

Electrical Specifications (2.5")

Driver type	Constant Current		
Drive Current	175 mA Nominal (5.5")	350 mA Nominal (11")	700 mA Nominal (23")
Total Board Power	2.79 W Nominal (5.5")	6.0W Nominal (11")	11.17W Nominal (23")
		24 LEDs	
Life	50,000 Hrs, 70% lumen maint. @ Ta max 50 °C, used as specified		
Max Junction Temp:	190 °C		
Max Test Point Temp:	80 °C		
Operating Temp:	-40 °C to +65 °C Ambient		
Storage Temp:	-40 °C to +80 °C		
Viewing Angle (FWHM):	120° Lamberain distribution		
LED CRI:	80		

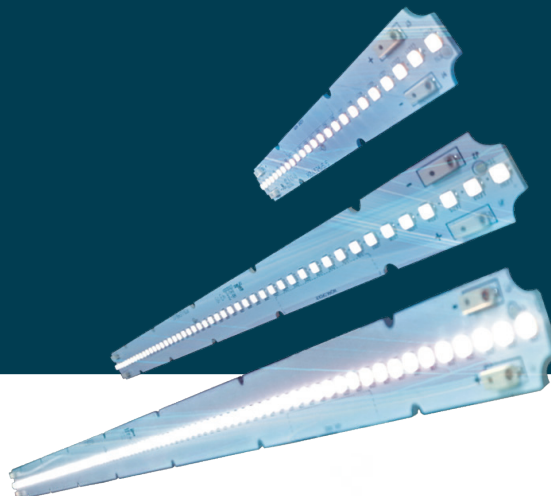
5.5 Inch Linear - Forward Voltage: 16.6 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE24C/2780S/5.5	2700	175	2.9	463	159.6
LE24C/3080S/5.5	3000	175	2.9	477	164.4
LE24C/3580S/5.5	3500	175	2.9	484	166.8
LE24C/4080S/5.5	4000	175	2.9	502	172.8
LE24C/5080S/5.5	5000	175	2.9	509	175.2

11 Inch Linear - Forward Voltage: 17.16 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE24C/2780S/11	2700	350	11.6	1853	159.6
LE24C/3080S/11	3000	350	11.6	1909	164.4
LE24C/3580S/11	3500	350	11.6	1937	166.8
LE24C/4080S/11	4000	350	11.6	2007	172.8
LE24C/5080S/11	5000	350	11.6	2035	175.2

Linear LED Light Engines



23 Inch Linear - Forward Voltage: 16.62 V

Model	Color Temp (K)	Total Current (mA)	Power (W)	Lumens	Efficacy (Lm/W)
LE96C/2780S/23	2700	700	11.6	1853	159.6
LE96C/3080S/23	3000	700	11.6	1909	164.4
LE96C/3580S/23	3500	700	11.6	1937	166.8
LE96C/4080S/23	4000	700	11.6	2007	172.8
LE96C/5080S/23	5000	700	11.6	2035	175.2

