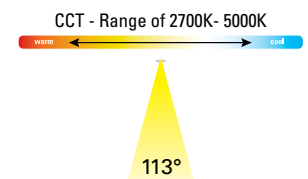
### PRODUCT SPECIFICATIONS

<b>Lumens</b>	<b>1156</b>
<b>Watts</b>	<b>15.2</b>
<b>Lumens Per Watt (Efficacy)</b>	<b>76.1</b>
<b>Color Accuracy (CRI)</b>	<b>93</b>
<b>Light Color (CCT)</b>	<b>3000K</b>
Correlated Color Temperature (CCT)	
warm white	soft white
2700K	3000K
4500K	6500K



**SMD6S129SWH - 3000K.IES**  
 Spacing criterion: (0-180) 1.26  
 (90-270) 1.26  
 (Diagonal) 1.40  
 Beam Angle: 113°  
 Lumens: 1241  
 Input Watts: 14.9 W  
 Efficacy: 83 LPW  
 Test Report:  
 SMD6S129SWH - 3000K.IES

Zonal Lumen	Lumens	% Lumens
0-30	329	26.5
0-40	539	43.5
0-60	960	77.3
0-90	1237	99.6

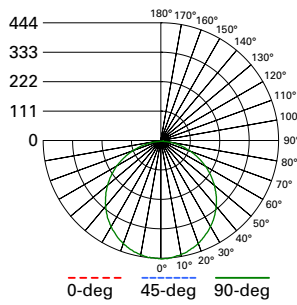


SMD6S129SWH	CCT	Watts	Lumens	LPW	CRI
1200 Lumen 6" Square Selectable CCT	2700K	15.5	1153	74.4	92
	3000K	15.5	1177	75.9	93
	3500K	15.5	1206	77.8	95
	4000K	15.5	1224	79.0	95
	5000K	15.4	1256	81.6	93

### PRODUCT SPECIFICATIONS

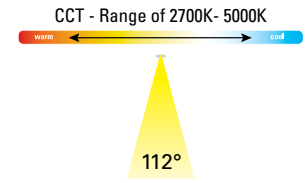
<b>Lumens</b>	<b>1177</b>
<b>Watts</b>	<b>15.5</b>
<b>Lumens Per Watt (Efficacy)</b>	<b>75.9</b>
<b>Color Accuracy (CRI)</b>	<b>93</b>
<b>Light Color (CCT)</b>	<b>3000K</b>
Correlated Color Temperature (CCT)	
warm white	soft white
2700K	3000K
4500K	6500K

## Photometric Data



**SMD6R129SWHE - 3000K.IES**  
 Spacing criterion: (0-180) 1.24  
 (90-270) 1.24  
 (Diagonal) 1.38  
 Beam Angle: 112°  
 Lumens: 1289  
 Input Watts: 14.5 W  
 Efficacy: 89 LPW  
 Test Report:  
 SMD6R129SWHE - 3000K.IES

Zonal Lumen	Lumens	% Lumens
0-30	343	26.6
0-40	562	43.6
0-60	997	77.3
0-90	1282	99.5

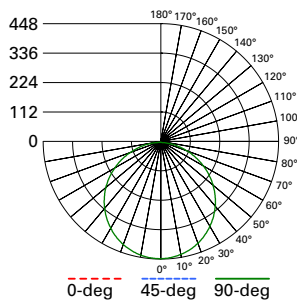


SMD6R129SWHE	CCT	Watts	Lumens	LPW	CRI
1200 Lumen 6" Round Selectable CCT 120-277V	2700K	14.7	1237	84.1	92
	3000K	14.7	1262	85.9	93
	3500K	14.7	1289	87.7	95
	4000K	14.7	1311	89.2	95
	5000K	14.7	1306	88.8	93

### PRODUCT SPECIFICATIONS

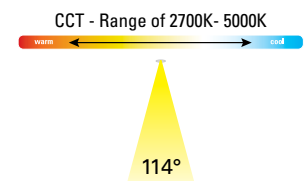
<b>Lumens</b>	<b>1262</b>
<b>Watts</b>	<b>14.7</b>
<b>Lumens Per Watt (Efficacy)</b>	<b>85.9</b>
<b>Color Accuracy (CRI)</b>	<b>93</b>
<b>Light Color (CCT)</b> <small>Correlated Color Temperature (CCT)</small>	<b>3000K</b>

warm white    soft white    bright white  
2700K    3000K    4500K    6500K



**SMD6S129SWHE - 3000K.IES**  
 Spacing criterion: (0-180) 1.26  
 (90-270) 1.26  
 (Diagonal) 1.40  
 Beam Angle: 114°  
 Lumens: 1312  
 Input Watts: 14.7 W  
 Efficacy: 89 LPW  
 Test Report:  
 SMD6S129SWHE - 3000K.IES

Zonal Lumen	Lumens	% Lumens
0-30	348	26.5
0-40	570	43.5
0-60	1014	77.3
0-90	1307	99.6



SMD6S129SWHE	CCT	Watts	Lumens	LPW	CRI
1200 Lumen 6" Square Selectable CCT 120-277V	2700K	15.1	1225	81.1	92
	3000K	15.1	1251	82.8	93
	3500K	15.1	1277	84.6	95
	4000K	15.1	1299	86.0	95
	5000K	15.1	1327	87.9	93

### PRODUCT SPECIFICATIONS

<b>Lumens</b>	<b>1251</b>
<b>Watts</b>	<b>15.1</b>
<b>Lumens Per Watt (Efficacy)</b>	<b>82.8</b>
<b>Color Accuracy (CRI)</b>	<b>93</b>
<b>Light Color (CCT)</b> <small>Correlated Color Temperature (CCT)</small>	<b>3000K</b>

warm white    soft white    bright white  
2700K    3000K    4500K    6500K



Project		Catalog #		Type	
Prepared by		Notes		Date	



# McGraw-Edison

## TT TopTier

Parking Garage Luminaire

### Product Features



### Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 2
- Mounting Details page 3
- Energy and Performance Data page 4
- Control Options page 6

### Product Certifications



### Quick Facts

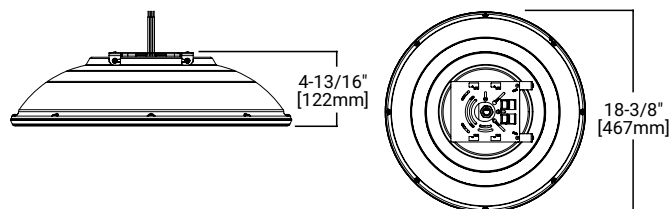
- Lumen packages range from 2,757 - 22,831
- Efficacies up to 146 lumens per watt
- Utilizes patented waveguide technology for maximum visual comfort
- Surface, pendant, trunnion, wall and direct conduit mount options

### Connected Systems

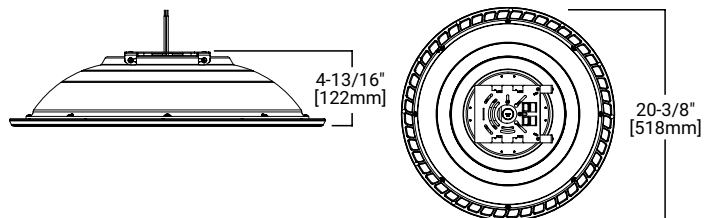
- WaveLinx Lite
- Synapse

### Dimensional Details

**SURFACE MOUNT**  
 CQ, MQ, WQ and RW: D1-D6  
 DL: D1-D4  
 Base luminaire weight: 18.2 lbs (8.3 kg)



**SURFACE MOUNT**  
 CQ, MQ, WQ and RW: D7+  
 DL: D5+  
 Base luminaire weight: 20.1 lbs (9.1 kg)



**NOTES:**  
 1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.  
 2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: TT-D3-740-U-WQ-STM-30L-AP

Product Family	Configuration	Color Temperature	Voltage	Distribution	Mounting <sup>30</sup>	Lead Length <sup>7</sup>	Finish
<b>TT</b> =TopTier <sup>1</sup> <b>BAA-TT</b> =TopTier, Buy American Act Compliant <sup>24</sup> <b>TAA-TT</b> =TopTier, Trade Agreements Act Compliant <sup>24</sup>	<b>D1</b> =4,000 Nominal Lumens <b>D2</b> =5,500 Nominal Lumens <b>D3</b> =6,500 Nominal Lumens <b>D4</b> =8,000 Nominal Lumens <b>D5</b> =10,000 Nominal Lumens <b>D6</b> =13,000 Nominal Lumens <b>D7</b> =15,000 Nominal Lumens <b>D8</b> =18,000 Nominal Lumens <b>D9</b> =20,000 Nominal Lumens <b>D10</b> =22,000 Nominal Lumens	<b>735</b> =70 CRI, 3500K CCT <b>740</b> =70 CRI, 4000K CCT <b>750</b> =70 CRI, 5000K CCT <b>830</b> =80 CRI, 3000K CCT <b>AMB</b> =Amber 590nm <sup>28</sup>	<b>U</b> =120-277V <b>H</b> =347-480V <sup>21, 25</sup> <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <b>9</b> =347V	<b>CQ</b> =Concentrated <b>MQ</b> =Medium <b>WQ</b> =Wide <b>RW</b> =Rectangular Wide <sup>29</sup> <b>DL</b> =Drive Lane / Type 4 <sup>29</sup>	<b>[Blank]</b> =Surface Mount <sup>16</sup> <b>TMB</b> =Trunnion Mount with Connection Box <b>DPM</b> =Decorative Pendant Mount <sup>4</sup> <b>WM</b> =Wall Mount <b>STM</b> =Stem Mount to 1/2" conduit <sup>16</sup>	<b>[Blank]</b> =6" <b>30L</b> =30" <b>36L</b> =36" <b>48L</b> =48" <b>72L</b> =72" <b>108L</b> =108" <b>120L</b> =120" <b>144L</b> =144"	<b>NW</b> =White <b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic

