

Philips Advance Xitanium LED Driver

PHILIPS ADVANCE XITANIUM LED DRIVER SPEC SHEET



XITANIUM 100W 2.30A 0-10V INT-S
XI100C230V042CNF1

Features

- UL Class 2 output, high drive current (2.3A)
- Available in both Fixed and Dimmable version

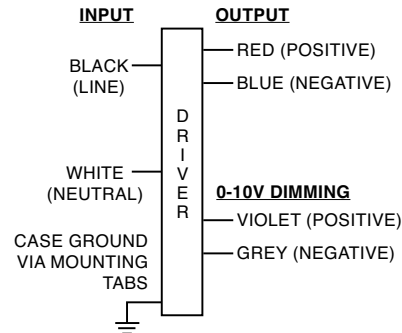
Benefits

- Tailored specifically for various COB arrays
- Helps to maximize energy savings and allows application specific light levels

Dimensions

	in.	mm
Case Length	8.37	212.6
Case Width	1.70	43.2
Case Height	1.14	29.0
Mounting Length	8.89	225.8
Overall Length	9.45	240.0

Wire Diagram



Product Data

Input and output use lead-wires.

Lead-wires are 18AWG solid copper:

105°C/600V per UL1316 and 90°C/1000V per UL1452.

Lead Length outside enclosure:

280 mm (+50.8mm -25.4mm) on all wires.

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 2 Wiring	15% ~ 100%	0.345	NA

Input Voltage (Vac)	Output Power (W)	Output Voltage Range (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	Inrush Current (Apk/ 50%-µs)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection Common/ Diff (KV)	Weight (Lbs/ kgs)	Envir. Protection Rating
120	96.6	21 - 42	2.30	85	90°C	0.95	123	36.5 / 100	<8%	>0.95	4/4	1.48/ 0.67	UL damp and dry
277				88		0.40		82.5 / 100	<12%				



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SPEC SHEET

Electrical Specifications

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

Ordering Information	
Order code	XI100C230V042CNS1
Full product code	XI100C230V042CNS1M (Mid-Pack, 10pcs/Box)
Full product name	XITANIUM 100W 2.30A 0-10V INT-S
Input Information	
Line Voltage	120-277Vac_rms
Line Current	0.95A @ 120V, 0.40A @ 277V
Line Frequency	50/60Hz
Min. Mains voltage operational	108 V [min]
Max. Mains voltage operational	305V [max]
THD (total)	Refer to graph
Power Factor (PF)	Refer to graph
Inrush Current	Per NEMA 410
Lightning Surge Protection	Refer to table below
Output Information	
Output voltage range	21V to 42Vdc
Maximum open circuit voltage	42V (±5%)
Output Current Ripple (ripple = peak to average / average)	10% max @ max lout Low frequency (≤120 Hz) content <5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED-
Ambient Temp Range	-40°C to +55°C
Max Case Temperature (Tcase)	90°C
Features	
Interfaces	0-10V Dimming
AOC (Adjustable Output Current)	N/A
MTP (Module Temperature Protection)	N/A
0-10V Dimming Specifications	See dim curve for detail.
Environment & Approbation	
Environmental Protection Rating	UL damp and dry
Agency Approbations	UL8750, ULI310, UL935, CSA-C22.2 No. 250.13-12, CSA C22.2 No. 223
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:

LED Current Tolerance at 2300mA \leq 5% over temperature and component variations and \leq 10% at any dim level.

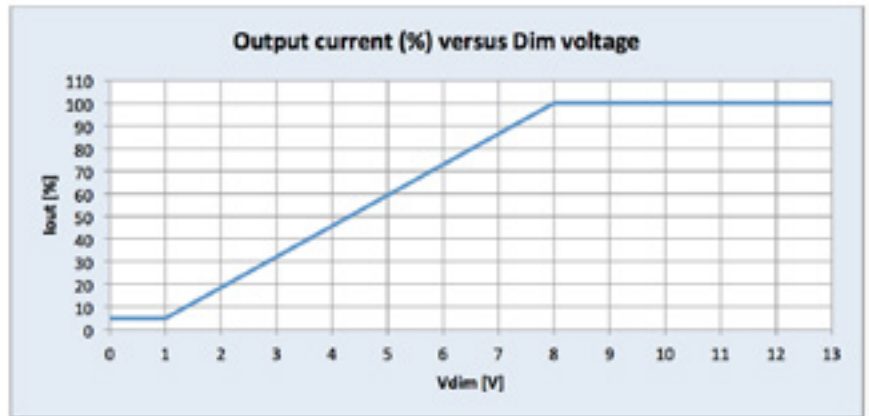
Minimum Dim Level: 15% of Iout (minimum 345mA)

Maximum output voltage on the dimming wires: 13V

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

For compatibility with other dimmers please contact the dimmer manufacturer.

