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Cell 781-308-7912
mmcettrick@gmail.com

TO: Milton Planning Board
FROM: Marion McEttrick
RE: 193 Central Avenue Update on Lighting
DATE: October 27, 2021

At the previous hearing and site walk the applicant was asked to review the parking lot lighting intensity and also to see if there were more attractive/residential lights that could be provided on the pole fixtures

Accordingly, for tomorrow's hearing we are submitting a plan turning off building lights after closing, a plan for reducing and then turning off parking lot lighting after closing, the specification for the lighting controls and two photometric plans , the first showing the parking lot lighting intensity without building lighting, and a plan showing full parking lot intensity when all lighting is as bright as possible and building lighting is on; the second plan is called the "fire" plan because this would be to fully illuminate the site in case of emergency.

We have also provided an alternative pole design and light. The applicant is looking at an added cost to use lights like these. Cost is an issue, as is whether the pole lights, which are only 10 feet tall, blend in well with the landscaping anyway, as originally proposed, and we will discuss these issues at tomorrow night's hearing.

Specifics provided by lighting consultant:

Site lighting control.
Pole mounted site lighting to be zoned and wired for 0-10v dimming control and controlled via HUBBELL NXP2-PNL-8-8-U-S or equivalent lighting control panel with integral time clock, scheduling and 0-10v dimming capability. A manual override switch will be provided in an area designated by the owner to allow override of scheduling until the next timed event. The panel shall respond to the fire alarm system as needed.

Scheduling:

Exterior pole mounted lighting to be turned on via time clock at dusk during days where the facility is operational. Lighting to be reduced in brightness 50% (1) hour after closing. Lighting to further reduce to 25% at 10pm and extinguish at dawn.

Exterior building mounted lighting (both zones) shall be turned on via time clock at dusk during days where the facility is operational. (1) hour after closing the non security zones will extinguish.

Zones:
Building mounted fixtures shall be comprised of (2) zones. Zone A shall be all operation lighting including wall sconces and doorways and paths of egress. Zone B shall be night security function lighting. This will include the wallpacks on the rear of the building, motion controlled lighting and main entrance lights.

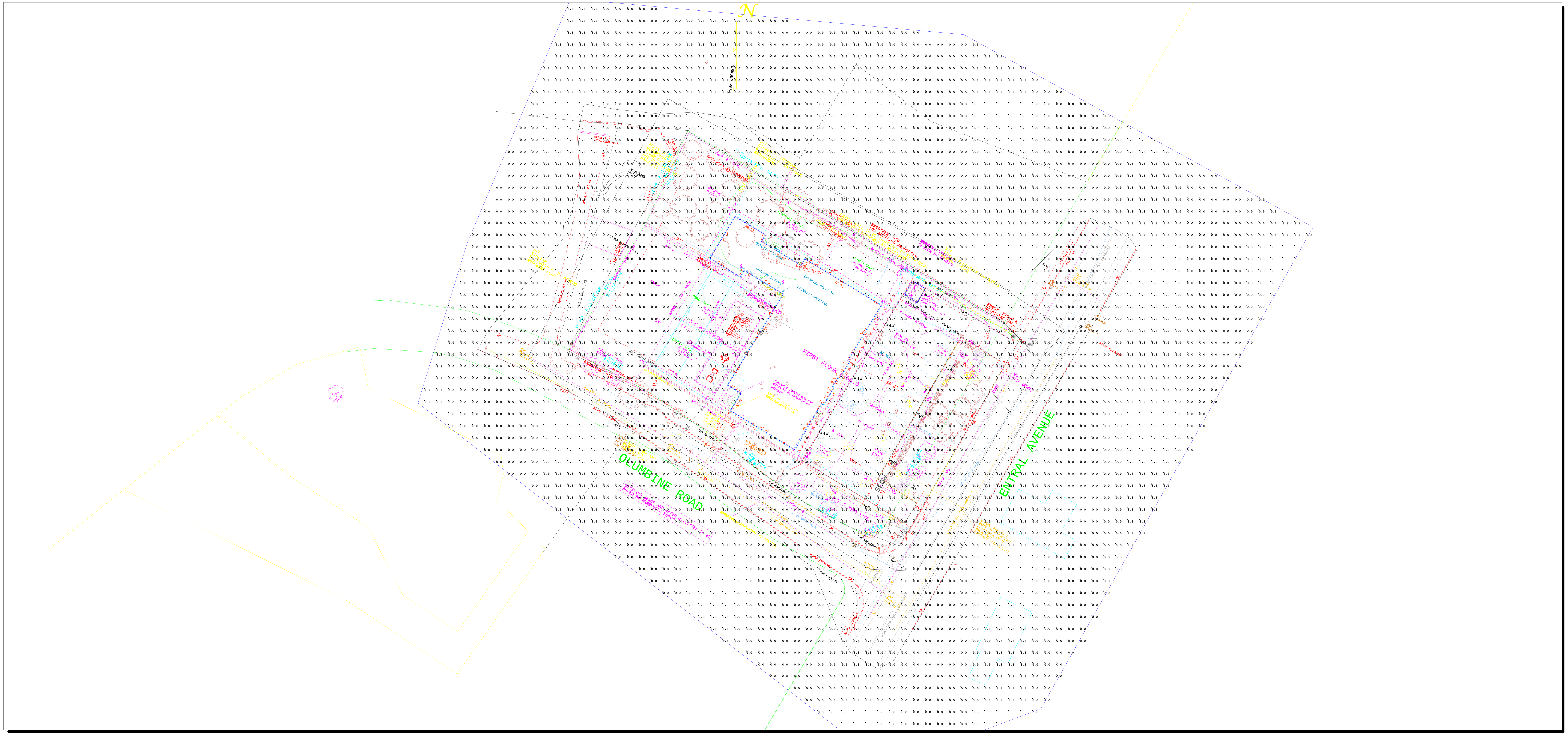
Pole mounted fixtures shall be divided into (3) zones. Zone C shall be driveways, Zone D shall be main parking street side and Zone F shall be poles adjacent to the building.

Adjustment: The lighting control system allows adjustment in brightness to individual pole mounted lighting zones as necessary. Building mounted lighting is on/off control.

Bob Kaseta LC
Specification Sales

P: 781-408-9767
E: Rkaseta@illuminatene.com
illuminatene.com | omnilite.com

With this memo I have provided the photometric plans, description of control panel, and description of pole and lighting fixture, for free standing poles.



Luminaire Schedule						
Scene: JUST POLES						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
▫	2	P3	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-3-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS
▫	3	P4	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-4-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS
▫	3	P4W	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-4W-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS

Urban Fixture on 10 foot pole.
Site only depreciated to compare to IESNA criteria.

