XI150C105V140CNF1M

PHILIPS
ADVANCE

LED Driver

Xitanium

150W 120-277V 1.05A 0-10V
XI150C105V140CNF1

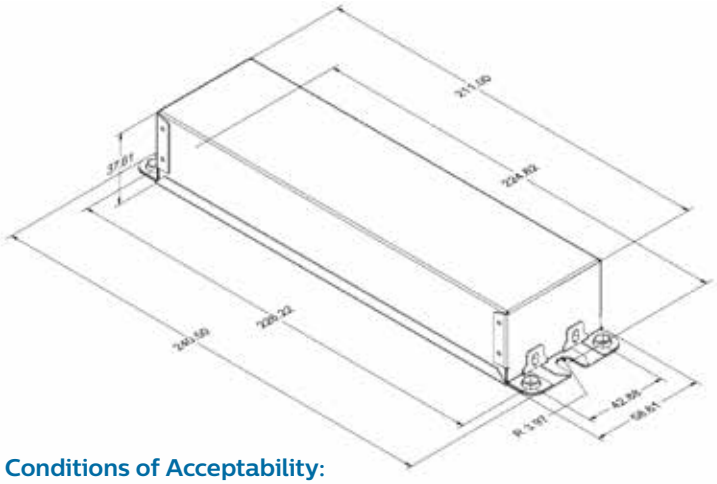
Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. The Philips Advance Xitanium LED Outdoor Driver portfolio offers a range of products specially designed to operate LED solutions in outdoor applications. These drivers are designed for hard-wired integration into outdoor luminaires for the most rugged applications. They operate to specification under wide temperature and electrical ranges to ensure reliability.

Specifications

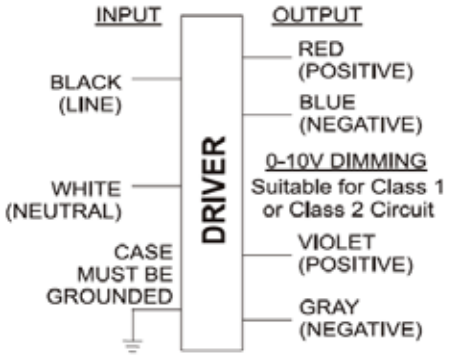
Input Voltage (Vrms)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max. Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	Inrush Current (A_{pk}/10%-µs)	THD @ Max. Load	Power Factor @ Max. Load	Surge Protection Common/ Diff (KV)	Weight (Lbs/kgs)	Envir. Protection Rating
120	150	44-140	1.05	90.7	80	1.4	169	57 / 300	<10%	>0.95	4/4	2.1/0.95	UL Dry & Damp
277				92.8		0.6		132 / 276	<10%				

Enclosure

	In. (mm)
Case Length	8.38 (211.1)
Case Width	2.35 (59.1)
Case Height	1.49 (37.6)
Mounting Length	9.0 (226.2)
Mounting Width	1.7 (42.9)
Overall Length	9.54 (240.5)



Wiring Diagram



Input and output use lead-wires.

Lead-wires are 18AWG 105C/600V solid copper per UL1452.

Lead Length outside enclosure: 270 mm (±30mm) on all wires

Dimming: 270mm (±30mm)

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog	10% ~ 100%	0.105	Dimming source current: 150 µA (±3%)

UL Conditions of Acceptability:

Please contact your Philips representative for a copy of the latest UL Conditions of Acceptability (COA).

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Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

Features

- 50,000+ hour lifetime[1]
- New housing with high thermal capability

Benefits

- Enables long life luminaire designs
- Allows luminaire designs for ambient environments

Application

- Area
- Roadway
- Parking garages
- Floodlights

1. Philips Advance Xitanium LED Drivers are designed and manufactured to engineering standards correlating to an average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

