Nemalux™

BL Series Installation Manual
Zone 21 Certification

LC21CA19098-1X

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

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

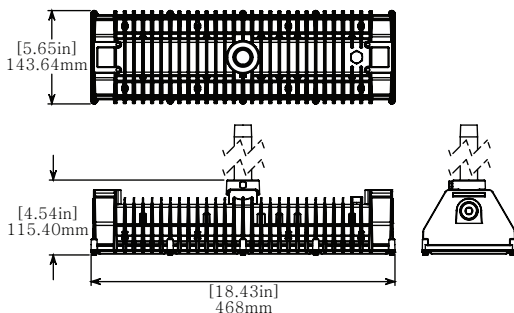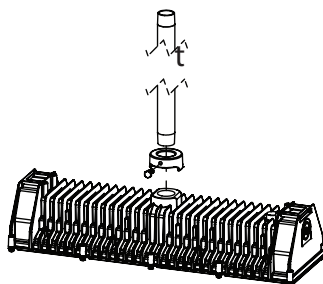| BL-R-CC	QTY	PART NAME
	1	ANTI-ROTATION BRACKET ASSEMBLY

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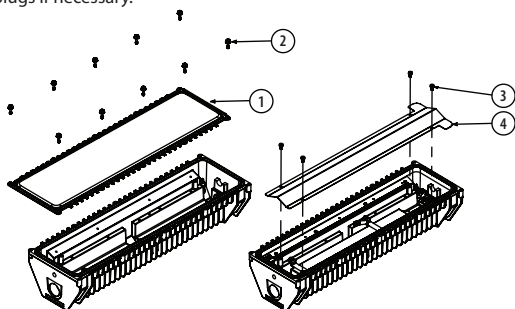
Slide the anti-rotation lock onto a 3/4" trade-size rigid metal conduit and lightly tighten the set screw to hold it in place. Thread BL luminaire directly onto the conduit. Slide anti-rotation lockdown over the top of mating geometry on the luminaire and tighten the set screw to 4.5 N-m [40 in-lbs].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

[5.65in]
143.64mm

[4.54in]
115.40mm

[18.43in]
468mm

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.
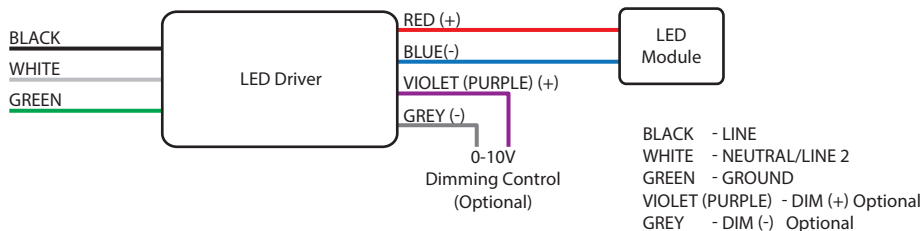
STEP 6.
For convenience, spring cage wire connectors have been provided. 12-28AWG solid or stranded wire with a strip length of 8-10mm (0.35-0.39") is supported. If user wiring requires it, the connectors may be replaced by an alternate listed connector.

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

BLACK
WHITE
GREEN
LED Driver
RED (+)
BLUE(-)
VIOLET (PURPLE) (+)
GREY (-)
LED Module
0-10V Dimming Control (Optional)

BLACK   - LINE
WHITE   - NEUTRAL/LINE 2
GREEN   - GROUND
VIOLET (PURPLE) - DIM (+) Optional
GREY   - DIM (-)   Optional

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:
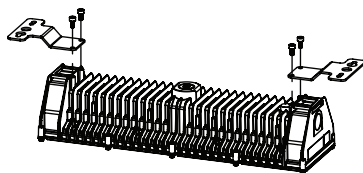Suspension mounting has not been evaluated for use in hazardous locations.
ATTENTION:
Le montage de la suspension n'a pas été évalué pour une utilisation dans des zones dangereuses.

STEP 1.
Inspect shipping package and contents to ensure no damage has occurred during shipping.
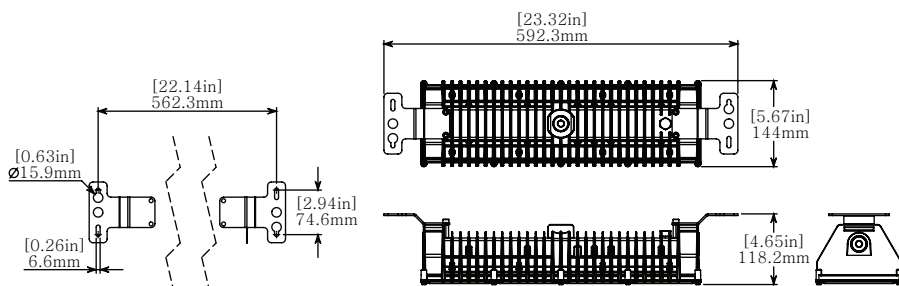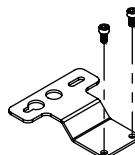
STEP 2.
The BL-SM kit is required for surface mounting. Install surface mounting brackets on the BL luminaire as shown using the provided M6 fasteners. Torque the M6 fasteners to 4.5 N-m [40 in-lbs]. For surface installation, mount the fixture to the desired location using 4x ¼-20 or M6 fasteners.

