

BL Series Installation Manual

Zone 21 Certification



APPLICATION

The BL luminaire is an industrial-grade product suitable for harsh and hazardous locations. Installation areas include indoors, outdoors, and wet locations. Frequent exposure to moisture, dirt, corrosion, vibration, and rough usage is common for this product family. The BL-Z21 is Zone 21 certified for Canada. Zone 21 areas are high-risk environments for explosive powder or dust. Models, including "-HZ-", are approved for use in hazardous location areas.

As defined by the Canadian Electrical Code (CEC), Nemalux BL luminaires are suitable for use in: hazardous locations indoors, outdoors, in dry, wet, or corrosive environments.

Certified to:	Conforms to: CSA-C22.2 NO. 60079-0, CSA-C22.2 NO. 60079-31, CSA-C22.2 No. 250.0, and CSA-C22.2 No. 250.13
Hazardous Location Certification:	Ex tb IIIC Db T94°C -50°C < Ta < +65°C Zone 21
Housing:	Copper-free die cast aluminium with polycarbonate lens. Optional glass window in stainless frame.
Input Voltage:	AC: 120/230-277VAC 50/60Hz
Rated Wattage:	BL20: 17W BL40: 34W
Connections:	3 x 3/4" NPT threaded entry Black: Line White: Neutral/Line 2 Green: Ground For connections use wire rated to a minimum of 90° C. Class 1 wiring only.
Temperature Range:	-50°C to +65°C
Ingress Protection:	IP66 Suitable for wet locations



WARNING/ ATTENTION

WARNING: THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

ATTENTION: CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS



WARNING/ ATTENTION

POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS. TO REDUCE THE RISK OF IGNITION OF HAZARDOUS ATMOSPHERES, DISCONNECT THE LUMINAIRE FROM THE SUPPLY CIRCUIT BEFORE OPENING. KEEP TIGHTLY CLOSED WHEN IN OPERATION.

CHARGE ÉLECTROSTATIQUE POTENTIEL DE DANGER - VOIR LES INSTRUCTIONS. POUR RÉDUIRE LE RISQUE D'INFLAMMATION DES ATMOSPÈRES DANGEREUSES, DÉBRANCHEZ LE LUMINAIRE DU CIRCUIT ÉLECTRIQUE AVANT D'OUVRIR. CONSERVER HERMÉTIQUEMENT FERMÉ LORSQU'IL EST EN FONCTIONNEMENT.

BL-R-CC – CONDUIT MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-R-CC kit is intended for UL listed BL luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

BL-R-CC	QTY	PART NAME
	1	ANTI-ROTATION BRACKET ASSEMBLY

INSTALLATION STEPS

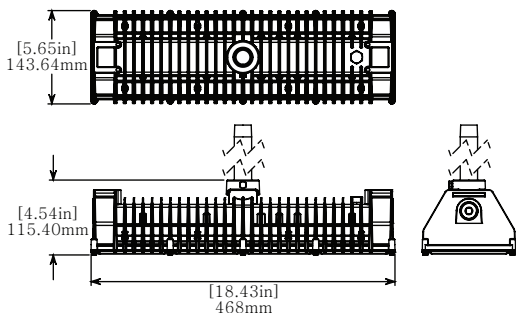
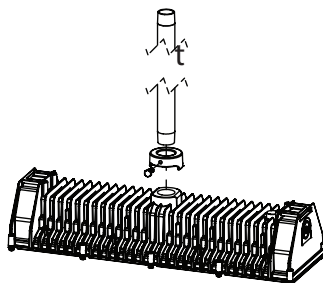
STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

STEP 2.

If pendant/conduit mounting the BL, the R-CC anti-rotation lock accessory is mandatory when installing below 8ft, per NEC 314.23H2. When installing a hazardous location model, the R-CC anti-rotation lock accessory is mandatory for any mounting height.