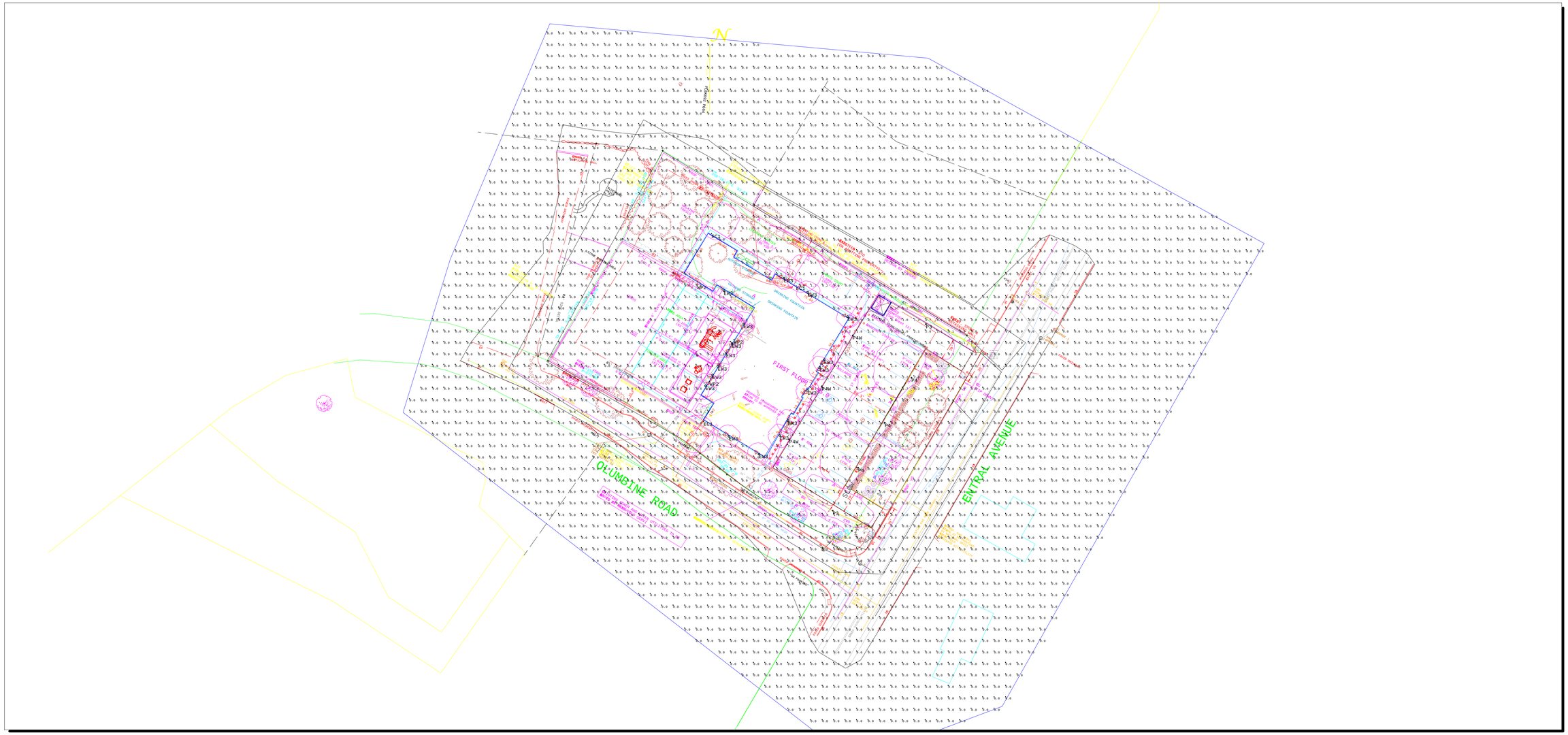
Calculation Summary							
Scene: JUST POLES							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ground plane_Planar	Illuminance	Fc	0.1	3.5	0.0	N.A.	N.A.
DRIVEWAY AND PARKING	Illuminance	Fc	1.0	3.5	0.0	N.A.	N.A.
Spill beyond property	Illuminance	Fc	0.0	0.0	0.0	N.A.	N.A.

#	Date	Comments

Revisions

Drawn By:RK
Checked By:
Date:10/26/2021
Scale:

Goddard School
Milton



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
○	3	EC1	SINGLE	N.A.	1.000	HUBBELL ML-2L3K-1
○	17	EW3	SINGLE	466.23	0.880	MODERN FORMS- WS-W28514
▭	2	P3	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-3-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS
▭	3	P4	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-4-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS
▭	3	P4W	SINGLE	N.A.	0.880	BEACON PRODUCTS URB-MRDS21-24L-27-3K7-UNV-4W-BC PCU-PM /AA-07S4P/RSA-B-S 10 40 OTBLS
▯	3	WP2	SINGLE	N.A.	0.880	HUBBELL LNC-5LU-3K-4-X PC

All ON
Fire Alarm condition

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ground plane_Planar	Illuminance	Fc	0.1	3.5	0.0	N.A.	N.A.
DRIVEWAY AND PARKING	Illuminance	Fc	1.0	3.5	0.0	N.A.	N.A.
Spill beyond property	Illuminance	Fc	0.0	0.3	0.0	N.A.	N.A.

illuminate

#	Date	Comments

Revisions

Drawn By:RK
Checked By:
Date:10/26/2021
Scale:

Goddard School

Milton

HUBBELL Control Solutions

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

NXP2 SERIES

NX LIGHTING CONTROL PANEL

NX DISTRIBUTED INTELLIGENCE

FEATURES

- Meets applicable ASHRAE, IECC and Title 24 energy codes and requirements
- Available in 8, 16, 24, 32 and 48 relay panel sizes
- Operates as standalone panel or NX network device
- Programmable using the Bluetooth® controlHUBB app*
- Matching number of relays and dimming channels
- Integrated NX SmartPORTs™ for connection of NX switches, sensors and accessories
- Optional UL924 emergency control
- Contractor friendly mounting/installation

*Requires NX Radio Bridge with Real Time Clock - included

RELATED PRODUCTS

- NX Panel Relays
- NX Area Controller
- NX Occupancy Sensors
- NX Specialty Switches
- NX Bluetooth Radio® Bridge with Clock

BROCHURE

DIMENSIONAL DRAWINGS

NX DESIGN & APPLICATION GUIDE

SPECIFICATIONS

CONSTRUCTION

- Exterior:
  - NEMA 1 Enclosure (Available In surface and flush mount versions)
  - (4) Keyhole mounting holes for mounting to wall
  - Standard electrical knockouts on top, bottom and sides for low voltage and line voltage feeds
  - Hinged locking door
- Interior:
  - Allows for installation of the exterior prior to the addition of the interior electrical components
  - (4) Keyhole mounting holes for mounting to panel exterior
  - Optional metal plate barrier available to separate relays (p/n NXP2-PBAR)
- Panel Dimensions:
  - 08 Relay Panel: 20.7"L x 20.0"W x 4.0"D
  - 16 Relay Panel: 24.6"L x 20.0"W x 4.0"D
  - 24 Relay Panel: 32.6"L x 20.0"W x 4.0"D
  - 32 Relay Panel: 32.6"L x 20.0"W x 4.0"D
  - 48 Relay Panel: 40.4"L x 20.0"W x 4.0"D

