



Advance Xitanium LED drivers with SimpleSet technology are designed to give OEMs ultimate flexibility with one driver to serve a complete portfolio. The operating window optimizes coverage for Class 2 in terms of power, output voltage and current. With two independent channels this driver allows the user to get much more than 100W in a compact form factor, while still complying with Class 2 limits. High driver efficiency enables very high system efficacies.



Specifications

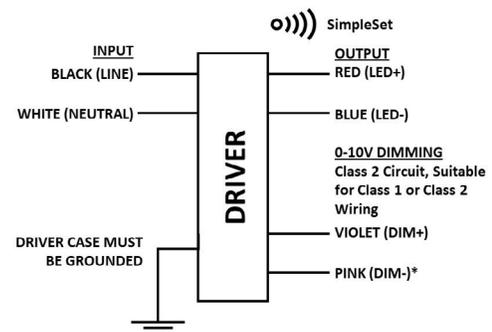
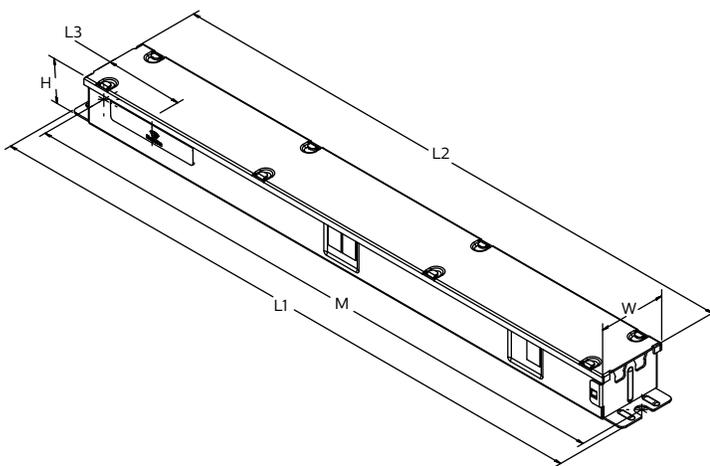
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 75°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating	Driver Type
120	95W per channel	27-54	0.1 - 2.75	88	Life - 85°C UL - 90°C	1.83	220	<10%	>0.95	6	UL damp & dry, Type HL	Constant Current
277		Class 2 Output		89		0.77						

Enclosure

	In. (mm)
Case Length (L2)	15.75 (400)
Case Width (W)	1.8 (45.6)
Case Height (H)	1.22 (31)
Mounting Length (M)	16.33 (414.8)
Overall Length (L1)	16.70 (424.2)
Center of SimpleSet Antenna (L3)	2.05 (52)

Wiring Diagram

Dimming	Wire Length (mm)
Black (Line)	270 (± 30)
White (Neutral)	270 (± 30)
Red (Positive, LED Output)	270 (± 30)
Blue (Negative, LED output)	270 (± 30)
Violet (Positive, 0-10V)	270 (± 30)
Pink (Negative, 0-10V)	270 (± 30)



WARNING:

Install in accordance with national and local electrical codes. The field-wiring leads or push-in terminals shall be fully enclosed.

Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0-10V Analog Class 1 and 2 Wiring	5% ~ 100%	0.035

Xitanium XI190C275V054BSG1

190W 2.75A 0–10V Dimming with SimpleSet

Features

- 50,000+ hour lifetime¹
- Programmable output current through SimpleSet
- Large operating window
- 6kV combi-wave surge rating to comply with ANSI C82.77-5 CAT C low

Benefits

- Designed for Class 2 luminaires
- Fast and simple way of programming
- Perfect for wide range of lumen outputs 12,000 to 24,000 lumens with single driver
- Dual channel allows high power up to 190W with UL Class 2 outputs
- No external surge protection required to pass C82.77-5 CAT C low

