PHILIPS ADVANCE

LED

LED Driver

Xitanium

150W 347-480V 0.70A 0-10V XH150C070V210CNF1



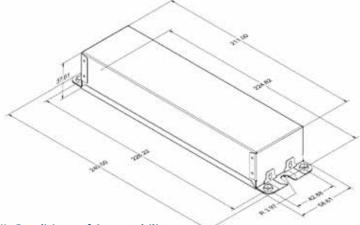
Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. The Philips Advance Xitanium LED Outdoor Driver portfolio offers a range of products 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

				Efficiency@			Max.	Inrush			Surge		
Input	Output	Output	Output	Max Load	Max.	Input	Input	Current	THD@	Power	Protection		Envir.
Voltage	Power	Voltage	Current	and 70°C	Case Temp.	Current	Power	(A _{pk} /10%-	Max.	Factor @	Common/	Weight	Protection
(Vrms)	(W)	(V)	(A)	Case	(°C)	(Arms)	(W)	μs)	Load	Max. Load	Diff (KV)	(Lbs/kgs)	Rating
347	150	60 -	0.7	92	00	0.50	167	56 / 196	<10%	- O OF	4/4	20/001	UL Dry &
480	150 210	210	0.7	92.5	0.35	167	77 / 196 <15% >0.95 4/4	4/4	2.0/ 0.91	Damp			

Enclosure

	1
	In. (mm)
Case Length	8.30 (211.0)
Case Width	2.31 (58.6)
Case Height	1.48 (37.6)
Mounting Length	8.84 (224.6)
Mounting Width	0.31 (7.9)
Overall Length	9.47 (240.5)

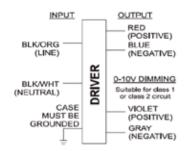


UL Conditions of Acceptability:

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

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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 input, output and dimming wires.

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.07	Dimming source current: 150 µA (±3%)

Electrical Specifications

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

Features

- · 50,000+ hour lifetime1
- · Isolated 0-10V dimming
- · New housing with high thermal capability

Benefits

- · Enables long life luminaire designs
- Helps to maximize energy savings and allows application specific light levels
- Allows luminaire designs for ambient environments

Application

- · Area
- · Roadway
- · Parking garages
- Floodlights
- Phillips 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	XH150C070V210CNF1M
Full Product Code	XH150C070V210CNF1M (Mid-Pack, 10pcs/Box)
Full Product Name	XITANIUM 150W 0.7A 0-10V Dimming
Line Voltage	347-480Vac_rms
Line Current	0.50A @ 347V, 0.35A @ 480V
Line Frequency	50/60Hz
Min. Mains Voltage Operational	312V
Max. Mains Voltage Operational	528V
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	60Vdc to 210Vdc
Maximum Open Circuit Voltage	300Vdc
Output Current	15% max @ max lout and max Vout
(ripple = peak to average / average)	Low frequency (<120 Hz) content <5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED –
Operating Ambient Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	80°C
Features	Talana.
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

Electrical Specifications

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0-10V Dimming Curve:

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

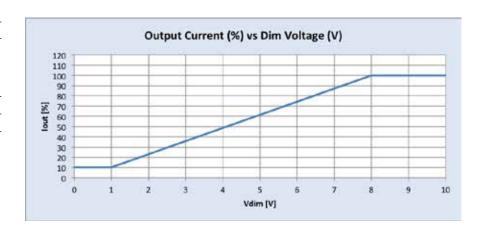
LED Current Tolerance at 700mA ≤ 5% over temperature and component variations and ≤ 10% at any dim level

Minimum Dim Level: 10% of lout (minimum 70mA)