Options (Add as Suffix)      Accessories (Order Separately) <sup>27</sup>

<b>F</b> =Single Fuse (120, 277 or 347V Specify Voltage) <b>FF</b> =Double Fuse (208, 240 or 480V Specify Voltage) <b>IBP</b> =Integral Battery Pack <sup>5, 23</sup> <b>IBP-CEC</b> =Integral Battery Pack, CEC compliant <sup>5</sup> <b>ITS</b> =Integral Transfer Switch <sup>4</sup> <b>924</b> =UL924 listed luminaire <sup>19</sup> <b>CG</b> =Clear Glass <sup>9</sup> <b>SG</b> =Solite® Glass <sup>9</sup> <b>UPL</b> =Uplight <sup>6</sup> <b>TR</b> =Tamper Resistant Hardware <b>NAT</b> =Natorium finish <b>DALI</b> =DALI Driver <sup>15</sup> <b>MS/DIM-L08</b> =Dimming Occupancy Sensor (<9' Mounting) <sup>11, 17</sup> <b>MS/DIM-L20</b> =Dimming Occupancy Sensor (9' - 20' Mounting) <sup>11, 17</sup> <b>SPB1</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting <sup>11, 20</sup> <b>SPB2</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting <sup>11, 20</sup>	<b>WLS2WH</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WLS4WH</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting <sup>21, 22</sup> <b>WPS2WH</b> =WaveLinx Pro, Dimming Motion, SR Driver and Daylight, WAC Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WPS4WH</b> =WaveLinx Pro, Dimming Motion, SR Driver and Daylight, WAC Programmable, 15' - 40' Mounting <sup>21, 22</sup> <b>LWR-LW</b> =Enlighted Wireless Sensor, Wide Lens 8' - 16' Mounting Height <sup>11, 18</sup> <b>LWR-LN</b> =Enlighted Wireless Sensor, Narrow Lens 16' - 40' Mounting Height <sup>11, 18</sup> <b>DIM10-L08</b> =Synapse occupancy sensor (<8' Mounting) <sup>21</sup> <b>DIM10-L20</b> =Synapse occupancy sensor (8'-20' Mounting) <sup>21</sup>	<b>MA1252</b> =Replacement 10kV Surge Module <b>TT/WG</b> =Wire Guard <sup>24</sup> <b>TT/BG-UP-XX</b> =Bird Guard <sup>12, 13</sup> <b>TT/HSS-XX</b> =House Side Shield <sup>24</sup> <b>DPMS36-XX</b> =36" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS48-XX</b> =48" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS96-XX</b> =96" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS36-XX-36"</b> =36" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMS48-XX-48"</b> =48" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMS96-XX-96"</b> =96" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>FSIR-100</b> =Wireless Configuration Tool for Occupancy Sensor <sup>17</sup> <b>SPB4</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 20' - 40' Mounting <sup>11, 20</sup>
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**NOTES:**

- DesignLights Consortium® Qualified. Refer to [www.designlights.org](http://www.designlights.org) Qualified Products List under Family Models for details.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Not available with D7 - D10 configurations.
- Order Pendant Mount Stem accessory.
- IBP ambient operating temperature -20°C to 35°C (D1-D3), -20°C to 25°C (D4-D6). Not available with D7-D10 configurations or DALI options.
- Additional 8.0W. Provides 920 lumens. Not available with D10 configuration.
- Choose lead length for Surface Mount and Stem Mount only. TMB, DPM and WM lengths predetermined.
- Not available with CQ.
- Standard with CQ, option available with WQ only.
- U voltage only. Ambient operating temperature -20°C to 50°C (D1-D4) or -20°C to 40°C (D5-D6). UL924 listed component.
- Includes integral photocell.
- Specify color in place of XX.
- Designed for use with Stem Mount and Decorative Pendant Mount only.
- Designed for use with Decorative Pendant Mount only.
- Not available with H voltage or IBP. Not compatible with MS/DIM or LWR sensors.
- Specify Lead Length for wire harness length.
- The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay and more.
- Enlighted wireless sensors are factory installed only, and require network components in appropriate quantities.
- 924 option provides luminaire UL924 listing, used in conjunction with ITS or IBP-CEC.
- Sensor configuration mobile application required for configuration. See controls page for details.
- Cannot be used with other control options.
- For WaveLinx applications, WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Not required for WaveLinx Lite Commercial (LC) applications.
- Specify 120V or 277V.
- TT/WG and TT/HSS cannot be installed together. TT/HSS & TT/WG not available on D7-D10 configurations.
- D4-D10 only. Not compatible with battery.
- Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC.PREFERENCES](http://DOMESTIC.PREFERENCES) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
- Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
- Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose lumen package D1.
- Not available in D10 configuration.
- For installations in locations such as gymnasiums, arenas, sports complexes, multi-purpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, DPM mounting is required, utilizing the stem kit with tether (DPMST\*). Surface Mount, Trunnion Mount (TMB), Wall Mount (WM) and Stem Mount (STM) are prohibited in these applications.

Product Specifications

Construction

- Low profile, die-cast aluminum housing provides a clean, symmetric aesthetic

Optics

- Five optical distributions utilizing visual comfort waveguide technology
- 10 lumen packages, ranging from 2,757 to 22,831
- Integral uplight option utilizes a dedicated, 8W light engine, producing 920 lumens for reduced visual contrast and cave effect
- IDA Certified for 3000k CCT and warmer only. Not available with uplight option.

Electrical

- D1-D6: -40C - 50C operating temperature
- D7-D10: -40C - 40C operating temperature

- Greater than 90% lumen maintenance at 50,000 hours
- IP66 rated
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- 10kV surge module standard
- 0-10V dimming standard

Mounting

- Surface mount directly to square or octagonal 4" surface or recessed junction box using quick mount bracket
- Optional stem mount bracket with set screw for direct 1/2" NPS conduit mounting
- Trunnion, decorative pendant, and wall mount options also available
- For installations in locations such as

gymnasiums, arenas, sports complexes, multipurpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, the stem kit with tether (DPMST\*) is required.

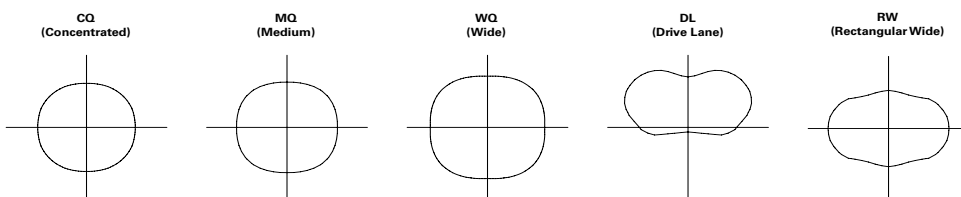
Finish

- 2.5 mil nominal TGIC powder coat thickness
- Finishes include white, black, bronze, gray, dark platinum and graphite metallic
- RAL and custom color matches available
- Natorium option (NAT) available, providing 5,000 hour salt spray rating per ASTM B117, with a scribe rating of 9 per ASTM D1654

Warranty

- Five-year warranty

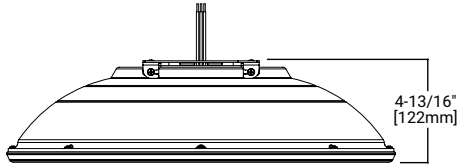
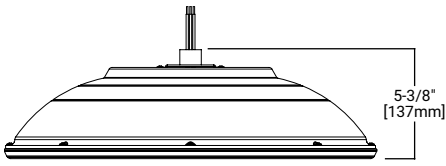
Optical Distributions



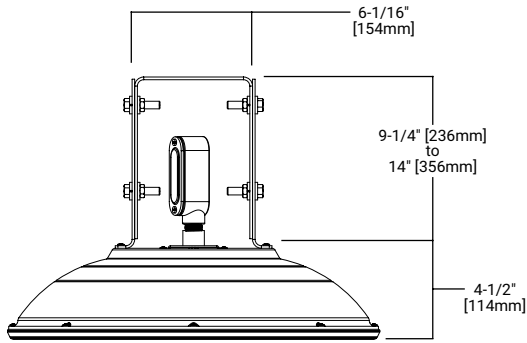
Mounting Details

\*D1-D6 configuration shown (D1-D4 for DL distribution)

