



Electrical Specifications

Input

Input Voltage (VAC)	120V-277V (+/- 10%) ¹	
Frequency Range (Hz)	50 - 60 Hz (+/- 5%)	
Input Current (A)	6.6A Max.	
Inrush Current (Apk) @ 230V	75A	
	120V	277V
Efficiency @ Full load	91%	94%
THD @ Full load	<10%	<15%
Power Factor @ Full load	>0.99	>0.97

¹ -Driver rated for 100-277Vac

General Information

Item Number	*2746EV (57341)
Type	Constant Current
Output Power	600W (Max.)
Programming Tool	*2743VP (57568)
Programmable Features	Output Current Dim-to-Off AstroDIM Thermal Protection Constant Lumen Output

Find (NAED) as cross reference for new item number i.e. *12345

Environmental Specifications

Ambient Operating Temperature	-40°C to 45°C - for V(in) 120-200V -40°C to 55°C - for V(in) 200-277V
Max. Case Temperature (Tc)	90°C (max) 75°C (Warranty)
Max. Storage Temperature	-40°C to 85°C
Max. Relative Humidity (%)	95%
Surge Protection	5KV line-line 10KV line-earth
IP Rating	IP67
UL Rating	Dry, Damp, & Wet
UL File number	E333135
EMI Compliance	FCC Part 15 Class A

Output

Output Current (mA)	2800 - 5600 mA (Default: 5600 mA)
Output Voltage (VDC)	54 - 134 VDC
Output Ripple Current	< 10%
Max. Output Power (W)	600W
LED Power-Up Time	< 1sec Max. < 0.5sec Typical
Load Regulation	+/-3%
Line Regulation	+/-1%
Over Voltage Protection	Yes, non-latching
Output Short-Circuit Protection	Yes, non-latching
Over Temperature Protection	Yes, non-latching

Dimming

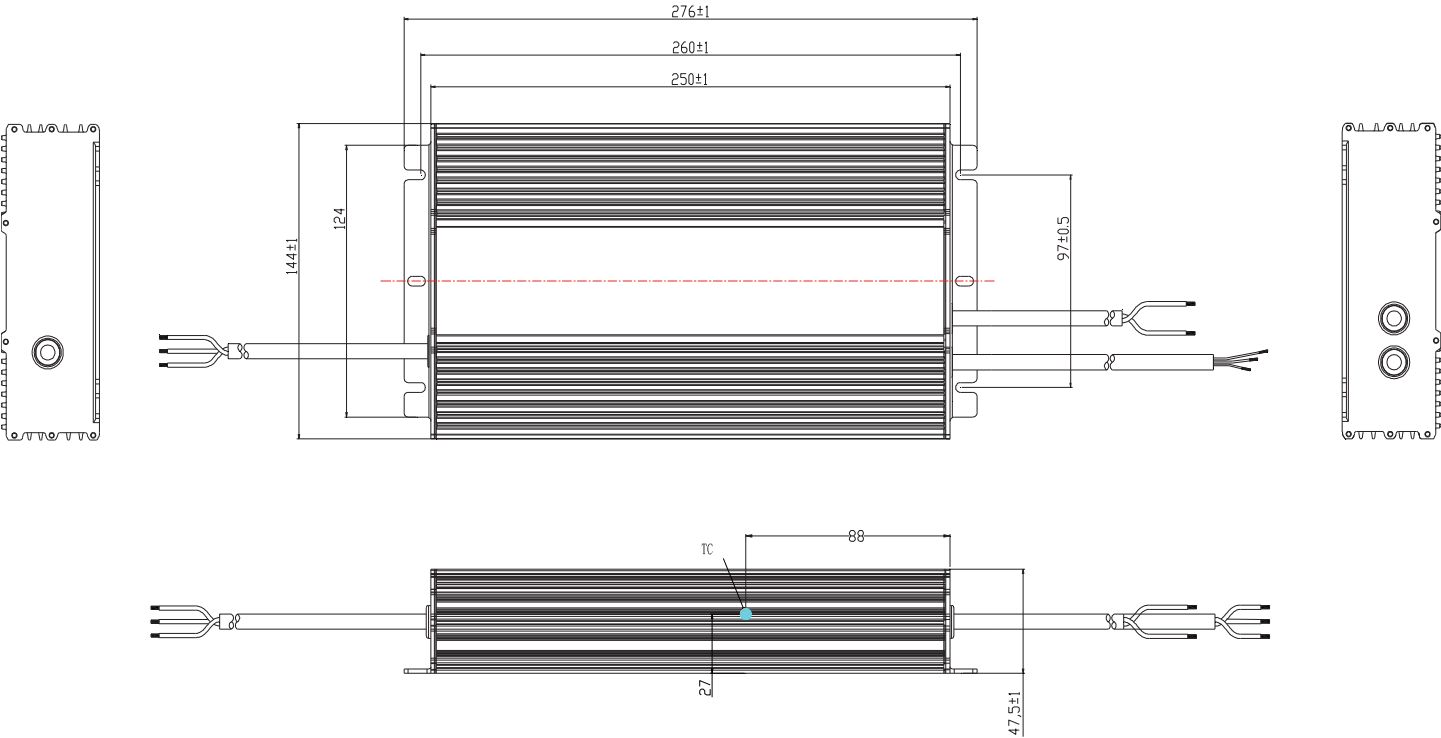
Dimming Control	0-10V
Dimming Range	10-100%
Dimming Type	Pulse-Width Modulation
Source/Sink Current	0.4mA Max.
Dim-to-Off OFF/ON Threshold	0.5V/0.7V
Dim-to-Off Standby Power	< 0.5W