Application

- Linear high-bay fixtures

Electrical Specifications

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

Product Data

Order Information	
Full Product Code	XI190C275V054BSG1M (Mid-Pack, Qty/box: 6) 12NC = 929000744513
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
Output Current Tolerance (in the performance window)	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED - and Temperature Foldback
Features	
# Of Output Channels	2 Channels of 95W each
0–10V Dimming	150µA (±3%) source current from driver. See dim curve for detail.
AOC (Adjustable Output Current)	0.1A–2.75A via SimpleSet (Factory Default at 2.3A)
Additional SimpleSet Configurable Features	Adjustable Min Dim Level, Adjustable Lumen Output, Adjustable Lumen Output Min, OEM Write Protection
Environment & Approbation	
Operating Ambient Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	90°C
Agency Approbations	UL 8750, UL1310, cUL, NOM
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.991 Kg

1. 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.

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0-10V Dimming Curve

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

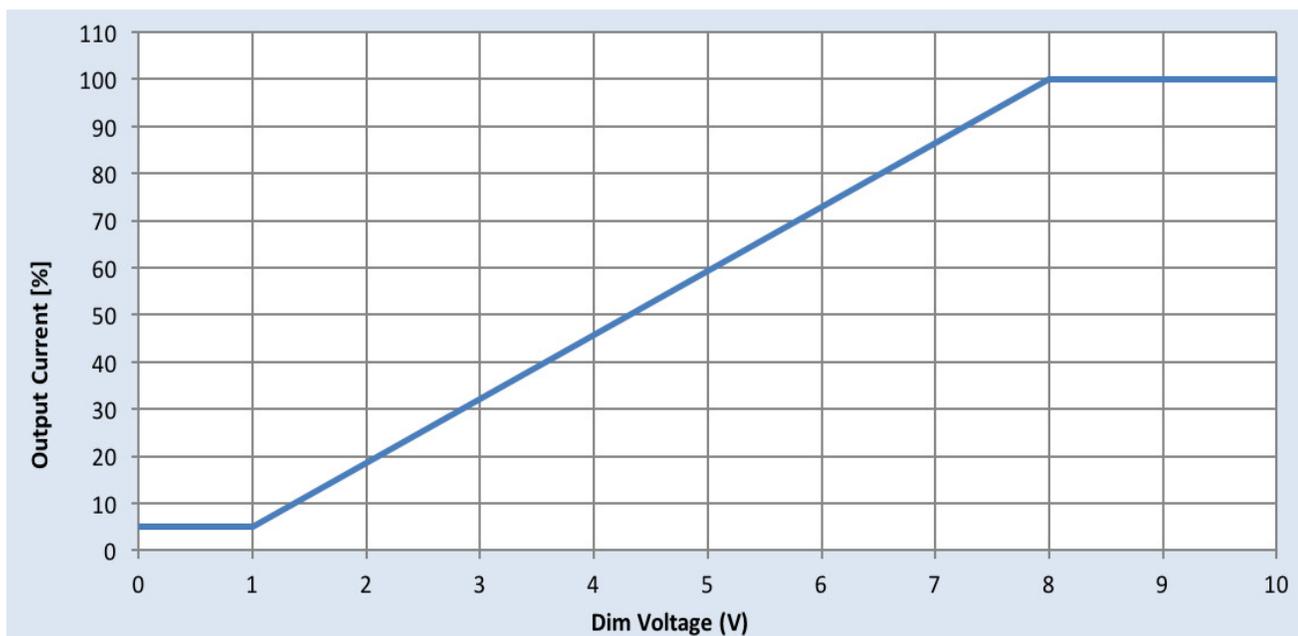
Minimum dim level: 5% of lout setting as default

Maximum output voltage on the dimming wires: 12V

Control Lead Leakage Current: 0.01mA, recommend max number of control circuits in parallel refer to Design-in Guide

