



The Advance Xitanium SR LED driver (available with new firmware to improve performance) can help reduce complexity and cost of light fixtures used in wireless connected lighting systems. It features a standard digital interface to enable direct connection to SR-certified components. Functionality that ordinarily would require additional auxiliary components is integrated into the driver. The result is a simple, cost-effective light fixture that can enable every fixture to become a wireless node.

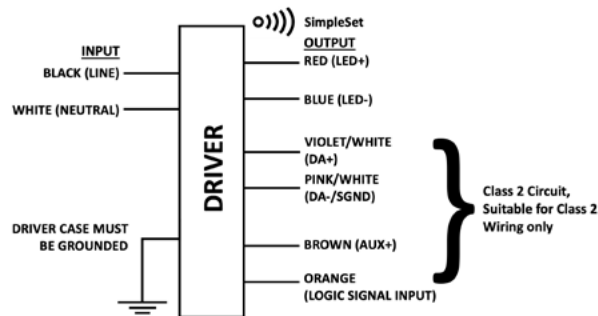
### Specifications

Input Voltage (Vrms)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max. Load and 70°C Case	Max. Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W) <sup>1</sup>	Inrush Current (Apk/10%-µs)	THD @ Max. Load	Power Factor @ Max. Load	Surge Protection Common/Diff (KV)	Weight (Lbs/kgs)	Envir. Protection Rating	Driver Type
120	75	32-79	0.105-1.05	89	80	0.74	95	38 / 200	<10%	>0.95	6/6	1.50 / 0.68	UL damp & dry	Constant Current
277				92		0.32		94 / 175						

### Enclosure

	In. (mm)
Case Length	5.43 (138.0)
Case Width	2.32 (59.0)
Case Height	1.50 (38.0)
Mounting Length	5.98 (152.0)
Overall Length	6.61 (168.0)

### Wiring Diagram



### Warning

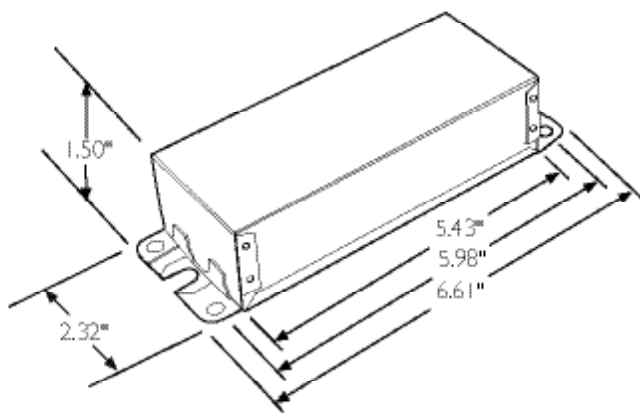
Install in accordance with national and local electrical code.

The field-wiring leads or push-in terminals shall be fully enclosed.

Input and output use lead-wires.

Lead-wires are 18AWG 105C/600V solid copper per UL1452.

Lead length outside enclosure: 270 mm (±30mm) on all wires.



1. Based on 1W load from SR power supply and 6.2W load from auxiliary power supply.

Dimming	Dimming Range	Minimum Output Current (A)
DALI	10% ~ 100%	0.105

# Xitanium SR XI075C105V079VSY2

## 75W 120-277V 1.05A SR

### Electrical Specifications

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

### Features

- Compatible with SR-certified devices
- Standard SR digital interface including integral power supply
- Auxiliary power supply for higher power device requirements
- Accurate energy metering
- Logic signal input
- Drive current setting via SimpleSet
- 5-year limited warranty<sup>1</sup>

- New firmware for improved constant light output (CLO) performance and expanded internal memory

### Benefits

- Enables interoperability with multiple sensor/network system vendors
- Reduces cost and complexity of outdoor connected lighting systems<sup>2</sup>
- Eliminates need for high-voltage relays to increase system reliability

- 2% metering accuracy meets proposed ANSI standard C136.52
- Can be used with standard motion sensors for local control to complement network control

