

ETC Parking Lot Light Replacement Lake Land College District Number 517 Mattoon, Illinois 61938

PROJECT NO. 2025-001

Bid Date: March 3, 2025

Community College District Number 517 Mattoon, Illinois

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ADVERTISEMENT FOR BIDS

Advertisement for Bids Bids: February 19, 2025 LAKE LAND COLLEGE DISTRICT #517 MATTOON, ILLINOIS Project No. 2025-001

The Lake Land College District Number 517 Board of Trustees will receive sealed bids for the Effingham Technology Center Parking Lot Light Replacement.

Bids will be received until 1:00 PM Central Standard Time on March 3, 2025 in the North Conference Room, in the Neal Hall building on the campus of Lake Land College, 5001 Lake Land Boulevard, Mattoon, IL. Bids received after this time will not be accepted. Bids will be opened and publicly read immediately after the specified closing time. All interested parties are invited to attend. Obtain bidding documents/requirements at the office of the Facilities Planning Manager, phone (217) 234-5054, <u>imoore3@lakelandcollege.edu</u>.

The Board of Trustees reserves the right to waive irregularities and reject all bids or parts of bids.

Successful Bidders shall have the sole responsibility of complying with all aspects of existing Prevailing Wage Policies.

Gary Cadwell Chairperson - Lake Land College Board of Trustees

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Lake Land College Board of Trustees will be hereafter referred to in this Specification as "Owners" and all correspondence shall be addressed to: Facilities Planning Manager, Lake Land College, 5001 Lake Land Blvd., Mattoon, IL 61938.
- B. A Bidder is a person or entity who submits a Bid to the Owner.
- C. Bidding Documents include the Advertisement for Bid, Instructions to Bidders, Bid Forms and supplements, and Addenda.
- D. Contract Documents include any Contract forms, Specifications, Drawings, Addenda, and modifications.
- E. An Agreement is a written agreement between the Owner and Contractor setting forth the obligations of the parties thereunder, including but not limited to the provision of the specified goods and materials, the basis of payment and the contract time.
- F. A Bid is a complete and properly signed proposal to provide the goods and services for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- G. The Base Bid is the sum stated in the Bid for which the Bidder offers to provide the goods and services described in the Bidding Documents as the base, to which items may be added or from which items may be deleted for sums stated in Alternate Bids.
- H. An Alternate Bid is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding changes in the items, as described in the Bidding Documents, are executed.
- I. A Unit Price is an amount stated in the Bid as a price per unit of measurement for goods or services as described in the Bidding Documents or in the proposed Contract Documents.

1.02 DOCUMENTS

A. Copies of the Bidding Documents may be obtained at the Office of the Facilities Planning Manager, 5001 Lake Land Boulevard, Mattoon, Illinois 61938, (217) 690-6215, jmoore3@lakelandcollege.edu.

1.03 EXAMINATION OF DOCUMENTS

- A. Bidders shall examine all documents. Failure to do so will not relieve a successful bidder of his obligation to provide all labor and materials necessary to carry out the provision of his contract for the sum stated thereon.
- B. Each Bidder, by submitting his bid represents that he has read and understands the bidding documents.

1.04 EXAMINATION OF PREMISES

- A. Before submitting proposals for this work, each bidder will be held to have examined the premises and satisfied himself as to the conditions existing and under which he will be obliged to operate, or that will in any manner, affect the work of this contract.
- B. No allowance will be made subsequently in this connection in behalf of the contractor for any error or negligence on his part. The contractor agrees to accept the existing conditions as found at the time of signing of contract.

1.05 AREAS, QUANTITIES AND MEASUREMENTS

A. The contractor shall be responsible for all areas, quantities, and measurements related to the work to be performed under this contract. No extra charge or compensation shall be allowed the contractor for any error or negligence on his part. The contractor shall visit the job site and acquaint himself with all conditions concerning this work.

1.06 INTERPRETATIONS DURING BIDDING

- A. If any Bidder is in doubt as to the meaning of any part of the Bidding Documents, they may submit a written request to: Facilities Planning Manager, 5001 Lake Land Boulevard, Mattoon, Illinois 61938; for an interpretation of that part.
- B. Written requests for interpretations or clarifications must be made no later than three (3) working days prior to the Bid Date specified in the Advertisement for Bids.
- C. Any interpretation or change will be made only by Addenda numbered, dated, and issued by the Owner to each Bidder on record as having received a set of Bidding Documents and will be available for inspection wherever the

Bidding Documents are kept available for that purpose. Lake Land College will not be responsible for any other explanations or interpretations of the Bidding Documents.

1.07 SUBSTITUTION OF PRODUCTS

- A. Manufacturer's trade names are used in specifications for the express purpose of establishing a standard of quality and coordination of design, not for the purpose of limiting competition.
- B. All sizes of equipment must be as specified, and all pieces of equipment must include or have those features which are set forth in the specifications.
- C. No substitution will be considered unless a written request has been submitted with their bid.
- D. Bidders proposing substitutions in writing must submit detailed specifications with catalog cuts or manufacturer's literature, pictorially portraying that on which they are bidding for comparison to specified items by the Owner.
- E. Any additional explanation or statement which the Bidder wishes to make must be placed in the same envelope and attached to the proposal. Unless the Bidder so indicates, it is understood that the Bidder has bid in strict accordance with the specifications and drawings and has made no substitutions, modifications or additional stipulations.
- F. Bids shall not contain any recapitulation of the work to be done and no oral, telephone, facsimile or email proposals or modifications will be considered.

1.08 QUALIFICATION OF BIDDERS

- A. Bidders may be disqualified and their Bids not considered for any of the following specific reasons:
 - 1. Reason to believe collusion exists among Bidders.
 - 2. The Bidder being interested in any litigation against the Owner.
 - 3. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
 - 4. Lack of competency as revealed by the financial statement, experience, and equipment, questionnaires, or qualification statement.
 - 5. Uncompleted work, which in the judgment of the Owner will prevent or hinder the prompt completion of additional work if awarded.

B. If requested, a Bidder shall submit to the Owner a confidential Financial Statement in a sealed envelope.

1.09 PREPARATION OF BID:

- A. All bids must be submitted on the bid form contained herein. Oral, telephone, facsimile, electronic mail, or telegraph bids will not be accepted.
- B. The Bidder shall base the bid on materials complying with the Bidding Documents, and shall list all information where the bid form requires.
- C. The blank spaces in the bid form shall be filled in correctly with ink or typewritten. A bid form containing an alteration or erasure of any price contained in the bid which is used in determining the lowest responsible bid shall be rejected unless the alteration or erasure is corrected as herein provided:
 - 1. An alteration or erasure must be crossed out and the correction printed in ink or typewritten adjacent to the alteration or erasure.
 - 2. The person signing the bid must initial the correction in ink.
 - 3. In the event that any price used in determining the lowest responsible bid is expressed by the Bidder in both written and numerical form, the written representation shall govern in all cases.
- D. If the bid form includes alternates, each Bidder shall bid on each alternate. Failure to comply may be cause for rejection.
- E. If an individual submits Bid, he or his duly authorized agent must sign his name. If a firm, association or partnership submits the Bid, the name, address and title of each member must be given, and an official or duly authorized agent must sign the Bid. Powers of attorney authorizing agents or others to sign Bids must be properly certified and must be in writing and submitted with the Bid.
- F. Bids from individuals or partnerships, if signed by an attorney-in-fact, shall have attached to the bid the power of attorney, evidencing the authority to sign the bid. If the bid is signed by any other legal entity, the authority of the person signing shall be attached to the bid.
- G. A W-9 Form is required with each bid submittal.

1.10 EXEMPTION FROM SALES TAX ON MATERIALS

A. The Owner is exempted by Section Three of the Illinois Use Tax Act (Sec 3, House Bill 1610 approved July 31, 1961. IL. Rev. Stat. 1961, Chap. 120 Sec 439.3) from paying any of the taxes imposed by that act and sales to the Owner

are exempt by Section Two of the Illinois Retailer's Occupation Tax Act (Section 2, House Bill 1609, Approved July 31, 1961 IL. Rev. Stat. 1961, Chap. 120 Sec. 441) from any of the taxes imposed by that Act.

1.11 IDENTIFICATION AND SUBMITTAL OF BID

- A. Each bid and all papers bound and attached to it shall be placed in an envelope and securely sealed therein. The envelope shall be plainly marked with the following:
 - 1. The word "BID"
 - 2. Name and address of the Bidder.
- B. The envelope of the bid shall be addressed to:

Facilities Planning Manager Lake Land College ETC Parking Lot Light Replacement, Project #2025-001 5001 Lake Land Boulevard Mattoon, Illinois, 61938

C. Bids shall be delivered before the time set for the opening of the bids. Bids arriving by mail or otherwise after the time designated for the opening of bids will be returned unopened. Oral, telephone, facsimile, electronic mail, or telegraph bids shall not be accepted.

1.12 MODIFICATION OR WITHDRAWL OF BID

- A. A bid may not be modified after submittal. Bidders may withdraw a bid at any time before opening. A Withdrawal of a Bid must be made in writing or in person by a bidder or his duly authorized agent. If a firm, association or partnership wishes to withdraw a bid, an official or duly authorized agent must sign the written request or appear in person.
- B. Once withdrawn, the bidder must submit a new bid prior to the opening in order to be considered.
- C. No Bid may be withdrawn or modified after the Bid opening except where the award of the Contract has been delayed beyond 60 days after date of Bid.
- 1.13 OPENING OF BIDS
 - A. The Bids submitted will be opened at the time and place stated in the Advertisement for Bids and publicly read aloud and thereafter shall remain on file with the Owner.

- B. After Bids are opened, the Bids will be tabulated for comparison on the basis of the Bid prices and quantities shown on the Bids.
- C. The Owner reserves the right to withhold the award of the Contract for a period of 60 days from the date of the opening of Bids and no award will be made until the Owner is satisfied as to the responsibilities of the low Bidders.
- D. Until final award of the Contract, the Owner reserves the right to reject any or all Bids or proceed to do the work otherwise in the best interest of the Owner.