ELECTRICAL

- Network Interface
  - Ethernet 10 base-T via HubbNET™ network cable, integral 2-port Ethernet hub

ELECTRICAL (CONTINUED)

- Input Voltages
  - UNV: 120/277VAC (50/60Hz)
  - 347: 347VAC
  - 480: 480VAC
- Relay Operating Voltages
  - Single Pole (p/n NXP2-RL-SP):
    - General Use: 30A @ 300/347VAC
    - Tungsten: 2400W @ 120VAC
    - (Standard) Ballast: 20A @ 300/347VAC
    - Electronic Ballast: 16A @ 277VAC
    - Motor Starting: ½ HP @ 110-125VAC; 1.5HP @ 220-277VAC
    - Short Circuit Current Rating (SCCR) of 18,000A @ 277VAC
  - Double Pole (p/n NXP2-RL-DP)[1]:
    - General Use: 20A @ 347/480VAC
    - Tungsten: 2400W @ 120VAC
    - (Standard) Ballast: 20A @ 347/480VAC
    - Motor Starting: ½ HP @ 110-125VAC; 1.5HP @ 220-277VAC
    - Short circuit Current Rating (SCCR) of 5,000A @ 277VAC
- Relay Electrical Ratings
  - Rated for minimum 60,000+ operations (30,000+ cycles) at full 20A load
  - Rated full-life with HID load

ELECTRICAL (CONTINUED)

- Relay Mechanical Ratings
  - Rated for minimum 120,000+ operations (60,000+ cycles)
- Relay Operation
  - Mechanically latching
  - Provides at-a-glance indication of ON or OFF relay status
  - Includes manual override switch (integral to the relay)
- 0-10V Dimming
  - Available on all panels
  - (8) Integrated dimming channels per Relay-Dimmer Board
  - Each dimming channel capable of sinking 50mA
  - Full support for Dim-to-Off drivers
- Class 2 Low Voltage NX SmartPORTs
  - (4) NX SmartPORTs - 24VDC, 1.2A MAX (all outputs combined)
  - Supports NX switches, sensors (NXOS, NXSMP, NXDS) and accessories[2]
  - RS485 digital communication
- Class 2 Inputs / Outputs
  - (4) 3-Wire dry contact inputs. Each input provides connection for sourcing 24VDC, common, control and switch pilot light functionality

HUBBELL Lighting

NXP2 SERIES

NX LIGHTING CONTROL PANEL

SPECIFICATIONS (CONTINUED)

ELECTRICAL (CONTINUED

- Class 2 Inputs / Outputs (Continued):
  - (2) SPDT (Normally Open/Normally Closed) dry contact outputs. Each output rated for 24VDC @ 50mA.
  - Terminal Tolerance:
    - Wire size: 14, 16, 18, 20, 22 AWG
    - Recommended tightening torque: 0.45 N-m (4 in-lbs.)
- Optional UL924 Emergency Control
  - Pre-installed at factory
  - When installed, panel is suitable for controlling emergency lighting circuits
  - On loss of normal power, all relays go to closed (ON) position and all dimming channels will go to 100% light output

ELECTRICAL (CONTINUED

- Bluetooth® Technology
  - Bluetooth programming using the controlHUBB app requires the NX Radio Bridge with Real Time Clock (p/n NXBTC) – Included

OPERATION

- Programming and Configuration
  - Programmable via Bluetooth controlHUBB app (available on Google Play™ and Apple® App Store)
  - Programmable via web-browser user interface[3]

OPERATING ENVIRONMENT

- Indoor use only
- 32° to 112°F (0° to 50°C)
- Relative humidity (non-condensing): 10% to 90%

CERTIFICATIONS

- UL 916, CAN/CSA C22.2 No. 205
- UL 924, CAN/CSA C22.2 No. 141 Emergency Lighting (Requires UL924 Emergency Control Option)

WARRANTY

- 5 year limited
- See Hubbell Control Solutions Standard Warranty for additional information

Notes:

1 Double pole relays occupy (2) relay spaces

2 Connection of NX actuators, bridges and radios is not supported

3 Requires NX Area Controller

ORDERING GUIDES

Stocked Panels

Example: NXP2-PNL-16-16-U-S

CATALOG #

Model	
NXP2-PNL-8-0-U-S	NX Lighting Control Panel V2, 8 Relay Capacity, 8 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-8-8-U-S	NX Lighting Control Panel V2, 8 Relay Capacity, 8 Dimming Channels, 8-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-16-0-U-S	NX Lighting Control Panel V2, 16 Relay Capacity, 16 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-16-16-U-S	NX Lighting Control Panel V2, 16 Relay Capacity, 16 Dimming Channels, 16-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-24-0-U-S	NX Lighting Control Panel V2, 24 Relay Capacity, 24 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-24-24-U-S	NX Lighting Control Panel V2, 24 Relay Capacity, 24 Dimming Channels, 24-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-32-0-U-S	NX Lighting Control Panel V2, 32 Relay Capacity, 32 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-32-32-U-S	NX Lighting Control Panel V2, 32 Relay Capacity, 32 Dimming Channels, 32-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-48-0-U-S	NX Lighting Control Panel V2, 48 Relay Capacity, 48 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-48-48-U-S	NX Lighting Control Panel V2, 48 Relay Capacity, 48 Dimming Channels, 48-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NXP2 SERIES

NX LIGHTING CONTROL PANEL

ORDERING GUIDES (CONTINUED)

Custom Panels

Example: NXP2-EIT-48-24SP-12DP-UNV-S

CATALOG #

NXP2 – _____ – _____ – _____ – _____ – _____ – _____ – _____ – _____

Model	Panel Shipment	Panel Size	Single Pole Relay Qty	Double Pole Relay Qty	Emergency Control	Input Voltage	Enclosure Mount
NXP2 NX Lighting Control Panel V2	**EIT** Enclosure/ Interior Together[1] **EIS** Enclosure/ Interior Separately[1] **ENC** Enclosure Only **INT** Interior Only[1]	**8** 8 Relay/ Dimmer Capacity **16** 16 Relay/ Dimmer Capacity **24** 24 Relay/ Dimmer Capacity **32** 32 Relay/ Dimmer Capacity **48** 48 Relay/ Dimmer Capacity	**nnSP** Single Pole Relay Qty	**nnDP** Double Pole Relays	**Blank** No UL924 Control **924** UL924 Panel	**UNV** Universal Voltage (120/277VAC) **347** 347VAC **480** 480VAC	**S** Surface Mount **F** Flush Mount

Notes:

1 Bluetooth Radio Bridge With Real Time Clock included for panel programming

Stocked NXP2 Panel Accessories

Example: NXP2-RL-SP

CATALOG #

Model	
NXP2-RL-SP	Single Pole - General Use: 30A @ 300/347VAC; Tungsten: 2400W @ 120VAC; (Standard) Ballast: 20A @ 300/347VAC; Motor Starting: 1HP @ 110-125VAC; 1.5HP @ 220-277VAC
NXP2-RL-DP	Double Pole - General Use: 20A @ 347/480VAC; Tungsten: 2400W @ 120VAC; (Standard) Ballast: 20A @ 347/480VAC; Motor Starting: 1HP @ 110-125VAC; 1.5HP @ 220-277VAC
NXP2-PBAR	NX Lighting Control Panel V2 Relay Channel Barriers – Set of two
NXP2-CNTRLRBRD	NX Lighting Control Panel V2 Controller Board Replacement
NXP2-RLYDMRBRD	NX Lighting Control Panel V2 Relay/Dimmer Board Replacement

DATE: LOCATION:

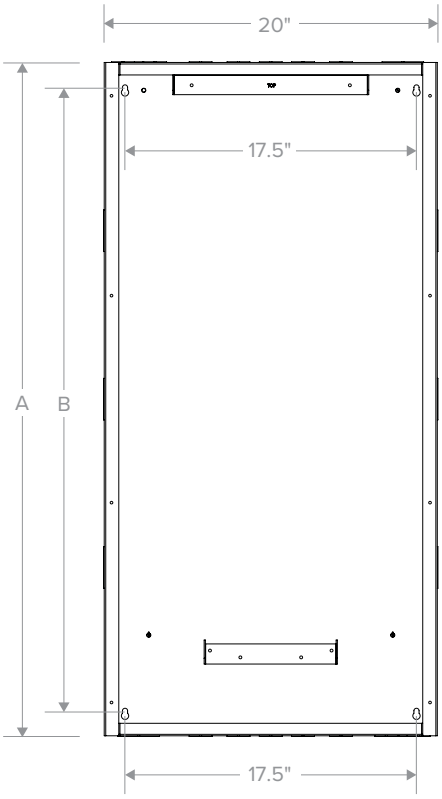
TYPE: PROJECT:

CATALOG #:

NXP2 SERIES

NX LIGHTING CONTROL PANEL

DIMENSIONS



Surface Mount Panel Dimensions

Sizes	A	B
V2-8	20.7"	17.7"
V2-16	24.6"	21.6"
V2-24	32.6"	29.6"
V2-32	32.6"	29.6"
V2-48	40.4"	37.4"

Note:

1 For Flush Mount Panels, add 2" to A & B dimensions

DATE: LOCATION:

TYPE: PROJECT:

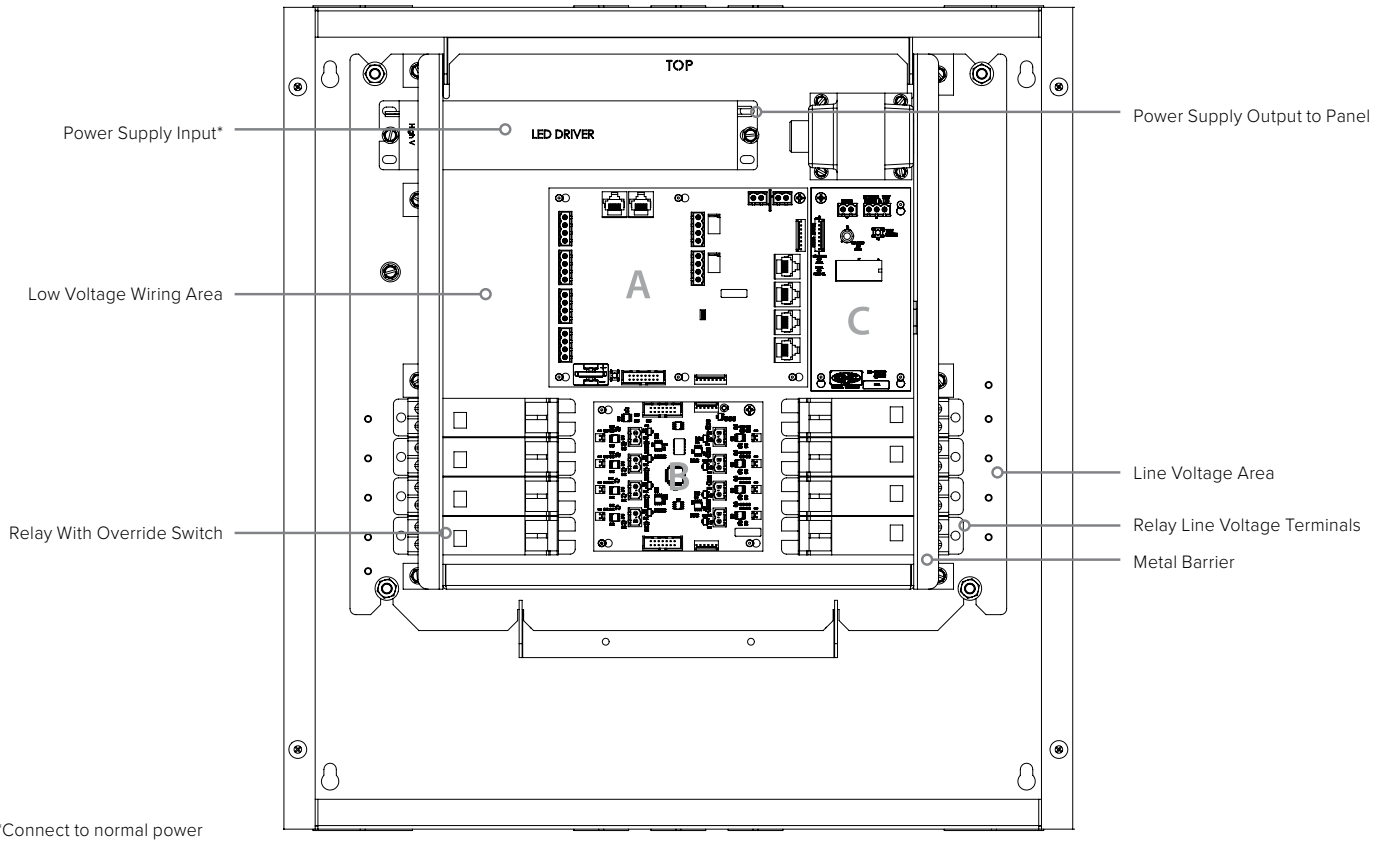
CATALOG #:

NXP2 SERIES

NX LIGHTING CONTROL PANEL

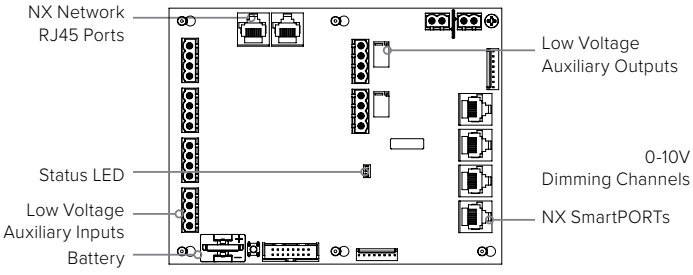
ADDITIONAL INFORMATION

Panel Interior

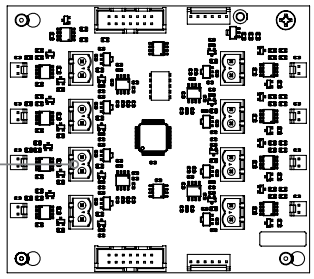


*Connect to normal power source if panel is controlling emergency circuits.