Auxiliary Output

Output Voltage (Vdc)	12V
Output Power (W)	3.6W Max
Voltage Regulation	+/- 10%



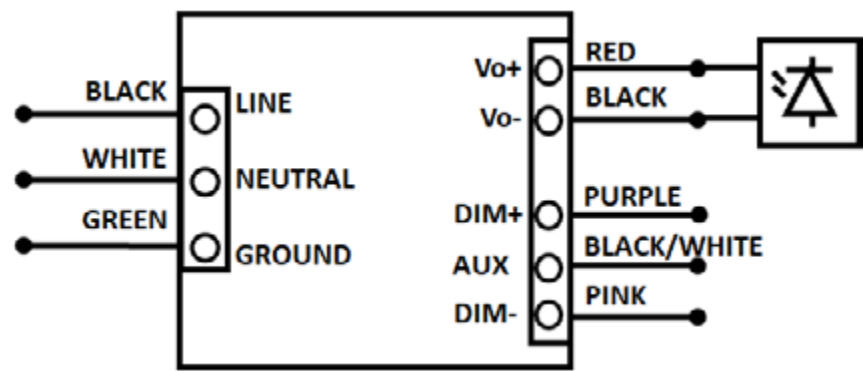
Mechanical Diagram



Mechanical Specifications

Length	10.86" (276 mm)
Width	5.67" (144 mm)
Height	1.87" (47.5 mm)
Mounting Length	9.8" (250 mm)
Mounting Slot Width	3.81" (97 mm)

