

**PHILIPS
ADVANCE**



LED Driver

Xitanium

20W 0.1-0.56A 54V 0-10V INT
with SimpleSet
XI020C056V054BST1



**RoHS
COMPLIANT**



UL US
UL Class 2
For Dry and
Damp Location

Philips Advance Xitanium Linear LED Drivers with SimpleSet technology are designed to give OEMs ultimate flexibility. With wide operating windows, slim profile and simple programming, luminaire manufacturers can design luminaires of different sizes and lumen levels for office and retail applications.

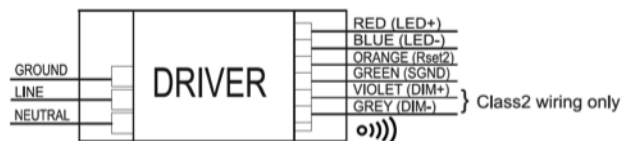
Specifications

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 Common/Diff (KV)	Envir. Protection Rating
120	20	27 - 54	0.1 - 0.56	83	75°C Life 80°C UL	0.21	26	<10%	>0.95	>2.5	UL Dry & Damp
277				85		0.1					

Enclosure

	In. (mm)
Case Length	10.0 (254)
Case Width	1.18 (30)
Case Height	1.00 (25)
Mounting Length	9.68 (246)
Mounting Width	
Overall Length	

Wiring Diagram

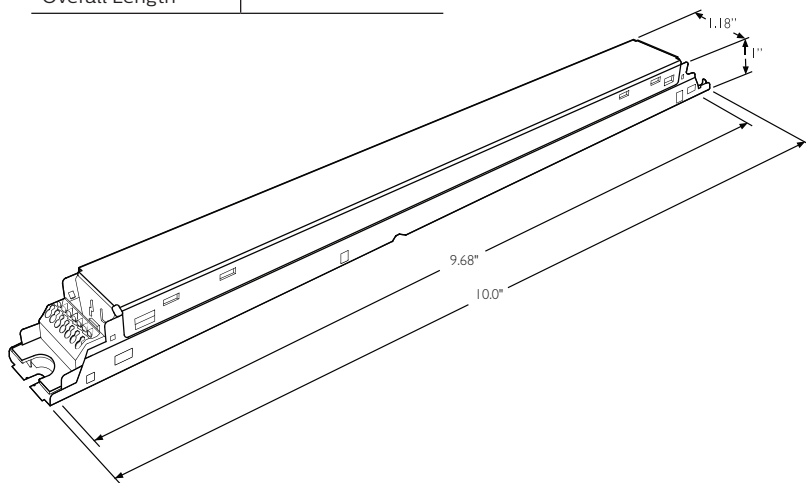


Driver case must be grounded.

Install in accordance with National and Local Electrical Codes.

Use 18 AWG solid copper wire rated $\geq 300V/85^{\circ}C$.

Strip wire 3/8".



Dimming	Dimming Range	Minimum Output Current (A)
0-10V Analog Class 2 Wiring	5% ~ 100% (for output current range 0.1-0.56A)	0.005

Xitanium 20W 0.1-0.56A 54V 0-10V INT

Features

- Programmable output current through SimpleSet
- Large operating window
- Slim linear form factor

Benefits

- Fast and simple way of programming
- Enables fixture designs with wide variety of loads and current
- Enables easy integration into narrow fixtures and troffers

Application

- Indoor linear applications such as troffers and pendants
- Office
- Retail

Electrical Specifications

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

Product Data

Order Information	
Full Product Code	XI020C056V054BST1M (Mid-Pack, 18pcs/Box)
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108V
Max. Mains Voltage Operational	305V
Output Information	
Maximum Open Circuit Voltage	<60Vdc
Output Current Ripple (ripple = peak to average / average)	15% max @ max lout Low frequency (≤ 120 Hz) content <5%
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 μ A source current from driver. See dim curve for detail.
AOC (Adjustable Output Current)	100mA to 560mA via external resistor (Refer to graph and notes below.)
Environment & Approbation	
Operating Ambient Temp. Range	-20°C to +55°C
Max Case Temperature (Tcase)	75°C for Life & UL Safety
Agency Approbations	UL8750, UL1310, UL935, CSA-C22.2 No. 250.13-12, CSA C22.2 No. 223
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.48 Lbs / 0.22 kgs