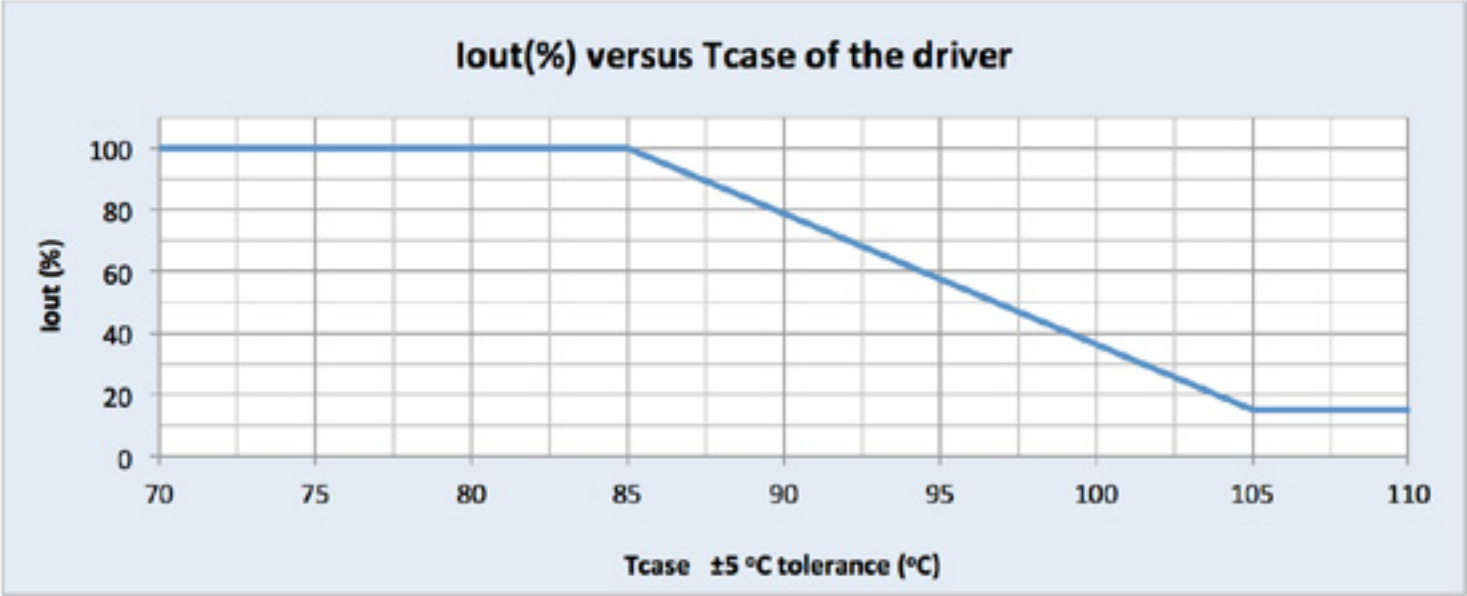


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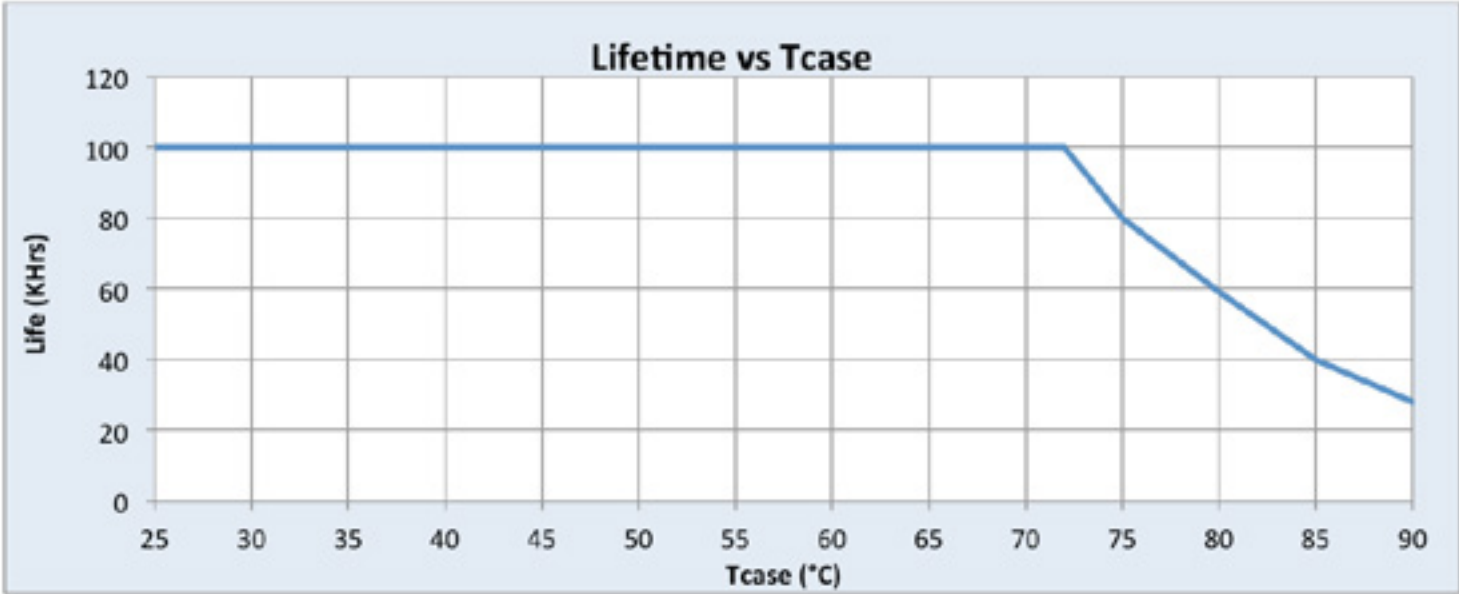
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Iout vs. Tcase of Driver:



Lifetime vs. Tcase of Driver:

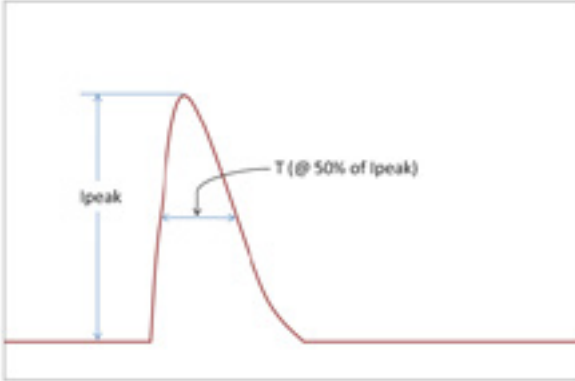


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Inrush Current Info:



V_{in}	I_{peak}	T (@ 50% of I_{peak})