1.14 EVALUATION AND CONSIDERATION OF BIDS

- A. The Owner reserves the right to reject all bids or parts of bids, and to waive informalities therein.
- B. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.15 DISQUALIFICATION OF BIDDERS

- A. Bids will not be considered if they show any omissions, additions, alterations of form, conditions not requested unauthorized alternate Bids or irregularities of any kind. However, the Owner reserves the right to waive any irregularities and to make the award in the best interest of the Owner.
- B. The Bidder acknowledges the right of the Owner to reject any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid if the Bidder fails to submit the data required by the Bidding Documents.
- C. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.16 APPLICABLE LAWS

- A. All applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the Work shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.
- B. Bidder's signatures shall be construed as acceptance of and willingness to comply with all provisions of the acts of the General Assembly of the State of Illinois relating to the Department of Human Rights Act, previously the Illinois

Fair Employment Practices Act, Prevailing Wage Act for workers in our area, preference to citizens of the United States and residents of the State of Illinois, and discrimination and intimidation of employees. Provisions of said acts are hereby incorporated by reference and become a part of this proposal and specification.

1.17 EXECUTION OF THE AGREEMENT

- A. The successful Bidder, if awarded the Project, shall sign the necessary Agreements with the Owner and furnish Payment and Performance Bonds and Certificates of Insurance, if required elsewhere in this document, but no such Agreement shall be in force and effect until it is executed by all parties, and the Payment and Performance Bonds and Certificates of Insurance have been approved.
- B. Failure to execute and return the Agreement within ten (10) calendar days may result in the rescinding of the Contract award.

1.18 RECORDS:

A. The Contractor shall maintain, for a minimum of 5 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the Contract shall be available for review and audit, and the Contractor agrees to cooperate fully with any audit conducted and to provide full access to all relevant materials.

END OF SECTION

BID FORM

ETC Parking Lot Light Replacement, Project #2025-001
Board of Trustees
C/O Facilities Planning Manager
Lake Land College District Number #517
5001 Lake Land Boulevard
Mattoon, Illinois, 61938

The undersigned Bidder agrees, if this Bid is accepted, to enter into an Agreement with the Owner, in the form included in the Bidding Documents, to perform and furnish all materials, labor and equipment as specified or indicated in the Bidding Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the terms and conditions of the Contract Documents.

- In submitting this Bid, Bidder represents that:
- A. This Bid will remain subject to acceptance for 60 days after the day of the bid opening.
- B. The Owner has the right to reject this bid.
- C. Bidder will sign and submit the Agreement with the Bonds and other documents as required by the Bidding requirements within 15 days after the Owner's Notice of Award. A W-9 Form is required.
- D. Bidder has copies of all the Bidding Documents.
- E. Bidder is familiar with federal, state and local laws and regulations.
- F. Bidder has correlated the information known to Bidder with the Bidding Documents.
- G. This Bid is genuine and not made in the interest of or on the behalf of an undisclosed person, firm or corporation and is not submitted in conformity with an agreement or rules of a group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; Bidder has not solicited or induced a person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself an advantage over another Bidder or over the Owner.
- H. Bidder has received the following addenda receipt of which is hereby acknowledged. Date Number

Bidder will provide all materials, labor and equipment as specified in accordance with the Contract Documents for the following price(s):

STIPULATED-SUM BID PRICE (ETC Parking Lot Light Replacement) _ Dollars (\$ ____ (figures) (use words) ALTERNATE BID PRICE (ETC Site Bollard Replacement) ___ Dollars (\$_____ (use words) Bidder agrees to provide all materials, labor and equipment, as specified. SUBMITTED on , 2025 , (Seal) Company Address Signed (Printed Name) Phone Fax

BONDS & CERTIFICATES

PART 1 GENERAL

1.01 BID DEPOSIT AND CONTRACT SECURITY

A. No bid security will be required for this project.

1.02 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

- A. Performance Bond required for bids over \$50,000.
- B. Contractors shall be required to furnish, in duplicate, a Performance Bond and a Labor and Material Payment Bond in strict conformance to, and submitted on A.I.A. Document A-312 equal to the full amount of their Contract covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form as the Owner may prescribe and with such sureties as he may approve.
- C. The Contractor's Bonding Agency shall carry either a Rating of "A-VIII" on the AM Best Rating System or be able to show Comparable Financial Status and Bonding Volume. Acceptance of Bonding Agency qualification shall be approved by the Owner.
- D. NOTE: This Performance Bond, and Labor and Material Payment Bond, shall be furnished and in effect before any work is started under this Contract.
- E. The life of the Bond and guarantee shall extend twelve (12) months beyond the day on which final payment under the Contract falls due, or the date of which the Owner accepts the work as completed whichever comes first. If final acceptance is by mutual agreement, a proper date shall be determined.
- F. If before the expiration of the twelve (12) month guarantee period, a Contractor has been notified by the Owner regarding any work to be completed or corrected, any unpaid bills presented to the Owner, or any other unfinished business, the expiration of the twelve (12) month period does not relieve the Contractor or his bondsmen of the proper execution of such items.
- G. The Contractor or his bondsmen shall pay any lien or court costs and attorney's fee of the Owner, and cost that any creditor may incur in the forced collection of any just claim, and interest from date of filing lien until payment is made.
- H. In the event the Contractors should default and it becomes necessary for the sureties to complete the Contract, the Owner reserves the right to approve all Contractors and Subcontracts obtained by the sureties.

I. The General Conditions of this Contract shall govern all issued, and any provisions of the bonds in conflict with these general conditions shall be waived.

1.03 FAILURE TO FURNISH PERFORMANCE BOND

A. Should the successful Bidder fail or refuse to sign a formal written Contract with the Owner, or fail or refuse to furnish a Performance Bond satisfactory to the Owner and the Manager within ten (10) days after written notification of the acceptance of the proposal by the Owner, the Bidder will be considered to have abandoned the proposal. In such event the Owner shall retain all proceeds of the Bid Security (Bid Bond or Certified Check) in order to secure a "Successful Bidder". The term "Successful Bidder" shall be deemed to include any bidder whose proposal is accepted by the Owner.

1.04 COMPENSATION AND PUBLIC LIABILITY INSURANCE

- A. Principal Contractors shall carry sufficient insurance on their workmen to absolutely protect the Owner from any liability or damage resulting to the workmen as provided under the "Workmen's Compensation Act", and "Structural Works Act".
- B. The Principal Contractors and all Subcontractors performing services on said site shall take out and furnish to the Owner, and maintain during the life of this Agreement, complete Owner's Protective Liability Insurance in the amounts as specified herein for bodily injury, property damage, liability, or damage resulting to the Workmen as provided under the Workmen's Compensation and Structural Works Act of the State of Illinois as shall protect the Owner, Principal Contractor, and any Subcontractor performing work covered by this Agreement from claims for damages of personal injury including accidental death, as well as, from claims for property damage which may arise from operations under this Agreement, whether such operations be by the Principal Contractors or by any Subcontractors or by anyone, directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than:
 - 1. Comprehensive Automobile Liability:
 - a) \$1,000,000 Bodily Injury per person.
 - b) \$1,000,000 Bodily Injury per occurrence.
 - c) \$ 500,000 Property Damage per occurrence.
 - d) \$1,000,000 Combined Single Limit coverage for bodily injury and property damage per occurrence in the same aggregate limit will be accepted in lieu of the separate limits specified above.

- 2. Workman's Compensation: Statutory Limits
 - a) Employer's Liability: \$500,000 Bodily Injury per person.
 - b) The Contractor may use a Self-Insured plan for Workman's Compensation Insurance if the plan is approved by the State of Illinois. For approval, the Contractor shall obtain a Certificate from the Illinois Industrial Commission, Office of Self-Insurance Administration, Springfield office.
- 3. Comprehensive general Liability:
 - a) \$1,000,000 Bodily Injury per person.
 - b) \$2,000,000 Product and Completed Operations Aggregate
 - c) \$1,000,000 Bodily Injury aggregate limit.
 - d) \$1,000,000 Property Damage per occurrence.
 - e) \$2,000,000 Property Damage aggregate limit.
 - f) \$1,000,000 Combined Single Limit coverage for bodily injury and property damage per occurrence in the same aggregate limit will be accepted in lieu of the separate limits specified above.
- 4. Umbrella
 - a) \$1,000,000 Umbrella
- B. The above Comprehensive General Liability Insurance shall be specifically endorsed to cover the terms of Liability Insurance for the Owner as set forth hereinafter.
- C. The Contractor shall cause Certificates of Insurance to be deposited with the Owner.

1.05 LIABILITY INSURANCE FOR OWNER

A. The Contractor shall purchase and maintain public liability insurance naming the Owner and his agents and employees as insured with respect to any claim that may be made against the Owner or his agents and employees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense shall be covered by such insurance only if (a) it is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable regardless of whether or not the claimant contends that the Owner or his agents or employees are in part negligent or otherwise legally culpable with regard to the loss.

- B. Such insurance shall provide a defense for the Owner and his agents and employers, including the cost of defense counsel and other expenses of litigation.
- C. Principal Contractors shall carry the insurance of their Subcontractors or shall require their Subcontractors to carry their own insurance in the amounts stated above.
- D. This insurance shall cover all Agreements and any extra work connected with the construction of this Project.
- E. Contractors shall instruct their Insurance Companies to supply the Owner with Certificates of Insurance showing that such insurance is kept in force until completion of the Agreement. These Certificates of Insurance shall be provided before Contractors start any work under this Agreement.

1.06 BUILDERS RISK INSURANCE (Owner)

- A. Immediately after the signing of construction contracts or at such time as construction materials become situated upon the construction site or sites, the Owner will effect and maintain upon the entire structure on which work of this Contract is to be done, and upon all materials, on or adjacent thereto, intended for use thereon, to 100 percent of the insurable value thereof, an All- Risk Coverage Insurance Policy.
- B. This insurance will not cover Contractor's equipment, tools, or storage sheds and temporary buildings.
- C. Any loss is to be made adjustable with and payable to, the Owner, Contractors, Subcontractors, and Material Dealers as their interests may appear at the time of loss.
- D. The Owner, Contractor, and all Subcontractors waive all rights of action, each against the others, for damages caused by fire or other perils covered by insurance provided for under the terms of this Contract, except such rights as they may have to the proceeds of insurance held by the Owner as trustee.

