



City of Madison

Proposed Demolition, Conditional Use and Certified Survey Map

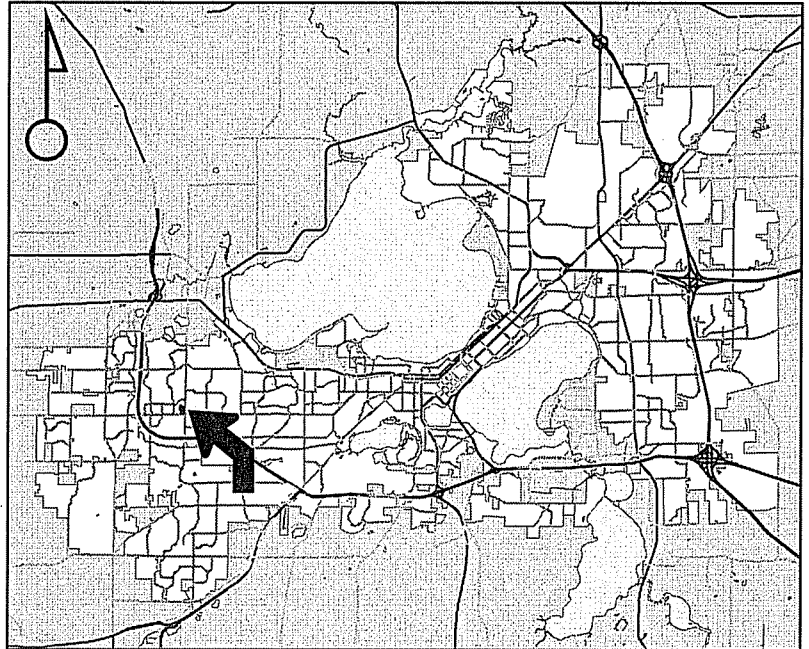
Location
302 South Gammon Road

Applicant
John Livesy - Livesy Company /
Melissa Huggins - Urban Assets

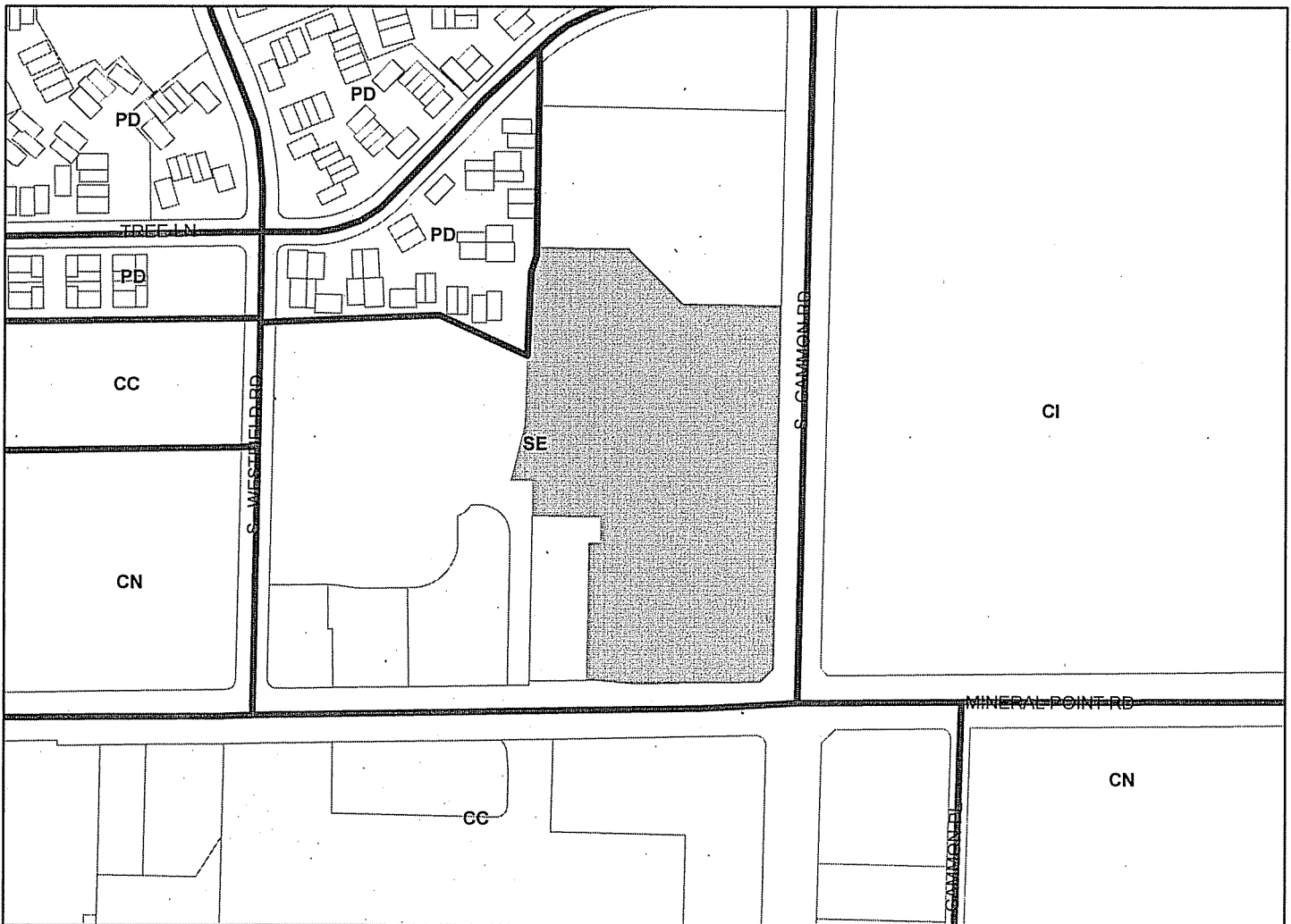
Existing Use
Office Building

Proposed Use
Demolish office building and construct
first phase office and general retail
complex, and revised CSM to create
four-lot planned multi-use site.

Public Hearing Date
Plan Commission
02 October 2017
Common Council
17 October 2017



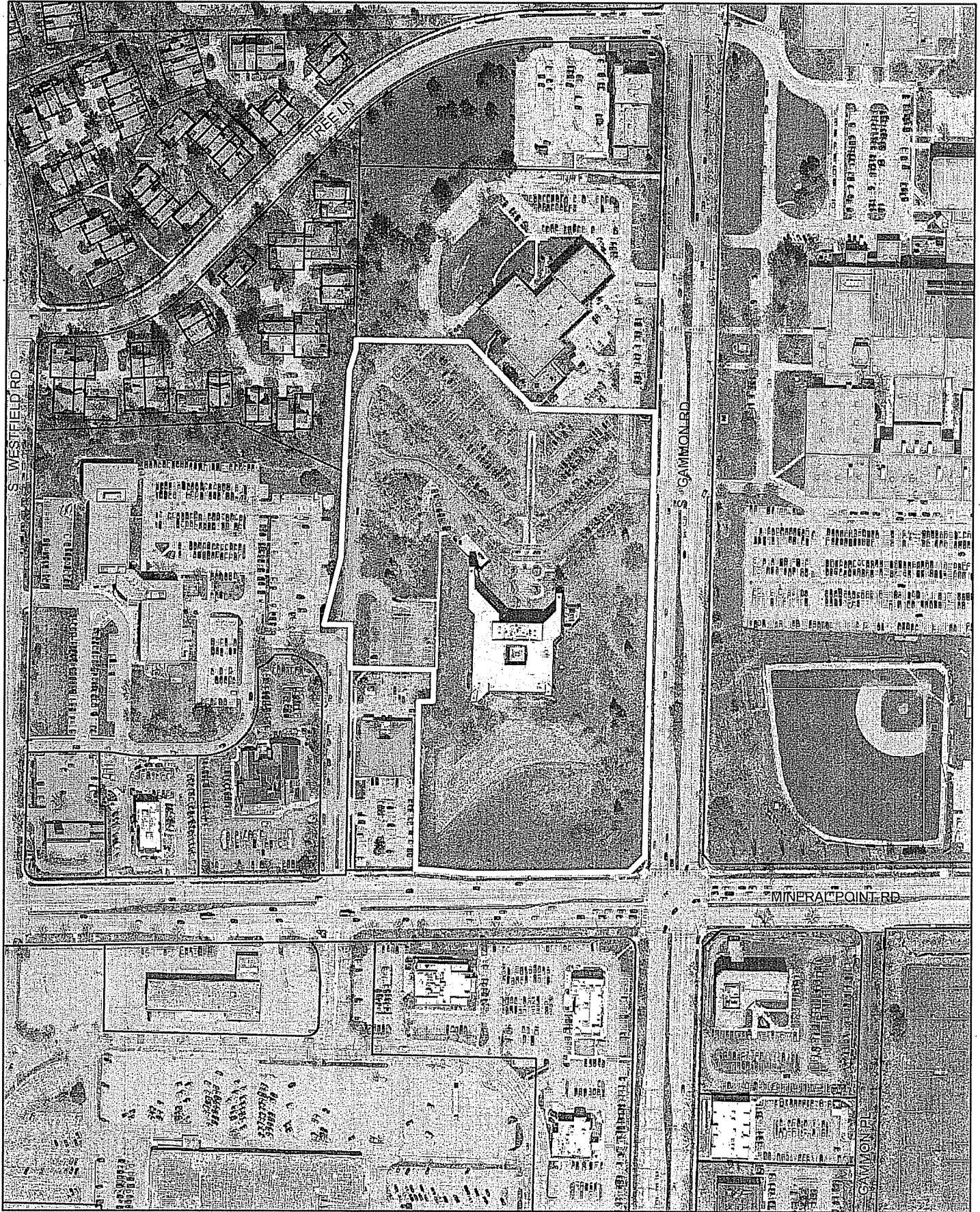
For Questions Contact: Tim Parks at: 261-9632 or tparks@cityofmadison.com or City Planning at 266-4635



Scale : 1" = 400'

City of Madison, Planning Division : PPE : Date : 26 Sept 2017

12-13



Date of Aerial Photography : Spring 2016

City of Madison
Planning Division
126 S. Hamilton St.
P.O. Box 2985
Madison, WI 53701-2985
(608) 266-4635



FOR OFFICE USE ONLY:

Paid \$2000 Receipt # 033805-0004
Date received 8/16/17
Received by [Signature]
Parcel # 0708-234-1006-7
Aldermanic district 9-Skidmore
Zoning district SE
Special requirements ZBA
Review required by _____
 UDC PC
 Common Council Other _____
Reviewed By _____

All Land Use Applications must be filed with the Zoning Office at the above address.

This completed form is required for all applications for Plan Commission review except subdivisions or land divisions, which should be filed using the Subdivision Application found on the City's web site.

1. Project Information

Address: 302 South Gammon Road
Title: West Place - Phase One

2. This is an application for (check all that apply)

- Zoning Map Amendment (rezoning) from _____ to _____
- Major Amendment to an Approved Planned Development-General Development Plan (PD-GDP) Zoning
- Major Amendment to an Approved Planned Development-Specific Implementation Plan (PD-SIP)
- Review of Alteration to Planned Development (PD) (by Plan Commission)
- Conditional Use or Major Alteration to an Approved Conditional Use
- Demolition Permit
- Other requests

3. Applicant, Agent and Property Owner Information

Applicant name John Livesey Company The Livesey Company
Street address 2248 Deming Way City/State/Zip Middleton, WI 93962
Telephone 833.2929 Email jklivesey@liveseyco.com
Project contact person Melissa Huggins Company Urban Assets
Street address 807 E. Johnson Street City/State/Zip Madison, WI 53703
Telephone 819.6966 Email melissa@urbanassetsconsulting.com
Property owner (if not applicant) John Livesey
Street address 2248 Deming Way City/State/Zip Middleton, WI 53562
Telephone 833.2929 Email jklivesey@liveseyco.com

4. Project Description

Provide a brief description of the project and all proposed uses of the site:

Phase One of a mixed use development that includes 2 office buidings, one headquarters

office of 80,000 SF and one Specialty Pharmacy building of 30,000 SF

Scheduled start date December 1, 2017 Planned completion date January 31, 2019

5. Required Submittal Materials

Refer to the Land Use Application Checklist for detailed submittal requirements.

- Checkboxes for Filing fee, Land Use Application, Letter of intent, Legal description, Pre-application notification, Vicinity map, Survey or existing conditions site plan, Development plans, Land Use Application Checklist (LND-C), Supplemental Requirements, and Electronic Submittal*.

*Electronic copies of all items submitted in hard copy are required. Individual PDF files of each item submitted should be compiled on a CD or flash drive, or submitted via email to papplications@cityofmadison.com.

For concurrent UDC applications a separate pre-application meeting with the UDC Secretary is required prior to submittal. Following the pre-application meeting, a complete UDC Application form and all other submittal requirements must be submitted to the UDC Secretary.

6. Applicant Declarations

Pre-application meeting with staff. Prior to preparation of this application, the applicant is strongly encouraged to discuss the proposed development and review process with Zoning and Planning Division staff. Note staff persons and date.

Planning staff Tim Parks Date 6.22.17
Zoning staff Matt Tucker & Jenny Kirchgatter Date 6.16.17

Demolition Listserv

Public subsidy is being requested (indicate in letter of intent)

Pre-application notification: The zoning code requires that the applicant notify the district alder and any nearby neighborhood and business associations in writing no later than 30 days prior to FILING this request. List the alderperson, neighborhood association(s), business association(s), AND the dates you sent the notices:

June 30, 2017, Paul Skidmore, Mark Clear, Tamarack Community Trail Condominium Assoc. Woodland Hills Neighborhood Assoc, Parkwood Hills Community Assoc. Walnut Grove Homeowners Assoc. Parkwood Village Homeowners Assoc. Parkwood West Condominium Assoc.

The alderperson and the Director of Planning & Community & Economic Development may reduce the 30-day requirement or waive the pre-application notification requirement altogether. Evidence of the pre-application notification is required as part of the application materials. A copy of the notification letters or any correspondence granting a waiver is required as part of the application materials.

The applicant attests that this form is accurately completed and all required materials are submitted:

Name of applicant Doug Hursh Relationship to property Architect
Authorizing signature of property owner Date 07/28/2017

Handwritten signature and circled number 121



2248 Deming Way, Suite 200
Middleton, WI 53562
(608) 833-2929, (608) 824-9020 (Facsimile)

Wednesday, August 16, 2017

City of Madison Planning Division
Department of Planning & Community & Economic Development
126 South Hamilton Street
Madison, WI 53703

Attention: Tim Parks; Kevin Firchow

Re: West Place – 7050 Mineral Point Road & 302 South Gammon Road

Dear Members of the Plan Commission:

Please accept this Letter of Intent, Application and attachments as our formal request for approval to redevelop and improve the above listed properties under the current zoning, Suburban Employment (SE).

Project Team

Owner: John K. Livesey
Livesey Company
2248 Deming Way
Middleton, Wisconsin 53562
(608) 833-2929
jkivesey@liveseyco.com

Architect: Doug Hursh
Potter Lawson, Inc.
749 University Avenue, Suite 300
Madison, Wisconsin 53705
(608) 274-2741
Dough@potterlawson.com

Civil Engineer: Bruce Hollar
D'Onofrio Kottke and Associates, Inc.
7350 Westward Way
Madison, Wisconsin 53717
bhollar@donofrio.cc

Landscape Architect: Ken Saiki
Ken Saiki Design, Inc.
303 South Paterson
Madison, WI 53703
(608) 251-3600
KSaiki@ksd-la.com

Contractor: Jason Koziar
Ideal Builders, Inc.
1406 Emil Street
Madison, WI 53703
(608) 271-8111
Jasonkoziar@idealbuildersinc.com

Existing Conditions

The site, located on the intersection of Mineral Point and Gammon Roads, is 14.2 acres and includes the former Rural Insurance Building (formerly occupied by Madison Area Technical College and Famous Footwear) and the Noodles & Company building. The site is zoned Suburban Employment (SE). West Towne Mall is located across Mineral Point Road to the south. Memorial High School is located across Gammon Road to the East. The Livesey Company owns an additional 8.8 acres to the north that includes Paul Mitchell School, KJ's Curry Bowl, Orthodontic Specialists, A Breed Apart Animal Hospital, Madison Metropolitan School District Offices, La Petite Academy, and Midwest Dental. This property will remain as is for the foreseeable future.

Staff and Neighborhood Input

The Development team first met formally with city staff on June 9th 2017 and has continued to consult with them regularly either at in-person meetings or via email or phone.

The Livesey Company engaged Urban Assets to coordinate and facilitate communications and meetings with Alder Skidmore, Alder Clear, city staff, and the neighborhood. A full neighborhood meeting was held on July 27th. Meeting notes are available upon request.

Project Overview

The goal of the project is to create a corporate headquarters for Nativus Health Solutions LLC, a full service pharmacy benefit management company. The project will include a mix of offices, retail, and Lumicera Health Solutions, a specialty pharmacy that serves the needs of health plans throughout the country. Lumicera will include a call center.

At full buildout, the site will comprise of a total of 325,200 SF in eight buildings and 1,054 parking stalls located in a three-story parking garage and surface parking. The existing Noodles & Company building includes an additional 60 stalls.

Building	Square Feet	Use
A	80,000	Office
B	30,000	Office/Call Center

C	5,000	Retail
D	6,000	Retail
E	60,000	Office
F	60,000	Office
G	24,000	Office
H	60,000	Office

Primary access for the project will occur at the existing curb cut on Gammon Road. This intersection will be signalized in the future when necessary. A private road will extend through the site to the west, connecting to the street that runs between the Noodles & Company building and the UW Health Clinic. The road will curve in order to create a buffer for around Lumicera, which required is by Navitus due to the nature the business.

The project site is served by Madison Metro, on both Mineral Point and Gammon roads. The bus stop most proximal will be improved as part of the development. In addition to Madison Metro, the project site is located along the route recommended by the MPO for a future Bus Rapid Transit (BRT) system.

The project includes numerous outdoor spaces throughout. The most prominent space is located at the corner of Mineral Point and Gammon roads between the retail spaces. This area will be designed to provide outdoor seating for two to three restaurants. The developer’s goal is to have a variety of quality, local restaurants from a coffee shop to fine dining.

Full project build out is anticipated to occur over the next ten to fifteen years. Structured parking will be phased in over time as required to meet parking demand, providing a total of 938 stalls.

Phase One

Phase One of the project includes buildings A, B, C, and D for a total of 110,000 SF of office and 11,000 SF of retail. Phase One of the project will be surface parked and will include 468 stalls. A total of 74 bike parking stalls will be spread throughout the site to meet the needs of Navitus employees, visitors, as well as restaurant employees and customers.

Building A will be five stories high. Due to the required floor to floor heights of 15 feet, the building will be taller than 68 feet, the height limit under SE. Building B will be two stories. A loading area is included behind the building to accommodate delivery trucks (box trucks) for Lumicera. Buildings C and D will be one story but will have high floor to ceiling heights so as to present as two stories.

A signalized intersection is not required for Phase One. The private road will be truncated in order to provide Lumicera with the required buffer.

Relevant City of Madison Planning Documents

The City of Madison Comprehensive Plan recommends employment for this site. The project is being developed under the current zoning, Suburban Employment (SE).

Project Schedule – Phase One

Phase One of the project is scheduled to begin a 12 to 14 month construction period in the January, 2018 with occupancy to occur in March, 2019.

Sustainability

The most sustainable aspect of the project is the redevelopment of a low-density employment infill site into a higher density major employment center. Transit access to the site is excellent and will increase when BRT is implemented.

Buildings will be built to high energy efficiency standards, including insulation, HVAC, and LED lighting. The development team will consult with Focus on Energy to ensure the project capitalizes on any other available technologies. As the project develops over time, the development team will investigate the feasibility of geothermal and photovoltaic.

The storm water management requirements for this development are significant. An integrated approach utilizing a variety of best storm water management practices is necessary to meet the quantitative and qualitative requirements. In addition, West Place elects to display storm water management measures to heighten awareness of sustainable practices. These site and landscape features are both functional and aesthetic enhancements for the development. The plant palette will feature species native to Wisconsin.

Lot Coverage

Full Build Out Lot Coverage:

- Impervious (Lot Coverage) = 75.3%
- Pervious = 24.7%

Phase One Lot Coverage:

- Impervious (Lot Coverage) = 63.3%
- Pervious = 36.7%

Hours of Operation

Approximately 7 AM – 12 PM

- Office approximately 7 AM – 7PM
- Retail/Restaurant approximately 7 AM – 12 PM

Value of the Land

7050 Mineral Point Road: \$968,000
302 South Gammon Road: \$5,610,000
Total: \$6,578,000

Estimated Project Cost for Phase One

\$28 Million

Number of Construction Jobs Created in Phase One

Approximately 110

Number of Full Time Equivalent Jobs Created in Phase One

Approximately 230 to 275

Public Subsidy Requested for Phase One

\$6.2 million

We look forward to working with the City and neighborhoods to develop a corporate campus for Navitus Health Solutions. We strongly urge staff and the Plan Commission to review this project with a broader perspective that takes into account the design, economic feasibility, and, most importantly, the overall benefit this project will bring to the West Side of Madison.

