Schedule												
Label	QTY	Manufacturer	Catalog Number	Description	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Notes
A	44	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GLNA-AF-02-LED-E1-SL4-7030-600-HSS	GALLEONAIRE AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV w/Spill Control WITH HOUSESIDE SHEILD OPTICS	1	GLNA-AF-02-LED-E1-SL4-7030-600-HSS (1).ies	5716	1	1	66	100%	
B	18	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON (FORMERLY EATON)	GLNA-AF-02-LED-E1-SL4-7030-600	GALLEONAIRE AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V Square Wide OPTICS	1	GLNA-AF-02-LED-E1-SL4-7030-600.ies	7340	1	1	132	100%	
C	35	COOPER LIGHTING SOLUTIONS - INVUE (FORMERLY EATON)	LXS-VA1-730-U-ASC-S	LUXESCAPE OUTDOOR ARCHITECTURAL LUMINAIRE 70 CRI, 3000K LEDS AND ASYMMETRIC CURBLINE OPTIC, GRAPHITE METALLIC PAINTED FINISH, SPIDER MOUNT	1	LXS-VA1-730-U-ASC-S.ies	1780	1	1	24	100%	
D	17	COOPER LIGHTING SOLUTIONS - LUMIERE (FORMERLY EATON)	303-B1-LEDB2-3000-UNV-T4-DIM10-CS	LUMIERE EON LED LUMINAIRE BOLLARD, SINGLE HEAD, TWO LIGHTBAR, TYPE 4	1	303-B1-LEDB2-3000-UNV-T4-DIM10-CS.ies	1209	1	1	15.5	100%	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
BLDG 1 PARKING	+	2.2 fc	4.0 fc	0.1 fc	40.0:1	22.0:1
FRONT PARKING	+	2.2 fc	3.8 fc	0.4 fc	9.5:1	5.5:1
SIDE AND REAR PARKING	+	1.7 fc	4.8 fc	0.1 fc	48.0:1	17.0:1
SIDEWALKS	+	2.1 fc	15.6 fc	0.0 fc	N/A	N/A
UTILITY YARD	+	1.1 fc	3.1 fc	0.4 fc	7.8:1	2.8:1

Lighting Schedule Notes:

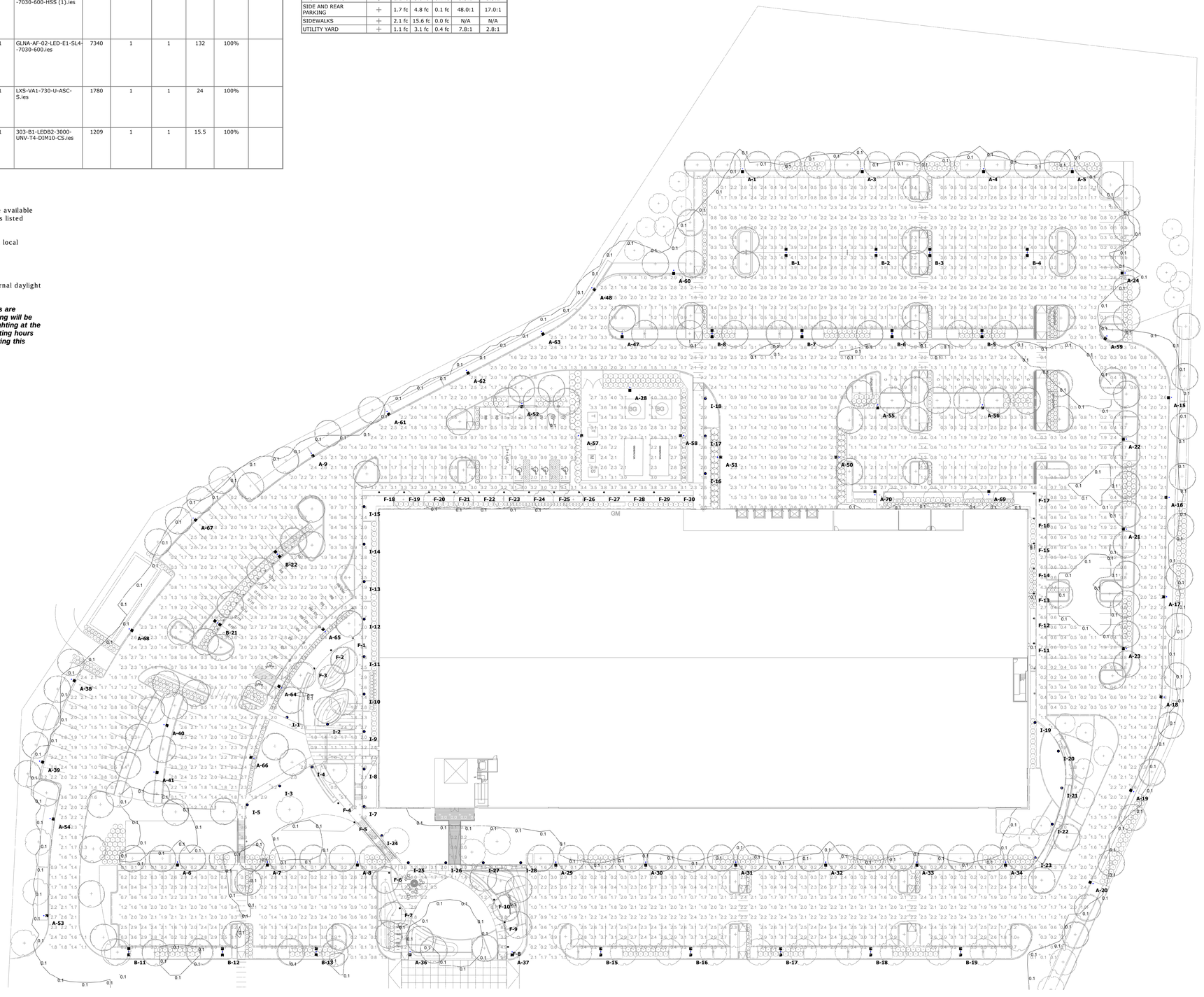
All exterior light fixture color temperature to be 2700k. Specific IES may not be available for every fixture in 2700k. Manufacturer (Cooper Lighting) confirmed all fixtures listed above are available in 2700k.