Xitanium 20W 0.1-0.56A 54V 0-10V INT

Electrical Specifications

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

0-10V Dimming Curve

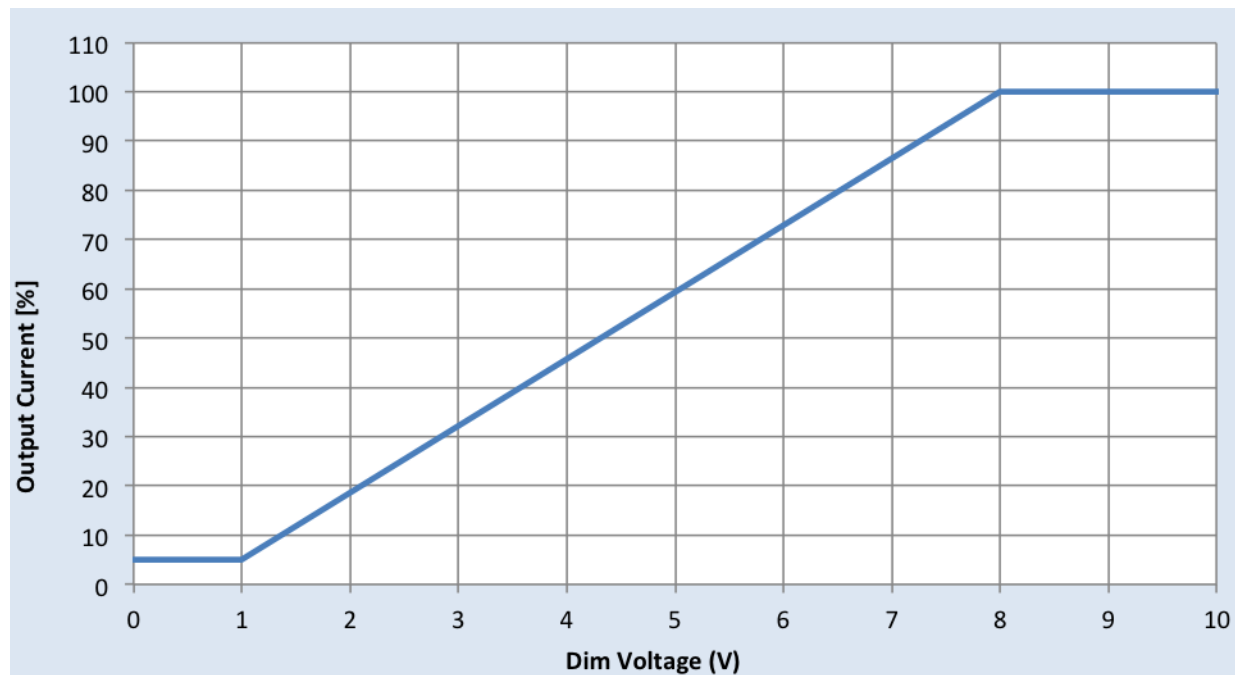
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum Dim Level: 5% of Iout (minimum 5mA)

