



## OVERVIEW

Diode LED designed the patent pending LO-PRO<sup>®</sup> Junction Box Series to meet electrical code requirements as well as cost saving measures with easy installation of LED power supplies in a wide range of environments. The truly amazing benefit of this enclosure is the UL Listed Driver option available when ordering the Lo-Pro Junction Box & Driver Combo.

## FEATURES

- Available as a UL Listed enclosure or as a Lo-Pro Junction Box & Driver Combo - a UL Listed Low Voltage Power Supply that conforms to Article 725.121(A)(2) of the National Electrical Code<sup>®</sup>.
- Available in two sizes
- For cabinet and surface mount use.
- Suitable for use in air handling spaces.
- Black powder-coated steel construction
- Modular mounting
- Three-sided ventilation
- 8x knockouts
- Nema1 Enclosure
- 5-year warranty\*

RECEIVE A UL LISTED DRIVER WHEN ORDERING THE LO-PRO<sup>®</sup> JUNCTION BOX & DRIVER COMBO ON PAGES 3-4.



\* Warranty applies to Lo-Pro Junction Box Only. Power supplies will retain their own individual warranties.

Item #	
Project	

## SPECIFICATIONS

- Material: Black powder-coated steel
- Knockouts: 8x knockouts. Actual knockout diameter is 0.87in. and fits 3/8in. strain reliefs and fittings.
- Mounting: Mount with included Mounting Screws.
- Environment: Indoor / dry location.
- Dimensions: DI-JBOX-LPS: 11.25 x 3.75 x 1.90 in. (L x W x H)  
DI-JBOX-LPL: 13.50 x 4.50 x 2.375 in. (L x W x H)

### SUITABLE FOR USE IN AIR HANDLING SPACES

Suitable for cabinet and surface mount use. Suitable for use in air handling spaces. Suitable for use in other environmental air spaces in accordance with Section 300.22 (C) of the National Electrical Code.

## COMPLIANCE & REGULATORY APPROVALS

LO-PRO JUNCTION BOX HAS 3 UL CERTIFICATIONS TO COVER A VARIETY OF APPLICATIONS. #1 IS OPTIONAL AND APPLIES WHEN PURCHASING A LO-PRO JUNCTION BOX & DRIVER COMBO (PAGES 3-4). #2 AND #3 APPLY WHEN PURCHASING THE J-BOX ALONE.

### #1) UL 2108 (UL# E469769) LED LOW VOLTAGE POWER UNIT

CERTIFIED AS A LISTED LED LOW VOLTAGE POWER UNIT. *OPTIONAL - ONLY APPLIES WHEN PURCHASED AS A LO-PRO JUNCTION BOX & DRIVER COMBO. SEE ORDERING OPTIONS ON PAGES 3-4. A UL E469769 STICKER WILL BE PLACED ON THE OUTSIDE OF THE LO-PRO BOX CERTIFYING THE COMBO AS A UL LISTED LED LOW VOLTAGE POWER UNIT.*

### #2) UL 508A (UL# E486215) INDUSTRIAL CONTROL PANEL

*TYPE 1 ENCLOSURE - INDOOR. CAN BE USED AS A STANDARD J-BOX FOR ANY COMPONENT. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.*

### #3) UL 1598 (UL# E485321) LUMINAIRE FITTING

*CERTIFIED FOR FIELD INSTALLATION WITH CLASS 2 LED DRIVER MODELS HIGHLIGHTED ON PAGE 3-4. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.*

## NEMA1 Enclosure

## ORDERING OPTIONS

### LO-PRO® JUNCTION BOX (J-BOX ONLY)

The UL Listed Lo-Pro Junction Box can be utilized to provide a code-compliant enclosure for your power supply, control, and electrical components. Conforms to Article 409 of the National Electrical Code®.

