

Somerville Auto Electric, Inc.

24 Inch LED Fluorescent Light Bulb Retrofit, Cascadeable

Product Specification

Product Description

The LED Light Strip Circuit Card Assembly (CCA) is for use as 24 inch fluorescent light bulb replacement. The end user shall replace light ballast with suitable regulated DC power supply.

- Cascade two CCA to replace one 48 inch fluorescent bulb.
- Connect four CCA to replace one 96 inch fluorescent bulb, two sets wired in parallel not to exceed 2.0 Amp connector current limit.
- Compatible with SomeAutoElec LED Dimmer Control, optional accessory.

Assembly Dimensions (L x W x H)	546.6667 x 16.0 x 4.58 (mm)
Board Outline (L x W)	540.8667 x 16.0 (mm)
Cascadeable (L)	541.8667 (mm) / 21.333 (in)

Includes two 0.125" mounting holes spaced 10.333 inches apart.

Littelfuse® PolySwitch Resettable Device 1.1A Circuit Protection

Safety Agency Approvals: Pending

Part Numbers

151040000	Schematic, LED Light Strip
151040001	Fabrication Detail, LED Light Strip
151040002	Assembly Drawing, LED Light Strip

Applicable Documents and Specifications

Cree-XLampMLB-275843.pdf Product Family Data Sheet

Molex PS-503471-001-001.pdf Product Specification (Flexi-Mate)

Ratings

Voltage: 16.67 VDC typical; 17.5 VDC maximum

Current: 1.0 Amp maximum per CCA
2.0 Amp maximum per Receptacle Housing

Use 26-28 AWG cable assemblies with this product.

CAUTION: Do not exceed 175 mA per LED.

Correlated Color Temperature (CCT)

Various CCA configurations are available, populated with different color temperature LEDs ranging from 3000K (Warm White) to 8000K (Cool White) CCT.

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Relative Luminous Flux

1,410 lumens (lm) Typical (Qty. 60 LEDs @ 23.5 lm per)

The CCA contains sixty Cree(R) XLamp(R) ML-B LEDs.

For 100% Relative Luminous Flux target operating scenario each LED consumes 80 mA current @ 3.3 Volts (typical).

These are directional luminaires, in contrast to non-directional.

Application

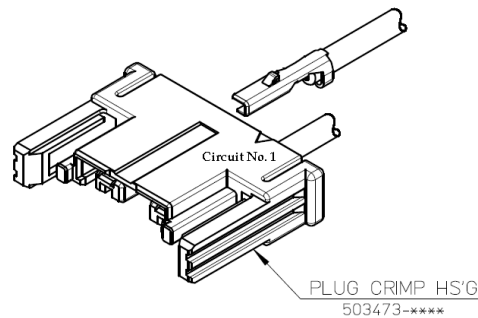
LEDs are connected in twelve parallel strings of five, resulting in a 16 watt (16.7 VDC @ 0.96 Amp) nominal energy consumption.

A 48 inch Philips 40-Watt Cool White linear fluorescent light bulb provides an output of 2600 lumens (non-directional).

In a typical office environment, directional LED lighting consumes less energy than non-directional fluorescent light bulbs. Cascade two of these 16 Watt products to replace one 40 Watt fluorescent bulb. Brightness is adjustable with SomeAutoElec Dimmer Control.

Other Information

Plug Crimp Housing (Molex 503473)



Receptacle Housing Connector (Molex 503471)

Plug Housing Connector (Molex 503469)

Acronyms

CCA	Circuit Card Assembly
CCT	Correlated Color Temperature
RLF	Relative Luminous Flux (%)

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