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



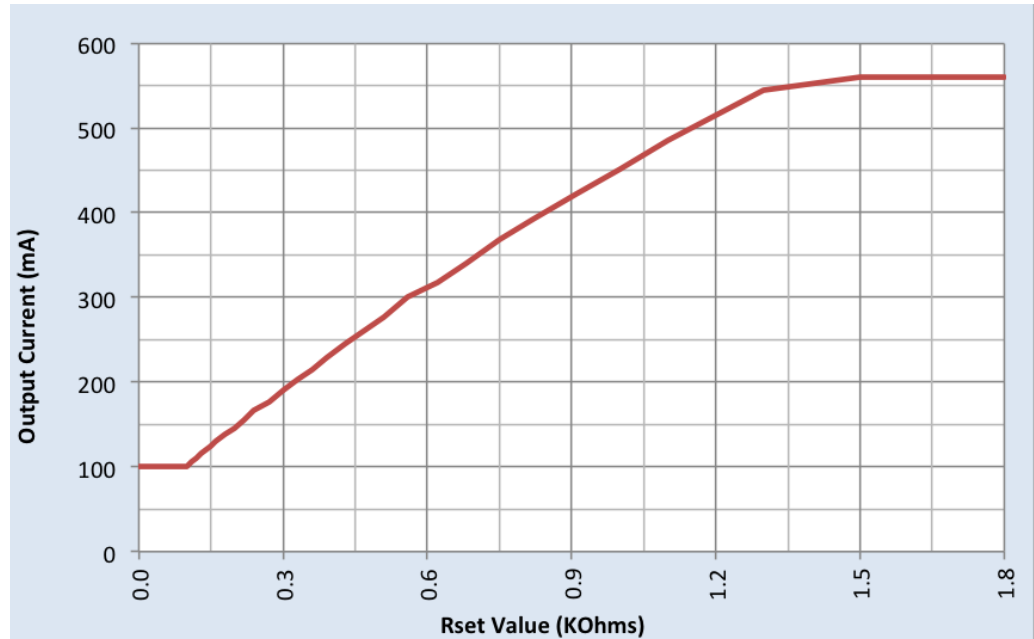
Xitanium 20W 0.1-0.56A 54V 0-10V INT

Electrical Specifications

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

AOC (Adjustable Output Current) Settings (Rset)

Rset (Ohms)	Current (mA)
1	100
100	100
110	106
120	111
130	116
150	125
160	130
180	138
200	146
220	155
240	166
270	176
300	190
330	204
360	215
390	228
430	245
470	261
510	277
560	300
620	318
680	340
750	368
820	392
910	422
1000	452
1100	485
1200	515
1300	545
1500	560
1600	560
1800	560
>100,000	560



Notes

Current is set via a resistor between Rset2 and SGND leads.

Any through-hole or SMD resistor with >0.25W and >20V can be used as Rset.

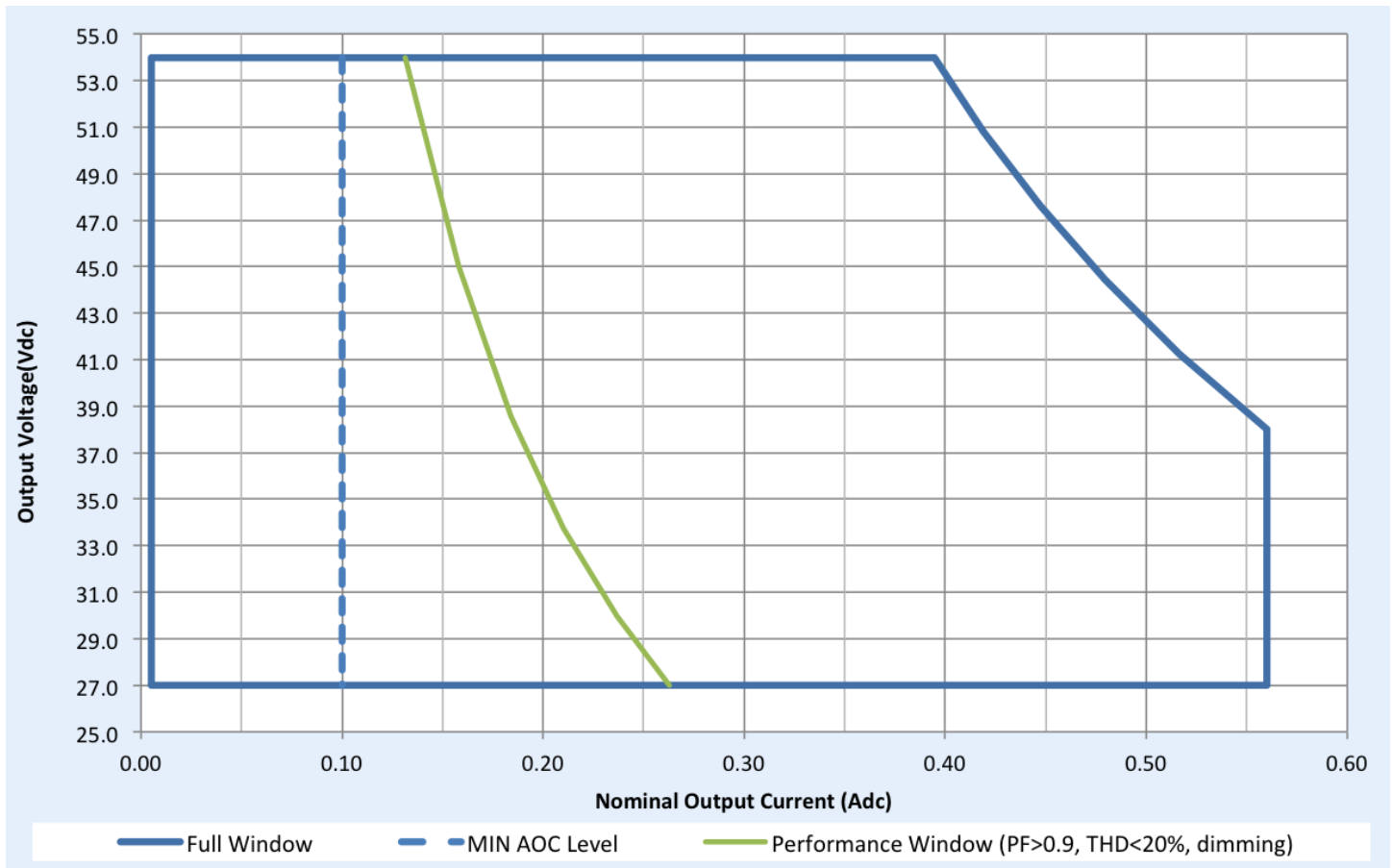
Driver will default to 560mA when Rset is left open.