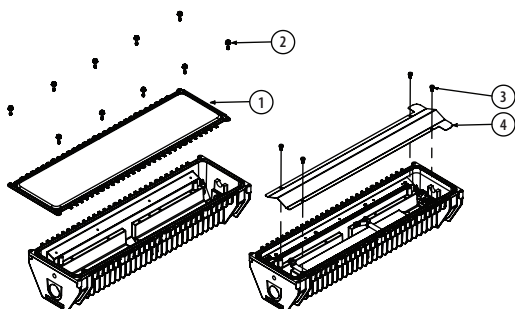
Slide the anti-rotation lock onto a 3/4" trade-size rigid metal conduit and lightly tighten the set screw to hold it in place. Thread BL luminaire directly onto the conduit. Slide anti-rotation lockdown over the top of mating geometry on the luminaire and tighten the set screw to 4.5 N-m [40 in-lbs]. The conduit must be suitably mounted using a listed fixture hanger.



INSTALLATION STEPS CONT.

STEP 3.

Open luminaire for wiring. Remove window, reflector and reposition NPT plugs if necessary.



ITEM NO.	DESCRIPTION	QTY
1	BL WINDOW	1
2	M4 LENS FASTENERS	12
3	M4 REFLECTOR FASTENERS	4
4	BL REFLECTOR	1

STEP 4.

Make wiring connections to luminaire housing using 3/4" NPT trade entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific general or hazardous location of the installation.

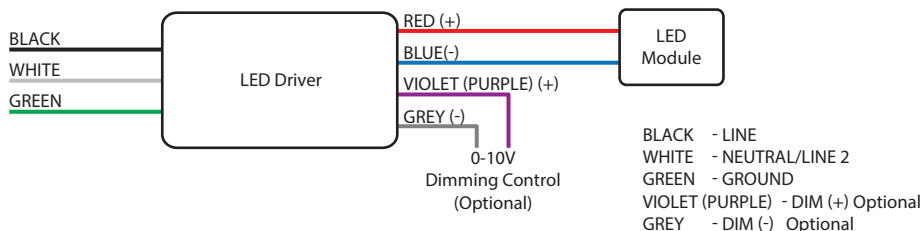
STEP 5.

Make wiring connections to luminaire housing using 3/4" NPT trade entries. Follow wiring method requirements of the Canadian Electrical Code or National Electrical Code for the specific general or hazardous location of the installation.

STEP 6.

For convenience, spring cage wire connectors have been provided. 12-28AWG solid or stranded wire with a strip length of 8-10mm (0.35-0.39") is supported. If user wiring requires it, the connectors may be replaced by an alternate listed connector.

Make branch circuit connections inside the luminaire using the provided splice connectors.



STEP 7.

Make dimming connections if required using the provided wiring connectors. Ensure the dimming control is certified and suitable for the classification of the installation area. The driver will source a maximum of 165µA for 0-10V control. The dimming controller must sink current from the 0-10V control leads.

STEP 8.

Reinstall the reflector and window. Tighten M4 fasteners to 1.7 N-m [15 in-lbs].

BL-SM – SURFACE/CEILING MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-SM kit is intended for use with UL listed BL luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

BL-SM	QTY	PART NAME
	2	SURFACE/SUSPENSION MOUNT BRACKET
	4	M6 X 12mm HEX HEAD CAP SCREW
	4	M6 FLAT WASHER



INSTALLATION STEPS

WARNING:

Suspension mounting has not been evaluated for use in hazardous locations.

ATTENTION:

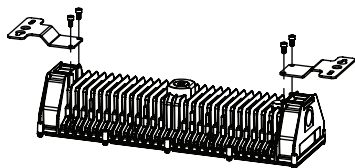
Le montage de la suspension n'a pas été évalué pour une utilisation dans des zones dangereuses.

STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

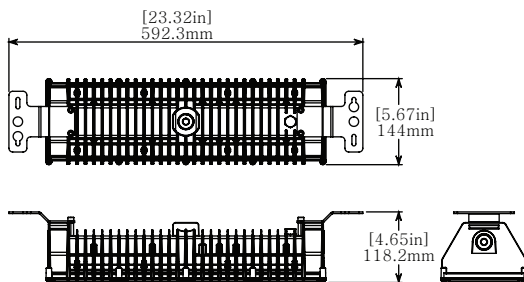
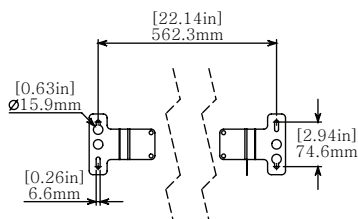
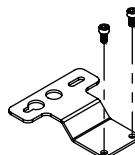
STEP 2.

The BL-SM kit is required for surface mounting. Install surface mounting brackets on the BL luminaire as shown using the provided M6 fasteners. Torque the M6 fasteners to 4.5 N-m [40 in-lbs]. For surface installation, mount the fixture to the desired location using 4x ¼-20 or M6 fasteners.



STEP 3.

Continue installation with STEP 3 on PAGE 3.



BL-WM – WALL MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-WM kit is intended for use with UL listed BL luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

BL-WM	QTY	PART NAME
	2	WALL MOUNT BRACKET
	4	M6 X 12mm HEX HEAD CAP SCREW
	4	M6 FLAT WASHER



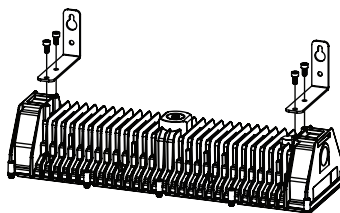
INSTALLATION STEPS

STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

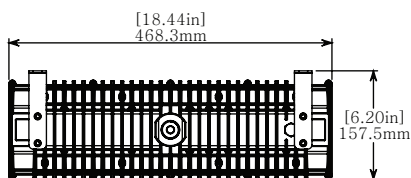
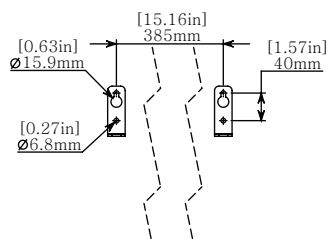
STEP 2.

The BL-WM kit is required for wall mounting. Install wall mounting brackets on the BL luminaire as shown using the provided M6 fasteners. Torque the M6 fasteners to 4.5 N-m [40 in-lbs]. Mount the fixture to the desired location using 4x ¼-20 or M6 fasteners.



STEP 3.

Continue installation with STEP 3 on PAGE 3.



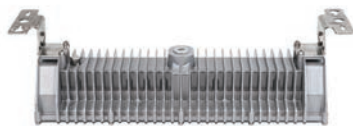
BL-YM – YOKE MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-YM kit is intended for UL listed BL luminaires, as marked on the luminaire nameplate.

Accessory Package Contents

BL-YM	QTY	PART NAME
	2	SWIVEL BRACKET A
	2	SWIVEL BRACKET B
	4	M6 x 1 x 12mm SOCKET HEAD CAP SCREW
	4	M4 x 8mm SOCKET HEAD CAP SCREW