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



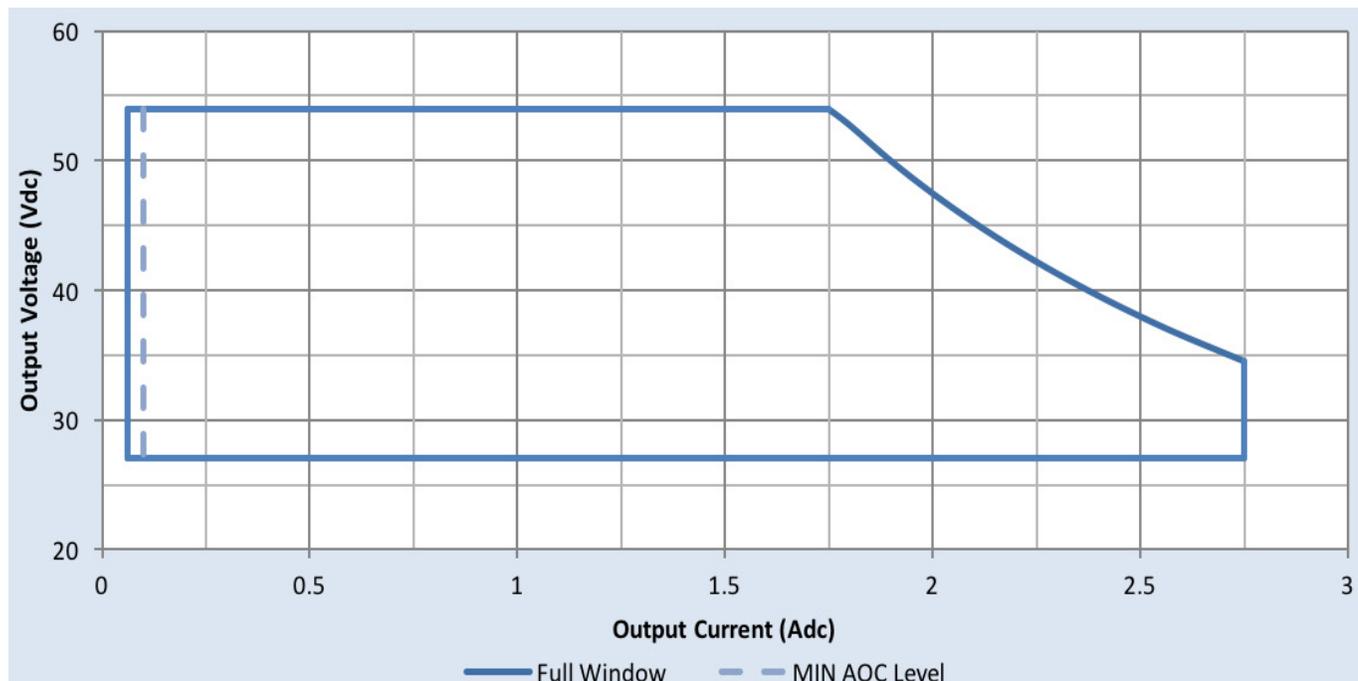
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Driver Output Window



Notes

1. Factory default output current is 2.3A.
2. To get a 100% to 5% dimming range, the output current setting through AOC should be $\geq 700\text{mA}$ (at 5% min dim).
3. Factory default minimum dimming level is 5%. This can be adjusted between 5% and 100% using Advance MultiOne.
4. See page 7 for Power Factor and Total Harmonic Distortion graphs.