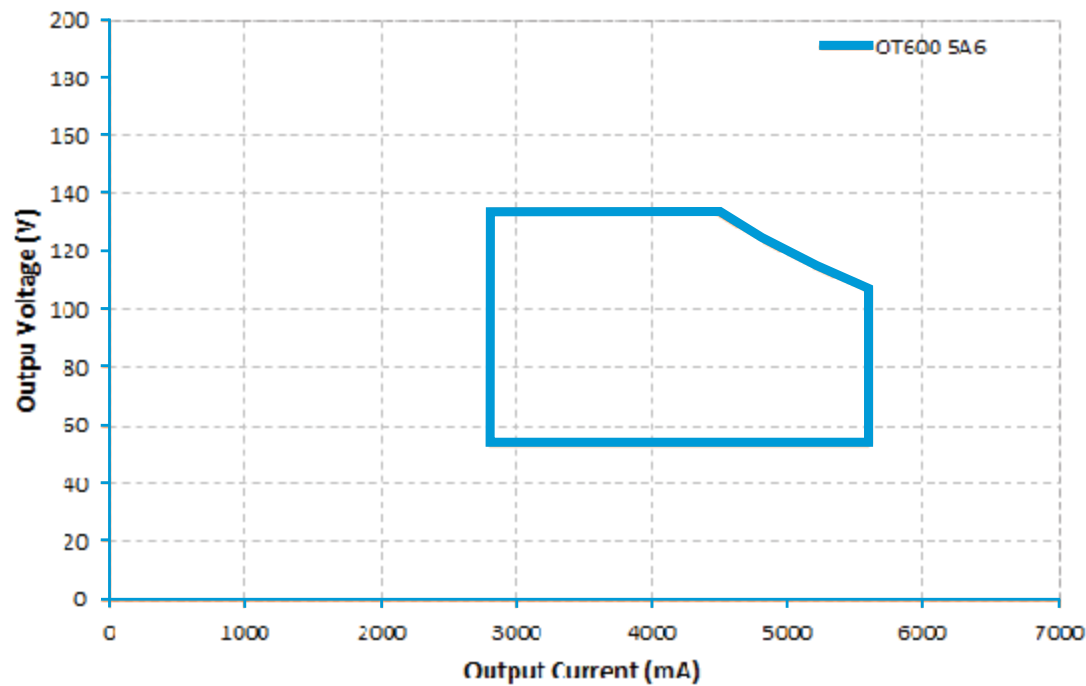
Wiring Diagram



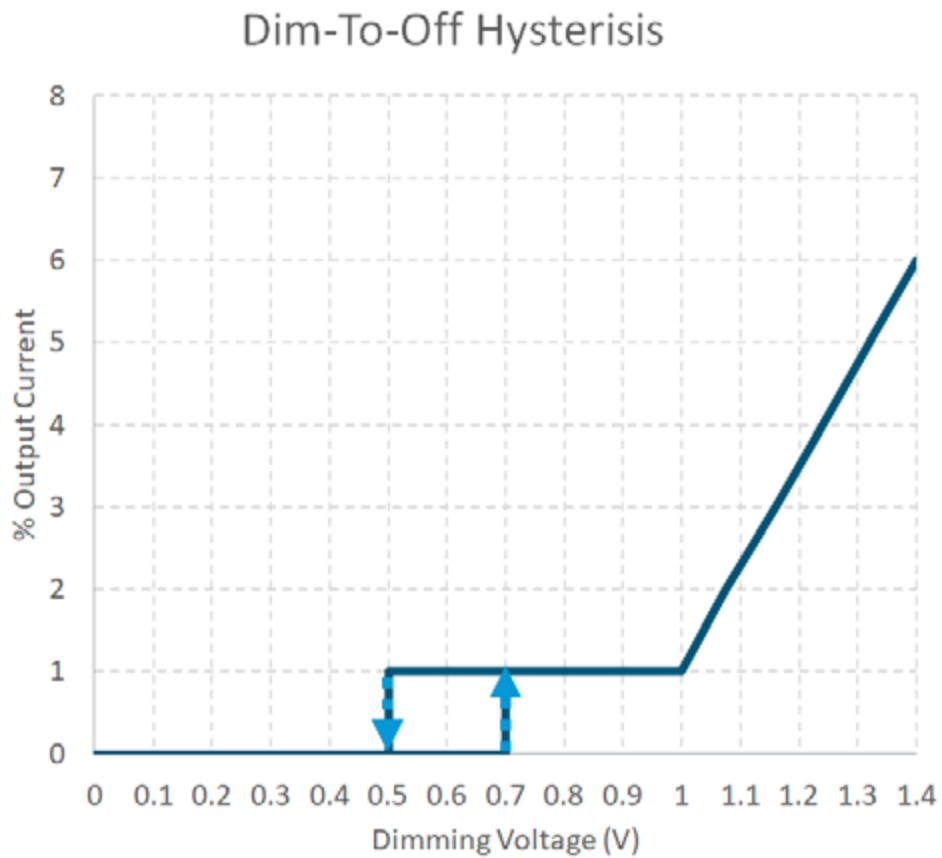
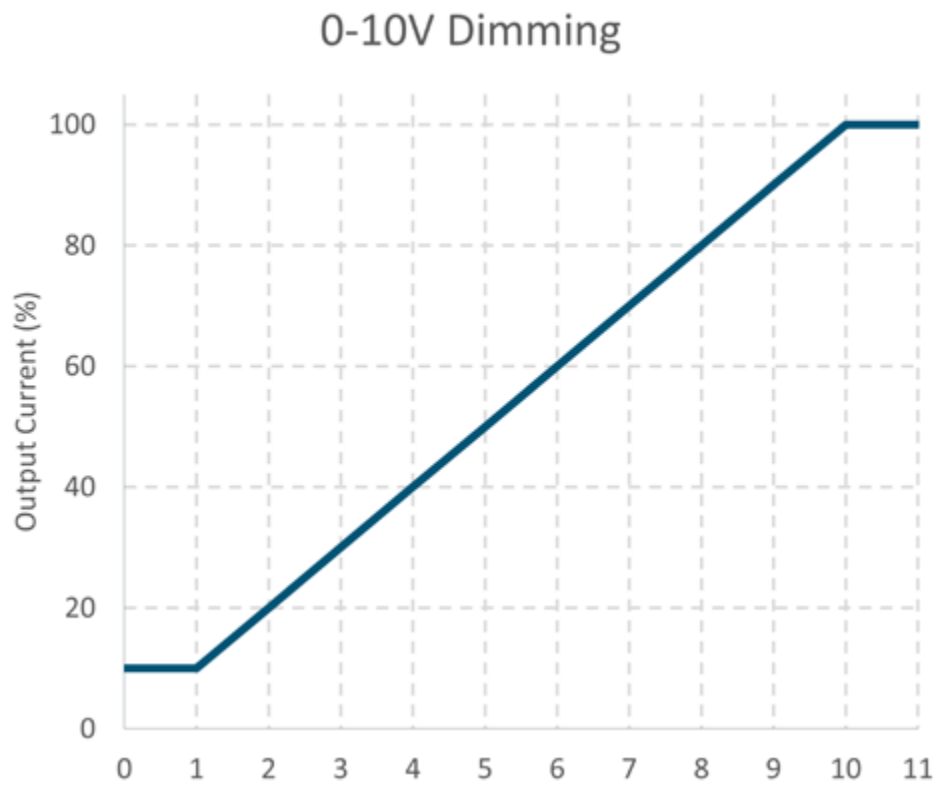
- Note:** - The Vaux Out (BLACK/WHITE) and LED- (BLUE) will provide the DC Auxiliary Output. BLACK/WHITE is "+ve" polarity and BLUE is "-ve" polarity.
- Programming Interface Connection is through DIM+ (PURPLE) and DIM- (PINK).

Wire	Specification	Note
Input	17AWG*3C SJOW external diameter: 8.3mm L=300±20mm peel length 35mm, Tin-dip length 10mm	for CCC/CE/UL
Output	17AWG*2C SJOW external diameter: 7.7mm L=300±20mm peel length 35mm, Tin-dip length 10mm	for CCC/CE/UL
Dimming	UL2733 22AWG*2C external diameter: 5.45mm L=350±10mm peel length 35mm, Tin-dip length 10mm	

