



The Advance Xitanium range of linear LED drivers is designed to provide OEMs with ultimate flexibility. These models are compatible with standard 0-10V dimming systems to deliver reliably smooth dimming performance down to a minimum of 1%. Enabled with SimpleSet technology, these drivers offer the needed flexibility and performance for the application with precise tuning of drive currents, selectable dimming curves and adjustable minimum dimming levels. With wide operating windows, slim profile and simple current adjustability, the drivers make it easy for luminaire manufacturers to design linear fixtures with desired lumen levels to suit the application.

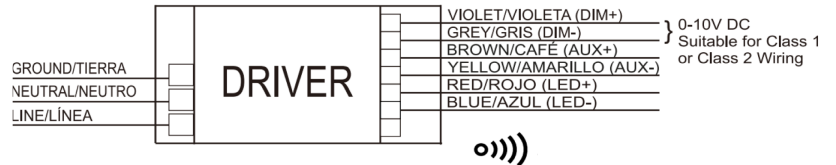
### Specifications

Input Volt. (Vac)	Output Power (W)	Output Volt. (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. Protect. Rating	Dim	Dimming Range (with specified dimmers)	Min. Output Current (A)	Other Notes
120	75	10 - 54	0.1 - 2.0	87.5%	Life 80°C	0.7	87.5	<10%	>0.95	2.5	UL damp & dry	0-10V Suitable for Class 1 or Class 2 Wiring	1% ~ 100%	0.007	Dimming source current: 150 µA
277				89.5%	UL 85°C	0.3		<15%							

### Enclosure

	In. (mm)
Case Length (L2)	16.7 (424)
Case Width (W)	1.19 (30.2)
Case Height (H)	1.02 (25.8)
Mounting Length (M)	16.34 (415)
Overall Length (L1)	16.7 (424)

### Wiring Diagram



#### WARNING:

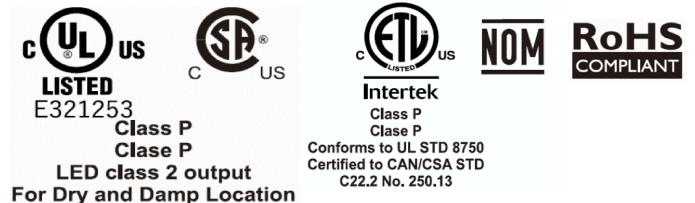
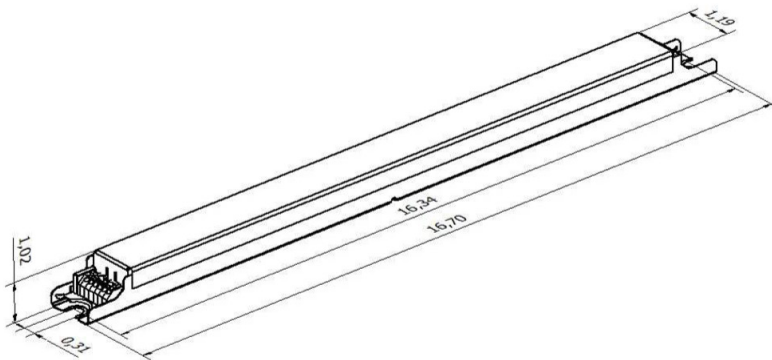
Install in accordance with national and local electrical codes.  
 Use 18 AWG solid copper wire.  
 Rated  $\geq 300V/90^{\circ}C$ .  
 Strip wire 3/8".

#### WARNING:

Risk of fire and electric shock.  
 Do not interconnect output terminations

#### GROUNDING:

Driver case must be grounded.