SKU	LO-PRO SIZE	DRIVERS THAT WILL FIT IN BOX
DI-JBOX-LPS	LO-PRO J-BOX (Small)	Refer to the 'Note' on pages 3 & 4.
DI-JBOX-LPL	LO-PRO J-BOX (Large)	

### LO-PRO® JUNCTION BOX & DRIVER COMBO

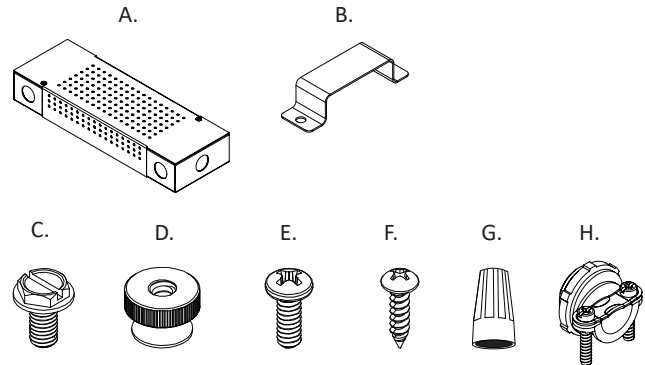
See pages 3-4 for ordering details.

Diode LED recognized a tremendous demand for a solution that enables contractors to provide a junction box that not only encloses an LED driver but certifies the box/driver combination as a Class 2 UL Listed power supply suitable for in-field installation. The Lo-Pro Junction Box and Driver Combo includes an LED driver and Lo-Pro box with an additional UL sticker certifying the combination as a UL Listed Low Voltage Power Unit. Conforms to Article 725.121(A)(2) of the National Electrical Code®.

## SUPPLIED ACCESSORIES

Accessories are always included with each Lo-Pro Junction box or Lo-Pro Junction Box & Driver Combo.

- |                                |  |
|--------------------------------|--|
| A. Lo-Pro Junction Box (1)     | F. Mounting Screws (4)                               |
| B. Driver Mounting Bracket (1) | G. Wire Connector 22-14AWG (600V) (6)                |
| C. Ground Screw (1)            | H. NM (Non-Metallic) Cable Strain Relief (2)- 3/8in. |
| D. Thumb Screws (2)            |  |
| E. Cover Screws (2)            |  |



## ORDERING OPTIONS CONTINUED

# LO-PRO® JUNCTION BOX & DRIVER COMBO

### UL LISTED DRIVER OPTION



SKUs highlighted in blue qualify for the Lo-Pro Junction Box & Driver Combo. An additional UL Listed E469769 Sticker will be placed on the outside of the Lo-Pro J-Box certifying the combo as a UL Listed Low Voltage Power unit. Conforms to Article 725.121(A)(2) of the National Electrical Code®. For full driver specifications, see the driver spec sheet.

Note: Models marked with a 'N/A' under **SKU: UL Listed Option** will fit in the Lo-Pro box indicated in the column **Compatible Lo-Pro Box For Driver** but are not available as a Lo-Pro Junction Box & Driver Combo.

## OMNIDRIVE® ELECTRONIC DIMMABLE DRIVERS

SKU: DRIVER ONLY	SKU: UL LISTED OPTION (DRIVER/J-BOX COMBO)	COMPATIBLE LO-PRO BOX FOR DRIVER	INPUT VOLTAGE	OUTPUT VOLTAGE	WATTAGE	COMPATIBLE DIMMERS / CONTROLS
DI-TD-12V-10W	DI-TD-12V-10W-LPS	Small	90-135VAC	12VDC	10W	MLV, INC/HAL, ELV DIMMERS
DI-TD-12V-20W	DI-TD-12V-20W-LPS	Small			20W	
DI-TD-12V-30W	DI-TD-12V-30W-LPS	Small			30W	
DI-TD-12V-45W	DI-TD-12V-45W-LPL	Large			45W	
DI-TD-12V-60W	DI-TD-12V-60W-LPL	Large			60W	
DI-TD-12V-80W	N/A	Large			80W	
DI-TD-12V-120W	N/A	Large		120W	24VDC	
DI-TD-24V-10W	DI-TD-24V-10W-LPS	Small		10W		
DI-TD-24V-20W	DI-TD-24V-20W-LPS	Small		20W		
DI-TD-24V-30W	DI-TD-24V-30W-LPS	Small		30W		
DI-TD-24V-45W	DI-TD-24V-45W-LPL	Large		45W		
DI-TD-24V-60W	DI-TD-24V-60W-LPL	Large		60W		
DI-TD-24V-80W	DI-TD-24V-80W-LPL	Large		80W	24VDC	
DI-TD-24V-120W	N/A	Large		120W		