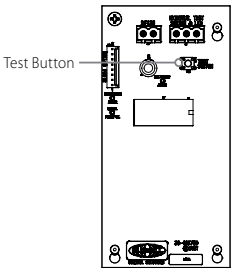
Fully Populated 8 Relay Interior (with UL924 Option Board) Mounted in the Exterior Enclosure



A: Controller Board



B: Relay/Dimmer Board

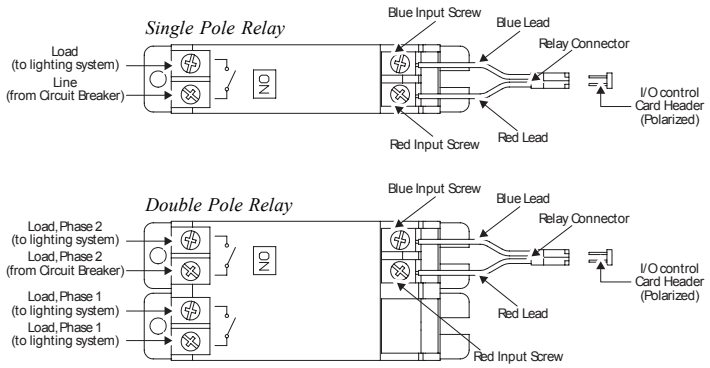


C: UL924 Board (Optional)

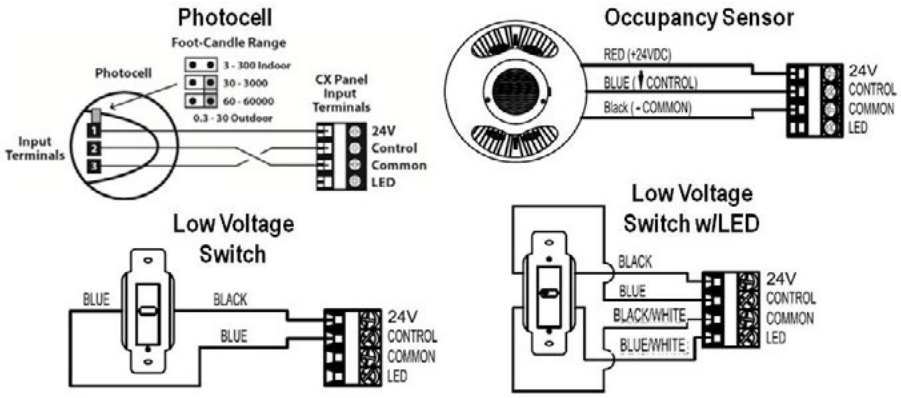
NXP2 SERIES

NX LIGHTING CONTROL PANEL

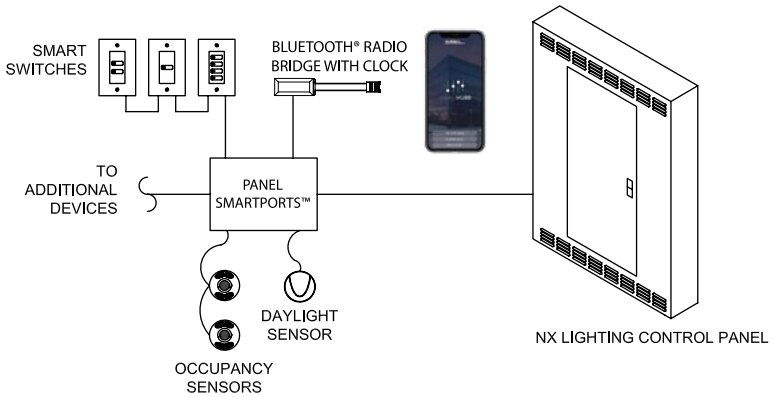
WIRING DIAGRAMS (CONTINUED)



Relay Wiring Diagrams



Low Voltage Input Wiring Diagrams

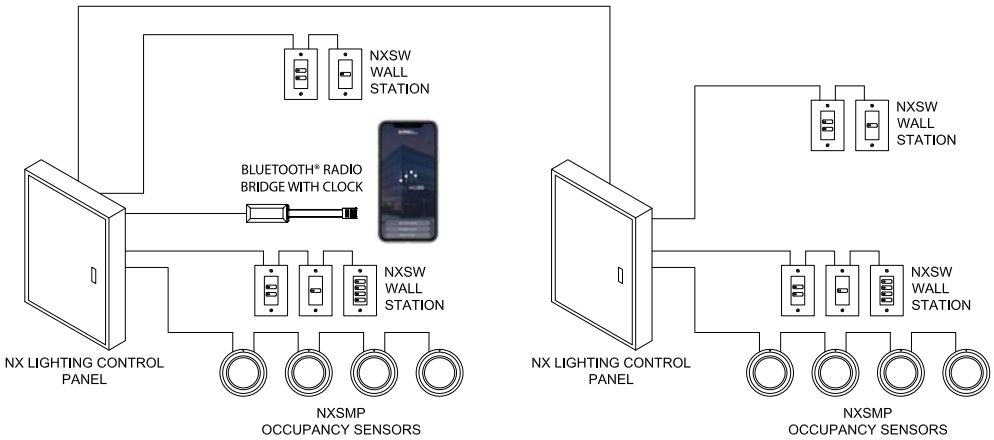


Standalone Panel Programmed Using Bluetooth Radio Bridge with Clock and controlHUBB app

