

SelectWHITE™ Module Family

LED Light Engines with Nichia LEDs

Intelligent Device
ECOSYSTEM
Classic

Electrical Specifications

Driver Type:	Constant-Current
Drive Current:	150mA Nominal x 2 Channels (5.5") 300mA Nominal x 2 Channels (11") 600mA Nominal x 2 Channels (22") 450mA Nominal x 2 Channels (3" Round)
Nom. Forward Voltage:	28.8V
Total Board Power:	4.3W Nominal x 2 Channels (5.5") 8.6W Nominal x 2 Channels (11") 17.3W Nominal x 2 Channels (22") 12.9W Nominal x 2 Channels (3" Round)
Life:	50,000 Hrs, 70% lumen maint. @ Ta max 50°C, used as specified
Max Test Point Temp:	90°C *
Operating Temp:	-40°C to +60°C Ambient
Storage Temp:	-40°C to +80°C
Viewing Angle (FWHM):	120° Lambertian distribution
LED CRI Options:	80, 90 (standard)

5.5 Inch Linear

Example Configuration	Color Temp (K)	CRI	Total Current (mA)	Power (W)	Lumens (± 15%)	Efficiency lm/W
2700/5000	2700	80	150	4.3	566	132
	5000	80	150	4.3	673	157
3500/6500	3500	80	150	4.3	607	141
	6500	80	150	4.3	648	151
2700/5000	2700	90	150	4.3	453	105
	5000	90	150	4.3	513	120
3500/6500	3500	90	150	4.3	471	110
	6500	90	150	4.3	506	118

11 Inch Linear

Example Configuration	Color Temp (K)	CRI	Total Current (mA)	Power (W)	Lumens (± 15%)	Efficiency lm/W
2700/5000	2700	80	300	8.6	1132	132
	5000	80	300	8.6	1347	157
3500/6500	3500	80	300	8.6	1214	141
	6500	80	300	8.6	1296	151
2700/5000	2700	90	300	8.6	907	105
	5000	90	300	8.6	1027	120
3500/6500	3500	90	300	8.6	942	110
	6500	90	300	8.6	1012	118

22 Inch Linear

Example Configuration	Color Temp (K)	CRI	Total Current (mA)	Power (W)	Lumens (± 15%)	Efficiency lm/W
2700/5000	2700	80	600	17.3	2265	131
	5000	80	600	17.3	2694	156
3500/6500	3500	80	600	17.3	2429	140
	6500	80	600	17.3	2592	150
2700/5000	2700	90	600	17.3	1814	105
	5000	90	600	17.3	2055	119
3500/6500	3500	90	600	17.3	1884	109
	6500	90	600	17.3	2024	117

3 Inch Round

Example Configuration	Color Temp (K)	CRI	Total Current (mA)	Power (W)	Lumens (± 15%)	Efficiency lm/W
2700/5000	2700	80	450	12.9	1706	136
	5000	80	450	12.9	1846	148
3500/6500	3500	80	450	12.9	1776	142
	6500	80	450	12.9	1819	146
2700/5000	2700	90	450	12.9	1517	121
	5000	90	450	12.9	1606	128
3500/6500	3500	90	450	12.9	1447	116
	6500	90	450	12.9	1627	130

★ **MADE IN USA** ★
Of Imported And Domestic Components



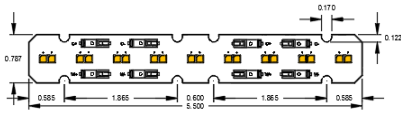
Overview:

- Constant-Current DC Arrays:
 - 5.5" Linear - 9 LED Series x 1 Parallel Strings x 2 Color Channels
 - 11" Linear - 9 LED Series x 2 Parallel Strings x 2 Color Channels
 - 22" Linear - 9 LED Series x 4 Parallel Strings x 2 Color Channels
 - 3" Round - 9 LED Series x 3 Parallel Strings x 2 Color Channels
 - 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: ¼ ANSI Binning, 3 Step MacAdam Ellipse
 - Suggested Applications: Surface-mount, Recessed or Suspended lighting, Troffers, Troffer Retrofits, Linear Recessed and Flush-mount
 - Customizable: Engines can be modified to your application. Contact us
 - Engineered by Norlux
 - 5 yr. Warranty
- * When using a fixture with multiple light engines, measure temperature at Tc closest to center of fixture.