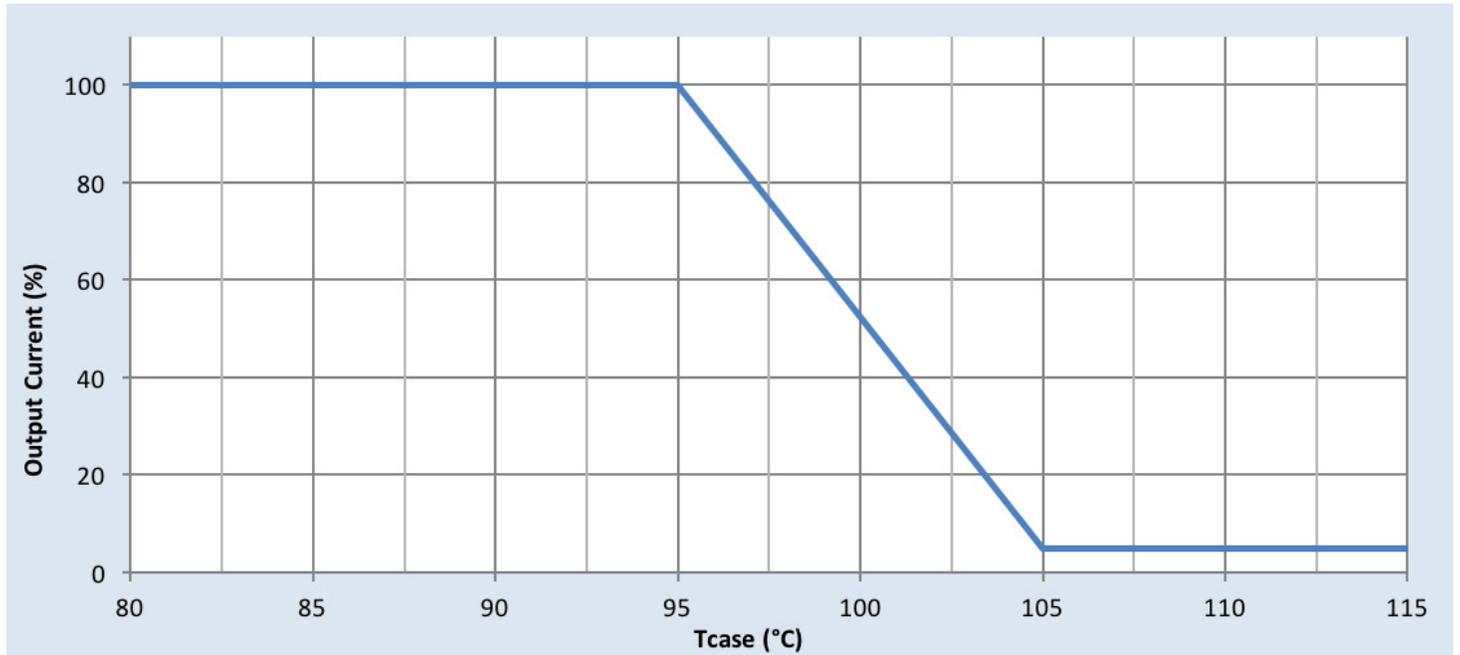
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