Xitanium 20W 0.1-0.56A 54V 0-10V INT

Electrical Specifications

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

Operating Window



Notes

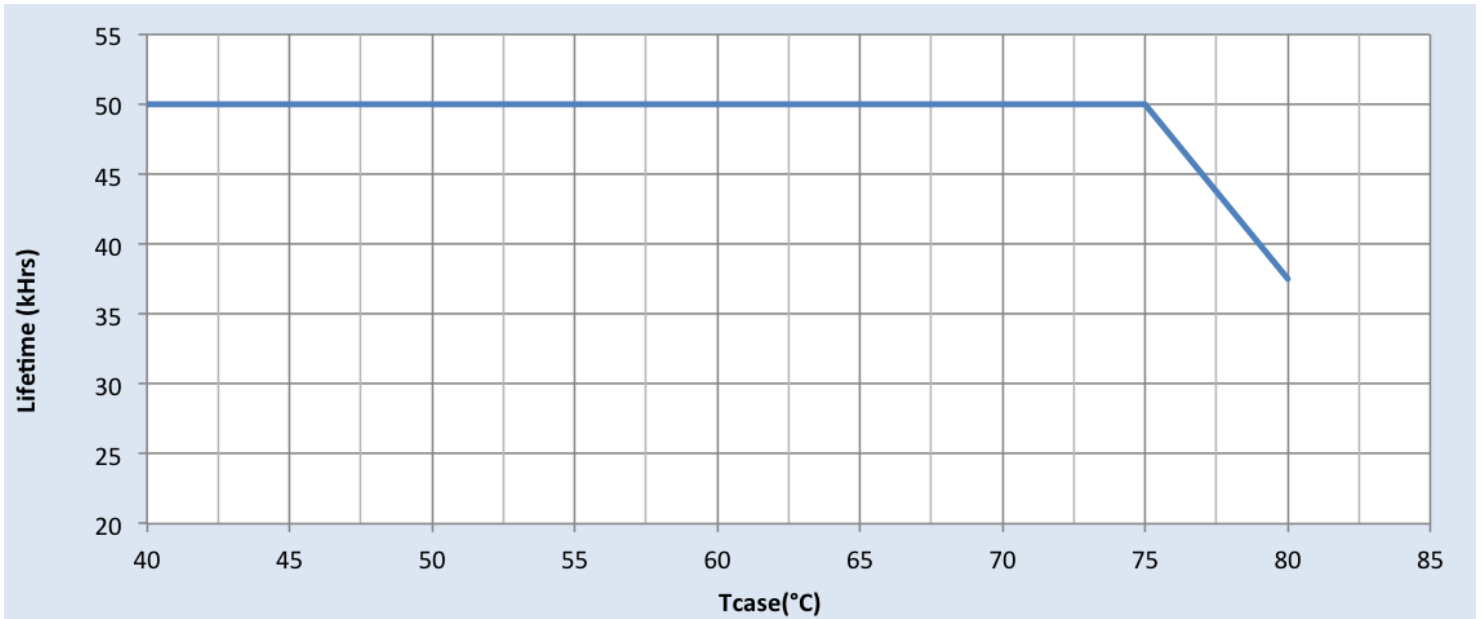
For 5% dimming output current setting through AOC should be >0.1A.