### Application

- Area
- Roadway
- Parking garages
- Floodlights

### Product Data

Ordering Information	
Order Code	XI075C105V079VSY2
Full Product Code	XI075C105V079VSY2M (Mid-pack, 10pcs/box)
Full Product Name	XITANIUM 75W 1.05A 120-277V SR
Net Weight Per Piece	1.50 lbs / 0.68 kgs
Input Information	
Inrush Current	Per NEMA 410
Line Voltage (AC operation)	120-277VAC +/- 10%
Line Current	0.80A @ 120V, 0.35A @ 277V
Line Frequency	50/60Hz
Surge Protection	Refer to table
Output Information	
Output Voltage Range	32VDC to 79VDC
Output Current Range	0.105A to 1.05A
Output Current Ripple	<15% at max. Iout (ripple = pk-avg/avg) Low frequency (<120 Hz) content <1%
Output Current Tolerance	±5% at max. output current
Open Circuit Voltage	150VDC
Protections	Short Circuit and Open Circuit Protection for LED + and LED-
Features	
AOC (adjustable output current)	0.105A to 1.05A via SimpleSet programming (refer to graphs and notes)
Life	50,000 hr nom. @ TC 80°C; 100,000 hr nom. @ TC 70°C (refer to graphs)
Suitable for Outdoor Use?	Yes
Interfaces	AOC via SimpleSet or SR using MultiOne, SR, Logic Signal Input (LSI), Auxiliary Power Supply
Min. Ambient Temp	-40°C
Max. Case Temperature (Tcase)	80°C
Input Over-voltage	Can survive input over-voltage stress of 320VAC for 48 hours and 350VAC for 2 hours
Earth Leakage Current	0.75 mA [max.]
THD Total	Refer to graph

1. Advance Xitanium LED drivers are designed and manufactured to engineering standards correlating to an average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.
2. Functionality that ordinarily would require additional auxiliary components is integrated into the driver.

# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

## Electrical Specifications

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

## Product Data (continued)

<b>Power Factor</b>	Refer to graph
<b>Efficiency</b>	Refer to graph
<b>Power Reporting Accuracy</b>	± 2% in performance window and under nominal operating conditions
<b>SR Interface</b>	
<b>Digital Protocol</b>	Specifications available to SR-Certified Partners
<b>SR Power Supply</b>	Specifications available to SR-Certified Partners
<b>Auxiliary Power Supply</b>	
<b>Power</b>	3W continuous, 10.5W peak for 1.2ms
<b>Voltage</b>	24V+/-10%
<b>Ripple</b>	300mV peak-peak for resistive load
<b>Protection</b>	Overload and short circuit protected
<b>Last Gasp Energy</b>	200mJ typ.
<b>Logic Signal Input (LSI)</b>	
<b>Dry Contact Input</b>	Yes
<b>Logic Low</b>	<3V or open
<b>Logic High</b>	>7V
<b>Max. Current Draw</b>	2mA
<b>Environment &amp; Approbation</b>	
<b>Agency Approbations</b>	UL8750, UL1310, UL935, cUL, Class P (UL, cUL)
<b>Audible Noise</b>	<24dB Class A
<b>Isolation Between Output and Input</b>	Refer to table
<b>Isolation of Controls</b>	Refer to table
<b>EMC (electromagnetic compliance)</b>	Meets FCC 47 Part 15 Class A
<b>Envir. Protection Rating</b>	UL Dry & Damp

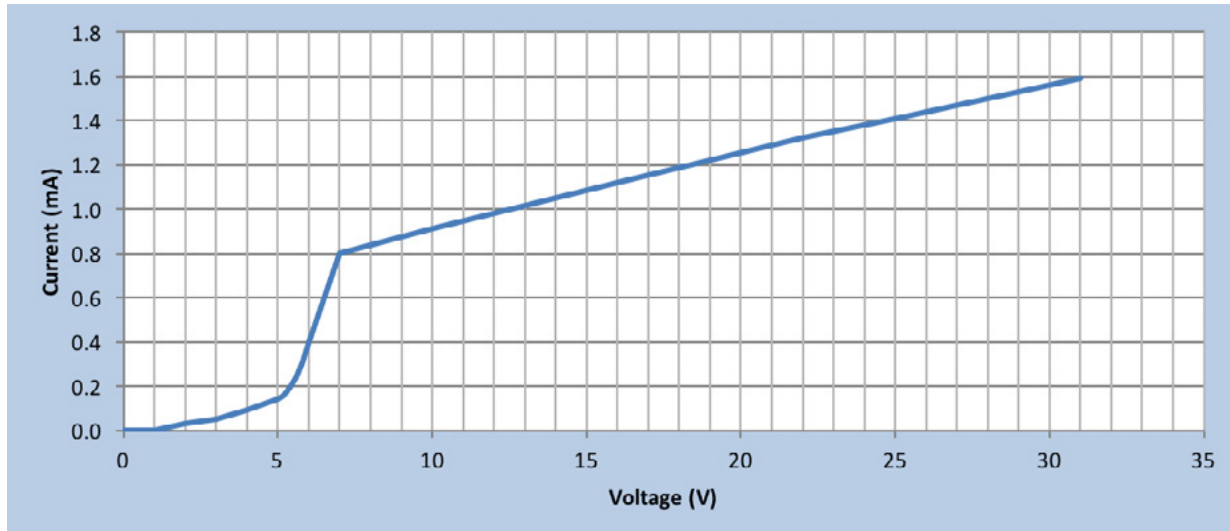
# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