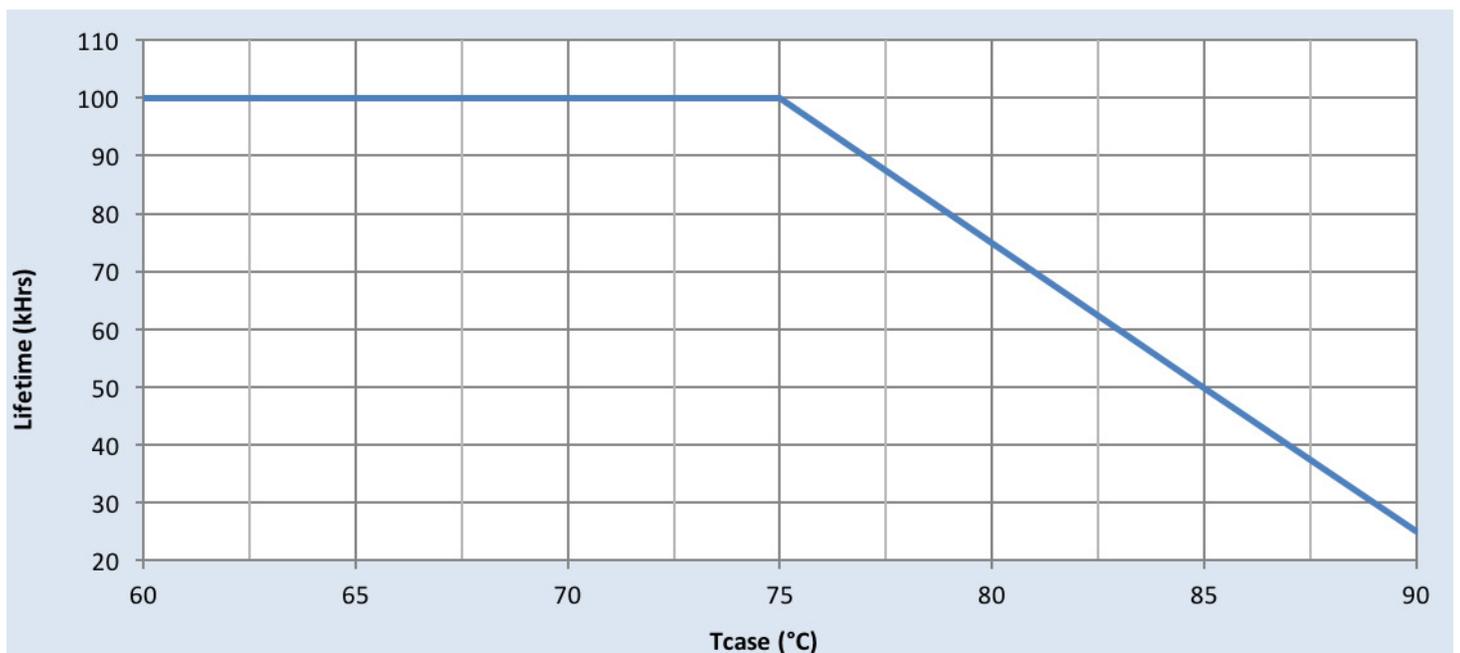
Output Current Vs. Driver Case Temperature