120 Vrms	36.5 A	100 μs
277 Vrms	82.5 A	100 μs

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

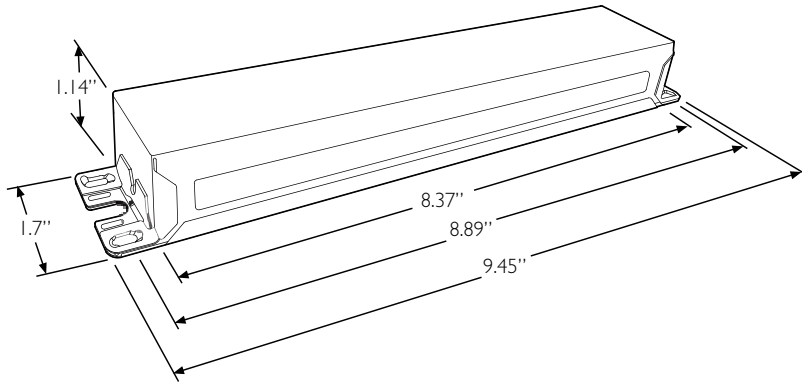
Lightning Surge Info:

ANSI Surge Type	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
100 kHz Ring Wave (w/t 30Ω)	6kV	6kV
1.2/50μs - 8/20μs Combination Wave (w/t 2Ω)	4kV	4kV

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Mechanical Specifications

Mechanical Drawing:

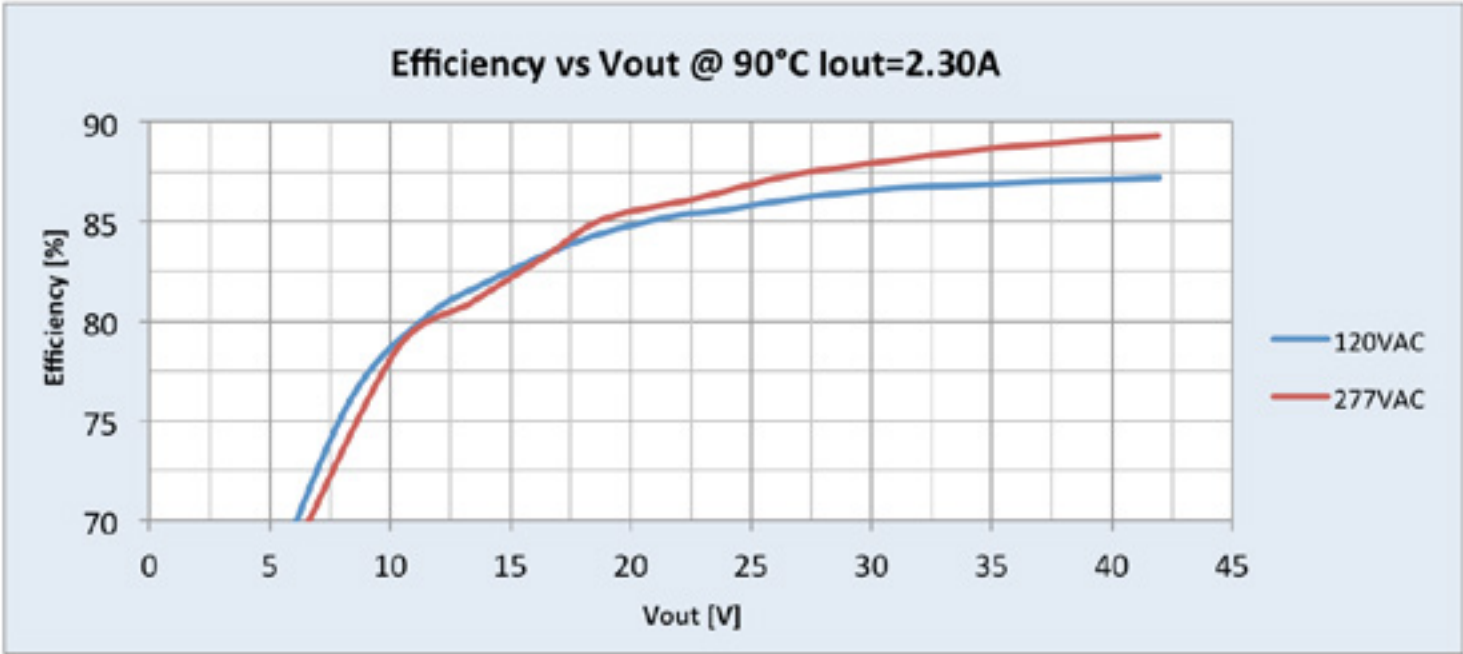
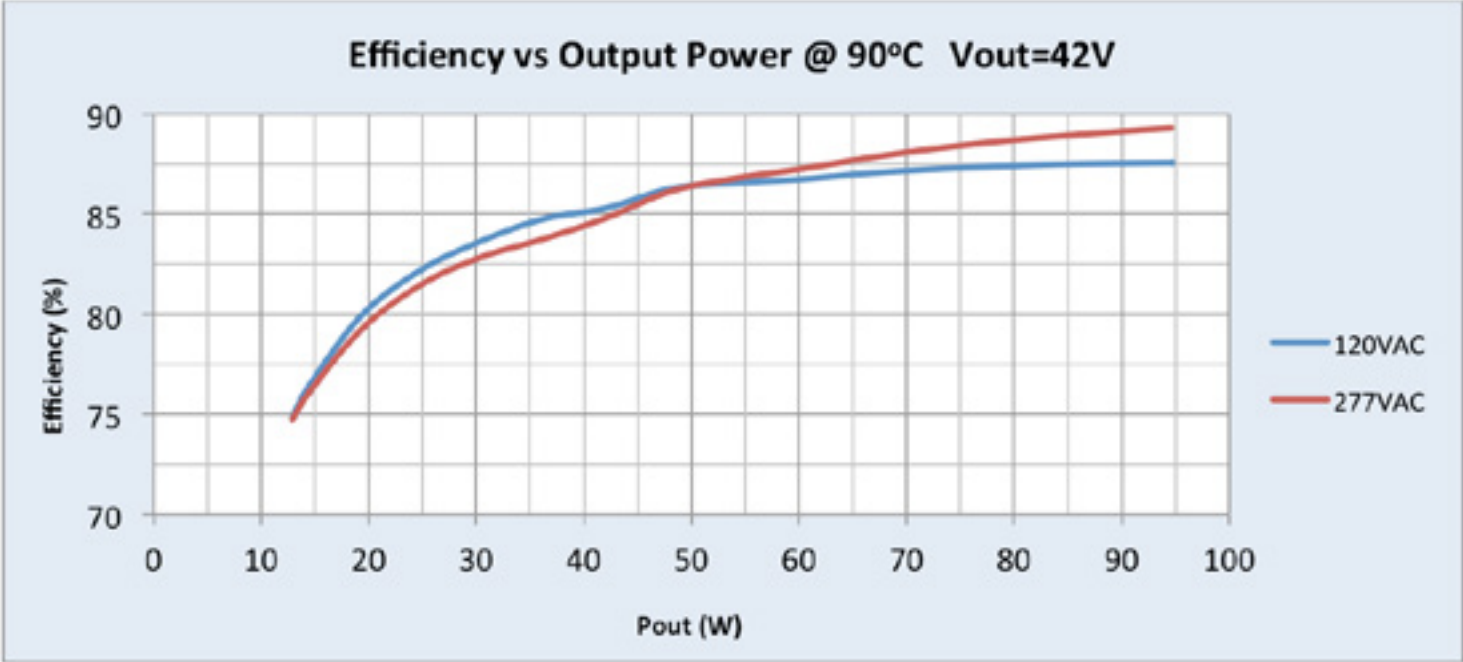


