

by (s) ignify

LED Driver

Xitanium

XI040C110V054BST2



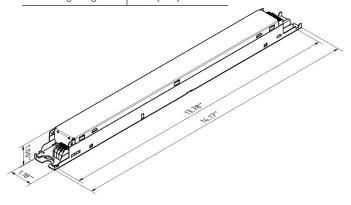
The Advance Xitanium range of linear LED drivers is designed to provide OEMs with ultimate flexibility. These models are compatible with standard 0-10V dimming systems to deliver reliably smooth dimming performance down to a minimum of 1%. Enabled with SimpleSet technology, these drivers offer the needed flexibility and performance for the application with precise tuning of drive currents, selectable dimming curves and adjustable minimum dimming levels. With wide operating windows, slim profile and simple current adjustability, the drivers make it easy for luminaire manufacturers to design linear fixtures with desired lumen levels to suit the application.

Specifications

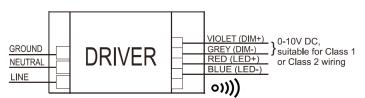
Input Volt. (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 75°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Ring Wave, KV)	Envir. Protection Rating	Dimming	Dimming Range (with specified dimmers)	Min. Output Current (A)	Other Comments
120	— 40	10 -54	0.1 - 1.1	85	Life-75°C	0.4 47	47	<10%	<10% >0.90	1 2.5	UL damp	0-10V Analog	1% ~	0.004	Dimming source
277				87	UL-85°C		47	<15%			& dry	Class 1 or 100% Uring 0	0.004	current: 150 µA	

Enclosure

	In. (mm)
Case Length	14.17 (360)
Case Width	1.18 (30)
Case Height	1.00 (25.4)
Mounting Length	13.78 (350)



Wiring Diagram



WARNING:

Install in accordance with National and Local Electrical Codes.
Use 18 AWG Solid Copper Wire Strip Wire 3/8".

GROUNDING:

Driver case must be grounded.









40W 0.1-1.1A 54V 0-10V INT (1% dim) with SimpleSet

Features

- · 50,000+ hour lifetime¹
- · SimpleSet programmable
- · Large operating window
- 1% minimum dim level

Benefits

- Slim profile housing enables easy design-in with excellent thermal performance
- Enables simple, fast, flexible application-specific configurations
- Enables fixture designs with comprehensive application coverage for various loads and lumen levels

Application

- Indoor linear applications such as troffers and pendants
- Office
- Education
- Healthcare
- Retail
- · Big Box stores

Electrical Specifications

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

Product Data

Order Information					
Full Product Code	XIO40C110V054BST2 (Mid-Pack, 18pcs/Box)				
Line Frequency	50/60Hz				
Min. Mains Voltage Operational	108 Vac				
Max. Mains Voltage Operational	305 Vac				
Output Information					
Maximum Open Circuit Voltage	< 60Vdc				
Output Current Ripple (ripple = peak to average / average)	15% max @ max lout 4% max @ Visible for stroboscopic frequency range 60Hz-3KHz				
Output Current Tolerance (in the performance window)	<5%				
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback				
Features					
0-10V Dimming	150 µA source current from driver. See dim curve for detail.				
AOC (Adjustable Output Current)	0.1A-1.1A via SimpleSet programming (refer to graph and notes below)				
Additional SimpleSet Configurable Features	Adjustable minimum dimming level, Dimming curve selection (linear or logarithmic), Adjustable output level, Adjustable output min, OEM write protection				
Environment & Approbation					
Operating Ambient Temp. Range	-20°C to +50°C				
Max Case Temperature (Tcase)	85°C				
Agency Approbations	UL8750, UL1310, CSA-C22.2 No. 250.13-17, CSA Class P, ETL Class P, UL Class P, NOM				
Electromagnetic Compliance	FCC Title 47 Part 15 Class A				
Audible Noise	<24dB Class A				
Weight	0.58 Lbs / 0.265 kgs				