Note

There is $\pm 5^\circ\text{C}$ tolerance on the driver case temperature.

Driver Lifetime Vs. Driver Case Temperature



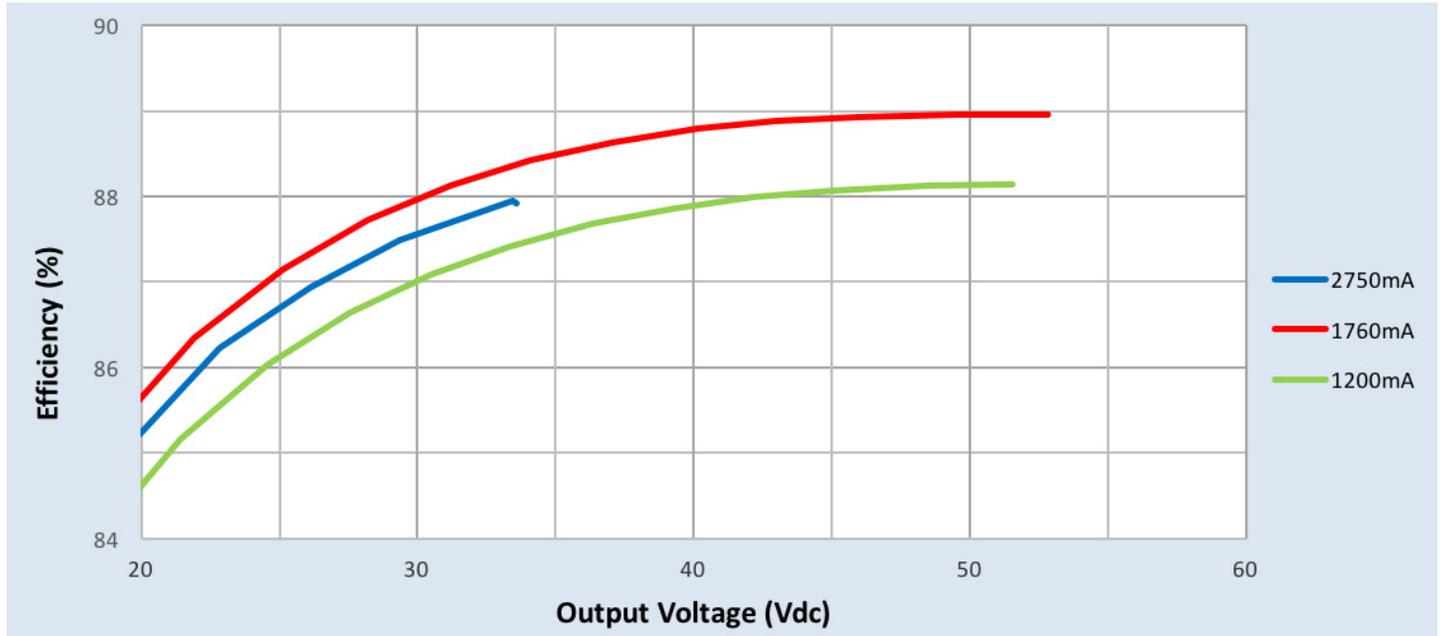
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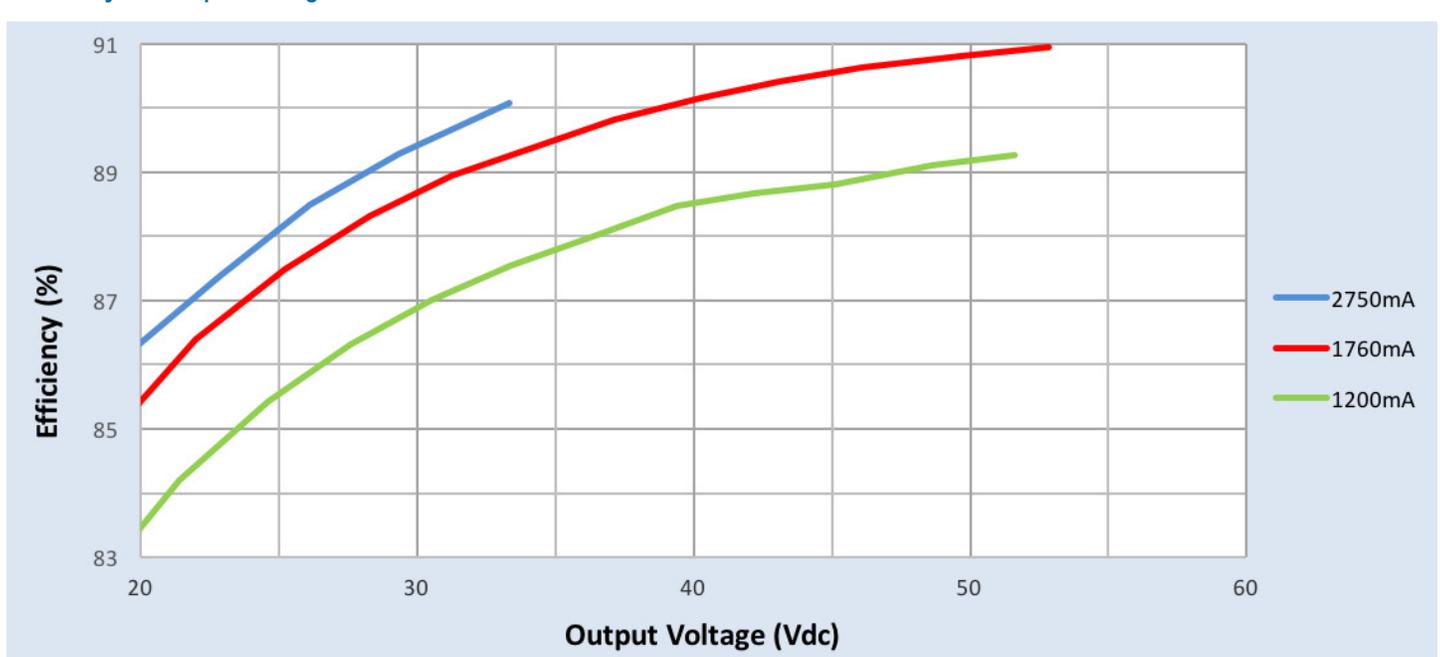
Performance Characteristics