END OF SECTION

SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Where the term "Owner" is used throughout these specifications same shall mean the Lake Land College Board of Trustees as their agent.
- B. Where the term "Manager" is used, it shall refer to the Manager of Facilities Planning Manager.
- C. Where the term "Contractor", "Prime Contractor", or "Principal Contractor" is used, it refers to anyone having a Principal Contract with the Owner.
- D. Where the term "Subcontractor" is used, it refers to anyone having a Contract for labor or material with any of the Principal or Prime Contractor on the job.
- 1.02 THEFT, ETC.
 - A. The Contractors shall be responsible for any damage or loss resulting to the work, materials, or tools due to theft, or in any manner not covered by the insurance called for elsewhere in these Specifications. Payments on account of Contract do not relieve Contractors of this obligation. Contractors may carry Theft Insurance at their own option.

1.03 SOCIAL SECURITY, UNEMPLOYMENT INSURANCE

A. The Contractors shall keep records and pay, all social security, withholding tax, unemployment insurance, and other taxes imposed by the various governmental authorities and laws.

1.04 MATERIAL AND WORKMANSHIP

- A. The owner or his agent shall have full power to reject any material or workmanship which, in their opinion, do not conform with these specifications or drawings, and cause same to be immediately removed and reconstructed without additional cost to the Owner
- 1.05 PERMITS
 - A. The Owner will obtain and pay for all permits required by Local Law, except as indicated otherwise in these specifications.

1.06 CLEANING OF GROUNDS AND BUILDINGS

A. At the completion of the project and before final acceptance by the Owner, the area shall be cleared of all rubbish, materials, and debris which accumulate during the process of work under this Contract. See section 01110 – Summary of Work, of these Specifications.

1.07 SUBCONTRACTORS

- A. The Principal Contractors shall be responsible for any and all Subcontractors working under them, and shall carry insurance for them or see that they are carrying it themselves so as to relieve the Owner of any and all liability.
- B. Nothing contained in the Contract Documents shall create any contractual relation between any Subcontractor and the Owner.
- C. The Owner assumes no responsibility for the overlapping or omission of parts of the work by various Subcontractors in their Contracts with the Principal Contractors.

1.08 PATCHING

A. The expense of any undue alterations, cutting, patching, or repairing of damage due to carelessness or neglect caused by any trade shall be borne by the Contractor for that trade. The work shall be done by the workmen of the Contractor whose work was damaged so that such patching will be least conspicuous.

1.09 OTHER WORK NOT IN CONTRACT

A. The Owner reserves the right to let separate Contracts for other work in connection with this project, but agrees that such work shall not interfere with the work of the Contracts previously made.

1.10 EXTRAS AND CHANGES

- A. Should any extra work or changes be required during the work, the Owner and Contractor shall agree upon the price for such extra work or changes and the Owner shall issue a change order to the Contractor for such work as agreed upon. Payment shall be made under same conditions as for original Contract.
- B. No payment shall be made for extra work or materials unless a formal written change order is issued by the Owner.

1.11 CORRECTION OF WORK AFTER FINAL PAYMENT

- A. Neither the final Certificate, nor payment, nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials or workmanship discovered to be not as specified or shown on the Drawings.
- B. The Contractor shall remedy any defects due thereto, and pay for, any damages to other work resulting therefrom, which shall appear within a period of one year from the date of acceptance.
- C. The Owner shall give notice of observed defects with reasonable promptness. The Owner shall judge the defects as to maintenance, workmanship, or material defects.
- D. All questions arising under this article shall be decided by the Owner subject to arbitration.

1.12 LOCAL LABOR

A. It is the desire of the Owner that the Contractors make use of all local labor, material, insurance, etc., if possible, as long as it does not work a hardship on the Contractors.

1.13 PRECEDENCE OF DOCUMENTS

- A. The Contract Documents shall be given precedence in the following order, provided they are in existence at the time of the closing of the Contracts:
 - 1. Agreement
 - 2. General Conditions of the Contract
 - 3. Any Valid Building Code
 - 4. Specifications
 - 5. Full Sized Detail Drawings
 - 6. Large Scale Drawings
 - 7. General Drawings

1.14 PROTECTION OF GENERAL PUBLIC

A. All Contractors shall provide protection of the general public at all times, providing protection devices as prescribed by laws having jurisdiction.

B. The Contractor will, at all times, take all reasonable precautions for the safety of employees on the project, and of the public and all other persons who may be affected, and will comply with all applicable provisions of Federal, State, and Municipal Safety Laws and Building and Construction Codes.

1.15 GUARANTEE & WARRANTIES

- A. All Prime Contractors shall guarantee their work and the work of their Subcontractors for a period of one year from the date of acceptance of their work, unless stipulated for a longer period of time under specific sections of the specifications.
- B. All items requiring a warranty certificate from the manufacturer shall be executed and the certificate delivered to the Owner before final payment can be approved.

1.16 SUPERINTENDENT

- A. The General Contractor shall keep a capable superintendent on the job site at all times when major work is in progress. This Superintendent shall lay out all work required under the Contract and also assist other Contractors in laying out and planning their work.
- B. The Contractors, or his Superintendent, shall also notify other Contractors when it will be necessary to install certain work and take complete responsibility for co-ordination of construction.

1.17 REQUIREMENTS

- A. All Contractors shall comply with all laws, rules and regulations governing the work under this Contract.
- B. Should the Contractor observe anything in the contract documents that is contrary to any code requirement, he shall notify the Owner immediately in writing. The Owner shall issue all changes required to correct the variance, and be responsible for code interpretations.

1.18 OCCUPATIONAL SAFETY AND HEALTH

A. It shall be each Contractor's responsibility to comply with all local, state and federal laws and regulations governing job safety and health standards, and the requirements of the "Occupational Safety and Health Act of 1970" enacted by Congress and signed into law on December 29, 1970 and all applicable changes, revisions, and amendments.

1.19 FAIR EMPLOYMENT PRACTICES

A. All Contractors agree that, in accordance with an Act to prohibit discrimination and intimidation on account of race or color in employment and Contracts for public buildings or public works, approved July 8, 1933, as amended, no person will be refused or denied employment in any capacity on the grounds of race or color, nor be discriminated against in any manner by reason thereof in connection with the performance of the work set forth in the attached drawings and specifications; nor will any unfair employment practice, as defined in the Fair Employment Practices Act, approved July 21, 1961 and all applicable changes, revisions, and amendments, be committed by the said Contractor.

1.20 PREVAILING WAGE POLICY

- A. The Owner has established a general prevailing rate of hourly wage in said District, as determined by the Illinois Department of Labor.
- B. All Contractors and Subcontractors shall comply with the following and any later amendments thereto:
- C. "Illinois Statutes, as amended by Act approved August 8, 1961, (SB No. 250) (Rev. State Chap. 48, Sec. 39S-1 et.seq.) declared to be the policy of the State of Illinois that a wage of no less than the general prevailing hourly rate as paid for work of a similar character in the locality in which the work is performed, shall be paid to all laborers, workmen and mechanics employed by or on behalf of any and all public bodies engaged in public works, exclusive of maintenance work."
- D. Contractors shall have the responsibility of complying with all aspects of the Prevailing Wage Policy.
- E. Certified payroll documentation must be provided to the college by the 15th of the following month.

1.21 BUSINESS ENTERPRISE FOR MINORITIES, FEMALES, AND PERSONS WITH DISABILITIES ACT

- A. On August 25, 2015, Governor Rauner signed into law the Business Enterprise for Minorities, Females, and Persons with Disabilities Act (30 ILCS 575), effective immediately. The Act stipulates certain requirements regarding the use of businesses owned by minorities, females and persons with disabilities for the procurement of goods and services by State agencies, universities, and community colleges.
- B. The College recognizes the importance of increasing the participation of businesses owned by minorities, females and persons with disabilities in public contracts in an effort to overcome the discrimination and victimization such firms have historically encountered. It is the College's policy to promote the economic development of businesses owned by minorities, females and persons with disabilities by setting aspirational goals to award contracts to businesses owned by minorities, females, and persons with disabilities for certain services as provided by the Business Enterprise for Minorities, Females and Persons with Disabilities Act, 30 ILCS 575/0.01 et seq. (the "Act") and the Business Enterprise Council for Minorities, Females, and Persons with Disabilities (the "Council").
- C. Certified Business Enterprise Contractors
- In determining whether a business is owned by a minority, female, or person with disabilities, the College shall require the business to provide proof of certification by the Business Enterprise Council, an entity delegated the authority to make certifications by the Business Enterprise Council, or by a state agency with statutory authority to make such a certification, that the business entity is owned by a minority, female, or person with a disability, or by submitting an ownership affidavit provided by the College.
- D. Subcontractors and Suppliers
- The College's aspirational goals are based on the total dollar amounts awarded to businesses owned by minorities, females, and persons with disabilities. All funds awarded to any certified subcontractors and/or suppliers shall be included for the College's aspirational goals, so long as the expenditures are direct, necessary, and proximately related to the work or service of the contract.
- E. Evaluation of Contracts to Facilitate Aspirational Goals
- These procedures shall not eliminate, alter, reduce, alleviate or modify in any way the College's procedures for purchasing. However, in addition to the College's purchasing procedures, the College shall evaluate all contracts, except those subject to federal reimbursement, to determine whether the

bidder or contracting party assists the College in meeting its aspirational goals as set forth above, and increase the participation of businesses owned by minorities, females, and persons with disabilities in contracts with the College.

