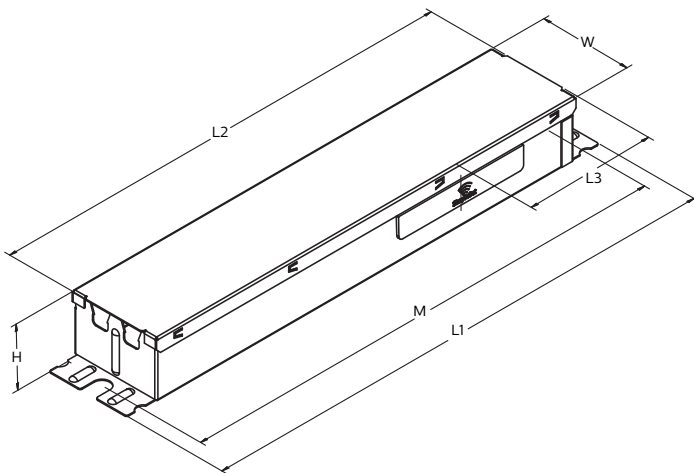# LED Driver

Xitanium

XI095C275V054BSS1

Advance Xitanium outdoor LED drivers with SimpleSet technology are designed to give OEMs ultimate flexibility. The drivers' wide operating windows and simple programming make it easy for luminaire manufacturers to design luminaires of different sizes and lumen levels for outdoor applications.
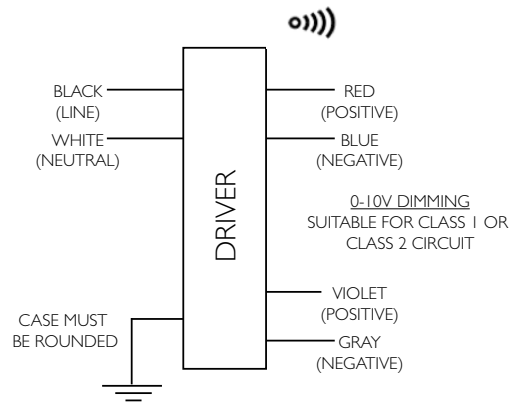
Specifications

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
120	95	20–54	0.1 – 2.75	88	Life – 85°C UL – 90°C	0.89	110	<10%	>0.95	6	UL damp & dry and Type HL
277				89		0.38					

Enclosure

	In. (mm)
Case Length (L2)	8.37 (212.6)
Case Width (W)	1.70 (43.2)
Case Height (H)	1.14 (29.0)
Mounting Length (M)	8.89 (225.8)
Overall Length (L1)	9.45 (240.0)
Center of SimpleSet Antenna (L3)	9.45 (240.0)

Wiring Diagram

BLACK (LINE)
WHITE (NEUTRAL)
RED (POSITIVE)
BLUE (NEGATIVE)

0-10V DIMMING
SUITABLE FOR CLASS 1 OR CLASS 2 CIRCUIT

VIOLET (POSITIVE)
GRAY (NEGATIVE)

CASE MUST BE ROUNDED

DRIVER

Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0–10V Analog Class 1 and 2 Wiring	5% ~ 100%	0.03

ETL LISTED
Intertek
Class P
Conforms to UL STD 8750
Certified to CAN/CSA STD
C22.2 No. 250.13

c UL us
LISTED
E321253
Class P
LED class 2 output
For Dry and Damp Location

c CSA us

Xitanium XI095C275V054BSS1

95W 0.1-2.75A 0-10V Dimming with SimpleSet

Features

- 50,000+ hour lifetime[1]
- 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
- Perfectly suited for COB applications up to 2.6A
- Industry leading dimming range for 95W Class 2 product
- No external surge protection required to pass C82.77-5 CAT C low

Application

- Area
- Roadway
- Parking garages
- Floodlights
- High-bay and mid-bay fixtures

Electrical Specifications

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

Product Data

Order Information	
Full Product Code	XI095C275V054BSS1M (Mid-Pack, 10pcs/Box) 12NC = 929000753513
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 Iout (Low frequency ripple (≤120Hz) content <5%)
Output Current Tolerance (in performance window)	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback
Features	
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	UL8750, UL1310, CSA, UL Class P
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	1.5 Lbs / 0.68 kgs

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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.