# Xitanium XI075C200V054PST1

75W 0.1–2A 54V 0–10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Features

- 50,000+ hour lifetime<sup>1</sup>
- SimpleSet programmable
- Large operating window
- 1% minimum dim level
- 12V 100mA/24V 50mA auxiliary power supply selectable

## Benefits

- Slim profile housing enables easy design-in with excellent thermal performance
- Enables simple, fast, flexible application-specific configurations
- Enables fixture designs with comprehensive application coverage for various

## Application

- Troffers and pendant fixtures
- Office
- Healthcare
- Education
- Retail
- Big box stores

## Electrical Specifications

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

## Product Data

Order Information	
Full Product Code	XI075C200V054PST1M (Mid-Pack, 12pcs/Box), 12NC = 929001758413
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 (in CC mode) (ripple = peak to average / average)	15% max. @ max. I <sub>out</sub> 4% max @ Visible for Stroboscopic Frequency range 60Hz–3KHz
Output Current Tolerance (at maximum output current)	<5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED-, mis-wiring protection
Features	
0–10V Dimming	150µA (±3%) source current from driver. See dim curve for detail.
Adjustable Output Current (AOC)	0.1A–2.0A via SimpleSet programming (refer to graph and notes below)
Additional SimpleSet Configurable Features	Adjustable minimum dimming level, Dimming curve selection (Linear or Logarithmic) Adjustable Output level, Adjustable Output Min, OEM Write Protection, Dim to off function Aux output voltage selectable
Environment & Approbation	
Operating Ambient Temp. Range	–20°C to +50°C
Max. Case Temperature (T <sub>case</sub> )	85°C
Agency Approbations	UL8750, CSA–C22.2 No. 250.13, NOM, Class P (ETL, CSA, UL)
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.79 Lbs / 0.36 kgs

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 XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Electrical Specifications

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

## 0-10V Dimming Curve

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

Minimum dim level: 1% (minimum 5mA)

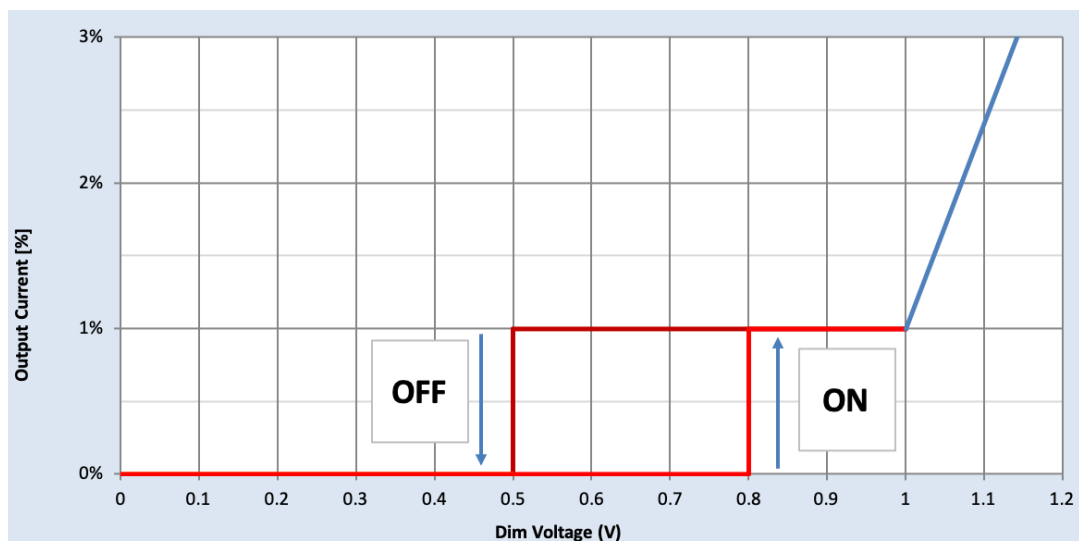
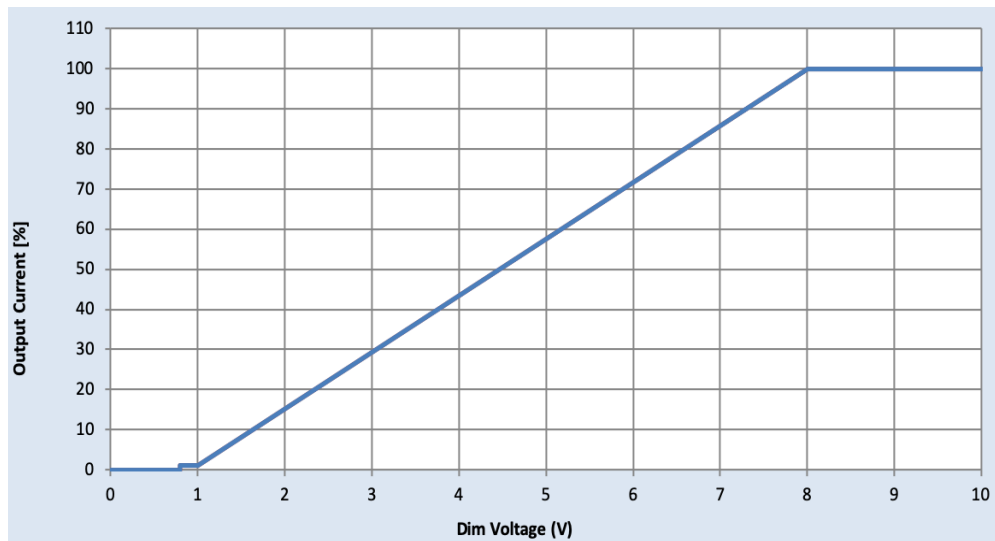
Maximum output voltage on the dimming wires: 12V