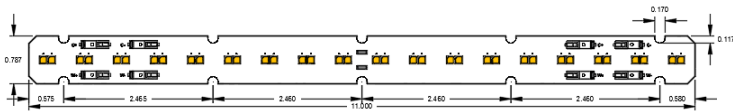


Dimensions

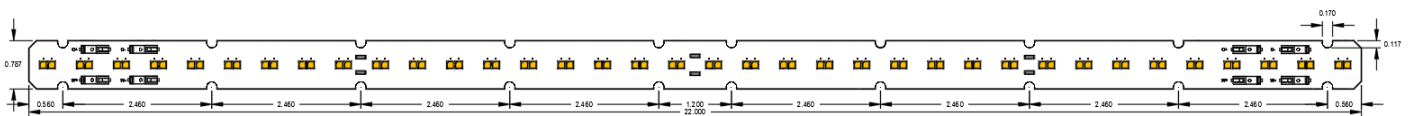
5.5"



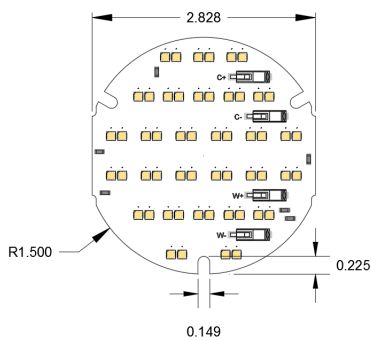
11"



22"



3" Round



Part Number and Ordering Information:

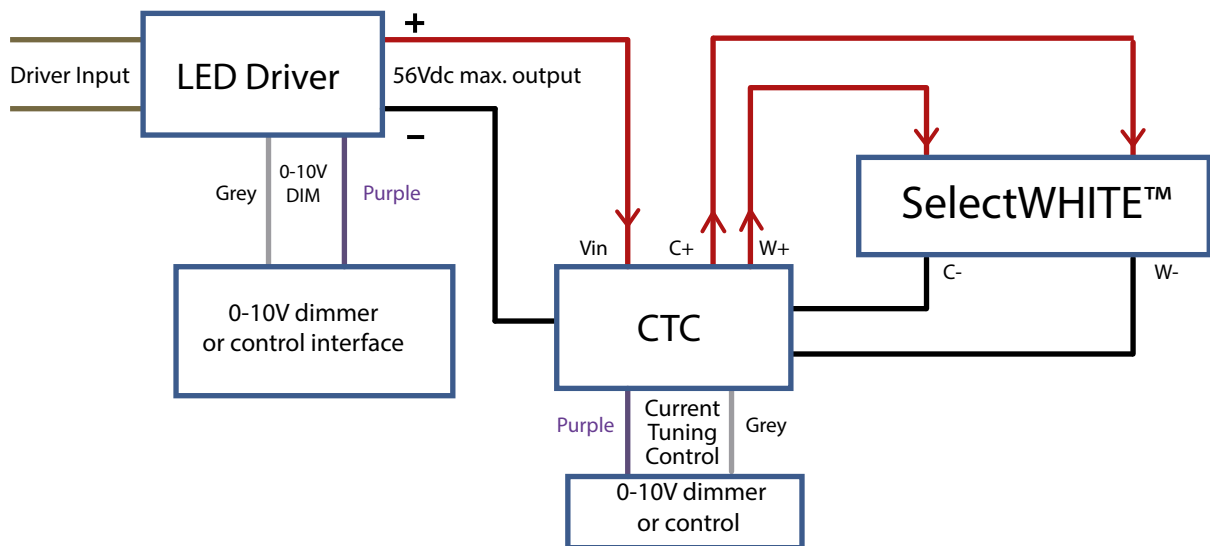
SW-WW-CW-LLL-CC-CR

WW - Warm White Options	CW - Cool White Options	LLL - Size	CC - Connector	CR - LED CRI
22 - 2200K	27 - 2700K	055 - 5.5" Linear	01 - Push-In Connector	80 - 80 CRI
27 - 2700K	30 - 3000K	110 - 11" Linear	02 - 12" #22 AWG Stranded Leads	90 - 90 CRI
30 - 3000K	35 - 3500K	220 - 22" Linear	03 - No Leads	
35 - 3500K	40 - 4000K	03R - 3" Round		
40 - 4000K	50 - 5000K			
50 - 5000K	65 - 6500K			