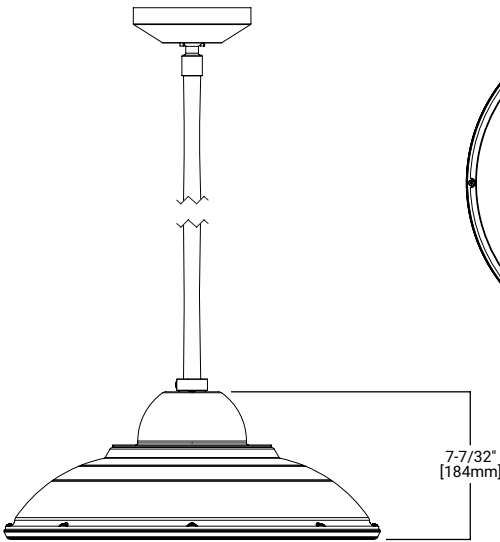
Stem Mount



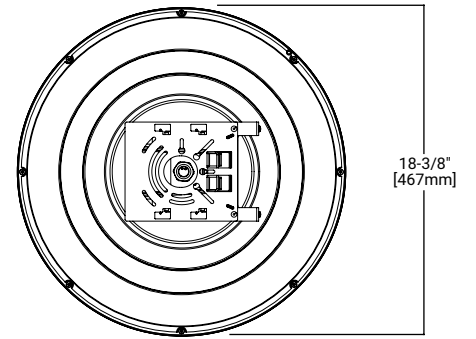
Trunnion Mount



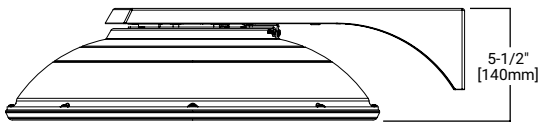
Decorative Pendant Mount



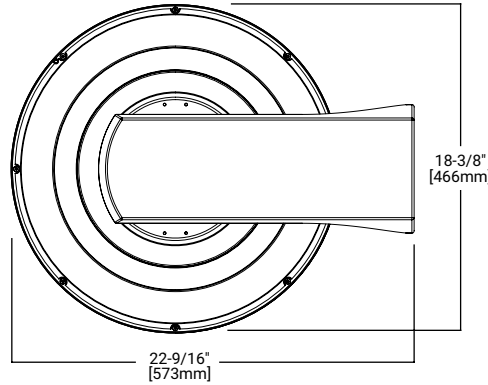
Top View



Wall Mount

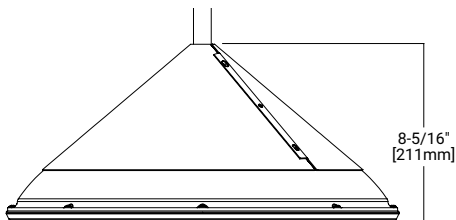


Top View - Wall Mount

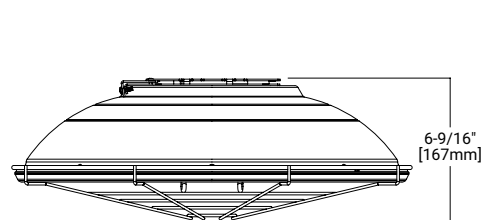


Accessories

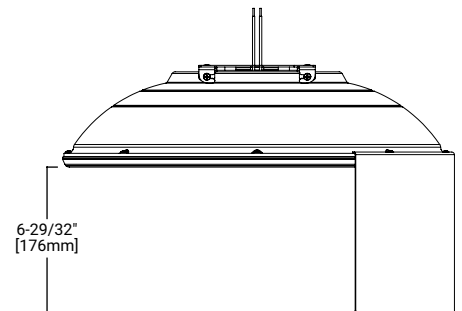
Bird Guard (TT/BG-UP-XX)



Wire Guard (TT/WG)



House Side Shield (TT/HSS-XX)



Energy and Performance Data

[View TopTier IES files](#)

Power and Lumens (3000K/3500K/4000K/5000K)

Lumen Package		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10		
Power (Wattage) CQ, MQ, WQ		28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8		
Power (Wattage) RW Only		28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0	--		
Power (Wattage) DL Only		28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0	--		
Distribution													
3000K CCT 80 CRI	CQ Concentrated	Lumens	3,409	4,640	5,595	6,660	8,383	11,030	12,307	14,411	16,430	18,001	
		BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2
		Lumens per Watt	122	118	119	116	112	105	99	97	95	93	
	MQ Medium	Lumens	3,647	4,964	5,986	7,125	8,969	11,800	12,854	15,053	17,161	18,802	
		BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	130	127	127	124	120	112	103	101	99	97	
	WQ Wide	Lumens	3,449	4,695	5,662	6,740	8,483	11,161	12,350	14,463	16,489	18,065	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	123	120	120	117	114	106	99	97	95	93	
	RW Rectangular Wide	Lumens	2,757	3,753	4,526	5,387	6,781	8,922	11,977	13,619	15,122	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	98	96	96	94	91	85	94	89	85	--	
	DL Drive Lane / Type 4	Lumens	2,959	3,985	4,762	5,622	6,537	8,771	11,834	13,337	14,768	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	--	
		Lumens per Watt	103	98	98	94	105	90	93	87	83	--	
	3500K CCT 70 CRI	CQ Concentrated	Lumens	3,618	4,925	5,940	7,070	8,899	11,708	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	129	126	126	123	119	111	120	118	115	113
MQ Medium		Lumens	3,872	5,270	6,355	7,564	9,520	12,527	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	138	134	135	131	127	119	125	123	120	118	
WQ Wide		Lumens	3,662	4,984	6,011	7,154	9,005	11,848	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	131	127	127	124	121	113	120	118	116	113	
RW Rectangular Wide		Lumens	2,927	3,984	4,805	5,719	7,198	9,471	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	105	102	102	99	96	90	114	108	103	--	
DL Drive Lane / Type 4		Lumens	3,141	4,230	5,055	5,968	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	109	104	104	100	127	109	113	106	101	--	
4000K/5000K CCT 70 CRI		CQ Concentrated	Lumens	3,828	5,211	6,284	7,480	9,415	12,387	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	137	133	133	130	126	118	120	118	115	113
	MQ Medium	Lumens	4,096	5,575	6,723	8,002	10,072	13,253	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	146	142	142	139	135	126	125	123	120	118	
	WQ Wide	Lumens	3,874	5,273	6,359	7,569	9,527	12,535	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	138	135	135	131	128	119	120	118	116	113	
	RW Rectangular Wide	Lumens	3,097	4,215	5,083	6,050	7,615	10,020	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	111	108	108	105	102	95	114	108	103	--	
	DL Drive Lane / Type 4	Lumens	3,323	4,475	5,348	6,314	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	115	110	110	106	127	109	113	106	101	--	

Energy and Performance Data

CQ, MQ and WQ Distributions

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.09	1.31	1.53	1.72
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.57	0.67	0.78	0.88
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.66	0.76	0.85
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.49	0.58	0.67	0.74
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.40	0.47	0.55	0.62
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.35	0.41	0.45

RW Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.11	1.34	1.58
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.36	0.42

DL Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0
Input Current @ 120V (A)	0.24	0.34	0.41	0.50	0.55	0.86	1.11	1.34	1.58
Input Current @ 208V (A)	0.14	0.19	0.23	0.29	0.28	0.44	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.17	0.20	0.25	0.28	0.43	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.15	0.18	0.22	0.24	0.37	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.12	0.14	0.17	0.21	0.31	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.15	0.23	0.30	0.36	0.42

Lumen Maintenance

Lumen Package	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
D1-D6 (D1 - D4 DL/T4)	25°C	98.0%	95.2%	94.1%	89.8%	> 300,000
	40°C	97.9%	94.8%	93.6%	89.0%	> 290,000
	50°C	97.7%	94.5%	93.2%	88.4%	> 270,000
D7 - D10 (D5+ DL/T4)	25°C	95.8%	93.2%	92.2%	88.2%	> 300,000
	40°C	93.9%	89.7%	88.1%	81.9%	> 180,000

\* Supported by IES TM-21 standards

\*\*Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

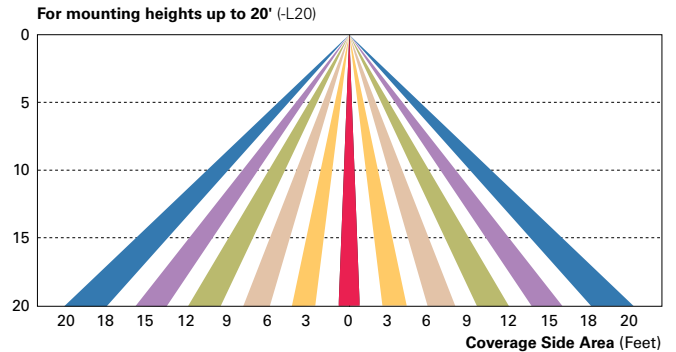
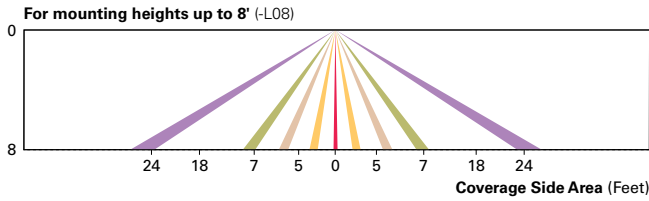
Lumen Multiplier

Ambient Temperature	Multiplier
0°C	1.03
10C	1.02
25°C	1.00
40°C	0.98
50°C	0.97

Control Options

**0-10V (D)** 0-10V dimming comes standard on all TopTier configurations for use with integrated or external lighting controls.