Xitanium   XI095C275V054BSS1

95W 0.1-2.75A 0-10V Dimming with SimpleSet

Electrical Specifications

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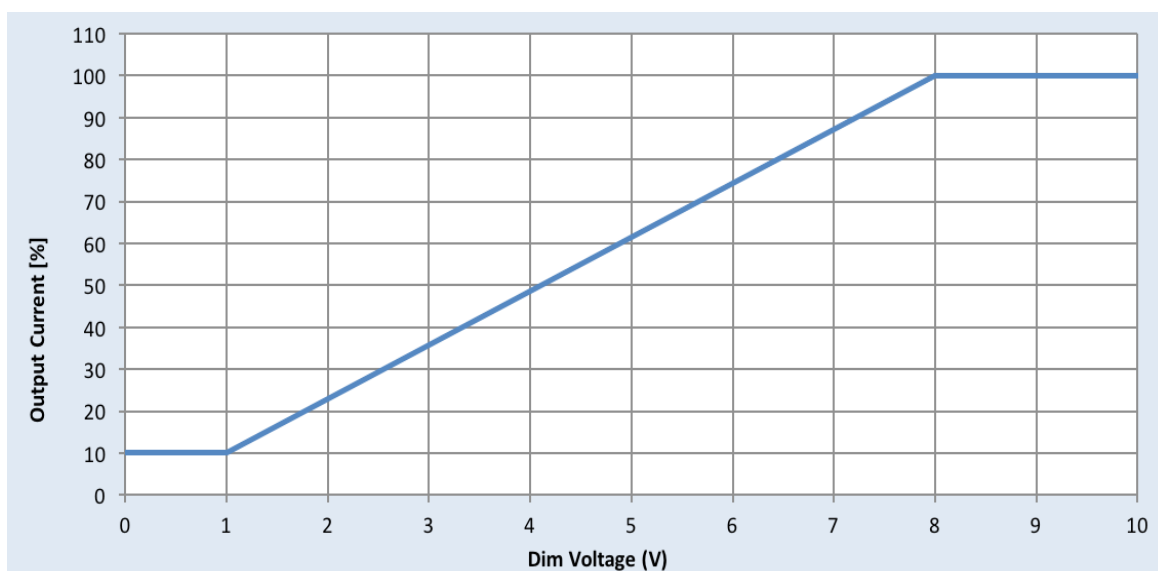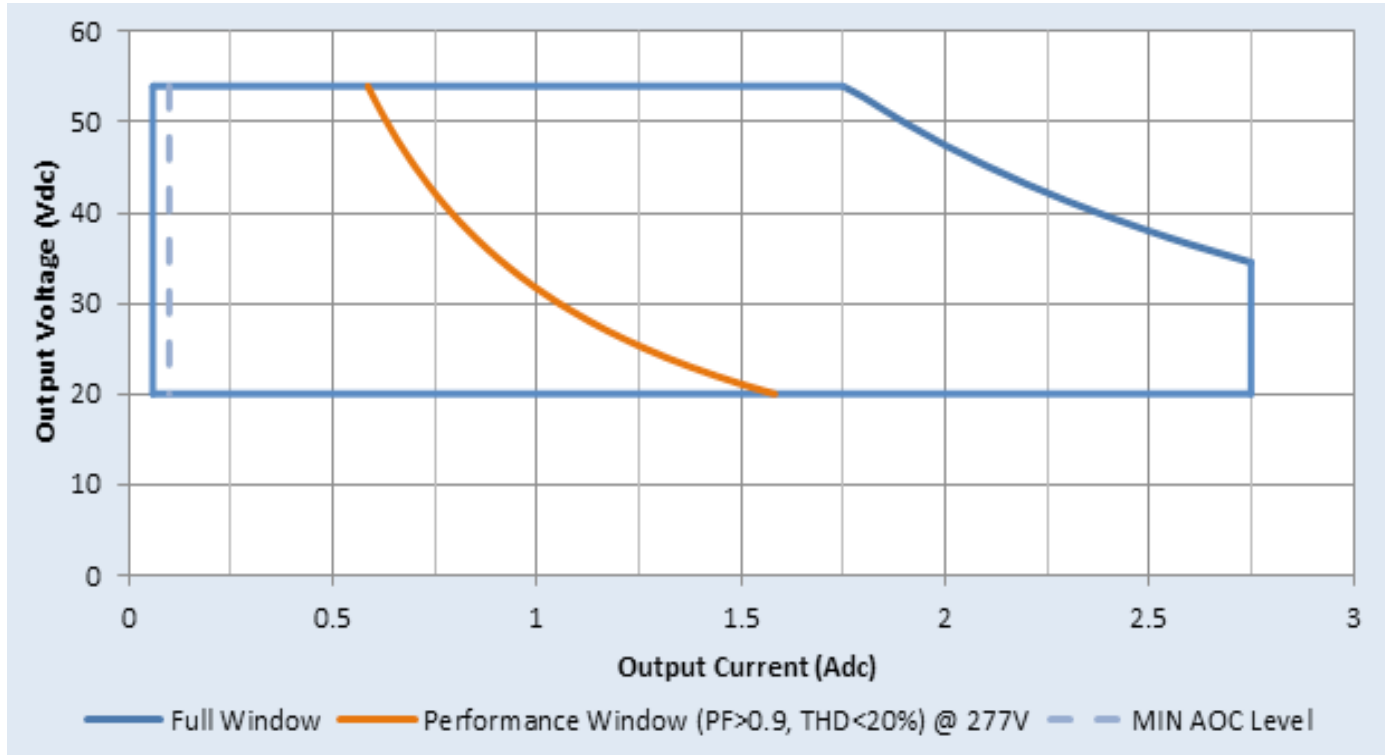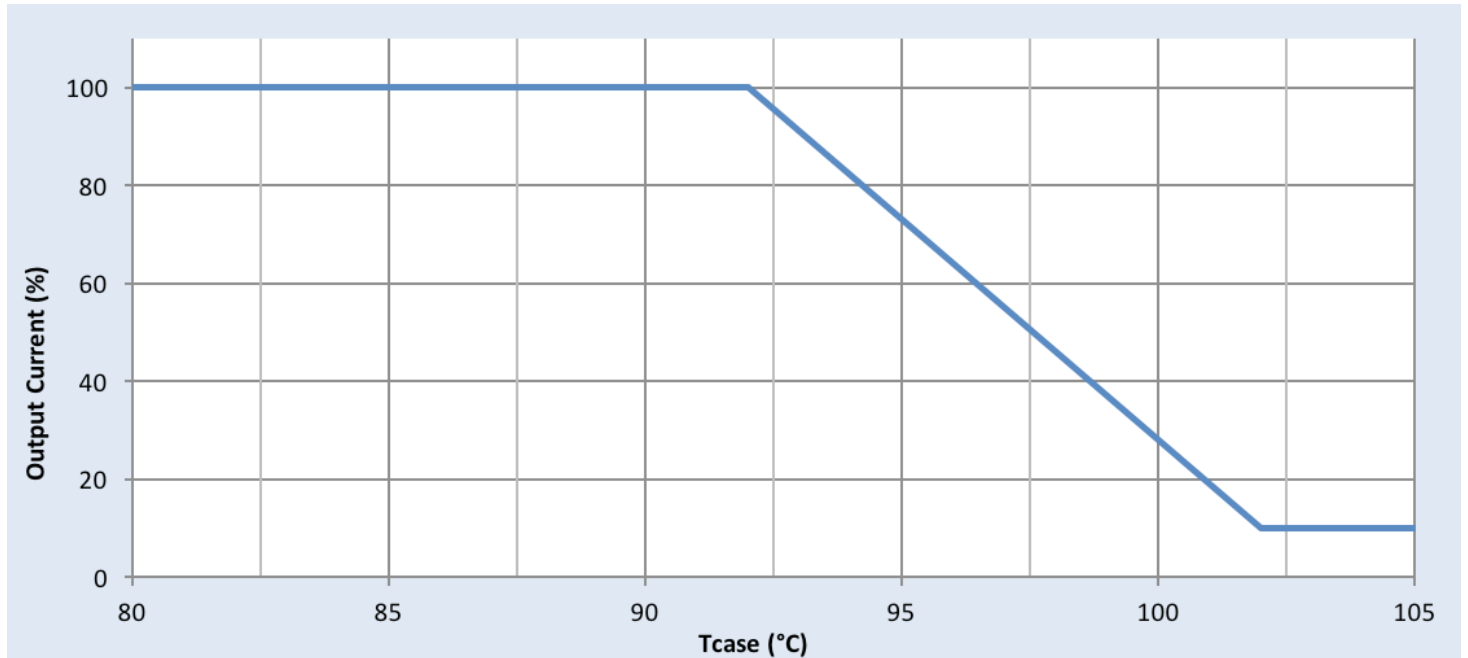
0-10V Dimming Curve