All exterior light fixture enclosure / housings to be black in color to comply with local bylaws.

Lighting Control Notes:

All exterior lighting to be controlled via building lighting control panel with external daylight photocontrol sensor and integrated timeclock.

The building tenant has not been determined therefore building operating hours are unknown at this time. Upon completion of this project exterior parking lot lighting will be scheduled to be off between the hours of 11pm and 7am. Building mounted lighting at the entrances will remain on throughout the evening and overnight. Building operating hours and lighting control sequence of operation may be adjusted in the future or during this project time frame to align with building end user requirements.



Plan View
Scale - 1" = 40ft

HIGHPOINT ENGINEERING, INC.
LAND PLANNING
PERMIT EXPEDITING
CIVIL ENGINEERING
CONSULTING
CANTON CORPORATE PLACE
45 DAN ROAD, SUITE 140
CANTON, MA 02021
www.HighpointEng.com

CLIENT:
King Devens, LLC
800 Boylston Street, Suite 1570
Boston, MA 02199

CONSULTANT:
NAPPA Electrical Contractors
380 Cambridge Street, Burlington, MA 01803
T (781) 273-6697
www.nappaelectric.com

SEAL

LEVEL 2 - UNIFIED PERMIT

45 JACKSON ROAD - LOT 3

45 JACKSON ROAD
DEVENS, MA

OWNER/APPLICANT: KING DEVENS, LLC

REV	DATE	DESCRIPTION

ISSUE TYPE:
LEVEL 2 - PERMIT SET

ISSUE DATE:
03-04-2021

PROJECT NUMBER:
19019

DRAWN BY:

CHECKED BY:

Copyright (c) by Highpoint Engineering, Inc.
All Rights Reserved.

SHEET TITLE:
ELECTRICAL SITE LIGHTING PHOTOMETRICS

SHEET NUMBER:
ES3.01

X:\1_Construction\2_Contract Jobs\12679 - Devens Jackson Rd - BWK\11_Design Eng'ng\3_Working\TITLEBLOCK_24x36.dwg

ISSUED FOR : **UNIFIED PERMIT**

McGraw-Edison

Catalog #		Type	A,B
Project			
Comments		Date	
Prepared by			

DESCRIPTION

The Galleonaire LED luminaire features advanced thermally conductive polymer heatsinks and open frame endcaps for a sleek aesthetic with significant weight reduction. 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.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Open frame die-cast aluminum end caps provide structural support for the housing and heatsinks. Thermally conductive polymer heatsinks offer significant weight reduction while fully maintaining thermal management of the Light Squares. 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 2700K, 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 Cooper Lighting Solutions proprietary circuit module designed to withstand 10kV of transient line surge. The Galleonaire LED luminaire is suitable for operation in -40°C to 40°C ambient environments. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA and 800mA 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 dark gray, non-paintable. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

GLNA
GALLEONAIRE

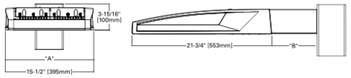
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology
CLICK HERE

WaveLinx

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)	28 (12.7 kgs)	0.72
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	38 (16.3 kgs)	0.77
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	43 (19.5 kgs)	0.95
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	49 (22.2 kgs)	1.13

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

TYPE "N"

CERTIFICATION DATA

3G Vibration Rated
IP66 Rated
ISO 9001
LM79 / LM80 Compliant
UL/cUL Wet Location Listed