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

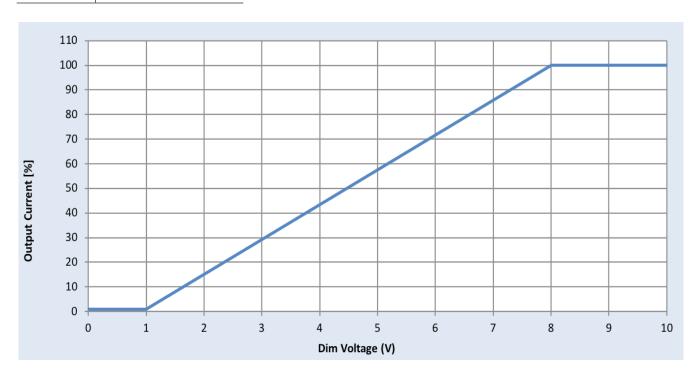
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 1% of lout (minimum 4mA)

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		

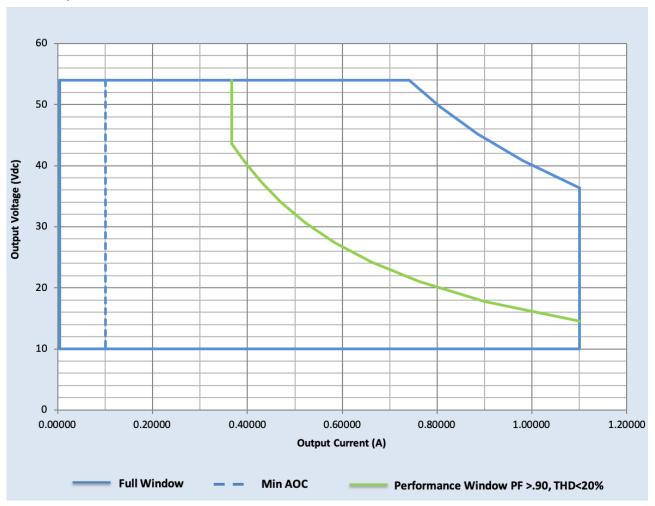


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Driver Output Window



Notes

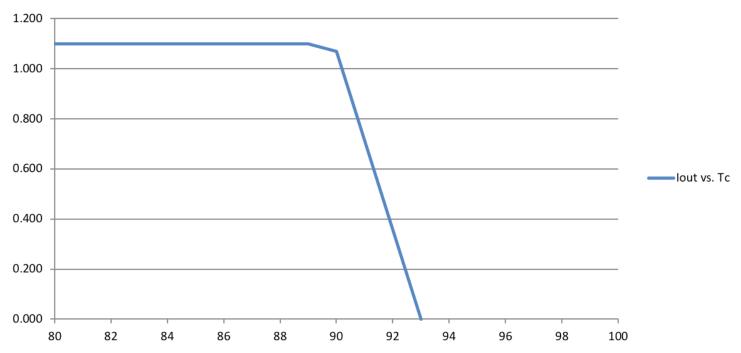
- 1. Factory default output current is 1.1A.
- 2. For dimming to a minimum level of 1% the output current setting through AOC should be \geq 0.37A.

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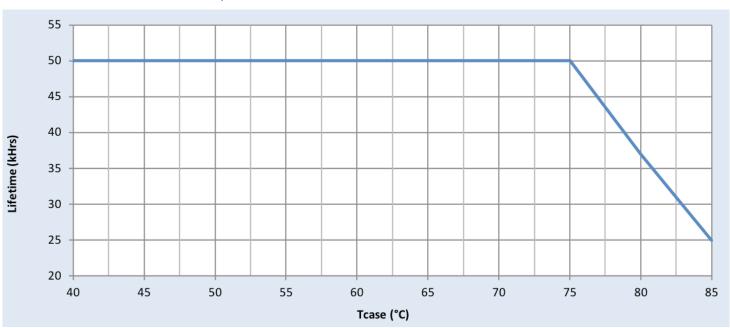
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Output Current Vs. Driver Case Temperature