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

Minimum dim level: Factory default 10% of Iout setting as default

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

Electrical Specifications

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

Driver Output Window

Full Window — Performance Window (PF>0.9, THD<20%) @ 277V — — MIN AOC Level

Notes

1. Factory default output current is 2.3A.

2. To get a 100% to 10% dimming range, the output current setting through AOC should be ≥ 300mA.

3. Factory default setting for the dimming range is 100% to 10%. However, the minimum dim level can be set between 5% and 100% through MultiOne and SimpleSet.

Xitanium   XI095C275V054BSS1

95W 0.1-2.75A 0-10V Dimming with SimpleSet

Electrical Specifications

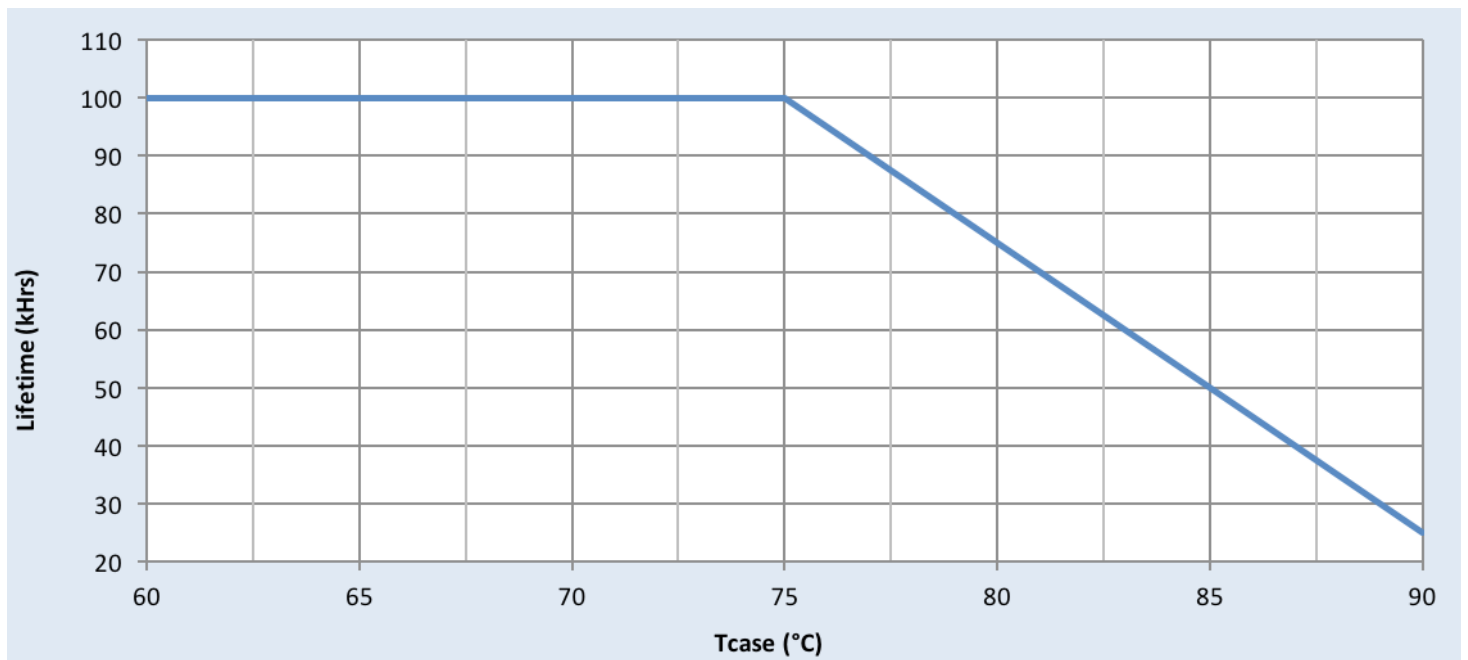All the specifications are typical and at 25°C Tcase unless specified otherwise.