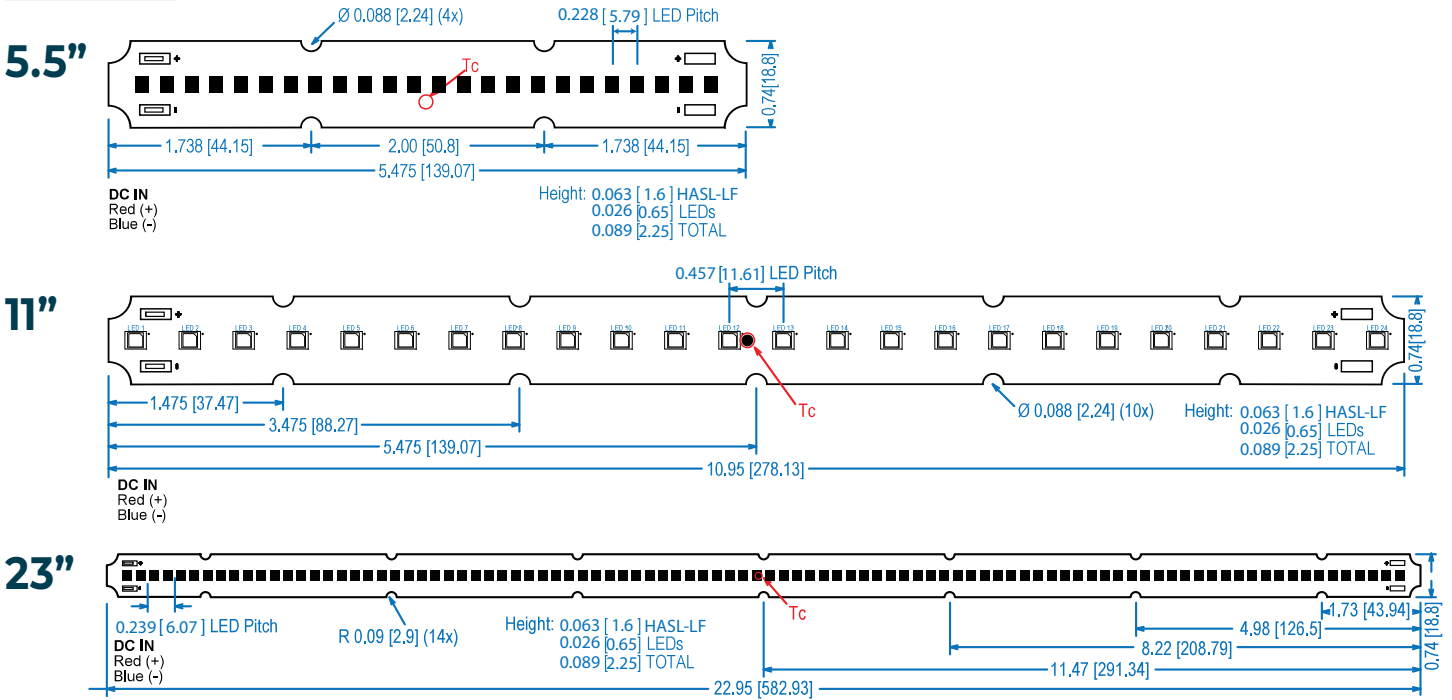
Overview:

- Constant Current DC Arrays:
 - 5.5: Linear - 6 LED Series x4 Parallel Strings x24 Samsung LEDs
 - 11" Linear -6 LED Series x4 Parallel Strings x24 Samsung LEDs
 - 23" Linear -6 LED Series x16 Parallel Strings x96 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
- Tight LED pitch eliminates pixelization
- 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 Component
- Engineered by: AC Electronics

Connectivity:

For Poke-In Connectors use #26-22 AWG stranded or solid wire WAGO Connector, Part # 2059-301/998-403

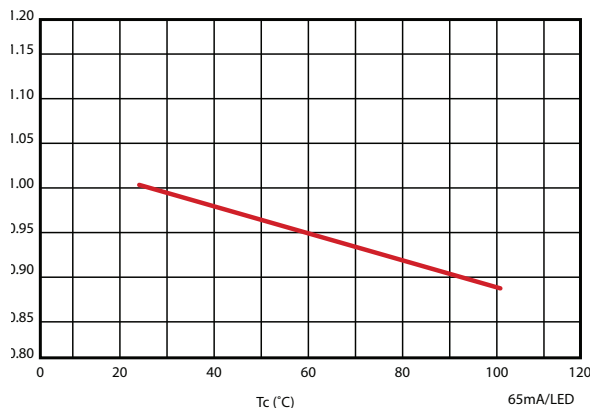
Dimensions:



CIE Chromaticity Coordinates:

2700k		3000k		3500k		4000k		5000k	
3 Step Macadams Ellipse		3 Step Macadams Ellipse		3 Step Macadams Ellipse		3 Step Macadams Ellipse		3 Step Macadams Ellipse	
X	Y	X	Y	X	Y	X	Y	X	Y
0.4576	0.4183	0.4325	0.4101	0.4045	0.3975	0.3783	0.3836	0.3408	0.3461
0.4698	0.4212	0.4452	0.4146	0.4189	0.4044	0.3909	0.3906	0.3485	0.3520
0.4478	0.3999	0.4244	0.3923	0.3989	0.3819	0.3747	0.3687	0.3416	0.3585
0.4591	0.4025	0.4362	0.3965	0.412	0.3875	0.3864	0.3757	0.3499	0.3644

Relative Luminous Flux / Tc Temperature:



Maximum Run Lengths:

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 "Board Temperature for Life Rating" in the specification when properly installed with an appropriate heat sink and under normal conditions of use. This warranty is also qualified by any specific condition as identified in the spec sheet such as "when used with a recommended AC Electronics Driver."