## Approved Dimmer List

Manufacturer	Manufacturer Part Number
Lutron	Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver
Leviton	IllumaTech IP7 series
Philips	Sunrise - SR1200ZTUNV

## Dim-to-Off Function

Symbol	Parameter	Min	Typical	Max	Unit
Von	Turn on threshold	0.7	0.8	0.9	V
Voff	Turn off threshold	0.4	0.5	0.6	V
Ton	Turn on time			250	mS
Toff	Turn off time			1000	mS



# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Electrical Specifications

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

### 12V/24V Auxiliary Power Supply

Symbol	Parameter	Condition	Min	Typical	Max	Unit
<b>Vaux</b>	Aux Power supply Nominal output voltage (programmable)	Steady state and during pulse current	10.8	12	13.2	V
			21.6	24	26.4	
<b>Iaux</b>	Steady state Average output current	12V	0		100	mA
		24V	0		50	

### Approved Sensor List

Manufacturer	Manufacturer Part Number
Enlighted INC	SU-5E
WATTSTOPPER	FSP201

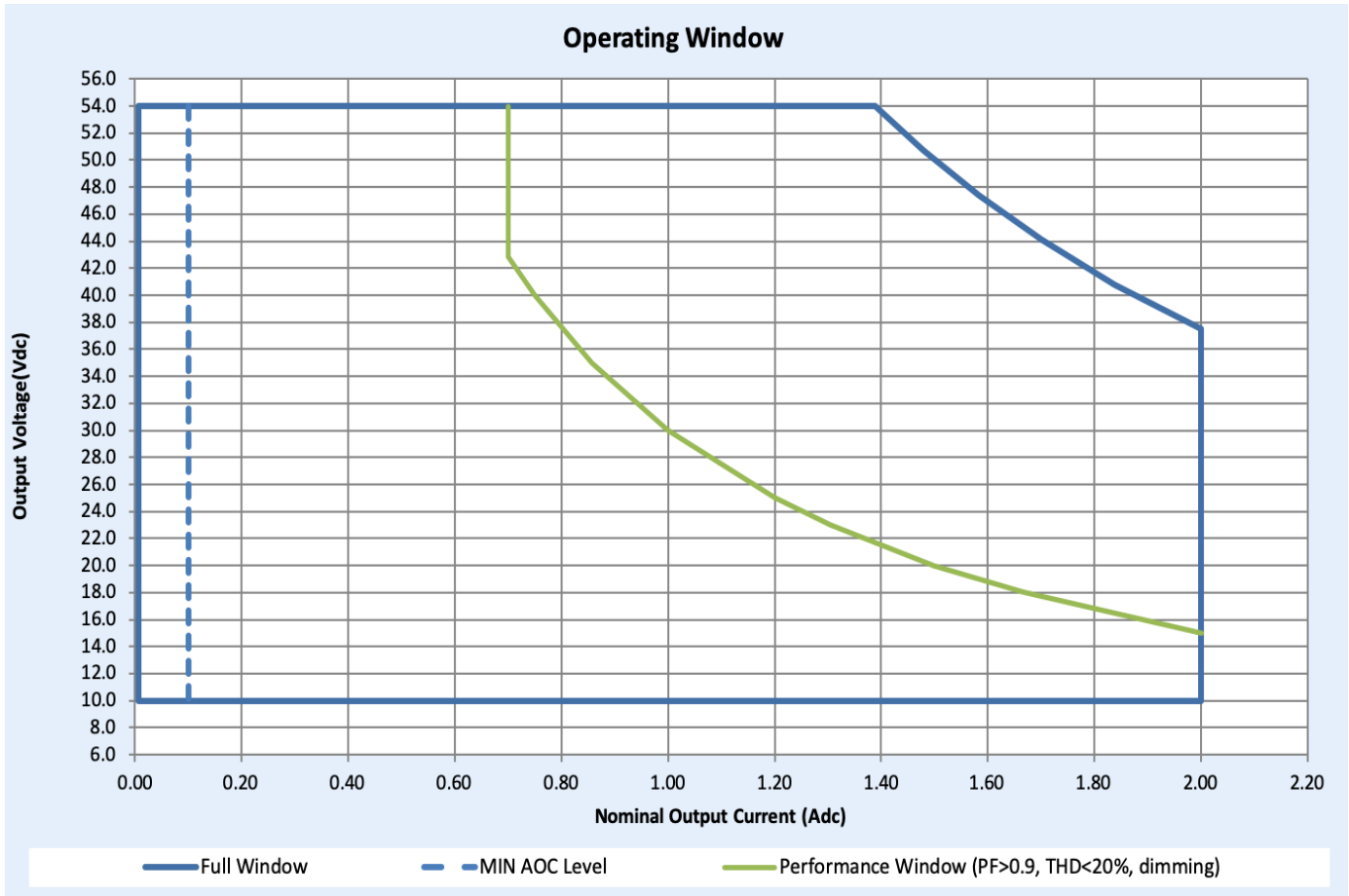
# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Electrical Specifications