## CONSTANT VOLTAGE DRIVERS

SKU: DRIVER ONLY	SKU: UL LISTED OPTION (DRIVER/J-BOX COMBO)	COMPATIBLE LO-PRO BOX FOR DRIVER	INPUT VOLTAGE	OUTPUT VOLTAGE	WATTAGE	COMPATIBLE DIMMERS / CONTROLS
DI-0904	DI-0904-LPS	Small	120/240VAC	12VDC	20W	PWM Dimmers, On/Off Switches, DMX Systems, RGB(W) Controllers
DI-0918	DI-0918-LPS	Small	120/240VAC		35W	
DI-0906	DI-0906-LPS	Small	120/240VAC		60W	
DI-DV-12V60W-277	N/A	Large	120/240V/277VAC	24VDC	60W	
DI-CV-12V120W	N/A	Large	120VAC		120W	
DI-0970	DI-0970-LPS	Small	120/240VAC		35W	
DI-DV-24V60W-277	N/A	Large	120/240V/277VAC		60W	
DI-0954	DI-0954-LPL	Large	120/240VAC		96W	
DI-CV-24V150W	N/A	Large	120VAC		150W	

## ORDERING OPTIONS CONTINUED

# LO-PRO® JUNCTION BOX & DRIVER COMBO

### UL LISTED DRIVER OPTION



SKUs highlighted in blue qualify for the Lo-Pro Junction Box & Driver Combo. An additional UL Listed E469769 Sticker will be placed on the outside of the Lo-Pro J-Box certifying the combo as a UL Listed Low Voltage Power unit. Conforms to Article 725.121(A)(2) of the National Electrical Code®. For full driver specifications, see the driver spec sheet.

*Note: Models marked with a 'N/A' under **SKU: UL Listed Option** will fit in the Lo-Pro box indicated in the column **Compatible Lo-Pro Box For Driver** but are not available as a Lo-Pro Junction Box & Driver Combo.*

### COMMERCIAL GRADE CONSTANT VOLTAGE DRIVERS

SKU: DRIVER ONLY	SKU: UL LISTED OPTION (DRIVER/J-BOX COMBO)	COMPATIBLE LO-PRO BOX FOR DRIVER	INPUT VOLTAGE	OUTPUT VOLTAGE	WATTAGE	COMPATIBLE DIMMERS / CONTROLS
DI-CV-MW12V40W-277	<b>DI-CV-MW12V40W-277-LPS</b>	Small	120/ 240/ 277VAC	12VDC	40W	PWM Dimmers, On/Off Switches, DMX Systems, RG- B(W) Controllers
DI-CV-MW12V60W-277	<b>DI-CV-MW12V60W-277-LPS</b>	Small			60W	
DI-CV-MW24V60W-277	<b>DI-CV-MW24V60W-277-LPS</b>	Small		24VDC	60W	
DI-CV-MW24V90W-277	<b>DI-CV-MW24V90W-277-LPL</b>	Large			90W	

### 0-10V DRIVERS

SKU: DRIVER ONLY	SKU: UL LISTED OPTION (DRIVER/J-BOX COMBO)	COMPATIBLE LO-PRO BOX FOR DRIVER	INPUT VOLTAGE	OUTPUT VOLTAGE	WATTAGE	COMPATIBLE DIMMERS / CONTROLS
DI-DM-12V60W-0-10V	N/A	Large	120/240V/277VAC	12VDC	60W	0-10V Dimmers / Controls
DI-DM-24V100W-0-10V	N/A	Large		24VDC	100W	

