

# OPTOLUM

## OptoLum MegaLine RGBW Luminaire

### Getting Started

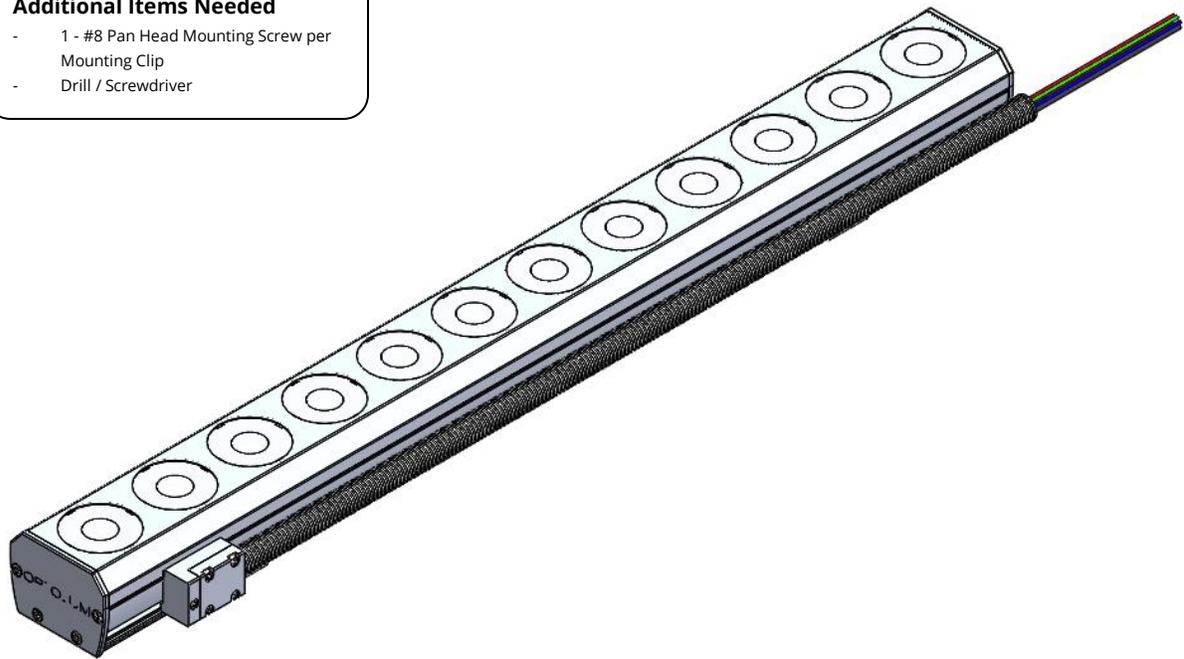
OptoLum MegaLine RGBW Luminaires offer indoor cove lighting and wall washing in a compact linear form. This guide contains important information on planning, installing, and operating your new MegaLine RGBW Luminaire. For your protection, read it fully and carefully prior to installation, and save it for future reference. The goal of this user guide is to explain in an easily understandable language the necessary steps to install MegaLine RGBW Luminaires and assure peak performance. Its intended use is for reference only, by persons who are fully qualified. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

#### Included In This Box

- 1 - MegaLine RGBW Luminaire
- 3-4 - MegaLine RGBW Mounting Clips
- 1 - Installation Guide

#### Additional Items Needed

- 1 - #8 Pan Head Mounting Screw per Mounting Clip
- Drill / Screwdriver



ITEM	SPECIFICATION	
OUTPUT	Lumen Output	Red 280 Lm/ft, Blue 170 Lm/ft, Green 590 Lm/ft, White 619 Lm/ft
	Beam Angle	10 Degree
	Lumen Maintenance	50,000 hours with maintenance of 70% lumen output @25 °C
	Input Voltage	24 VDC
ELECTRICAL	Power Consumption	25 W/ft maximum at steady state
PHYSICAL	Dimensions	2.134" H x 3.195" W x 12" Increments L
	Housing	Anodized Aluminum
	Fixture Connectors	3/8" fixture length flex conduit with 1' bare wires, (2)-24VDC power, (4)-5VDC data
	Max Run Length	4' per 100W Power Supply
	Ambient Operating Temperature	-20 to 50 °C
CERTIFICATION AND SAFETY	Certification	UL Listed
	Environment	Dry and Damp Location
CONTROL	Dimming	RGBW PWM