Output Current Vs. Driver Case Temperature

Note

There is ±5°C tolerance on the driver case temperature.
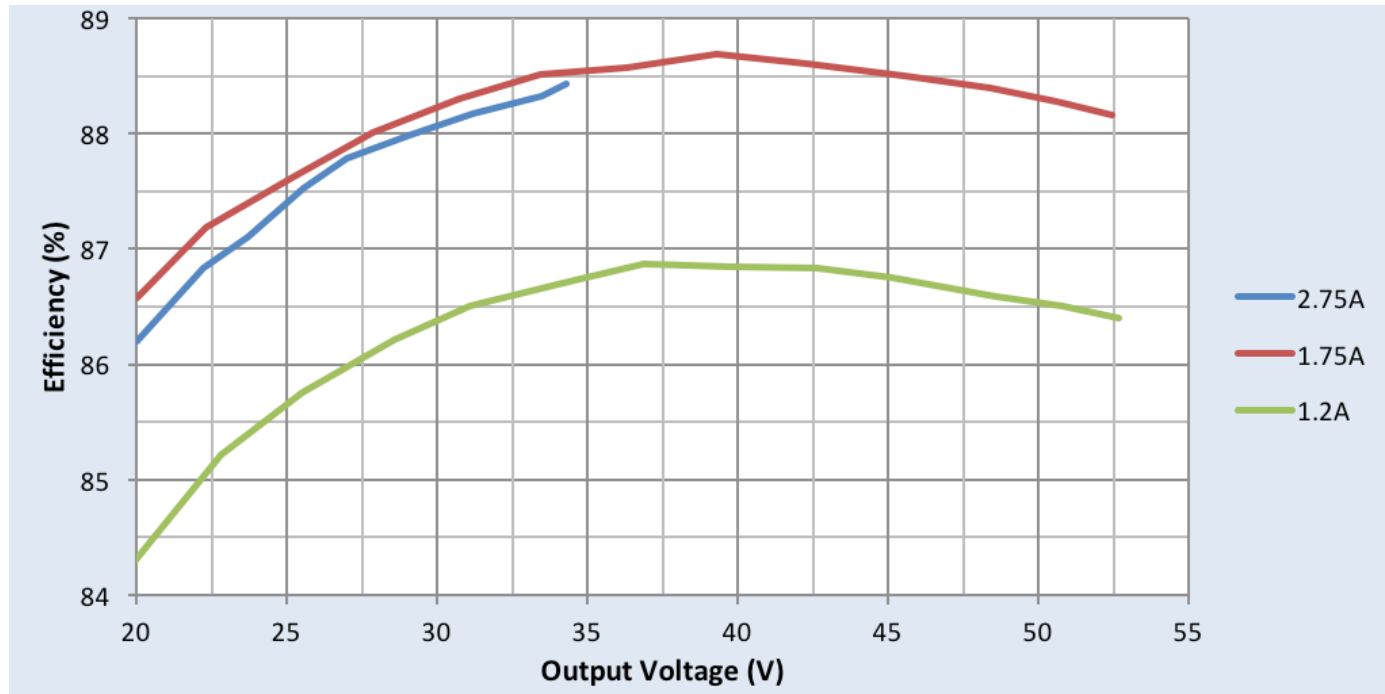
Driver Lifetime Vs. Driver Case Temperature

