

Electrical Specifications (2.5")

Driver type	Constant Current	
Drive Current	225 mA Nominal (11") 450 mA Nominal (22") 900 mA Nominal (44")	
Total Board Power	8.1 W Nominal (11") 16.2 W Nominal (22") 32.4 W Nominal (44")	12 LEDs 24 LEDs 48 LEDs
Life	50,000 Hrs, @ Ta max 25 °C	
Max Junction Temp:	125 °C	
Operating Temp:	-40 °C to +85 °C Ambient	
Storage Temp:	-40 °C to +125 °C	
Viewing Angle (FWHM):	120 °	
LED CRI:	80	

11 Inch Linear - Forward Voltage: 36 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE12C/3080S/11	3000	225	8.1	1137	140.5
LE12C/3580S/11	3500	225	8.1	1155	142.6
LE12C/4080S/11	4000	225	8.1	1196	147.7

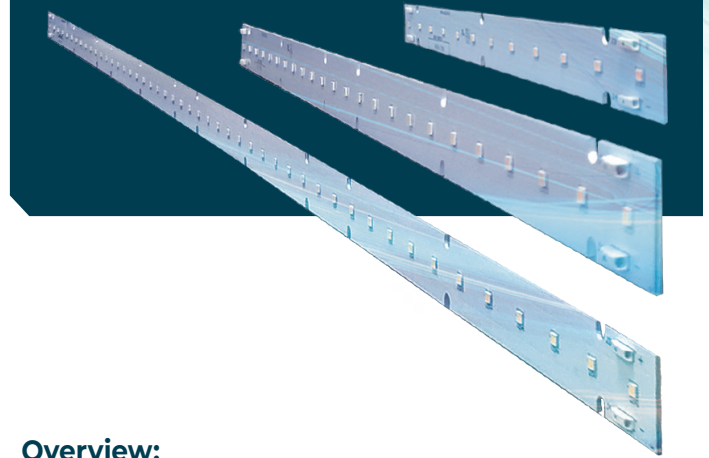
22 Inch Linear - Forward Voltage: 36 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE24C/3080S/22	3000	450	16.2	2275	140.2
LE24C/3580S/22	3500	450	16.2	2310	142.6
LE24C/4080S/22	4000	450	16.2	2395	147.7

44 Inch Linear - Forward Voltage: 36 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE48C/3080S/44	3000	900	32.4	4550	140.2
LE48C/3580S/44	3500	900	32.4	4619	142.6
LE48C/4080S/44	4000	900	32.4	4786	147.7

Linear LED Light Engines



Overview:

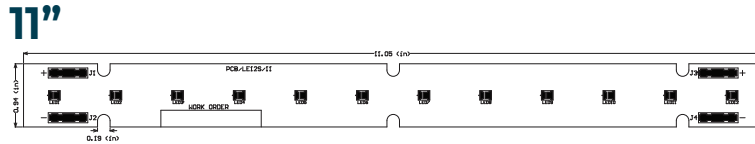
- Constant Current DC Arrays:
 - 11" Linear 12 Samsung LEDs in Series
 - 22" Linear -12 LED Series x2 Parallel Strings =24 Samsung LEDs
 - 44" Linear -12 LED Series x4 Parallel Strings =48 Samsung LEDs
- Modules in the family can be paired. Same circuit design allows combinations for a greater variety of applications
- Designed for easy use in standard luminaires
- Aluminum MCPCB provides exceptional thermal performance
- Color: 1/4 ANSI Binning, 3 Step MacAdam Ellipse
- Suggested Applications: Surface-mount, Recessed or Suspended lighting, Troffers, Troffer Retrofits, Linear Recessed and Flush-mount
- UL Recognized Components
- Engineered by: AC Electronics

Connectivity:

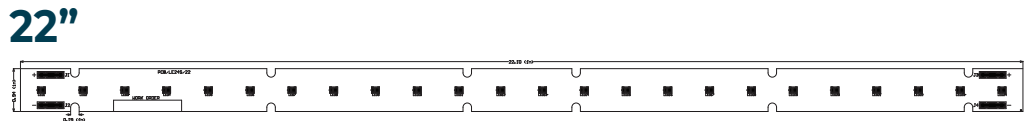
For Poke-In Connectors use #24-20 AWG stranded or solid wire BJB Connector, Part # 46.131.1001.50

Dimensions:

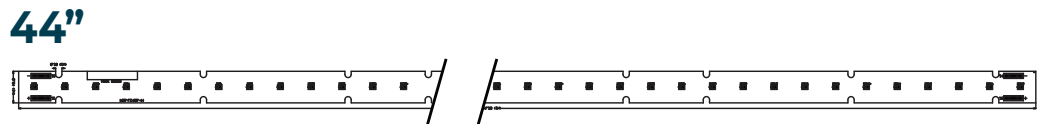
Dimensions	
Length	11.05"
Width	0.94"
Hole Distance	0.19"



Dimensions	
Length	22.10"
Width	0.94"
Hole Distance	0.19"



Dimensions	
Length	44.05"
Width	0.94"
Hole Distance	0.19"



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

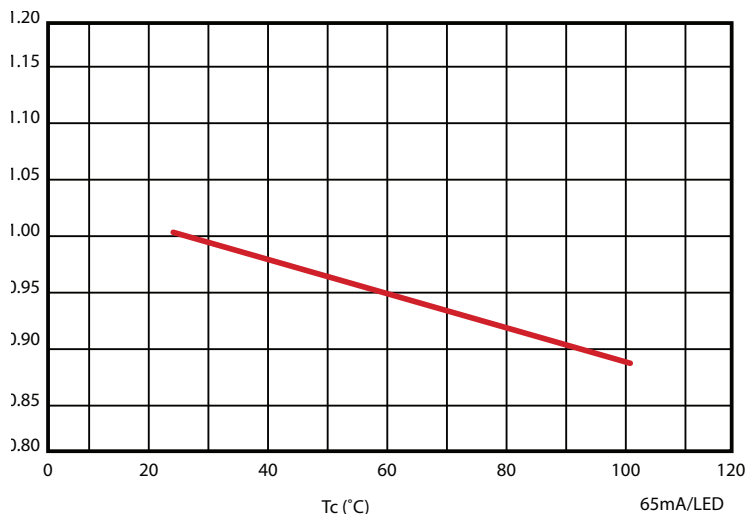
X	Y
0.4045	0.3975
0.4189	0.4044
0.3989	0.3819
0.412	0.3875

4000k

3 Step Macadams Ellipse

X	Y
0.3783	0.3836
0.3909	0.3906
0.3747	0.3687
0.3864	0.3757

Relative Luminous Flux / Tc Temperature:



3401 Avenue D, Arlington, TX 76011 • 800-375-6355 • www.aceleds.com

Data is based upon tests performed by AC Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

Mounting Notes:

The max number of boards wired in a chain (parallel or series) 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, when wired from one end. Multiple chains can connect directly to the power supply in parallel.

Improved wiring design for each parallel ladder chain should specify the positive and negative power connections at opposite ends of the chain to equalize current through each LED. Series ladder chains are naturally wired this way. Wiring from one end of the chain will create an uneven voltage across each section. The longer the ladder chain, the more important this becomes. The number of sections or chains wired in parallel directly from the driver is only limited by the supply wire size or driver capacity.

Thermal Application Notes:

These boards require additional heat sinking to run above 45°C ambient at nominal specifications. Heat sink also required when operated above specified drive currents.

Mounting Notes:

The LED assembly is supplied with mounting holes, per 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.

Static Sensitive Device:

Handle only at static-safe work stations.

Warranty:

AC Electronics, (ACE), warrants to the purchaser that each LED module will be free from defects in material or workmanship for a period of 5 years from the date of manufacture when operated at a temperature of less than or equal to the specified "Operating Temperature" in the specification when properly installed with an appropriate heat sink and under normal conditions of use.