



Advance CertaDrive X LED drivers are designed to meet basic lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion even more affordable.

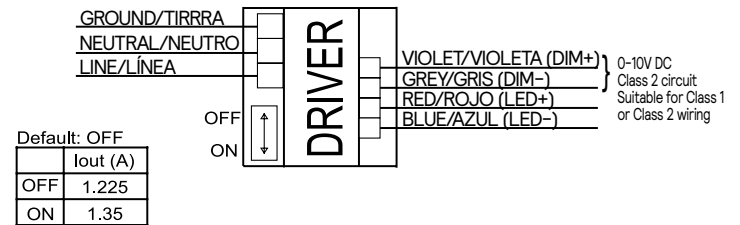
### Specifications

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 (Ring Wave, KV)	Envir. Protection Rating	Dimming	Dimming Range (with specified dimmers)
120	65	28-48	1.225 - 1.35A	87	Tc-life: 70°C Tc-UL: 80°C	0.61	74.7	<20%	>0.9	2.5	UL damp & dry	0-10V Analog	10% ~ 100%
277				89		0.26							

### Enclosure

Item	In(mm)	Tolerance (mm)
Overall length (A1)	14.17 (360.0)	+/-0.5
Mounting Hole Distance (A2)	13.67 (347.2)	+/-0.5
Mounting Hole Distance (A3)	14.00 (355.6)	+/-0.5
Case Length (A4)	11.96 (303.8)	+/-0.5
Case Width (B1)	1.18 (30.0)	+/-0.5
Case Height (C1)	0.83 (21.0)	+1.0
Mounting Hole Diameter (D1)	0.20 (5.08)	+/-0.3
Mounting Hole Diameter (D2)	0.30 (7.7)	+/-0.3

### Wiring Diagram

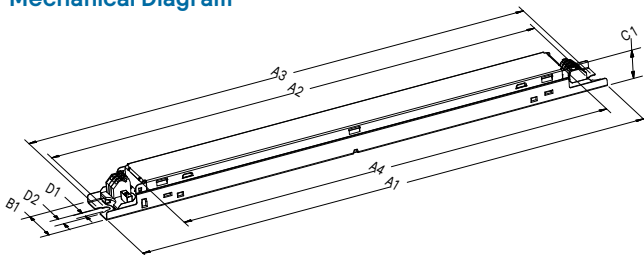


Switch position default = OFF

### WARNING:

Install in accordance with national and local electrical code, USE 18AWG solid and tinned stranded copper wires rated >=90° C.

### Mechanical Diagram



# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## Features

- 50,000+ hour lifetime<sup>1</sup>
- Excellent thermal performance
- High power factor & low THD<sup>2</sup>

## Benefits

- Enables long life luminaire designs
- Allows operability in indoor (low-bay) ambient conditions
- Suitable for commercial indoor applications

## Application

- Indoor linear troffers, pendants
- Office areas
- Retail centers
- Educational facilities

## Electrical Specifications

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

## Product Data

Order Information	
Full Product Code	CI065C135V048CDX1 (Mid-Pack, 18pcs/Box) 12NC:929002710813
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108 Vac
Max. Mains Voltage Operational	305 Vac
Output Information	
Maximum Open Circuit Voltage	60Vdc, Class 2 output
Output Current Ripple (ripple = peak to average / average)	30% max @ max lout
Output Current Tolerance (at maximum output current)	<8% <sup>2</sup>
Protections	Short Circuit
Over Voltage Protection	52V+/-4V Hiccup mode protection
Features	
0-10V Dimming	See dim curve for detail.
Environment & Approbation	
Operating Ambient Temp. Range	-20°C to +40°C
Max Case Temperature (Tcase) <sup>3</sup>	80°C, Tcase Life: 70°C
Agency Approbations	UL 8750, UL 1310, CSA 250.13, Class P (UL, CSA, ETL)
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.591Lbs / 0.268kgs

1. Advance CertaDrive LED Drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at specified Tcase (life) temperature. Minimum 90% survivals based on MTBF modeling.