Regards,

A handwritten signature in black ink, appearing to read 'JKL' with a large, stylized flourish extending from the 'L'.

John K. Livesey
Owner, Livesey Company

WEST PLACE PHASE I EXTERIOR LUMINAIRE SCHEDULE

QTY	TYPE	DESCRIPTION	LAMP SOURCE	MANUFACTURER & SERIES	MODEL NUMBER	WATTAGE	DIMMING TECHNOLOGY
1	C1	SURFACE MOUNT EXTERIOR CANOPY AREA LIGHT. FLUSH LENS.	LED 4000K 12,400 LUMENS	CREE	CPY250-A-DM-F-B-UL-WH-DIM-40K	96	0-10V
11	D1	6" DIAMETER OPEN DOWNLIGHT WITH MATTE HAZE REFLECTOR, WHITE TRIM.	LED 3500K 1030 LUMENS	CREE	S-DL-6-15L-35/ S-DL6T-W-SS-C	15W	0-10V
3	D2	6" DIAMETER OPEN DOWNLIGHT WITH MATTE HAZE REFLECTOR, WHITE TRIM.	LED 3500K 1774 LUMENS	CREE	S-DL-6-24L-35/ S-DL6T-W-SS-C	23W	0-10V
5	EW1	TRAPEZOIDAL EXTERIOR WALL SCONCE, TYPE III DISTRIBUTION. FINISH TO BE DETERMINED.	LED 3000K 2468 LUMENS	MCGRAW-EDISON IMPACT	IST-E01-LED-E1-BL3-XX-7030	25W	NON-DIM
1	EW2	TRAPEZOIDAL EXTERIOR WALL SCONCE, TYPE IV DISTRIBUTION. FINISH TO BE DETERMINED.	LED 3000K 4772 LUMENS	MCGRAW-EDISON IMPACT	IST-E02-LED-E1-BL4-XX-7030	47W	NON-DIM
1	P1A	EXTERIOR AREA LIGHT, TYPE V DISTRIBUTION. PROVIDE WITH 23' ROUND TAPERED STEEL POLE. TO BE MOUNTED ON 2.5' RAISED BASE. FINISH TO BE DETERMINED.	LED 3000K 11,355 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-02-LED-E1-5WQ-XX-7030	113W	0-10V
6	P1B	SIMILAR TO P1A, HIGHER LUMEN PACKAGE.	LED 3000K 16,944 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-03-LED-E1-5WQ-XX-7030	166W	0-10V
5	P1C	SIMILAR TO P1A, HIGHER LUMEN PACKAGE.	LED 3000K 22,388 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-04-LED-E1-5WQ-XX-7030	225W	0-10V
1	P2	EXTERIOR AREA LIGHT, TYPE II DISTRIBUTION. PROVIDE WITH 23' ROUND TAPERED STEEL POLE. TO BE MOUNTED ON 2.5' RAISED BASE. FINISH TO BE DETERMINED.	LED 3000K 20,822 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-04-LED-E1-SL2-XX-7030	225	0-10V
1	P3	EXTERIOR AREA LIGHT, TYPE III DISTRIBUTION. PROVIDE WITH 23' ROUND TAPERED STEEL POLE. TO BE MOUNTED ON 2.5' RAISED BASE. FINISH TO BE DETERMINED.	LED 3000K 26,337 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-05-LED-E1-SL3-XX-7030	279	0-10V
13	P4	EXTERIOR AREA LIGHT, TYPE IV DISTRIBUTION. PROVIDE WITH 23' ROUND TAPERED STEEL POLE. TO BE MOUNTED ON 2.5' RAISED BASE. FINISH TO BE DETERMINED.	LED 3000K 15,286 LUMENS	MCGRAW-EDISON GALLEON	GLEON-AF-03-LED-E1-SL4-XX-7030	166	0-10V
2	P5A	DECORATIVE EXTERIOR POST TOP LUMINAIRE, TYPE III DISTRIBUTION. MAXIMUM BRIGHTNESS REDUCTION LENS. PROVIDE WITH 14' SQUARE STRAIGHT STEEL COORDINATING POLE AND BASE COVER. BASE TO BE FLUSH WITH PAVEMENT. FINISH TO BE DETERMINED.	LED 2700K 6475 LUMENS	STERNBERG MILLENIA	PT-SV2-60L-27K-T3-MDL07-PEC-XXX/ SSS14F400/ ML900-4S-XXX	142	0-10V
3	P5B	SIMILAR TO P5A, PROVIDE WITH 16' SQUARE STEEL COORDINATING POLE AND BASE COVER.	LED 2700K 6475 LUMENS	STERNBERG MILLENIA	PT-SV2-60L-27K-T3-MDL07-PEC-XXX/ SSS16F400/ ML900-4S-XXX	142	0-10V
4	P6	DECORATIVE EXTERIOR POST TOP LUMINAIRE, TYPE V DISTRIBUTION. MAXIMUM BRIGHTNESS REDUCTION LENS. PROVIDE WITH 14' SQUARE STRAIGHT STEEL COORDINATING POLE AND BASE COVER. BASE TO BE FLUSH WITH PAVEMENT. FINISH TO BE DETERMINED.	LED 2700K 6687 LUMENS	STERNBERG MILLENIA	PT-SV2-60L-27K-T5-MDL07-PEC-XXX/ SSS14F400/ ML900-4S-XXX	142	0-10V
2 X 38' 3 X 54' 1 X 41'	S	TREE MOUNTED STRING LIGHTS	LED 3000K 33 LM /FT	TIVOLI	LIGHT SPHERE CLEAR	0.5 W/FT	NON-DIM

CPY Series

CPY250™ LED Canopy/Soffit Luminaire

Product Description

The CPY250™ LED Canopy/Soffit Luminaire has an extremely thin profile constructed of rugged cast aluminum. It can be surface mounted easily from below the canopy deck and can be pendant mounted. Direct imaging of the LEDs is eliminated with a highly efficient patterned flat or 0.91" (23mm) drop glass lens.

Applications: Petroleum canopies, CNG fueling stations, low-medium bay general lighting, soffits

Performance Summary

Made in the U.S.A. of U.S. and imported parts

Initial Delivered Lumens: Up to 20,784

Efficacy: Up to 143 LPW

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) Standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

IP66 Rated (Direct Mount only)

Class I, Division 2 Hazardous Location for select models

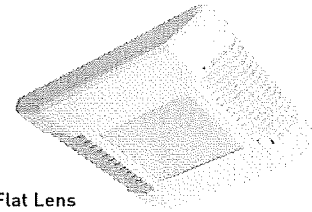
* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

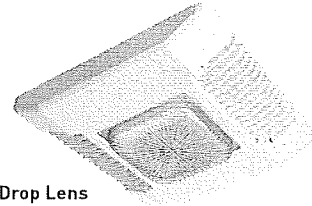
Field-Installed	
Direct Mount Luminaires	
Canopy Upgrade Kits (18 ga. steel)	
XA-BXCCMW – for use with Jet-Philips, 21.60" [549mm] square	
XA-BXCCNW – for use with ElSCO Franciscan, 22.06" [560mm] square	
XA-BXCCPW – for use with LSI Dakota or Masters, 22.50" [572mm] square	
XA-BXCCQW – for use with Whiteway Riviera or Rig-A-Lite, 20.60" [523mm] square	
XA-BXCCRW – for use with ElSCO Merrit, 18.06" [459mm] square	
XA-BXCCSW – for use with LSI Richmond or Whiteway Civic, 23.00" [584mm] L x 13.00" [330mm] W	
Direct Mount Junction Box/Stem Kit	
XA-BXCCJBOX – 6.0" [152mm] H x 3/4" [19mm] NPT Stem	
- Watertight	
- Rated for feed through 8 (4 in, 4 out) #12 AWC conductors	
Direct Mount Beauty Plates	
XA-BXCCBPW – 26.17" [665mm] Beauty Plate Only (18 ga. steel)	
XA-BXCCBPB12W – 26.17" [665mm] Beauty Plate (18 ga. steel) w/12" [305mm] Backer Plate (16 ga. steel)	
- For use in canopies where deck opening is larger than what is required for mounting the CPY250 luminaire. Maximum deck opening 10.75" x 15" [183mm x 375mm]	
XA-BXCCBPB16W – 26.17" [665mm] Beauty Plate (18 ga. steel) w/16" [406mm] Backer Plate (16 ga. steel)	
- For use in canopies where deck opening is larger than what is required for mounting the CPY250 luminaire. Maximum deck opening 12" x 15" [305mm x 375mm]	
Pendant Mount Luminaires	
Pendant Mount Kits	
XA-PS12KIT* – 5" [127mm] pendant	
XA-PS18KIT* – 11" [279mm] pendant	
XA-PS22KIT* – 15" [381mm] pendant	
- Includes two conduit fittings and 3/4-14 NPT pipe threaded on two ends	
Hand-Held Remote	
XA-SENSREM	
- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	

* Must specify color

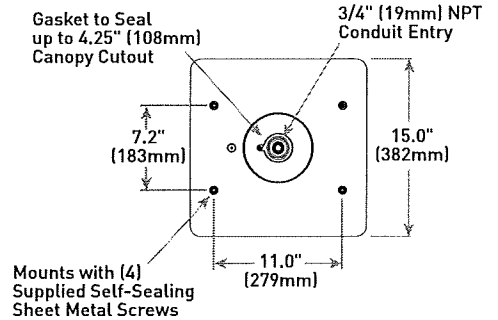
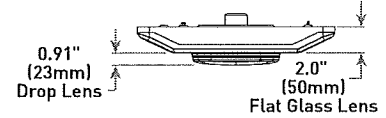
DM Mount



Flat Lens



Drop Lens



Weight
12.5 lbs. (5.7kg)

Ordering Information

Example: CPY250-A-DM-D-A-UL-SV

Product	Version	Mounting	Optic	Input Power Designator	Voltage	Color Options	Options
CPY250	A	DM Direct PD Pendant	D 0.91" [23mm] Drop Lens F Flat Lens	A 82W B 96W C 43W D 140W E 145W	UL Universal 120-277V UH Universal 347-480V - Available with A, B, D, & E Input Power Designators only	BK Black BZ Bronze SV Silver WH White	DIM 0-10V Dimming - Available with B, D, & E Input Power Designators only - Control by others - Refer to Dimming spec sheet for details - Can't exceed wattage of specified Input Power Designator HZ Class I, Div. 2 Hazardous Location Certification - Not available with DIM, ML, NSF or PML options ML Multi-Level - Available with B, D, & E Input Power Designators only - Available with UL voltage only - Refer to ML spec sheet for details NSF NSF 2 Certification - Luminaires include NSF certification mark - Available with the DM mount only - Not available with the HZ, ML or PML options PML Programmable Multi-Level - Available with B, D, & E Input Power Designators only - Available with UL voltage only - Refer to PML spec sheet for details 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire



Rev. Date: V9 08/08/2016



US: lighting.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile design
- Easy mounting and servicing from below the deck
- Luminaire housing is constructed of rugged cast aluminum with integral heat sink specifically designed for LED
- Flat lens is 0.125" tempered Solite® glass
- Drop lens is 0.157" molded borosilicate glass
- Direct mount is suitable for use in single or double skin canopies with a minimum 4.0" (102mm) wide panels and a minimum 22 gauge, 0.030" (0.7mm) canopy thickness
- Direct mount luminaire mounts directly to the canopy deck with the drilling of a single 2" to 4" (51mm to 102mm) round hole, is secured in place with self-sealing screws that provide a weathertight seal and includes 3/4" (19mm) conduit entry for direct wire feed
- Standard pendant mount includes a mounting bracket and a J-Box for customer wiring and is intended to be mounted by 3/4 IP pendant (by others)
- Hazardous location pendant mount has a threaded hub which accepts 3/4" NPT conduit (by others) and secures with a 1/4"-20 set screw
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver and white are available
- **Weight:** 12.5 lbs. (5.7kg)

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V (A, B, D and E Input Power Designators only), 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 6kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **10V Source Current:** 0.15mA
- **Operating Temperature Range:** Applications Requiring Class I, Division 2 Hazardous Location Ratings: -40°C - +25°C; A Input Power Designator: -40°C - +40°C (direct mount to plywood), -40°C - +45°C (direct mount to sheet metal/suspended); B & E Input Power Designators: -40°C - +35°C (plywood), -40°C - +40°C (sheet metal/suspended); C Input Power Designator: -40°C - +45°C (plywood), -40°C - +50°C (sheet metal/suspended); D Input Power Designators: -40°C - +35°C (sheet metal/suspended only)
- **WARNING:** Exceeding maximum operating temperature may result in thermal foldback

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations when ordered with DM mount
- Suitable for damp locations when ordered with PD mount
- Suitable for wet locations when ordered with PD mount and HZ option
- Enclosure rated IP66 per IEC 60529 when ordered with DM mount
- Consult factory for CE Certified products
- 6kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- DLC and DLC Premium qualified versions available. Please refer to www.designlights.org/QPL for most current information
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Class I, Division 2 Hazardous Location rated when ordered with the HZ option. Not available with DIM, ML, NSF or PML options. Consult factory for additional details
- NSF Certified when ordered with DM mount. Not available with HZ, ML or PML options. Refer to <http://info.nsf.org/Certified/Food/> for additional details

Electrical Data*								
Input Power Designator	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
A	82	84	0.69	0.40	0.35	0.32	0.24	0.18
B	96	96	0.82	0.47	0.40	0.35	0.28	0.20
C	43	N/A	0.35	0.21	0.19	0.17	N/A	N/A
D	140	145	1.24	0.71	0.62	0.54	0.44	0.29
E	145	145	1.22	0.70	0.61	0.53	0.42	0.30

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

Recommended CPY Series Lumen Maintenance Factors (LMF) ¹						
Ambient	Input Power Designator	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Projected ² LMF	100K hr Projected ² LMF
5°C (41°F)	A & C	1.05	1.00	0.93	0.87	0.81
	D	1.05	0.98	0.90	0.83	0.76
	B & E	1.04	1.00	0.97	0.95	0.93 ³
10°C (50°F)	A & C	1.04	0.99	0.92	0.86	0.80
	D	1.04	0.98	0.89	0.82	0.75
	B & E	1.03	0.99	0.96	0.94	0.92 ³
15°C (59°F)	A & C	1.02	0.97	0.91	0.84	0.79
	D	1.02	0.96	0.88	0.80	0.74
	B & E	1.02	0.98	0.95	0.93	0.91 ³
20°C (68°F)	A & C	1.01	0.96	0.90	0.84	0.78
	D	1.01	0.95	0.87	0.80	0.73
	B & E	1.01	0.97	0.95	0.93	0.91 ³
25°C (77°F)	A & C	1.00	0.95	0.89	0.83	0.77
	D	1.00	0.94	0.86	0.79	0.72
	B & E	1.00	0.96	0.94	0.91	0.89 ³
30°C (86°F)	A & C	0.99	0.94	0.88	0.82	0.76
	D	0.99	0.93	0.85	0.78	0.72
	B & E	0.99	0.95	0.92	0.90	0.88 ³

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing on sheet metal

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip

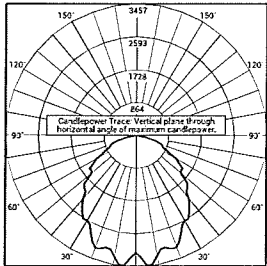


CPY250™ LED Canopy/Soffit Luminaire

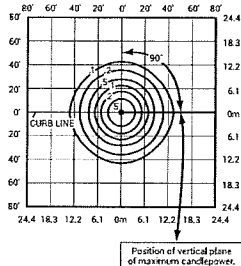
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: lighting.cree.com/Lighting/Products/Outdoor/Canopy/CPY-Series

DROP LENS



CESTL Test Report #: 2013-0111
CPY250-A-**-D-A-UL
Initial Delivered Lumens: 8,356

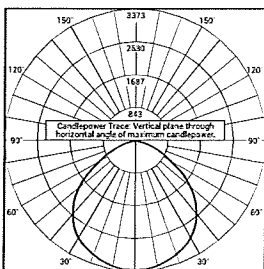


CPY250-A-**-D-A-UL
Mounting Height: 15' (4.6m)
Initial Delivered Lumens: 8,000
Initial FC at grade

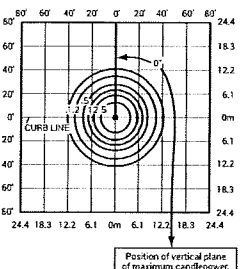
Drop Lens Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	7,600	B3 U2 G1	8,000	B3 U2 G1
B	12,400	B3 U2 G1	13,000	B3 U2 G1
C	4,400	B2 U2 G1	4,620	B2 U2 G1
D	16,403	B4 U3 G2	17,059	B4 U3 G2
E	20,411	B4 U2 G2	20,784	B4 U2 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

FLAT LENS



ITL Test Report #: 76866
CPY250-A-**-F-A-UL
Initial Delivered Lumens: 8,821

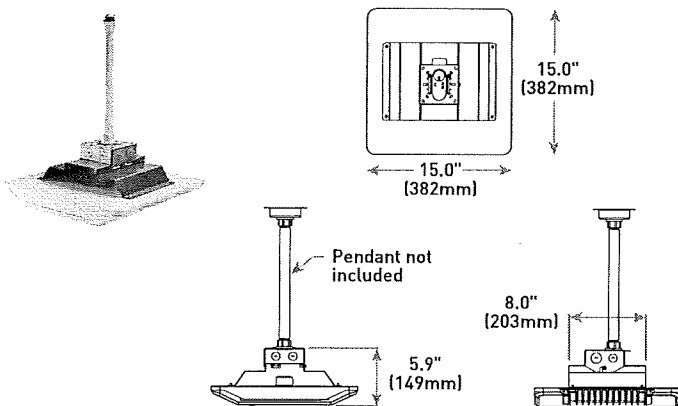


CPY250-A-**-F-A-UL
Mounting Height: 15' (4.6m)
Initial Delivered Lumens: 8,000
Initial FC at grade

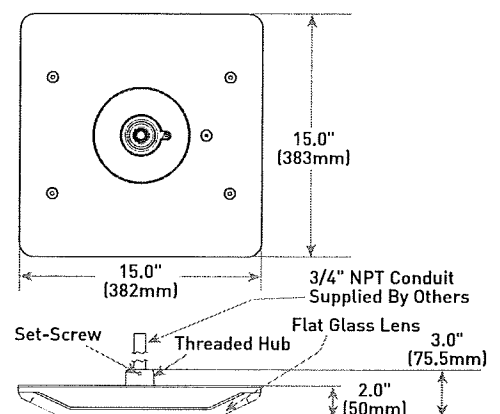
Flat Lens Distribution				
Input Power Designator	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
A	7,600	B3 U0 G1	8,000	B3 U0 G1
B	12,400	B3 U0 G1	13,000	B3 U0 G1
C	4,400	B2 U0 G1	4,620	B2 U0 G1
D	16,798	B4 U0 G1	17,470	B4 U0 G1
E	20,411	B4 U0 G1	20,784	B4 U0 G1

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf

PD Mount



PD Mount w/HZ Option



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Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507





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Photometric Report (Type C)

Filename: C1_CPY250-A-xx-F-B-UL-xxxxx-40K_CONFIGURED.ies

[TEST] CONFIGURED FROM PL08165-001C

[TESTLAB] Cree Inc

[ISSUEDATE] 4/26/2016

[MANUFAC] Cree Inc

[LUMCAT] CPY250-A-xx-F-B-UL-xxxxx-40K CONFIGURED FROM

CPY250-A-xx-F-B-UL-xxxxx

[LUMINAIRE] CONFIGURED FROM Cree CPY250 Canopy /

Soffit Luminaire w-Flat Lens, B Input Power Designator

, 5700K

Maximum Candela = 4489.58638250828 at 45 H 2.5 V

Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.00

Luminaire Efficacy Rating (LER): 129

Indoor Classification: Direct

BUG Rating : B3-U0-G1

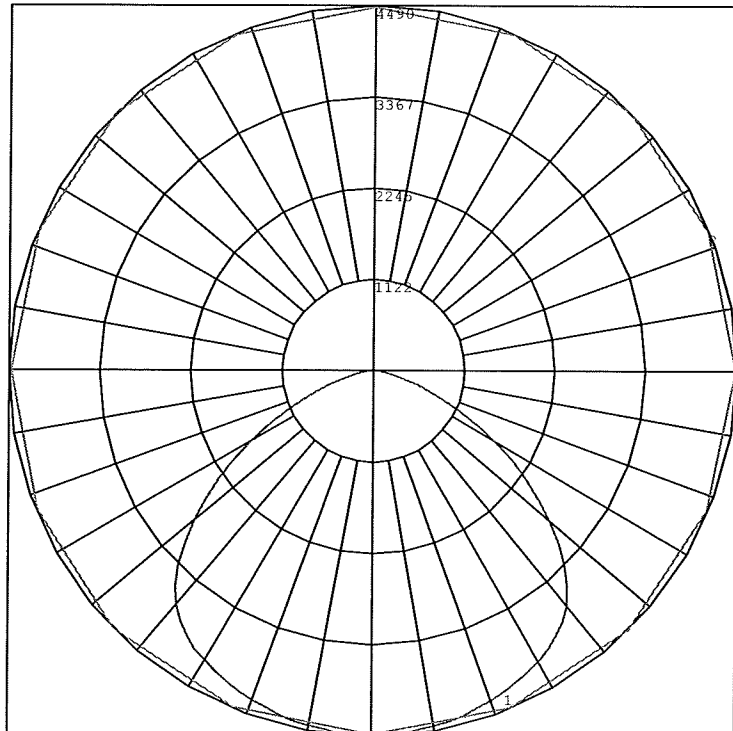
Polar Candela Curves:

Vertical Plane Through:

1) 45 - 225 Horizontal

Horizontal Cone Through:

2) 2.5 Vertical





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Photometric Report (Type C)

Filename: C1_CPY250-A-xx-F-B-UL-xxxxx-40K_CONFIGURED.ies
[TEST] CONFIGURED FROM PL08165-001C
[TESTLAB] Cree Inc
[ISSUEDATE] 4/26/2016
[MANUFAC] Cree Inc
[LUMCAT] CPY250-A-xx-F-B-UL-xxxxx-40K CONFIGURED FROM
CPY250-A-xx-F-B-UL-xxxxx
[LUMINAIRE] CONFIGURED FROM Cree CPY250 Canopy /
Soffit Luminaire w-Flat Lens, B Input Power Designator
, 5700K

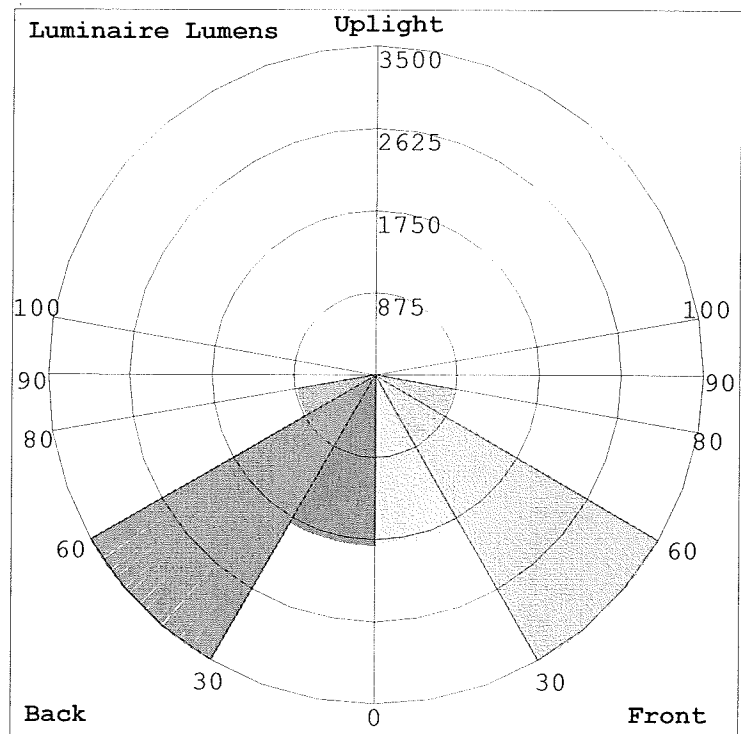
Maximum Candela = 4489.58638250828 at 45 H 2.5 V

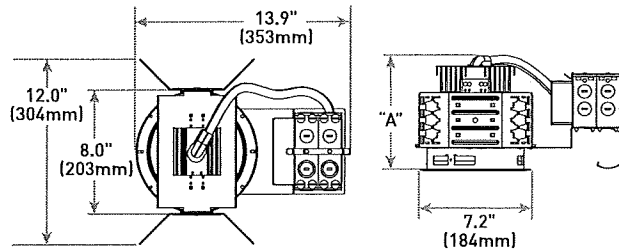
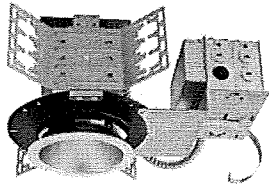
Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 129
Indoor Classification: Direct
BUG Rating : B3-U0-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	1805.4	N.A.	14.6
FM (30-60)	3499.8	N.A.	28.2
FH (60-80)	843.4	N.A.	6.8
FVH (80-90)	51.4	N.A.	0.4
BL (0-30)	1805.4	N.A.	14.6
BM (30-60)	3499.8	N.A.	28.2
BH (60-80)	843.4	N.A.	6.8
BVH (80-90)	51.4	N.A.	0.4
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	12400.0	N.A.	100.0
BUG Rating	B3-U0-G1		





INITIAL DELIVERED LUMENS	DIM "A"
11L, 15L, 24L	6.8" (172mm)
34L	6.8" (173mm)
42L	7.3" (186mm)
50L, 63L	9.7" (247mm)
75L	9.8" (248mm)
84L	10.5" (268mm)

PRODUCT DESCRIPTION

The Essentia® by Cree downlights deliver beautiful 90+CRI light, with efficacy up to 83 lumens per watt. Available in a variety of lumen packages, color temperatures and beam angles, each downlight is rated at 50,000 hours and features a premium quality self-flanged reflector finish supported by a range of color trim options. Essentia® by Cree downlights are engineered to provide outstanding value and performance. It's your essential, comprehensive downlight portfolio for new construction and renovation applications.

Applications: New construction and renovation applications with non-insulated ceilings or where insulation can be kept 3" (76mm) from housing

PRODUCT SPECIFICATIONS

OVERVIEW

- Initial Delivered Lumens: 958-6,315 lumens
- Input Power: 12-86 Watts
- CCT: 2700K, 3000K, 3500K, 4000K
- Beam Angles: Narrow, Medium and Wide
- Emergency Performance: 90 Minutes minimum
- CRI: 90
- Controls: 0/1-10V dimming down to 1% and Triac dimming down to 10%
- Limited Warranty†: 5 years on luminaire
- Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in accordance with local codes
- ENERGY STAR® certified

ORDERING INFORMATION

Fully assembled luminaire is composed of two components that must be ordered separately:

Example: Housing: S-DL6-11L-27K + Trim: S-DL6T-N-SSC

HOUSING (TRIM MUST BE ORDERED SEPARATELY)										
S-DL6										
PRODUCT	SIZE	INITIAL DELIVERED LUMENS*		CCT		VOLTAGE	CONTROLS	OPTIONS		
S-DL Essentia® by Cree Downlight	6 6" (152mm)	11L	12W	958 lumens		27K	2700K	Blank Universal 120-277 Volt - Available on 11L-42L only. Must specify voltage for 50L-84L 120V 120V for 50L-84L 277V 277V for 50L-84L	Blank 0/1-10V and Triac Dimming	EB Emergency Backup
		15L	15W	1,125 lumens		30K	3000K			
		24L	23W	1,786 lumens		35K	3500K			
		34L	34W	2,678 lumens		40K	4000K			
		42L	42W	3,311 lumens						
		50L	49W	3,887 lumens						
		63L	57W	4,715 lumens						
		75L	72W	5,701 lumens						
84L	86W	6,315 lumens								

TRIM (HOUSING MUST BE ORDERED SEPARATELY)									
S-DL6T									
PRODUCT	BEAM		FINISH		REFLECTOR COLOR		FLANGE COLOR		
S-DL6T	N	Narrow	SS	Semi-Specular	C	Clear	BR	Bronze	Blank Matching Flange WF*** White Flange
	M	Medium	P	Painted (For White Color)	CG	Champagne Gold	PE	Pewter	
	W	Wide			W**	White	WH	Wheat	
					B	Black			

† See <http://lighting.cree.com/warranty> for warranty terms

* Initial delivered lumens at 4000K. Actual production yield may vary between -10 and +10% of initial delivered lumens

** Requires "P" Painted finish

*** Required when "W" Reflector is ordered, example: S-DL6T-N-PW-WF; available with all reflectors



6" ROUND DOWNLIGHT

958-6,315 INITIAL DELIVERED LUMENS

PRODUCT SPECIFICATIONS

CONSTRUCTION & MATERIALS

- Semi-specular clear reflector/flange finish, standard
- Multiple reflector/flange colors available
- Light engine, optics and driver accessible from below ceiling
- Heavy-gauge formed steel housing
- Mounting brackets are adjustable from above or below the ceiling
- Ten 1/2" (13mm) and two 3/4" (19mm) knockouts with pry-outs
- Eight knockouts with Romex[®] cable clamp
- **Max. Ceiling Thickness: 1-3/8" (35mm)**

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9
- **Total Harmonic Distortion:** < 20% at full load
- **Input Voltage:** 120-277V, 50/60Hz
- **Operating Temperature Range:** 0°C - +35°C (32°F - +95°F); 0°C - +30°C (32°F - +86°F) w/EB option

CONTROLS

- Triac dimming down to 10%
- 0/1-10V dimming down to 1% with 0-10V DC control protocol
- **10V Source Current:** 1.00mA

ACCESSORIES

C-CHANNEL HANGER BARS

RBH30C

- Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) c-channel bars

RBH24C-1

- Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard c-channel bars

T-BAR CLIPS

RARC7

- Set of four
- For use with RBH24C-1 hanger bars

ELECTRICAL DATA*

Initial Delivered Lumens	System Watts 120-277V	Total Current (A)			
		120V	208V	240V	277V
11L	12	0.10	0.06	0.05	0.04
15L	15	0.12	0.07	0.06	0.05
24L	23	0.19	0.11	0.10	0.08
34L	34	0.28	0.16	0.14	0.12
42L	42	0.35	0.20	0.18	0.15
50L	49	0.40	0.23	0.20	0.17
63L	57	0.47	0.27	0.23	0.20
75L	72	0.60	0.35	0.30	0.26
84L	86	0.70	0.40	0.35	0.30

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%

- 0-10V dimming control must be Class 2 and either have a neutral connection or be suitable for use with LED luminaires
- Reference <https://www.creelink.com/exLink.asp?320393100Y68H19I46337100> for recommended dimming controls

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for damp locations
- Suitable for thru-wiring 8#12AWG-90°C
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Designed for indoor use
- 75L and 84L versions require marked spacing: 48" (1219mm) x 24" (610mm) x 3" (76mm). 48" (1219mm) luminaire to luminaire, 24" (610mm) luminaire to side wall, 3" (76mm) above luminaire
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- ENERGY STAR[®] certified. Please refer to <https://www.energystar.gov/productfinder/product/certified-light-fixtures/results> for most current information
- **UL924 (EB option). Maximum mounting height:** 11L - 36.1' (11.0m); 15L - 41.2' (12.5m); 24L - 37.2' (11.3m); 34L - 40.7' (12.4m); 42L - 40.2' (12.2m); 50L - 31.6' (9.6m); 63L - 34.5' (10.5m); 75L - 32.4' (9.8m); 84L - 34.8' (10.6m)

WIRELESS 0-10V DIMMING/SWITCHING INTERFACE W/CREE SMARTCAST[®] TECHNOLOGY

CIF-10V-CWC-SNSR

- For use with luminaires with 10V controls when integral SmartCast isn't available
- Maximum four luminaires per SmartCast 10V Interface
- Refer to <http://www2.cree.com/smartcast-landing-page> for additional details

CREE SMARTCAST[®] TECHNOLOGY CONFIGURATION TOOL CCT-CWC-1

- One required per project when CIF-10V-CWC-SNSR is selected
- Refer to <http://www2.cree.com/smartcast-landing-page> for additional details

RECOMMENDED ESSENTIA BY CREE DOWNLIGHT LUMEN MAINTENANCE FACTORS (LMF)¹

Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Calculated ³ LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
25°C	1.00	0.94	0.89	0.84	0.80

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

ESSENTIA[®]
by **CREE** ⇩

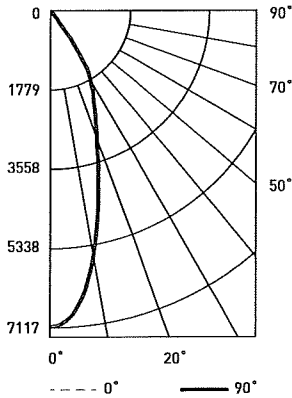
6" ROUND DOWNLIGHT

958-6,315 INITIAL DELIVERED LUMENS

PHOTOMETRY

S-DL6-42L-40K + S-DL6T-M-SSC BASED ON CESTL REPORT TEST #: PL08067-001

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



Initial Delivered Lumens: 3,469
 Efficacy: 81.0 LPW
 S/M: 0.56
 Beam Angle: 34.7°

Coefficients Of Utilization - Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	114	111	109	107
2	109	105	101	98
3	104	99	94	90
4	100	93	88	84
5	95	88	83	79
6	91	83	78	74
7	87	79	74	70
8	84	75	70	66
9	80	72	67	63
10	77	69	63	60

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m ²)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	7,000	7,000	7,000
55°	1,562	1,562	1,562
65°	591	591	591
75°	537	537	537
85°	503	503	503

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	2,802	N/A	80.8%
0-40	3,364	N/A	97.0%
0-60	3,460	N/A	99.8%
0-90	3,469	N/A	100%
0-180	3,469	N/A	100%

Reference <http://lighting.cree.com/products/indoor/track/essentia-by-cree-downlight> for detailed photometric data

Cone of Light		
Distance from Workplane	Footcandles	Beam Diameter
6' (1.8m)	203	3.4' (1.0m)
8' (2.4m)	114	4.5' (1.4m)
10' (3.0m)	78	5.3' (1.6m)
12' (3.7m)	51	6.7' (2.0m)
14' (4.3m)	37	7.9' (2.4m)

APPLICATION REFERENCE

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft ²	Average FC
4 x 4	3,311	42	79	2.58	211
6 x 6				1.20	99
8 x 8				0.65	53
10 x 10				0.43	35

10' Ceiling, 80/50/20 Reflectances, 2.5' Workplane, Open Room.
 LLF: 1.0 Initial. Open Space: 50' x 40'

Corridor					
Spacing	Lumens	Wattage	LPW	w/ft ²	Average FC
4' on Center	3,311	42	79	1.79	111
6' on Center				1.22	75
8' on Center				0.86	53
10' on Center				0.72	44

10' Ceiling, 80/50/20 Reflectances, 2.5' Workplane, Corridor.
 LLF: 1.0 Initial. Open Space: 6' x 100'

BEAM ANGLES

Initial Delivered Lumens	Beam Angle		
	N	M	W
11L-24L	15°	25°	45°
34L-84L	25°	40°	55°

CCT MULTIPLIERS (90 CRI)

CCT			
2700K	3000K	3500K	4000K
0.87	0.93	0.93	1.00

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www.agi32.com

Photometric Report (Type C)

Filename: D1_S-DL6-15L-27K w_S-DL6T-W-SS-C_PL08049-001A.IES

[TEST] PL08049-001A

[TESTLAB] Cree Inc.

[ISSUE DATE] 4/5/2016 11:03:45 AM

[MANUFAC] Cree Inc

[LUMCAT] S-DL6-15L-27K w_S-DL6T-W-SS-C

[LUMINAIRE] 6-Inch Round Downlight, 15L Package, 2700K

, Wide Distribution

[LAMP] CXB1512

Maximum Candela = 1488.08 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.00

Luminaire Efficacy Rating (LER): 73

Indoor Classification: Direct

BUG Rating : B1-U0-G0

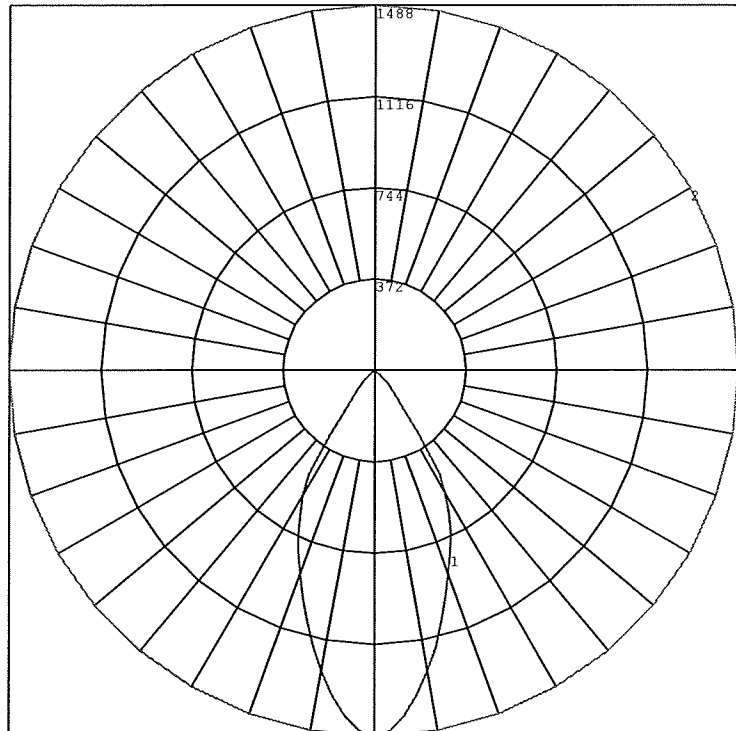
Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 0 Vertical





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Photometric Report (Type C)

Filename: D1_S-DL6-15L-27K w_S-DL6T-W-SS-C_PL08049-001A.IES
[TEST] PL08049-001A
[TESTLAB] Cree Inc.
[ISSUEDATE] 4/5/2016 11:03:45 AM
[MANUFAC] Cree Inc
[LUMCAT] S-DL6-15L-27K w_S-DL6T-W-SS-C
[LUMINAIRE] 6-Inch Round Downlight, 15L Package, 2700K
, Wide Distribution
[LAMP] CXB1512

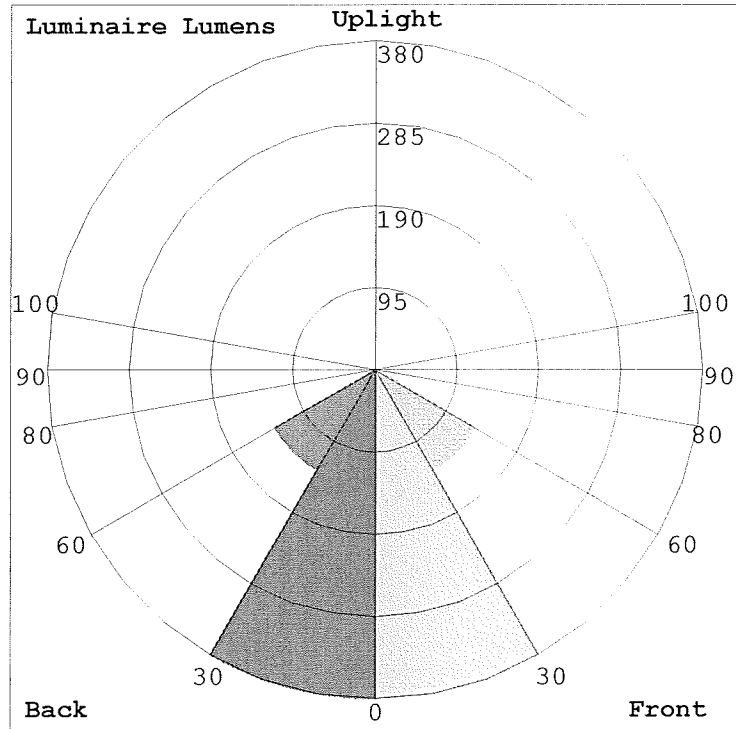
Maximum Candela = 1488.08 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 73
Indoor Classification: Direct
BUG Rating : B1-U0-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	380.0	N.A.	36.9
FM (30-60)	133.4	N.A.	13.0
FH (60-80)	1.4	N.A.	0.1
FVH (80-90)	0.2	N.A.	0.0
BL (0-30)	380.0	N.A.	36.9
BM (30-60)	133.4	N.A.	13.0
BH (60-80)	1.4	N.A.	0.1
BVH (80-90)	0.2	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	1030.0	N.A.	100.0
BUG Rating	B1-U0-G0		





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Photometric Report (Type C)

Filename: D2_S-DL6-24L-27K w_S-DL6T-W -SS-C_PL08053-001A.IES
[TEST] PL08053-001A
[TESTLAB] Cree Inc.
[ISSUEDATE] 3/30/2016 4:57:20 PM
[MANUFAC] Cree Inc
[LUMCAT] S-DL6-24L-27K w_S-DL6T-W -SS-C
[LUMINAIRE] 6-Inch Round Downlight, 24L Package, 2700K
, Wide Distribution
[LAMP] CXB1820

