

SOLID STATE AREA LIGHTING

LINEAR EXT BOLLARD-LED RECTANGULAR RISER

S P E C I F I C A T I O N S

OPTICAL HOUSING

Heavy extruded low copper aluminum (6063-T6 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance $<\pm .003"$) to facilitate thermal transfer of heat to housing and cooling fins. Minimum wall thickness is .188".

SHAFT & BASE

Extruded aluminum (6061-T6 alloy) riser welded to heavy cast aluminum (A356 alloy; <0.2% copper) base. Riser has minimum wall thickness of .188". Electrical assembly including LED mains driver, LED Emergency driver (optional LED-EM) with batteries, and quick connectors suspended inside riser. Concealed bolts attach the Optical Housing bolts to Riser.

ANCHOR BOLTS

Four 3/8" x 10" x 2" galvanized anchor bolts with couplings, leveling nuts, washers, template, and stainless bolts.

PLED™ OPTICAL MODULES

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. The asymmetric distributions have a micro-reflector inside the refractor that re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. All refractors in a Panel have the same optical pattern. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce Type II, III, and Type IV site/area distributions as well as other specialty asymmetric distributions. Panels are field replaceable and field rotatable in 90° increments.

LED DRIVER(S)

Constant current electronic with a power factor of $>.90$ and a minimum operating temperature of $-40^{\circ}\text{F}/-40^{\circ}\text{C}$. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

LED EMITTERS

High output LED's are utilized with drive currents ranging from 175mA to 350mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

AMBER LED's

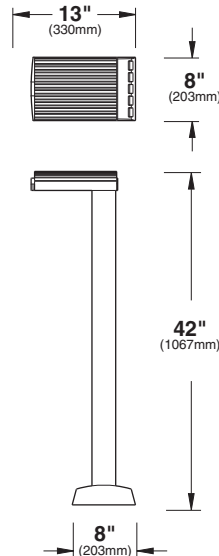
TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

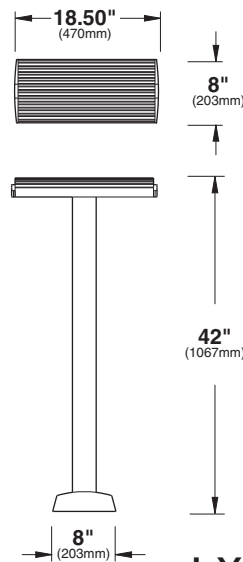
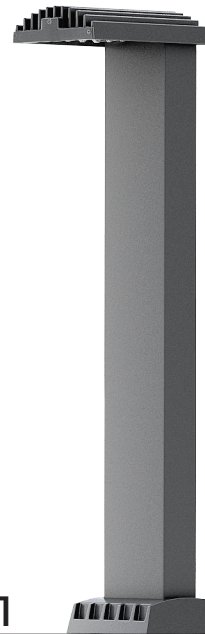
PROJECT NAME: _____

FIXTURE TYPE: _____



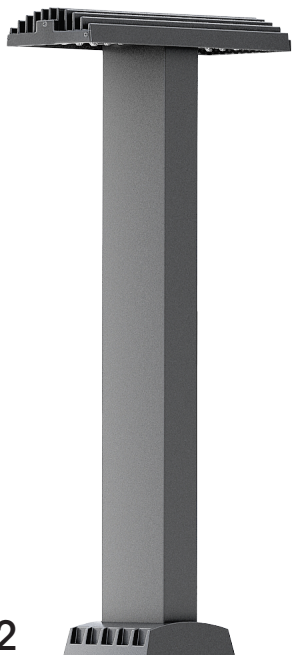
LXT-SB1

PATENT PENDING



LXT-SB2

PATENT PENDING

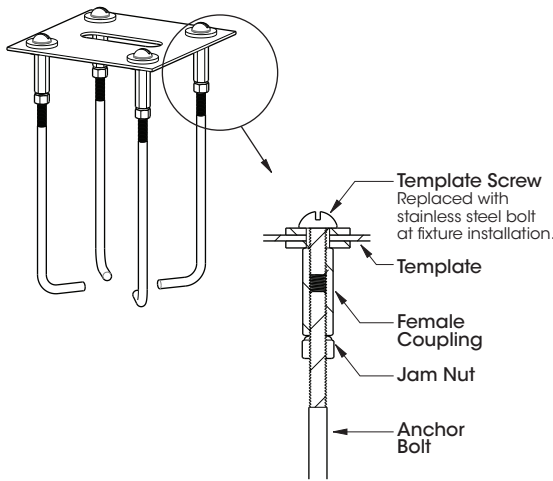


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LINEAR EXT BOLLARD SERIES - LED RECTANGULAR RISER

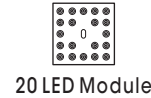
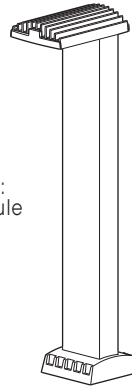
S P E C I F I C A T I O N S