## Electrical Specifications

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

## Logic Signal Input (LSI) Characteristics (Typical)



# Xitanium SR XI075C105V079VSY2

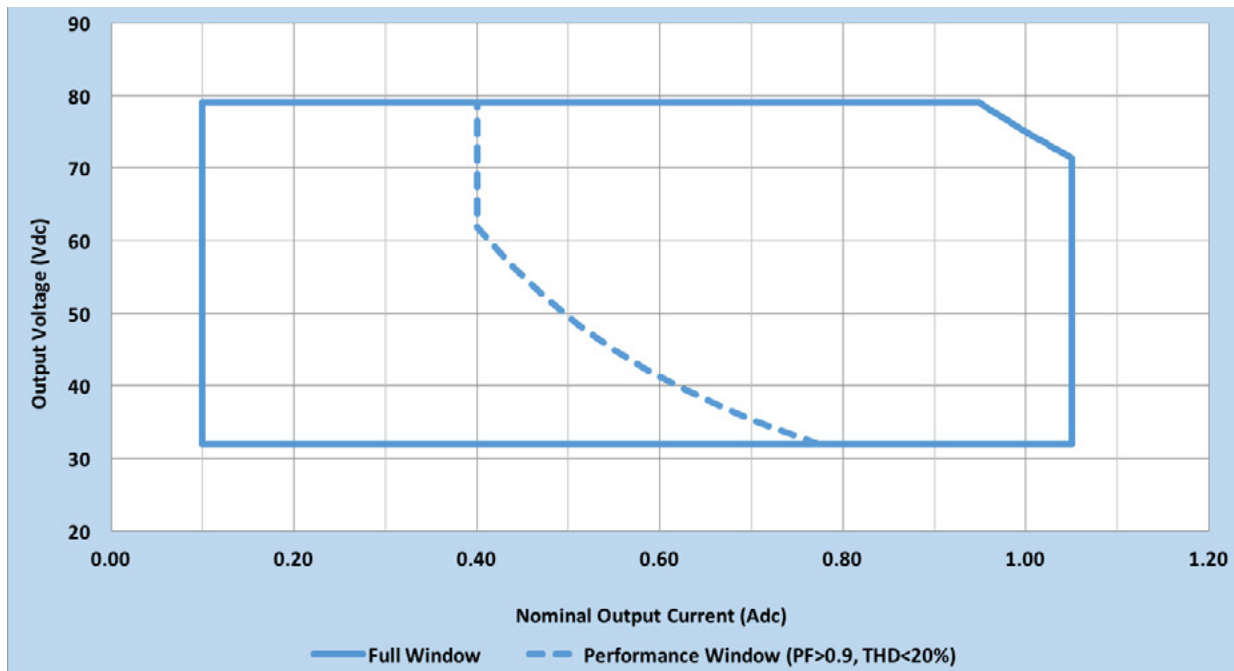
75W 120-277V 1.05A SR

## Electrical Specifications

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

## Operating Window

The driver current cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting. Output tolerance +/-5%.