Maximum Candela = 2372.34 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 79
Indoor Classification: Direct
BUG Rating : B2-U0-G0

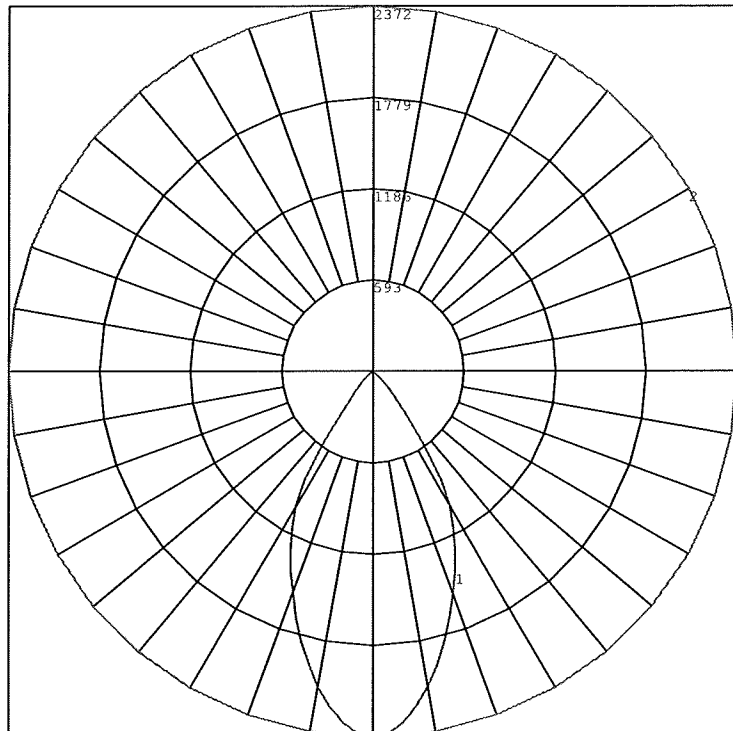
Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 0 Vertical





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Photometric Report (Type C)

Filename: D2_S-DL6-24L-27K w_S-DL6T-W -SS-C_PL08053-001A.IES
[TEST] PL08053-001A
[TESTLAB] Cree Inc.
[ISSUE DATE] 3/30/2016 4:57:20 PM
[MANUFAC] Cree Inc
[LUMCAT] S-DL6-24L-27K w_S-DL6T-W -SS-C
[LUMINAIRE] 6-Inch Round Downlight, 24L Package, 2700K
, Wide Distribution
[LAMP] CXB1820

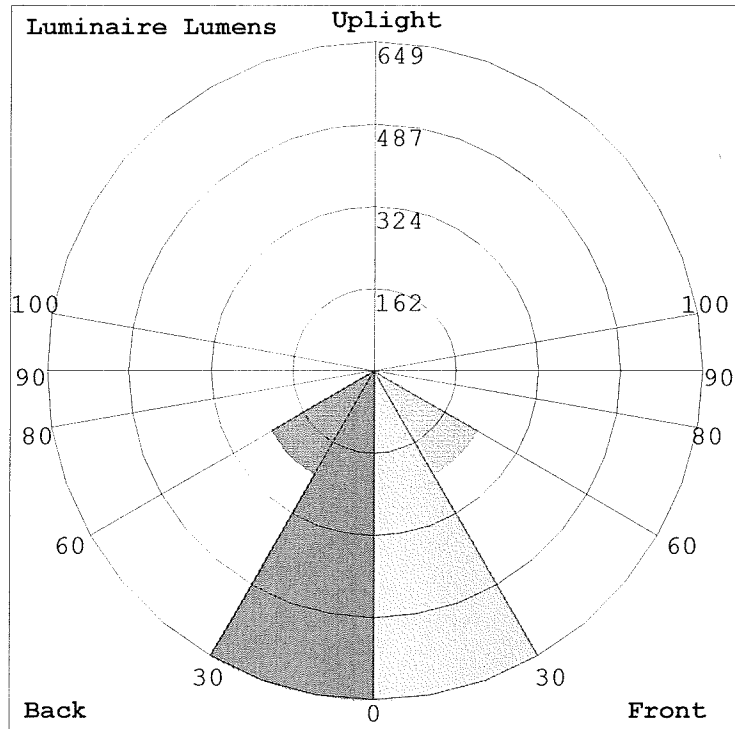
Maximum Candela = 2372.34 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 79
Indoor Classification: Direct
BUG Rating : B2-U0-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	649.0	N.A.	36.6
FM (30-60)	235.4	N.A.	13.3
FH (60-80)	2.4	N.A.	0.1
FVH (80-90)	0.3	N.A.	0.0
BL (0-30)	649.0	N.A.	36.6
BM (30-60)	235.4	N.A.	13.3
BH (60-80)	2.4	N.A.	0.1
BVH (80-90)	0.3	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	1774.2	N.A.	100.0
BUG Rating	B2-U0-G0		



DESCRIPTION

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

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

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

Optics

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

Electrical

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

Mounting

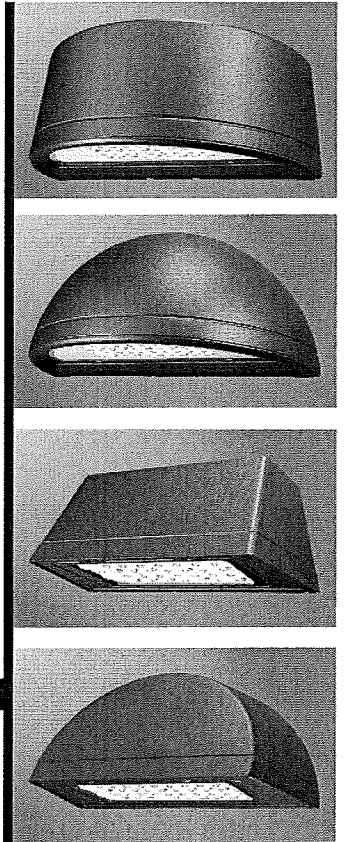
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish

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

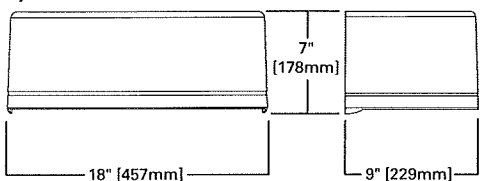
Warranty

Five-year warranty.

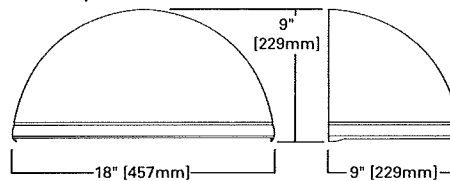


DIMENSIONS

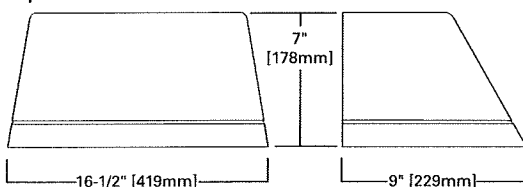
Cylinder



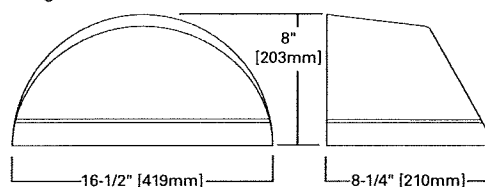
Quarter Sphere



Trapezoid



Wedge



ISC/ISS/IST/ISW IMPACT ELITE LED

1 - 2 LightBARs
Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightBARs
ISO 9001

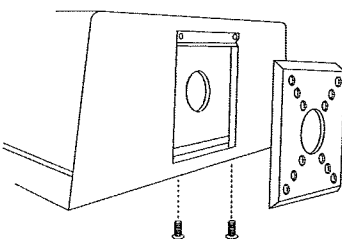
ENERGY DATA

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

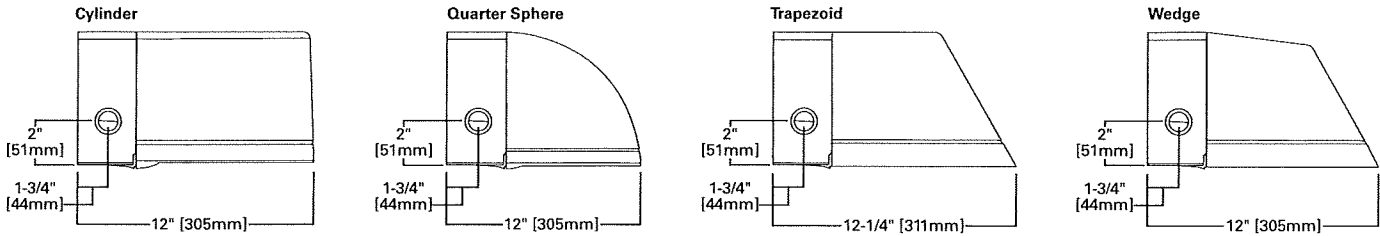
SHIPPING DATA

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

HOOK-N-LOCK MOUNTING



THRUWAY BACK BOX



POWER AND LUMENS BY BAR COUNT

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

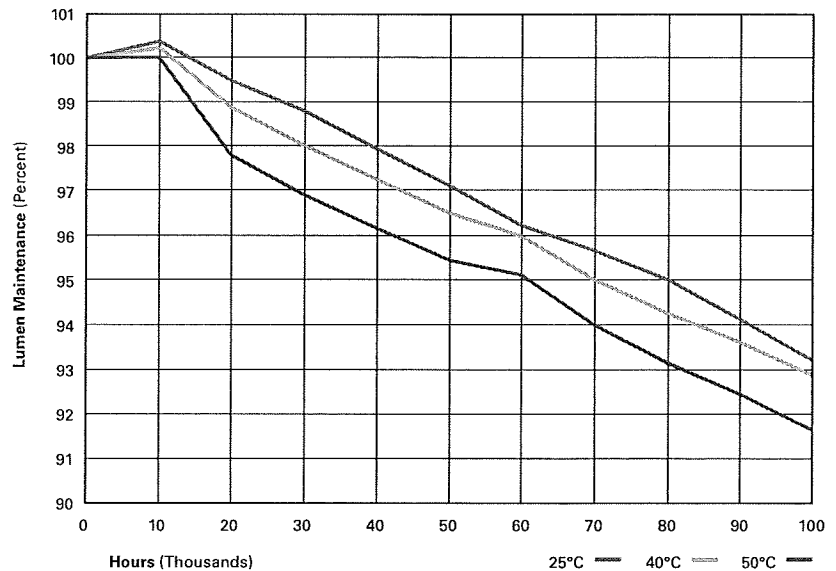
LUMEN MAINTENANCE

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

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

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



ORDERING INFORMATION

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

Product Family	Number of LightBARs 1,2	Lamp Type	Voltage	Distribution	Color 4
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs F01=(1) 7 LED LightBAR F02=(2) 7 LED LightBARs	LED=Solid State Light Emitting Diodes	E1=Electronic (120-277V) 347=347V 480=480V 3	BL2=Type II w/Back Light Control BL3=Type III w/Back Light Control BL4=Type IV w/Back Light Control GZW=Wall Grazer Wide SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)				Accessories (Order Separately) 10	
2L=Two Circuits 5 7030=70 CRI / 3000K CCT 6 7050=70 CRI / 5000K CCT 6 7060=70 CRI / 5700K CCT 6 8030=80 CRI / 3000K CCT 6 P=Button Type Photocontrol (Available in 120, 208, 240 or 277V. Must Specify Voltage) OSB=Occupancy Sensor with Back Box (Specify 120V or 277V) 7 BBB-XX=Battery Pack with Back Box (Specify 120V or 277V) 8 CWB-XX=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) 9 DIM=0-10V Dimming Drivers LCF=LightBAR Cover Plate Matches Housing Finish ULG=Uplight Glow TR=Tamper Resistant Hardware				MA1253=10kV Circuit Module Replacement MA1254-XX=Thruway Back Box - Impact Elite Trapezoid MA1255-XX=Thruway Back Box - Impact Elite Cylinder MA1256-XX=Thruway Back Box - Impact Elite Quarter Sphere MA1257-XX=Thruway Back Box - Impact Elite Wedge	

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



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Photometric Report (Type C)

Filename: EW1_IST-E01-LED-E1-BL3-7030.ies
[TEST] P139659 REPORT IS SCALED FROM IESNA LM-79-08
TEST DATA (P33645)
[TESTLAB] INNOVATIONS CENTER-P3
[ISSUE DATE] 2/20/2015
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] IST-E01-LED-E1-BL3-7030
[LUMINAIRE] IMPACT ELITE LED LUMINAIRE (1) LIGHTBARS
WITH AccuLED OPTICS - TYPE 3 W/ BACK LIGHT CONTROL
[LAMP] (21) 3000K CCT, 70 CRI LEDs

Maximum Candela = 2025.8 at 67 H 67 V

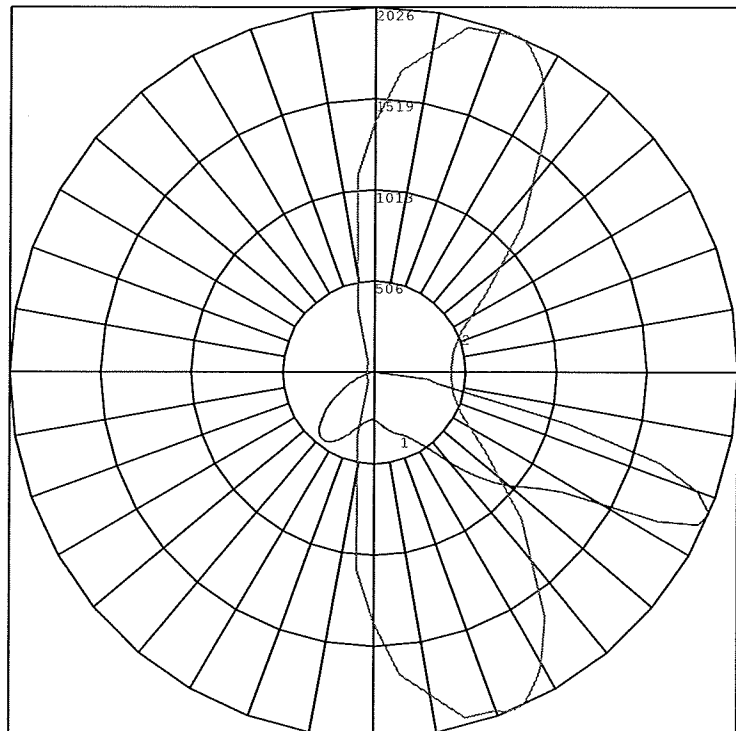
Classification:

Road Classification: Type III, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 100
Indoor Classification: Direct
BUG Rating : B1-U0-G1

Polar Candela Curves:

Vertical Plane Through:
1) 67 - 247 Horizontal

Horizontal Cone Through:
2) 67 Vertical





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Photometric Report (Type C)

Filename: EW1_IST-E01-LED-E1-BL3-7030.ies
 [TEST] P139659 REPORT IS SCALED FROM IESNA LM-79-08
 TEST DATA (P33645)
 [TESTLAB] INNOVATIONS CENTER-P3
 [ISSUEDATE] 2/20/2015
 [MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)
 [LUMCAT] IST-E01-LED-E1-BL3-7030
 [LUMINAIRE] IMPACT ELITE LED LUMINAIRE (1) LIGHTBARS
 WITH AccuLED OPTICS - TYPE 3 W/ BACK LIGHT CONTROL
 [LAMP] (21) 3000K CCT, 70 CRI LEDs

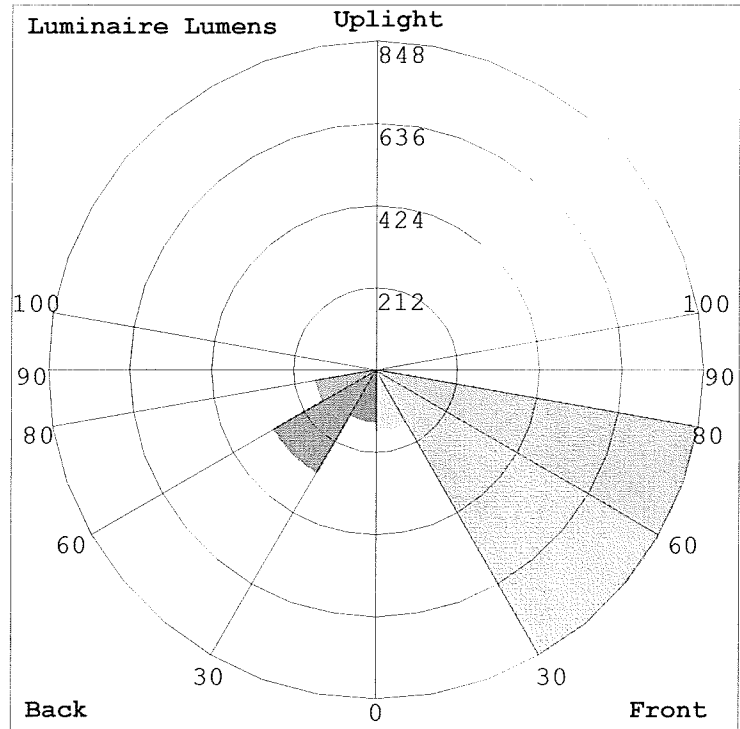
Maximum Candela = 2025.8 at 67 H 67 V

Classification:

Road Classification: Type III, Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 100
 Indoor Classification: Direct
 BUG Rating : B1-U0-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	154.8	N.A.	6.3
FM (30-60)	848.3	N.A.	34.4
FH (60-80)	843.2	N.A.	34.2
FVH (80-90)	22.6	N.A.	0.9
BL (0-30)	132.6	N.A.	5.4
BM (30-60)	302.7	N.A.	12.3
BH (60-80)	156.8	N.A.	6.4
BVH (80-90)	7.2	N.A.	0.3
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	2468.2	N.A.	100.0
BUG Rating	B1-U0-G1		





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Photometric Report (Type C)

Filename: EW2_IST-E02-LED-E1-BL4-7030.ies
[TEST] P139809 REPORT IS SCALED FROM IESNA LM-79-08
TEST DATA (P33646)
[TESTLAB] INNOVATIONS CENTER-P3
[ISSUE DATE] 2/20/2015
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] IST-E02-LED-E1-BL4-7030
[LUMINAIRE] IMPACT ELITE LED LUMINAIRE (2) LIGHTBARS
WITH AccuLED OPTICS - TYPE 4 W/ BACK LIGHT CONTROL
[LAMP] (42) 3000K CCT, 70 CRI LEDs

Maximum Candela = 4111 at 45 H 67.5 V

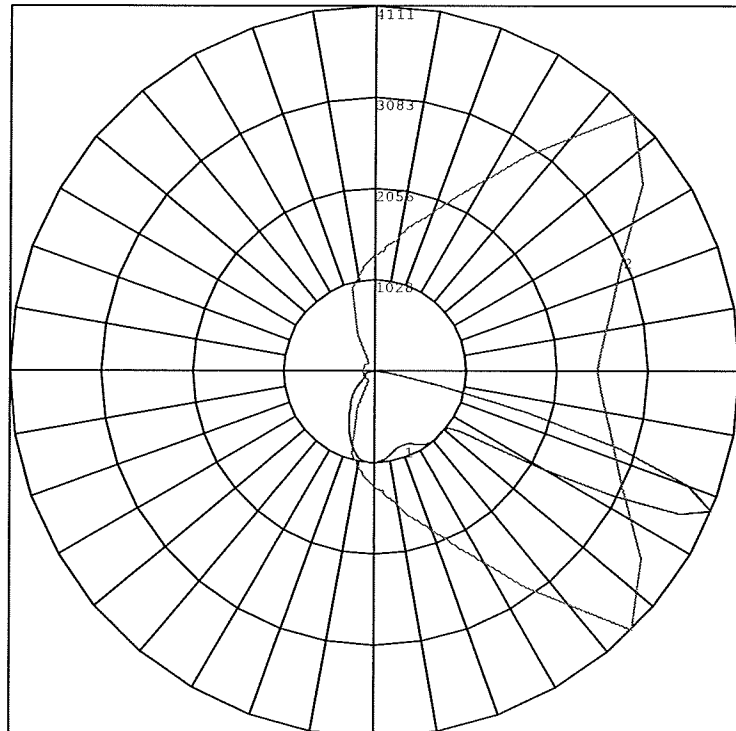
Classification:

Road Classification: Type III, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 102
Indoor Classification: Direct
BUG Rating : B1-U0-G1

Polar Candela Curves:

Vertical Plane Through:
1) 45 - 225 Horizontal

Horizontal Cone Through:
2) 67.5 Vertical





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Photometric Report (Type C)