2. Note: Power Factor (PF) and Total Harmonic Distortion (THD) may deviate under adverse mains voltage conditions outside nominal operation. Output Current (I out) variation includes effects of line & load regulation, temperature variation and component tolerances.

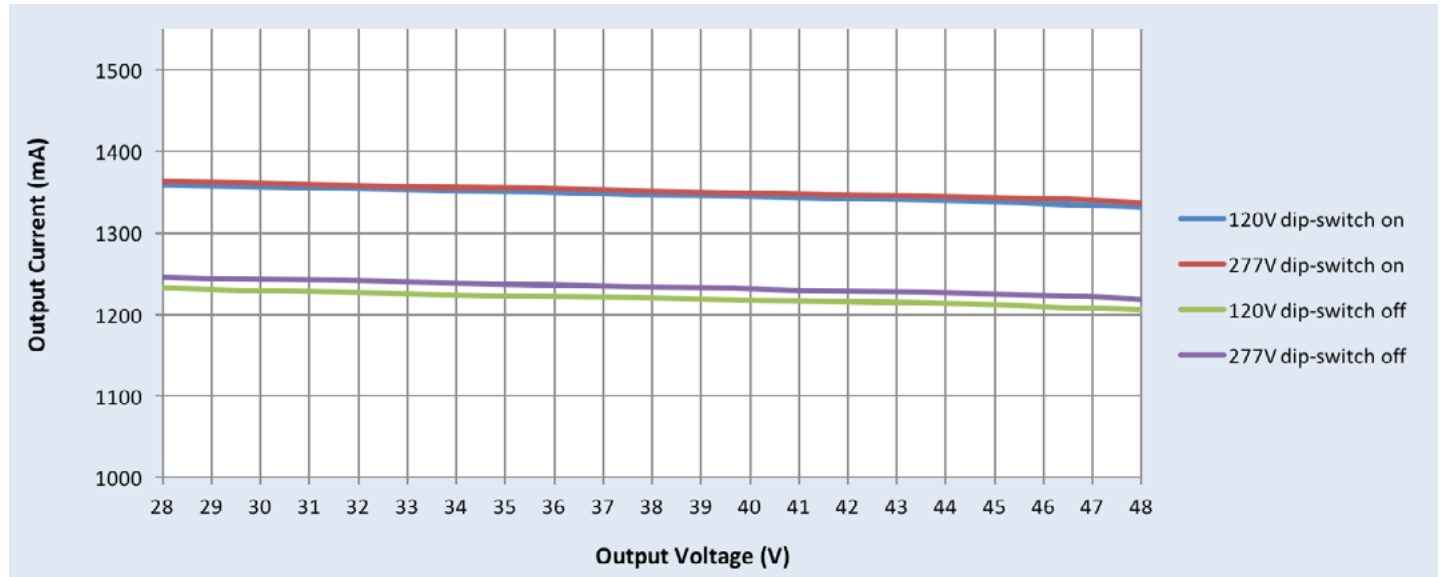
# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## Electrical Specifications

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

### I<sub>out</sub> Vs. V<sub>out</sub>



# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## Electrical Specifications