# Xitanium SR XI075C105V079VSY2

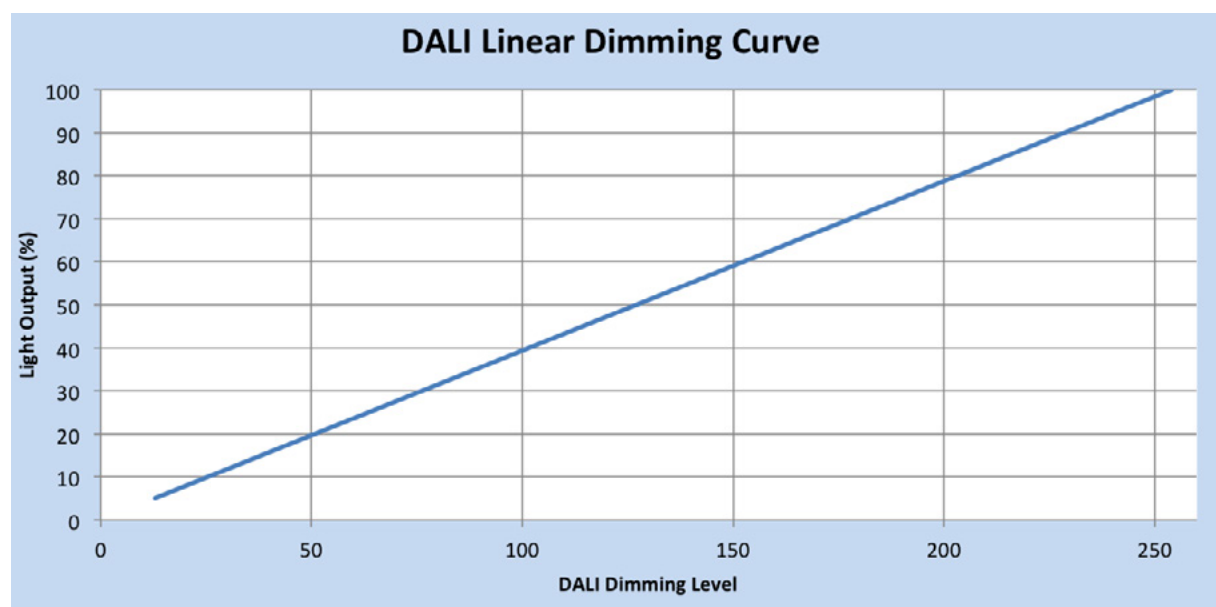
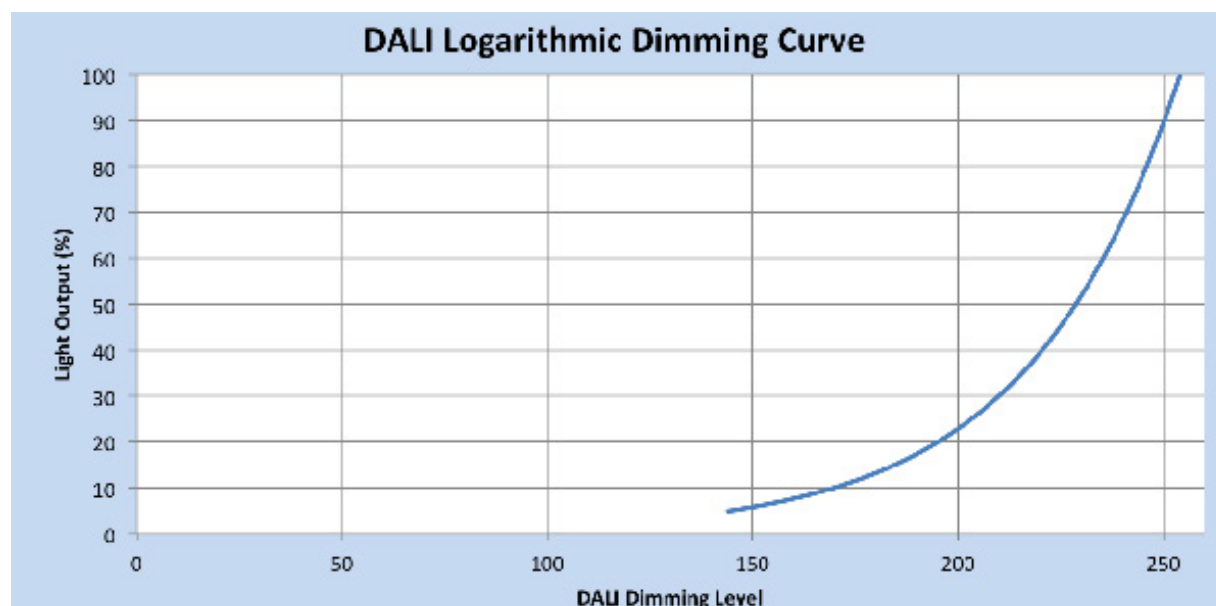
75W 120-277V 1.05A SR

## Electrical Specifications

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

## Dimming Characteristics

SR drivers use a logarithmic dimming curve as default. Dimming is accomplished through the 2-wire DALI connection to the sensor. DALI standard IEC62386\_102 Edition 2 defines the logarithmic dimming curve. DALI standard IEC62386\_101 Edition 2 defines the linear dimming curve as well as the command for switching between logarithmic and linear curves.