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

## Driver Output Window



## Notes

1. Factory default output current is 2A.
2. For dimming to a minimum level of 1% the output current setting through AOC should be  $\geq 0.7A$ .

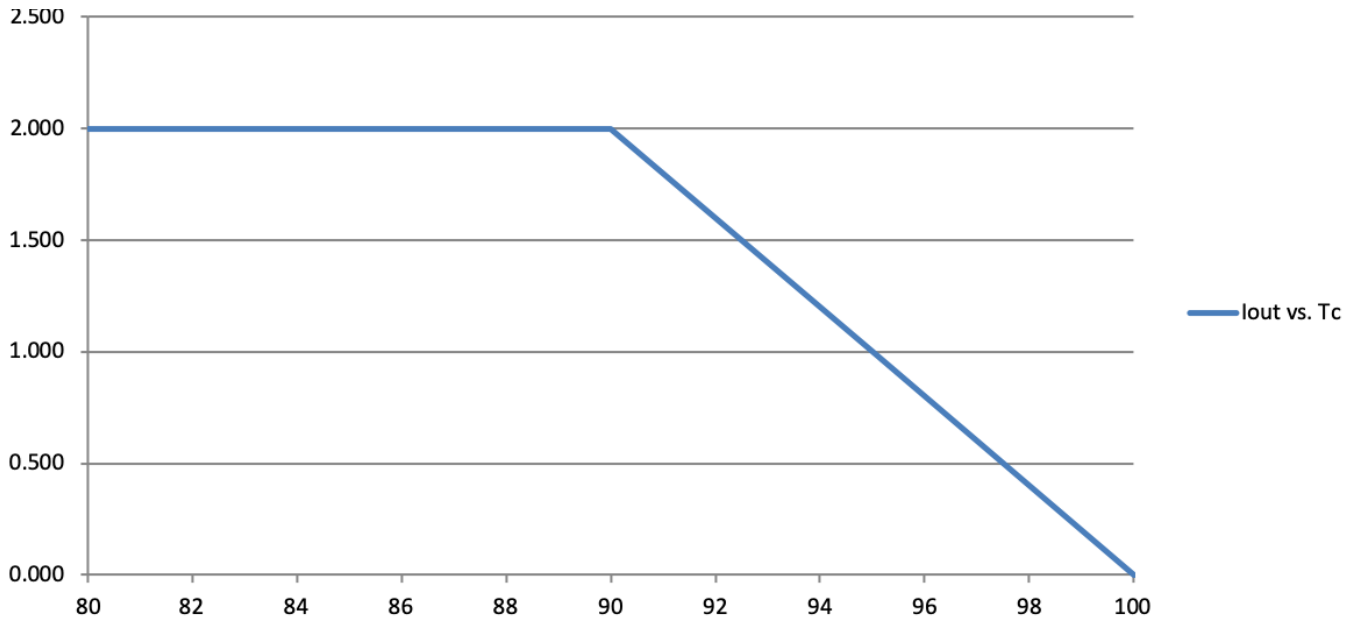
# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Electrical Specifications

