



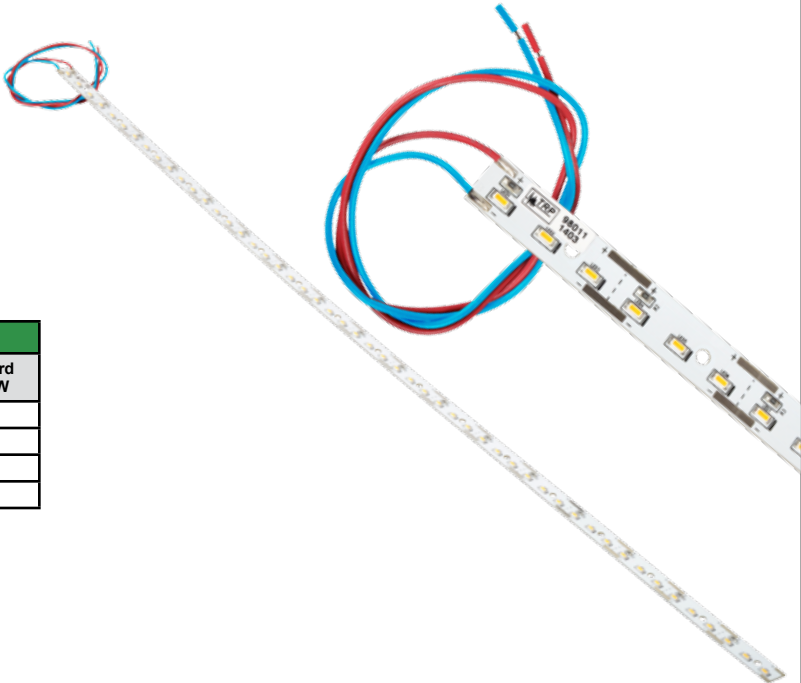
LED Light Engine, 22.7" Narrow Linear Module

12V Constant-Voltage Array, 3 LED Series x 17 Sections
 Engineered by Norlux
 51 Nichia LEDs
 5 yr. Warranty

Specifications

Driver Type: 12V Constant-Voltage
Nominal Current: 445mA total (26mA per section)
Drive Voltage: 12V
Total Board Power: 5.3W ±5%
Life: 50,000 Hrs @70% lumen maint., if used as specified (current & heat)
Max Junction Temp: 90°C
Max Test Point Temp: 80°C
Operating Temp: -40°C to +60°C Ambient
Storage Temp: -40°C to +80°C
Viewing Angle (FWHM): 120° Lambertian distribution
CRI: 85 typical

- Can be cut to length in 1.33" increments
- Designed for easy use in standard luminaires
- Tight LED pitch eliminates pixelization
- Color: ¼ ANSI Binning, 3 Step MacAdam Ellipse
- Suggested Applications: Cove or Undercabinet Lighting, Sign Lighting
- Customizable: Engines can be modified to your application. Contact us.



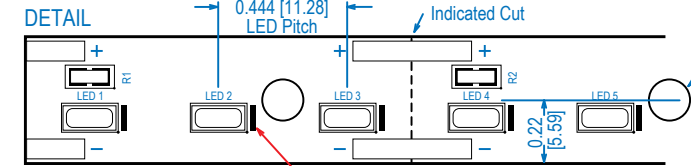
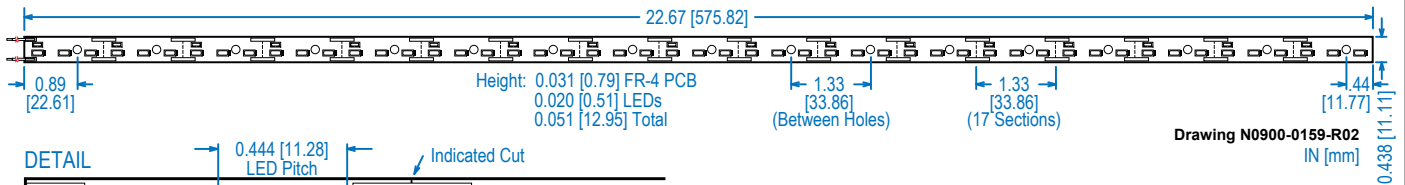
22.7 Inch Narrow Linear LED Module

| Model Number | Total Board Power (W) | Total Current (mA) | Color Temp (K) | Lumens (± 15%) | Board LPW |
|--------------|-----------------------|--------------------|----------------|----------------|-----------|
| 98010 | 5.3 | 445 | 3000 | 465 | 88 |
| 98011 | 5.3 | 445 | 3500 | 465 | 88 |
| 98012 | 5.3 | 445 | 4000 | 504 | 95 |
| 98030 | 5.3 | 445 | 5000 | 510 | 95 |

Connectivity Options

| Suffix | Connection |
|---------|-------------------------------|
| (blank) | 12 IN, #22 AWG Stranded Leads |
| -01 | No Leads |

Dimensions:



DC IN
 Red (+) 12" #22AWG
 Blue (-) 12" #22AWG

For To Point, probe any LED pad nearest anode band

Note:
 Board can be cut at the intervals shown. There is a dotted line at each cut point. Cut should be made with scissors. Board is NOT designed to be broken by hand.