## Planning

### Step 1: Verify electrical plan

- See specifications above to determine the maximum run length.
- Refer to local and state codes for installation compliance.
- Consult an Electrical Inspector to approve all wiring plans.

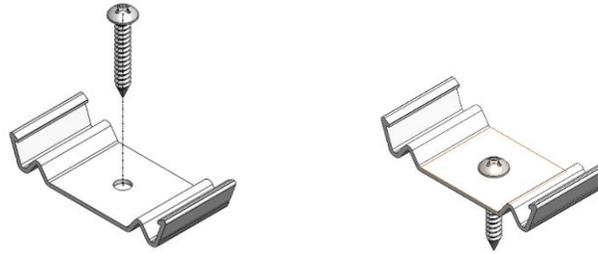
### Step 2: Verify mechanical plan

- Ensure sufficient fixture spacing for cooling. (0.5" per side)
- Purchase correct mounting hardware for installation surface.
- Refer to local and state codes for installation compliance.

## Installation

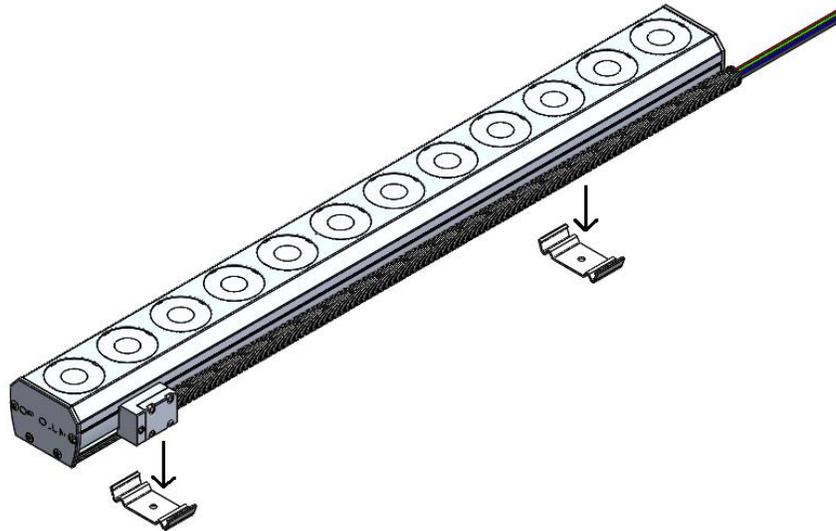
### Step 1: Install mounting clips

- Clips are attached to mounting surface using #8 pan head screws. The screws must be properly selected for the material of mounting surface. Clips should be evenly spaced across entire length of fixture at approximately 12 inch intervals.



### Step 2: Install fixture to mounting clips

- Position fixture directly over mounting clips and press down firmly to clip fixture into place.