Maximum output voltage on the dimming wires: 12V

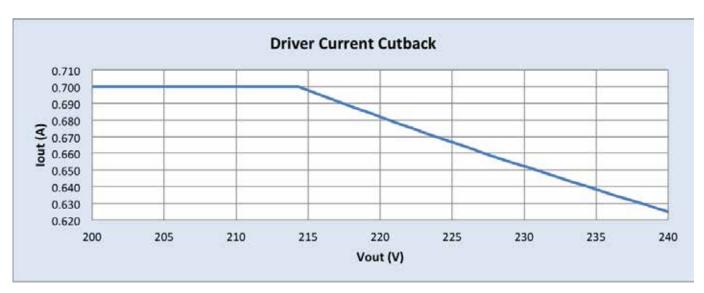
Approved Dimmer List

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



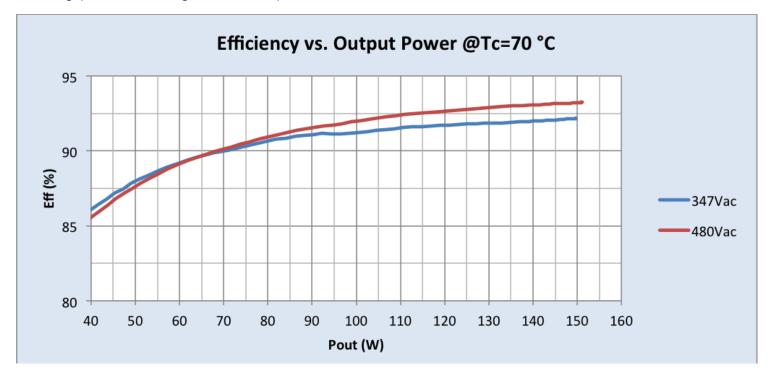
Driver Current Cutback

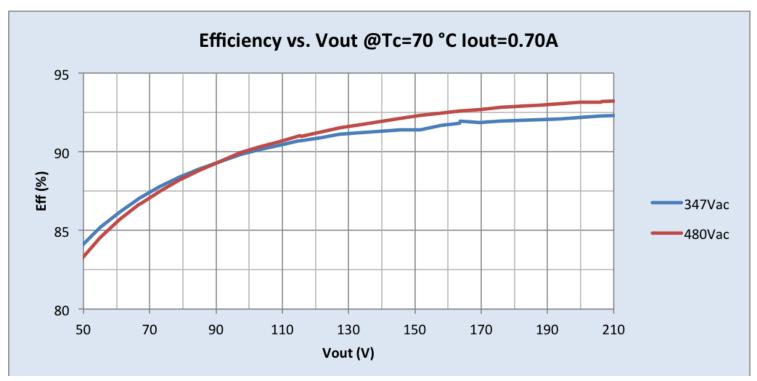
The Driver Current Cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting.



Performance Characteristics

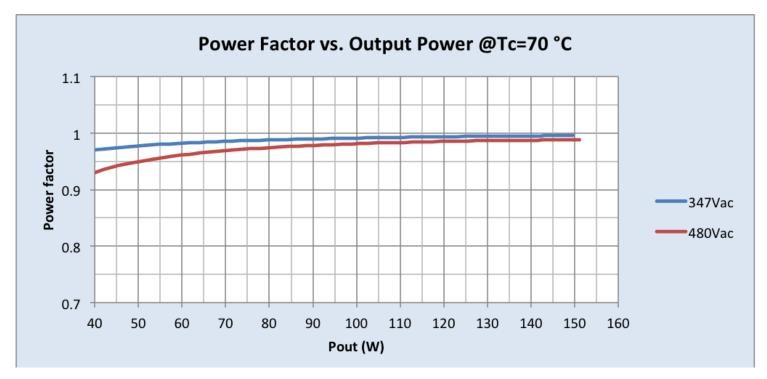
Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

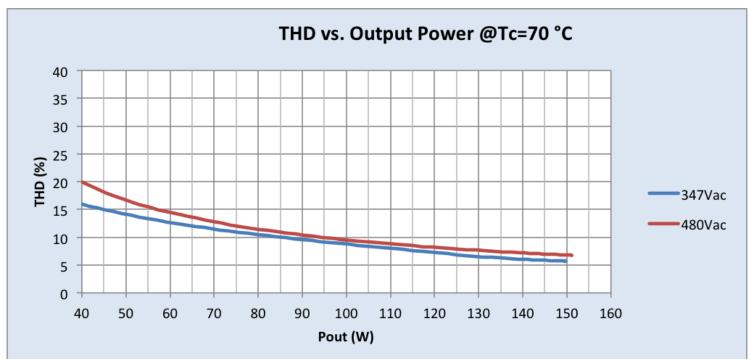




Performance Characteristics

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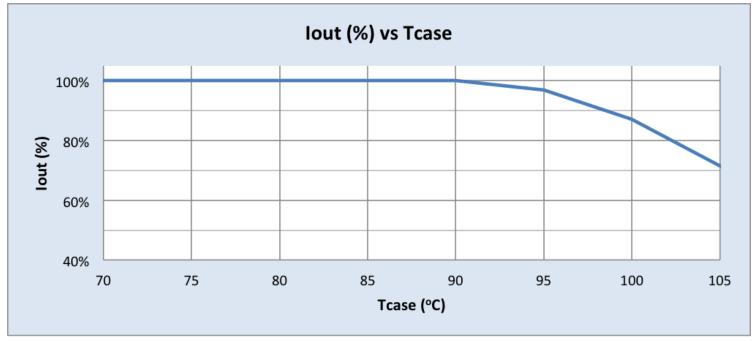




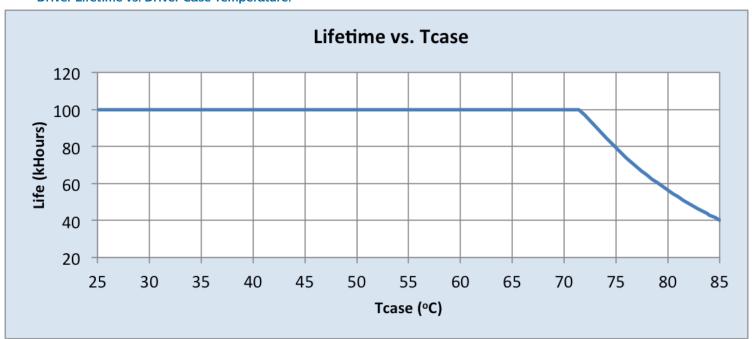
Electrical Specifications

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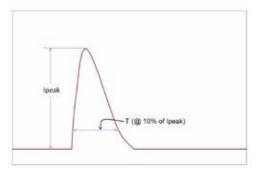
Output Current vs. Driver Case Temperature:



Driver Lifetime vs. Driver Case Temperature:



Inrush Current Info:



Vin	Ipeak	T (@ 10% of Ipeak)
347 Vrms	56A	196µs
480 Vrms	77A	196µs

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	4kV	4kV
Wave (w/t 2Ω)		

Isolation:

			0-10V	
Isolation	Input	Output	(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



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