PHILIPS ADVANCE

LED Driver

Xitanium

75W 1.5A 0-10V Dimming XI075C150V050CNY1









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.

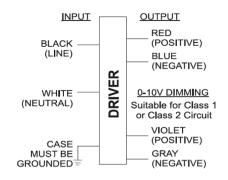
Specifications

Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi- Wave, KV)	Envir. Protection Rating
120	- 75	25 - 50	1.5	88	80°C 0.7	0.7	96	<10%	>0.95 4	4	UL damp & dry and Type HL
277				90		0.3	86	<15%		4	

Enclosure

	In. (mm)
Case Length	5.43 (138.00)
Case Width	2.32 (59.00)
Case Height	1.50 (38.00)
Mounting Length	5.98 (152.00)
Overall Length	6.61 (168.00)

Wiring Diagram



Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.15

Features

- 50,000+ hour lifetime¹
- Excellent thermal performance
- 0-10V Dimming suitable for UL Class 1 and Class 2 wiring

Benefits

- Enables long life luminaire designs
- Allows luminaire designs for a wide range of ambient environments

Application

• Roadway

• Area

- Parking garages
- Floodlights

Electrical Specifications

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

Product Data

Order Information				
Full Product Code	XI075C150V050CNY1M (Mid-Pack, 10pcs/Box)			
Line Frequency	50/60Hz			
Min. Mains Voltage Operational	108 Vac			
Max. Mains Voltage Operational	305 Vac			
Output Information				
Maximum Open Circuit Voltage	90Vdc			
Output Current Ripple (ripple = peak to average / average)	15% max @ max lout			
Output Current Tolerance (at maximum output current)	<5%			
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback			
Features				
0-10V Dimming	150μA (±3%) source current from driver.			
Environment & Approbation				
Operating Ambient Temp. Range	-40°C to +55°C			
Max Case Temperature (Tcase)	80°C			
Agency Approbations	UL 8750, CSA 250.13			
Electromagnetic Compliance	FCC Title 47 Part 15 Class A			
Audible Noise	<24dB Class A			
Weight	2.1 Lbs / 0.95 kgs			

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

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0-10V Dimming Curve

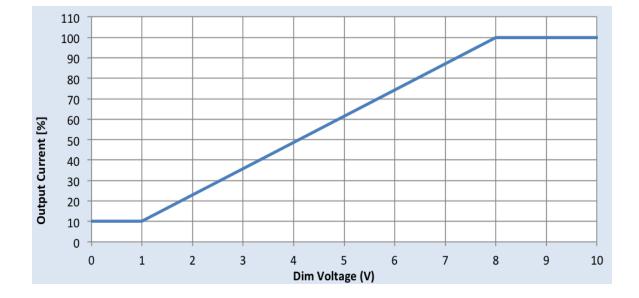
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 10% of lout

Maximum output voltage on the dimming wires: 12V

Approved Dimmer List

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

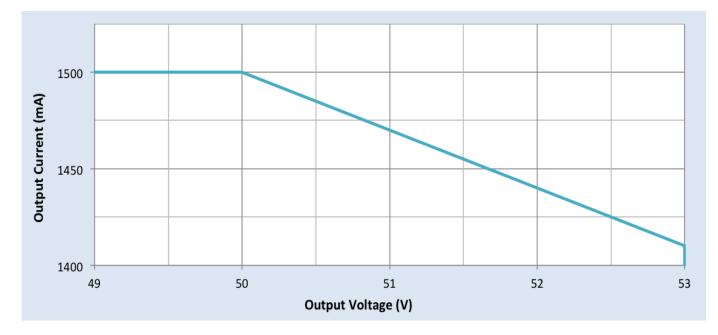


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Driver Current Cutback

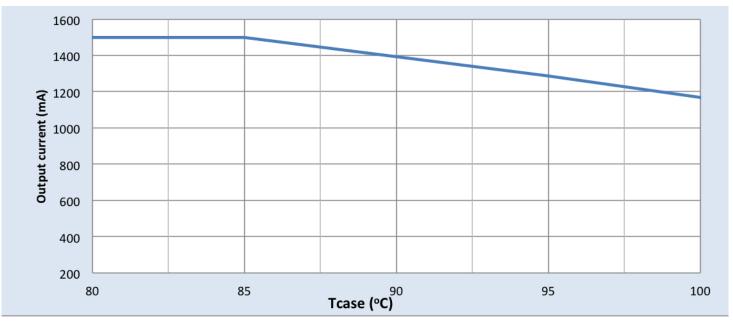
Dimming source current fro The driver current cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting.