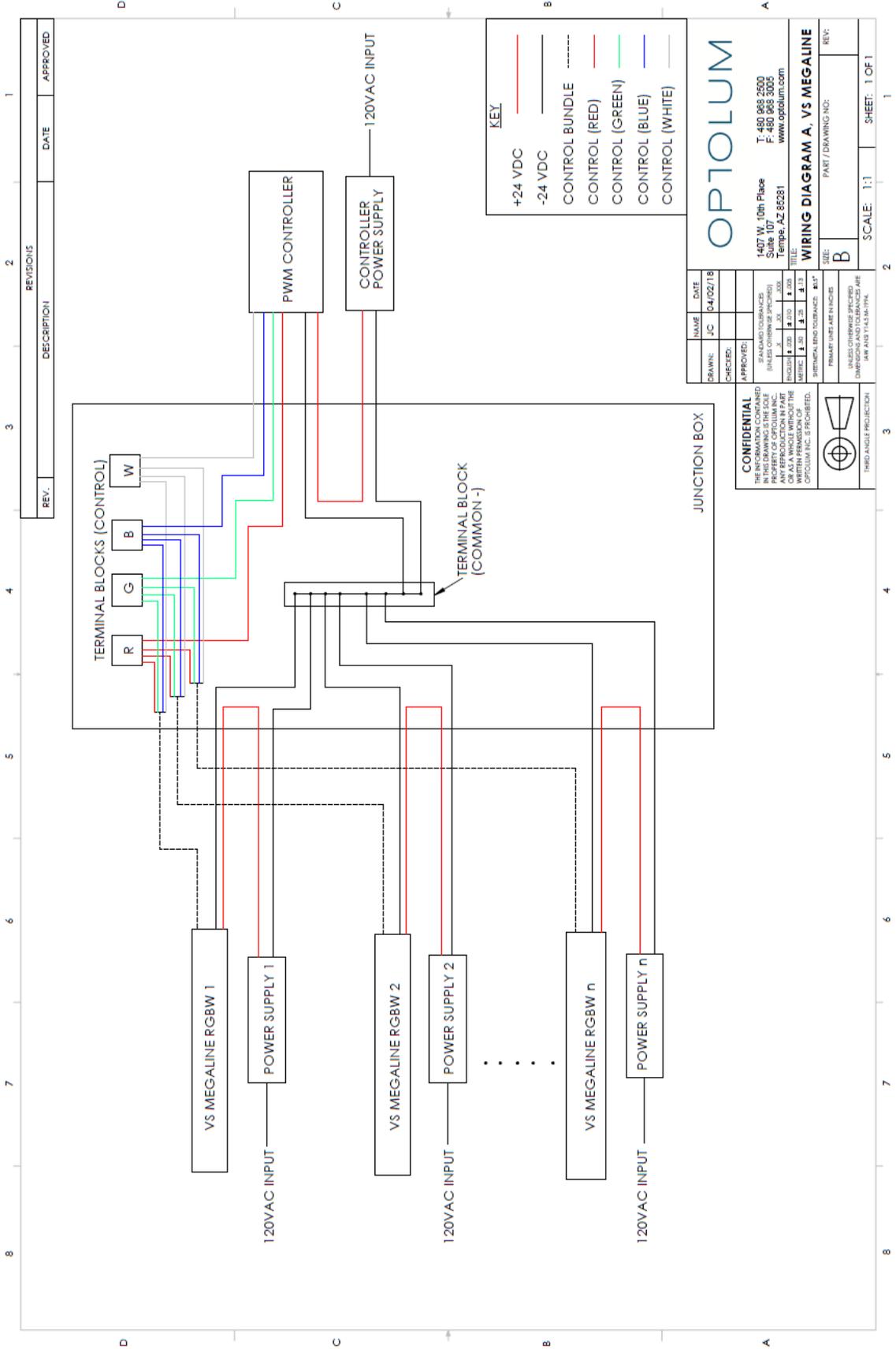
### Step 3: Connect wiring as shown on the following pages (DO NOT CONNECT TO POWER)

- Identify whether fixture is built with 24 AWG, black Ground Reference Wire
  - **For fixtures *without* Ground Reference Wire: Use Wiring Diagram A**
  - **For fixtures *with* Ground Reference Wire: Use Wiring Diagram B**
- Wire and secure cable whip to junction box according to local and state codes.
- Ensure that branch circuit is turned off before making connections to supply conductors.

## Usage

### Powering-up fixtures

- Consult electrical and mechanical plans to ensure that installation is in agreement with both plans.
- Ensure that all three of the installation steps were properly completed.
- Apply power to branch circuit and refer to PWM controller instructions to begin operation.
- Do not look directly into the LED sources.