**Dimming Occupancy Sensor (MS/DIM)** These sensors are factory installed in the luminaire, dimming to 50% after five minutes of no motion detected. When motion is detected, the luminaire output is 100%. Includes an integral photocell that can be programmed for "dusk-to-dawn" operation. The FSIR-100 programming tool can be utilized to adjust dimming level, time delay, sensitivity and other parameters. Two lens options provide optimal coverage patterns up to 20' mounting height.



**Dimming Occupancy Sensor (SPB)**

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

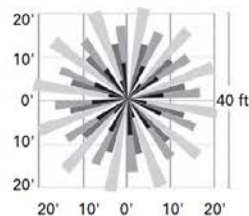
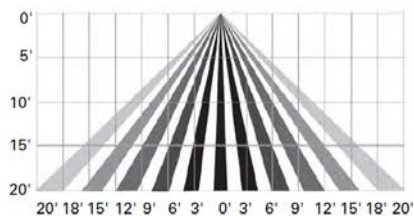
SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

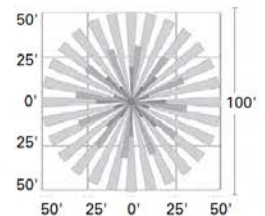
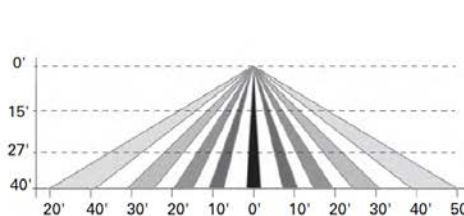
**WaveLinX Wireless Control and Monitoring System**

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinX Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinX Lite mobile application for set-up and configuration. WAC not required. WaveLinX Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

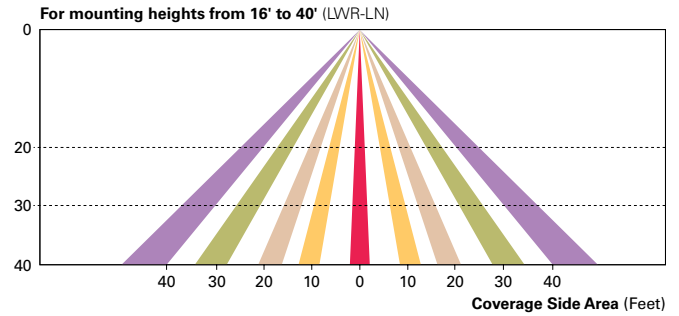
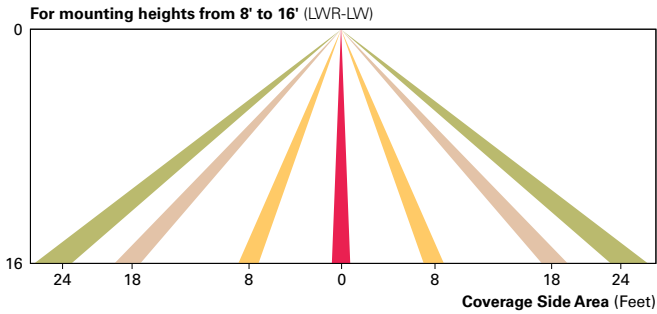
For mounting heights up to 15' (WPS2 and WLS2)



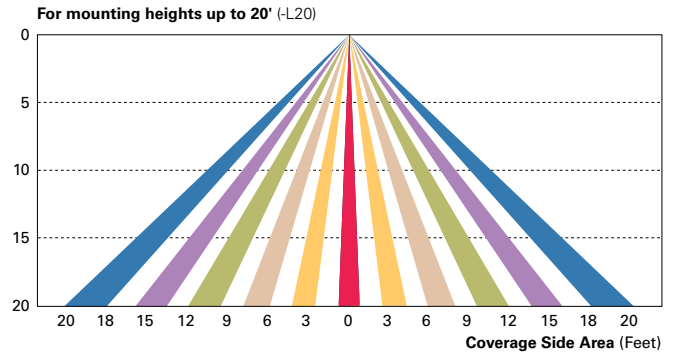
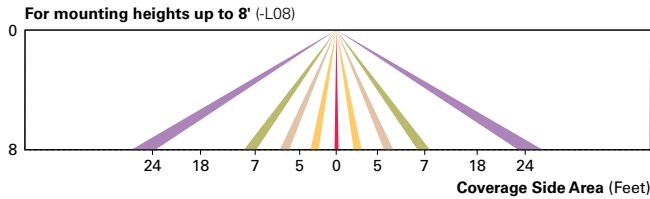
For mounting heights up to 40' (WPS4 and WLS4)



**Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)** The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.



**Synapse (DIM10)** SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 control module and FSP-20 motion sensor; requires additional Synapse system components for operation. Contact Synapse at [www.synapsewireless.com](http://www.synapsewireless.com) for product support, warranty, and terms and conditions.



## DESCRIPTION

Combining value and performance in a unique, patent-pending durable design, the Tracer LED floodlight luminaire delivers superior uniformity and excellent illumination to the targeted application. The rugged, die-cast housing is IP66 rated for exceptional durability and long-term reliability. The Tracer floodlight provides design flexibility for applications such as landscape, accent, facade, or sign lighting.

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>			
<b>Comments</b>		<b>Date</b>	
<b>Prepared by</b>			

## SPECIFICATION FEATURES

### Construction

Heavy-duty, die-cast aluminum housing provides durability and an IP66 rating to protect against moisture and contaminants. Clear tempered glass lens protects optics and encloses the front cover of the luminaire.

### Optics

The discrete LED optics provide illumination that has been precisely designed to shape the distribution as spot, medium, or wide. Multiple lumen packages ranging from 550 up to 2,900 lumens. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 5000K CCT or 3000K CCT available. Removable, pre-installed standard symmetric snoot as well included and field-replaceable with included extended visor for more cut-off applications.

### Electrical

LED driver is internally mounted for optimal heat sinking. 120-277V 50/60Hz standard operation. Integral 4kV surge is standard. 0-10V dimming is standard with external purple and grey leads. Suitable for ambient temperatures from -40°C to 40°C. 90% lumen maintenance greater than 60,000 hours per IESNA TM-21.

### Mounting

Heavy-duty, die-cast aluminum knuckle base utilizes tooth-lock adjustment with visual 15° adjustment indicators that allow for precise rotation of the luminaire. Knuckle fits 1/2" NPS available mounting junction box cover (supplied by others) and is secured with supplied locking nut.

### Finish

Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is carbon bronze. Additional colors available in summit white, black, and verde green. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors.

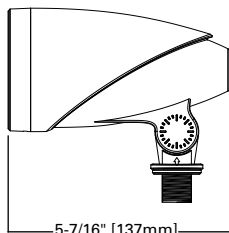
### Warranty

Five-year warranty.

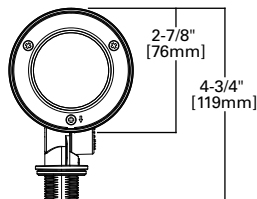
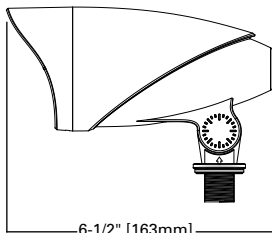


## DIMENSIONS

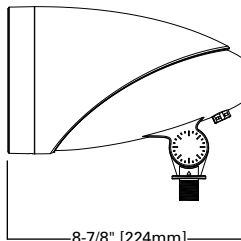
**Tracer Small**  
(Standard symmetric snoot)



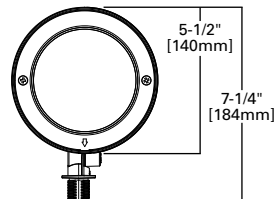
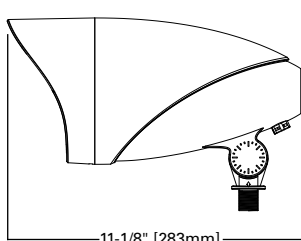
**Tracer Small**  
(Optional extended visor)



**Tracer Large**  
(Standard symmetric snoot)



**Tracer Large**  
(Optional extended visor)



## TCRS / TCRL TRACER

Solid State LED

FLOODLIGHT



### CERTIFICATION DATA

UL/cUL Wet Location Listed  
DesignLights Consortium® Qualified\*  
IP66 Fixture and Optical Chamber  
LM79/LM80 Compliant  
FCC Class A  
1.5G Vibration Rated  
RoHS Compliant

