## ADVANCE

by (signify

**LED Driver** 

#### Xitanium

XI150C150V100CNF1



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 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 help ensure reliability.

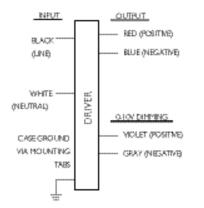
#### Specifications

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	150	0 30-100 1.5	1 -	90	- 80°C	1.4	- 169 <10%	~10%	>0.95	e	UL damp & dry and
277			1.5	92.5	00 C	0.6		>0.95 6	Type HL		

#### Enclosure

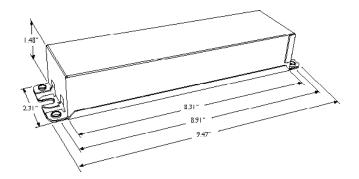
	In. (mm)
Case Length	8.31 (211.1)
Case Width	2.31 (58.6)
Case Height	1.48 (37.6)
Mounting Length	8.91 (226.3)
Overall Length	9.47 (240.5)





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 lifetime<sup>1</sup>
- Excellent thermal performance
- 6kV combi-wave surge rating to comply with ANSI C82.77-5 CAT C low

#### **Benefits**

- Enables long life luminaire designs
- Allows luminaire designs for a wide range of ambient environments
- No external surge protection required to pass C82.77-5 CAT C low

#### Application

- Area
- Roadway
- 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	XI150C150V100CNF1M (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	160Vdc		
Output Current Ripple	15% max @ max lout		
(ripple = peak to average / average)	Low frequency (<120 Hz) content <5%		
Output Current Tolerance	<5%		
(at maximum output current)			
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback		
Features			
0-10V Dimming	150µA (±3%) source current from driver. See dim curve for detail.		
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		

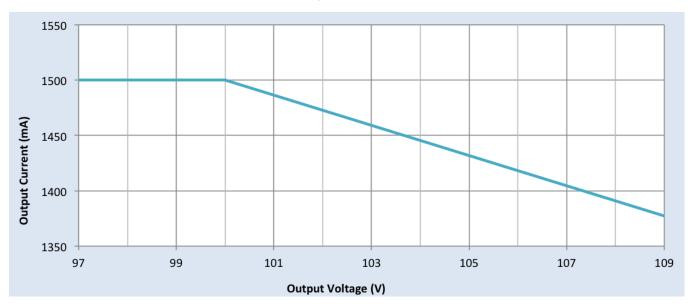
<sup>1.</sup> Advance Xitanium LED Drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTTF modeling.

#### **Electrical Specifications**

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

#### **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.



#### **Electrical Specifications**

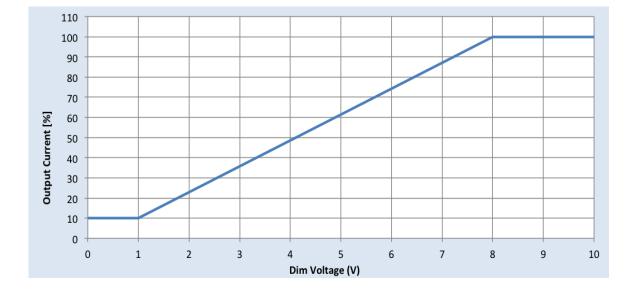
All the specifications are typical and at 25°C Tcase unless specified otherwise.

#### **0-10V Dimming Curve**

Dimming source current from the driver: 150µA (@ 0<Vdim<8V) Minimum dim level: Factory default 10% of lout Maximum output voltage on the dimming wires: 12V

#### **Approved Dimmer List**

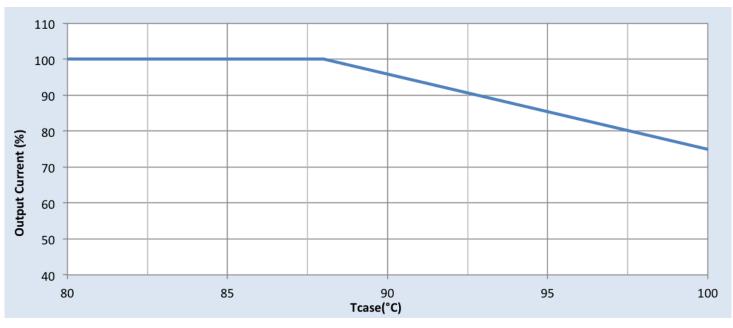
Manufacturer	Manufacturer Part Number	
Lutron	Visit www.lutron.com/ advance for a list of dimmers (Mark VII) that will work with this driver	
Leviton	IllumaTech IP7 series	
Advance	Sunrise - SR1200ZTUNV	