REV.	DESCRIPTION	DATE	APPROVED

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**WIRING DIAGRAM A, VS MEGALINE**

NAME: JC DATE: 04/02/18  
 DRAWN: JC CHECKED: [ ]  
 APPROVED: [ ]

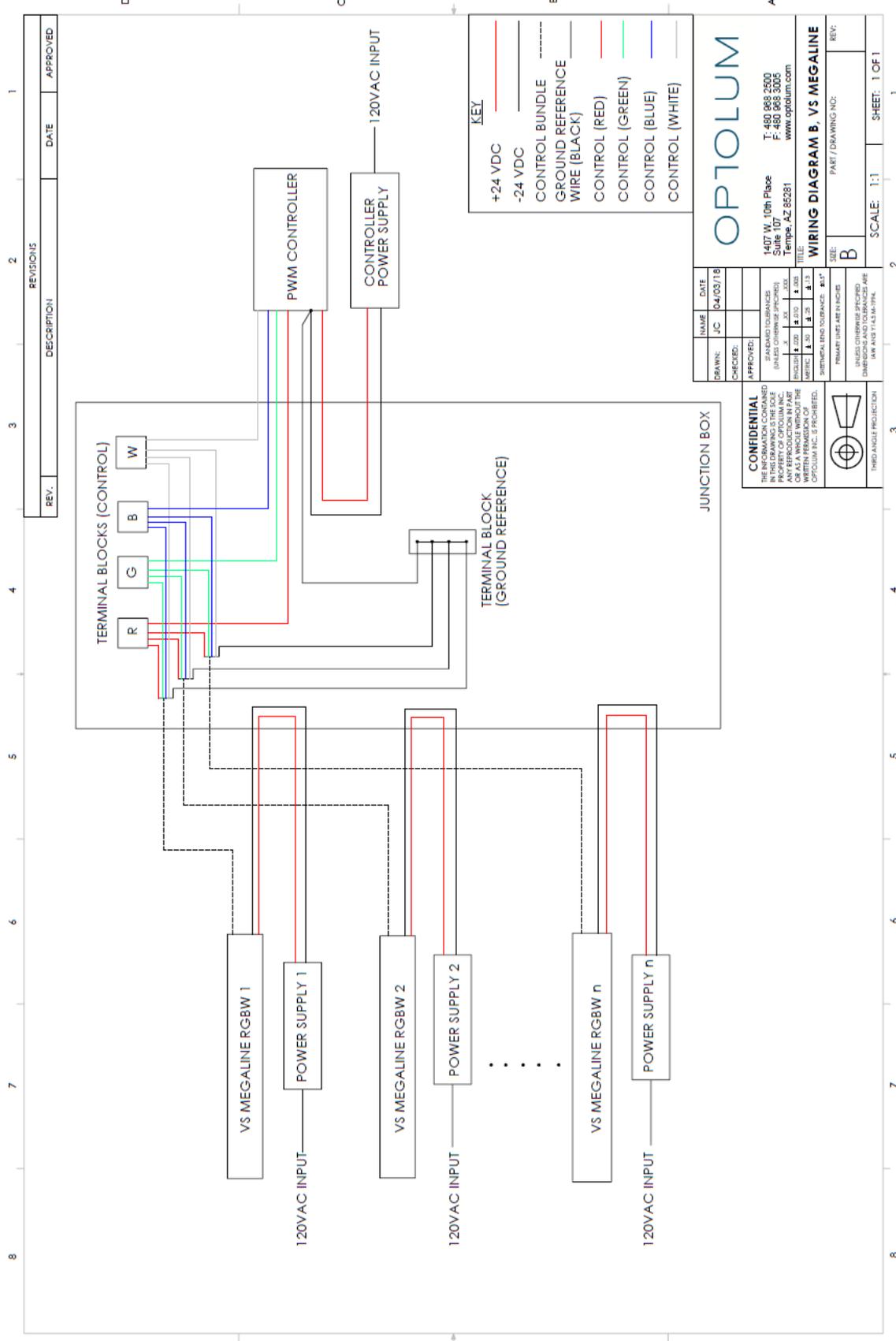
STANDARD TOLERANCES  
 DIMENSIONS IN PARENTHESES  
 FRACTIONS DECIMALS ANGLES  
 HOLE DIA. ±.005 ±.002 ±.010 ±.005 ±.010  
 METRIC ±.05 ±.02 ±.03 ±.03 ±.03  
 HORIZONTAL DIM TOLERANCES: .MM