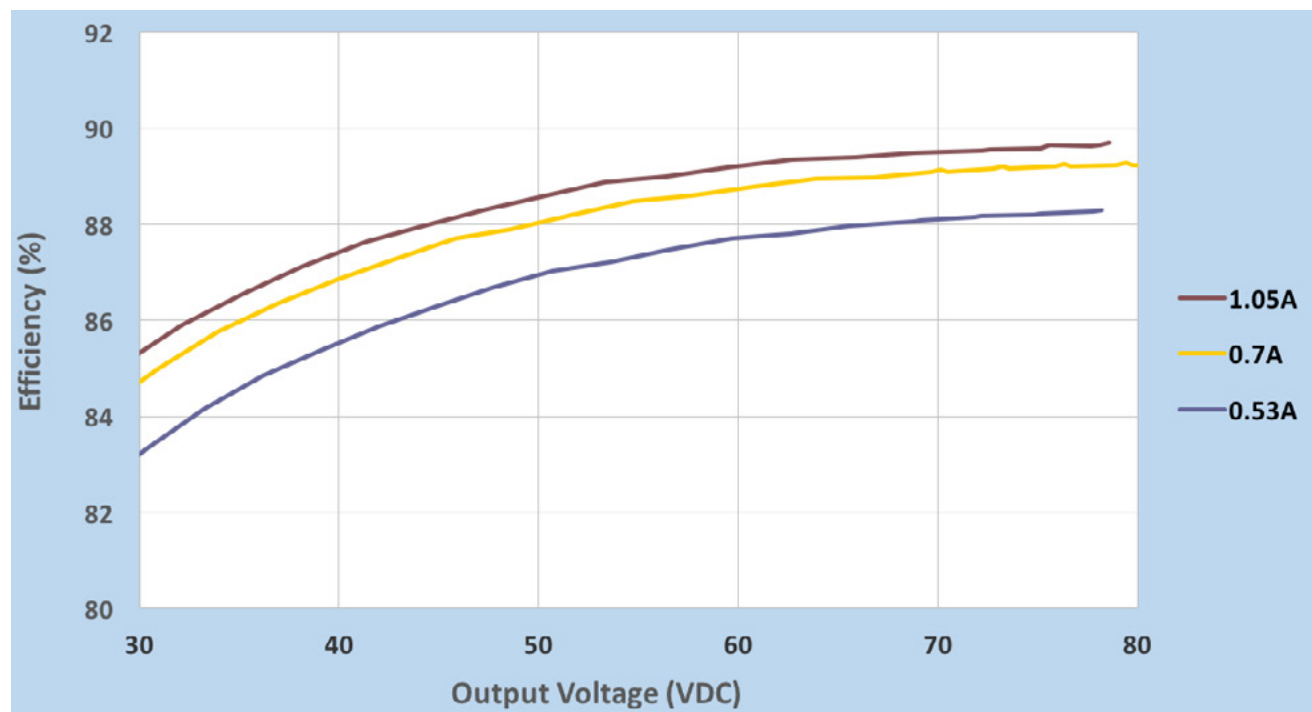
# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

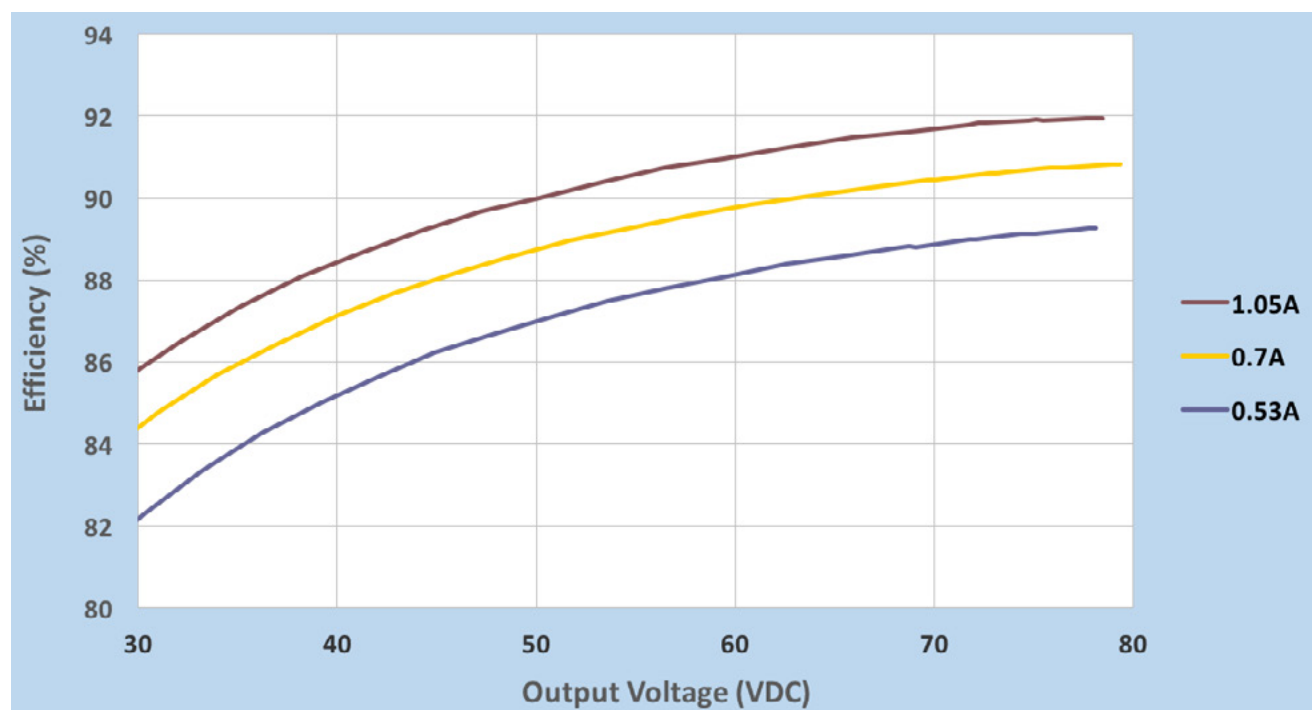
## Performance Characteristics

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. Data below at 70°C Tcase.