ANCHOR BOLT ASSEMBLY

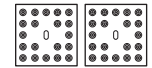
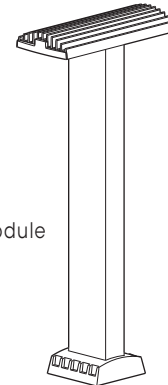


PLED® MODULES

LXT-SB1
Available in:
20 LED Module



LXT-SB2
Available in:
2 X 20 LED Module



*DISTRIBUTIONS MAY BE DIFFERENT

OVERVIEW

PRECISE CAST ALUMINUM LED MODULE. HOUSING IS VENTED TO PROVIDE AIR FLOW FOR THERMAL MANAGEMENT.

LED DRIVER ACCEPTS FROM 100-277 VAC INPUT VOLTAGE.

MAX INPUT WATTAGE

# OF LED'S	175mA	HID EQUIV. 350mA	HID EQUIV. 350mA	HID EQUIV. 350mA
40	22W	50W	44W	70W
20	12W	50W	22W	70W

Spec/Order Example: LXT-SB1/PLED-IV/20LED-350mA/CW/277/RAL-8019-S/DF

S P E C / O R D E R I N G I N F O R M A T I O N

MODEL	OPTICS	LED MODE			FINISH	OPTIONS
MODEL	OPTICS	LED	LED	LED	FINISH	OPTIONS
<input type="checkbox"/> LXT-SB1	PLED® DISTRIBUTION TYPE <input type="checkbox"/> TYPE II PLED-II	No. LEDs LXT-SB1¹ <input type="checkbox"/> 20LED	DRIVE CURRENT <input type="checkbox"/> 175mA ¹ <input type="checkbox"/> 350mA	COLOR <input type="checkbox"/> NW (4000K)* *STANDARD <input type="checkbox"/> CW (5000K) <input type="checkbox"/> WW (3000K) OTHER LED COLORS AVAILABLE CONSULT FACTORY AMBER² <input type="checkbox"/> TRUE AMBER TRA	STANDARD TEXTURED FINISH <input type="checkbox"/> BLACK RAL-9005-T <input type="checkbox"/> WHITE RAL-9003-T <input type="checkbox"/> GREY RAL-7004-T <input type="checkbox"/> DARK BRONZE RAL-8019-T <input type="checkbox"/> GREEN RAL-6005-T FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S" (EXAMPLE: RAL-9500-S)	<input type="checkbox"/> HOUSE SIDE SHIELDING HS-PLED <input type="checkbox"/> HIGH-LOW DIMMING FOR SWITCHING BY OTHERS/SELECT LEVELS 50/100 OR 25/100 (EXAMPLE: HLSW/25) HLSW <input type="checkbox"/> SINGLE FUSE (120V & 277V) SF <input type="checkbox"/> DOUBLE FUSE (208V & 240V) DF <input type="checkbox"/> EMERGENCY BACKUP ... EM-LXTB THE EM-LED SYSTEM PROVIDES POWER TO THE LED ARRAY TO MEET THE FOLLOWING LIGHT LEVELS FOR A MINIMUM OF 90 MINUTES: LXT-SB1 = 90% @ 175mA LXT-SB1 = 45% @ 350mA LXT-SB2 = 50% @ 175mA LXT-SB2 = 36% @ 350mA *MULTIPLY THE % ABOVE BY THE LUMEN OUTPUT @ 350mA OPTIONAL HEIGHTS: <input type="checkbox"/> 30" <input type="checkbox"/> 36"
<input type="checkbox"/> LXT-SB2	<input type="checkbox"/> TYPE II FRONT ROW PLED-II-FR <input type="checkbox"/> TYPE III MED. PLED-III-M <input type="checkbox"/> TYPE III WIDE PLED-III-W <input type="checkbox"/> TYPE IV PLED-IV <input type="checkbox"/> TYPE IV PLED-IV-FT	LXT-SB2 <input type="checkbox"/> 40LED	VOLTAGE <input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480			