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

TD500064EN
December 17, 2019 8:41 AM

COOPER Lighting Solutions

Invue

Catalog #		Type	I
Project			
Comments		Date	
Prepared by			

DESCRIPTION

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

SPECIFICATION FEATURES

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

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

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

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

Mounting
Invue's aluminum round decorative pole (ARP) offering provides a seamless transition and compliments the contemporary design architecture with its unique sleek taper and base design. The tenon mount pole comes standard with an access door feature integrated into the base.
Arm Mount
The integrated aluminum contemporary upsweep arm is bolted directly to the pole using an "N" drill pattern. Provides a seamless transition to a 4" or 5" round pole.
Spider & Cantilever Mount
Fitter assembly mounts over 3" O.D. tenon and can be adapted to a 2-3/8" tenon. It is secured via concealed, corrosion resistant set screw and jam screw pairs in six inconspicuous locations. Fitter design provides seamless transition to 4" O.D. round pole top. Optional mounting accessories include a twin arm mount and wall mount arm.

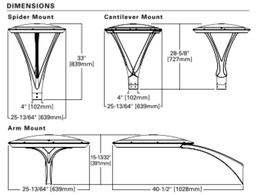
Finish
Cooper Lighting Solutions utilizes premium ultra-weatherable TGIC based polyester powder coatings specifically formulated to withstand extended outdoor exposure while providing decorative appeal. Finish is compliant to 3,000 hour salt spray standard (per ASTM B117). RAL and custom color matches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

Warranty
Five-year warranty.

LXS LUXESCAPE COLLECTION

DECORATIVE LUMINAIRE

DIMENSIONS



CERTIFICATIONS

UL LISTED, IP66, 3G VIB, DLC, DLC PREMIUM, RoHS, Light Alliance*

CERTIFICATION DATA

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

ENERGY DATA

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

EPA

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

SHIPPING DATA

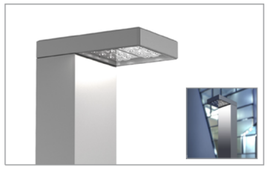
Approximate Net Weight:
Arm Mount Weight: 41 lbs. [18.6 kgs.]
Cantilever Mount Weight: 46 lbs. [20.8 kgs.]
Spider Mount Weight: 53 lbs. [24 kgs.]

TD500059EN
September 28, 2020 3:28 PM

*www.designlights.org

COOPER Lighting Solutions

Project		Catalog #	Type F
Prepared by		Notes	Date



Lumière

EON 303-B1-LEDB2

Bollard

Typical Applications
Hospitality • Commerical Landscape • Outdoor Area/Site • Residential • Architectural

Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Lumen Maintenance page 3
- Product Warranty

Product Certification

UL LISTED, c UL us LISTED, DLC PREMIUM, IP66

Product Features

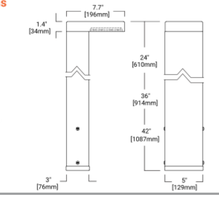
Wet location

Top Product Features

- Full Cut Off Downlight, 12", 24", 36" or 42" height
- 2700K, 3000K or 3500 or 4000K Color Temperature and Amber (585-595nm)
- Type II, Type IV or Type V Optics with clear glass sealed lens
- Patented AccuLED OpticsTM System
- Universal Input LED Driver Included (120 - 277V, 50/60 Hz)
- ELV or 0-10 Dimming

Dimensions

Under side profile view



TECHNICAL DATA
50°C Maximum Temperature Rating
External Supply Wiring 90°C Minimum

COOPER Lighting Solutions

PSS26024EN page 1
April 09, 2020 1:31 PM

HIGHPOINT ENGINEERING, INC.
LAND PLANNING
PERMIT EXPEDITING
CIVIL ENGINEERING
CONSULTING
CANTON CORPORATE PLACE
45 DAN ROAD, SUITE 140
CANTON, MA 02021
www.HighpointEng.com

CLIENT:
King Devens, LLC
800 Boylston Street, Suite 1570
Boston, MA 02199

CONSULTANT:
NAPPA
Electrical Contractors
380 Cambridge Street, Burlington, MA 01803
T (781) 273-6697
www.nappaelectric.com

SEAL

LEVEL 2 - UNIFIED PERMIT

45 JACKSON ROAD - LOT 3

45 JACKSON ROAD
DEVENS, MA

OWNER/APPLICANT: KING DEVENS, LLC

REV	DATE	DESCRIPTION

ISSUE TYPE: LEVEL 2 - PERMIT SET
ISSUE DATE: 03-04-2021
PROJECT NUMBER: 19019

DRAWN BY:
CHECKED BY:

Copyright (c) by Highpoint Engineering, Inc.
All Rights Reserved.

SHEET TITLE:

SHEET NUMBER:

X:\1_Construction\2_Contract Jobs\12679 - Devens Jackson Rd - BWK\11_Design Eng'ng\3_Working\TITLEBLOCK_24x36.dwg

ISSUED FOR : **UNIFIED PERMIT**