### Efficiency Vs. Output Voltage @ 120VAC



### Efficiency Vs. Output Voltage @ 277VAC



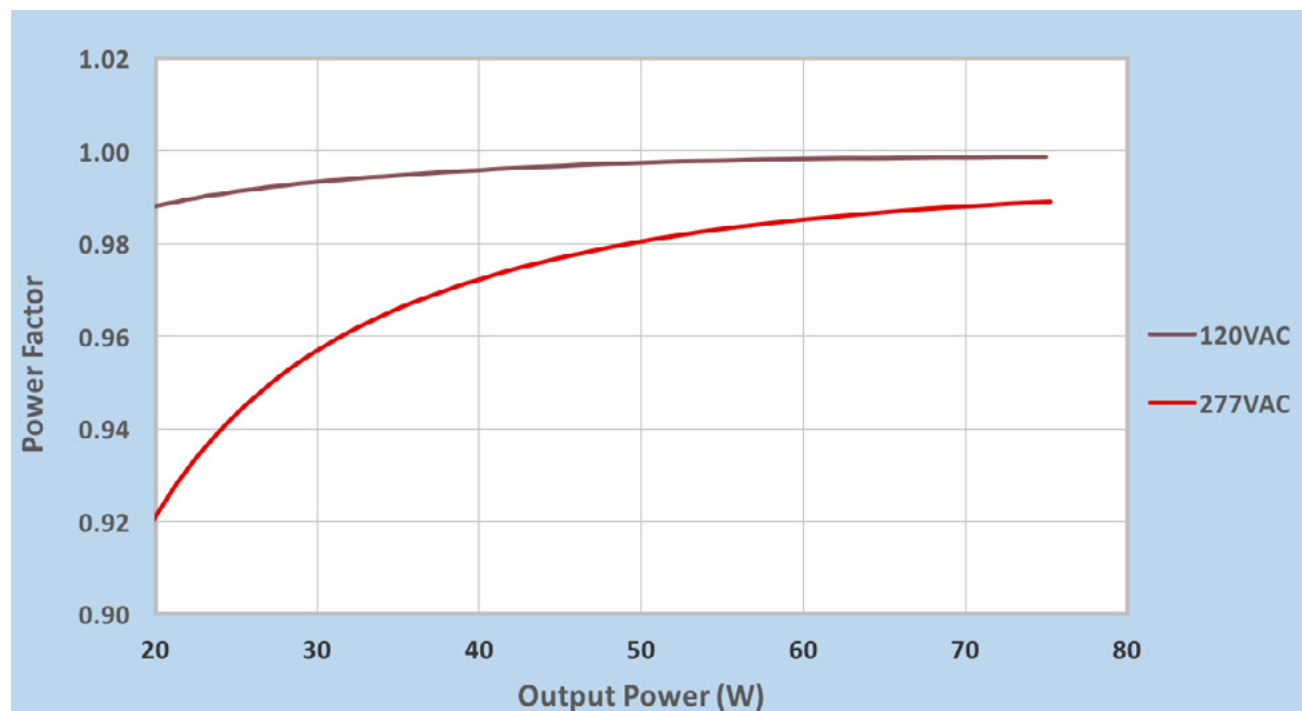
# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