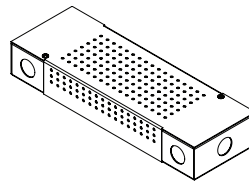
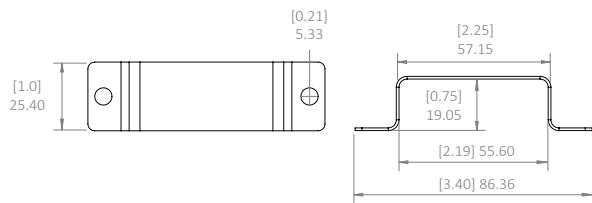
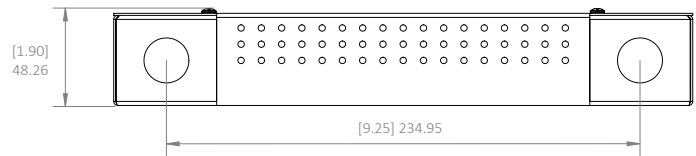
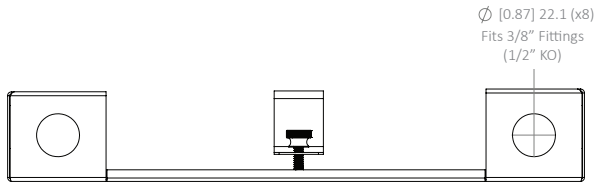
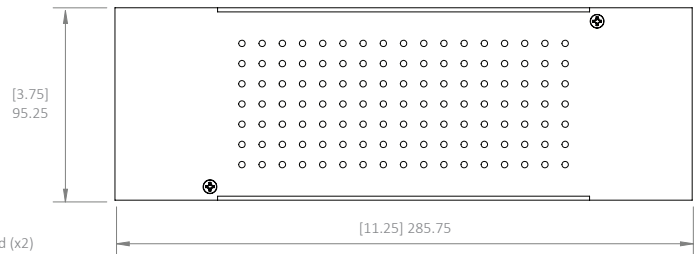
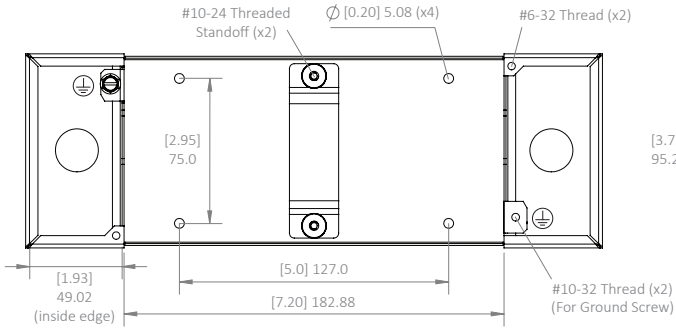
### COMMERCIAL GRADE 0-10V DRIVERS

SKU: DRIVER ONLY	SKU: UL LISTED OPTION (DRIVER/J-BOX COMBO)	COMPATIBLE LO-PRO BOX FOR DRIVER	INPUT VOLTAGE	OUTPUT VOLTAGE	WATTAGE	COMPATIBLE DIMMERS / CONTROLS
DI-DM-MW12V40W-0-10V	<b>DI-DM-MW12V40W-0-10V-LPS</b>	Small	120/ 240/ 277VAC	12VDC	40W	0-10V Dimmers / Controls
DI-DM-MW12V60W-0-10V	<b>DI-DM-MW12V60W-0-10V-LPS</b>	Small			60W	
DI-DM-MW24V60W-0-10V	<b>DI-DM-MW24V60W-0-10V-LPS</b>	Small		24VDC	60W	
DI-DM-MW24V90W-0-10V	<b>DI-DM-MW24V90W-0-10V-LPL</b>	Large			90W	