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

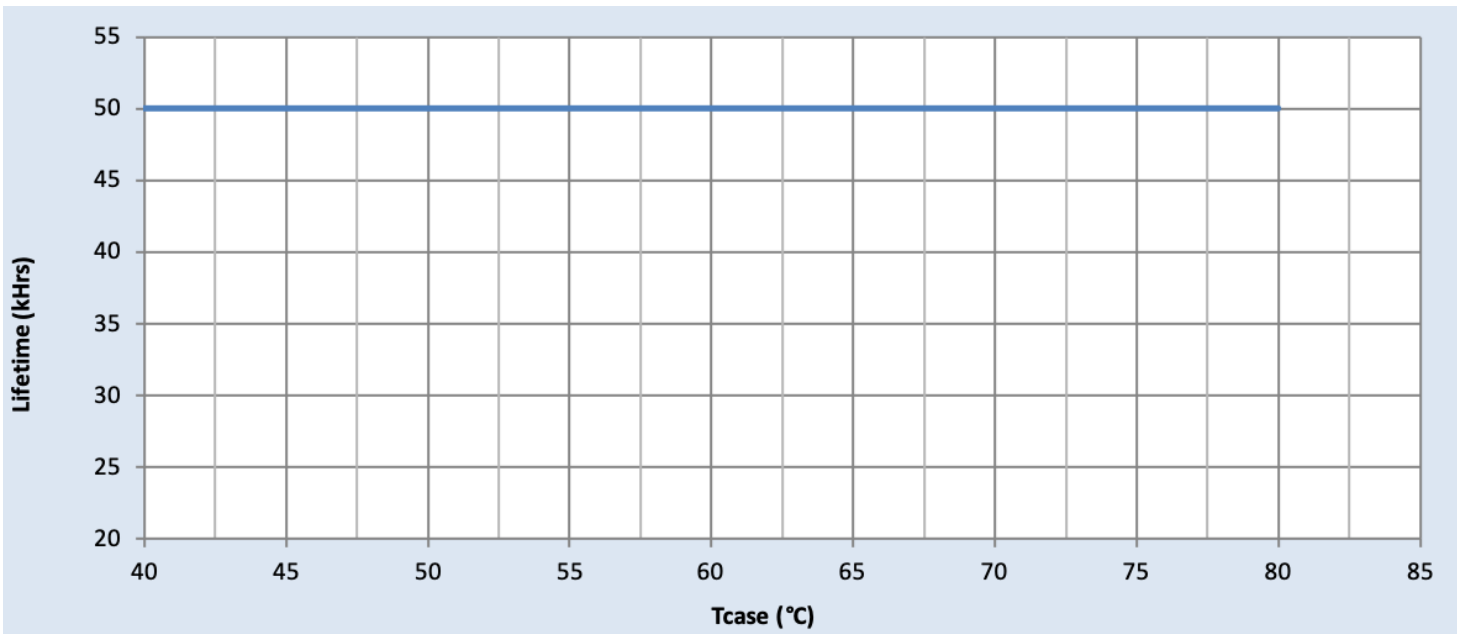
### Output Current Vs. Driver Case Temperature