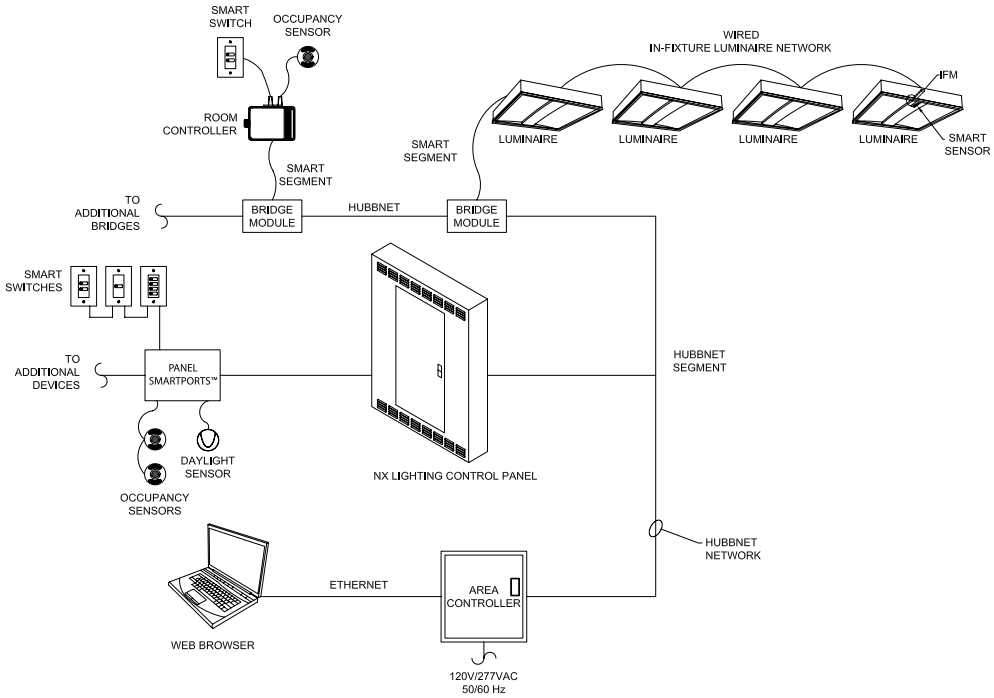
NXP2 SERIES

NX LIGHTING CONTROL PANEL

WIRING DIAGRAMS (CONTINUED)



Networked Panels Programmed Using Bluetooth Radio Bridge with Clock and controlHUBB App



Networked Panel Programmed Using the NX Area Controller

BEACON
design . performance . technology
www.beaconproducts.com

Type:	
Project Name:	
Notes:	

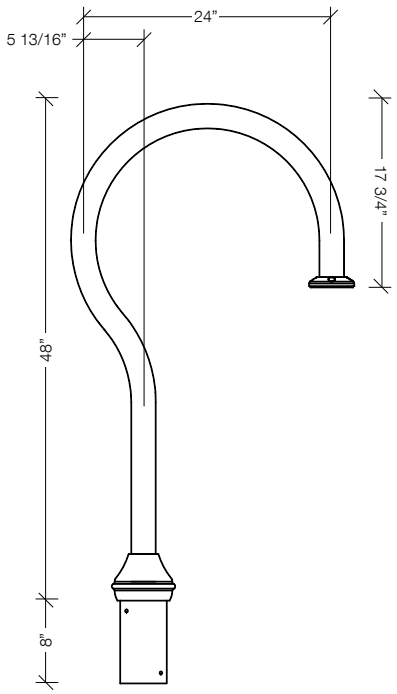
rev. 02.24.2014

AA-07 Bishop's Crook

Arms

Sample	AA-07	S	4	B	P	BBT
Ordering		/	/	/	/	/
	A	**B**	**C**	**D**	**E**	**F**

DETAILS



A. MODEL

AA-07	Bishop's Crook

B. POST SHAFT PROFILE

W	wall mount
S	smooth
F	fluted

C. POST SHAFT DIAMETER

4	4"
5	5"
6	6"
OTHER	_____

D. ARRANGEMENT

___	*see arrangement table below*

E. LUMINAIRE MOUNTING

P	pendant

F. COLOR

BBT	basic black textured
BMT	black matte textured
WHT	white textured
MBT	metallic bronze textured
BZT	bronze textured
DBT	dark bronze textured
GYS	gray smooth
DPS	dark platinum smooth
GNT	green textured
MST	metallic silver textured
MTT	metallic titanium textured
OWI	old world iron
RAL	_____

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

EPA (effective projected area): EPA is de¬fined as (projected surface area X drag factor) and measured in ft2. Allowable post, luminaire arm, luminaire and accessory EPAs are derived from the most current published AASHTO (American Association of State Highway and Transportation Officials) standard, currently AASHTO 2001 (50yr design life). Customer assumes all responsibility for selecting the ap¬propri-ate post for installation (consult factory for assistance). Luminaire arm, luminaire and accessory EPA must be equal to or less than allowable EPA of post. Consult a professional engineer for compliance with local codes and standards.

Fasteners: All fasteners shall be Corrosion Resistant. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, available at additional cost).

Finish: Finish shall be a Beacote V polyester pow-der-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a poly-mer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester pow¬der coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists sur-face impacts of up to 160 inch-pound.

Limited Warranty: Beacon Products warrants its products, to the original purchaser, against defects in materials and workmanship for proper usage for a pe-riod of 5 years after date of production, when properly installed, maintained and appropriately specified. See Warranty Information on www.beaconproducts.com for complete details and exclusions.

		arrangement (EPA index ft² / weight (lbs)									
shaft Ø		A	B	C	D	E	F	G	H	I	J
wall	weight	10	-	-	-	-	-	-	-	-	-
Ø4"	EPA	-	1.14	-	-	-	-	-	-	-	-
	weight	-	14	-	-	-	-	-	-	-	-
Ø5"	EPA	-	1.18	-	-	-	-	-	-	-	-
	weight	-	14	-	-	-	-	-	-	-	-
Ø6"	EPA	-	1.23	-	-	-	-	-	-	-	-
	weight	-	16	-	-	-	-	-	-	-	-

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Typical Site Pole configured per schedule

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

URBAN SERIES

URBAN LUMINAIRE

FEATURES

- Decorative transitional style lighting fixture series is suitable for walkway lighting and wall mounting
- Two unique shade and style options
- LED turtle-friendly option available
- Integral Surge and Thermal Protection

Shown with arm

Shown with SiteSync™

*3000K and warmer CCTs only

CONTROL TECHNOLOGY

RELATED PRODUCTS

Matrix MAA Brighton La Jolla

SPECIFICATIONS

CONSTRUCTION

- The drivers shall be located in the top cast housing and shall be accessible without tools by hinging the lower shade assembly. The driver and all electrical components shall be on a tray
- The lower shade shall be made from a one-piece aluminum spinning
- The housing is designed for LED thermal management without the use of metallic screens, cages, or fans. The top casting shall be able to be pendent mounted in place with a stainless steel safety pin and then permanently held in place with four stainless steel bolts

ELECTRICAL

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input
- Power factor is ≥0.90 at full load
- Dimming drivers are standard with connections for external dimming equipment available upon request
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment shall contain all LED driver components
- Button photocell available
- Ambient operating temperature -40°C to 40°C

ELECTRICAL (CONTINUED)

- Surge protection - 20KA
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55ºC (131ºF). Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to “fail on”, allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.)