### ENERGY DATA

**Electronic LED Driver**  
>0.9 Power Factor  
<20% Total Harmonic Distortion  
120-277V 50/60Hz  
-40°C Min. Ambient Temperature Rating  
+40°C Max. Ambient Temperature Rating

### EPA

Effective Projected Area (Sq. Ft.): 0.55

### SHIPPING DATA

**Approximate Net Weight:**  
Small fixture=2 lbs. (0.91kgs.)  
Large fixture=5 lbs. (2.27kgs.)



**POWER AND LUMENS**

Light Engine		TCRS5	TCRS8	TCRL15	TCRL20	TCRL26
Power (Watts)		5.0	8.0	12.0	17.6	25.1
Input Current @ 120V (A)		0.04	0.07	0.10	0.15	0.22
Input Current @ 277V (A)		0.02	0.03	0.05	0.07	0.10
Configuration						
Spot (20°)	4000K/5000K Lumens	530	812	1,500	2,039	2,718
	3000K Lumens	512	785	1,450	1,971	2,628
Medium (30°)	4000K/5000K Lumens	552	846	1,630	2,215	2,953
	3000K Lumens	533	818	1,575	2,141	2,854
Wide (50°)	4000K/5000K Lumens	561	860	1,657	2,251	3,002
	3000K Lumens	542	831	1,602	2,176	2,902

**LUMEN MAINTENANCE**

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
Up to 40°C	90%	153,000

**LUMEN MULTIPLIER**

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.97

**ORDERING INFORMATION**

Sample Number: TCRS5S-WH-7050

Product Family <sup>1</sup>	Light Engine	Distribution
TCRS=Tracer Flood Small LED TCRL=Tracer Flood Large LED	TCRS 5=5W, 550 Nominal Lumens 8=8W, 850 Nominal Lumens TCRL 15=15W, 1,600 Nominal Lumens 20=20W, 2,200 Nominal Lumens 26=26W, 2,900 Nominal Lumens	S=Spot M=Medium W=Wide
Options (Add as Suffix) <sup>2</sup>		
[blank]=Carbon Bronze (Standard) BK=Black VG=Verde Green WH=White 7030=70 CRI / 3000K CCT 7050=70 CRI / 5000K CCT		

NOTES: 1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 2. Extended lead times apply to any options selected.

**STOCK ORDERING INFORMATION**

Stock SKUs	
<b>Small</b> TCRS5S=Tracer Small 5W, 550 lumens, Spot Distribution TCRS5M=Tracer Small 5W, 550 lumens, Medium Distribution TCRS5W=Tracer Small 5W, 550 lumens, Wide Distribution TCRS8S=Tracer Small 8W, 850 lumens, Spot Distribution TCRS8M=Tracer Small 8W, 850 lumens, Medium Distribution TCRS8W=Tracer Small 8W, 850 lumens, Wide Distribution	<b>Large</b> TCRL15S=Tracer Large 15W, 1,600 lumens, Spot Distribution TCRL15M=Tracer Large 15W, 1,600 lumens, Medium Distribution TCRL20M=Tracer Large 20W, 2,200 lumens, Medium Distribution TCRL26S=Tracer Large 26W, 2,900 lumens, Spot Distribution TCRL26M=Tracer Large 26W, 2,900 lumens, Medium Distribution

NOTES: Options not available with stock products. Refer to standard ordering information to add options. Stock fixture is 4000K, dimming, 120-277V, carbon bronze only.



## **Citizen Participation Plan**

**The Villas on Shelby**  
2250 Shelby Drive  
Sedona, AZ 86336-5483

Letters to surrounding neighbors were mailed out on May 23, 2024 to inform residents of a public meeting to be held on Thursday, June 6<sup>th</sup>.

The meeting was held on June 6<sup>th</sup> at the Sedona Library beginning at 5pm. Participation was low with only the following attendees:

- Scott Jablow – Mayor of Sedona
- Jeanne Frieder – Housing Coordinator, City of Sedona
- Generie Cleon Ysulan Pesodas – NSI Construction

The mayor had some questions regarding the design and amenities as well as timelines. The meeting went well, however no neighbors were in attendance.

A copy of the slideshow, letter that was distributed and distribution list is attached.

Another letter informing the neighbors of the project will be sent out summarizing the meeting details including the information that was provided in the public meeting. As correspondence is received, we will keep all records and provide to the Commission as needed.

Currently, no questions or public feedback has been received, other than those received from the mayor.



May 23, 2024

## **Community Participation Public Meeting**

Re: **The Villas on Shelby**  
2250 Shelby Road  
Sedona, AZ 86336

Please accept this letter as a formal invitation to participate in a Public Meeting regarding the proposed 30-unit apartment project, The Villas on Shelby. The purpose of this meeting is to introduce our neighbors to the project and to create open-dialog and opportunities for our neighbors to understand the project and provide feedback for this development.

This meeting will be held as follows:

**Thursday, June 6<sup>th</sup>, 2024 from 5pm -7:30pm**

**Sedona Library  
3250 White Bear Road  
Sedona, AZ 86336  
Community Room**

I will personally be in attendance to discuss the project and answer any questions you may have. We are looking forward to meeting our neighbors and discussing this exciting project.




Respectfully,

Bonnie J. Demmy  
Member  
bharbage@hsdevpartners.com  
937-607-9755  
**HS Development Partners, LLC**  
**The Villas on Shelby**



Aerial View

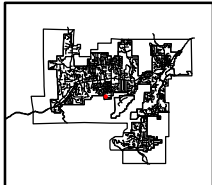
Parcel  
408-28-103F  
Villas on Shelby

-  Parcel 408-28-103F
-  Parcel Boundary
-  Street Centerline



0 15 30 Feet

City Index



GIS, City of Sedona  
05/22/2024  
g:\pubweb\projects\villasshelby\mxd\408-28-103f\_aerial.mxd

This map is designed to provide information about Sedona, and has been prepared for general planning and informational purposes only. It is not necessarily accurate to engineering or surveying standards. Every effort has been made to make this map as complete and as accurate as possible; however, no warranty of fitness is implied.





The information is provided on an "as-is" basis. The City of Sedona shall have neither liability nor responsibility to any person or entity with respect to any loss or damages in connection with or arising from the information contained on this map.



SHELBY DR

# 300ft Owners

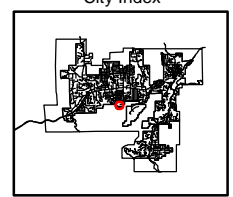
Parcel  
408-28-103F  
Villas on Shelby

-  Parcel 408-28-103F
-  Parcels within 300ft
-  Parcel Boundary
-  Street Centerline