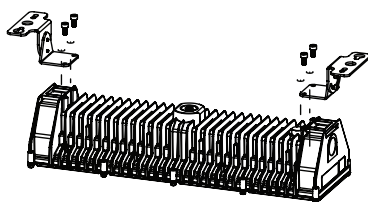
INSTALLATION STEPS

STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

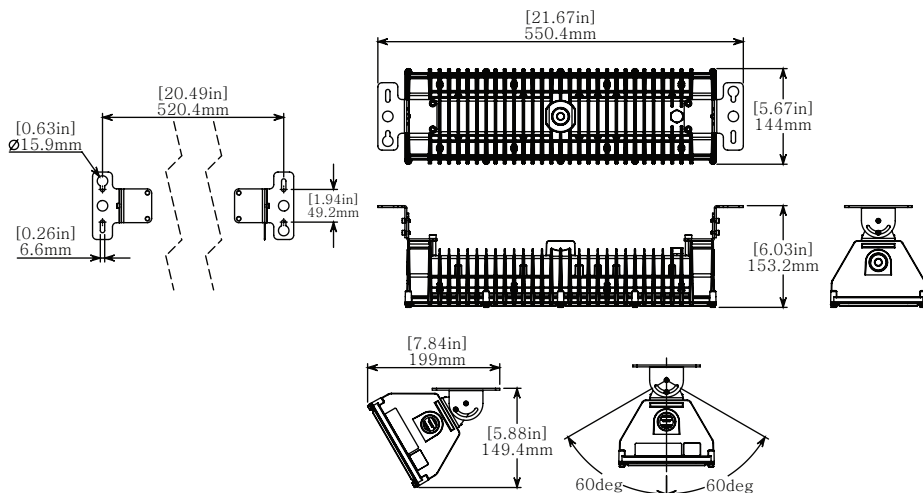
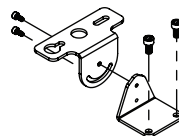
STEP 2.

The BL-YM kit is required for adjustable/swivel bracket mounting. Install swivel bracket A components on the BL luminaire using the M6 fasteners. Torque the M6 fasteners to 4.5 N-m [40 in-lbs]. Install swivel bracket B components on the BL luminaire using the M4 fasteners. Torque the M4 fasteners to 1.7 N-m [15 in-lbs]. Mount the fixture to the desired location using 4x ¼-20 or M6 fasteners.



STEP 3.

Continue installation with STEP 3 on PAGE 3.



BL-HK – HOOK PENDANT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-HK kit is intended for UL listed BL luminaires, as marked on the luminaire nameplate.

Accessory Package Contents

BL-HK	QTY	PART NAME
	1	PENDANT HOOK ASSEMBLY
	1	ANTI-ROTATION ASSEMBLY

INSTALLATION STEPS

STEP 1.

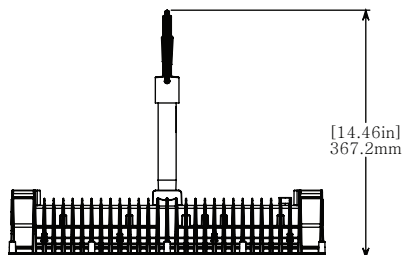
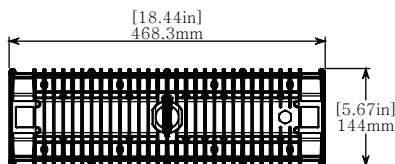
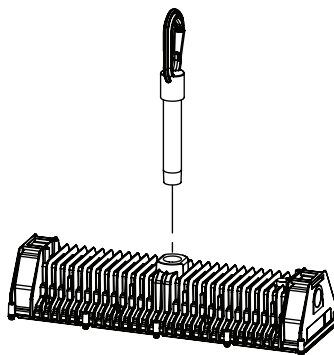
Inspect shipping package and contents to ensure no damage has occurred during shipping.

STEP 2.

The BL-HK kit is required for hook pendant installation. Slide anti-rotation lock onto suspension hook assembly and install hook assembly into 3/4" NPT threaded entry. Tighten to hand tight plus 1 to 2 turns. Slide the anti-rotation lock into place and tighten the set screw to lock the unit in place. Tighten the anti-rotation lock set screw to 4.5 N-m [40 in-lbs]. Clip hook onto eye-bolt or other fixed mounting loop.

STEP 3.

Continue installation with STEP 3 on PAGE 3.