Filename: EW2_IST-E02-LED-E1-BL4-7030.ies
 [TEST] P139809 REPORT IS SCALED FROM IESNA LM-79-08
 TEST DATA (P33646)
 [TESTLAB] INNOVATIONS CENTER-P3
 [ISSUE DATE] 2/20/2015
 [MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)
 [LUMCAT] IST-E02-LED-E1-BL4-7030
 [LUMINAIRE] IMPACT ELITE LED LUMINAIRE (2) LIGHTBARS
 WITH AccuLED OPTICS - TYPE 4 W/ BACK LIGHT CONTROL
 [LAMP] (42) 3000K CCT, 70 CRI LEDs

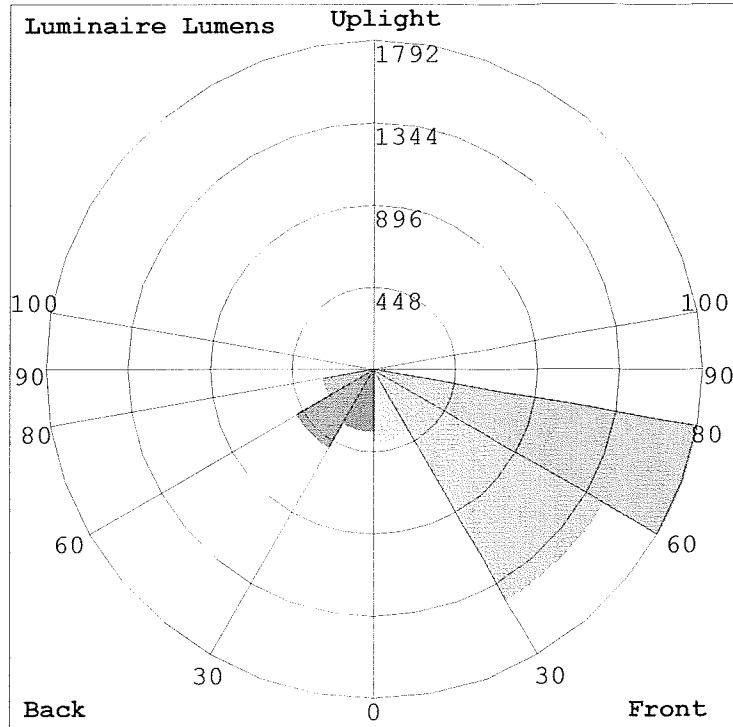
Maximum Candela = 4111 at 45 H 67.5 V

Classification:

Road Classification: Type III, Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 102
 Indoor Classification: Direct
 BUG Rating : B1-U0-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	390.1	N.A.	8.2
FM (30-60)	1446.1	N.A.	30.3
FH (60-80)	1792.4	N.A.	37.6
FVH (80-90)	25.3	N.A.	0.5
BL (0-30)	335.2	N.A.	7.0
BM (30-60)	485.5	N.A.	10.2
BH (60-80)	280.2	N.A.	5.9
BVH (80-90)	17.4	N.A.	0.4
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	4772.2	N.A.	100.0
BUG Rating	B1-U0-G1		



DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

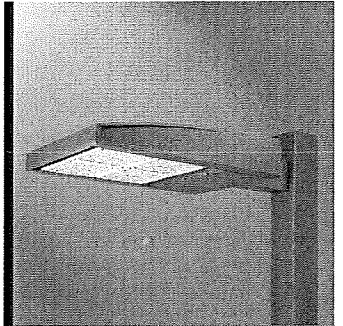
arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.

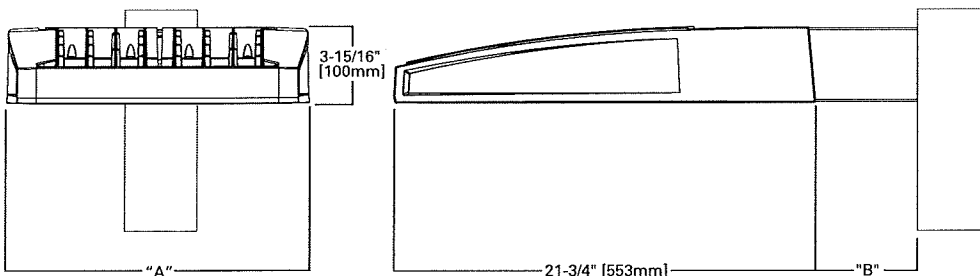


GLEON GALLEON LED

1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

DIMENSIONS

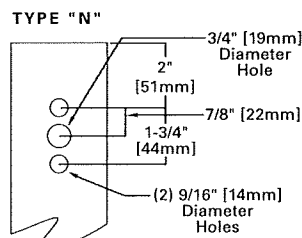


DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

NOMINAL POWER LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Nominal Power (Watts)	59	113	166	225	279	333	391	445	501	558	
Input Current @ 120V (A)	0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.6	5.07	
Input Current @ 208V (A)	0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75	
Input Current @ 240V (A)	0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39	
Input Current @ 277V (A)	0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09	
Input Current @ 347V (A)	0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68	
Input Current @ 480V (A)	0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28	
Optics											
T2	4000K/5000K Lumens	6,116	11,951	17,833	23,563	29,195	34,937	41,317	46,814	52,221	57,817
	3000K Lumens	5,414	10,579	15,786	20,858	25,843	30,926	36,574	41,440	46,226	51,180
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,493	12,688	18,932	25,015	30,994	37,090	43,863	49,699	55,439	61,380
	3000K Lumens	5,748	11,231	16,759	22,143	27,436	32,832	38,828	43,994	49,075	54,334
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,234	12,181	18,176	24,017	29,756	35,609	42,111	47,715	53,225	58,930
	3000K Lumens	5,518	10,783	16,089	21,260	26,340	31,521	37,277	42,237	47,115	52,165
	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-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,372	12,453	18,580	24,550	30,418	36,400	43,048	48,776	54,409	60,239
	3000K Lumens	5,640	11,023	16,447	21,732	26,926	32,221	38,106	43,177	48,163	53,324
	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	B3-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,270	12,252	18,282	24,156	29,929	35,815	42,356	47,992	53,534	59,271
	3000K Lumens	5,550	10,845	16,183	21,383	26,493	31,703	37,494	42,483	47,388	52,467
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,189	12,094	18,045	23,844	29,543	35,352	41,809	47,372	52,843	58,506
	3000K Lumens	5,479	10,706	15,973	21,107	26,151	31,294	37,009	41,934	46,777	51,790
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,105	11,931	17,803	23,522	29,144	34,877	41,245	46,734	52,130	57,717
	3000K Lumens	5,404	10,561	15,759	20,822	25,798	30,873	36,510	41,369	46,145	51,091
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,233	12,180	18,174	24,013	29,753	35,604	42,106	47,708	53,218	58,921
	3000K Lumens	5,517	10,782	16,088	21,256	26,337	31,517	37,272	42,231	47,109	52,157
	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	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	5,922	11,572	17,268	22,816	28,269	33,829	40,006	45,330	50,566	55,984
	3000K Lumens	5,242	10,244	15,286	20,197	25,024	29,945	35,413	40,126	44,761	49,557
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,429	12,563	18,746	24,768	30,688	36,723	43,429	49,208	54,891	60,775
	3000K Lumens	5,691	11,121	16,594	21,925	27,165	32,507	38,443	43,559	48,590	53,798
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,547	12,794	19,090	25,224	31,253	37,400	44,228	50,114	55,902	61,893
	3000K Lumens	5,795	11,325	16,898	22,328	27,665	33,106	39,151	44,361	49,484	54,788
	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-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	6,564	12,828	19,141	25,291	31,336	37,499	44,347	50,248	56,051	62,058
	3000K Lumens	5,810	11,355	16,944	22,388	27,739	33,194	39,256	44,480	49,616	54,934
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,478	10,703	15,970	21,102	26,145	31,286	37,001	41,924	46,765	51,777
	3000K Lumens	4,849	9,474	14,137	18,679	23,144	27,694	32,753	37,111	41,396	45,833
	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-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,371	12,449	18,576	24,544	30,411	36,392	43,037	48,764	54,396	60,225
	3000K Lumens	5,640	11,020	16,443	21,726	26,920	32,214	38,096	43,166	48,151	53,311
	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-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,394	12,494	18,644	24,634	30,521	36,524	43,194	48,942	54,593	60,444
	3000K Lumens	5,660	11,060	16,504	21,806	27,017	32,331	38,235	43,323	48,326	53,505
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

ORDERING INFORMATION

Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	AF=1A Drive Current	01=1 02=2 03=3 04=4 05=5 06=6 07=7 ⁴ 08=8 ⁴ 09=9 ⁵ 10=10 ⁵	LED=Solid State Light Emitting Diodes	E1=120-277V 347=347V ⁶ 480=480V ^{6,7}	T2=Type II T2R=Type II Roadway T3=Type III T3R=Type III Roadway T4FT=Type IV Forward Throw T4W=Type IV Wide 5NQ=Type V Narrow 5MQ=Type V Square Medium 5WQ=Type V Square Wide SL2=Type II w/Spill Control SL3=Type III w/Spill Control SL4=Type IV w/Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I AFL=Automotive Frontline	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	[Blank]=Arm for Round or Square Pole EA=Extended Arm ⁸ MA=Mast Arm Adapter ⁹ WM=Wall Mount QM=Quick Mount Arm (Standard Length) ¹⁰ QMEA=Quick Mount Arm (Extended Length) ¹¹
Options (Add as Suffix)					Accessories (Order Separately)		
7030=70 CRI 3000K ¹² 8030=80 CRI 3000K ¹³ 7050=70 CRI 5000K ¹² 7060=70 CRI 6000K ¹² 600=Drive Current Factory Set to Nominal 600mA ¹⁴ 800=Drive Current Factory Set to Nominal 800mA ¹⁴ 1200=Drive Current Factory Set to Nominal 1200mA ^{14,15} F=Single Fuse (120, 277 or 347V. Must Specify Voltage) FF=Double Fuse (208, 240 or 480V. Must Specify Voltage) 2L=Two Circuits ^{16,17} DIM=External 0-10V Dimming Leads P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle R=NEMA Twistlock Photocontrol Receptacle AHD145=After Hours Dim, 5 Hours ¹⁸ AHD245=After Hours Dim, 6 Hours ¹⁸ AHD255=After Hours Dim, 7 Hours ¹⁸ AHD355=After Hours Dim, 8 Hours ¹⁸ HA=50°C High Ambient ¹⁹ MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{20,21} MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ^{20,22} MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ^{20,23} MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) ^{20,24} MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height ^{20,21,25} MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height ^{20,22,25} MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height ^{20,23,25} MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range) ^{20,24,25} MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height ^{20,21} MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height ^{20,22} MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height ^{20,23} MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range) ^{20,24} LWR-LW=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ²⁶ LWR-LN=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ²⁶ L90=Optics Rotated 90° Left R90=Optics Rotated 90° Right MT=Factory Installed Mesh Top TH=Tool-less Door Hardware LCF=Light Square Trim Plate Painted to Match Housing ²⁷ HSS=Factory Installed House Side Shield ²⁸ CE=CE Marking ²⁹					OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=120V Photocontrol MA1252=10kV Surge Module Replacement MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon FSIR-100=Wireless Configuration Tool for Occupancy Sensor ²⁰ GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares GLEON-QM=Quick Mount Arm Kit GLEON-QMEA=Quick Mount Extended Arm Kit LS/HSS=Field Installed House Side Shield ^{28,30}		

NOTES:

- 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.
- Standard 4000K CCT and minimum 70 CRI.
- Not compatible with extended quick mount arm (QMEA).
- Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA).
- Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table.
- Factory installed.
- Maximum 8 light squares.
- Maximum 6 light squares.
- Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website.
- Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website.
- 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Galleon luminaire product page on the website.
- Not available with HA option.
- 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table.
- Not available with LumaWatt wireless sensors.
- Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
- 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents.
- 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 Eaton for more information.
- Approximately 22' detection diameter at 8' mounting height.
- Approximately 40' detection diameter at 20' mounting height.
- Approximately 60' detection diameter at 40' mounting height.
- Approximately 100' detection diameter at 40' mounting height.
- Replace X with number of Light Squares operating in low output mode.
- LumaWatt wireless sensors are factory installed only requiring network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See www.eaton.com/lighting for LumaWatt application information.
- Not available with house side shield (HSS).
- Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected.
- CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only.
- One required for each Light Square.



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Photometric Report (Type C)

Filename: GLEON-AF-02-LED-E1-5WQ-7030.ies
[TEST] P192630 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24143)
[TESTLAB] Innovations Center P2
[ISSUEDATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-02-LED-E1-5WQ-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (2) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE V WIDE OPTICS

Maximum Candela = 4547.1 at 45 H 72.5 V

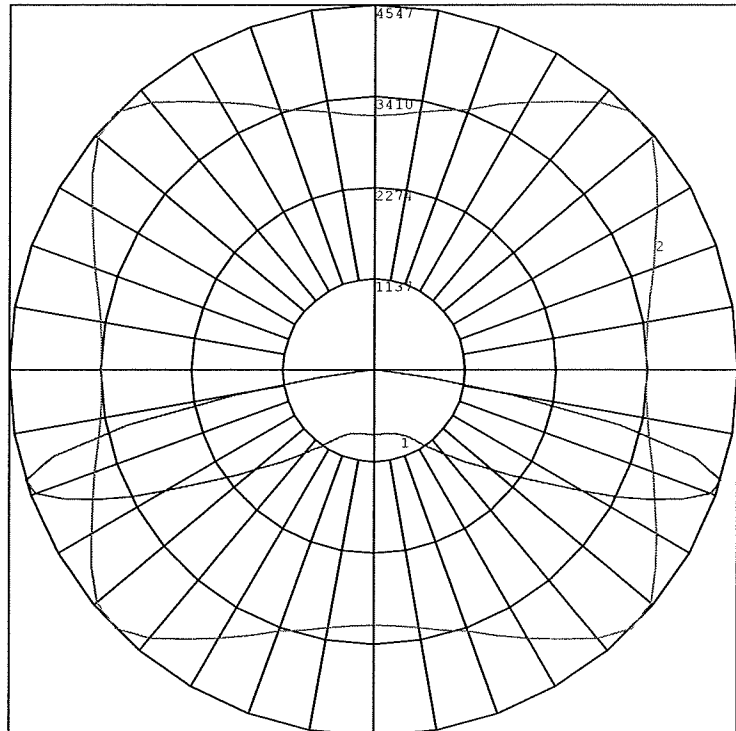
Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 100
Indoor Classification: Direct
BUG Rating : B4-U0-G2

Polar Candela Curves:

Vertical Plane Through:
1) 45 - 225 Horizontal

Horizontal Cone Through:
2) 72.5 Vertical





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Photometric Report (Type C)

Filename: GLEON-AF-02-LED-E1-5WQ-7030.ies
[TEST] P192630 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24143)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-02-LED-E1-5WQ-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (2) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE V WIDE OPTICS

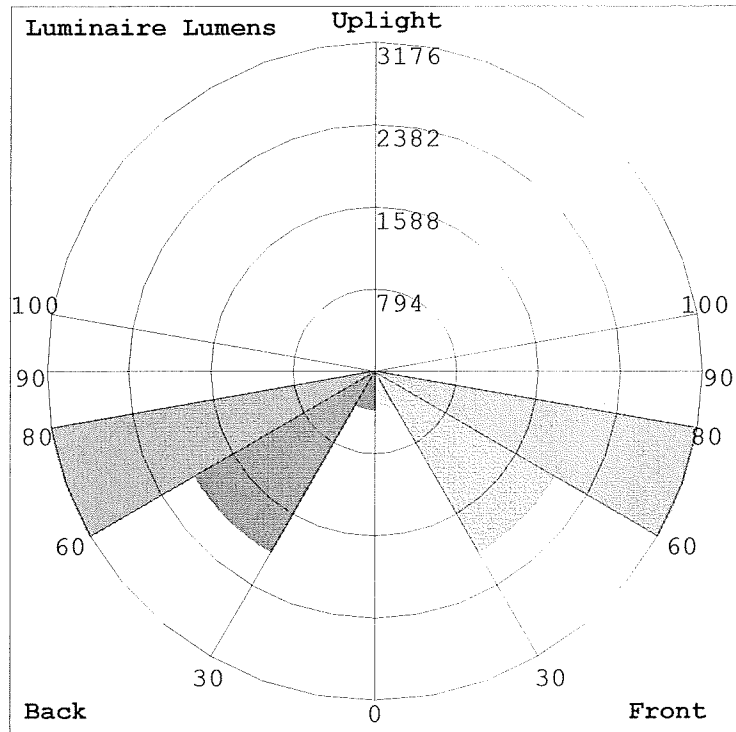
Maximum Candela = 4547.1 at 45 H 72.5 V

Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 100
Indoor Classification: Direct
BUG Rating : B4-U0-G2

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	368.1	N.A.	3.2
FM (30-60)	2013.4	N.A.	17.7
FH (60-80)	3176.1	N.A.	28.0
FVH (80-90)	119.9	N.A.	1.1
BL (0-30)	368.1	N.A.	3.2
BM (30-60)	2013.4	N.A.	17.7
BH (60-80)	3176.1	N.A.	28.0
BVH (80-90)	119.9	N.A.	1.1
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	11355.0	N.A.	100.0
BUG Rating	B4-U0-G2		





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Photometric Report (Type C)

Filename: P1_GLEON-AF-03-LED-E1-5WQ-7030.ies
[TEST] P192631 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24143)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-03-LED-E1-5WQ-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (3) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE V WIDE OPTICS

Maximum Candela = 6785.2 at 45 H 72.5 V

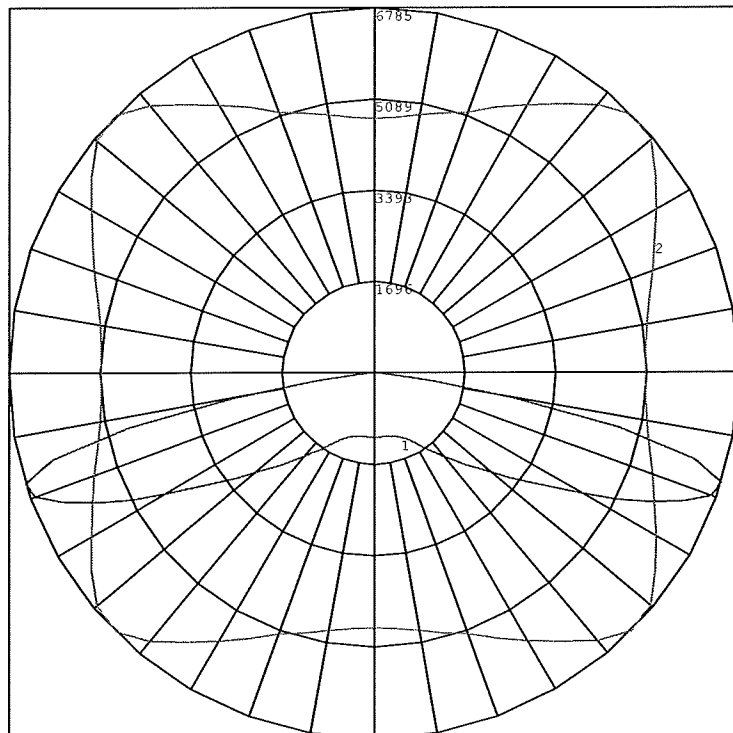
Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 102
Indoor Classification: Direct
BUG Rating : B4-U0-G2

Polar Candela Curves:

Vertical Plane Through:
1) 45 - 225 Horizontal

Horizontal Cone Through:
2) 72.5 Vertical





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Photometric Report (Type C)

Filename: P1_GLEON-AF-03-LED-E1-5WQ-7030.ies
 [TEST] P192631 TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
 [TESTLAB] Innovations Center P2
 [ISSUE DATE] 7/21/2016
 [MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)
 [LUMCAT] GLEON-AF-03-LED-E1-5WQ-7030
 [LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (3) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS

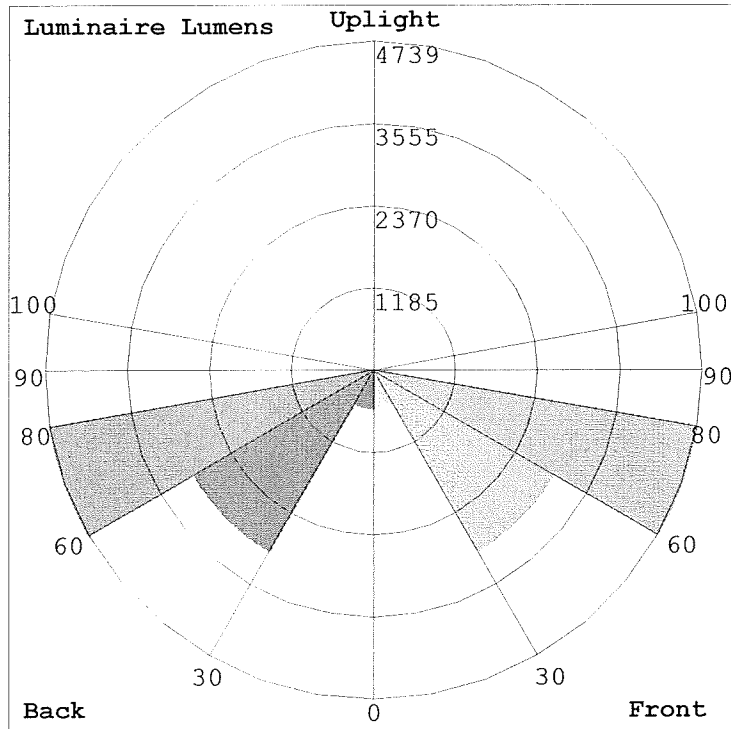
Maximum Candela = 6785.2 at 45 H 72.5 V

Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 102
 Indoor Classification: Direct
 BUG Rating : B4-U0-G2