CONTROLS

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night visit: www.beaconproducts.com/products/energeni
- Urban can be specified with SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbelllighting.com/products/sitesync/

FINISH

- IFS polyester powder-coat electrostatically applied and thermocured
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish

FINISH (CONTINUED)

- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds

CERTIFICATIONS

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: http://www.designlights.org/QPL
- • NRTL Certified, UL8750, UL 1598 and CSA22.2#250. 13-14 for wet locations
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at http://www.beaconproducts.com/products/urban

WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	3,300–11,600
Wattage Range	55–136
Efficacy Range (LPW)	61–87

BEACON
design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

URBAN SERIES

URBAN LUMINAIRE

ORDERING GUIDE

Example: URB–CAP-21–36L-80–5K7–UNV–4–SWP–NRNW–BLT

CATALOG #

Model		Lens Option		Engine–Watts		CCT/CRI[7]		Voltage		Optics[2]		Electrical Options	
URB	Urban	**CAP-21**	21" Capitol	**24L-27**	27W, LED array	**3K7**	3000K, 70 CRI	**UNV**	120-277V	**FR**	Type I	**PCU**	Button Photocell, Universal
		MRDS-21	21" Miramar deep shade	**24L-55**	55W, LED array	**4K7**	4000K, 70 CRI	**347**	347V	**2**	Type II		
		MAR-21	21" Maritas	**36L-80**	85W, LED array	**5K7**	5000K, 70 CRI	**480**	480V	**3**	Type III		
		CAP-26	26" Capitol	**48L-110**	110W, LED array[1]					**4**	Type IV		
		MRSS-26	26" Miramar shallow shade	**60L-136**	136W, LED array[1]					**4W**	Type IV wide		
		MRDS-26	26" Miramar deep shade							**5R**	Type V rectangular		
		MAR-26	26" Maritas							**5QM**	Type V square medium		
										5W	Type V round wide		
										BC	Backshield (available for FR, 2, 3, 4, 4W Opctics)		

Control Options		Mounting Style		Style		Sensor Option		Finish	
GENI-XX	Energeni[5]	**PM**	Pendant mount	**NRNW**	No rings	**MOB**	Motion sensor 33% or 50% dimming[4,6,8]	**BLT**	Black Matte Textured
SWP	SiteSync Wireless Pre-Commission[3,4]	**SM**	Side mount	**3RNW**	Three rings			**BLS**	Black Gloss Smooth
		YM	Yoke mount					**DBT**	Dark Bronze Matte Textured
								DBS	Dark Bronze Gloss Smooth
								GTT	Graphite Matte Textured
								LGS	Light Grey Gloss Smooth
								PSS	Platinum Silver Smooth
								WHT	White Matte Textured
								WHS	White Gloss Smooth
								VGT	Verde Green Textured
								Color Option	
								CC	Custom Color

Accessories

- ☐ **SWUSB** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node*
- ☐ **SWTAB** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node*
- ☐ **SWBRG** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested+

Notes:

* When ordering SiteSync at least one of these two interface options must be ordered per project

\+ If needed, an additional Bridge Node can be ordered

Notes:

1. 26" only
2. To rotate optics left or right 90 degrees, specify L or R after the optical distribution example: 4L
3. Must specify group and zone information at time of order. For further details, see www.hubbell-automation.com/products/sitesync/
4. Not available with other control or sensor options
5. When ordering Energeni, specify the routine setting code (Example GENI-04). See Energeni brochure and Energeni instructions for setting table and options. Not available with sensor options
6. Specify time delay; dimming level and mounting height
7. This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at http://cdn.beaconproducts.com/content/products/specs/specs_files/Urban_LED_spec_sheet_turtle.pdf
8. Only available on 24L and 36L configurations

CONTROLS

SiteSync

SiteSync — Precommissioned Ordering Information:

When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit the SiteSync family page on our website or contact Hubbell Lighting tech support at 864-678-1000.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

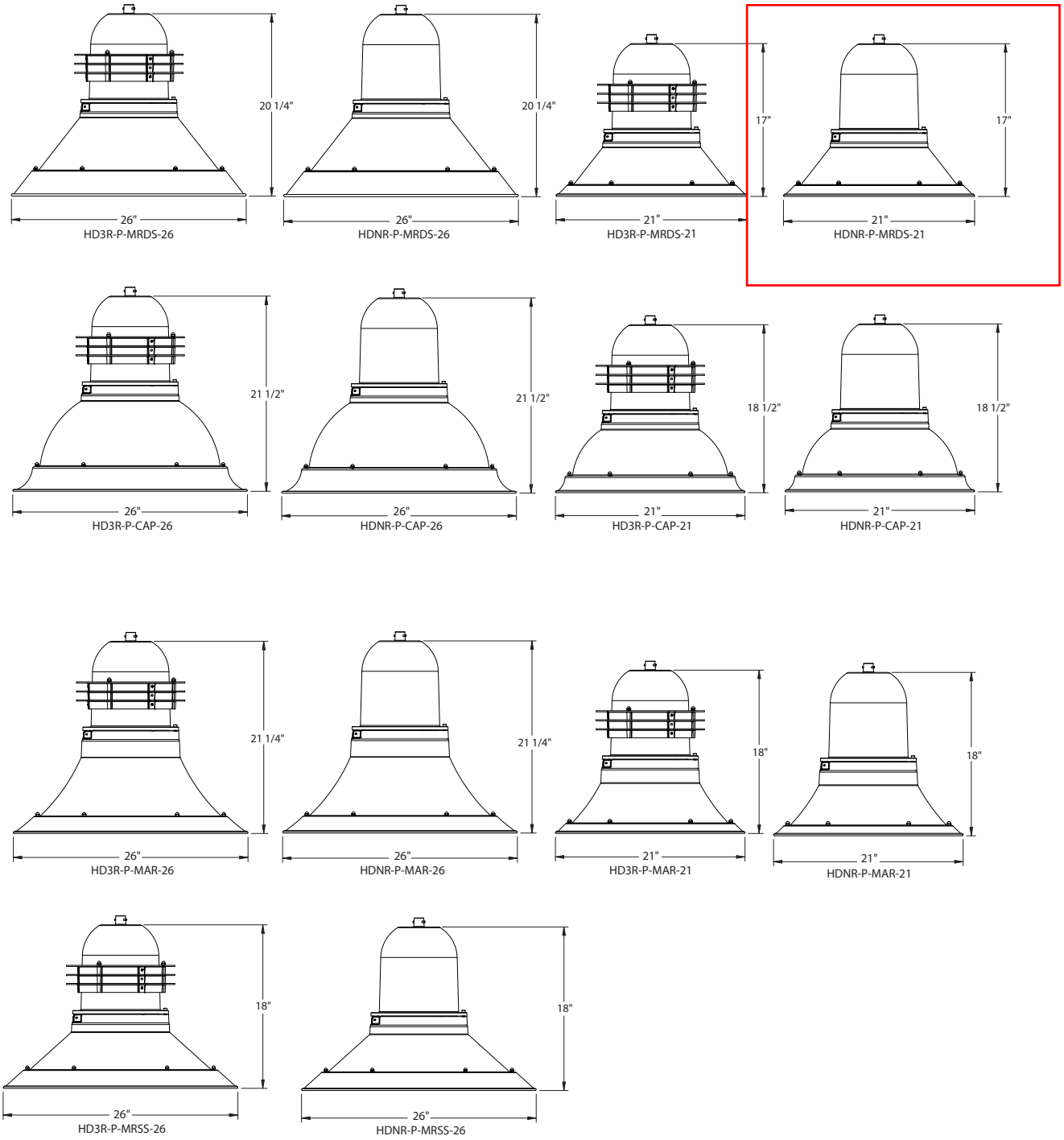
Examples: URBCAP-26/60L-136/3K7/UNV/5QM/SWP/NRNW/BLT SiteSync only