Xitanium   XI095C275V054BSS1

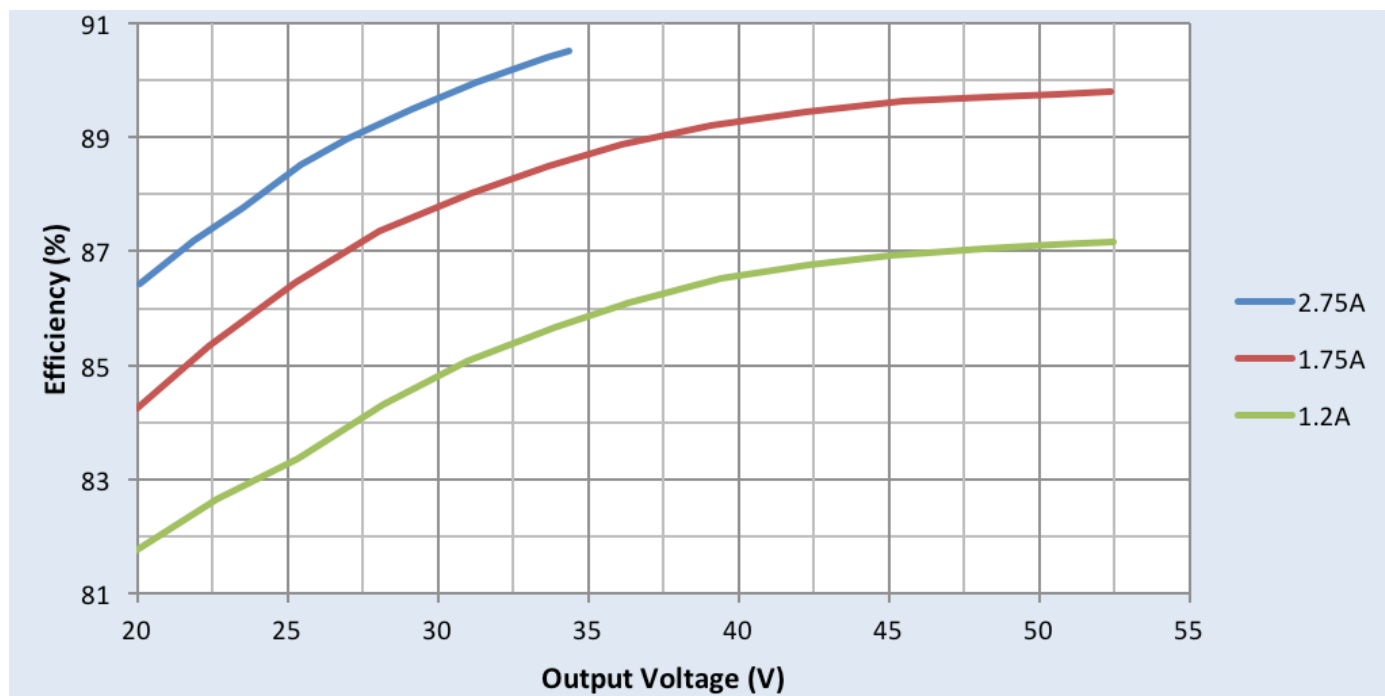## 95W 0.1-2.75A 0-10V Dimming with SimpleSet