- F. Bidding Requirements.
- 1. Bid Documents
- a. When the College procedures and/or state law require the College to competitively bid a contract, the College shall state in its bid documents the College's aspirational goal for the contract. The College's bid documents shall also require each bid submitted for a contract to include: (i) the bidder's name, (ii) the bid amount, and (iii) a business enterprise program utilization plan indicating the percentage of disadvantaged businesses that will be awarded by the bid.
- 2. Lowest, Responsive and Responsible Bidder
- a. As required by state law and the College's purchasing procedures, the College shall award contracts subject to state public bidding requirements to the lowest, responsive and responsible bidder. A bidder's failure to complete a utilization plan or submit necessary certifications shall be an issue of "responsiveness" which may make the bidder ineligible to receive the contract. In awarding contracts, the College shall also consider that the definition of "lowest responsible bidder" is broader than "lowest bidder" or "financially responsible", and that in proper circumstances, certain public interests can be considered as "responsible" in the College's discretion as allowed by applicable state laws, rules or regulations.
- 3. Opportunity to Cure
- a. In the event that a bidder offers the lowest, responsive and responsible bid but fails to meet the contract's aspirational goals, the College shall notify the bidder of this deficiency and give the bidder no more than ten (10) days to cure that deficiency. The College may provide the bidder with sufficient information necessary to obtain the Business Enterprise Council's list of certified businesses owned by minorities, females and persons with disabilities. The bidder may only cure this deficiency by subcontracting with businesses that are certified as provided in these procedures.
- 4. Good Faith Effort Procedures
- a. If the bidder cannot meet the contract's aspirational goal, the bidder must document in the utilization plan its good faith efforts that could reasonably have been expected to meet the goal. The College shall consider the quality, quantity, and intensity of the bidder's efforts, and may evaluate the bidder's:
- i) Solicitation through all reasonable and available means of certified subcontractors, suppliers, and/or vendors that have the capability to perform the work required by the contract. The bidder must solicit this interest to give certified businesses sufficient time to respond to the solicitation, must provide adequate information about the plans, specifications, and contract requirements in a timely manner, and must take appropriate steps to follow up initial solicitations.

- ii) Use of resources from the College, the Business Enterprise Council, and any other business or community groups that provide assistance in the recruitment and placement of certified businesses.
- iii) Selection of portions of the contract work to be performed by certified vendors to increase the likelihood that the goal will be achieved. This includes, where appropriate, breaking out contract work items or services into economically feasible units to facilitate participation by certified businesses, even when the bidder might otherwise prefer to perform the work or services with its own employees.
- iv) Negotiation in good faith with interested certified businesses. In order to show good faith efforts, the bidder's utilization plan shall include the names, addresses, and telephone numbers of certified businesses that were considered, and an explanation for why an agreement could not be reached.
- v) Thorough investigation of the capabilities of certified businesses and not rejecting them as unqualified without sound reasons.
- vi) Efforts to assist interested certified businesses in obtaining contract required lines of credit, insurance, equipment, supplies, materials, or other related assistance or services.
- 5. Award of Contract
- a. If the College determines that the bidder is the lowest, responsive and responsible bidder and has either met the contract's aspirational goals or has made a good faith effort to meet the goal, the College may award the contract to the bidder. The College shall have the right to reject all bids and re-bid the contact in its sole discretion.
- 6. Incorporation into Contract
- a. The successful bidder's utilization plan shall become part of the awarded contract and shall not be modified or amended without the College's written consent.

END OF SECTION

SUMMARY OF WORK

PART 1 GENERAL

1.01 SCOPE

- A. Provide parts and labor to replace existing metal halide parking lot pole light luminaires with LED.
- B. The work includes, but is not limited to:
 - 1. Remove/dispose of (23) existing pole mount metal halide luminaires. Proper disposal and/or recycling of removed luminaries is the responsibility of the contractor.
 - 2. Provide/install (23) LED pole mount area/site luminaires.
 - 3. New luminaires will be installed on existing 30ft tall round light poles. Existing electrical service and lighting controls will be used.
 - 4. Provide alternate cost to remove/dispose (51) existing fluorescent bollard lights and replace with new LED bollards.
 - 5. The address is located within Ameren Illinois electric delivery service territory. All efforts or suggestions to take advantage of any available incentives or rebates will be given additional consideration.
- C. Furnish labor and materials, tools, supervision, and services required to provide a complete operable and acceptable installation.
- D. All items required to complete the project shall be provided by the Contractor unless noted otherwise.
- E. If a Bidder is unable to comply with any of the following specifications, the Bidder shall submit in writing the reason for noncompliance. Noncompliance with any specification is grounds for rejection of the entire bid. The buyer reserves the right to reject any bid which does not meet these specifications.
- F. Before submitting a proposal, the contractor shall visit the site of the work and shall carefully examine the work and be fully responsible for achieving the intent of the project.

G. Each bid shall be accompanied by two copies of detailed manufacturers literature with complete written descriptions and graphical illustrations of each item of equipment included in bid.

1.02 SUBMITTALS

- A. Product Data: Include data on features, accessories, finishes, and the following:
 - 1. Physical description of luminaire including dimensions.
 - 2. Energy-efficiency data.
 - 3. Life, output, and energy-efficiency data for lamps.
 - 4. Photometric data, in IESNA format, based on laboratory tests of each lighting fixture as applied. The following are acceptable:
 - Photometric data shall be certified by a manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program (NVLAP) for Energy Efficient Lighting Products
- B. Operation and Maintenance Data: Include all applicable operation, and maintenance manuals.
- C. Warranties: As specified in this Section.

1.03 QUALITY ASSURANCE

- A. All equipment shall have a nameplate/tag that identifies the manufacturer's name, address, type or style, model or serial number, and catalog number.
- B. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
- C. All materials shall bear the underwriters label of approval, or otherwise labeled and listed as defined in NFPA 70, and shall be installed according to manufacturer's specifications.

D. The Contractor shall assume responsibility of proper installation of materials in the space available and must comply also with applicable provisions of NFPA, NEMA, IEEE, ASTM, and ANSI.

1.02 LOCATION

E. This project is located at the Effingham Technology Center, 1201 Althoff Dr, Effingham, Illinois.

1.03 COMMENCEMENT AND COMPLETION DATE

- A. All work on this project is subject to the College's schedule and circulation needs, which are as follows:
 - 1. Coordinate Work schedule with the Manager. This project and bid will be taken to the Board of Trustees meeting on March 10, 2025 for approval. Coordination of the work schedule can begin after Board approval is granted.
 - 2. Two days' notice is required for schedule changes.
 - 3. Weekends are available with prior approval from the College.
 - 4. Any alternate dates MUST be coordinated with the College.
 - 5. The tentative project completion deadline is June 27, 2025.
 - 6. PROVIDE PROPOSED SCHEDULE WITH BID.

1.04 COORDINATION WITH OWNER

- A. The building will be occupied by the Owner and their tenants during all phases of construction. It shall be the Contractors responsibility to coordinate the work with the Owner to maintain access to roadways, parking and buildings during normal hours of operation, and to minimize conflict with the College's schedule.
- B. Sequence of work shall be coordinated with the College and be scheduled to minimize inconveniences for the College students and staff.
- C. A copy of the College calendar is available upon request.
- D. The Contractor shall notify the Owner three (3) working days prior to commencing work on site.

1.05 CONTRACTOR'S RESPONSIBILTIES

- A. The General Contractor on this project regardless of whether he has a Contract for the General Construction or complete Construction Work shall have the responsibility of coordinating and directing the work. This shall include the scheduling and/or co-ordination of all other Prime Contractors having a contract with the Owner and shall include assistance to these Contractors in the layout of their work when it must be coordinated with work the General Contractor is performing. The General Contractor shall include the cost of performing this co-ordination in his Bid.
- B. The remaining Prime Contractors and Subcontractors on the project will be charged with scheduling their own work so that it can be coordinated with the General Contractors schedule. They shall give the General Contractor their full co-operation.
- 1.06 UTILITY SERVICE DISRUPTION
 - A. This project will not require interruption of utility service.
- 1.07 BUILDING PROTECTION
 - A. The Contractor shall be responsible for protecting the existing buildings and contents from damage from any cause as a result of work to be performed under this Contract. Any damaged to buildings or contents shall be repaired or replaced to equal the original condition of the damaged area or contents.
 - B. All damaged buildings or contents shall be repaired or replaced at the Contractor's expense and to the satisfaction of the Owner.

1.08 SITE PROTECTION

- A. The Contractor shall be responsible for protecting the adjacent site from damage from any cause as a result of work to be performed under this Contract. Any damaged areas, including yard areas and plants, walks, steps, paved areas, irrigation system, etc., shall be repaired or replaced to equal the original condition of the damaged areas.
- B. All damaged areas shall be repaired at the Contractor's expense and to the satisfaction of the Owner.

1.09 MATERIAL STORAGE

A. The Owner will allocate certain areas of the site for the purpose of storing materials and equipment and locating Contractor's temporary office. The Contractor shall contact the Owner before any materials are situated in the building or on the site and determine a general plan for storing materials.

B. Materials are shall be placed on the site in a neat and orderly manner.

1.10 CLEANING OF GROUNDS

- A. The site shall be maintained free of unnecessary debris and clutter during all phases of construction.
- B. At the completion of the project and before final acceptance by the Owner, the site shall be cleared of all rubbish, materials, and debris which accumulated during the process of construction.

PART 2 PRODUCTS

- 2.01 WARRANTY
 - A. Contractor shall provide 1 year warranty on all labor and material installed under this scope.
 - B. Contractor shall also provide copies of all manufacturers' warranties for parts and equipment installed.
- 2.02 LED LINEAR HIGH BAY
 - A. Fixture Type: LED Area & Site Luminaire
 - 1. Available Manufacturers:

Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- 1) McGraw-Edison
- 2) Lumark
- 3) Streetworks
- 4) Invue
- 5) Or approved equal.
- 2. Voltage: 480V AC
- 3. Initial Lumens: 24,000
- 4. CRI: > 70
- 5. Color temperature (K): 4,000K
- 6. Environment Temperature: -40°C to 40°C ambient

- 7. Each Luminaire shall consist of an assembly that utilizes LEDs as the light source. In addition, a complete luminaire shall consist of a housing, LED array, and electronic driver (power supply).
- 8. Reported lumen maintenance (using DOE Energy Star TM-21 Calculator) shall be greater than 96% per TM-21-11 after 78,000 hours of luminaire operation in an ambient environment of 40°C (104°F). This data must be TM-21 compliant and derived from the EnergyStar.gov TM-21 Calculator.
- 9. Luminaire shall be constructed such that LED modules may be replaced or repaired without replacement of the luminaire.
- 10. Each luminaire shall be listed with Underwriters Laboratory, Inc. under UL1598 for luminaires, or an approved equivalent standard from a nationally recognized testing laboratory.
- 11. Luminaire shall DLC approved.
- 12. Country of manufacture will be TAA compliant
- 13. Optical Assemblies: LEDs shall be provided with discrete over-optic elements to provide an IES Type III and IV distribution. Optical assemblies shall have a minimum efficiency of 85% regardless of distribution type. All LEDs and optical assemblies shall be mounted parallel to the ground when the fixture is installed at 0 degree tilt. All LEDs shall provide the same optical pattern such that the failure of individual LEDs will not constitute a loss in the distribution pattern.
- 14. Heavy-wall die-cast aluminum housing. Housing shall be designed to allow water runoff on the top of the housing when mounted horizontally.
- 15. Luminaire shall include a die-cast aluminum mounting arm to universally accommodate pole drill patterns from 1-1/2" to 4-7/8". Standard mounting arm must mount to round and square poles without the use of an adapter. Standard mounting arm to act as electrical enclosure for all fixture wiring during installation.
- 16. The housing assembly shall be protected against mechanical impact to withstand an IK10 rating.
- 17. See attached fixture spec for example