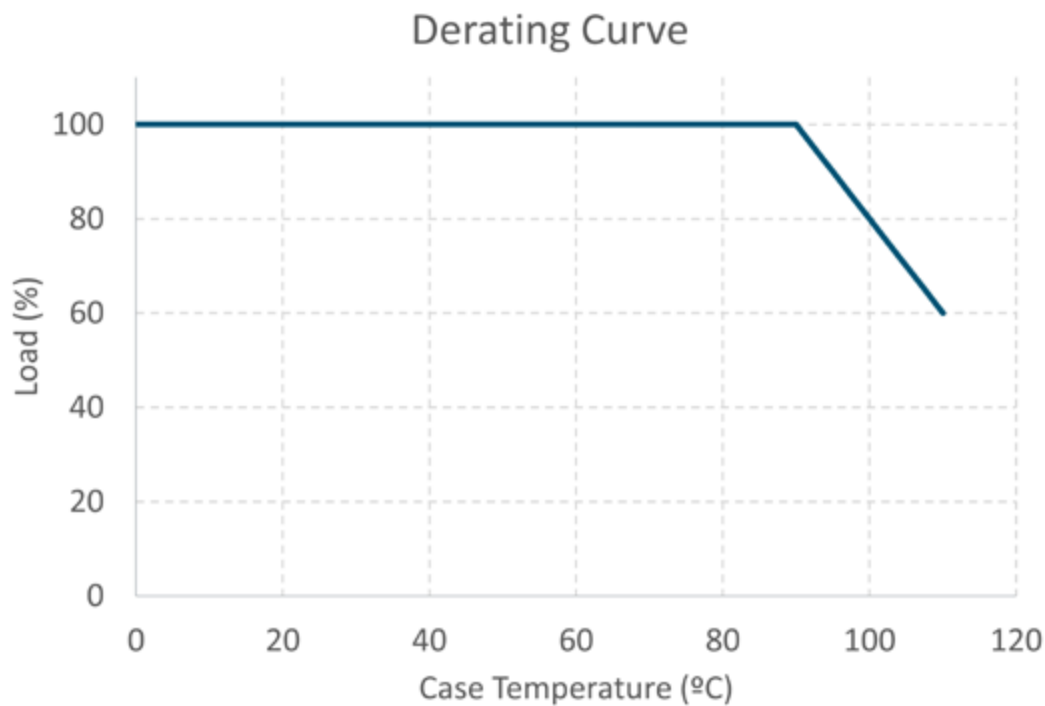
Operating Curve



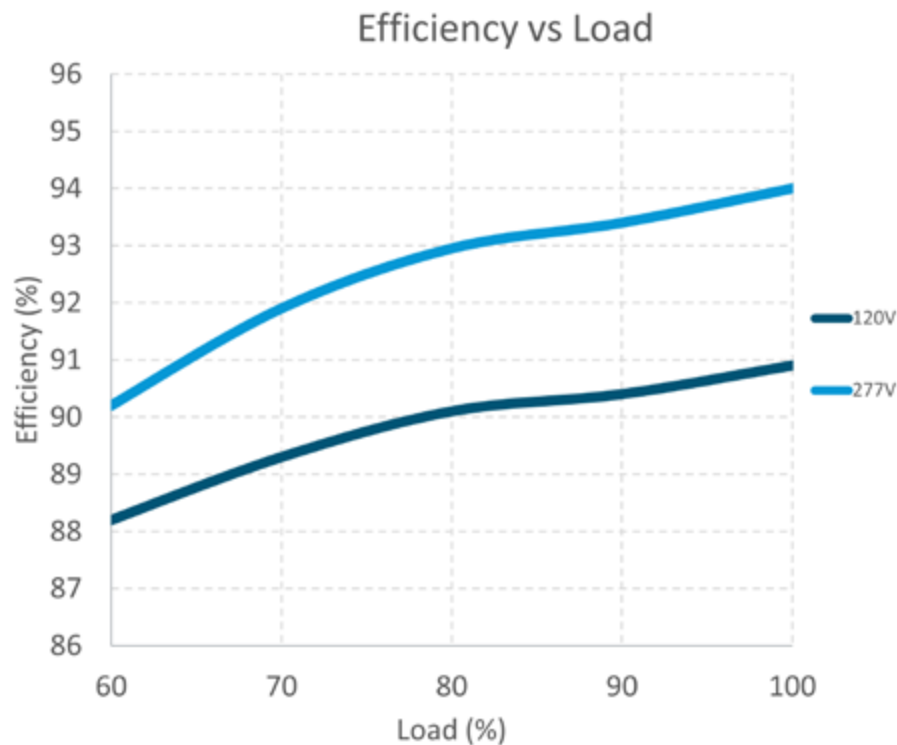
Dimming Curve



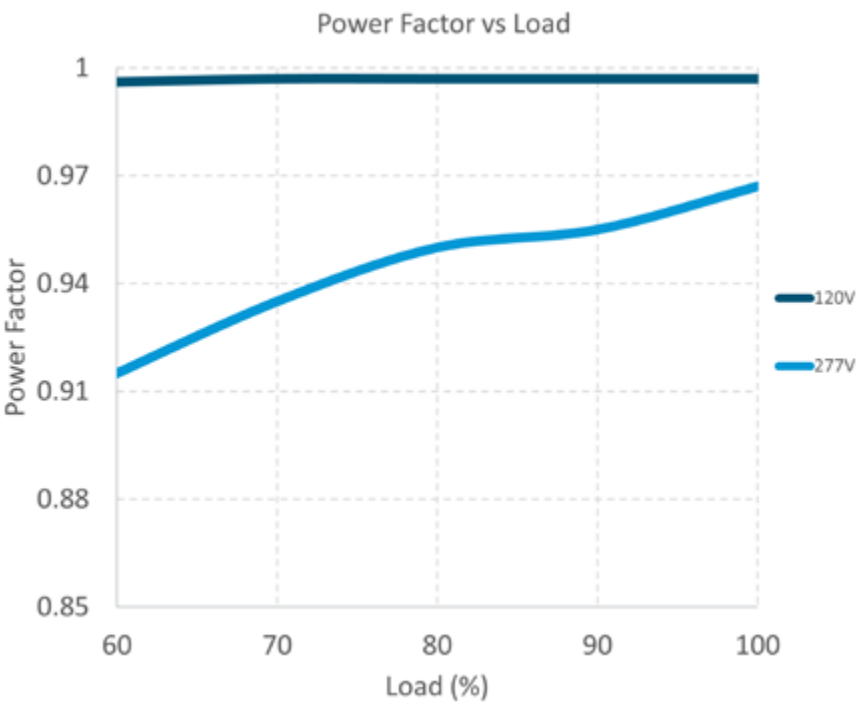
Derating Curve



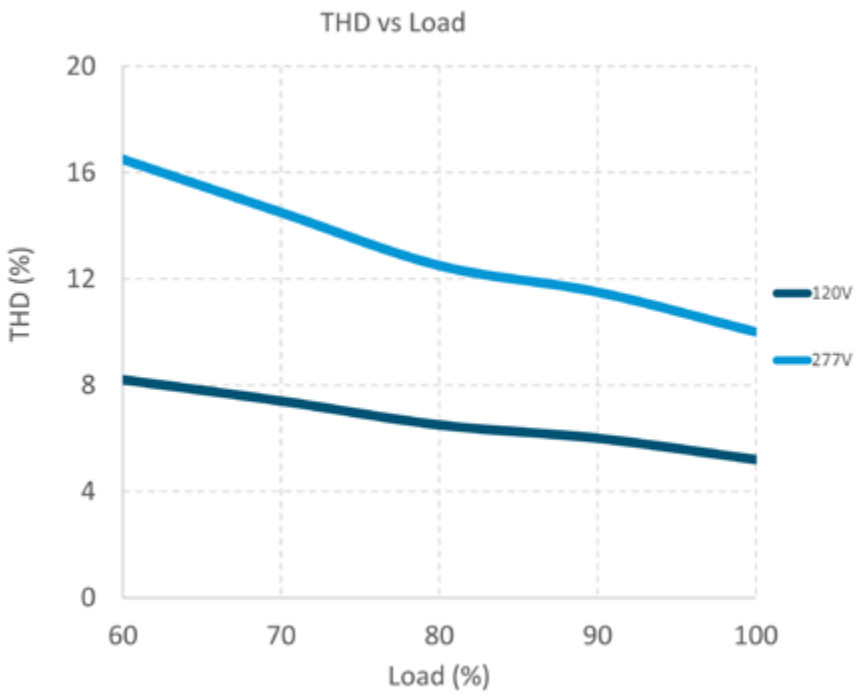
Efficiency vs. Output Voltage



Power Factor Performance



THD Performance



Driver Thermal Protection (OTP)

The OPTOTRONIC P7 LED Drivers have a built in thermal protection feature which prevents the driver from overheating due to abnormal ambient conditions. There is an internal NTC integrated into the drivers that prevents the driver case temperature from exceeding a threshold. Every luminaire is installed in a different application space because of which the thermal profiles can vary significantly. The Driver Thermal Protection is a user configurable feature through the P7 Configuration Tool which helps in customizing the thermal protection limits as per the application needs.