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	549.2	N.A.	3.2
FM (30-60)	3004.4	N.A.	17.7
FH (60-80)	4739.5	N.A.	28.0
FVH (80-90)	178.9	N.A.	1.1
BL (0-30)	549.2	N.A.	3.2
BM (30-60)	3004.4	N.A.	17.7
BH (60-80)	4739.5	N.A.	28.0
BVH (80-90)	178.9	N.A.	1.1
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	16944.0	N.A.	100.0
BUG Rating	B4-U0-G2		





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Photometric Report (Type C)

Filename: GLEON-AF-04-LED-E1-5WQ-7030.ies
[TEST] P192632 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24143)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-04-LED-E1-5WQ-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (4) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE V WIDE OPTICS

Maximum Candela = 8965.2 at 45 H 72.5 V

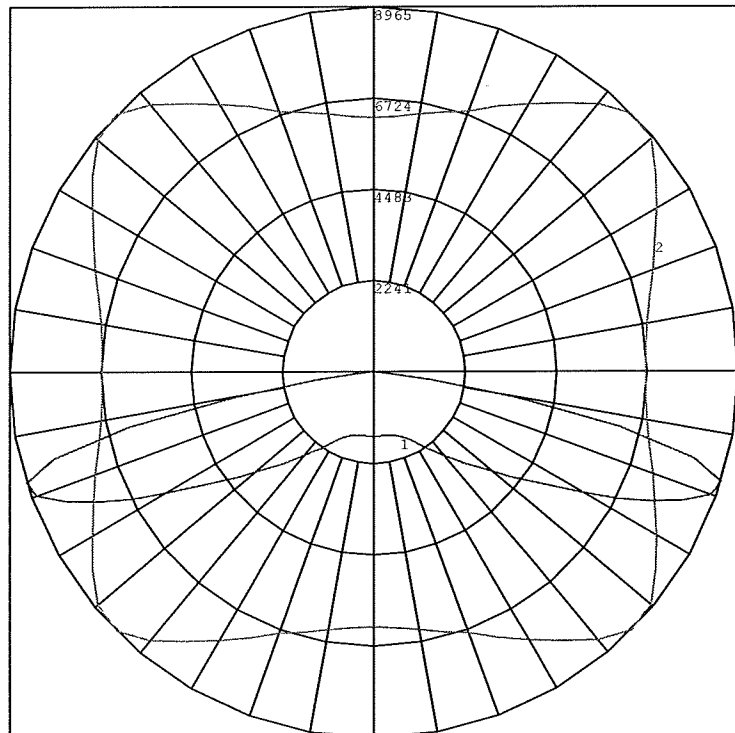
Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 100
Indoor Classification: Direct
BUG Rating : B5-U0-G3

Polar Candela Curves:

Vertical Plane Through:
1) 45 - 225 Horizontal

Horizontal Cone Through:
2) 72.5 Vertical





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Photometric Report (Type C)

Filename: GLEON-AF-04-LED-E1-5WQ-7030.ies
[TEST] P192632 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24143)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-04-LED-E1-5WQ-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (4) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE V WIDE OPTICS

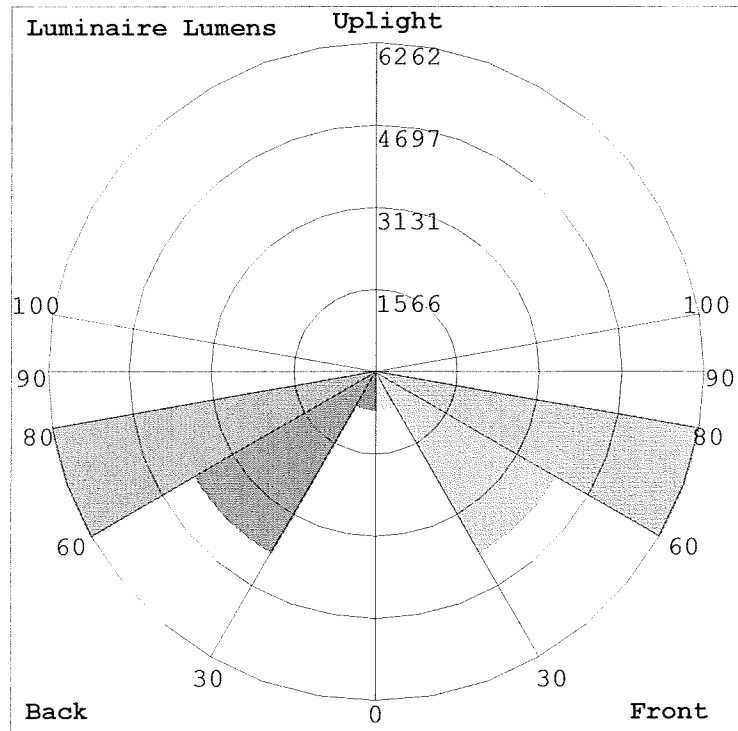
Maximum Candela = 8965.2 at 45 H 72.5 V

Classification:

Road Classification: Type VS, Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 100
Indoor Classification: Direct
BUG Rating : B5-U0-G3

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	725.7	N.A.	3.2
FM (30-60)	3969.6	N.A.	17.7
FH (60-80)	6262.2	N.A.	28.0
FVH (80-90)	236.4	N.A.	1.1
BL (0-30)	725.7	N.A.	3.2
BM (30-60)	3969.6	N.A.	17.7
BH (60-80)	6262.2	N.A.	28.0
BVH (80-90)	236.4	N.A.	1.1
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	22387.8	N.A.	100.0
BUG Rating	B5-U0-G3		





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Photometric Report (Type C)

Filename: P2_GLEON-AF-04-LED-E1-SL2-7030.ies
[TEST] P192832 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24286)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-04-LED-E1-SL2-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (4) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE II SPILL LIGHT ELIMINATOR OPTICS

Maximum Candela = 26382.8 at 67 H 67.5 V

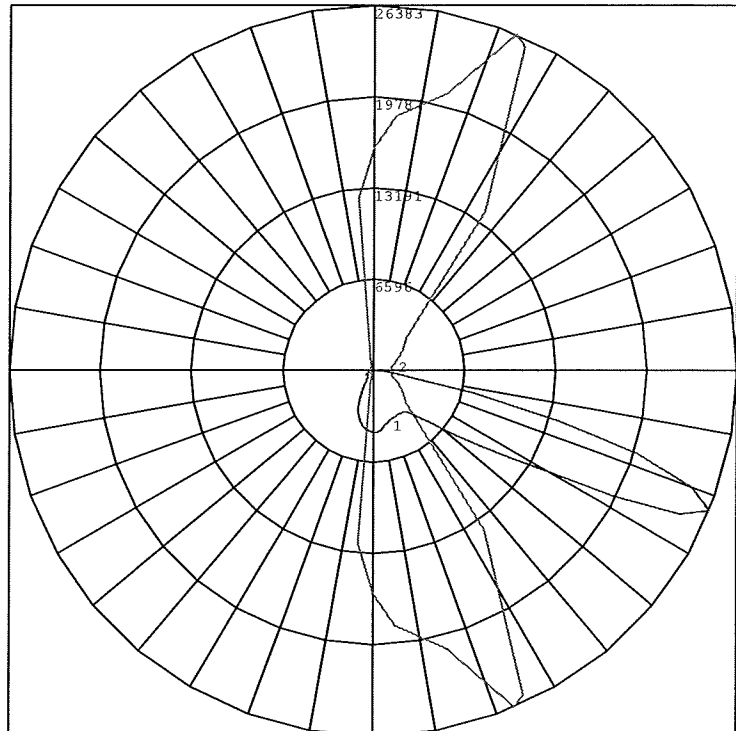
Classification:

Road Classification: Type II, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 93
Indoor Classification: Direct
BUG Rating : B3-U0-G4

Polar Candela Curves:

Vertical Plane Through:
1) 67 - 247 Horizontal

Horizontal Cone Through:
2) 67.5 Vertical





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Photometric Report (Type C)

Filename: P2_GLEON-AF-04-LED-E1-SL2-7030.ies
 [TEST] P192832 TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
 [TESTLAB] Innovations Center P2
 [ISSUEDATE] 7/21/2016
 [MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER LIGHTING)
 [LUMCAT] GLEON-AF-04-LED-E1-SL2-7030
 [LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS

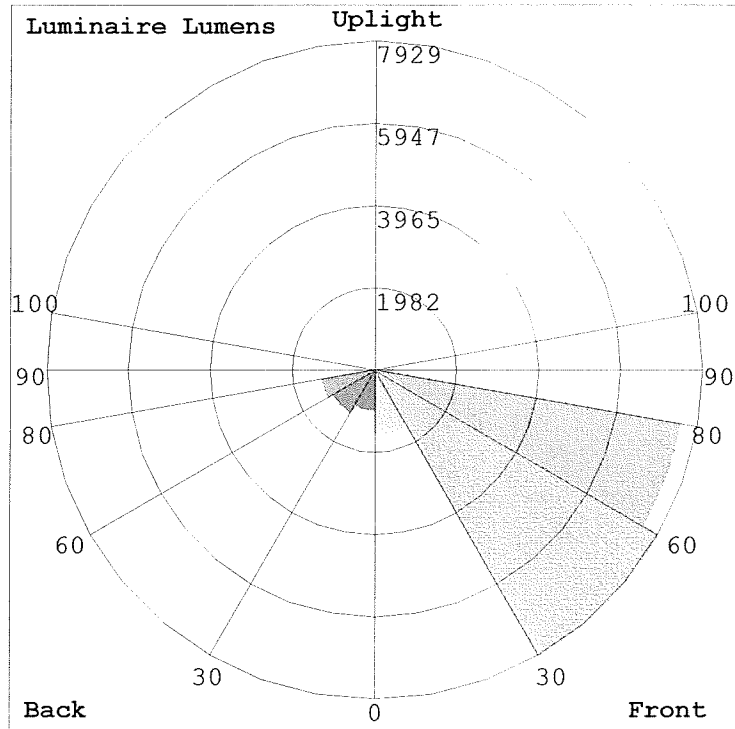
Maximum Candela = 26382.8 at 67 H 67.5 V

Classification:

Road Classification: Type II, Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 93
 Indoor Classification: Direct
 BUG Rating : B3-U0-G4

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	1515.3	N.A.	7.3
FM (30-60)	7929.4	N.A.	38.1
FH (60-80)	7501.7	N.A.	36.0
FVH (80-90)	425.5	N.A.	2.0
BL (0-30)	956.2	N.A.	4.6
BM (30-60)	1159.3	N.A.	5.6
BH (60-80)	1276.0	N.A.	6.1
BVH (80-90)	58.4	N.A.	0.3
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	20821.8	N.A.	100.0
BUG Rating	B3-U0-G4		





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Photometric Report (Type C)

Filename: GLEON-AF-05-LED-E1-SL3-7030.ies
[TEST] P192913 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24288)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-05-LED-E1-SL3-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (5) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE III SPILL LIGHT ELIMINATOR OPTICS

Maximum Candela = 28812.4 at 60 H 69 V

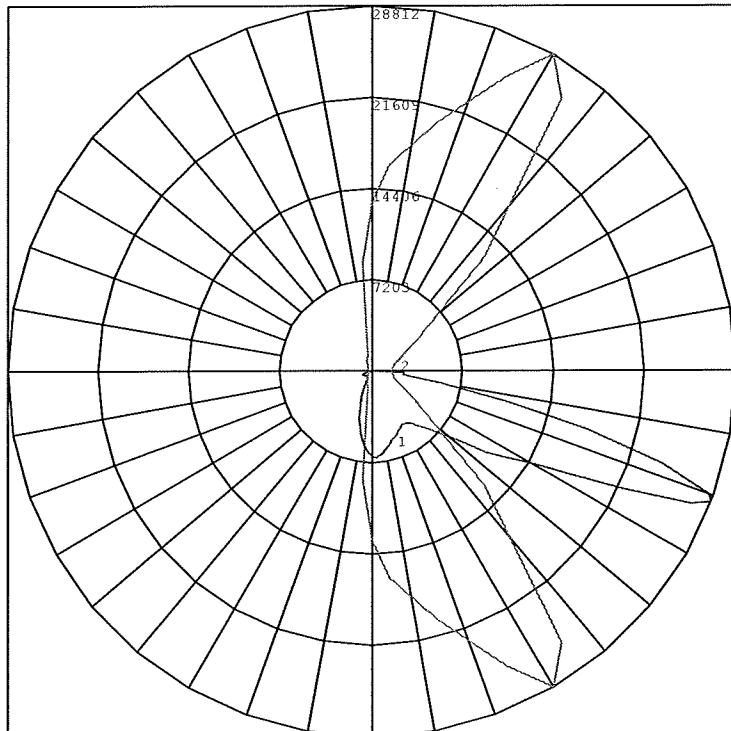
Classification:

Road Classification: Type III, Medium, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 94
Indoor Classification: Direct
BUG Rating : B3-U0-G4

Polar Candela Curves:

Vertical Plane Through:
1) 60 - 240 Horizontal

Horizontal Cone Through:
2) 69 Vertical





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Photometric Report (Type C)

Filename: GLEON-AF-05-LED-E1-SL3-7030.ies
 [TEST] P192913 TEST IS SCALED FROM IESNA LM-79-08 TEST
 DATA (P24288)
 [TESTLAB] Innovations Center P2
 [ISSUE DATE] 7/21/2016
 [MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
 LIGHTING)
 [LUMCAT] GLEON-AF-05-LED-E1-SL3-7030
 [LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (5) 70
 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
 TYPE III SPILL LIGHT ELIMINATOR OPTICS

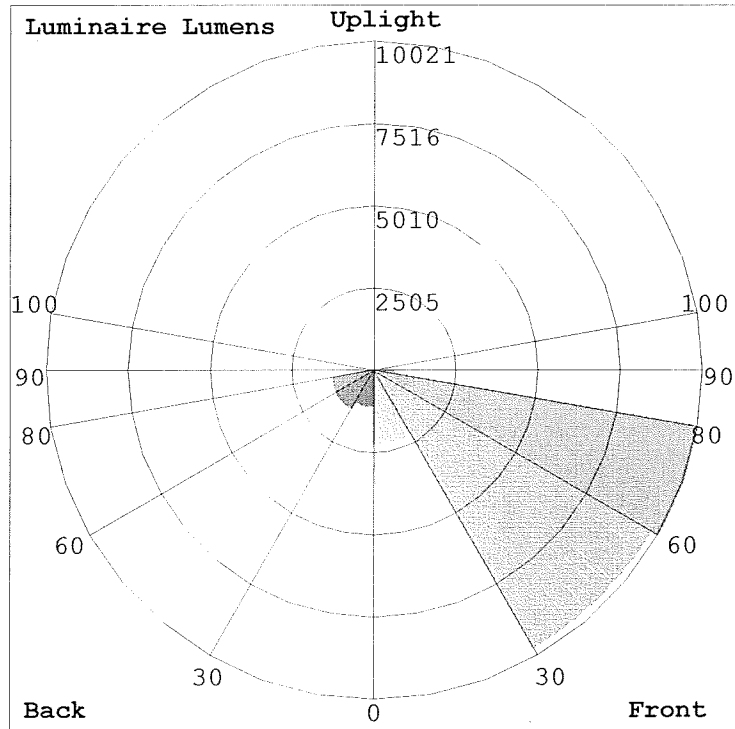
Maximum Candela = 28812.4 at 60 H 69 V

Classification:

Road Classification: Type III, Medium, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 94
 Indoor Classification: Direct
 BUG Rating : B3-U0-G4

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	2223.8	N.A.	8.4
FM (30-60)	9748.4	N.A.	37.0
FH (60-80)	10020.7	N.A.	38.0
FVH (80-90)	597.1	N.A.	2.3
BL (0-30)	1093.1	N.A.	4.2
BM (30-60)	1316.4	N.A.	5.0
BH (60-80)	1273.8	N.A.	4.8
BVH (80-90)	63.6	N.A.	0.2
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	26336.9	N.A.	100.0
BUG Rating	B3-U0-G4		





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Photometric Report (Type C)

Filename: GLEON-AF-03-LED-E1-SL4-7030.ies
[TEST] P192991 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24294)
[TESTLAB] Innovations Center P2
[ISSUE DATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-03-LED-E1-SL4-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (3) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE IV SPILL LIGHT ELIMINATOR OPTICS

Maximum Candela = 12839.7 at 39 H 70 V

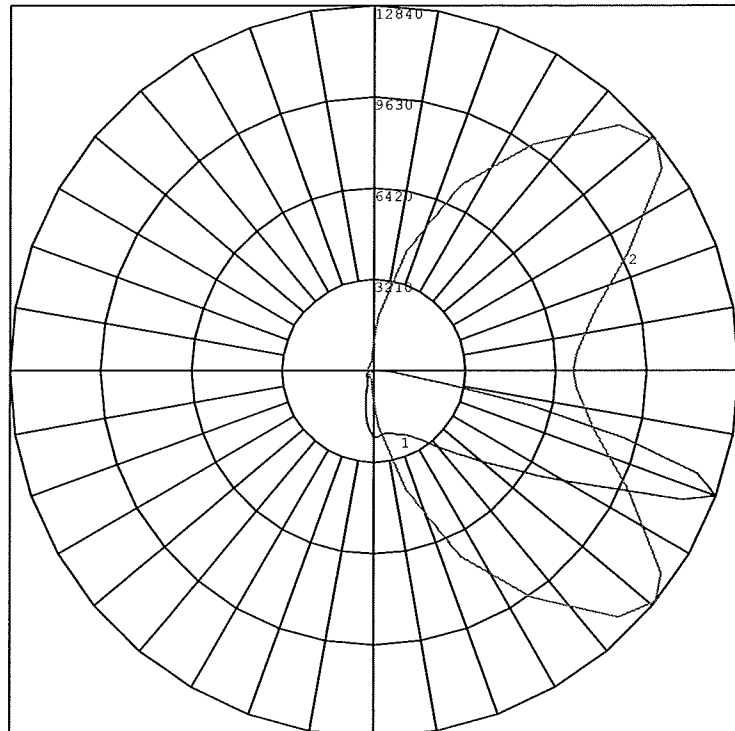
Classification:

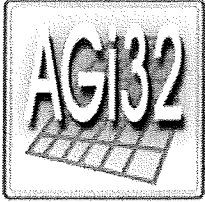
Road Classification: Type IV, Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 92
Indoor Classification: Direct
BUG Rating : B1-U0-G3

Polar Candela Curves:

Vertical Plane Through:
1) 39 - 219 Horizontal

Horizontal Cone Through:
2) 70 Vertical





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Photometric Report (Type C)

Filename: GLEON-AF-03-LED-E1-SL4-7030.ies
[TEST] P192991 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (P24294)
[TESTLAB] Innovations Center P2
[ISSUEDATE] 7/21/2016
[MANUFAC] EATON - MCGRAW-EDISON (FORMER COOPER
LIGHTING)
[LUMCAT] GLEON-AF-03-LED-E1-SL4-7030
[LUMINAIRE] GALLEON AREA AND ROADWAY LUMINAIRE (3) 70
CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE IV SPILL LIGHT ELIMINATOR OPTICS

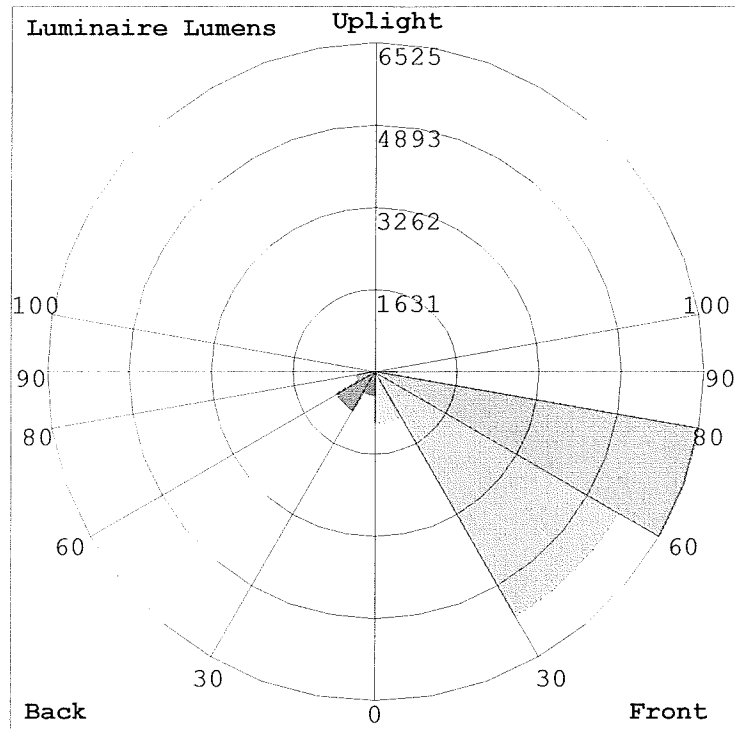
Maximum Candela = 12839.7 at 39 H 70 V

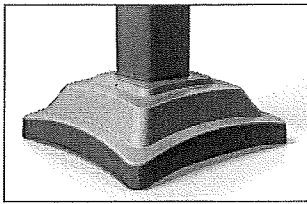
Classification:

Road Classification: Type IV, Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 92
Indoor Classification: Direct
BUG Rating : B1-U0-G3

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	1010.9	N.A.	6.6
FM (30-60)	5584.9	N.A.	36.5
FH (60-80)	6524.5	N.A.	42.7
FVH (80-90)	427.2	N.A.	2.8
BL (0-30)	461.2	N.A.	3.0
BM (30-60)	870.0	N.A.	5.7
BH (60-80)	365.0	N.A.	2.4
BVH (80-90)	42.3	N.A.	0.3
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	15286.0	N.A.	100.0
BUG Rating	B1-U0-G3		





MILLENIA[®] ML900



SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED

PROJECT: _____

TYPE: _____

HOW TO ORDER: ML900-4R / UBKT

ML900			
SERIES	TRIM	COLOR	
SPLIT BASE	4R	UBKT	UBK
	4S	UBT	UB
	5R	ULBT	ULB
	5S	USLT	USL
		UWHT	UWH
		UCHS	

The ML900 two piece die cast base cover is constructed of 360 aluminum and is designed with soft corners that complement the Millenia product family of luminaires. The ML900 base cover can be fitted to 4" and 5" round or square Urban poles and are mechanically secured to the pole shaft with stainless steel hardware.