PART 3 EXECUTION

3.01 INSTALLATION

- A. Lighting fixtures: Install in locations of existing metal halide fixtures reusing existing 30ft tall round taper poles.
- B. The existing asphalt parking surfaces, etc., for the entire project shall be protected from any damage, marks, gouges, scrapes, etc. by whatever means necessary/required, and with the approval of the owner prior to commencing work. Any damage shall be repaired at the full expense of the contractor and at no additional cost to the owner. This includes building entry points and corridors used by the contractor to access the project area.
- C. Contractor will provide for clean-up of all dust debris, and other waste produced as a result of the work performed by contractor
 - 1. All debris to be disposed of in accordance with all laws and regulations, both local and federal.
 - 2. Contractor is responsible for supplying ALL dumpsters or waste containers for scope of work

END OF SECTION

PAYMENT PROCEDURES

PART 1 GENERAL

1.01 PAYMENTS

- A. The Owner will make payment on account of the Contract as follows:
 - 1. Upon completion of all work as directed in these specifications the Contractor shall request payment in full. Payment made via ACH is strongly encouraged.
 - 2. Payment will be made provided Manager certifies that the work meets all requirements of these specifications. Successful bidder must provide a W-9 for processing of payment.
 - 3. The Contractor shall provide an invoice for the work which will satisfy the following:
 - 1) Itemize separate line item cost for each major division of work, using specifications Table of Contents as basis for format for listing cost of work.
 - 2) List all major subcontracts and subcontractors.
 - 3) All forms must be typed and all sections of the forms completed.
 - 4) All forms must have ORIGINAL SIGNATURE and be NOTARIZED.

1.02 PAYMENTS WITHHELD

- A. The Owner may withhold, or on account of subsequently discovered evidence, nullify the whole or part of any payment to such an extent as may be necessary to protect the Owner from loss on account of:
 - 1. Defective work not remedied.
 - 2. Claims filed or reasonable evidence indicating probable filing of claims.
 - 3. Failure of the Contractor to make payment properly to Subcontractors for materials and/or labor.
 - 4. A reasonable doubt that the Contract can be completed for the balance then unpaid.
 - 5. Damage to another Contractor.

- B. When the above conditions are remedied payment will be made for the amounts withheld.
- C. Should the Contractor fail to perform any work according to the drawings and specifications, or should he refuse to correct any work not done according to the drawings and specifications, the Owner may, after having given the Contractor ten days written notice, construct such work or make repairs necessary to meet the requirements of the Contract. The cost of such work shall be deducted from the final payment due the Contractor.

LIEN WAIVERS

- A. Before final payment, the Contractor shall submit Lien Waivers marked "FINAL" from all Subcontractors and Material Suppliers covering all labor and materials furnished on the job. All Lien Waivers shall have ORIGINAL SIGNATURES and be NOTARIZED.
- B. If any Lien or unpaid bills should be presented to the Owner after full payment has been made to a Contractor, the Contractor or his bondsmen shall refund to the Owner all the money the latter may be compelled to pay in discharging such obligations, including all court costs and reasonable attorney's fees.
- C. During the course of construction should there be any doubt regarding whether or not the Contractor has been paying his bills or subcontractors promptly, Waivers of Lien Partial may be requested and shall be submitted.

END OF SECTION

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 TEMPORARY ELECTRICAL ENERGY

A. Temporary electrical energy is not required for this work.

1.02 WATER FOR CONSTRUCTION WORK

A. Water for construction purposes is available at the site, and shall be paid for by the Owner. Contractors shall arrange for their own distribution. Temporary distribution apparatus shall not be allowed to interfere with normal functions of the Owner.

1.03 TEMPORARY SANITARY FACILITIES

- A. Toilet facilities in the existing buildings may be used by Contractor's personnel during performance of the work. Coordinate the use of existing toilet facilities with the building officials.
- B. Maintain toilet facilities used by Contractor's personnel in a clean and sanitary condition.

END OF SECTION

Project	Catalog #	Туре	
Prepared by	Notes	Date	



GALN Galleon II

Area / Site Luminaire

Product Features



Product Certifications























Ouick Facts

• Lumen packages range from 3,300 - 99,100 (33W - 658W)

• Energy and Performance Data page 6

• 17 optical distributions

P Interactive Menu

• Ordering Information page 2 • Mounting Details page 3

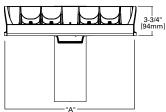
• Optical Distributions page 5 • Product Specifications page 5

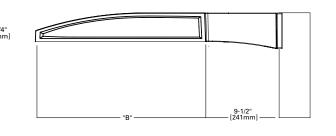
• Control Options page 13

• Efficacy up to 171 lumens per watt

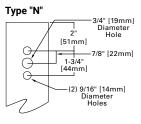
Dimensional Details

Standard Pole Mount Arm





Pole Drilling Pattern



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

NOTES:

Visit <u>https://www.designlights.org/search/</u> to confirm qualification. Not all product variations are DLC qualified.
 IDA Certified (3000K CCT and warmer only, fixed mounting options)



GALN Galleon II

Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

	1	Light Engine Config	Iration	Color					
Product Family ^{1, 2}	Light Square	Square Count	Lumen Output	Temperature	Voltage	Distr	ribution	Mounting	Finish
(GALN=Galleon II) BAA-GALN=Galleon II Buy American Act Compliant ²⁶ TAA-GALN=Galleon II Trade Agreements Act Compliant ²⁶	(SA=16 LED (Light Square) SB=26 LED Light Square ³⁵	1=1 Light Square 2=2 Light Squares 3=3 Light Squares 6=6 Light Squares 6=6 Light Squares 6=6 Light Squares 8=8 Light Squares 9=9 Light Squares	A=Output Level 1 B=Output Level 2 C=Output Level 3 D=Output Level 4, 415 Z=Configured Output ²² 722=70CRI, 2200K 730=70CRI, 200K 735=70CRI, 3000K 740=70CRI, 3000K 740=70CRI, 3000K 750=70CRI, 5000K 750=70CR, 5000K 830=80CRI, 3000K 835=80CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 3500K 936=90CRI, 5000K 936=90CRI, 5000K 936=90CRI, 5000K 936=90CRI, 5000K U=120-277V H=347V-480V 2=208V 3=240V 4=277V 9=347V ⁷ D=277V D=277V-480V DraVolt Drivers ^{38, 39, 30} T1=Type I T2=Type II T2=Type II T2=Type II T3R=Type II T3R=Type II T3R=Type II T3R=Type II T4R=Type IV M/ SNQ=Type V Na SNQ=Type V Sa SNQ=Type V Sa SNQ=Type V Sa SIZ=Type II w/S SIZ=Type			adway orward Throw ide uare Medium uare Wide spill Control Spill Control Spill Control Spill Control ght Eliminator Left ght Eliminator r Wide Type I	[Blank]=Standard Pole Mount Arm QU=Quick Mount Universal Arm QM=Pole Mount Arm with Quick Mount Adaptor PA=Pole Mount, Adjustable * SP2=2-3/8" Slipfitter, Adjustable * QMA=Quick Mount Mast Arm, Fixed MA=Mast Arm, Fixed WM=Wall Mount, Fixed WP=Upswept Arm	AP=Grey BZ=Bronze (BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White RALXX=Custom Color	
Op	tions (Add as Suffix)	Cont	rols and Systems Optic	ons (Add as Suffix)			Accessories (Order Separately)	27
DIM-External 0-10V Dir F=Single Fuse (120, 27; FF=Double Fuse (208, 2, 20K-20KV UL 1449 fus: 2L=Two Circuits ¹⁰ HA=50°C High Ambient HSS=Installed House S GRSBK-Glare Reducing LCF=Light Square Trim TH=Tool-less Door Hart CC=Coastal Constructic L90=Optics Rotated 90 AHD145=After Hours D AHD245=After Hours D AHD245=After Hours D AHD255=After Hours D DALI=DALI Drivers	7 or 347V Specify Vo 40 or 480V Specify ed surge protective ¹⁶ (de Shield ¹⁷ Shield, Black ²² 3 Shield, White ²² 9 Shield, White ²² Painted to Match Hi dware ⁵ 2 Left * Right im, 5 Hours ²¹ im, 7 Hours ²¹	Voltage) device ¹⁰	PR=NEMA 3-PİN Photocontrol Receptacle 0A/R. PR7-NEMA 7-PIN Photocontrol Receptacle 0A/R. PR7-NEMA 7-PIN Photocontrol Receptacle 0A/R. PR0C=Field Adjustable Dimming Controller 0A/R. PS2=Photocontrol Shorting Cap 0A/R. SPB4=Dimming Motion Sensor, 9'-20' mounting ²³ 0A/R. SPB42/X=Dimming Motion Sensor, 11-40' mounting ²³ 0A/R. SPB4/X=Dimming Motion Sensor, 11-40' mounting ²³ 0A/R. MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting ²³ 0A/R. MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting ²³ 0A/R. MS/DIM-L40=Motion Sensor for Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{18, 12, 23, 44} 0A/R. Programmable, 7' - 15' Mounting ^{18, 12, 23, 24} 0A/R. 0A/R. MPSXXX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC 0A/R. 0A/R. Programmable, 15' - 40' Mounting ^{18, 12, 13, 24} 0A/R. 0A/R. 0A/R. MPSXXX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC			OA/RA1027=NEM, OA/RA1013-Phot OA/RA1013-Phot OA/RA1013-Phot OA/RA1013-Phot OA/RA1013-Phot OA/RA1013-Phot OA/RA1013-Phot NA103-XX=30 MA103-XX=30 MA103-XX=30 MA1190-XX=30 MA1190-XX=30 MA1190-XX=30 MA1193-XX=40 MA119	ge Module Replacement e Tenon Adapter for 2-3/8" 0.D. 30" Tenon Adapter for 2-3/8" 0.D. 6" Tenon Adapter for 3-1/2" 0.D. 30" Tenon Adapter for 3-1/2" 0.D. 31" Tenon Adapter for 3-1/2" 0.D. 31" Tenon Adapter for 3-1/2" 0.D. 32" Tenon Adapter for 3-1/2" 0.D. 33" Tenon Adapter for 3-1/2" 0.D. 34" Tenon Adapter for 3-1/2" 0.D. 34" Tenon Adapter for 3-1/2" 0.D. 35" Tenon Adapter for 3-1/2" 0.D. 36" Tenon Tool for MS/DIM 318" Aducing Shield, Black ^{9, 22} 318" Reducing Shield, White ^{9, 22}	Tenon). Tenon Tenon Tenon Tenon Tenon). Tenon Tenon Tenon Tenon Tenon Y8" O.D. vertical	