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

## 0-10V Dimming Curve

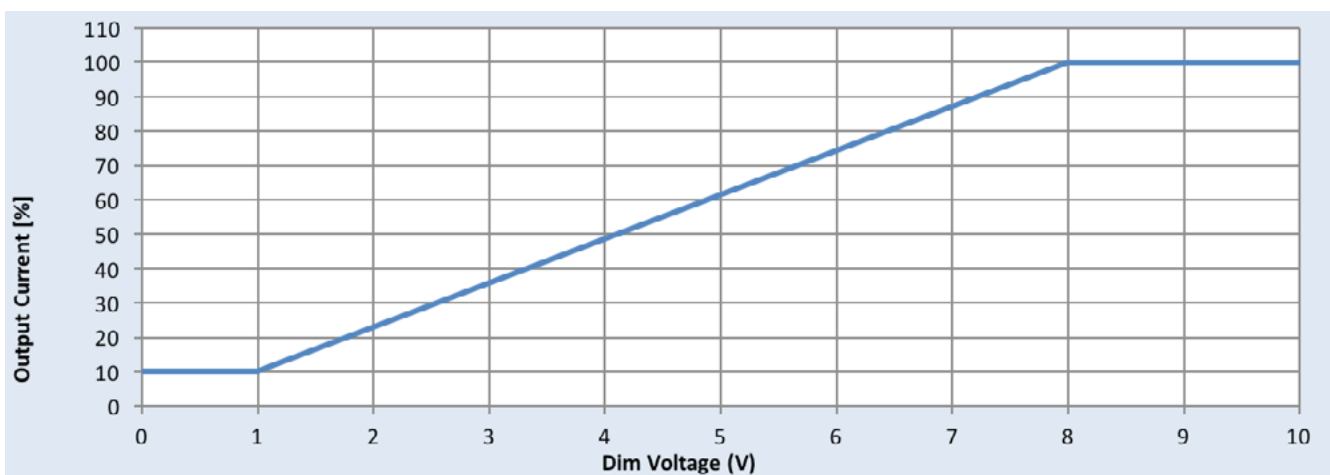
Dimming source current from the driver: 100-250µA (@ 1<Vdim<8V)

Minimum dim level: 10% of Iout

Maximum output voltage on the dimming wires: 12V

## Approved Dimmer List

Manufacturer	Manufacturer Part Number
Lutron	Visit <a href="http://www.lutron.com">www.lutron.com</a>
Leviton	IllumaTech IP7 series
Advance	Sunrise - SR1200ZTUNV



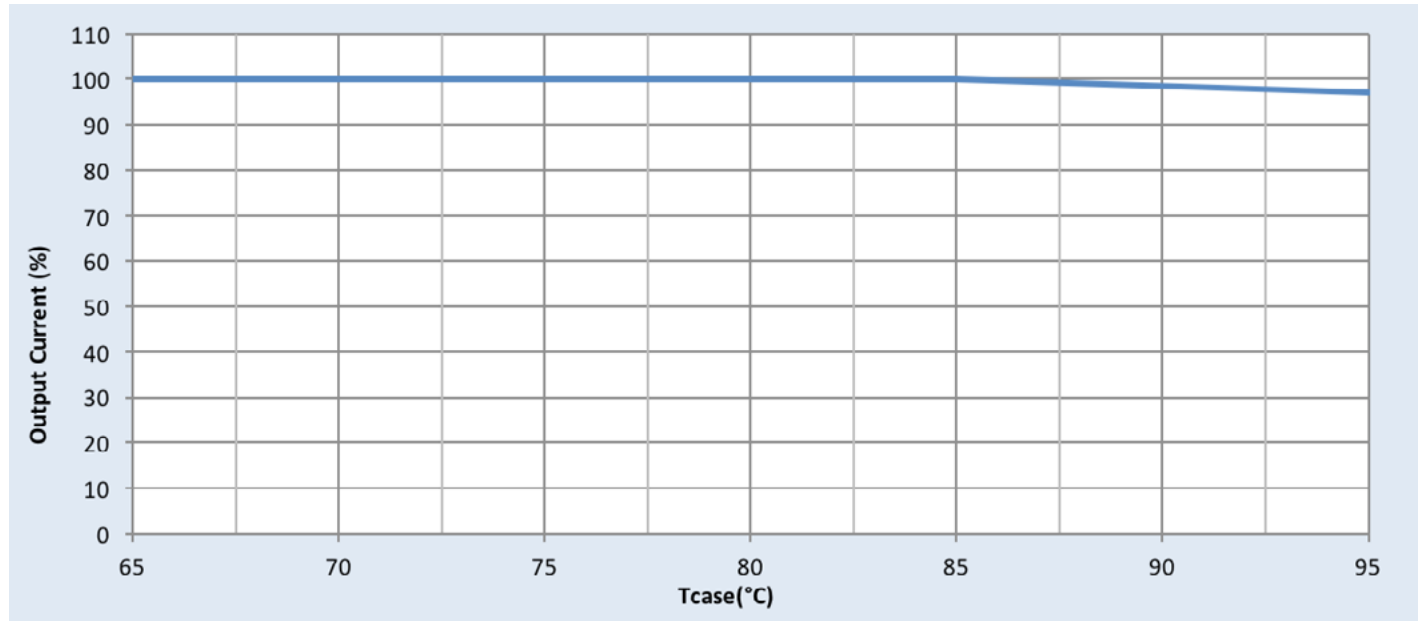
# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## Electrical Specifications