Xitanium 20W 0.1-0.56A 54V 0-10V INT

Electrical Specifications

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

Driver Lifetime Vs. Driver Case Temperature

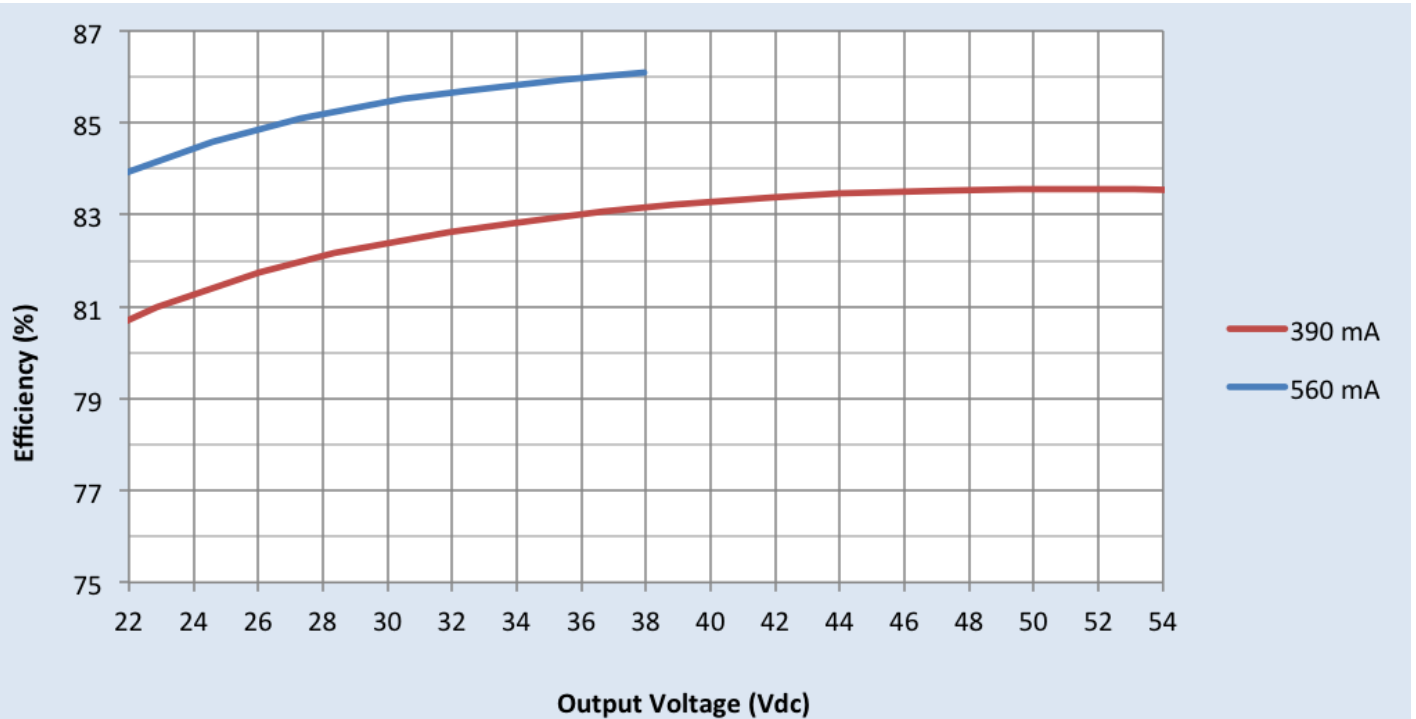


Xitanium 20W 0.1-0.56A 54V 0-10V INT

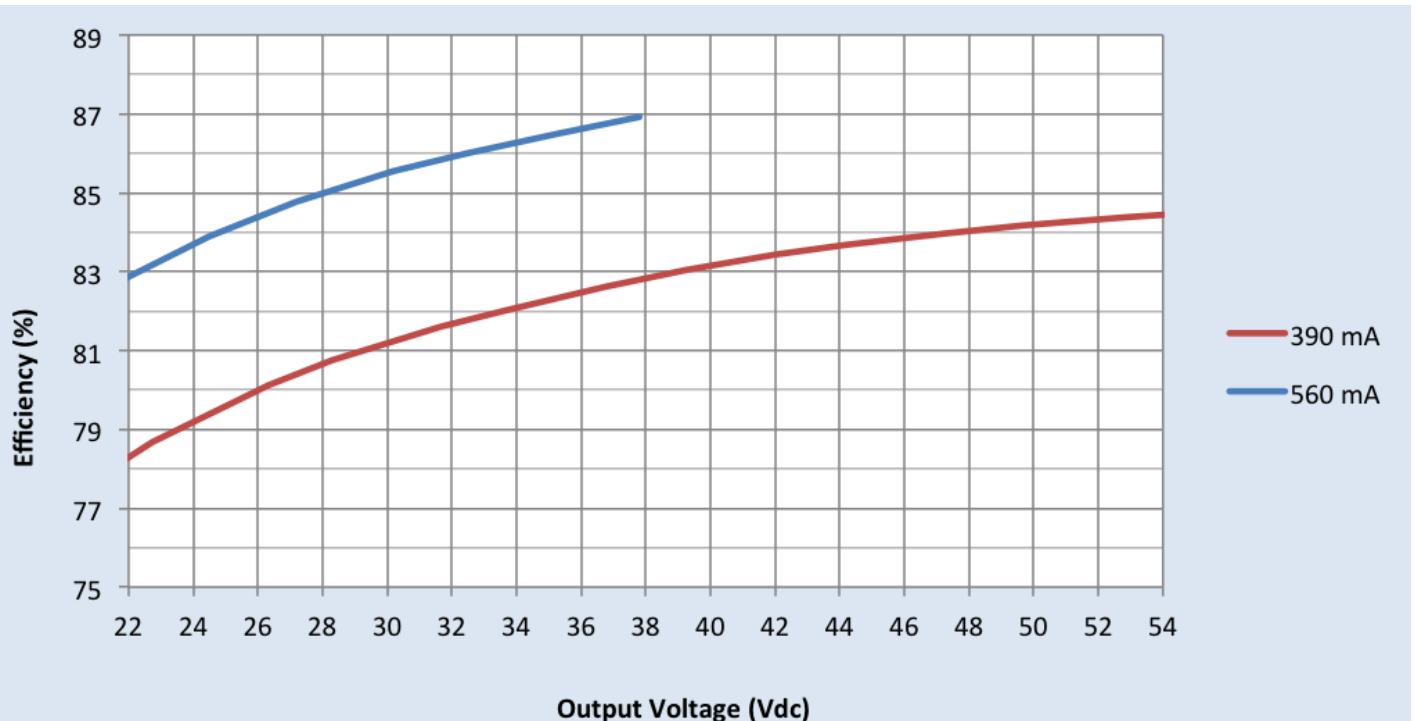
Performance Characteristics

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.