- 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. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models 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. Net available unit TLL actions 2. 3.
- Not available with TH option. 4 When using SA light squares, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is used
- 5. 6. 7
- used. Th option not 3G rated. Not available with Coastal Construction (CC) option. Not available with voltage options H, B or 9. Not available with SB1 or SB2A configurations. Not available in combination with HA high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9. SP arm limited to 3' 0. Vertical tenon. SP2 limited to 2:3/8' 0.0. vertical tenon. One required for each Light Square. Oil is not available with SB mith sensor available with SPB at 347 vor 480V. Not available with Wavel inv or 20KV surgers

- 10. 2L is not available with SB light squares. Not available with SPB at 347V or 480V. Not available with WaveLinx or 20kV surge option. Requires PR7. 11
- Replace XX with sensor color (WH, BZ or BK.).
- 13
- 14.
- Replace XX with sensor color (WH, BZ or BK). WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose Output Level 1; supplied at 500mA drive current only. Not available with 58 light squares. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. Set of 4 pcs. One set required per Light Square. HA option not available with Output Level 4 or AMB Amber. Not for use with T1, 5NQ, 5MQ, 5WQ or RW optics.
- 16. 17.

- 19.
- Cannot be used with other control options. Low voltage control lead brought out 18° outside fixture. Not available with DALI or integrated controls options. Not available if any SPB, LWR, or WaveLinx sensor is selected. Motion sensor has an integral photocell. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB 20. 21.

- 21. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using output Level 4.

 22. Not for use with 11, TAF, TAW or SL optics. See IES files for details. Not available with SB light squares.

 23. Sensor configuration mobile application required for configuration. See controls page for details.

 24. Replace X with number of Light Squares controlled by the SPB, referencing the 'SPB/X Availability Table' on the controls page.

 25. Not available with HSS, GRSWH or GRSBK.

 26. 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 1973 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information.

 27. For BAA or TAA requirements, Accessories soil separately analyzed under domestic preference requirements.

 27. For BAA or TAA requirements, Accessories soil separately will be separately analyzed under domestic preference requirements.

 28. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
- UtraVolt drivers teature added protection from power quality issues such as loss of neutral, transients and voitage fluctuations. Visit www.signity.com/duravolt for more information.
 480V not to be used with ungrounded or impedance grounded systems.
 Not available with SA1A or SA1B. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option except SPB
 Cannot be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output Level 4.
 Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with SB light squares

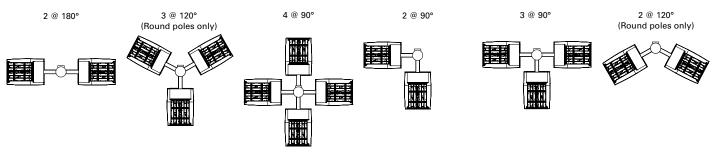
- Use Vack Product Comparation to specify liament output, arrive current and wartage. Not available wint Avb. Not available with se light squares.
 Uses the FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
 Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx).
 Available with T1, T2, T3, T4FT, SL4 and 5WQ distributions.
 Requires kinklesh central base station CBSSW-450-002 and Synapse commissioning for operation.



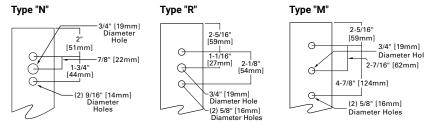
GALN Galleon II

Mounting Details

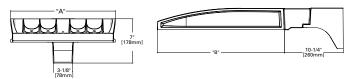
Pole Configuration Options



Pole Drilling Patterns

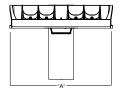


Quick Mount Universal Arm (QU)



*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

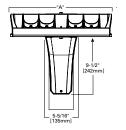
Pole Mount Arm with Quick Mount Adaptor (QM)





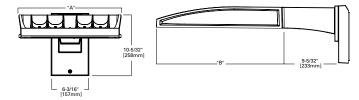
*NOTE: Use Type N drilling pattern

Upswept Arm (UP)



al bolt pa

 Wall Mount, Fixed (WM)

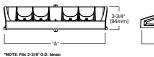


Quick Mount Mast Arm (QMA)

3-3/4" [94mm]

Mast Arm, Fixed (MA)

*NOTE: Fits 2-3/8" O.D. tenon





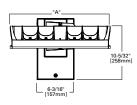
0 0

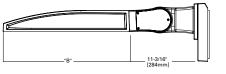
npatible with Type N through Type M drilling patterns

GALN Galleon II

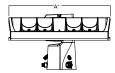
Mounting Details

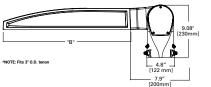
Wall Mount, Adjustable (WA)



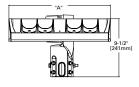


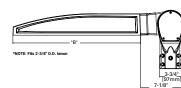
3" Slipfitter, Adjustable (SP)



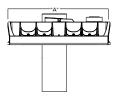


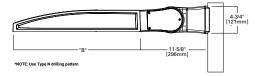
2-3/8" Slipfitter, Adjustable (SP2)





Pole Mount, Adjustable Arm (PA)





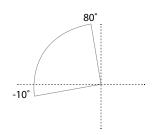
Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
0°	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
15°	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
30°	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
45°	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
60°	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40



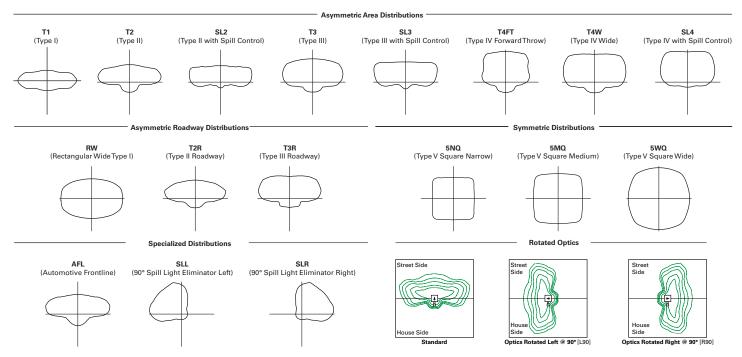
Adjustable Arm Range of Motion

- Includes WA, SP, SP2 and PA mounting options
- Adjustable in increments of 5°
- Must maintain downward facing orientation



GALN Galleon II

Optical Distributions



Product Specifications

Construction

- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 17 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)

Electrical

- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting

- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Typical Applications

Outdoor, Parking Lots, Walkways, Roadways, Building Areas

Warranty

• Five-year limited warranty. Consult website for details. www.cooperlighting.com/legal



GALN Galleon II

Energy and Performance Data

Lumen Maintenance (TM-21)

Output Level	Ambient Temperature	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%	> 2.4M
Output Levels 1-3	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
Output	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
Level 4	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* 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.

FADC Settings SA1-SA3 (All Output Levels)

OAT OAD (All Output Ecvels)				
FADC Position	Percent of Typical Lumen Output			
1	25%			
2	48%			
3	56%			
4	65%			
5	75%			
6	80%			
7	85%			
8	90%			
9	95%			
10	100%			
Note: / F% typical value				

FADC Settings
SA4-SA6 (All Output Levels)

FADC Position	Percent of Typical Lumen Output			
1	14%			
2	25%			
3	32%			
4	43%			
5	49%			
6	57%			
7	65%			
8	72%			
9	80%			
10	100%			
Note: +/-5% typical value				

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				

FADC Settings SA7-SA9 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Note: +/-5% typical value

Note: +/-5% typical value

Note: +/-5% typical value



GALN Galleon II

A Ligi	nt Squares, Output Level 2	2, 4000K CCT, 7	O CRI				📌 Galleon I	IES Files	Supplemental	Lumen Tal
lumbe	r of Light Squares	1	2	3	4	5	6	7	8	9
lomina	I Power (Watts)	44	82	121	164	204	243	286	325	364
	urrent @ 120V	0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
•	urrent @ 208V	0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
-	urrent @ 240V	0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
•	urrent @ 277V	0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
-	urrent @ 347V	0.100	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
	urrent @ 480V	0.092						0.605		
	urrent @ 480V	0.092	0.172	0.258	0.344	0.432	0.517	0.005	0.706	0.775
ptics				1					1	1
	Lumens	5,748	11,423	16,957	22,470	28,446	33,683	39,563	45,867	51,494
T1	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-0
	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
T2	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-0
	Lumens per Watt	132	140	141	138	140	140	139	142	143
	Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
r2R	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-0
	Lumens per Watt	133	142	143	140	142	142	141	144	144
	Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,15
тз	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-
	Lumens per Watt	130	138	139	136	139	138	137	140	141
	Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,78
r3R	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-
	Lumens per Watt	134	143	144	140	143	142	142	145	145
	Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,47
4FT	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-
	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,62
'4W	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-
	Lumens per Watt	131	140	140	137	140	139	139	141	142
	Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,49
SL2	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-
	Lumens per Watt	131	139	140	137	139	139	138	141	141
	Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,12
SL3	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-
	Lumens per Watt	130	138	139	136	138	138	137	140	140
	Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,49
SL4	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-
	Lumens per Watt	128	137	137	134	137	136	136	138	139
	Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,83
NQ	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-
	Lumens per Watt	137	146	147	143	146	145	145	148	148
	Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,10
MQ	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-
	Lumens per Watt	137	146	147	144	147	146	145	148	149
	Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,98
5WQ	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,46
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,22
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-
	Lumens per Watt	135	144	145	142	144	143	143	146	146
	Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
AFL	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-0
	Lumens per Watt	132	141	142	139	141	140	140	143	143
	per matt							1 10		1-45