Product Data

Order Information	
Order Code	XI150C105V140CNF1
Full Product Code	XI150C105V140CNF1M (Mid-Pack, 10pcs/Box)
Full Product Name	XITANIUM 150W 1.05A 0-10V Dimming
Line Voltage	120-277Vac rms
Line Current	1.40A @ 120Vac, 0.60 @ 277Vac, 0.67A @ 250Vdc
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108V
Max. Mains Voltage Operational	305V
THD (total)	Refer to graph
Power Factor (PF)	Refer to graph
Efficiency	Refer to graph
Inrush Current	Per NEMA 410
Lightning Surge Protection	Refer to table
Output Information	
Output Voltage Range	44Vdc to 140Vdc
Maximum Open Circuit Voltage	220Vdc
Output Current (ripple = peak to average / average)	15% max @ max Iout and max Vout Low frequency (≤120 Hz) content <5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED -
Ambient Operating Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	80°C
Features	
Interfaces	0-10V Dimming
0-10V Dimming Specifications	150µA ± 3% source current from driver. See dim curve for detail.
Environment & Approbation	
Environmental Protection Rating	UL dry and damp
Agency Approbations	UL879, UL1012, UL935, (cRUs/CSA)
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Isolation	Refer to table
Audible Noise	<24dB Class A

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0-10V Dimming Curve:

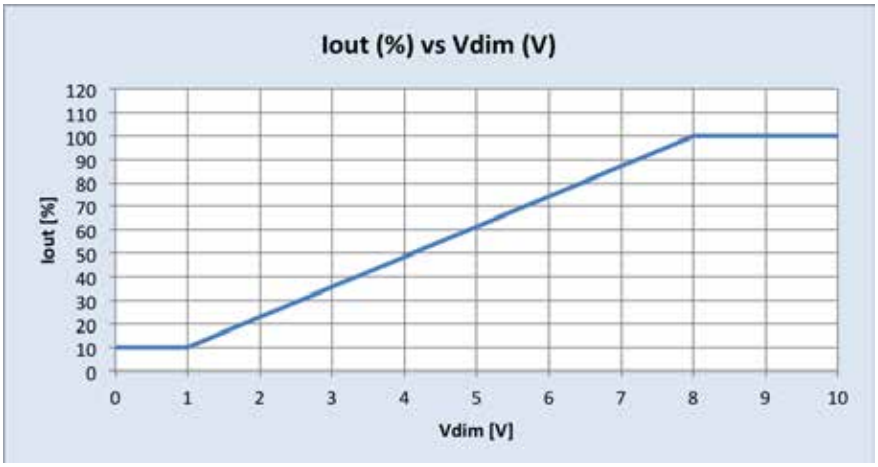
Dimming source current from the driver: 150µA (±3%) (@ 0<Vdim<8V)

LED Current Tolerance at 1050mA ≤ 5% over temperature and component variations and ≤ 10% at any dim level