## Note

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

### Driver Lifetime Vs. Driver Case Temperature



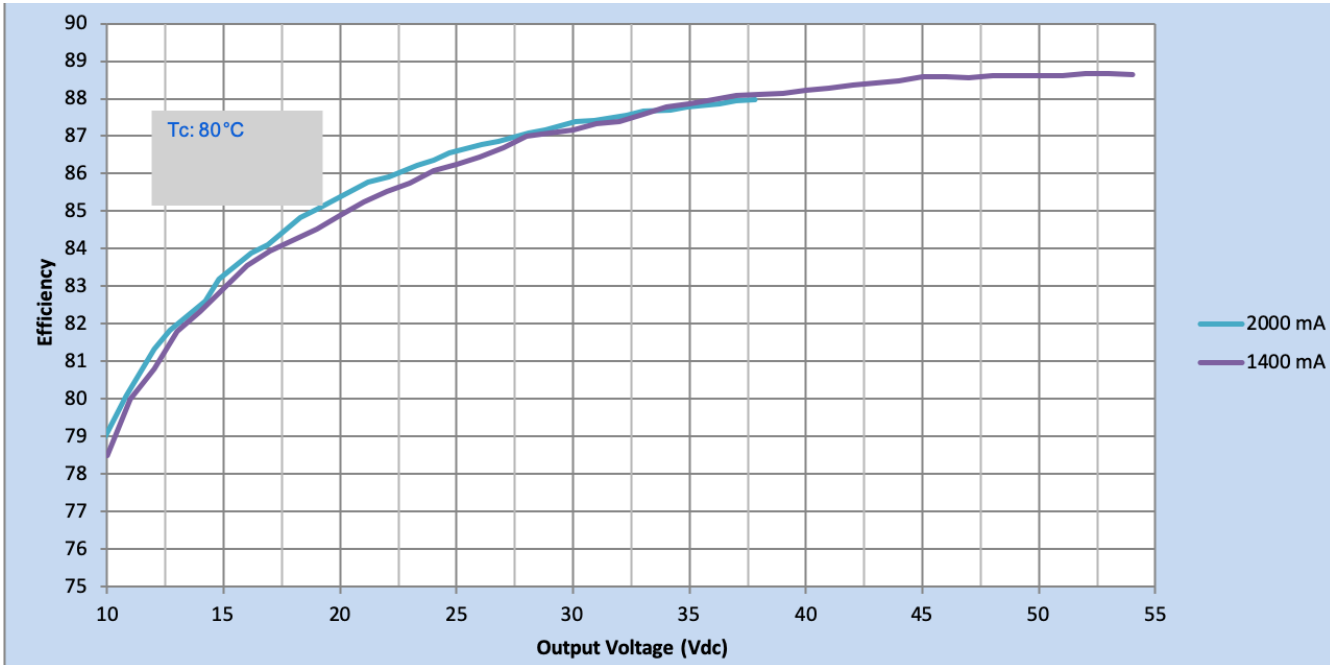
# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