URBCAP-26/60L-136/3K7/UNV/5QM/SWPM-20F/NRNW/BLT SiteSync with Motion Control

HUBBELL Lighting

URBAN SERIES

URBAN LUMINAIRE



URBAN SERIES

URBAN LUMINAIRE

DELIVERED LUMENS

# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	350mA	27W	FR	3871	138	1	0	0	3990	143	1	0	0	3667	131	0	0	0
			2	3750	134	2	0	0	3838	137	1	0	1	3528	126	1	0	1
			3	3638	130	1	0	1	3750	134	1	0	1	3446	123	1	0	1
			4	3680	131	0	0	1	3794	135	0	0	1	3486	129	0	0	1
			4W	3612	129	1	0	1	3723	133	1	0	1	3422	122	1	0	1
			5QM	3750	134	2	0	0	3866	138	2	0	0	3553	127	2	0	0
			5R	3763	134	2	0	2	3879	139	2	0	2	3565	127	2	0	2
			5W	3556	127	2	0	1	3666	131	3	0	1	3369	120	2	0	1
24	700mA	55W	FR	6451	113	1	0	1	6650	117	1	0	1	6112	107	1	0	1
			2	6251	110	3	0	1	6397	112	1	0	2	5879	103	1	0	1
			3	6063	106	1	0	2	6250	110	1	0	2	5744	101	1	0	2
			4	6133	108	1	0	2	6323	111	1	0	2	5811	102	1	0	2
			4W	6020	106	1	0	2	6206	109	1	0	2	5703	100	1	0	2
			5QM	6251	110	3	0	1	6444	113	3	0	1	5922	104	2	0	1
			5R	6272	110	3	0	3	6466	113	3	0	3	5942	104	3	0	3
			5W	6926	104	3	0	1	6110	107	3	0	1	5615	99	3	0	1
36	700mA	85W	FR	9672	113	1	0	1	9970	117	1	0	1	9173	107	1	0	1
			2	9303	109	1	0	2	9591	112	1	0	2	8823	103	1	0	2
			3	9089	107	1	0	2	9370	110	1	0	2	8621	101	1	0	2
			4	9195	108	1	0	2	9479	111	1	0	2	8721	102	1	0	2
			4W	9025	106	1	0	2	9304	109	1	0	2	8559	100	1	0	2
			5QM	9371	110	3	0	1	9661	113	3	0	1	8888	104	3	0	1
			5R	9403	110	3	0	3	9694	114	3	0	3	8918	105	3	0	3
			5W	8885	105	3	0	2	9160	108	4	0	2	8427	100	3	0	2
48*	700mA	110W*	FR	12895	116	1	0	1	13294	120	1	0	1	12230	110	1	0	1
			2	12404	112	2	0	2	12788	115	2	0	2	11765	106	2	0	2
			3	12119	109	1	0	3	12494	113	1	0	3	11494	104	1	0	2
			4	12260	110	1	0	3	12639	114	1	0	3	11628	105	1	0	3
			4W	12033	108	2	0	3	12405	112	2	0	3	11413	103	2	0	2
			5QM	12494	113	3	0	2	12881	116	3	0	2	11850	107	3	0	2
			5R	12537	113	3	0	3	12925	116	4	0	4	11891	107	3	0	3
			5W	11847	107	4	0	2	12213	110	4	0	2	11236	101	4	0	2
60*	700mA	136W*	FR	16119	117	1	0	2	16618	121	2	0	2	15288	112	1	0	2
			2	15505	113	2	0	2	15985	117	2	0	2	14706	107	2	0	2
			3	15149	111	2	0	3	15617	114	2	0	3	14368	105	2	0	3
			4	15324	112	1	0	3	15798	115	1	0	3	14534	106	1	0	3
			4W	15041	110	2	0	3	15506	113	2	0	3	14266	104	2	0	3
			5QM	15618	114	4	0	2	16101	118	4	0	2	14813	108	3	0	2
			5R	15671	114	4	0	4	16156	118	4	0	4	14864	108	4	0	4
			5W	14809	108	4	0	2	15267	111	4	0	2	14046	103	4	0	2

Notes:

1 Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

* Available in the 26" Urban only

URBAN SERIES

URBAN LUMINAIRE

ELECTRICAL DATA

# OF LEDS	Number of Drivers	Drive Current (mA)	Input Voltage (V)	System Power (Watts)	Oper. Current (Amps)
24	1	350mA	120	27	0.27
			277		0.12
			347		0.09
			480		0.07
24	2	700 mA	120	55	0.55
			277		0.24
			347		0.19
			480		0.14
36	1	700 mA	120	80	0.80
			277		0.35
			347		0.28
			480		0.20
48	1	700 mA	120	110	1.1
			277		0.43
			347		0.38
			480		0.28
60	1	700 mA	120	136	1.4
			277		0.59
			347		0.47
			480		0.34

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0˚ C	32˚ F	1.02
10˚ C	50˚ F	1.01
20˚ C	68˚ F	1.00
25˚ C	77˚ F	1.00
30˚ C	86˚ F	0.98
40˚ C	104˚ F	0.98

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

PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	*TM-21-11 L90 60,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.97	0.95	0.95	0.86	>470,000

Notes:

* Projected per IESNA TM-21-11. Data references the extrapolated performance projections for thebase model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

EPA

EPA: X.XX sqft		PM	SM	YM
CAP	21	1.04	1.14	1.39
	26	1.39	1.49	1.79
MAR	21	1.00	1.10	1.35
	26	1.25	1.35	1.65
MRDS	21	1.00	1.10	1.35
	26	1.25	1.35	1.65
MRSS	26	1.17	1.27	1.57

FOR ALL CONFIGURATIONS LINE DRAWINGS PLEASE SEE:

URB-HD-P.PDF
URB-HD-S.PDF
URB-HD-YM.PDF

USE OF TRADEMARKS AND TRADE NAMES

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