Application Notes:

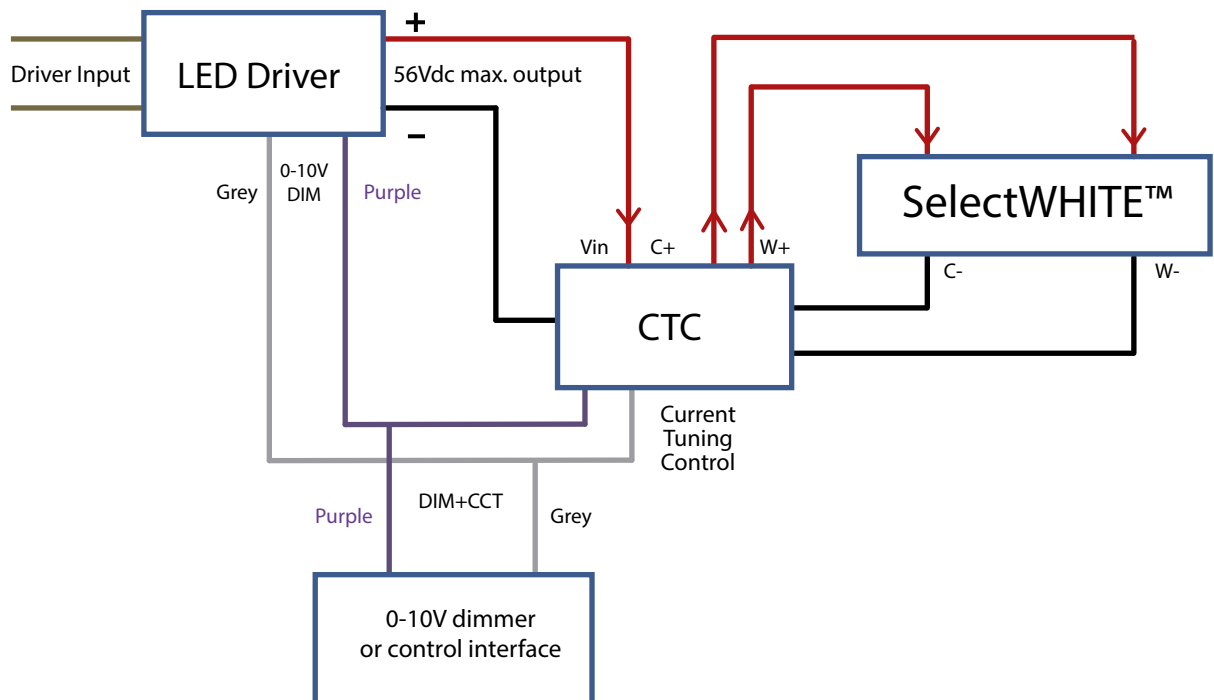
Color Tuning by controlling CTC and LED driver independently:

- 1st Wall Dimmer connects to Driver and controls brightness (intensity).
- 2nd Wall Dimmer connects to CTC and controls color balance.



Warm/Dim using one common dimmer for CTC and LED Driver together:

- Use a single Wall Dimmer connected to both Driver and CTC to create a Warm Dimming fixture



Static Sensitive Device

Handle only at static-safe work stations.

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 requires additional heat sinking to run above 55°C ambient at nominal specifications. Heat sink is also required when operated above specified drive current.

Compatible Class P Programmable Drivers (yellow)

	Model	Product Description	Output Voltage Range
25W	S025W-056C1300	Compact Case, 150-1300mA Output	12-56V
27W	S027W-038C1000	Brick Case, 200-1000mA Output, Outdoor	0-10V
30W	S030W-052C1050	Linear Case, 150-1050mA Output	0-10V
40W	S040W-056C1500	Compact Case, 300-1500mA Output	0-10V
50W	S050W-052C1400	Linear Case, 400-1400mA Output	0-10V
75W	S075W-038C2000	Linear Case, 670-2000mA Output	0-10V

Maximum Current

5.5" Linear Max Current: **165mA**

11" Linear Max Current: **330mA**

22" Linear Max Current: **660mA**

3" Round Max Current: **495 mA**

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.

CIE Chromaticity Coordinates:

2700K

3 Step Macadams Ellipse

X	Y
0.4576	0.4183
0.4698	0.4212
0.4478	0.3999
0.4591	0.4025

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