Minimum Dim Level (nominal): 105 mA

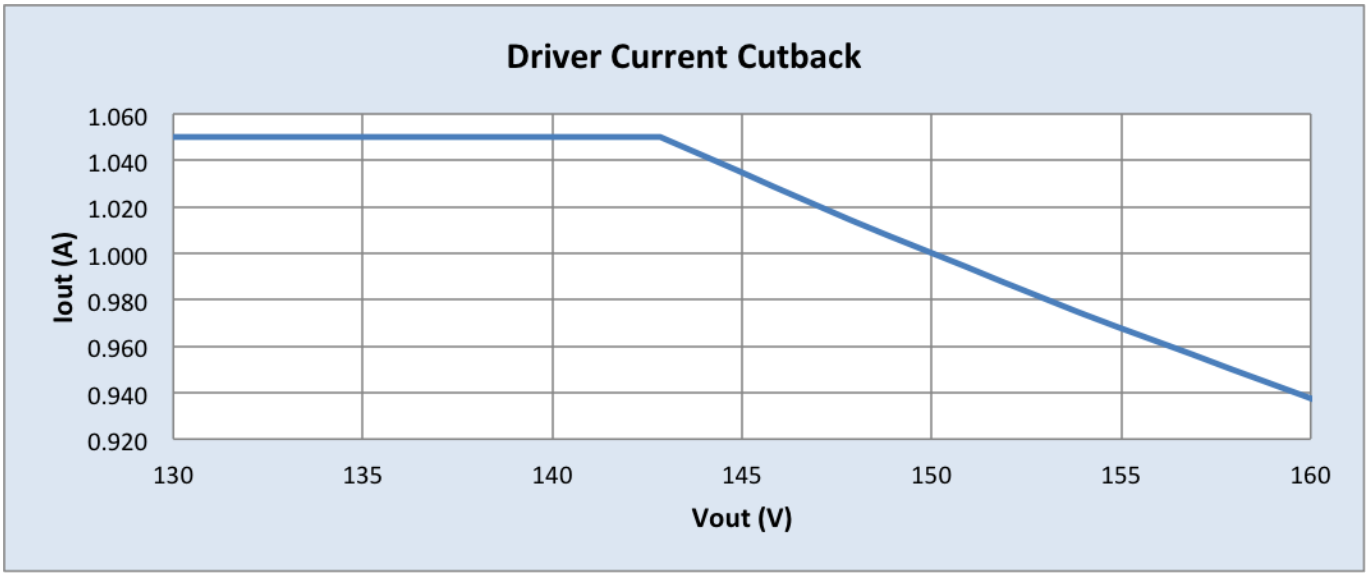
Approved Dimmer List

Manufacturer	Manufacturer Part Number
Lutron	Visit www.lutron.com/advance for a list of dimmers (Mark VII) that will work with sthis driver
Leviton	IllumaTech IP7 series
Philips	Sunrise - SR1200ZTUNV



Driver Current Cutback

The Driver Current Cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting.



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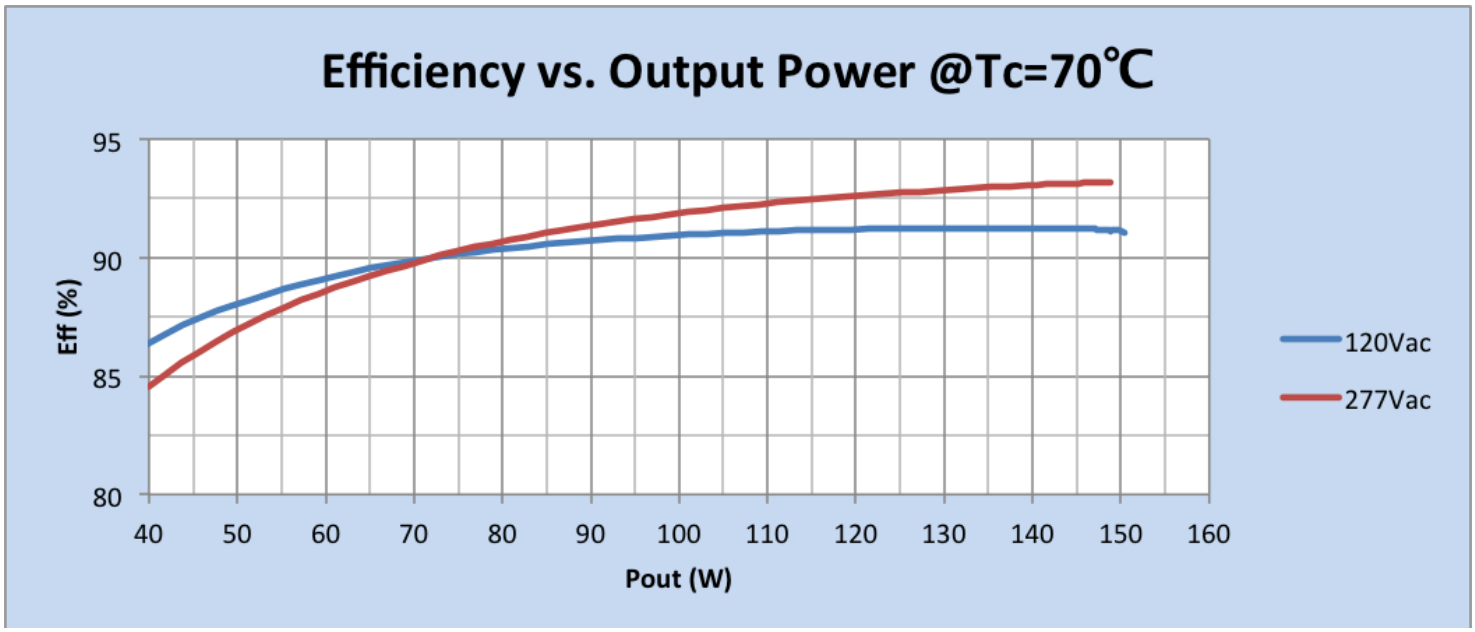
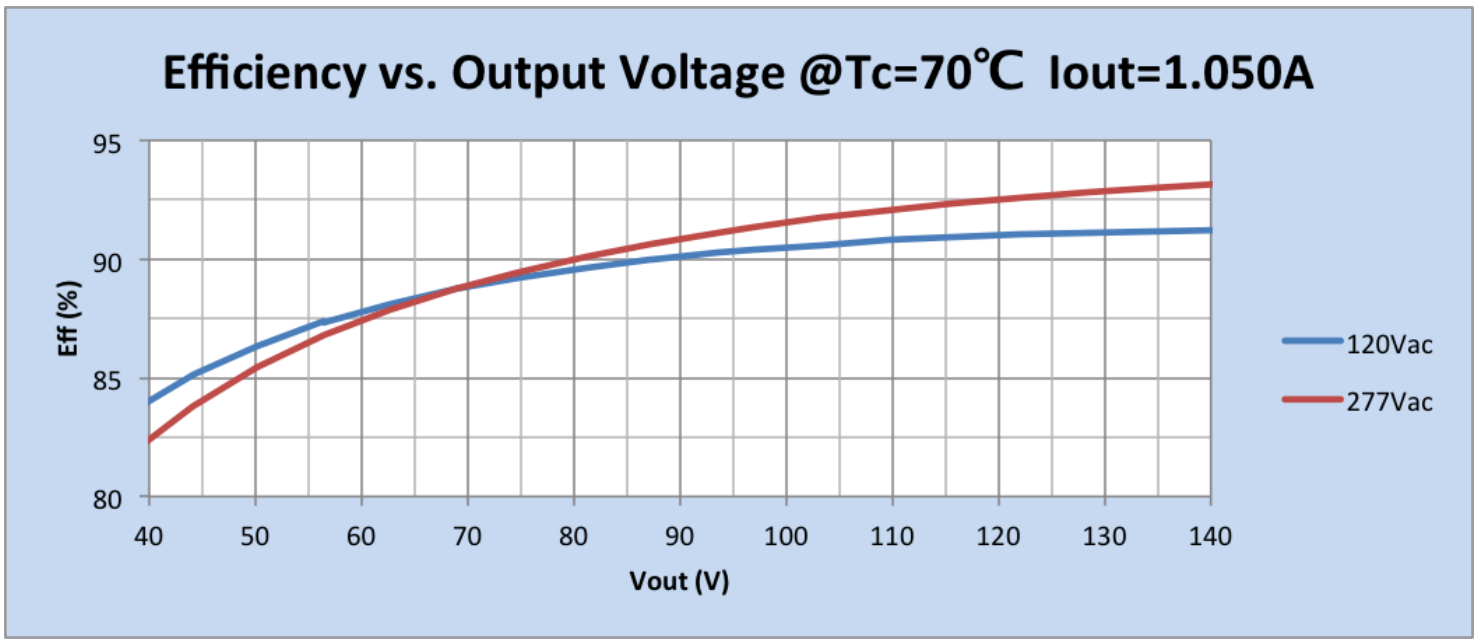
Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.