★ MADE IN USA ★
 Of Imported And Domestic Components



22.7" Narrow Linear Std. DC LED Light Engine Module

SSL Solutions Faster Than The Speed Of Light®

CIE Chromaticity Coordinates:

3000K

3 Step Macadams Ellipse

| X | Y |
|--------|--------|
| 0.4325 | 0.4101 |
| 0.4452 | 0.4146 |
| 0.4244 | 0.3923 |
| 0.4362 | 0.3965 |

3500K

3 Step Macadams Ellipse

| X | Y |
|--------|--------|
| 0.4045 | 0.3975 |
| 0.4189 | 0.4044 |
| 0.3989 | 0.3819 |
| 0.412 | 0.3875 |

4000K

3 Step Macadams Ellipse

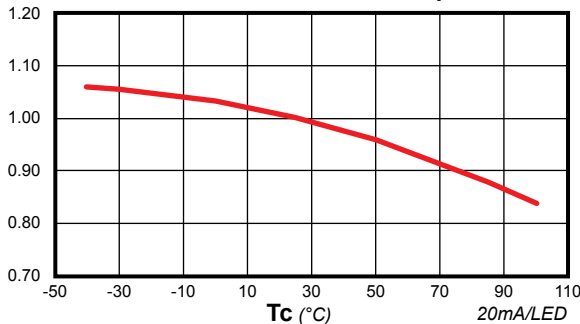
| X | Y |
|--------|--------|
| 0.3783 | 0.3836 |
| 0.3909 | 0.3906 |
| 0.3746 | 0.3687 |
| 0.3864 | 0.3757 |

5000K

3 Step Macadams Ellipse

| X | Y |
|--------|--------|
| 0.3408 | 0.3461 |
| 0.3485 | 0.3520 |
| 0.3416 | 0.3585 |
| 0.3499 | 0.3644 |

Relative Luminous Flux / Tc Temperature



Compatible TRP Drivers:

The drivers listed here are all compatible with this module. Choose the best driver for your application.

- LED12W-12 (1-2 Boards Total)
- LED17W-12 (2-3 Boards Total)
- LED20W-012 (1-3 Boards Total)
- LED25W-12 (2-5 Boards Total)
- LED25W-12-HL-B (2-5 Boards Total)
- LED25W-12-HL-S (2-5 Boards Total)
- LED30W-12 (2-5 Boards Total)
- LED40W-012 (2-7 Boards Total)
- LED50W-012 (3-9 Boards Total)
- LED60W-012 (3-11 Boards Total)
- PLED75W-12 (3-14 Boards Total)
- TRV-100S012ST (1-18 Boards Total)
- TRV-150S012ST (1-28 Boards Total)
- TRV-200S012ST (1-33 Boards Total)
- TRV-250S012ST (1-41 Boards Total)
- TRV-300S012ST (1-51 Boards Total)

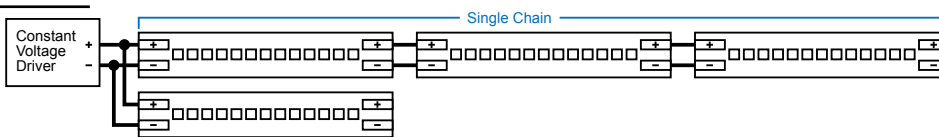
Step Dimming:

This Light Engine can be step-dimmed, with a recommended TRP dimmable driver and SD series step-dimming module. See the SD2 or SD3 data sheet for wiring information.

Parallel Configurations

The 22.7" Specialty Narrow Linear Board is designed for parallel connections only. For a single chain (end-to-end), the positive and negative of one board is connected to the respective positive and negative of the next. Current adds, so the supply must be 2x the current for 2 boards. Add currents for parallel chains also.

Parallel



Maximum Run Lengths

The max number of boards wired in a chain (end-to-end/parallel) is limited by the max current rating of the first board wired to the driver. The sum of the board currents, in the chain, funnels through the first board. Multiple chains can connect directly to the power supply in parallel. See table for max chain length.

| Product | Series/Parallel | Max Allowable Uncut Boards | |
|--------------|-----------------|----------------------------|-------------|
| | | High Current (Nom) | Low Current |
| 22.7" Narrow | Parallel | 5 | N/A |

Mounting Notes

The LED assembly is supplied with mounting holes, per the dimensional drawing. It is important to mount the board in such a way as to maintain the Tc point below the max. The steady state thermals in application will dictate if the board needs to be mounted directly to metallic housing and/or include a thermal pad. For example fully enclosed recessed fixture will require better thermal mounting than an open air pendant.

Thermal Application Notes

This board may require additional heat sinking to run above 60°C ambient. Heat sink is also required when operated above specified drive currents.

Maximum Current

Max Current: 445mA

Voltage at max current: 12V, Power at max current: 5.3W

The total maximum current reflects the LED maximum forward current only, without considering thermal needs. Driving the LEDs this hard will likely violate their thermal limits, depending on the application. Tc point must remain at or below the max temperature, or the warranty will be voided. Temperature is directly correlated to LED current.

Static Sensitive Device

Handle only at static-safe work stations.

Packaging

50 per box standard.