Product Specs

Trims

- 4R (4" Round)
- 4S (4" Square)
- 5R (5" Round)
- 5S (5" Square)

Mechanical

- Mechanically fastens to pole with stainless steel hardware.
- Available in 4 trim options:
 - 4" Round (4R)
 - 5" Round (5R)

III. 4" Square (4S)

IV. 5" Square (5S)

Limitations

- For use with all Sternberg Urbanline Round and Square poles <30".
- Acceptable bolt projection up to 4-3/4".
- Will accommodate Sternberg Urban square steel or aluminum poles with .5" or .75" radius corners.

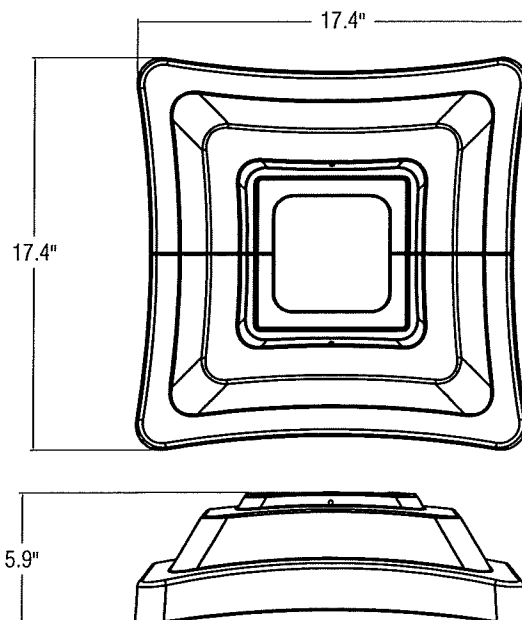
Finish

- Durable, thermosetting, electrostatically applied color retentive powder coat finish.

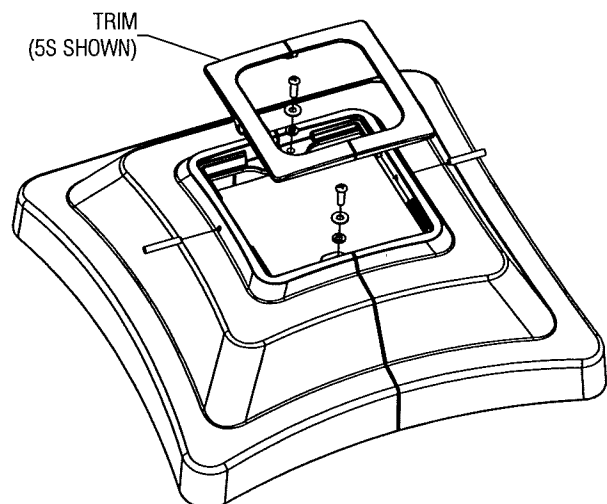
Colors:

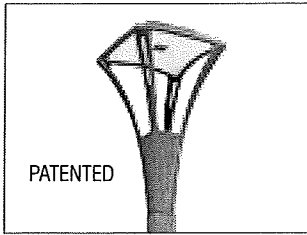
- UBKT - Urban Black Textured
- UBT - Urban Bronze Textured
- ULBT - Urban Light Bronze Textured
- USLT - Urban Silver Textured
- UWHT - Urban White Textured
- UCHS - Urban Champagne Satin Smooth
- UBK - Urban Black Matte
- UB - Urban Bronze Matte
- ULB - Urban Light Bronze Matte
- USL - Urban Silver Matte
- UWH - Urban White Matte

Product Dimensions



Assembly





MILLENIA® ML660

The Millenia® ML660 medium post top luminaire is a breakthrough in modern area lighting technology. Its new world urban design transcends traditional lighting convention by seamlessly interweaving form and function to yet another level. Our convective AAD™ "Advanced Air-flow Dynamics" maximizes heat sink expulsion to deliver unsurpassed thermal management for long-life LED performance and energy efficiency.

Available with a myriad of options, the Millenia is perfect for commercial, institutional and municipal markets.



PROJECT: _____

TYPE: _____

ORDERING EXAMPLE: PT-ML660-CA-60L45T5-MDH05-HSS-FHD / UBKT

ML660											
MOUNTING CONFIGURATION	SERIES	LENS	NO. OF LEDS	COLOR TEMP K	DISTRIBUTION TYPE	DRIVER	CONTROLS	HOUSE SIDE SHIELD	DUAL FUSE & HOLDER	COLOR	
PT	Medium Post Top	CA	44L ¹	27(00) K	T2	MDL03	OPTIONS			UBKT	UBK
		SV1*	60L	35(00) K	T3	MDL05	PEC	HSS	FHD	UBT	UB
		SV2**		45(00) K	T3R	MDL07				ULBT	ULB
					T4	MDH03				USLT	USL
					T5	MDH05				UWHT	UWH
						MDH07				UCHS	

PT = Post Top ¹ Only available with MD_03 driver

Product Specs

Optical

- IP66 rated optic module with BUG rating of U-1.
- Utilizes high output, high brightness LEDs.
- Operates at -40°C (-40°F) to +50°C (122°F) ambient air temperature range.
- Minimum CRI of 70, CCT 2700, 3500, and 4500K. Call factory for custom CCT.
- LM-79 and LM-80 tests in accordance with IESNA standards.
- Lumen depreciation rating L₇₀ > 180,000 hrs. Projected per TM-21 guideline and based on 700mA drive current.
- RoHS Compliant.

Electrical

- 120-277 volt standard and 347-480 volt option available.
- Minimum drivers power factor: >0.9.

- Electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines (10kV).
- UL or ETL listed in U.S. and Canada.

Mechanical

- Rugged die-cast aluminum housing.
- AAD™ "Advanced Air-flow Dynamics" maximizes heat sink expulsion.
- Advanced self cleaning flow through design.
- Low profile Aero-dynamic design with integrated heat sink for optimum thermal management.
- Tool-less driver access and removeable driver assembly.

Controls

- Supplied with dimmable driver (0-10 volts).
- Optional pole mounted electronic button photocell: PEC 120-277V.

Finish

- Durable, color retentive powder coat finish.
- Perforated windows are black, except when fixture is urban black textured or urban black matte, the perforated windows are silver.

Warranty & Standards

LED Systems and Drivers - 7 years.
All fixtures shall be free from all defects in materials and workmanship for a period of 7 years from the date of manufacture. The luminaire manufacturer shall warrant the LED boards/system, during the stated warranty period, against failure defined as more than 10 percent of non-operating LEDs.

Drivers (0-10V dimming):

- MDL03: 350mA, 120-277V
- MDL05: 525mA, 120-277V
- MDL07: 700mA, 120-277V
- MDH03: 350mA, 347-480V
- MDH05: 525mA, 347-480V
- MDH07: 700mA, 347-480V

Lens:

CA - Clear Acrylic

Soft Vue:

- SV1* - Flat Medium Diffuse Acrylic Lens
 - SV2** - Flat Heavy Diffuse Acrylic Lens
- *Provides moderate reduction in Brightness while only a minimal reduction in lumen output. **Provides maximum reduction in Brightness while only a nominal reduction in lumen output. Consult photometric files for exact lumen performance.

Colors:

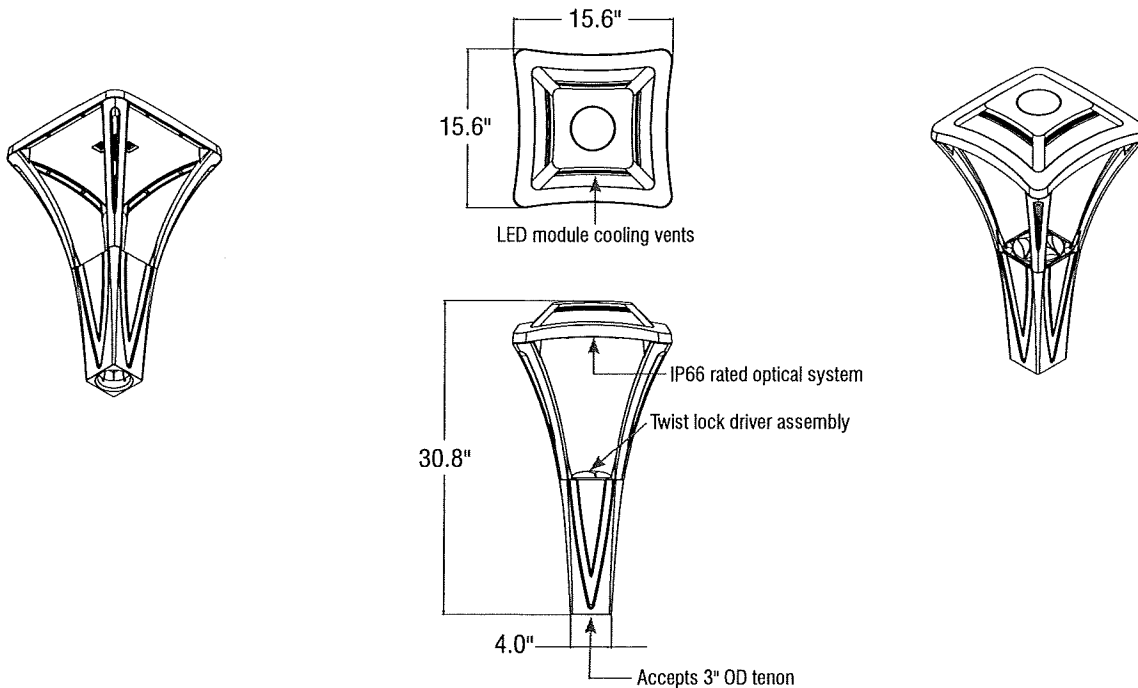
- UBKT - Urban Black Textured
- UBT - Urban Bronze Textured
- ULBT - Urban Light Bronze Textured
- USLT - Urban Silver Textured
- UWHT - Urban White Textured
- UCHS - Urban Champagne Satin Smooth
- UBK - Urban Black Matte
- UB - Urban Bronze Matte
- ULB - Urban Light Bronze Matte
- USL - Urban Silver Matte
- UWH - Urban White Matte

Performance (Based on CA Lens)

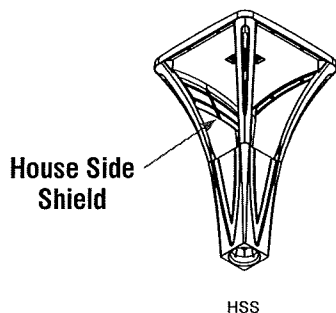
MODEL #	T2 DELIVERED LUMENS	EFFICACY (LPW)	T3 DELIVERED LUMENS	EFFICACY (LPW)	T3R DELIVERED LUMENS	EFFICACY (LPW)	T4 DELIVERED LUMENS	EFFICACY (LPW)	T5 DELIVERED LUMENS	EFFICACY (LPW)	WATTAGE
44L27T_MD_03	3065	57.8	2820	53.2	2940	55.5	2905	54.8	2945	55.6	53
44L35T_MD_03	3495	65.9	3215	60.7	3350	63.2	3310	62.5	3360	63.4	53
44L45T_MD_03	3725	70.3	3430	64.7	3570	67.4	3530	66.6	3580	67.5	53
60L27T_MD_03	4140	59.1	3860	55.1	3990	57.0	3960	56.6	4030	57.6	70
60L35T_MD_03	4720	67.4	4405	62.9	4550	65.0	4515	64.5	4595	65.6	70
60L45T_MD_03	5030	71.9	4695	67.1	4850	69.3	4815	68.8	4895	69.9	70
60L27T_MD_05	5555	52.9	5195	49.5	5360	51.0	6095	58.0	5415	51.6	105
60L35T_MD_05	6335	60.3	5925	56.4	6115	58.2	6950	66.2	6175	58.8	105
60L45T_MD_05	6750	64.3	6310	60.1	6515	62.0	7405	70.5	6580	62.7	105
60L27T_MD_07	6410	44.8	6275	43.9	6425	44.9	6415	44.9	6480	45.3	143
60L35T_MD_07	7315	51.2	7155	50.0	7325	51.2	7315	51.2	7390	51.7	143
60L45T_MD_07	7795	54.5	7625	53.3	7810	54.6	7795	54.5	7875	55.1	143

Product Dimensions and Features

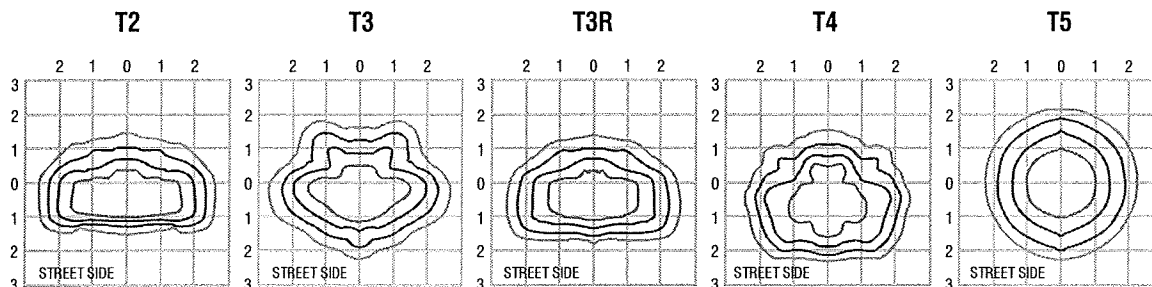
EPA: 1.3 SQUARE FT
WEIGHT: 35 LBS



Other Options



ISO Footcandle Plots



All published luminaire photometric testing performed to IESNA LM-79 standards by NVLAP, certified laboratory. ISO footcandle plots above demonstrate the MILLENNIA® ML660 light patterns only. Not for total fixture output. For complete specifications and IES files, see website.



SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED

800-621-3376
555 Lawrence Ave., Roselle, IL 60172
info@sternberglighting.com
www.sternberglighting.com

10' TO 30' SQUARE STRAIGHT STEEL POLES (SSS)

Job Name Client Name

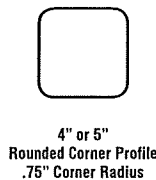
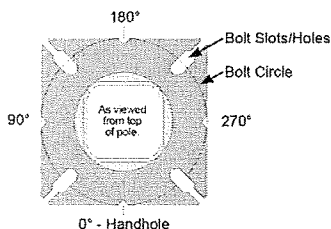
Job Location Created By Date

Product Quote Customer Approval Date

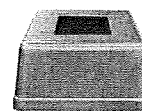
Sternberg Model	Pole Height	Shaft Size	Wall Thickness	Slotted Base Width	Hand-hole Size	Weight Lbs	Bolt Circle	Bolt Proj +/- .25	DBL Nitted Anchor bolt ASTM F1554 GRADE 65 Galv thread	Max Loading Capacities								Base Cover Options
										90 MPH w/1.3 Gust		110MPH w/1.3 Gust		130MPH w/1.3 Gust		150MPH w/1.3 Gust		
										MAX EPA 1 (SQ FT)	MAX WEIGHT (lbs)	MAX EPA 1 (SQ FT)	MAX WEIGHT (lbs)	MAX EPA 1 (SQ FT)	MAX WEIGHT (lbs)	MAX EPA 1 (SQ FT)	MAX WEIGHT (lbs)	
SSS10F400	10	4	11GA	8.25"	2.5 x 5	75	8.5"	3.5	3/4"	23.8	595	15.0	375	10.0	250	7.1	178	2403-4, ML900-4
SSS12F400	12	4	11GA	8.25"	2.5 x 5	90	8.5"	3.5	3/4"	18.8	470	11.5	288	7.5	188	5.0	25	2403-4, ML900-4
SSS14F400	14	4	11GA	8.25"	2.5 x 5	100	8.5"	3.5	3/4"	15.1	378	9.1	228	5.6	140	3.4	85	2403-4, ML900-4
SSS16F400	16	4	11GA	8.25"	2.5 x 5	115	8.5"	3.5	3/4"	11.8	295	6.8	170	3.9	98	1.9	48	2403-4, ML900-4
SSS18F400	18	4	11GA	8.25"	2.5 x 5	125	8.5"	3.5	3/4"	9.2	230	5.0	125	2.4	60	0.4	10	2403-4, ML900-4
SSS20F400	20	4	11GA	8.25"	2.5 x 5	140	8.5"	3.5	3/4"	6.7	167	3.5	88	0.8	20	-	-	2403-4, ML900-4
SSS20N400	20	4	7GA	8.25"	2.5 x 5		8.5"	3.63	3/4"	12.4	350	7.6	190	4.5	113	2.5	63	2403-4, ML900-4
SSS20F500	20	5	11GA	11"	2.5 x 5	185	11"	3.75	3/4"	12.7	343	7.0	175	3.5	88	0.9	25	2403-5, ML900-5
SSS20N500	20	5	7GA	11"	2.5 x 5	265	11"	3.75	3/4"	21.4	535	12.3	308	7.3	183	4.2	105	2403-5, ML900-5
SSS25F400	25	4	11GA	8.25"	2.5 x 5	170	8.5"	3.5	3/4"	2.6	100	-	-	-	-	-	-	2403-4, ML900-4
SSS25N400	25	4	7GA	8.25"	2.5 x 5	245	8.5"	3.63	3/4"	7.7	188	3.9	100	1.6	40	0.2	5	2403-4, ML900-4
SSS25F500	25	5	11GA	11"	2.5 x 5	225	11"	3.75	3/4"	6.3	157	2.5	63	-	-	-	-	2403-5, ML900-5
SSS25N500	25	5	7GA	11"	2.5 x 5	360	11"	3.75	3/4"	13.3	333	6.6	165	2.9	75	-	-	2403-5, ML900-5
SSS30F500	30	5	11GA	11"	2.5 x 5	265	11"	3.75	3/4"	2.0	50	-	-	-	-	-	-	2403-5, ML900-5
SSS30N500	30	5	7GA	11"	2.5 x 5	380	11"	3.75	3/4"	6.7	167	2.5	63	-	-	-	-	2403-5, ML900-5

CROSS SECTION	MODEL NUMBER	FIXTURE MOUNTING	BASE COVER	OPTIONS	COLOR
SSS					
SSS = Square Straight Steel	SSS10F400 SSS20N500 SSS12F400 SSS25F400 SSS14F400 SSS25N400 SSS16F400 SSS25F500 SSS18F400 SSS25N500 SSS20F400 SSS30F500 SSS20N400 SSS30N500 SSS20F500	Drill Mounting D1 = 1 Luminaire D2 = 2 @ 180° D4 = 4 @ 90° D5 = 2 @ 90° D6 = 3 @ 90° Tenon Mounting P2 = 2.38" OD x 4.00" P3 = 3.00" OD x 3.00" P4 = 4.00" OD x 6.00" P5 = 4.25" OD x 3.50" P6 = 3.25" OD x 3.50"	2403-4 2403-5 ML900-4 ML900-5	See Accessories at www.sternberglighting.com (Please specify with code)	UBKT - Urban Black Textured UBT - Urban Bronze Textured ULBT - Urban Light Bronze Textured USLT - Urban Silver Textured UWHT - Urban White Textured UCHS - Urban Champagne Satin Smooth UBK - Urban Black Matte UB - Urban Bronze Matte ULB - Urban Light Bronze Matte USL - Urban Silver Matte UWH - Urban White Matte

