



### Description

The L-RETRO-C LED carriage kit offers service professionals an economic, easy to install solution to safely upgrade HID luminaires to LED. Available in three output versions, the L-RETRO-C Retrofit Kit proves to be the perfect LED conversion solution for your next carriage project.

### **Retrofit Custom Optics**









## L - RETRO - C LED Carriage Retrofit

Catalog Number:					
Project:					
Comments:					
Prepared By:	Date:				

### **Technical Specifications**

Input Voltage: 120-277V or 347-480V

**Kit Contents:** The kit consists of an aluminum panel with integrated LED circuit board, LED driver, 20kA surge suppressor, and all wiring and hardware required for installation. Installation of the kit to the existing fixture is accomplished via provided mounting screws.

**Power Supply:** A single wide range (120V to 277V) 96 Watt, regulated DC power supply is included. The power supply is compliant with UL 1012 and 1310. The drive current provided to the LEDs is 70 or 105mA.

The power supply performance meets the following electrical characteristics: THD: Less than 20%. PF: Greater than 0.90 @ 120V. Max Power: 96 Watts or less.

Color Temperature: 2200K, 2700K, 3000K, 4000K (standard), 5000K.

**LED Lifetime:** All LED's are rated for a minimum of 100,000 hours of continuous operation at ambient temperatures from -40°F/-40°C to 120°F/50°C.

**Light Engine:** Each light engine consists of a total of 72 Nichia LEDs. The LED board is mounted to a 0.125" thick aluminum disk that is customer fit to the existing fixture.

Color Rendering Index (CRI): Minimum of 70 or higher.

Dimming: 0-10V standard dimming capability.

**Surge Protection:** Thermally protected 20kA/ 40kV varistor type surge suppressor is included and meets ANSI C136.2-2015: Extreme Level. Also meets IEC61643-11 Class II / EN61643-11 Type 2, and US Dept of Energy MSSLC Model Spec for surge protection. The device is wired in series with the luminaire input power in order to interrupt power to the luminaire when consumed, protecting the LED power supply and circuit boards from additional electrical surges.

**Lumecon ETD™ System:** The enhanced thermal dissipation system engines are thermally bonded to provide maximum thermal dissipation to the exterior of the fixture to ensure long life. To protect the light engine panel from moisture and corrosion, the LED light engine panel is uniformly coated with a UV stabilized acrylic polymer resin that meets MIL and ASTM dielectric standards, UL, and IPC standards for flammability, moisture resistance and thermal shock.

**DesignLights Consortium® (DLC) Qualified Product**: Unless noted, not all versions of this product may be DLC® qualified. For a complete list of Lumecon DLC® Qualified Products visit: www.designlights.org.

Certification Data: ETL Listed to UL 1598, UL 8750 for Wet Locations. \*Full compliance and test documentation is available for TM-21, LM-79, LM-80, ETL Listing to UL1598 and UL 8750.

Manufacturing Origin: US Manufactured and Assembled.

**BABA Compliant:** Meets Build America, Buy America Act Included in the Infrastructure Investment and Jobs Act, Public Law Number 117-58, Title IX, Subtitle A, Part I – Buy America Sourcing Requirements, Sections 70911-70917 stating Manufactured in the U.S. The cost of components mined, produced, or manufactured in the U.S. is greater than 55 percent of the total cost of all manufactured product components.

**Warranty:** 10 Year L70 performance based warranty. For full warranty terms, please visit our website: www.lumecon.com













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# L - RETRO - C LED Carriage Retrofit

### **Ordering Information**

L - RETRO - C Options / Ordering Example: L-RETRO-C-60-27-1-T5

Wattage	Color Temperature	Voltage	Distribution
20 - 20 Watts	22 - 2200K	1 - 120v-277v	T2 - Type II
30 - 30 Watts	27 - 2700K	2 - 347v-480v	T3 - Type III
45 - 45 Watts	30 - 3000K		T4 - Type IV
60 - 60 Watts	40 - 4000K		T5 - Type V
	50 - 5000K		

### **Options and Accessories**

MS - Motion Sensor

#### **Performance Data**

		2200K		2700K		3000K		4000K		5000K		
	Distribution Type	Watts	Lumens	Efficacy								
L-RETRO-C-20	Type 2	20W	1,661.7	74.5	2,071.7	92.9	2,058.8	92.3	2,248.7	100.8	2,231.4	100
	Type 3	20W	1,628.9	73	2,030.9	91	2,018.2	90.5	2,204.4	98.8	2,187.5	98
	Type 4	20W	1,674	75.3	2,039.5	91.4	2,026.8	90.8	2,213.7	99.2	2,196.7	98.5
	Type 5	20W	1,794.3	80.4	2,237	100.3	2,223.1	99.6	2,428.1	108.8	2,408.4	108
L-RETRO-C-30	Type 2	30W	2,233.3	74.3	2,784.4	92.7	2,767	92.1	3,022.2	100.6	2,999	99.8
	Type 3	30W	2,189.3	72.9	2,729.6	90.9	2,712.5	90.3	2,962.7	98.6	2,940	97.9
	Type 4	30W	2,198.5	73.2	2,741.1	91.2	2,724	90.7	2,975.2	99	2,952.4	98.3
	Type 5	30W	2,411.5	80.3	3,006.6	100.1	2,987.8	99.5	3,263.4	108.6	3,238	107.8
L-RETRO-C-45	Type 2	45W	3,327.9	69.9	4,149.2	87.2	4,123.3	86.6	4,503.6	94.6	4,469	93.9
	Type 3	45W	3,262.4	68.6	4,067.5	85.5	4,042.1	84.9	4,414.9	92.8	4,381	92.1
	Type 4	45W	3,276.2	68.8	4,084.7	85.8	4,059.2	85.3	4,433.6	93.2	4,399.6	92.4
	Type 5	45W	3,593.5	75.5	4,480.3	94.1	4,452.3	93.6	4,863	102.2	4,823.4	101.4
L-RETRO-C-60	Type 2	60W	4,209.3	71.3	5,248.1	88.9	5,215.3	88.4	5,730.9	96.5	5,652.7	95.8
	Type 3	60W	4,126.5	69.9	5,144.8	87.2	5,112.6	86.6	5,619.1	94.6	5,541.4	93.9
	Type 4	60W	4,122.6	70.2	5,166.5	87.5	5,134.3	87	5,613.3	95	5,564.8	94.3
	Type 5	60W	4,545.2	77	5,666.4	96	5,652.5	95.4	6199.5	104.2	6,104.1	103.4