Project	Catalog #	Туре	
Prepared by	Notes	Date	



McGraw-Edison BRT6 Bollard

Round LED Pedestrian Luminaire

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 2
- Energy and Performance Data page 3

Product Certifications







ALTERNATE BID

FIXTURE SPEC



IK10









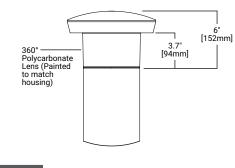
Quick Facts

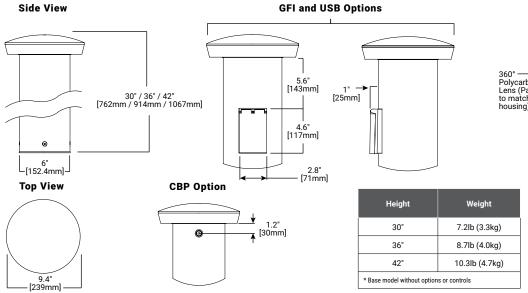
- 4 Optical Distributions
- Available in 30", 36", and 42"
- Lumen packages range from 560 4400 (5W 49W)
- Efficacy up to 122 lumens per watt
- Zero uplight on all configurations

Dimensional Details

GFI and USB Options









Ordering Information

SAMPLE NUMBER: BRT6-A3-740-U-T4-36-GM

Product Family		Configuration ¹	Color Temperature	Voltage	Distribution	Height	Finish
BRT6=Bollard, 6" Round Base BAA-BRT6=Bollard, 6" Round Base, Buy American Act Compliant ¹³ TAA-BRT6=Bollard, 6" Round Base, Trade Agreements Act Compliant ¹³		A1=1000Im Nominal ¹¹ A2=2000Im Nominal (A3=3000Im Nominal) A4=4000Im Nominal	727=70CRI, 2700K 730=70CRI, 3000K (740=70CRI, 4000K) 750=70CRI, 5000K 830=80CRI, 3000K AMB=Amber, 590nm ²	U=120-277V 1=120V 2=208V 3=240V (4=277V) 8=480V ⁵ 9=347V	T3=Path Asymmetric T4=Wide Path Asymmetric (T5=Type V Symmetric) T5S=Type V Square Symmetric	30 =30" (36 =36") 42 =42"	AP=Gray BZ=Bronze BK=Black DP=Dark Platinum (GM=Graphite Metallic) WH=White
Options (Add as Suffix)	Ca	ontrols and Systems Optio	ons (Add as Suffix)		Accessories (Order Separately) ¹⁴		
DIM=External 0-10V Dimming Leads ^{4,7} F-Single Fuse (120, 277 or 347V Specify Voltage) FF=Double Fuse (208, 240 or 480V Specify Voltage) CC=Coastal Construction ³ HA=50°C High Ambient 20K=20KV UL 1449 fused surge protective device CBP=Battery Pack, Cold Weather Rated ^{9,12} DALI=DALI Driver ^{4,11} LAB=Less Anchor Bolts & Template ⁶ GFI=GFCI Outlet ^{8,17} USB=USB charging receptacle ^{15,17}	Ise (120, 277 or 347V Specify Voltage) Fuse (208, 240 or 480V Specify Voltage) Iconstruction ³ UL 1449 fused surge protective device ty Pack, Cold Weather Rated ^{9, 12} Driver ^{4, 11} Anchor Bolts & Template ⁶ utiet ^{6, 17}					e'	
NOTES: 1. Norninal output based on symmetric distributions at 4000K CCT. See lumen table and IES files for details. 2. Narrow-hand \$90nn +/- Snm for wildlife and observatory use. Available with configuration A1 only. 3. Coastal construction finish salt spray tested to over \$5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 4. Mot available with other controls options 5. 480V must utilize Wye system only. 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; 6. Bollard ships with anchor bolts and template included, unless LAB is specified, in which case the BRT6ANCHOR accessory must be ordered separately. 7. Low voltage control leads brought out 18 'from fixture 8. GFC1 125-Volt duplex tampe-proof oulder trated for 15A. Available in 120V only. Cannot be used in conjunction with USB option. 9. Operates at -20° Cto +40°C. Not available with 4A00K CH, USB or SM2 options. 6W initial output. 16.2Wh capacity. 10. Not available with TW ordinge, must specify voltage. 11. Available in 120V only, except with Amber (AMB). 12. Specify 120 vol 277. 13. 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 <u>DOMESTIC PREFERENCES</u> website for more information. Components shipped separately may be separately mand be separately mand be separate							

shipped separately may be separately analyzed under domestic preference requirements. 14. For BAA or TAA requirements, Accessories sold separately wilb separately analyzed under domestic preference requirements. Consult factory for further information. 15. 120V only. Weather-resistant, tamper-resistant duplex 15A, 125V AC receptacle with (1) USB Type-A and (1) USB Type-C port. Must be installed on a GFCI-protected circuit. 1-Year Warranty. Model WRR26USBAC6BK. Cannot be used in conjunction with GFI Outlet option. 16. Includes microwave sensor with integral polycarbonate lens painted to match fixture. Does not include photocontrol. Use in conjunction with BPC or external photocontrol for dusk-to-dawn operation. Not available with HA High Ambient option. 17. Mounted to weatherproof, spring-loaded box suitable for covered areas. Not while-in-use capable.

Product Specifications

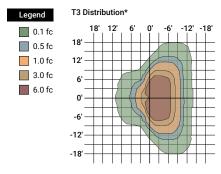
Construction

- Extruded aluminum housing with cast base and top ٠ Patent-pending base plate design offers superior
- rigidity 3G vibration rated
- •
- IK10 impact rating for housing and optic assembly

Optics

- High-efficiency injection-molded AccuLED optics technology
- 4 optical distributions; 2 symmetric and 2 asymmetric
- IDA Certified (3000K CCT and warmer only)

Optical Distributions



Electrical

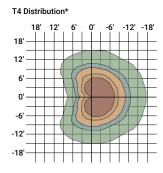
- Standard with 0-10V dimming ٠
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- 10kV surge module standard

Finish

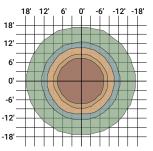
- Super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- RAL and custom color matches available
- Coastal Construction (CC) option available



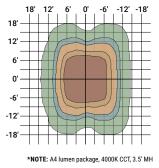
- Outdoor, Walkway, Perimeter, Landscapes, Hardscapes
- Warranty
- Five year warranty