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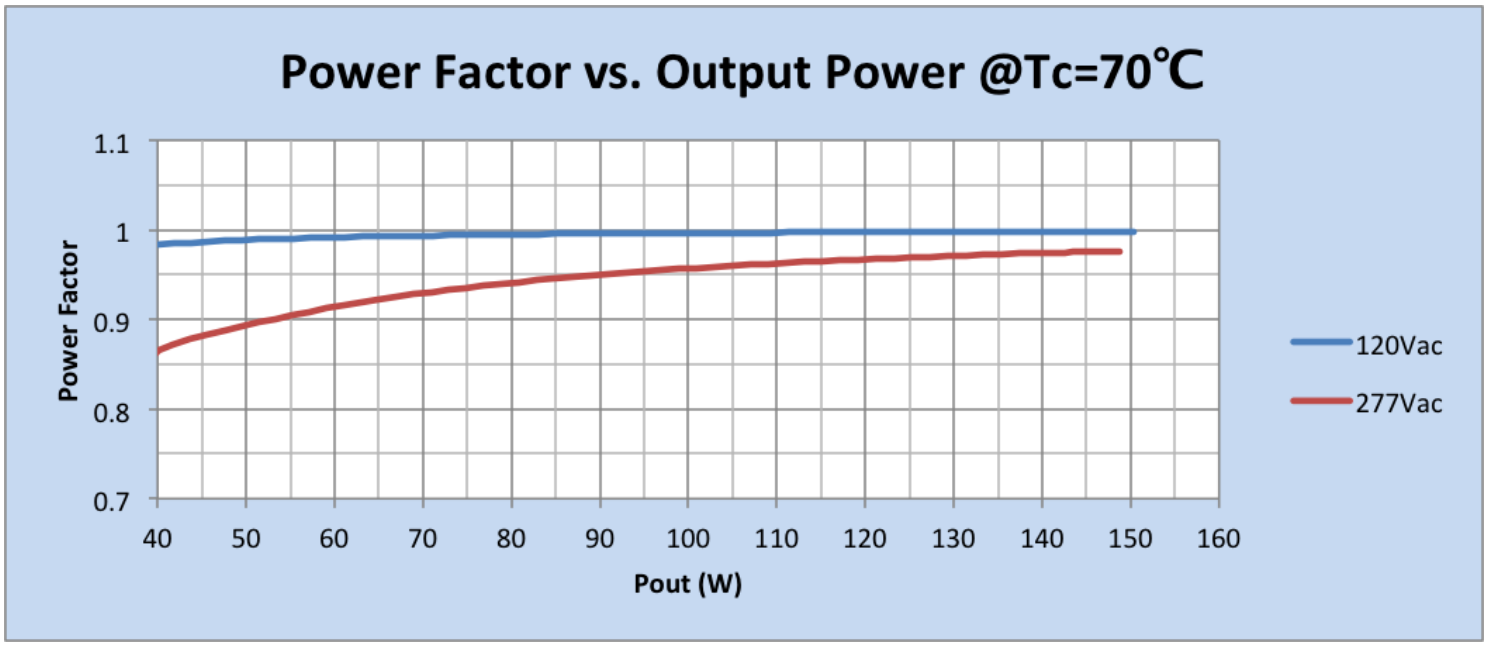