NOTES:
 1 - DIMMING NOT AVAILABLE IN LXTB1 AT 175mA DRIVE CURRENT.
 2 - NARROW BAND AMBERS HAVE NO DEFINABLE CCT EQUIVALENT

LINEAR EXT BOLLARD-LED

LAMP/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
20	LED	20 PLED® Optical Module - 175mA	1,401 - 1,404	1,226 - 1,229	1,434 - 1,438	60,000+	-20°F	12	120 277	0.24 0.10
20	LED	20 PLED® Optical Module - 350mA	2,501 - 2,508	2,190 - 2,196	2,561 - 2,568	60,000+	-20°F	22	120 277	0.34 0.15
40	LED	40 PLED® Optical Module - 175mA	2,801 - 2,808	2,452 - 2,459	2,561 - 2,568	60,000+	-20°F	22	120 277	0.38 0.17
40	LED	40 PLED® Optical Module - 350mA	5,002 - 5,015	4,379 - 4,391	5,122 - 5,136	60,000+	-20°F	44	120 277	0.38 0.17

NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV - 20KV surge suppressors.
5. L70(10K) - TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

SOLID STATE AREA LIGHTING

LINEAR EXT BOLLARD-LED ROUND RISER

S P E C I F I C A T I O N S

OPTICAL HOUSING

Heavy extruded low copper aluminum (6063-T6 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance $\pm .003"$) to facilitate thermal transfer of heat to housing and cooling fins. Minimum wall thickness is .188".

SHAFT & BASE

Extruded aluminum (6061-T6 alloy) riser slip fits over a heavy cast aluminum (A356 alloy; <0.2% copper) mounting plate and is secured to it by 4 stainless steel panhead screws. The mounting plate is secure to grade by 4 anchor bolts. Riser has minimum wall thickness of .188". Electrical assembly including LED mains driver, LED Emergency driver (optional LED-EM) with batteries, and quick connectors suspended inside riser. Concealed bolts attach the Optical Housing bolts to Riser.

PLED™ OPTICAL MODULES

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. The asymmetric distributions have a micro-reflector inside the refractor that re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce Type II, III, and Type IV site/area distributions as well as other specialty asymmetric distributions. Panels are field replaceable and field rotatable in 90° increments.

LED DRIVER(S)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

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High output LED's are utilized with drive currents ranging from 175mA to 350mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

AMBER LED's

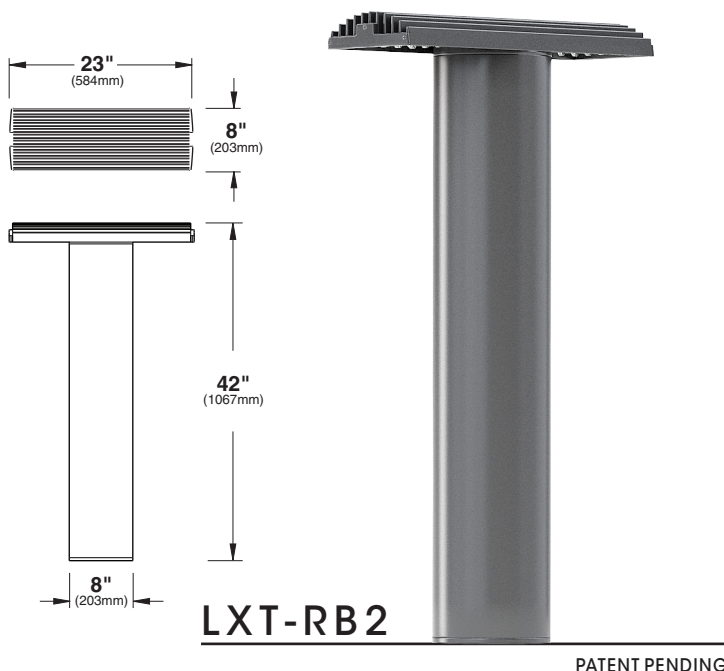
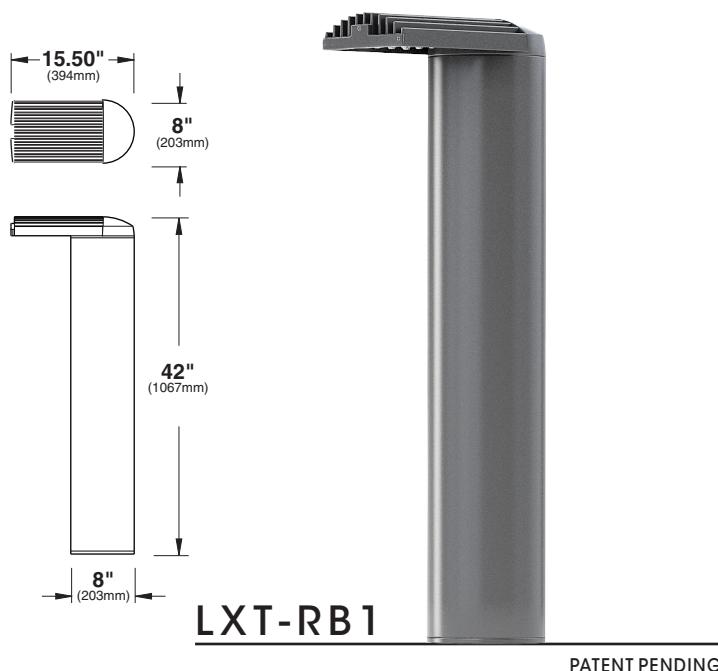
TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