0 55 110 Feet

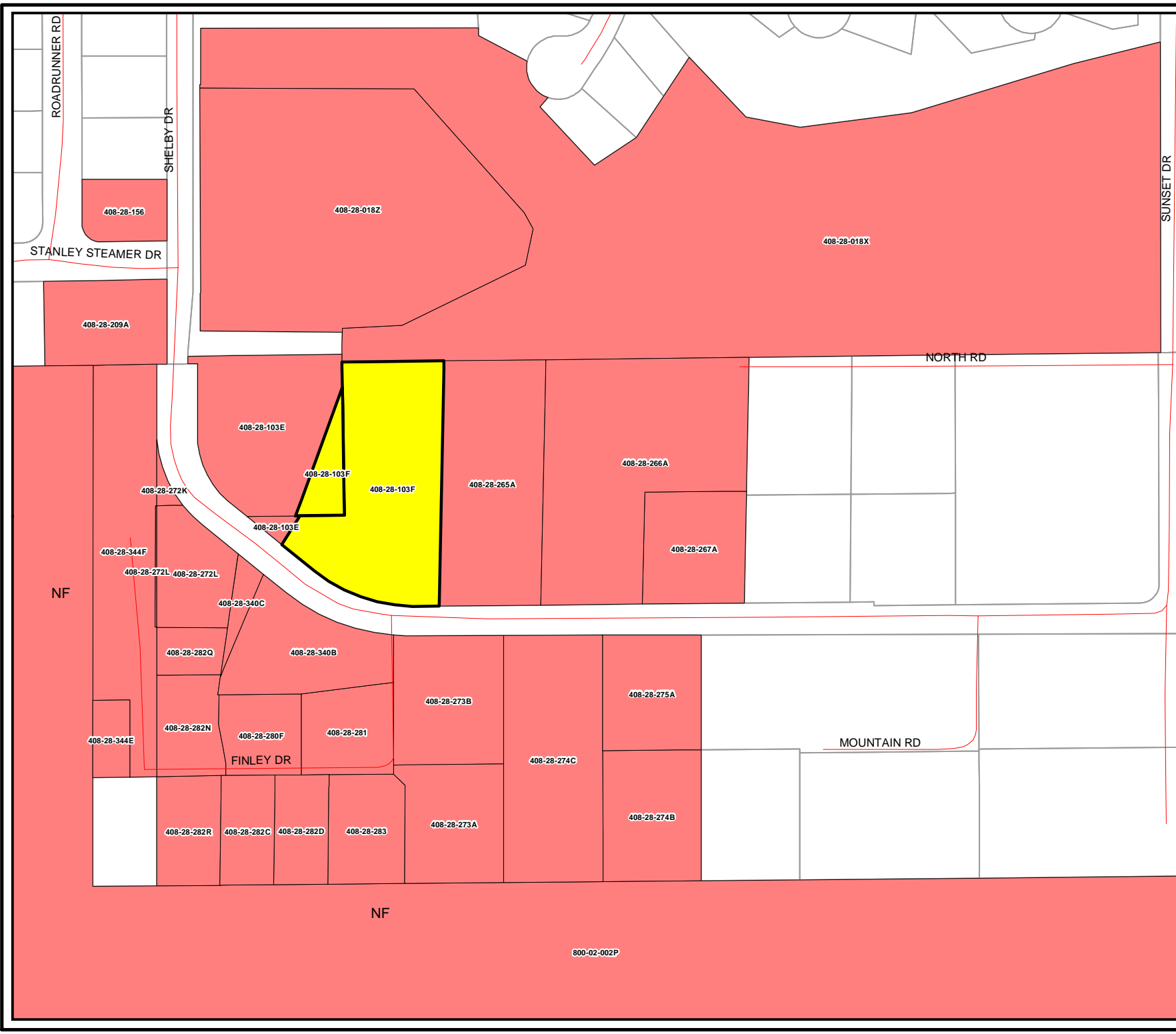
City Index



GIS, City of Sedona  
05/22/2024  
g:\pubarea\projects\ villasonshelby\mxd\ 408-28-103f\_owners.mxd









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800-02-002P

# Vicinity Map

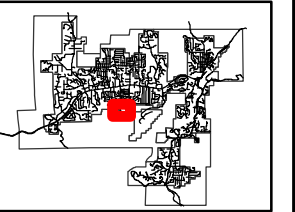
Parcel  
408-28-103F  
Villas on Shelby

-  Parcel 408-28-103F
-  Zoning Boundary
-  Building Footprint
-  Parcel Boundary
-  Trail
-  Street Centerline



0 60 120 Feet

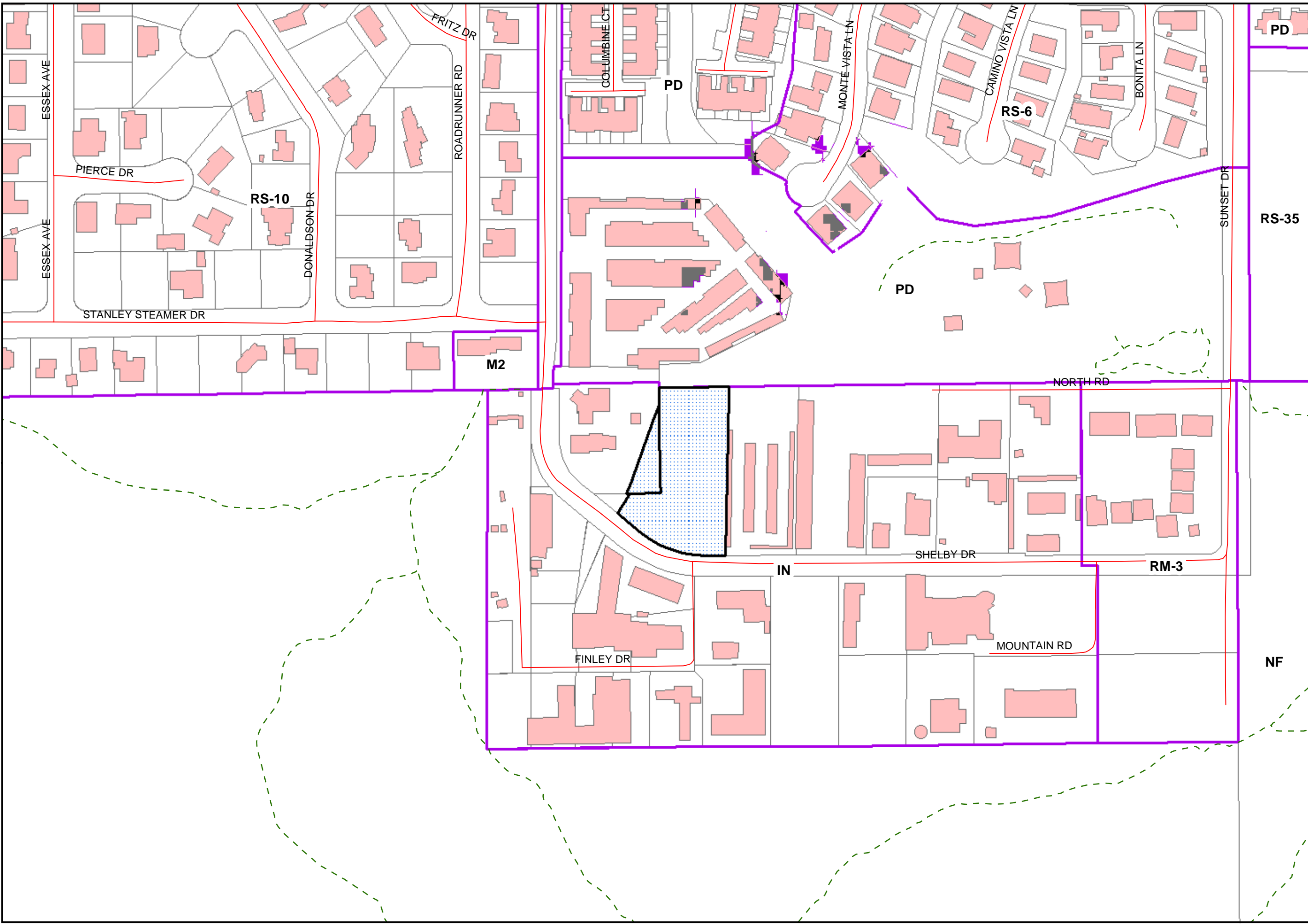
City Index



GIS, City of Sedona  
05/22/2024  
[g:\pubreq\projects\villasonshelby\mxds\408-28-103f\\_vicinity.mxd](https://pubreq/projects/villasonshelby/mxds/408-28-103f_vicinity.mxd)

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Parcel 408-28-103F = Parcels within 300ft  
Project: Villas on Shelby

TPARCEL	OWNER	OSTREET	OCITY	OSTATE	OZIP
408-28-018Z	SMS LAND LLC	2300 SHELBY DR	SEDONA	AZ	863365402
408-28-156	NORDGREN KENNETH & LINDA	1979 ABBOTSFORD DR	INVERNESS	IL	600105560
408-28-209A	LAWLER FAMILY REVOCABLE TRUST	2155 SHELBY DR STE E	SEDONA	AZ	863365476
408-28-265A	AAA MINI STORAGE LLC	16100 N PETROGLYPH RD	PRESCOTT	AZ	863057825
408-28-266A	TINGLE SANDRA R	PO BOX 684	SEDONA	AZ	863390684
408-28-267A	PAYDAR FARSHID	410 ARROYO PINON DR	SEDONA	AZ	863365039
408-28-272K	ALLDREDGE ENTERPRISES LLC	5 N FARM CIRCLE RD	CORNVILLE	AZ	863255735
408-28-272L	ALLDREDGE ENTERPRISES LLC	505 COBERT LN	FRANKLIN	TN	370641459
408-28-272L	ALLDREDGE ENTERPRISES LLC	505 COBERT LN	FRANKLIN	TN	370641459
408-28-273A	HAOLIANG XUE	145 LAUREL CREST ALY	JOHNS CREEK	GA	300244749
408-28-273B	WAYNE ADAM D	595 CIRCLE DR	SEDONA	AZ	863364147
408-28-274B	LUXOR LISTINGS LLC	PO BOX 426	SEDONA	AZ	863390426
408-28-274C	LUXOR LISTINGS LLC	PO BOX 426	SEDONA	AZ	863390426
408-28-275A	BEHMER ROBERT FAMILY	5847 W FETLOCK TRL	PHOENIX	AZ	850837392
408-28-280F	ISENSEE LLC	PO BOX 1462	SEDONA	AZ	863391462
408-28-281	FINLEY PROPERTY LLC	1975 E PEAK RIDGE DR	COTTONWOOD	AZ	863262866
408-28-282C	RATH CECELIA TRUST	7 AVENIDA VISTA GRANDE STE B-7	SANTA FE	NM	875089207
408-28-282D	RATH CECELIA TRUST	7 AVENIDA VISTA GRANDE STE B-7	SANTA FE	NM	875089207
408-28-282N	ISENSEE LLC	8022 N 11TH AVE	PHOENIX	AZ	850215627
408-28-282Q	ISENSEE LLC	8022 N 11TH AVE	PHOENIX	AZ	850215627
408-28-282R	RALSTON WILLIAM W & GINGER LYNN RS	60 FINLEY DR SUITE D	SEDONA	AZ	863365478
408-28-283	OESTMANN JOEL & JANA	PO BOX 4288	SEDONA	AZ	863404288
408-28-340B	TINGLE SANDRA R	PO BOX 684	SEDONA	AZ	863390684
408-28-340C	TINGLE SANDRA R	PO BOX 684	SEDONA	AZ	863390684
408-28-344F	ISENSEE LLC	8022 N 11TH AVE	PHOENIX	AZ	850215627