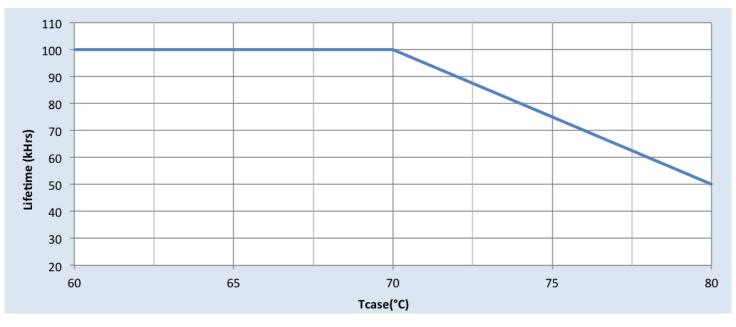
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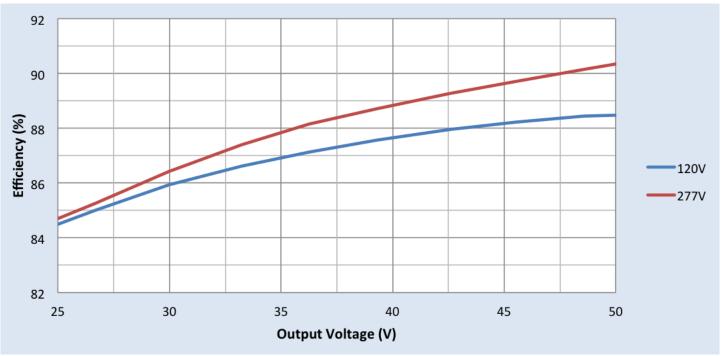
Driver Lifetime vs. Driver Case Temperature



Performance Characteristics

Based on measurements on a typical sample at 70° C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

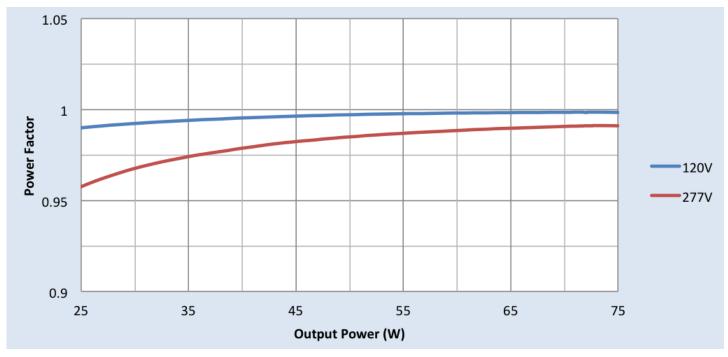
Efficiency Vs. Output Voltage



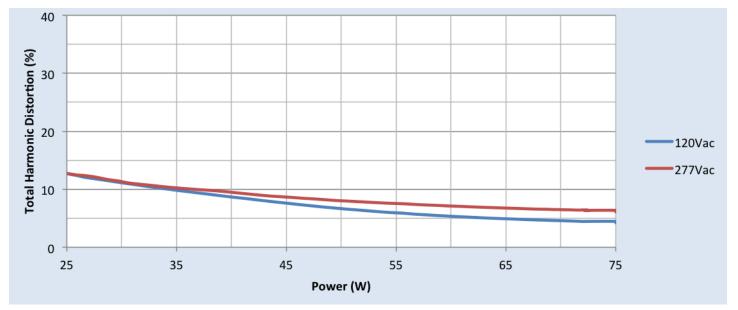
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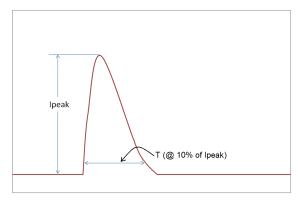
Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)	
120 Vrms	38A	210µS	
277 Vrms	90A	190µS	

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)
1.2/50 μ s Combination Wave (w/t 2 Ω)	4kV	4kV

Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	NA	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	NA	2.5kV	2xU+1kV
0-10V	2.5kV	2.5kV	NA	2.5kV
Enclosure	2xU+1kV	2xU+1kV	2.5kV	NA

U = Max input voltage

UL Conditions of Acceptability

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

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