#### **Electrical Specifications**

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

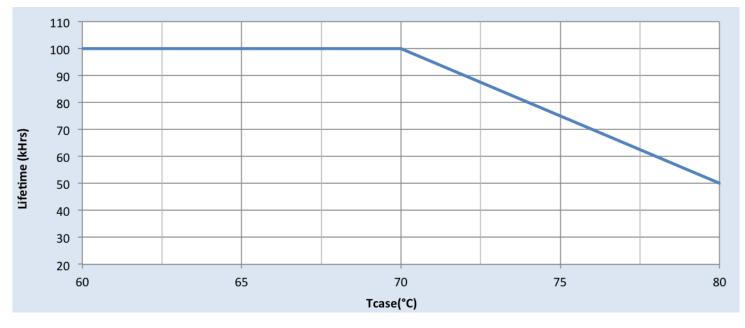
#### **Output Current Vs. Driver Case Temperature**



#### Note

There is ±5°C tolerance on the driver case temperature.

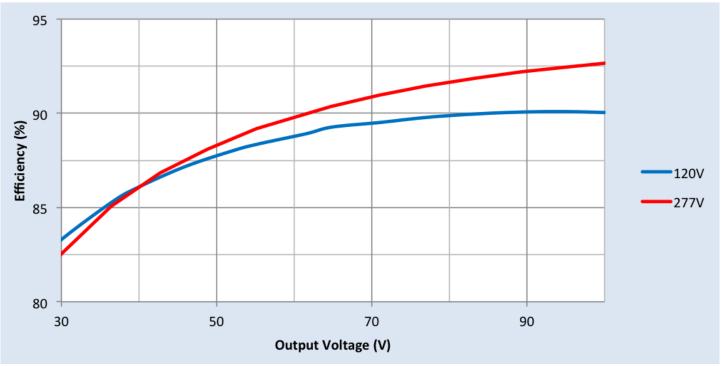
#### Driver Lifetime vs. Driver Case Temperature



#### **Performance Characteristics**

Based on measurements on a typical sample at  $70^{\circ}$ C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

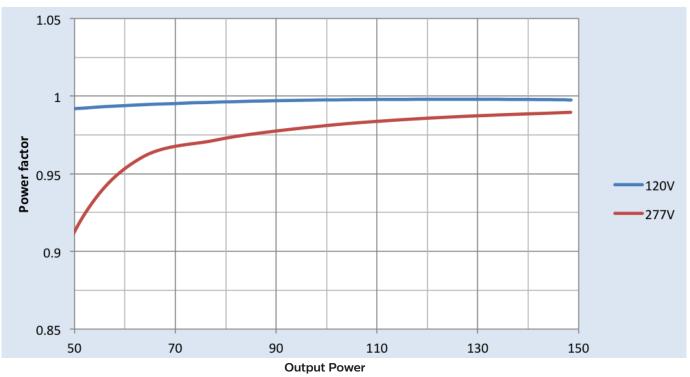
#### Efficiency Vs. Output Voltage



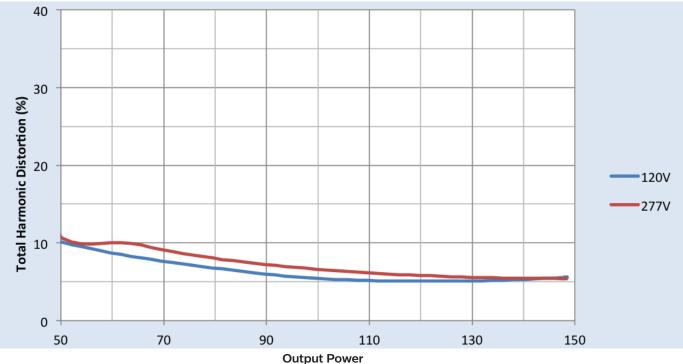
#### **Performance Characteristics**

Based on measurements on a typical sample at  $70^{\circ}$ C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

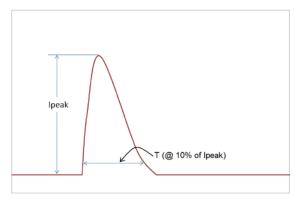
#### Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



#### **Inrush Current Info**



Vin	Ipeak	T (@ 10% of Ipeak)	
120 Vrms	32A	298µS	
277 Vrms	110.4A	273µS	

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 $\mu$ s Combination Wave (w/t 2 $\Omega$ )	6kV	6kV

#### 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	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	NA

U = Max input voltage

#### **UL Conditions of Acceptability**

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

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

# Signify

© 2019 Signify Holding. All rights reserved. This document contains information relating to the product portfolio of Signify which information may be subject to change. No representation or warranty as to the accuracy or completeness of the information included herein is given and any liability for any action in reliance thereon is disclaimed. All trademarks are owned by Signify Holding or their respective owners. Signify North America Corporatio 200 Franklin Square Drive, Somerset, NJ 08873 Telephone 855-486-2216 Signify Canada Ltd. 281 Hillmount Road, Markham, ON, Canada L6C 2S3 Telephone 800-668-9008