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

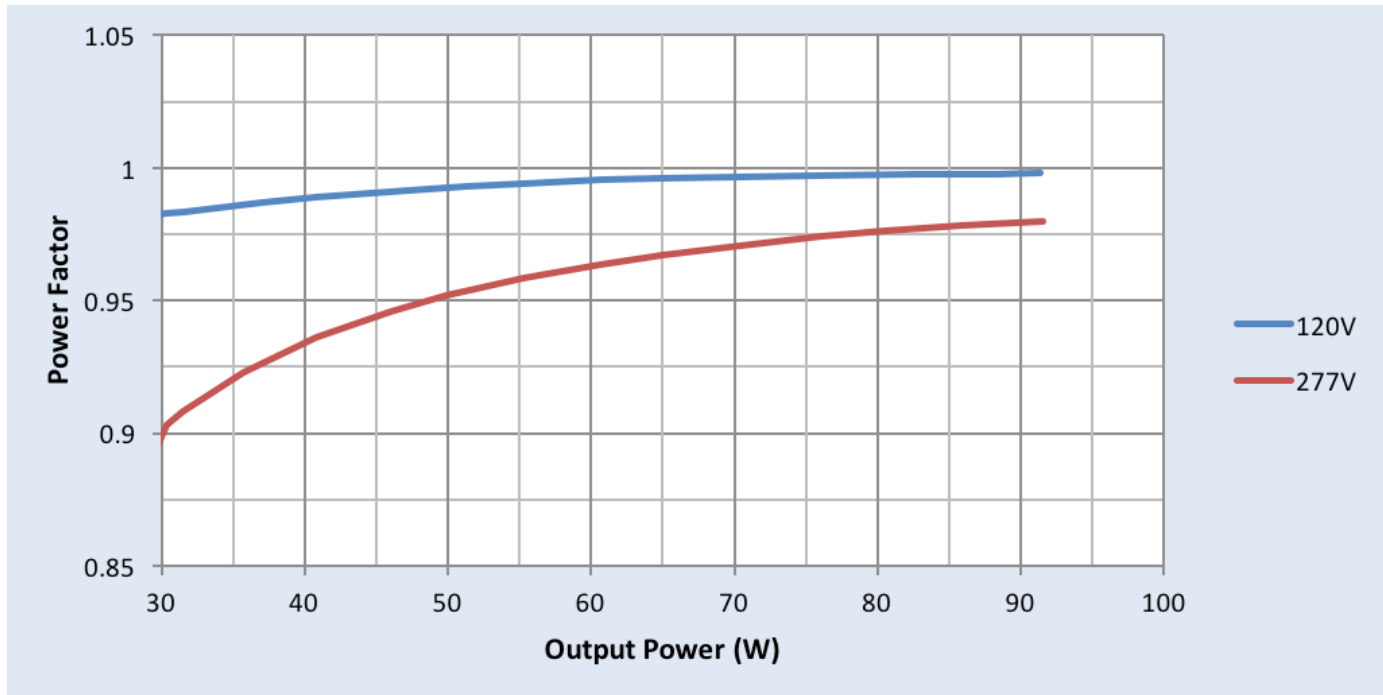### Efficiency Vs. Output Voltage at 277Vac