PRIMARY DIMS ARE IN INCHES  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE TO FACE UNLESS NOTED  
 DIM AND FIT AS SHOWN

SCALE: 1:1 SHEET: 1 OF 1

**CONFIDENTIAL**  
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THIRD ANGLE PROJECTION



REV.	DESCRIPTION	DATE	APPROVED
1			

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**WIRING DIAGRAM B. VS MEGALINE**

SCALE: 1:1 SHEET: 1 OF 1

NAME	DATE
DRAWN: JC	04/03/18
CHECKED:	
APPROVED:	

STANDARD TOLERANCES (UNLESS OTHERWISE SPECIFIED):  
 ANGLES: 1:50 1:50 1:50  
 DIMENSIONS: 1:50 1:50 1:50  
 HOLE DIA: 1:50 1:50 1:50

UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES ARE IN MILLIMETERS AND DECIMALS ARE IN INCHES.

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## OPERATING TEMPERATURE

The MegaLine RGBW Luminaire is designed with the latest LED technology to provide the maximum possible light output in a slim linear fixture. Although MegaLine RGBW Luminaires operates at much cooler temperatures than traditional high illumination light fixtures, the housing can reach temperatures of 167 °F (75 °C). For this reason, handle with care to prevent injuries and provide adequate ventilation to the fixture. During normal operation, the MegaLine RGBW housing becomes hot and remains hot for an extended time after operation is suspended. Exercise caution when handling the fixture after extended operation to prevent burns. It is necessary to provide adequate ventilation around the fixture. Adequate ventilation refers to the airflow over the surface of the fixture and air flow within the room, not the room temperature. A MegaLine RGBW Luminaire in a hot (40 °C) room with a fan or ventilation system that keeps air moving can actually run cooler on its surface than in a cool (20 °C) room with stagnant air.

## IDENTIFICATION AND WARNINGS OF SAFETY HAZARDS

In accordance with ANSI Z535.4-2002 the following system of identifying the severity of the hazards associated with the products is used:

**"DANGER":** Imminently hazardous situation which, if not avoided, will result in death or serious injury.

**"WARNING":** Potentially hazardous situation that, if not avoided, could result in death or serious injury.

**"CAUTION":** Potentially hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

**WARNING:** MegaLine RGBW Luminaires must be installed by a qualified electrician in accordance with NEC and relevant local codes. Failure to comply could result in death or serious injury.

**WARNING:** Turning off switches or dimmers does not always remove hazardous voltage from the wiring. Ensure that branch circuit power supply is off before installing or wiring MegaLine RGBW Luminaires. Failure to do so could result in death or serious injury.

**WARNING:** Do not install or use MegaLine RGBW Luminaires until you read and understand the installation instructions and safety labels. Failure to do so could result in death or serious injury.

**WARNING:** Do not use MegaLine RGBW Luminaires if the power cables are damaged. Doing so could result in death or serious injury.

**WARNING:** MegaLine RGBW Luminaires have no user serviceable parts. Do not attempt to service the fixture nor open it. Doing so could result in death or serious injury, and will void the warranty.

**CAUTION:** Use appropriate materials and mounting methods to support the fixture adequately. Failure to do so may result in property damage and void the warranty

**CAUTION:** Do not exceed maximum rated (50 for 120V, 100 for 277V) quantity of MegaLine RGBW Luminaires in a single series. Doing so will exceed cable current rating and may result in property damage.