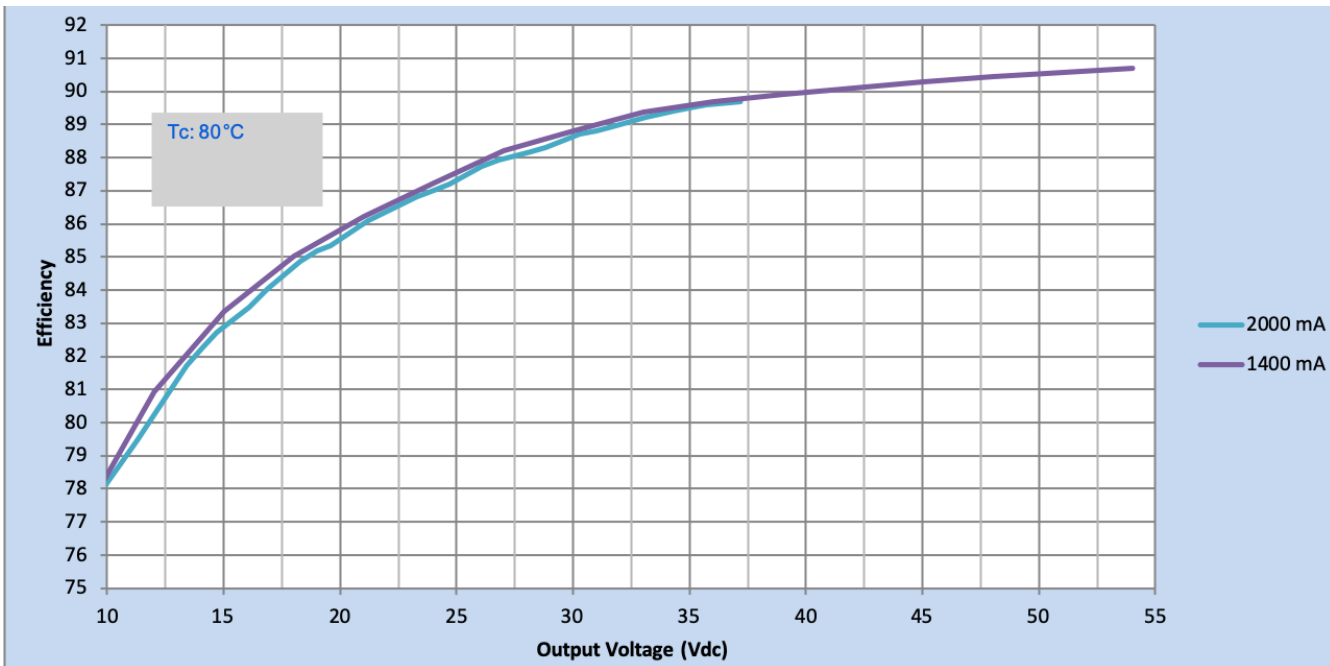
## Performance Characteristics

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



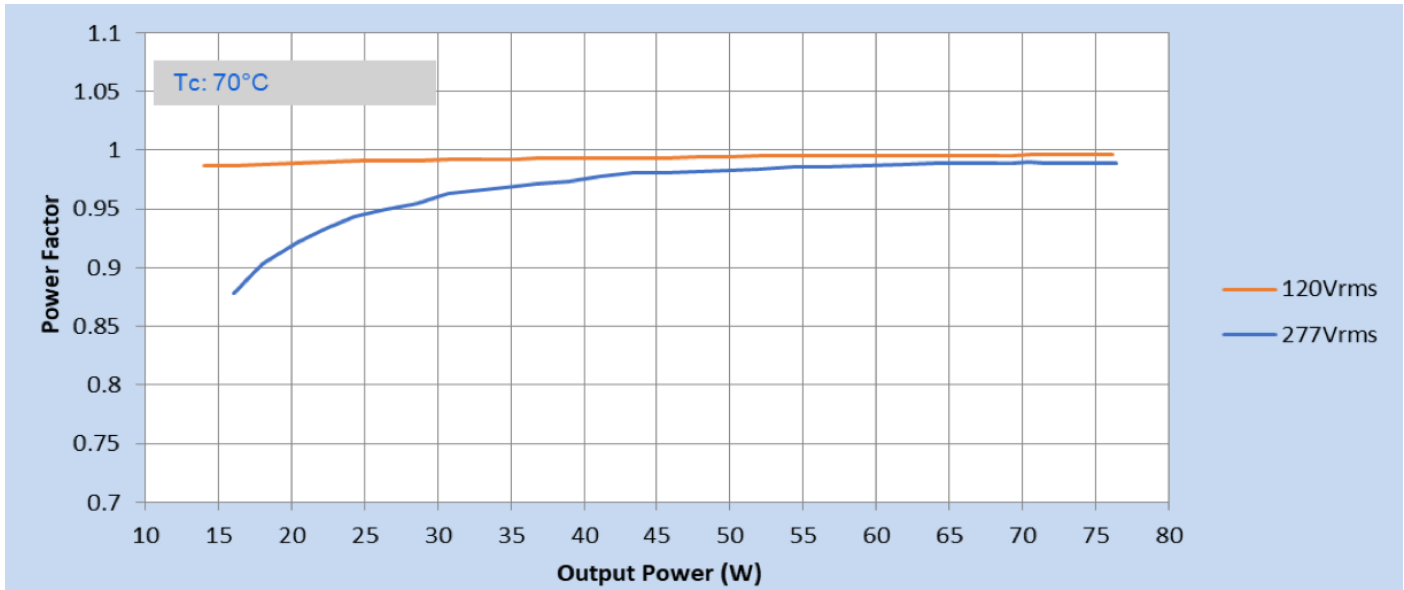
# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