STEP 3.
Continue installation with STEP 3 on PAGE 3.

[22.14in] 562.3mm
[0.63in] Ø15.9mm
[0.26in] 6.6mm
[2.94in] 74.6mm
[23.32in] 592.3mm
[5.67in] 144mm
[4.65in] 118.2mm

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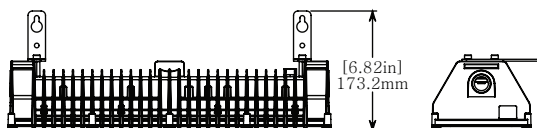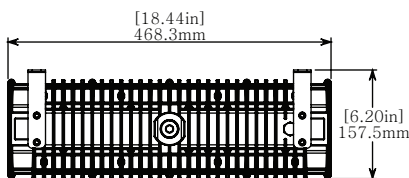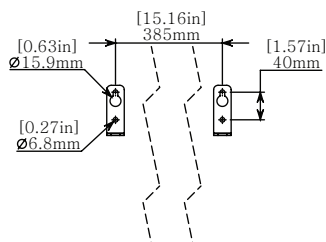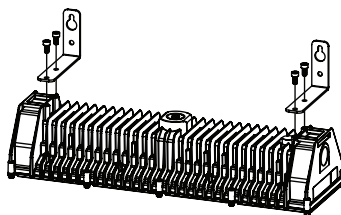Inspect shipping package and contents to ensure no damage has occurred during shipping.

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.

[18.44in]
468.3mm

[15.16in]
385mm

[0.63in]
Ø15.9mm

[1.57in]
40mm

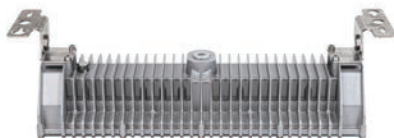[0.27in]
Ø6.8mm

[6.20in]
157.5mm

[6.82in]
173.2mm

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

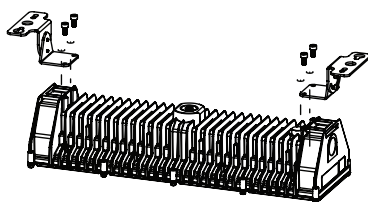### INSTALLATION STEPS

STEP 1.
Inspect shipping package and contents to ensure no damage has occurred during shipping.
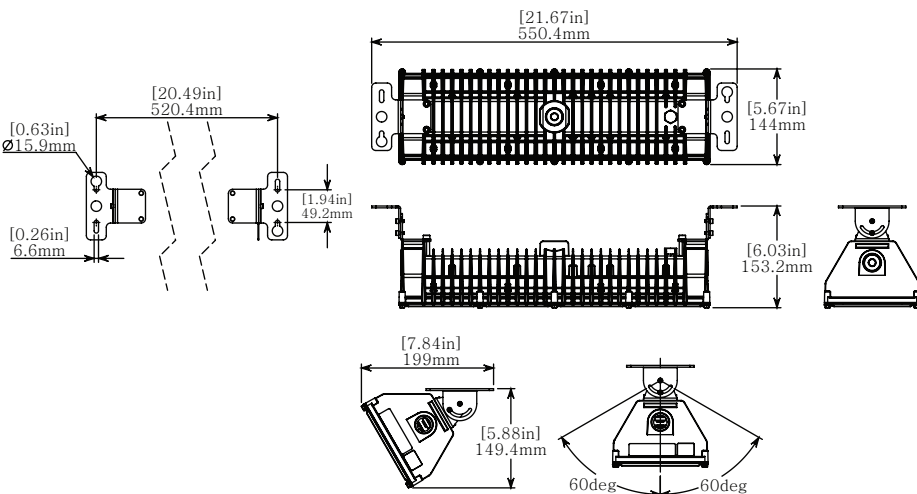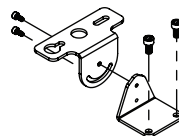
STEP 2.
The BL-YM kit is required for adjustable/swivel bracket mounting. Install swivel bracket A components on the BL luminaire using the M6 fasteners. Torque the M6 fasteners to 4.5 N-m [40 in-lbs]. Install swivel bracket B components on the BL luminaire using the M4 fasteners. Torque the M4 fasteners to 1.7 N-m [15 in-lbs]. Mount the fixture to the desired location using 4x ¼-20 or M6 fasteners.

STEP 3.