PROJECT NAME: _____

FIXTURE TYPE: _____

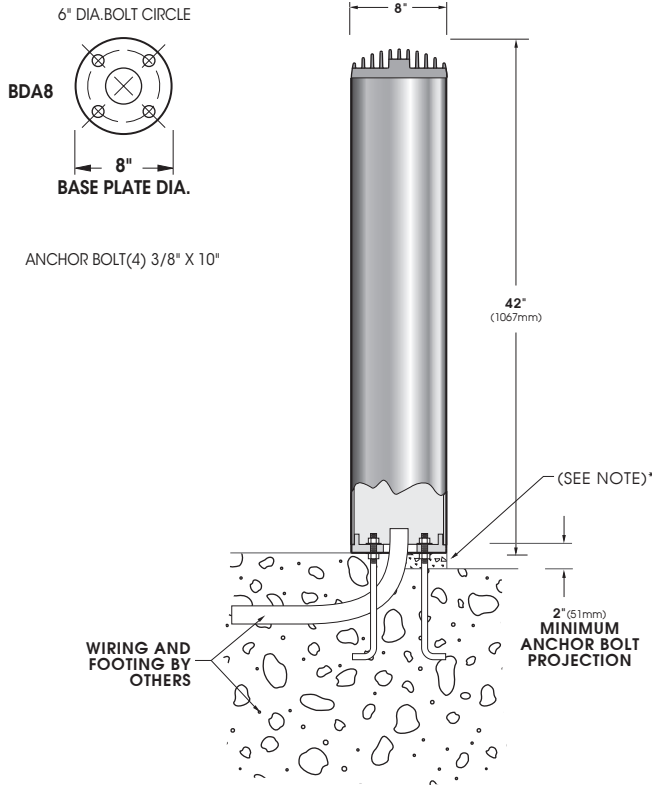


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LINEAR EXT BOLLARD SERIES - LED ROUND RISER

SPECIFICATIONS

INSTALLATION

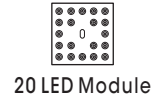


*When mounting in soil, anchor bolt fasteners and other hardware must be protected from soil by grouting.

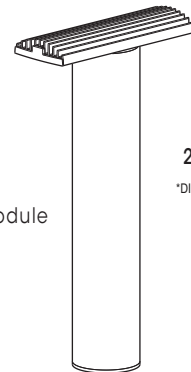
PLED® MODULES



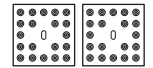
LXT-RB1
Available in:
20 LED Module



20 LED Module



LXT-RB2
Available in:
2 X 20 LED Module



2 X 20 LED Module*
*DISTRIBUTIONS MAY BE DIFFERENT

MAX INPUT WATTAGE

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SPEC / ORDERING INFORMATION

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MODEL	OPTICS	LED	FINISH	OPTIONS	OPTIONS	
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LINEAR EXT BOLLARD-LED

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