A WORKFORCE HOUSING SOLUTION WITHIN THE CITY OF SEDONA



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

# THE VILLAS ON SHELBY

2250 Shelby Drive  
Sedona AZ 86336





- Partnering with the City of Sedona to create 30 units of affordable housing for individuals and families within the City limits of Sedona, Arizona
- Project is first of its kind within the City limits
  - Rental Limits will be based on incomes at 60% of the Area Median Income
  - Yavapai County AMI - \$85,300
    - 60% of the AMI - \$51,180
- 30 total units
  - 24 one-bedroom units – \$862 Net Rent/Month
  - 6 three-bedroom units – \$1,188 Net Rent/Month
- Design and construction will provide high-quality units and amenities
- LIHTC program is a Developer's Subsidy not an Rental Subsidy

# THE VILLAS ON SHELBY



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

- Anticipated to start construction in August/September of 2024
- 12 – 14 month construction timeline
- On-site Management will have local office and conduct a lottery for eligible residents, waitlists will be maintained
- Lease-up anticipated – immediate

## THE VILLAS ON SHELBY - TIMELINE



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

# Eligible Residents

- Police Officers
- Fire Fighters/EMT
- Hospitality Workers
- Governmental Employees
- Nurses
- Teachers
- Shop workers

THE VILLAS ON SHELBY - RESIDENTS



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

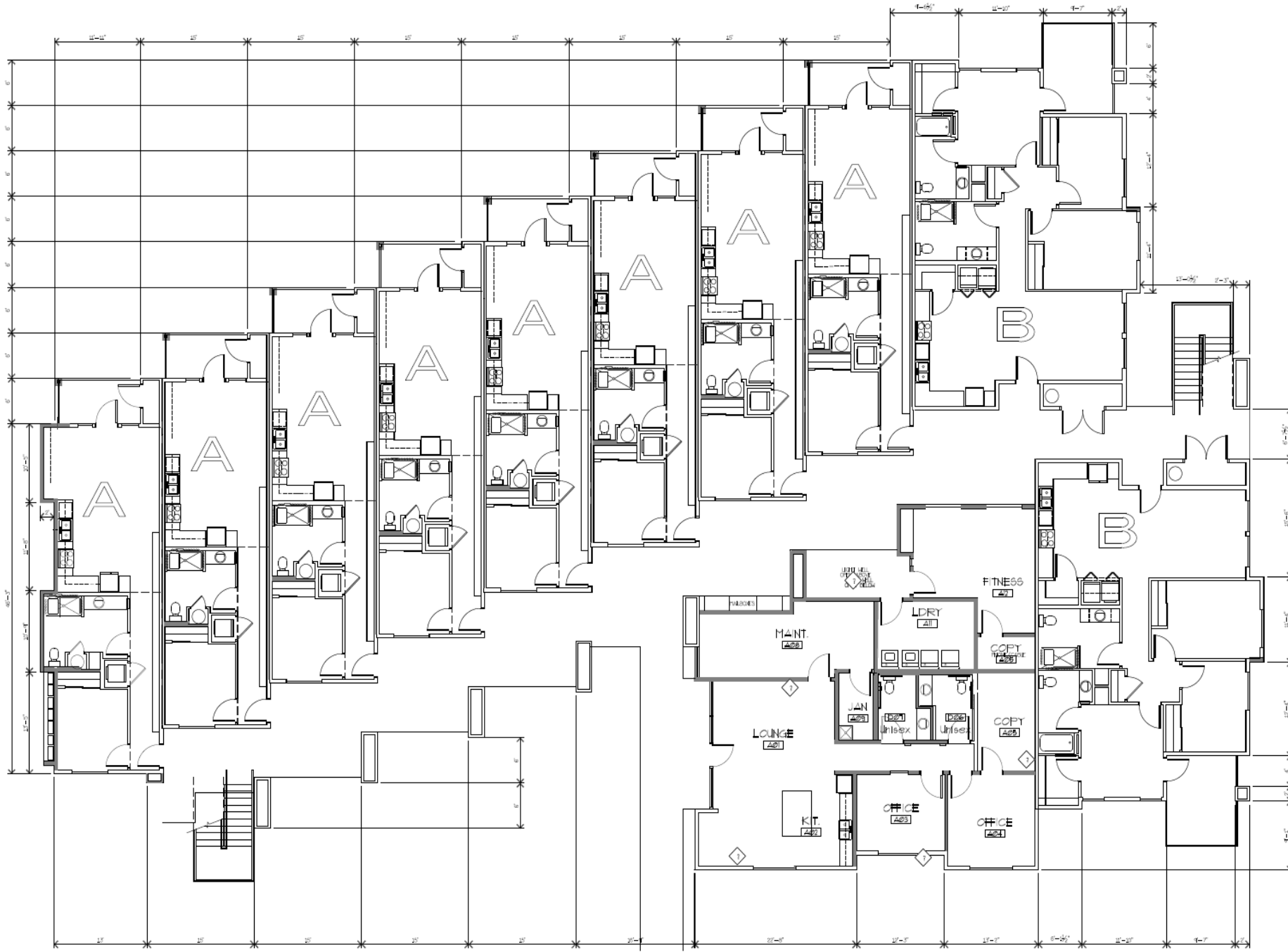


- 1.14 acres on Shelby Drive
- Three-story walk-up design
- 42 on-site parking spaces
- On-site amenities
  - Connection to Sunset Park
  - On-site Playground
  - Laundry Room
  - Washer/Dryer Provided
  - Lounge/Community Space
  - Fitness Room
  - Covered Parking
  - On-site management/maintenance



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

# THE VILLAS ON SHELBY — SITE LAYOUT



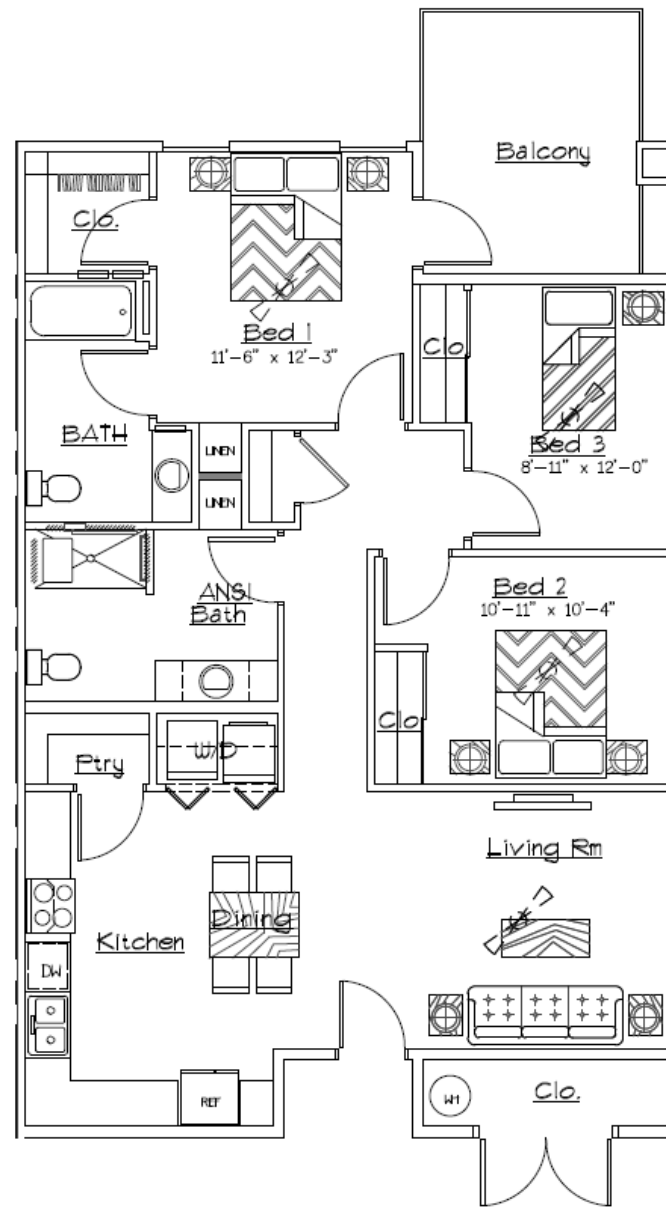
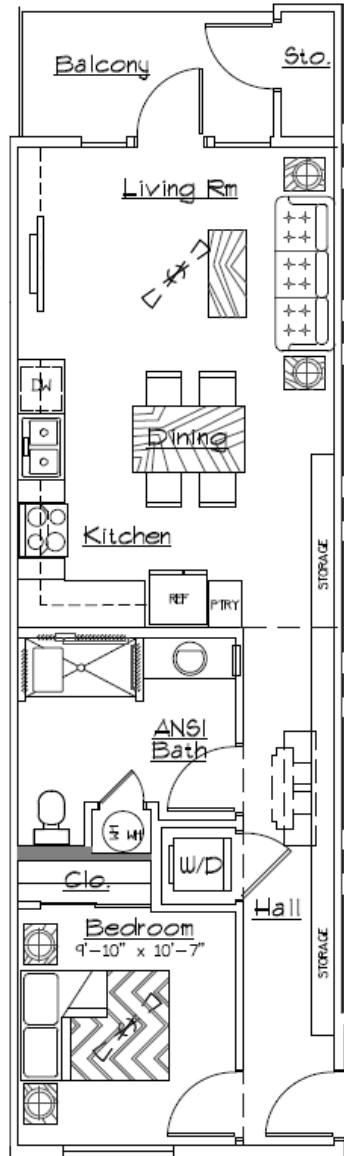
**THE VILLAS ON SHELBY**  
 SEDONA, ARIZONA