Xitanium   XI095C275V054BSS1

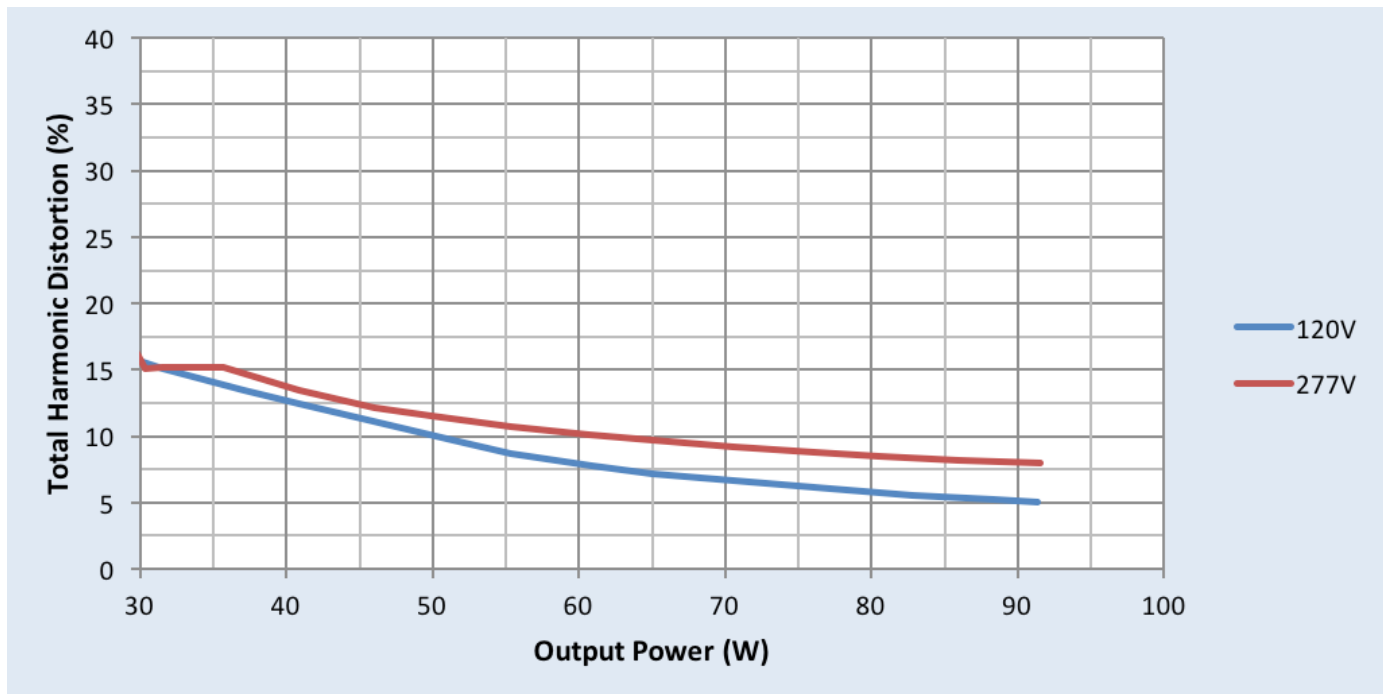## 95W 0.1-2.75A 0-10V Dimming with SimpleSet

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.
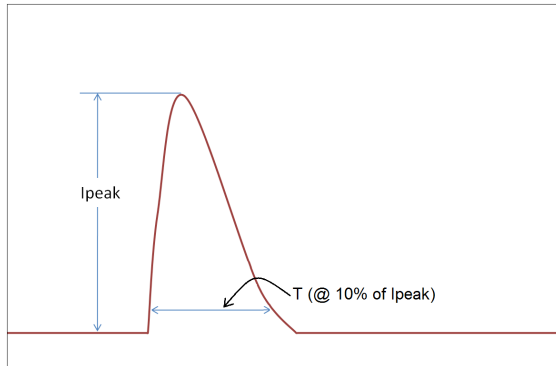
Power Factor Vs. Output Power

Total Harmonic Distortion (THD) Vs. Output Power

Xitanium   XI095C275V054BSS1

95W 0.1-2.75A 0-10V Dimming with SimpleSet

Inrush Current Info

Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	27A	141µS
277 Vrms	84A	117µS

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	500V
0-10V	2.5kV	2.5kV	NA	2.5kV
Enclosure	2xU+1kV	500V	2.5kV	NA

U = Max. input voltage

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

www.signify.com/advance