Efficiency Vs. Output Voltage at 120Vac



Efficiency Vs. Output Voltage at 277Vac

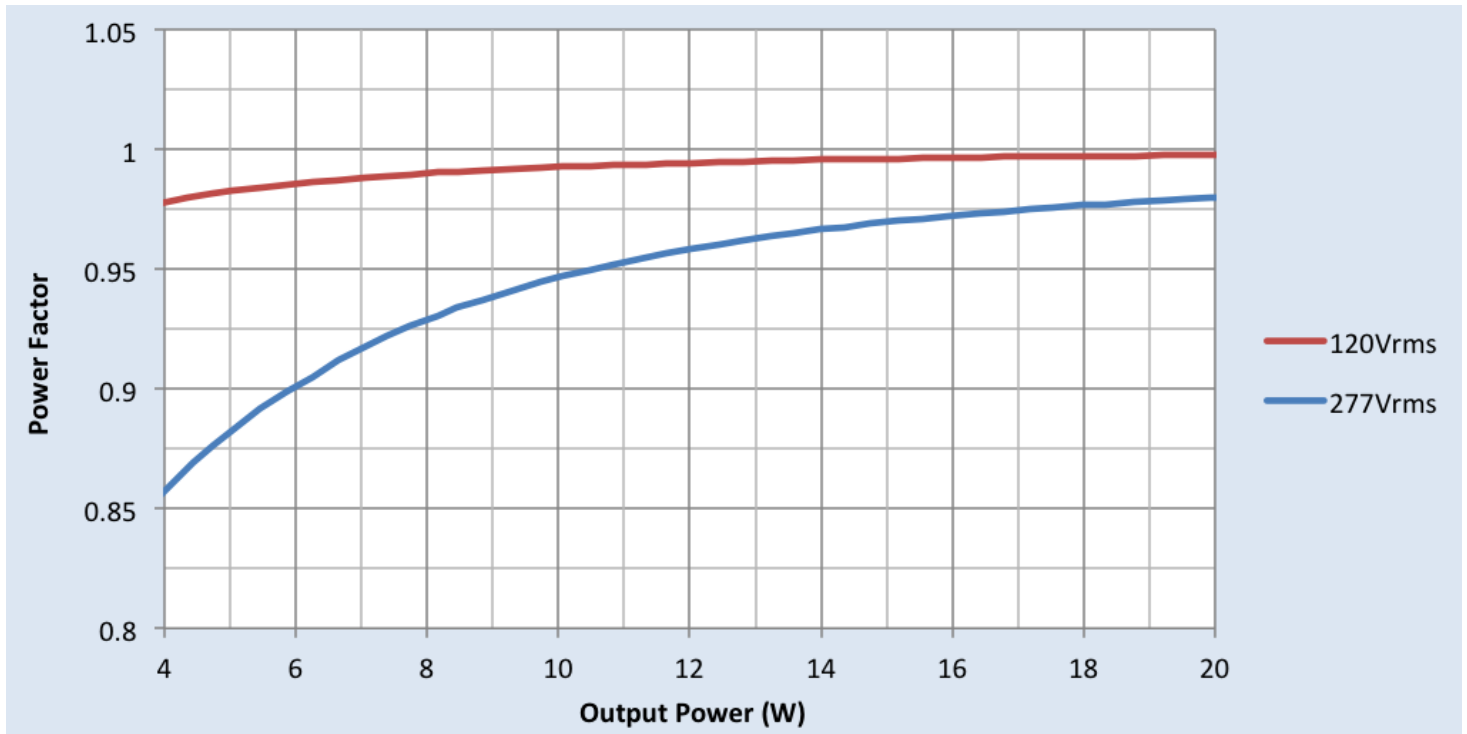


Xitanium 20W 0.1-0.56A 54V 0-10V INT

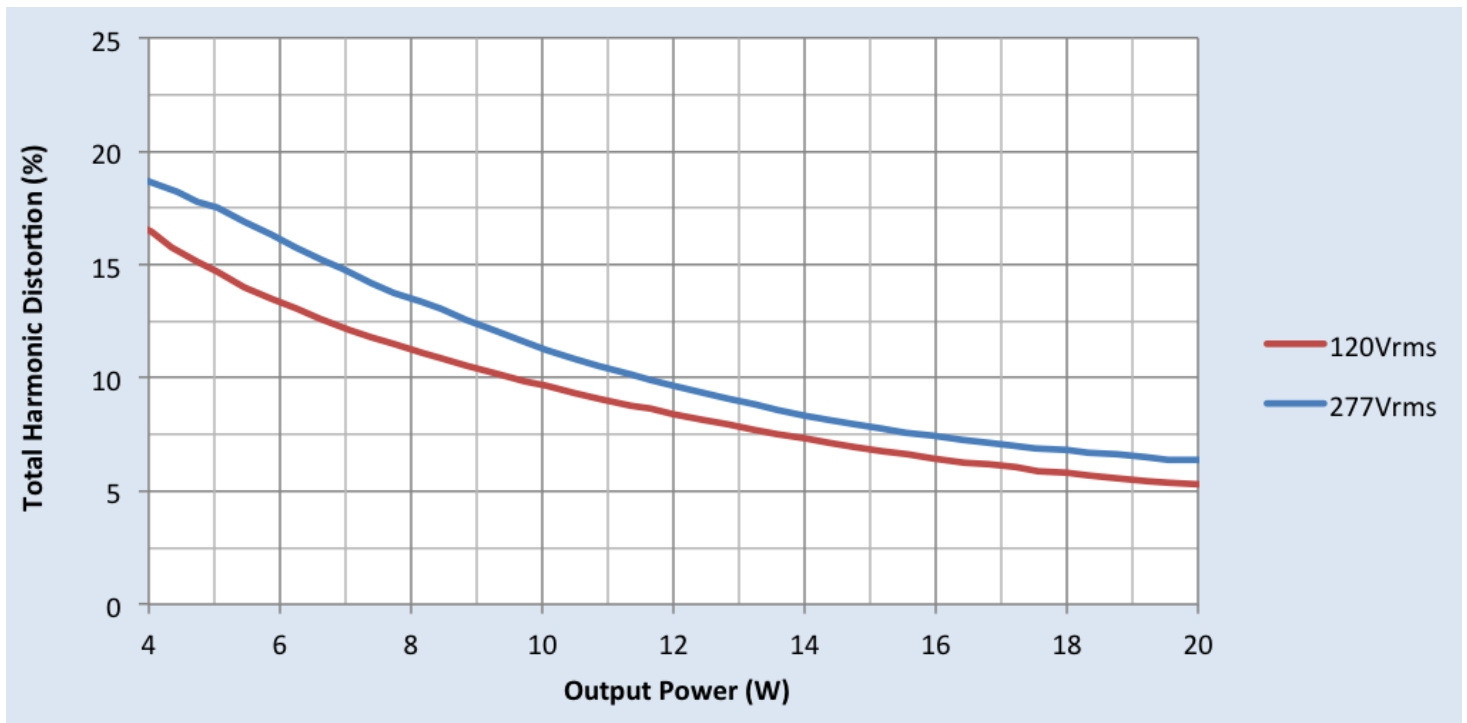
Performance Characteristics

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.

Power Factor Vs. Output Power

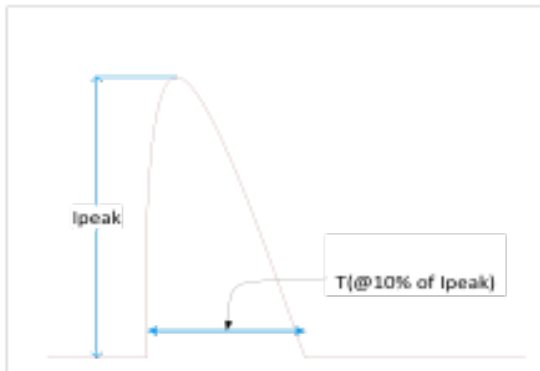


Total Harmonic Distortion (THD) Vs. Output Power



Xitanium 20W 0.1-0.56A 54V 0-10V INT

Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	10.5A	210 μ S
277 Vrms	25.5A	225 μ S

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 30 Ω)	>2.5kV	>2.5kV

Isolation

Isolation	Input	Output	0-10V (Class 2)	Enclosure
Input	–	2xU+1kV	2xU+1kV	2xU+1kV
Output	2xU+1kV	–	NA	500V
0-10V (Class 2)	2xU+1kV	NA	–	500V
Enclosure	2xU+1kV	500V	500V	–

U = Max input voltage

UL Conditions of Acceptability

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

© 2015 Koninklijke Philips N.V. All rights reserved.
Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.
philips.com/leddrivers



Philips Lighting North America Corporation
10275 W. Higgins Road, Rosemont IL 60018
Tel: 800-322-2086 Fax: 888-423-1882
Customer/Technical Service: 800-372-3331
OEM Support: 866-915-5886

Imported by: Philips Lighting
A division of Philips Electronics Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008