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

Driver Lifetime vs. Driver Case Temperature

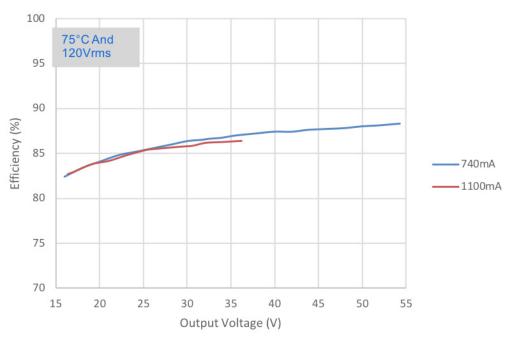


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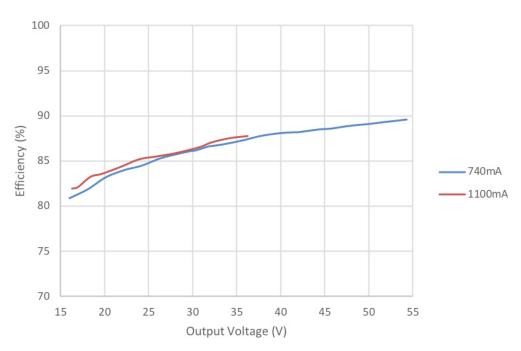
Performance Characteristics

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 at 120Vac



Efficiency Vs. Output Voltage at 277Vac

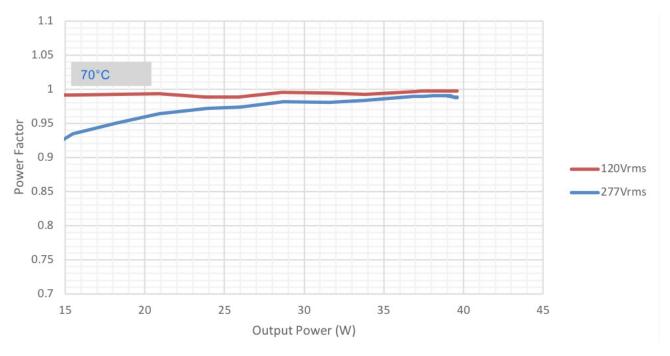


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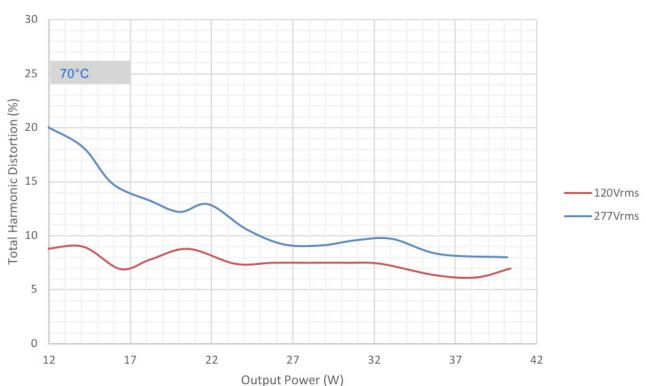
Performance Characteristics

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Power Factor Vs. Output Power

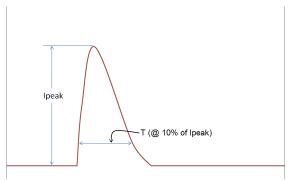


Total Harmonic Distortion (THD) Vs. Output Power



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Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)		
120 Vrms	13.8A	188µS		
277 Vrms	37.5A	192µS		

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)		
100kHz Ring Wave (w/t 30Ω)	>2.5KV	>2.5KV		

Isolation

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

U = Max input voltage

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