Based on measurements on a typical sample at 75°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



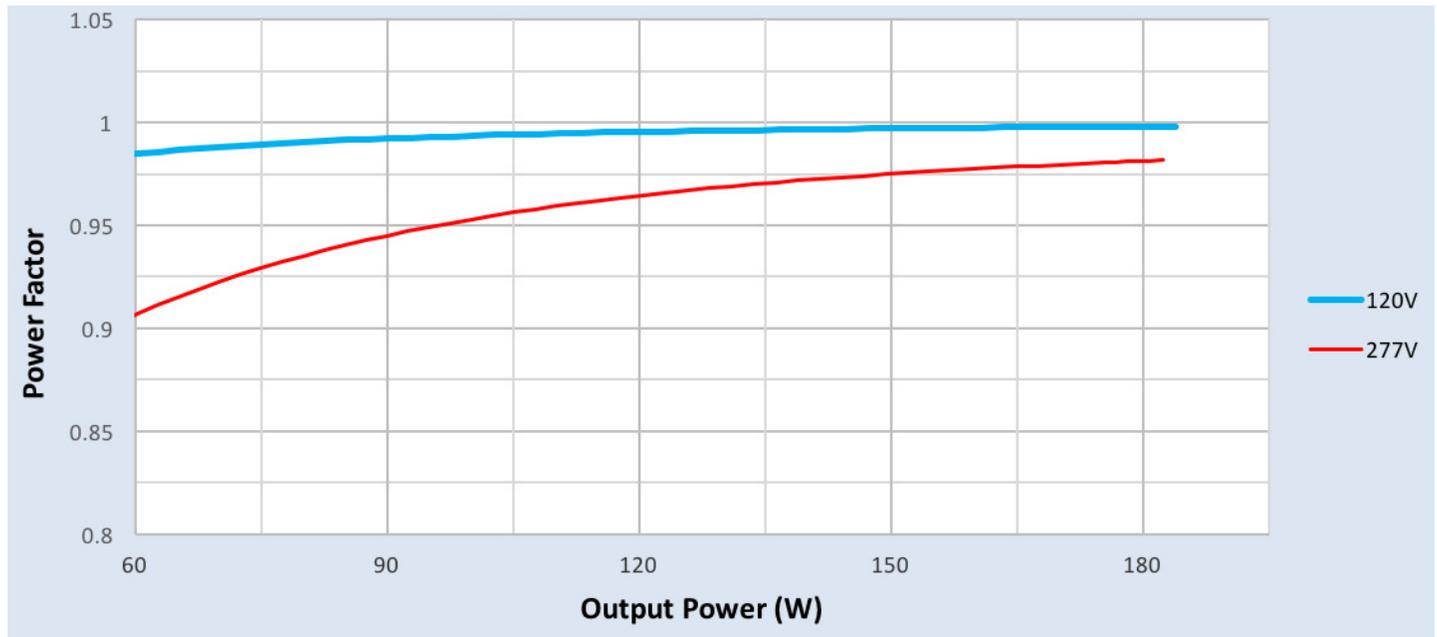
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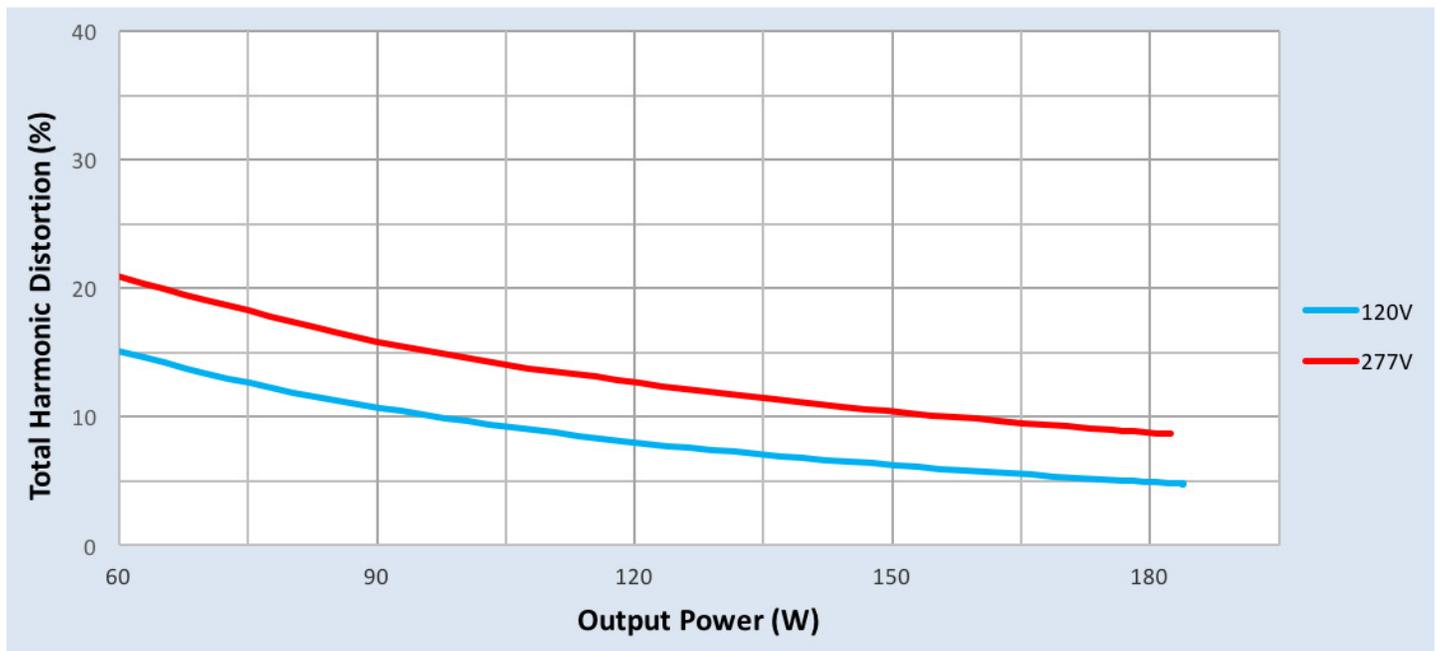
Performance Characteristics

Based on measurements on a typical sample at 75°C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

Power Factor Vs. Total Output Power*



Total Harmonic Distortion (THD) Vs. Total Output Power*

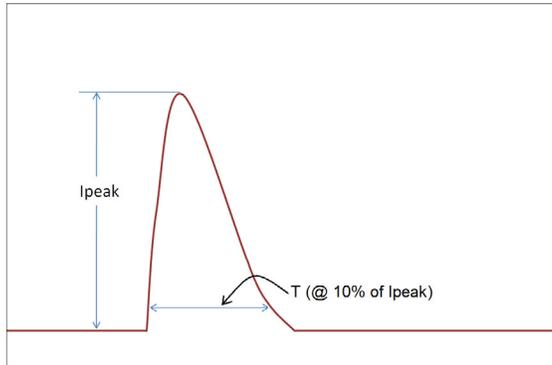


* Power Factor and Total Harmonic Distortion graphs are shown for combined output power of both channels.

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190W 2.75A 0-10V Dimming with SimpleSet

Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	51A	360μS
277 Vrms	119.2A	353μS

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 Wave (w/t 2Ω)	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	2.5kV
Enclosure	2xU+1kV	2xU+1kV	2.5kV	NA

U = Max. input voltage

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