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Performance Characteristics

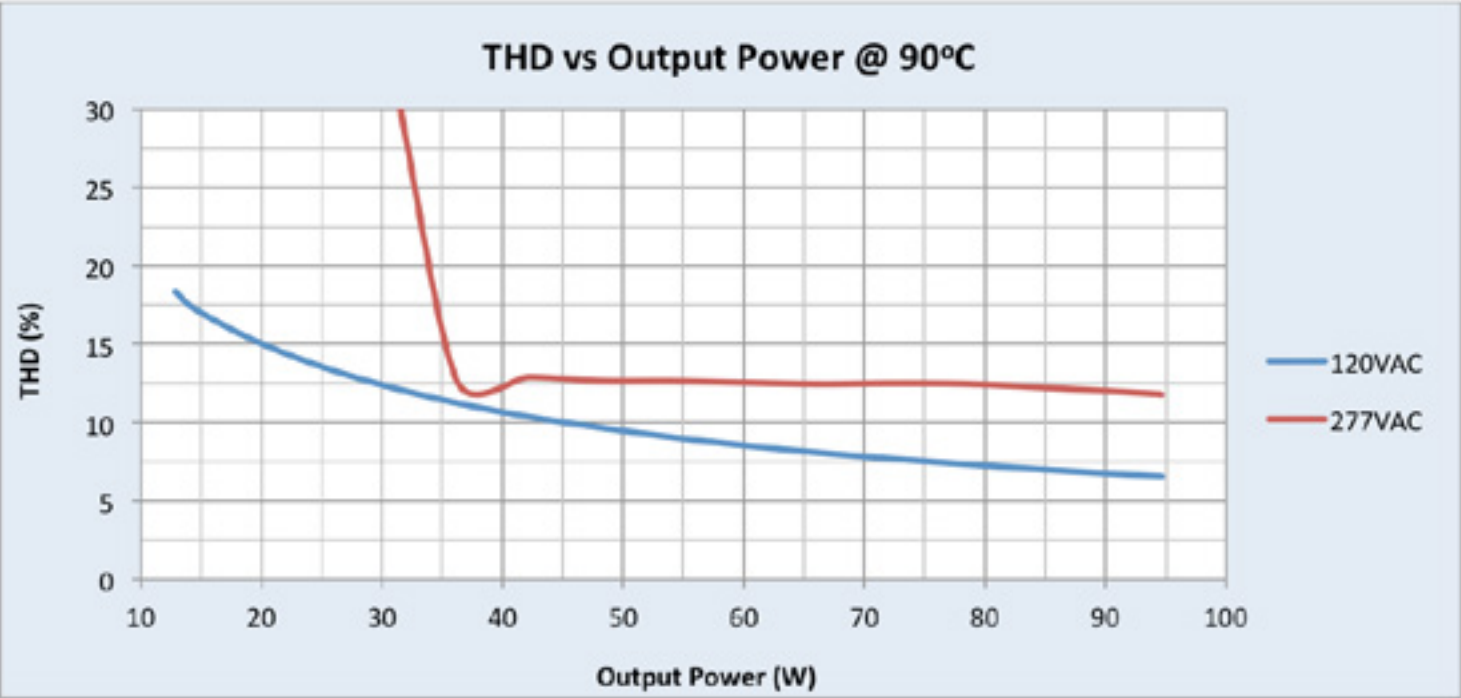
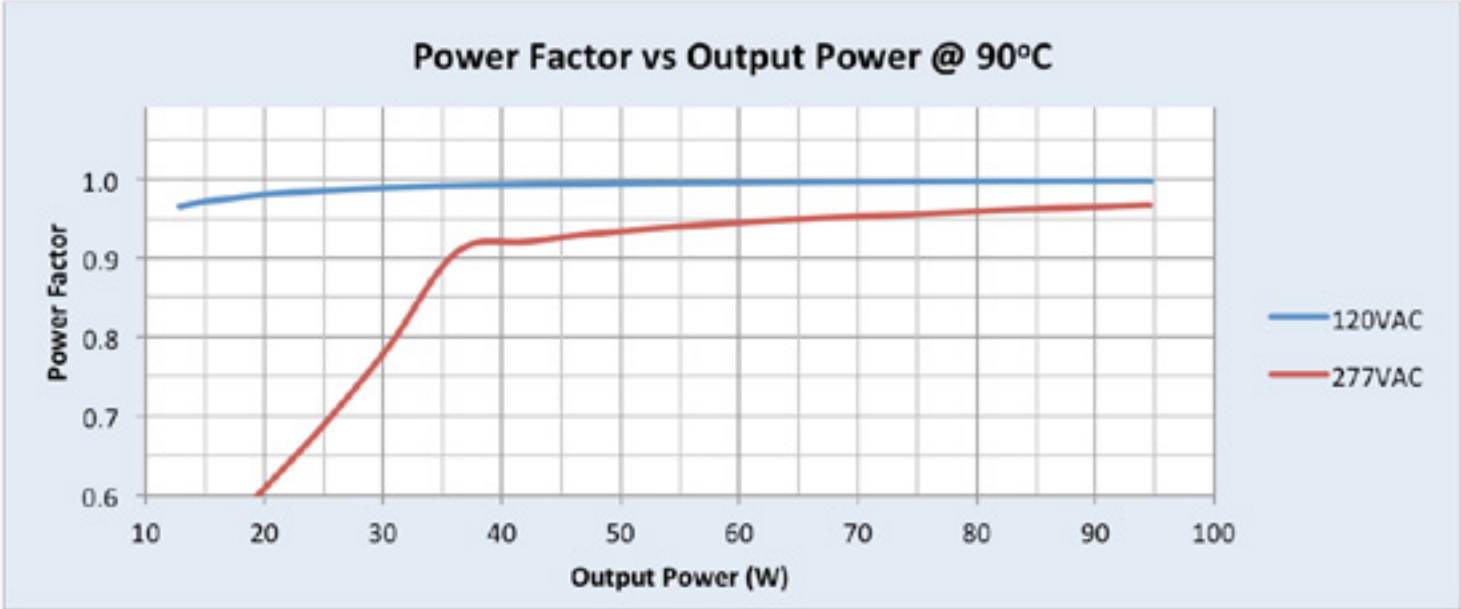
Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.



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Application Notes

Isolation:

Isolation	Input	Output	0-10V (Class 2)	Enclosure
Input	Not applicable	2xU+1KV	2.5KVac	2xU+1KV
Output	2xU+1KV	Not applicable	Not applicable	500V
0-10V (Class 2)	2.5KVac	Not applicable	Not applicable	500V
Enclosure	2xU+1KV	500V	500V	Not applicable

UL Conditions of Acceptability:

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



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Philips Lighting
North America Corporation
10275 W. Higgins Road
Rosemont, IL 60018
Tel: 800-322-2086
Fax: 888-423-1882
Customer Support/Customer
Care: 800-372-3331

Philips Lighting Company
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008