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

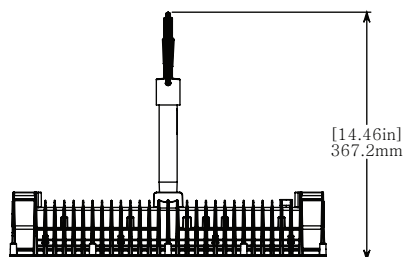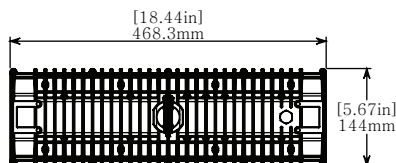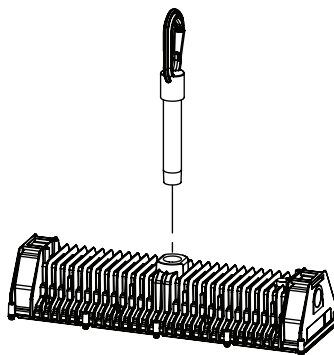| BL-HK	QTY	PART NAME
	1	PENDANT HOOK ASSEMBLY
	1	ANTI-ROTATION ASSEMBLY

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.

[18.44in]
468.3mm

[5.67in]
144mm

[14.46in]
367.2mm

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

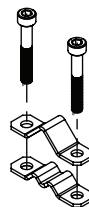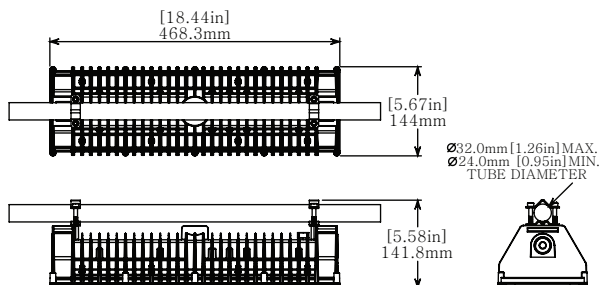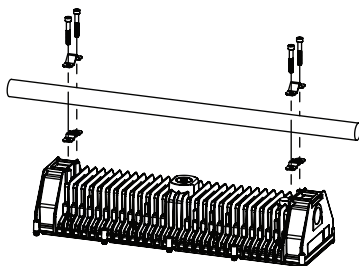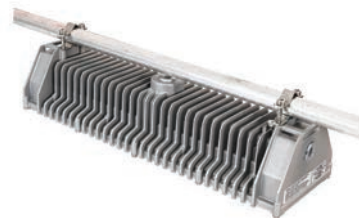| BL-TC	QTY	PART NAME
	2	TOP CLAMP MOUNT BRACKET
	2	BOTTOM CLAMP MOUNT BRACKET
	4	M6 X 12mm HEX HEAD CAP SCREW

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.
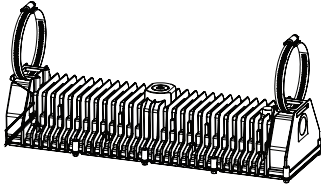
STEP 3.
Continue installation with STEP 3 on PAGE 3.

[18.44in]
468.3mm

[5.67in]
144mm

[5.58in]
141.8mm

Ø32.0mm [1.26in] MAX.
Ø24.0mm [0.95in] MIN.
TUBE DIAMETER

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

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

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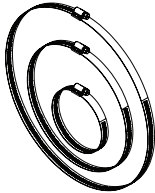
Accessory Package Contents

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

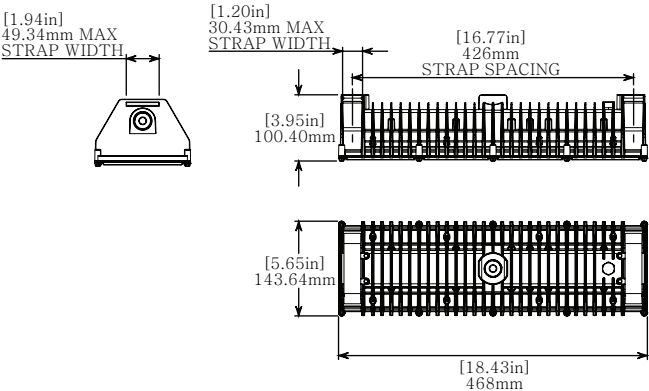### INSTALLATION STEPS

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.

[1.94in]
49.34mm MAX
STRAP WIDTH

[1.20in]
30.43mm MAX
STRAP WIDTH

[16.77in]
426mm
STRAP SPACING

[3.95in]
100.40mm

[5.65in]
143.64mm

[18.43in]
468mm

P/N	QTY	DESCRIPTION
STS12	2	Stainless steel tube clamp, fits 9 3/8" to 12" tubing diameter
STS9	2	Stainless steel tube clamp, fits 7 1/8" to 9 3/4" tubing diameter
STS8	2	Stainless steel tube clamp, fits 5 5/8" to 8 1/4" tubing diameter
STS6	2	Stainless steel tube clamp, fits 4 1/8" to 6 3/4" tubing diameter
STS5	2	Stainless steel tube clamp, fits 3 5/8" to 6 1/4" tubing diameter
STS4	2	Stainless steel tube clamp, fits 3 5/16" to 4 1/4" tubing diameter
STS3	2	Stainless steel tube clamp, fits 2 9/16" to 3 1/4" tubing diameter