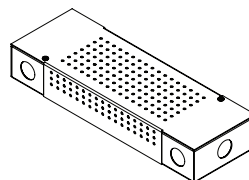
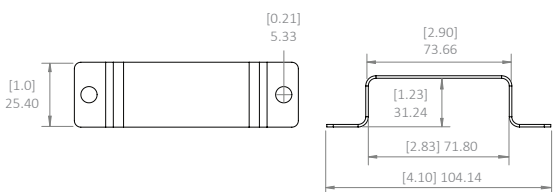
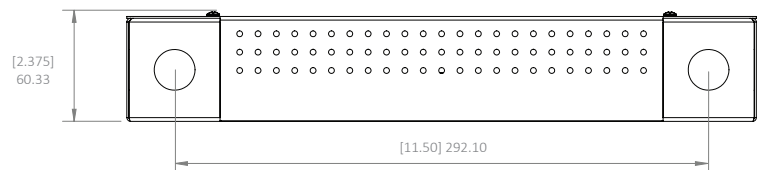
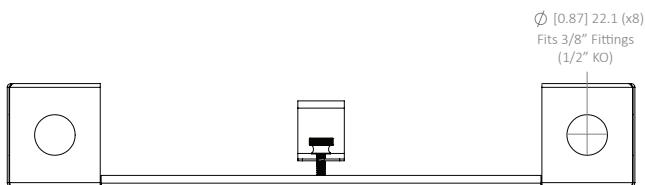
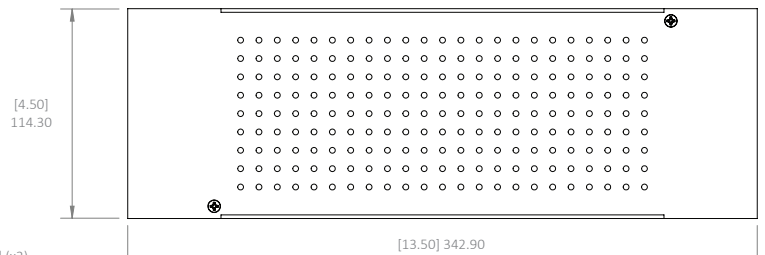
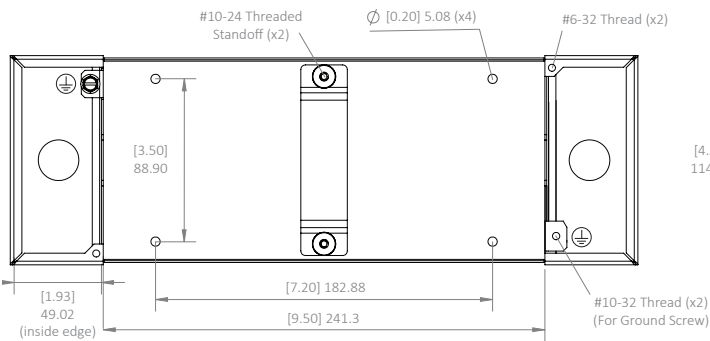
# MECHANICAL DIAGRAMS

## LO-PRO BOX (SMALL): DI-JBOX-LPS

UNITS: [in.] mm



## LO-PRO BOX (LARGE): DI-JBOX-LPL



# SYSTEM DIAGRAMS

## SYSTEM DIAGRAM NOTE

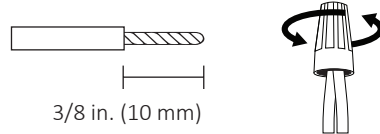
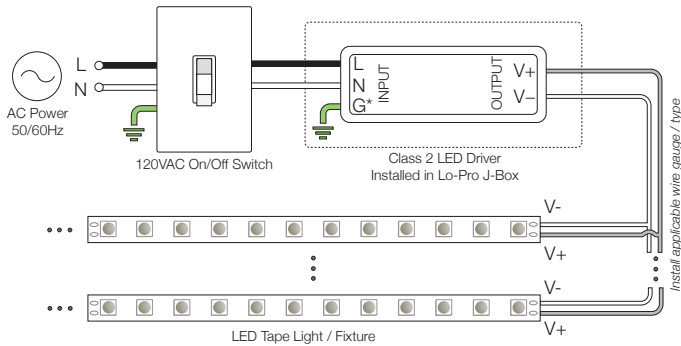
Each compatible LED driver has a unique System Diagram and color-coded wires. Please see each LED driver, luminaire (tape light, puck light, etc.), and control installation guide for System Diagrams, connections and wire colors. Pictured below is a Traditional ON/OFF Switching system. This is for reference only and does not apply to every driver.