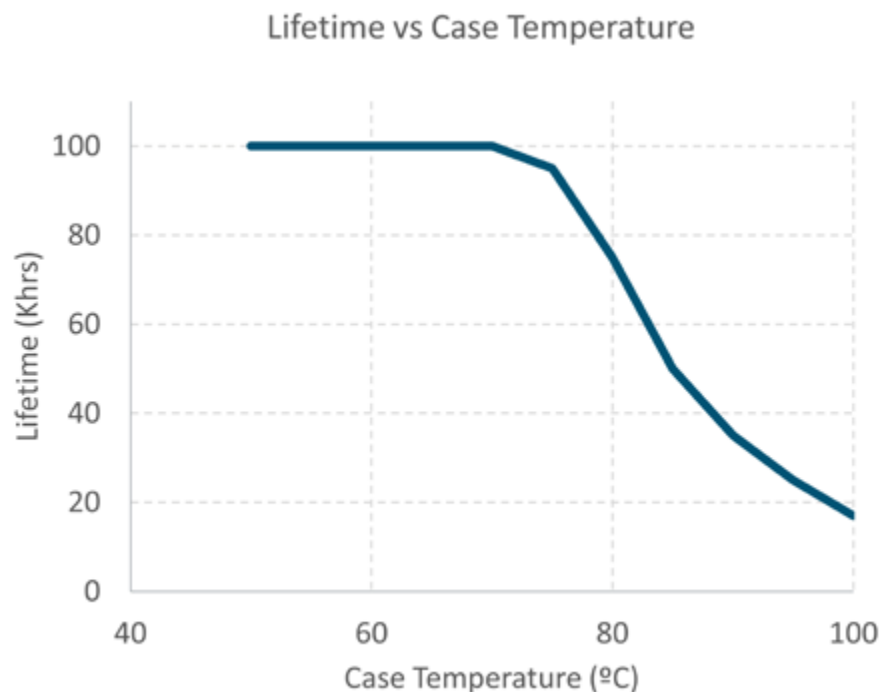
Constant Lumen Output

The Constant Lumen Maintenance feature helps to maintain the required lumen output of the fixture at a constant level throughout its lifetime. In general LED's lumen output will depreciate over time and in order to maintain sufficient light level towards the end of lifetime, the LED's are driven at high current initially and will result in more energy consumption. The constant lumen maintenance will give the flexibility to drive the LEDs at optimal driving current throughout its lifetime. This helps in energy savings, constant light output and enhanced reliability of the system. For more details, please see the P7 Series Driver Software Configuration Manual.

AstroDIM

AstroDIM is an autonomous dimming protocol that provides multi-stage night-time power reduction based on an internal timer; there is no need for an external control infrastructure. The driver is automatically aligned to the on and off times and provides a defined output for the particulate period of time. Compared with conventional systems there are significant cost savings. AstroDIM is designed for dimming without any external control wiring. Therefore, AstroDIM helps to save energy, extend the life of the driver and the LED module and reduce light pollution, even if only a power line is available. In AstroDIM operation, the driver executes a preset dimming profile, which can be reconfigured via the P7 Configuration Tool. The autonomous dimming is regulated by an integrated timer (no real-time clock), which adjusts the dimming profile according to the previous night (operation from switch-on to switch-off). For more details, please see the P7 Series Driver Software Configuration Manual.

Lifetime vs TCase



Warranty

eldoLED OPTOTRONIC® Products are covered by a 5-year limited warranty.
Complete warranty terms can be found at: www.eldoled.com/legal/terms-and-conditions

eldoLED

One Lithonia Way
Conyers, GA 30012
United States

+1 877 353 6533

nasupport@eldoLED.com
www.eldoLED.com

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Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.