T5 Distribution



T5S Distribution*





Energy and Performance Data

Asymmetric Power and Lumens

Vertical PartialA1A2A3A4A102102102102Lumens537107516271061BUG RatingB0-Uo-C0B0-Uo-C1B0-Uo-C1B0-Uo-C1Lumens per Watt999491Partial55910015121Lumens per Watt998491101Lumens per Watt9984.00-C1B1-Uo-C1B1-Uo-C1Lumens per Watt100115110104Lumens per Watt100115100101Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99909491Lumens per Watt99909491BUG RatingB0-Uo-C0B0-Uo-C1B1-Uo-C11558BUG RatingB0-Uo-C0B0-UO-C1B1-Uo-C11558Lumens per Watt999491155Lumens per Watt9994911558BUG RatingB0-UO-C0B0-UO-C1B1-UO-C11743Lumens per Watt9994911558Lumens per Watt90B1-UO-C1B1-UO-C11743Lumens per Watt110115110147Lumens per Watt90B1-UO-C1B1-UO-C1164B	Optics		Configuration					
Proof 10000 10000 10000 10000 10000 10000 10000 10000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 10000000			opucs	A1 A2		A3	A4	
Propose Propose Bus Rating Bou Cool			Wattage	5	11	17	22	
BOULT LUMENS per WattLURENS per WattP79LLRENC LURENS per WattDU-U-G1B	CRI	тз	Lumens	537	1075	1627	1961	
BOULT LUMENS per WattLURENS per WattP79LLRENC LURENS per WattDU-U-G1B	r, 70		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	
BOULT LUMENS per WattLURENS per WattP79LLRENC LURENS per WattDU-U-G1B	k cc		Lumens per Watt	99	99	94	91	
BOULT LUMENS per WattLURENS per WattP79LLRENC LURENS per WattDU-U-G1B	5000		Wattage	5	10	15	21	
BOULT LUMENS per WattLURENS per WattP79LLRENC LURENS per WattDU-U-G1B) AOC	Тл	Lumens	559	1101	1616	2193	
Page 17 Page 18 18Wattage5111722Lumens48997914821786BUG RatingB0-Uo-G0B0-Uo-G1B0-Uo-G1B0-Uo-G1Lumens per Watt9999949114Mattage5101521Lumens per Watt999094997BUG RatingB0-Uo-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104BUG RatingB0-Uo-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Mattage5101521Lumens per Watt99999491Mattage5101521Lumens per Watt99999491Mattage51117222Lumens per Watt110115110104Lumens per Watt1101151101640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens per Watt99999491BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt11011511010	40(14	BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	
Image: book state			Lumens per Watt	110	115	110	104	
Big Big <td></td> <td></td> <td>Wattage</td> <td>5</td> <td>11</td> <td>17</td> <td>22</td>			Wattage	5	11	17	22	
BUG PatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt999994914451015214Lumens509100314721997BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt1101151101041Lumens per Watt11011511010442785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt999994911Lumens per Watt9999949144875128417431743BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt1101151101041Lumens per Watt110115110BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt999994911Lumens per Watt999994911BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt999994911Lumens per Watt999994BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt1101151		T 2	Lumens	489	979	1482	1786	
T4 BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104T3T3Katage5111722Lumens42785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Katage5101521Lumens per Watt99999491T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0Lumens per Watt34Lumens per Watt34BUG RatingB0-U0-G0	CRI	13	BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	
T4 BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104T3T3Katage5111722Lumens42785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Katage5101521Lumens per Watt99999491T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0Lumens per Watt34Lumens per Watt34BUG RatingB0-U0-G0	л, 70		Lumens per Watt	99	99	94	91	
T4 BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104T3T3Katage5111722Lumens42785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Katage5101521Lumens per Watt99999491T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0Lumens per Watt34Lumens per Watt34BUG RatingB0-U0-G0	OK CC	T4	Wattage	5	10	15	21	
BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104 T3Wattage 5111722Lumens42785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt99999491Lumens per Watt99999491Lumens per Watt99999491BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1InterT4T43BUG RatingB0-U0-G0<	300		Lumens	509	1003	1472	1997	
Yang Part Part Part Part Part Part Part Part			BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	
T3Lumens42785412931558BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Wattage5101521Lumens44487512841743BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt99999491Lumens per Watt999913611640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens per Watt99999491BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt99999491Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34Lumens per Watt34Lumens per Watt34Lumens per Watt34Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0 <td></td> <td>Lumens per Watt</td> <td>110</td> <td>115</td> <td>110</td> <td>104</td>			Lumens per Watt	110	115	110	104	
To To		тз	Wattage	5	11	17	22	
BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Wattage5101521Lumens44487512841743BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt99999491Mattage5101521Lumens per Watt99999491BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1BUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0CBUG RatingB0-U0-G0C<			Lumens	427	854	1293	1558	
T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104T3Wattage5111722Lumens44989913611640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens46792113511834BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0Lumens per Watt34Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0	CRI		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	
T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104T3Wattage5111722Lumens44989913611640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens46792113511834BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0Lumens per Watt34Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0	:Т, 80		Lumens per Watt	99	99	94	91	
T4BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104T3Wattage5111722Lumens44989913611640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491Lumens46792113511834BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt34BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0Lumens per Watt34Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0	DK CC	T4	Wattage	5	10	15	21	
BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104T3Wattage5111722Lumens44989913611640BUG RatingB0-U0-G0B0-U0-G1B0-U0-G1B0-U0-G1Lumens per Watt99999491T4Wattage5101521Lumens per Watt999919391BUG RatingB0-U0-G0B0-U0-G1B1-U0-G1B1-U0-G1Lumens per Watt110115110104Lumens per Watt110115110104Lumens per Watt13BUG RatingB0-U0-G0BUG RatingB0-U0-G0Lumens per Watt34Lumens per Watt34Lumens per Watt34Lumens352BUG RatingB0-U0-G0Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0Lumens352BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0BUG RatingB0-U0-G0	300		Lumens	444	875	1284	1743	
Verticity Wattage 5 11 17 22 Lumens 449 899 1361 1640 BUG Rating B0-U0-G0 B0-U0-G1 B0-U0-G1 B0-U0-G1 Lumens per Watt 99 99 94 91 Lumens per Watt 99 99 94 91 Lumens 467 921 1351 1834 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 Lumens per Watt 110 115 110 104 Lumens per Watt 110 115 110 104 Lumens per Watt 13 BUG Rating B0-U0-G0 Homens 457 BUG Rating B0-U0-G0 Homens 352 <t< td=""><td></td><td>BUG Rating</td><td>B0-U0-G0</td><td>B0-U0-G1</td><td>B1-U0-G1</td><td>B1-U0-G1</td></t<>			BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	
Mark Lumens 449 899 1361 1640 BUG Rating B0-U0-G0 B0-U0-G1 B0-U0-G1 B0-U0-G1 B0-U0-G1 Lumens per Watt 99 99 94 91 Lumens 4677 921 1351 1834 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens 467 921 1351 1834 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 Lumens per Watt 130 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Tumens per Watt 34 BUG Rating B0-U0-G0 <td></td> <td>Lumens per Watt</td> <td>110</td> <td>115</td> <td>110</td> <td>104</td>			Lumens per Watt	110	115	110	104	
T3 BUG Rating B0-U0-G0 B0-U0-G1 B0-U0-G1 B0-U0-G1 Lumens per Watt 99 99 94 91 T4 Wattage 5 10 15 21 Lumens 467 921 1351 1834 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 Lumens per Watt 13 Lumens per Watt 34 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Humens 352 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0		TO	Wattage	5	11	17	22	
F BUG Rating B0-U0-G0 B0-U0-G1 B0-U0-G1 B0-U0-G1 B0-U0-G1 Lumens per Watt 99 99 94 91 T4 Wattage 5 10 15 21 Lumens 467 921 1351 1834 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 Lumens per Watt 110 115 110 104 BUG Rating B0-U0-G0 Lumens per Watt 133 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 <			Lumens	449	899	1361	1640	
T4 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 T3 BUG Rating B0-U0-G0 BUG Rating 457 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0	CRI		BUG Rating	B0-U0-G0	B0-U0-G1	B0-U0-G1	B0-U0-G1	
T4 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 T3 BUG Rating B0-U0-G0 BUG Rating 457 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0	:Т, 70		Lumens per Watt	99	99	94	91	
T4 BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 T3 BUG Rating B0-U0-G0 BUG Rating 457 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0	OK CC		Wattage	5	10	15	21	
BUG Rating B0-U0-G0 B0-U0-G1 B1-U0-G1 B1-U0-G1 Lumens per Watt 110 115 110 104 T3 Wattage 13 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 Lumens 352 BUG Rating B0-U0-G0	270	т4	Lumens	467	921	1351	1834	
Wattage 13 Lumens 457 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0 BUG Rating 80-U0-G0			BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	
T3 Lumens 457 BUG Rating B0-U0-G0 Lumens per Watt 34 Lumens per Watt 34 Lumens 352 BUG Rating B0-U0-G0			Lumens per Watt	110	115	110	104	
T3 BUG Rating B0-U0-G0 Lumens per Watt 34 Mattage 11 Lumens 352 BUG Rating B0-U0-G0			Wattage	13				
BUG Rating B0-U0-G0 Lumens per Watt 34 Wattage 11 Lumens 352 BUG Rating B0-U0-G0		тэ	Lumens	457				
Lumens 352 BUG Rating B0-U0-G0	5	13	BUG Rating	B0-U0-G0				
Lumens 352 BUG Rating B0-U0-G0	000u		Lumens per Watt	34				
Lumens 352 BUG Rating B0-U0-G0	MB 5		Wattage	11				
BUG Rating B0-U0-G0	1	тл	Lumens	352				
Lumens per Watt 32		14	BUG Rating	B0-U0-G0				
			Lumens per Watt	32				

Symmetric Power and Lumens

Optics			Configuration						
			A1	A2	A3	A4			
		Wattage	9	18	29	42			
R	Т5	Lumens	1149	2210	3244	4401			
, 70 (15	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
CC X		Lumens per Watt	122	120	111	105			
2000		Wattage	10	21	35	49			
4000K / 5000K CCT, 70 CRI	TFO	Lumens	1125	2230	3338	4367			
400	T5S	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
		Lumens per Watt	110	107	97	89			
		Wattage	9	18	29	42			
		Lumens	1046	2013	2954	4008			
СR	Т5	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
т, 70		Lumens per Watt	122	120	111	105			
3000K CCT, 70 CRI		Wattage	10	21	35	49			
3000	TFO	Lumens	1025	2031	3040	3977			
	T5S	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
		Lumens per Watt	110	107	97	89			
	TE	Wattage	9	18	29	42			
		Lumens	913	1757	2578	3497			
CRI	Т5	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
3000K CCT, 80 CRI		Lumens per Watt	122	120	111	105			
ы К СС	T5S	Wattage	10	21	35	49			
300		Lumens	894	1772	2653	3470			
		BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
		Lumens per Watt	110	107	97	89			
		Wattage	9	18	29	42			
	Т5	Lumens	960	1848	2712	3680			
70 CRI	15	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
-		Lumens per Watt	122	120	111	105			
2700K CCT		Wattage	10	21	35	49			
270	T5S	Lumens	941	1865	2791	3652			
	155	BUG Rating	B1-U0-G0	B1-U0-G1	B2-U0-G1	B2-U0-G1			
		Lumens per Watt	110	107	97	89			
		Wattage	21						
	Т5	Lumens	575						
F	13	BUG Rating	B0-U0-G0						
AMB 590nm		Lumens per Watt	28						
AMB 5		Wattage	25						
4	TEC	Lumens	676						
	T5S	BUG Rating	B1-U0-G0						
		Lumens per Watt	27						



Energy and Performance Data

Input Current (mA)

	Optics	Voltage	Configuration						
	Optics	voltage	A1	A2	A3	A4			
	тз	120V	47	97	152	190			
		208V	-	59	89	110			
		240V	-	52	78	97			
	13	277V	-	48	70	85			
		347V	-	40	59	72			
metric		480V	-	29	43	53			
Asymmetric		120V	44	84	128	183			
		208V		52	75	105			
	T4	240V		47	66	92			
		277V	-	44	59	81			
		347V		35	49	68			
		480V		25	36	50			
		120V	81	159	257	373			
		208V		93	146	209			
	Т5	240V		82	128	183			
	15	277V	-	73	113	159			
		347V		65	96	148			
netric		480V		48	70	108			
Symmetric		120V	90	185	314	454			
		208V		107	177	251			
	T5S	240V		94	155	219			
	100	277V		83	135	190			
		347V		69	114	172			
		480V		51	82	125			

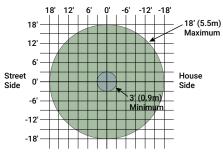
Lumen Maintenance (TM-21)

Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
25°C	95.9%	92.9%	91.7%	87.1%	271,000
40°C	95.7%	92.5%	91.3%	86.5%	256,000
50°C	95.3%	91.9%	90.6%	85.7%	242,000

* 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.

View BRT6 IES files

SM2 Coverage*




*NOTE: Applicable to heights of 30", 36" and 42"



Cooper Lighting Solutions 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.cooperlighting.com

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LAKE LAND COLLEGE

- 6 TERMINATE CATV AND COMMUNICATIONS CONDUITS IN MECH RM #038, EAST WALL DIRECTLY OPPOSITE OF TTB OF ROOM 037.

- 1. BOLLARD LIGHTS TYPE "S5" SHALL BE 277V.