## WIRE COMBINATION GUIDE

Wire Combination Range	Wire Combination Range (mm)
600V Max 22 to 14 AWG Min. (1) #18 & (2) #20 Max. (2) # 14	600V Max 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. (1) 0.75mm <sup>2</sup> w/ (1) 0.50mm <sup>2</sup> Max. (4) 1.5mm <sup>2</sup> w/ (1) 0.50mm <sup>2</sup>

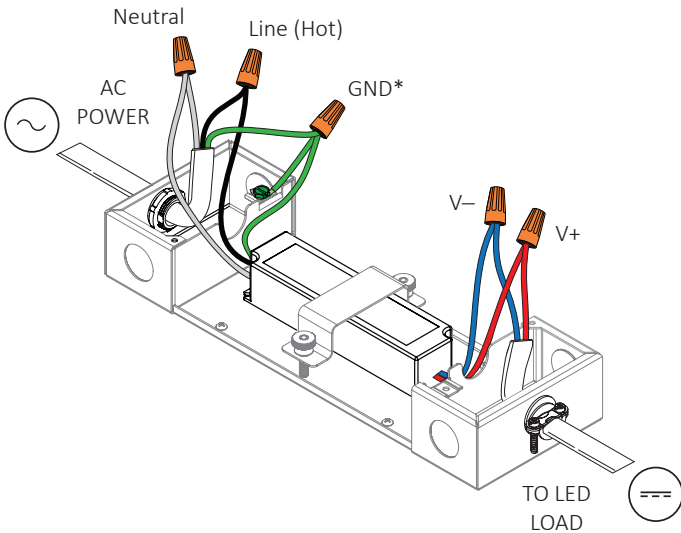
## TRADITIONAL ON/OFF SYSTEM DIAGRAM

DRIVER TYPE: CONSTANT VOLTAGE



## TRADITIONAL ON/OFF WIRING CONNECTIONS

DRIVER TYPE: CONSTANT VOLTAGE



**\* LED Driver and J-Box must be grounded in accordance with local and national electrical codes.** Ground the LED Driver and J-Box with the included Green Grounding Screw. Some compatible LED drivers are Class II certified and do not require a FG (Fault Ground Connection). Refer to the LED driver label and installation guide for more information.

## ADDITIONAL RESOURCES

- LO-PRO JUNCTION BOX / LED DRIVER INSTALLATION GUIDE
- VOLTAGE DROP CHARTS
- LED DRIVER SPEC SHEETS / INSTALLATION GUIDES
- LED TAPE LIGHT OR LUMINAIRE SPEC SHEETS / INSTALLATION GUIDES

## SAFETY / WARNINGS / DISCLOSURES

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Do not conceal or extend exposed conductors through a building wall.
4. Do not install outdoors or in wet locations. For indoor and dry use only.
5. For low voltage exposed insulated conductor systems required by 30.1(c) of UL 2108 do not install any part of this system less than 7 feet (2.2m) above the floor.
6. To reduce the risk of fire and burns, do not install this lighting system where the exposed bare conductors can be shorted or contact any conductive materials.
7. To reduce the risk of fire and overheating, make sure all connections are tight.
8. Do not install any luminaire closer than 6 inches (15.25cm) from any curtain, or similar combustible materials.
9. Turn off electrical power before modifying the lighting system in any way.

## WARRANTY

### Limited Warranty

LO-PRO Junction Box has a five (5) year limited warranty from the date of shipment. Warranty applies to Lo-Pro Junction Box Only. Power supplies will retain their own individual warranties (see each driver spec sheet for warranty details). Complete warranty details for fixtures and additional accessories are available at [www.diodeled.com/limited-warranty/](http://www.diodeled.com/limited-warranty/) within the Policies section. For warranty related questions please contact product support.

### Consumer's Acknowledgment

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.