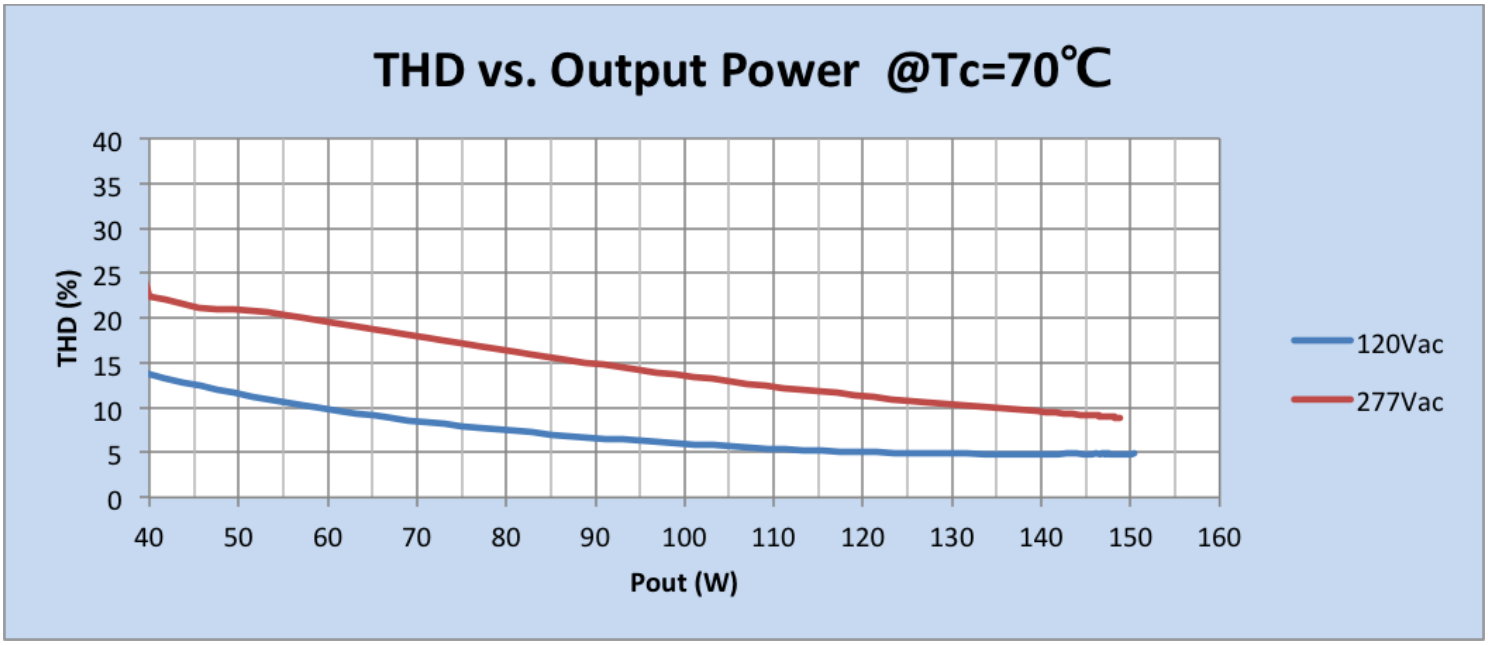

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