BL-TC – TUBE CLAMP MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-TC kit is intended for use with UL listed BL luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

BL-TC	QTY	PART NAME
	2	TOP CLAMP MOUNT BRACKET
	2	BOTTOM CLAMP MOUNT BRACKET
	4	M6 X 12mm HEX HEAD CAP SCREW



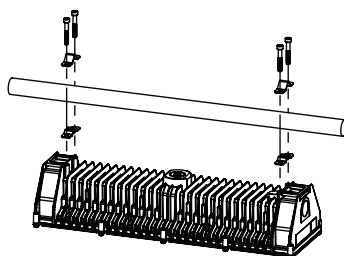
INSTALLATION STEPS

STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

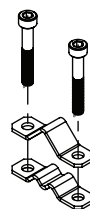
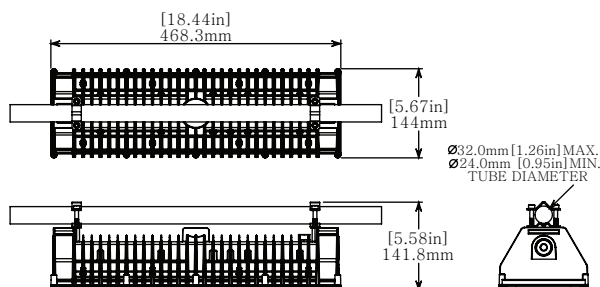
STEP 2.

The BL-TC kit is required for mounting onto tubing between 24.0mm [0.95in] and 32.0mm [1.26in] in diameter. Install the Tube Mount components as shown using the provided fasteners. Tighten M6 fasteners by equal amounts until they make contact with the tubing. Torque to a maximum of 4.5 N-m [40 in-lbs] to secure the luminaire.



STEP 3.

Continue installation with STEP 3 on PAGE 3.



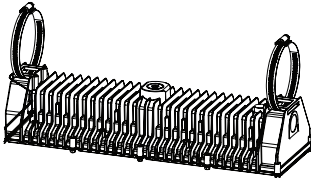
BL-ST5## - STRAP MOUNT INSTALLATION (Ordered Separately)

If using a different mounting accessory, refer to the corresponding page.

This BL-ST5## kit is intended for use with UL listed BL luminaire, as marked on the luminaire nameplate.

Accessory Package Contents

BL-ST5##	QTY	PART NAME
##		STRAP MOUNT BRACKET
4		6 x 25mm SOCKET HEAD CAP SCREW



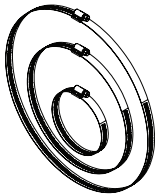
INSTALLATION STEPS

STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

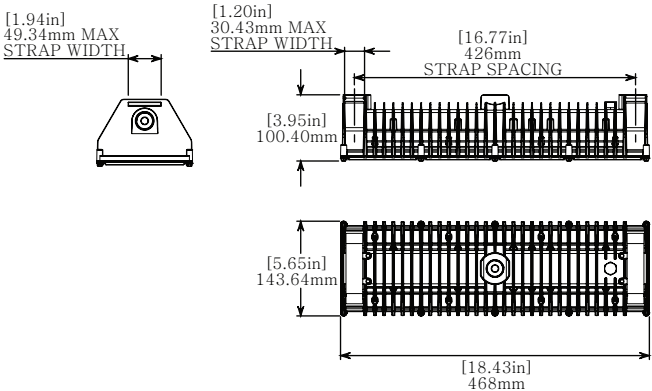
STEP 2.

For strap mounting onto structural elements, install supplied straps through the slots at the ends of the luminaire and around the mounting point. Feed the open end through the worm drive and tighten the screw to secure the luminaire.



STEP 3.

Continue installation with STEP 3 on PAGE 3.



P/N	QTY	DESCRIPTION
ST512	2	Stainless steel tube clamp, fits 9 3/8" to 12" tubing diameter
ST59	2	Stainless steel tube clamp, fits 7 1/8" to 9 3/4" tubing diameter
ST58	2	Stainless steel tube clamp, fits 5 5/8" to 8 1/4" tubing diameter
ST56	2	Stainless steel tube clamp, fits 4 1/8" to 6 3/4" tubing diameter
ST55	2	Stainless steel tube clamp, fits 3 5/8" to 6 1/4" tubing diameter
ST54	2	Stainless steel tube clamp, fits 3 5/16" to 4 1/4" tubing diameter
ST53	2	Stainless steel tube clamp, fits 2 9/16" to 3 1/4" tubing diameter