**First Floor Plan**

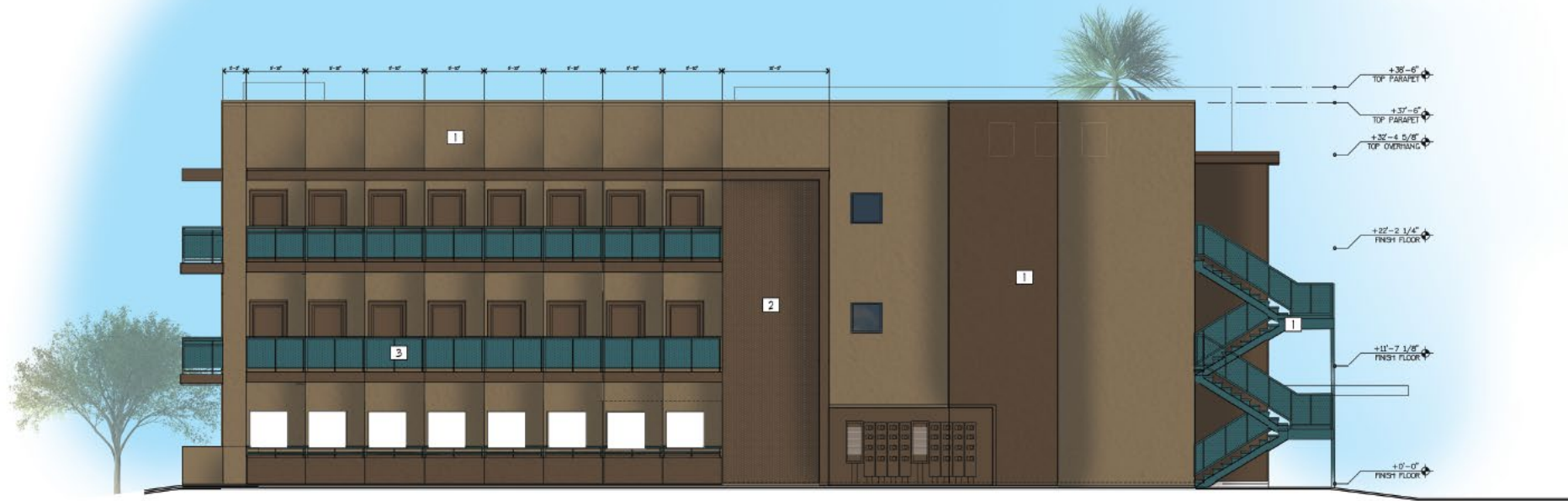


**THE VILLAS ON SHELBY**  
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**Second & Third Floor Plan**



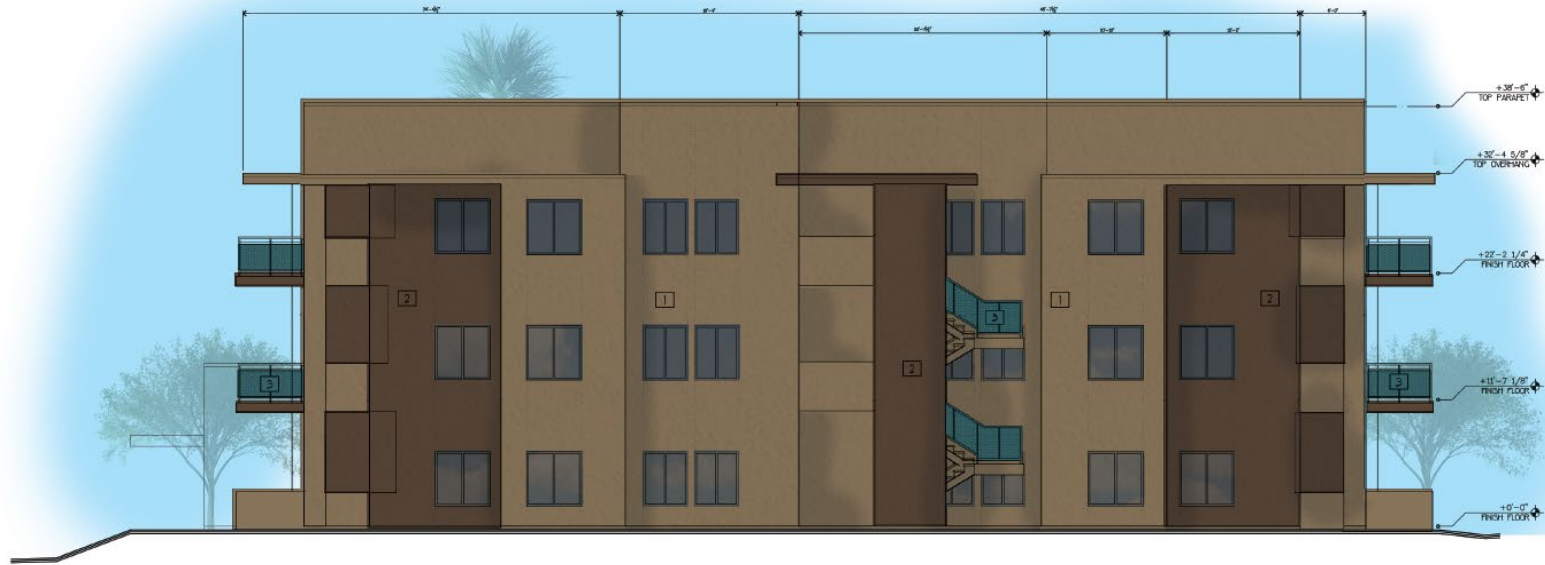
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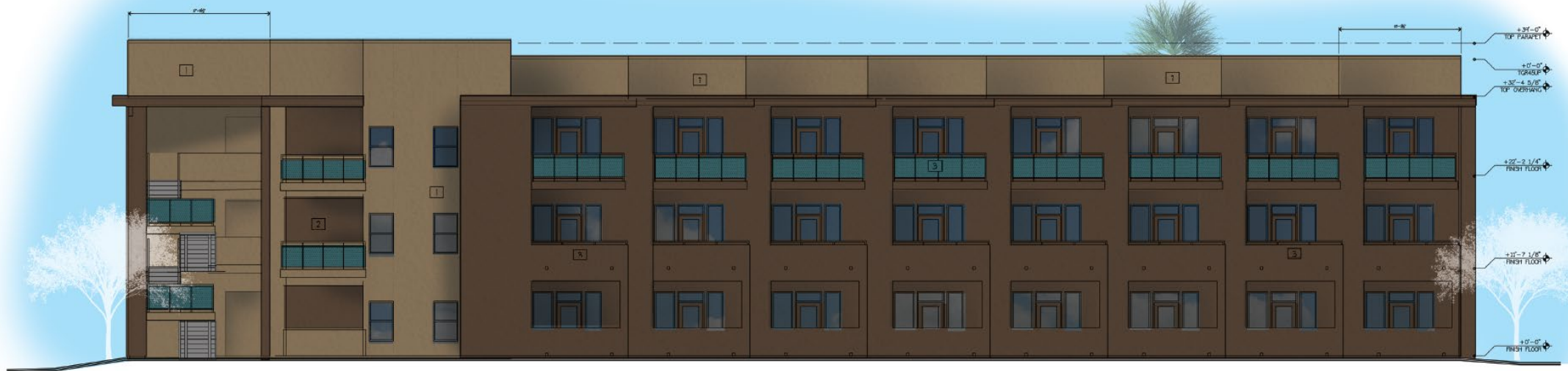
**NORTH ELEVATION**  
 SCALE: 3/8" = 1'-0"







**SOUTH ELEVATION**  
SCALE: 3/8"=1'-0"



**EAST ELEVATION**



- 2250 Shelby Drive
- Sunset CFA Plan
- Connection to Sunset Park

# LOCATION



THE VILLAS ON SHELBY  
SEDONA, ARIZONA



## A WORKFORCE HOUSING SOLUTION WITHIN THE CITY OF SEDONA



THE VILLAS ON SHELBY  
SEDONA, ARIZONA

# QUESTIONS

2250 Shelby Drive  
Sedona AZ 86336