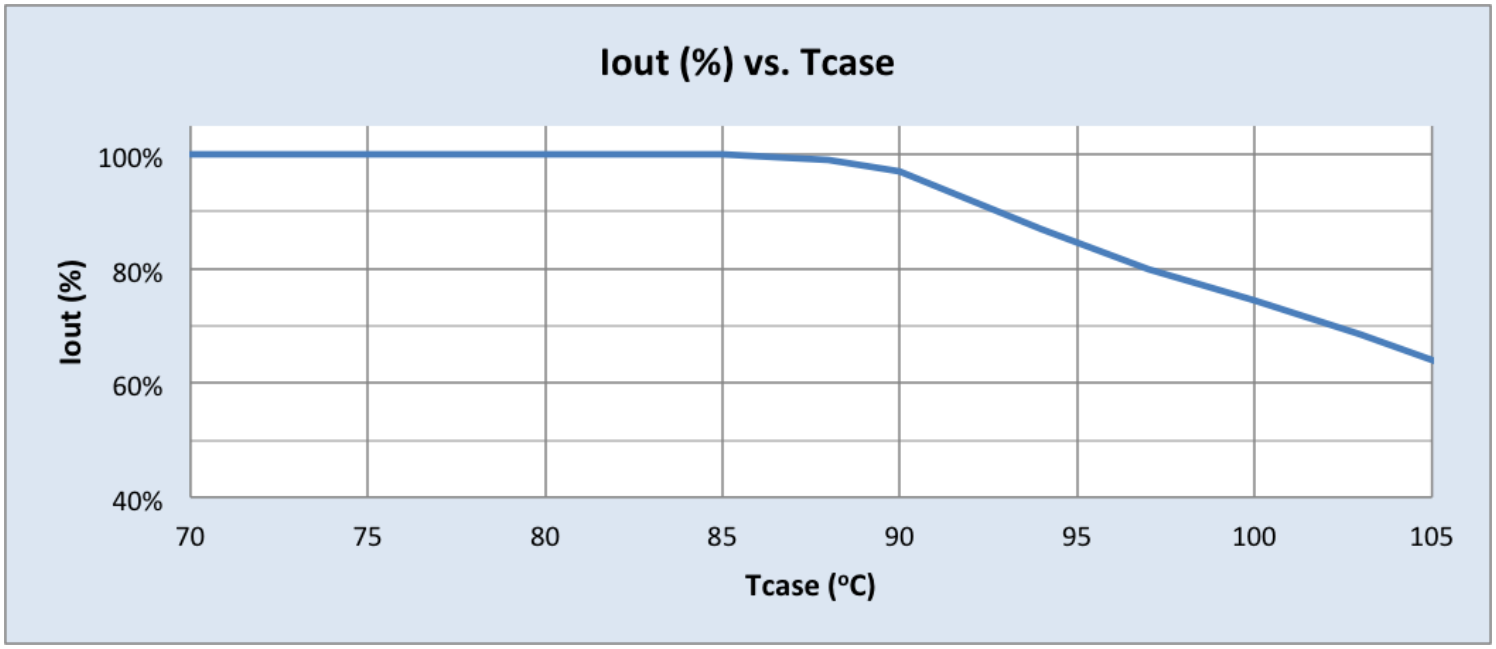
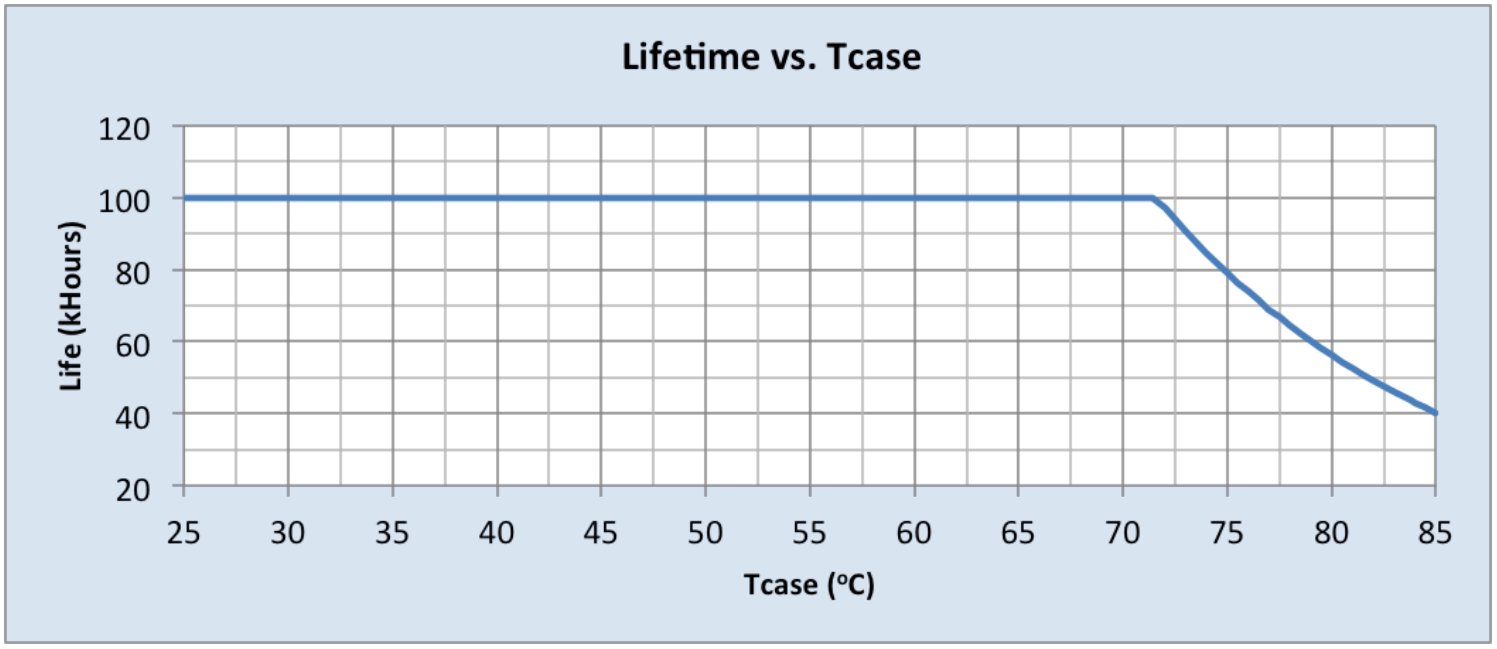
Output Current vs. Driver Case Temperature:



Driver Lifetime vs. Driver Case Temperature:



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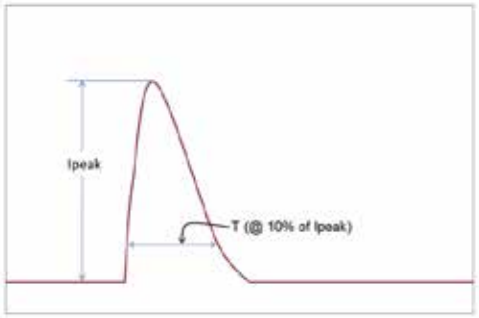
Inrush Current Info:



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vac	57A	300µs
277 Vac	132A	276µs

Inrush current is measured at peak of the corresponding line voltage, source impedance per NEMA 410.

Lightning Surge Info:

ANSI Surge Type	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
1.2/50µs Combination Wave (w/t 2Ω)	4kV	4kV

Isolation:

Isolation	Input	Output	0-10V (Class 1 & 2)	Enclosure
Input	NA	2xU+1kV	2.5KVac	2xU+1kV
Output	2xU+1kV	NA	2.5KVac	2xU+1kV
0-10V (Class 1 & 2)	2.5KVac	2.5KVac	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	NA

Dry & Damp location

Philips Lighting North America Corporation
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Tel: 800-322-2086 Fax: 888-423-1882
Customer/Technical Service: 800-372-3331
OEM Support: 866-915-5886

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