**CAUTION:** Do not use sharp tools near or on the fixtures electrical components. Doing so may result in property damage and void the warranty.

**CAUTION:** Do not hot swap (plugging or unplugging while power is applied). Ensure that power to the fixture is off before connecting or disconnecting fixtures. Hot swapping can void the warranty.

**CAUTION:** MegaLine RGBW Luminaires emit LED radiation when illuminated. Do not stare into the beam or view directly with optical instruments while the luminaire is powered on.

**CAUTION:** To prevent the risk of fire, do not install a 12" (305 mm) section closer than 0.5" (13 mm) to a cabinet wall or in a closed compartment smaller than 13" (330 mm) Length by 2.5" (63.5 mm) Width by 2" (51 mm) Height.

**NOTE:** The instructions and precautions set forth in this user guide are not necessarily all-inclusive, all conceivable, or relevant to all applications as OptoLum cannot anticipate all conceivable or unique situations.

## FIVE YEAR LIMITED HARDWARE WARRANTY

OptoLum, Inc. warrants its products, if properly used and installed, will be free from defects in materials and workmanship and will substantially conform to OptoLum's publicly available specifications for a period of five (5) years after the date the product was purchased by the end user. If the product fails during the warranty period, purchaser's remedy under this limited warranty shall be at OptoLum's sole election:

- Repair the product by means of hardware and/or software or
- Replace the product with another product

This limited warranty does not cover damages due to external causes, including, but not limited to, accident, problems with electrical power, usage not in accordance with product instructions, misuse, neglect, modification, repair, improper installation, or improper testing. OptoLum is not responsible for indirect, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including, but not limited to, lost profits, downtime, goodwill, damage to or replacement of equipment and property. All Damage claims must be reported within 30 days of purchase. To obtain warranty service, you may contact your distributor in accordance with its instructions, or you may contact OptoLum. To request warranty service you should call OptoLum during the warranty period. Proof of purchase is required. When calling within warranty, please provide:

- 1) Your name, shipping address, and telephone number
- 2) A description of the model
- 3) An explanation of the problem

A Return Authorization (RA) number & ship-to address will be provided to send the product back. The warranty and remedies set forth above are exclusive and in lieu of all others, whether oral or written, express or implied. OptoLum specifically disclaims any and all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. No OptoLum distributor, dealer, agent or employee is authorized to make any modification, extension, or addition to this warranty. This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

Unless modified in writing signed by both OptoLum and Purchaser/User, this Limited Warranty is understood to be the complete and exclusive agreement between OptoLum and Purchaser, including without limitation any statements made by salespersons or other representatives of OptoLum. No employee or other representative of OptoLum or any other party is authorized to make any warranty in addition to the warranty contained in this document.

Items Explicitly NOT covered by this Warranty. OptoLum does not warrant: Defects caused by failure to provide a suitable installation environment (i.e., temperature above 104°F, humidity above 95%), Acts of God including but not limited to lightning surges, flooding, or earthquakes. Damage caused during shipment. Damage caused by any primary side (line voltage) power source problem including but not limited to unregulated power, short circuits, or lightning induced power surges. Damage caused by use of product for purposes other than those for which it was designed. Products incorporating white LEDs (Light Emitting Diodes) are not covered for color temperature variations or changes, brightness reduction or diminished light output. Products installed by other than electricians, will not be covered. OPTOLUM DOES NOT COVER LABOR COST ASSOCIATED WITH REPLACEMENT OF PRODUCTS IN END APPLICATIONS. OPTOLUM CANNOT WARRANTY OR EXTEND ITS WARRANTY TO WORK PROVIDED BY OUTSIDE CONTRACTORS. OPTOLUM WILL HOWEVER WARRANTY LABOR IF THE INSTALLATION IS DONE BY OPTOLUM QUALIFIED PERSONNEL.

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