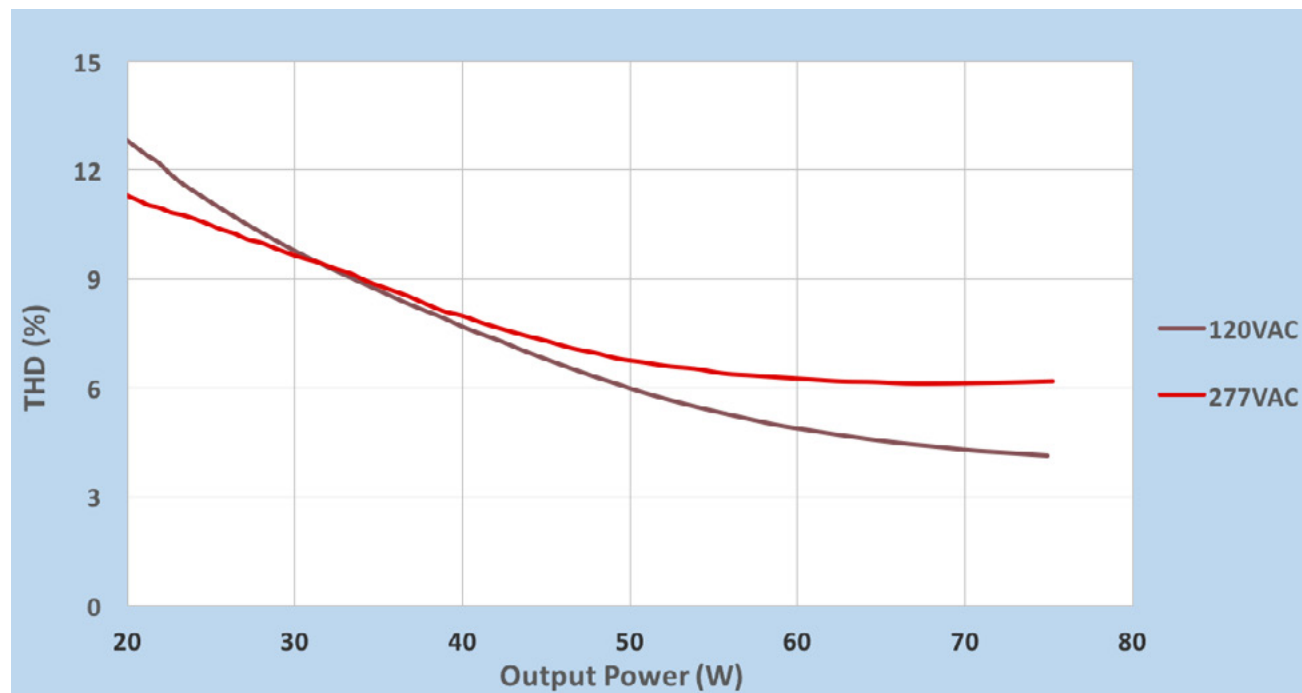
## Performance Characteristics

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. Data below at 70°C Tcase.

### Power Factor Vs. Output Power



### Total Harmonic Distortion Vs. Output Power





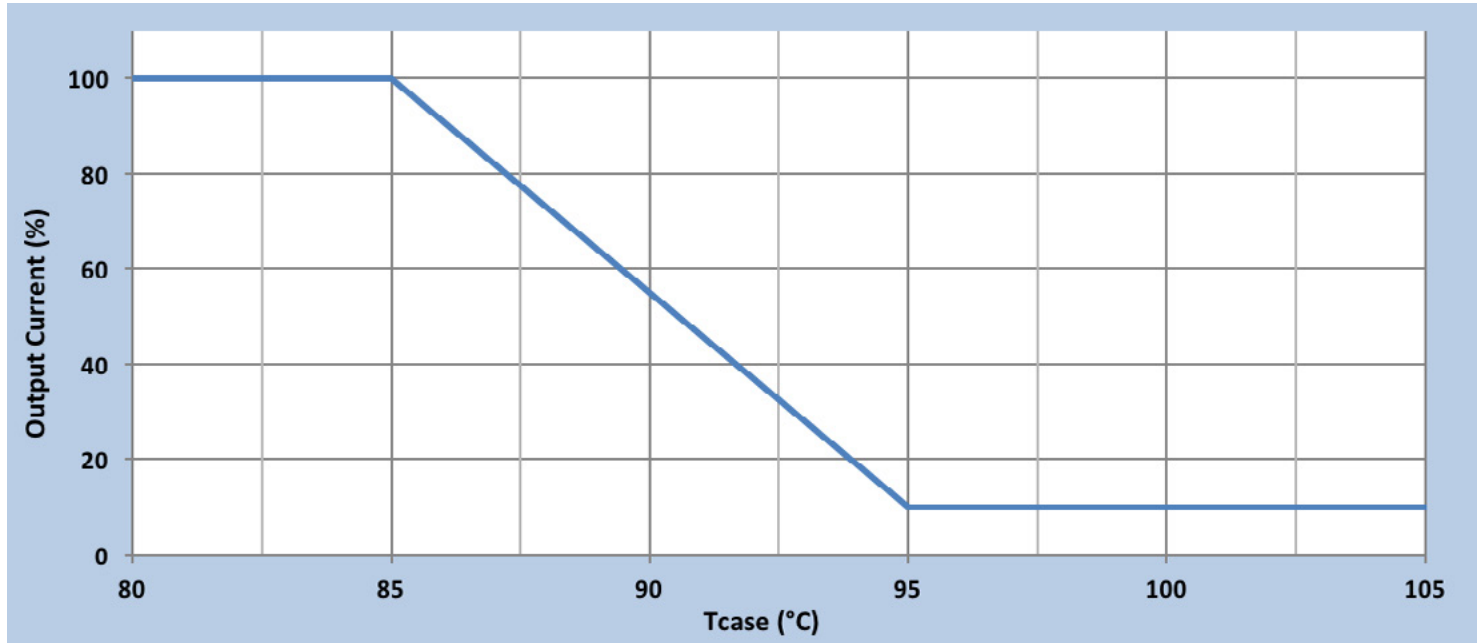
# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