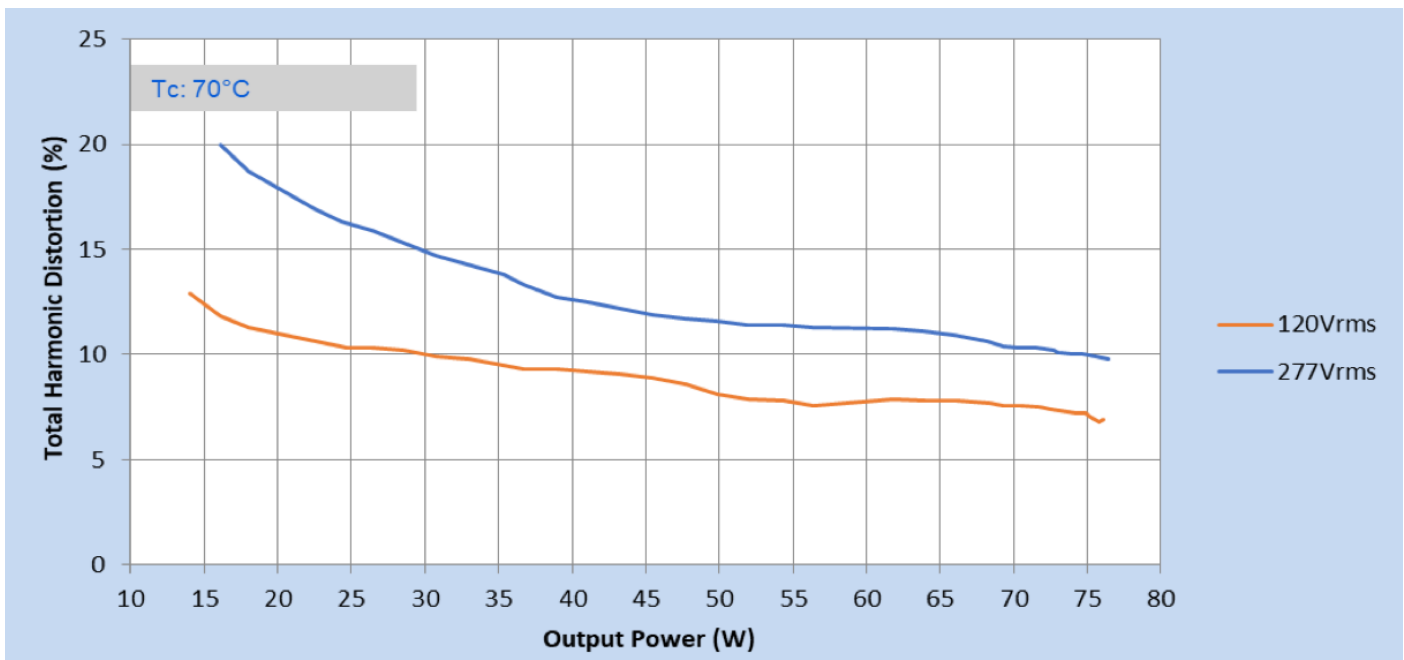
## Performance Characteristics

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. Output Power



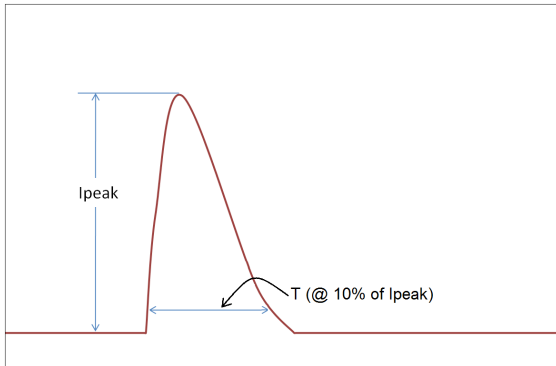
### Total Harmonic Distortion (THD) Vs. Output Power



# Xitanium XI075C200V054PST1

75W 0.1-2A 54V 0-10V INT (1% dim) with SimpleSet and auxiliary power supply selectable

## Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	16.6A	180µS
277 Vrms	55.7A	185µS

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)
100kHz Ring Wave (w/t 3Ω)	>2.5KV	>2.5KV

## Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	-	2xU+1kV	2xU+1kV	2xU+1kV
Output	2xU+1kV	-	2xU+1kV	2xU+1kV
0-10V	2xU+1kV	2xU+1kV	-	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	-

U=Max. Working Voltage

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