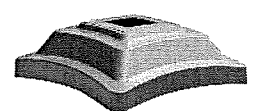
Anchor Base Detail



OPTIONAL BASE COVERS



Square 2403
13" Sq. x 6-1/2" H
Throat Size 4" or 5" Sq.
2403-4
2403-5



Square ML900
17.4" Sq. x 5.9" H
Throat Size 4" or 5" Sq.
ML900-4
ML900-5





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since 1984



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Photometric Report (Type C)

Filename: ML660-SV2-60L45T3-F-MD_07.IES
[TEST] S7133
[TESTLAB] STERNBERG LIGHTING
[ISSUEDATE] 4/21/2014
[MANUFAC] Sternberg Lighting
[LUMCAT] ML660-SV2-60L45T3-F-MDL07
[LUMINAIRE] ML660 Millenia Post Top, medium size,
Frosted Acrylic, Type 3
[LAMPCAT] CREE XT-E LEDS 4500K. LUMINAIRE OUTPUT:
6457 Lms.
[LAMP] 60 LEDS

Maximum Candela = 2287.9 at 35 H 32.5 V

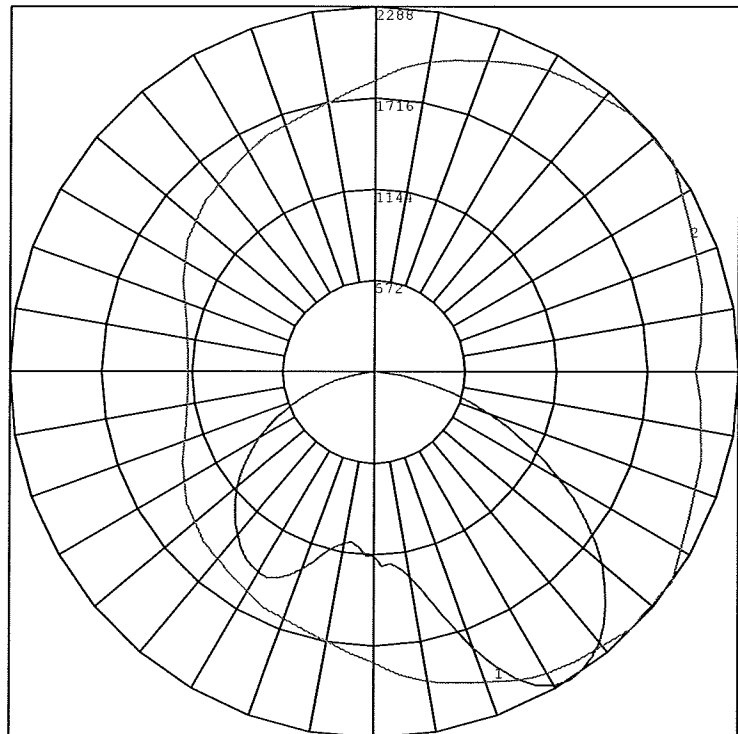
Classification:

Road Classification: Type III, Very Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 46
Indoor Classification: Direct
BUG Rating : B2-U1-G2

Polar Candela Curves:

Vertical Plane Through:
1) 35 - 215 Horizontal

Horizontal Cone Through:
2) 32.5 Vertical





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Photometric Report (Type C)

Filename: ML660-SV2-60L45T3-F-MD_07.IES
 [TEST] S7133
 [TESTLAB] STERNBERG LIGHTING
 [ISSUEDATE] 4/21/2014
 [MANUFAC] Sternberg Lighting
 [LUMCAT] ML660-SV2-60L45T3-F-MDL07
 [LUMINAIRE] ML660 Millenia Post Top, medium size,
 Frosted Acrylic, Type 3
 [LAMPCAT] CREE XT-E LEDS 4500K. LUMINAIRE OUTPUT:
 6457 Lms.
 [LAMP] 60 LEDS

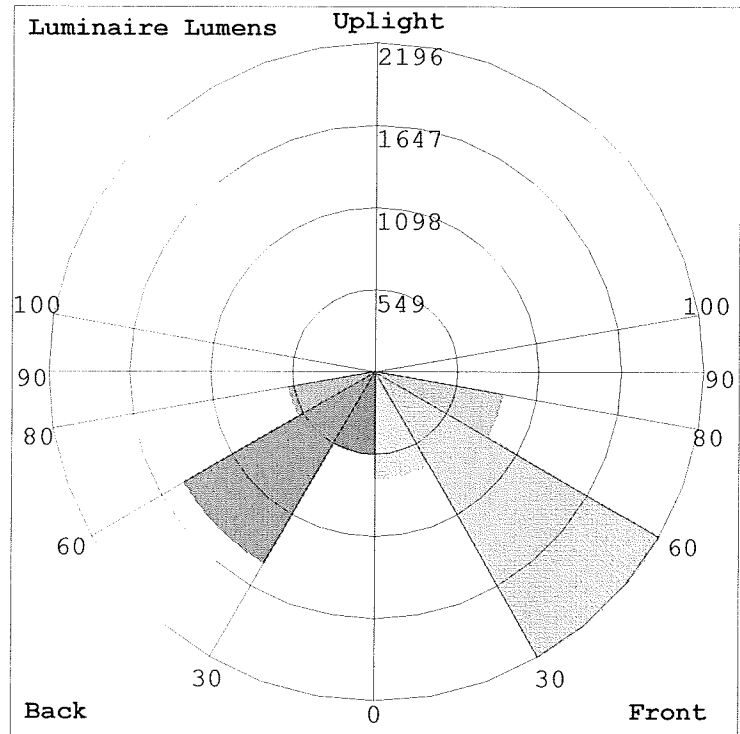
Maximum Candela = 2287.9 at 35 H 32.5 V

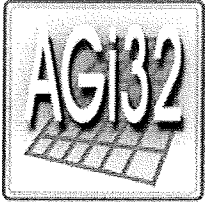
Classification:

Road Classification: Type III, Very Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 46
 Indoor Classification: Direct
 BUG Rating : B2-U1-G2

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	709.3	N.A.	11.0
FM (30-60)	2196.4	N.A.	33.9
FH (60-80)	864.5	N.A.	13.4
FVH (80-90)	62.3	N.A.	1.0
BL (0-30)	548.0	N.A.	8.5
BM (30-60)	1468.8	N.A.	22.7
BH (60-80)	583.1	N.A.	9.0
BVH (80-90)	41.0	N.A.	0.6
UL (90-100)	1.4	N.A.	0.0
UH (100-180)	0.2	N.A.	0.0
Total	6475.0	N.A.	100.0
BUG Rating	B2-U1-G2		





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Photometric Report (Type C)

Filename: ML660-SV2-60L45T5-F-MD_07.IES
[TEST] S7216
[TESTLAB] STERNBERG LIGHTING
[ISSUEDATE] 4/28/2014
[MANUFAC] Sternberg Lighting
[LUMCAT] ML660-SV2-60L45T5-F-MDL07
[LUMINAIRE] ML660 Millenia Post Top, medium size,
Clear Frosted Acrylic, Type 5
[LAMPCAT] CREE XT-E LEDES 4500K. LUMINAIRE OUTPUT:
6673 Lms.
[LAMP] 60 LEDES

Maximum Candela = 1959.5 at 135 H 32.5 V

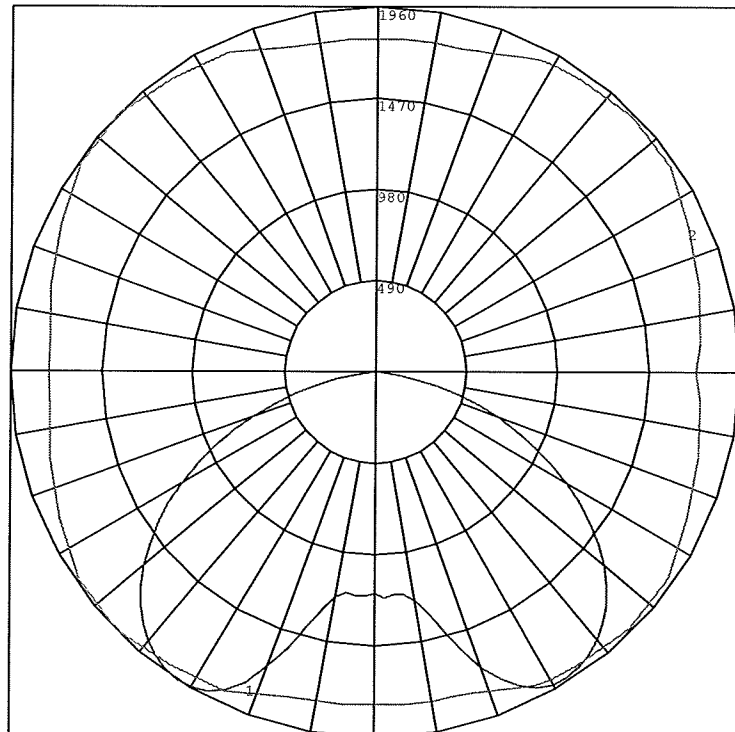
Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 47
Indoor Classification: Direct
BUG Rating : B2-U1-G1

Polar Candela Curves:

Vertical Plane Through:
1) 135 - 315 Horizontal

Horizontal Cone Through:
2) 32.5 Vertical





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Photometric Report (Type C)

Filename: ML660-SV2-60L45T5-F-MD_07.IES
 [TEST] S7216
 [TESTLAB] STERNBERG LIGHTING
 [ISSUEDATE] 4/28/2014
 [MANUFAC] Sternberg Lighting
 [LUMCAT] ML660-SV2-60L45T5-F-MDL07
 [LUMINAIRE] ML660 Millenia Post Top, medium size,
 Clear Frosted Acrylic, Type 5
 [LAMPCAT] CREE XT-E LEDES 4500K. LUMINAIRE OUTPUT:
 6673 Lms.
 [LAMP] 60 LEDs

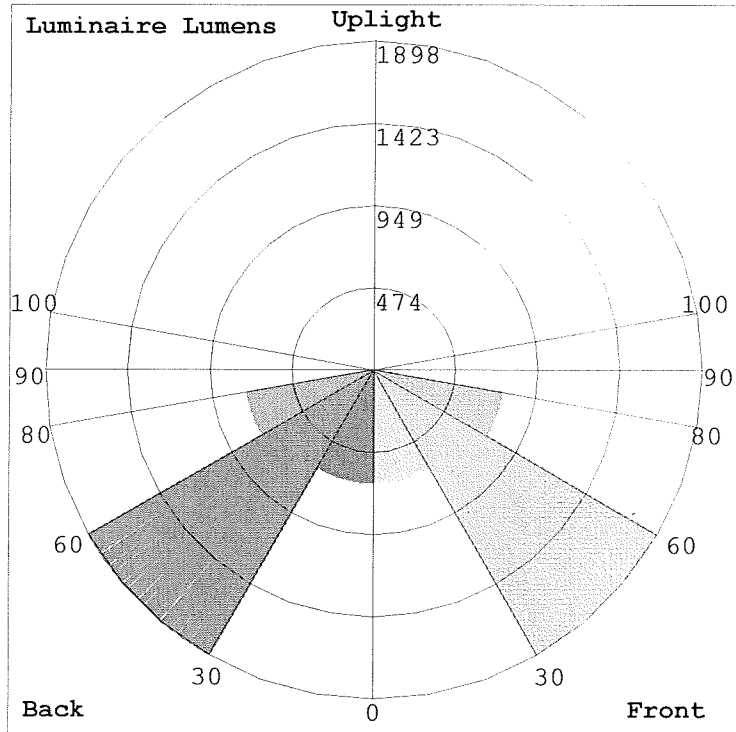
Maximum Candela = 1959.5 at 135 H 32.5 V

Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)
 Upward Waste Light Ratio: 0.00
 Luminaire Efficacy Rating (LER): 47
 Indoor Classification: Direct
 BUG Rating : B2-U1-G1

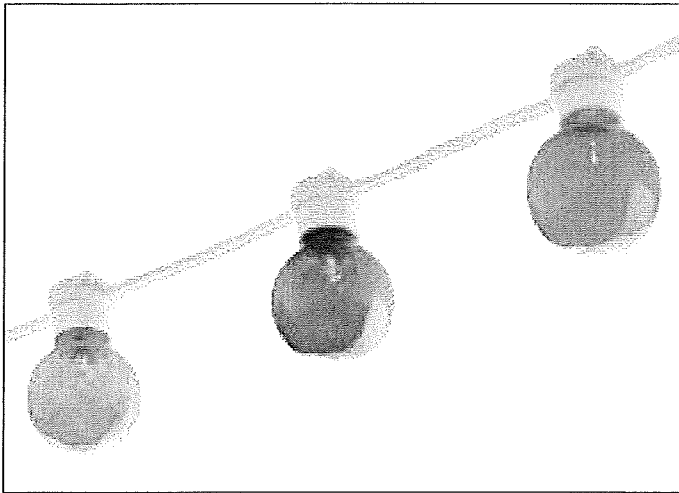
LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	646.1	N.A.	9.7
FM (30-60)	1888.7	N.A.	28.2
FH (60-80)	750.7	N.A.	11.2
FVH (80-90)	53.9	N.A.	0.8
BL (0-30)	648.3	N.A.	9.7
BM (30-60)	1897.7	N.A.	28.4
BH (60-80)	747.8	N.A.	11.2
BVH (80-90)	52.1	N.A.	0.8
UL (90-100)	1.2	N.A.	0.0
UH (100-180)	0.1	N.A.	0.0
Total	6686.6	N.A.	100.0
BUG Rating	B2-U1-G1		



CAT:	FEET:
------	-------

TYPE:	PROJECT:
-------	----------



Energy-efficient, low voltage strand lighting using wedge-base LED lamps protected by clear, frosted or colored polycarbonate globes.

Features

- Flexible 16AWG. cord available in Black or White with matching socket.
- Shatterproof, polycarbonate, O-ring fitted globes protect lamps with clarity and seamless appearance.
- Socket is parallel wired and permanently fixed to cord.
- Field cuttable.

Mounting

Each Socket has mounting holes for screw attachment in under-eave applications. Use 1/8" stainless steel wire cable (by others) and included hanger clips for festoon applications.

Applications

Ideal for indoor and outdoor applications.

Warranty

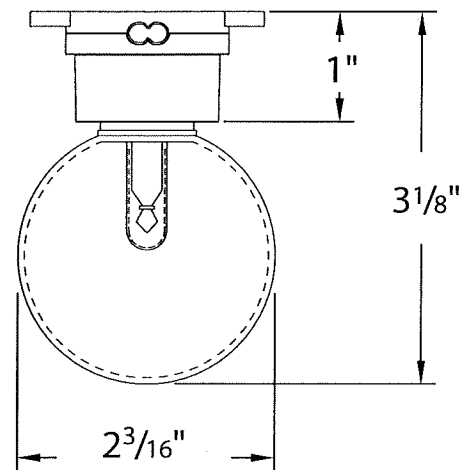
5 years

Technical Information



Lamp Spacing	6" O.C.	12" O.C.	18" O.C.	24" O.C.
*Lumens/ft (STD)	11	5.5	3.67	2.75
*Lumens/ft (HO)	30	15	10	7.5
*Watts/ft (STD)	0.17	0.085	0.057	0.0425
*Watts/ft (HO)	0.46	0.23	0.153	0.115
Lumens/watt (STD)	65.34			
*Lumens/watt (HO)	63.51			
CRI	> 80/TYP83			
LED Colors	1900°K, 2700°K, 3000°K, 3500°K, 4000°K (+/- 80°K) 35DCM			
Rated Life	75,000 hr.			
Ordering Increment	1'			
Operating Voltage	12V DC			
Power Supply	Class 2			
Dimming	Yes			

Profile Dimensions



* 3000°K Sample

Recommended Power Supplies

CAT NO	APPLICATION	PRIMARY AND SECONDARY	TOTAL WATTAGE / AMPS PER BREAKER	LISTING	DIMENSIONS	ELECTRONIC OR AC MAGNETIC
ADNM-80-1-5-12-D	Outdoor	120-277V AC / 12V DC	60W / 1X5A	cULus	12"W X 12"L X 4"D	Electronic
ADNM-150-2-5-12-D		120-277V AC / 12V DC	120W / 2X5A	cULus	12"W X 12"L X 4"D	
ADNM-240-3-5-12-D		120-277V AC / 12V DC	180W / 3X5A	cULus	12"W X 12"L X 4"D	
ADNM-320-4-5-12-D		120-277V AC / 12V DC	240W / 4X5A	cULus	12"W X 12"L X 4"D	
ADUL-80-1-5-12-D	Indoor	120-277V AC / 12V DC	60W / 1X5A	UL/ETL/CSA	10"W X 10"L X 4"D	
ADUL-150-2-5-12-D		120-277V AC / 12V DC	120W / 2X5A	UL/ETL/CSA	10"W X 10"L X 4"D	
ADUL-240-3-5-12-D		120-277V AC / 12V DC	180W / 3X5A	UL/ETL/CSA	10"W X 10"L X 4"D	
ADUL-320-4-5-12-D		120-277V AC / 12V DC	240W / 4X5A	UL/ETL/CSA	10"W X 10"L X 4"D	
MT-60-1-5-12-DD	Indoor/Outdoor	120V AC / 12V DC	60W / 1X5A	UL recognized	2.50"W X 12.32"L X 1.56"D	Magnetic
JT-60-1-5-12-D		120V AC / 12V DC	60W / 1X5A	cETLus	4.25"W X 8.50"L X 3.25"D	
JTH-60-1-5-12-D		277V AC / 12V DC	60W / 1X5A	cETLus	4.25"W X 8.50"L X 3.25"D	
JT-240-4-5-12-D		120V AC / 12V DC	240W / 4X5A	cETLus	8.50"W X 16.00"L X 4.50"D	
JTH-240-4-5-12-D		277V AC / 12V DC	240W / 4X5A	cETLus	8.50"W X 16.00"L X 4.50"D	

Dimming Interface

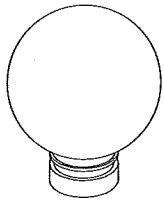
DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	MAX LOAD	CIRCUIT BREAKERS	CIRCUIT CAPACITY	DIMENSION
DIM-OT	DIM-OT-1-4-5-D	Indoor	12V/24V	12V/24V	96W	1	5A /4A	7"L X 1½"W X ¾"H

Ordering Information

PRODUCT CODE	WIRE	LAMP SPACING	LED	LED COLOR	*GLOBE COLOR	VOLTAGE	REQUIRED POWER SUPPLY
LSL	B = Black W = White	06 = 6" O.C. 12 = 12" O.C. 18 = 18" O.C. 24 = 24" O.C.	H = High Output S = Standard Output	19 = 1900°K 27 = 2700°K 30 = 3000°K 35 = 3500°K 40 = 4000°K	C = Clear F = Frosted Y = Yellow R = Red O = Orange G = Green B = Blue P = Purple Z = Varied Colors	12 12 = 12V DC	PSU See Above

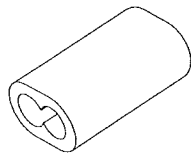
* for best results use 3500°K, with colored bulb.

Wiring Accessories



LS-CG
Clear
LS-FG
Frosted
LS-YG
Yellow
LS-RG
Red

LS-OG
Orange
LS-GG
Green
LS-BG
Blue
LS-PG
Purple



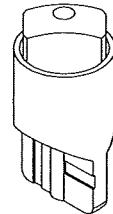
LS-EC-CL
Clear End Cap

Factory installed 24", 16 AWG Power Lead.
LS-EP- B
Straight Power Feed Lead - BLACK
LS-EP- W
Straight Power Feed Lead - WHITE

LS-XEP- B
Extra Power Feed Lead - Black
LS-XEP- W
Extra Power Feed Lead - White



LS-HANG-CLIP
Hanger clip for installation from 8 gauge stainless steel aircraft cable



STANDARD
LSL-19-S-12
12V Wedge base
1900°K
LSL-27-S-12
12V Wedge base
2700°K
LSL-30-S-12
12V Wedge base
3000°K
LSL-35-S-12
12V Wedge base
3500°K
LSL-40-S-12
12V Wedge base
4000°K

HIGH OUTPUT
LSL-19-H-12
12V Wedge base
1900°K
LSL-27-H-12
12V Wedge base
2700°K
LSL-30-H-12
12V Wedge base
3000°K
LSL-35-H-12
12V Wedge base
3500°K
LSL-40-H-12
12V Wedge base
4000°K