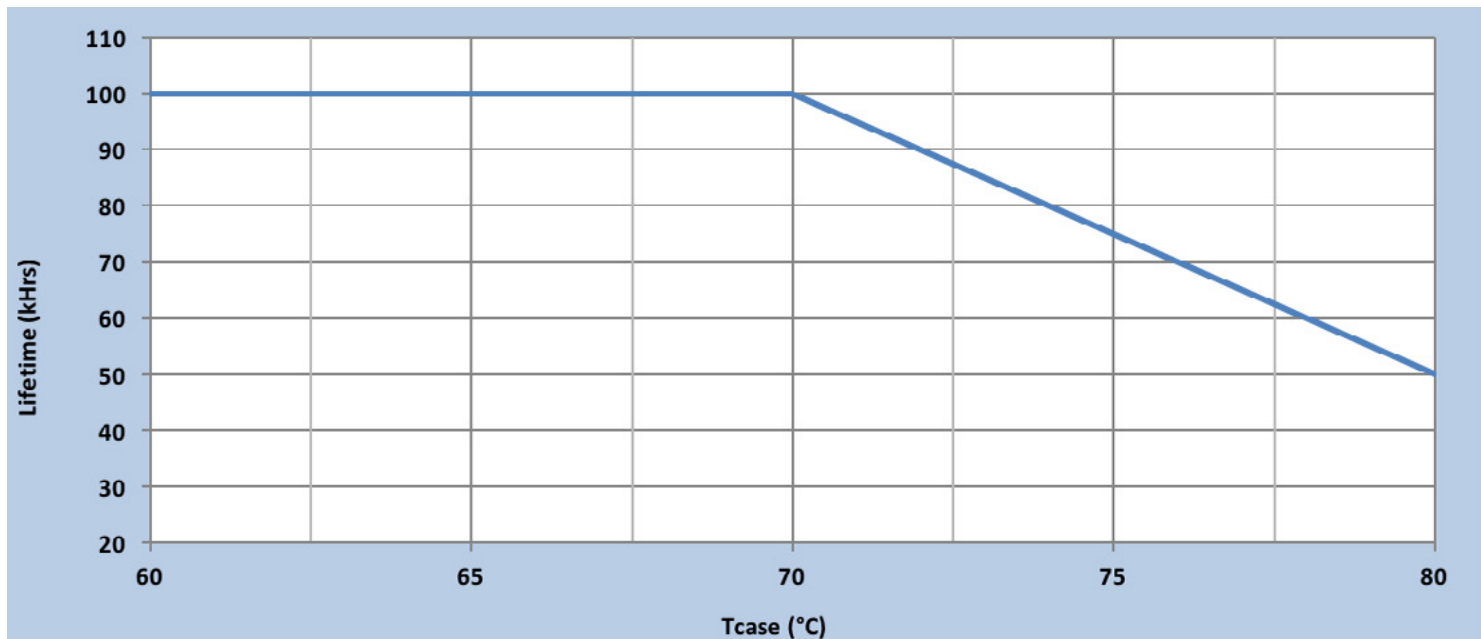
## Electrical Specifications

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

## Output Current Vs. Driver Case Temperature



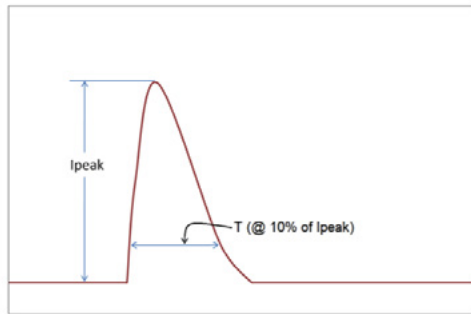
## Driver Lifetime Vs. Driver Case Temperature



# Xitanium SR XI075C105V079VSY2

75W 120-277V 1.05A SR

## Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vac	38A	200 $\mu$ s
277 Vac	94A	175 $\mu$ 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)
1.2/50 $\mu$ s Combination Wave (w/t 2 $\Omega$ )	6kV	6kV

## Isolation

Isolation	Input Leads	Output Leads	SR Leads (SR+, SR-/SGND, AUX, and LSI), Class 2 Only	Enclosure
Input Leads	NA	2xU+1kV	2xU+1kV	2xU+1kV
Output Leads	2xU+1kV	NA	2xU+1kV	2xU+1kV
SR Leads (SR+, SR-/SGND, AUX, and LSI), Class 2 Only	2xU+1kV	2xU+1kV	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	NA

U = Max. input voltage



© 2021 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Signify North America Corporation  
200 Franklin Square Drive,  
Somerset, NJ 08873  
Telephone 855-486-2216

Signify Canada Ltd.  
281 Hillmount Road,  
Markham, ON, Canada L6C 2S3  
Telephone 800-668-9008

All trademarks are owned by Signify Holding or their respective owners.