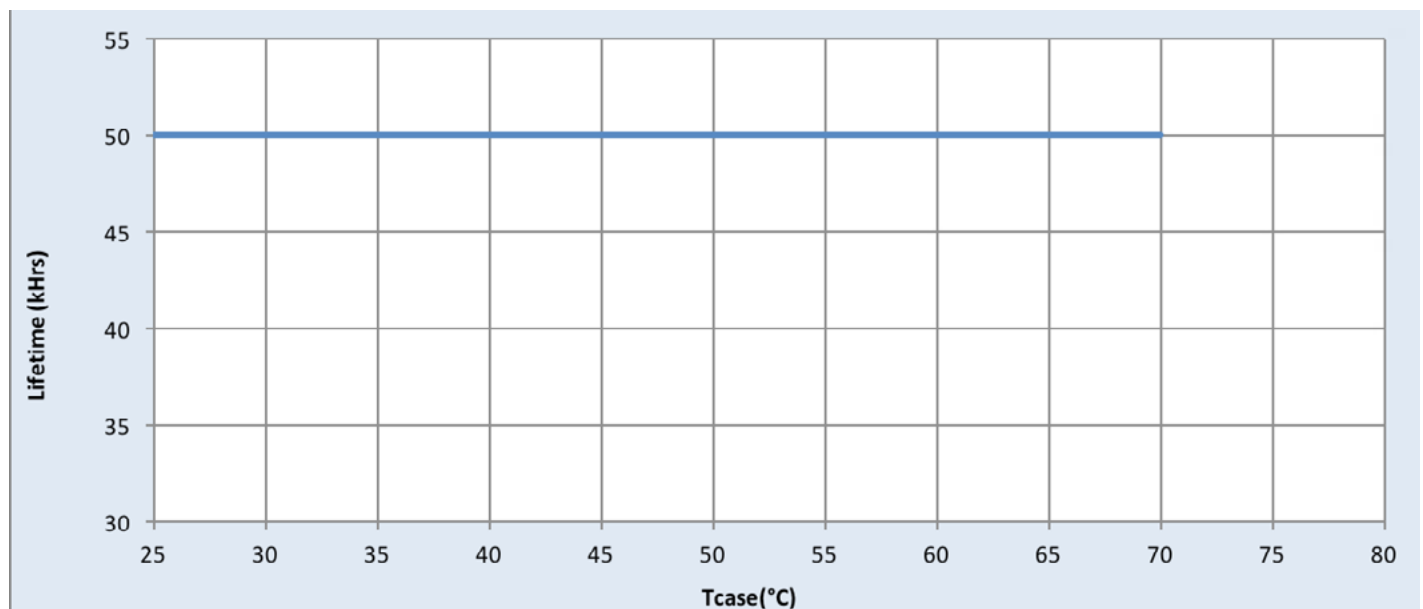
All the specifications are typical and at 25°C Tcase unless specified otherwise.

## 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



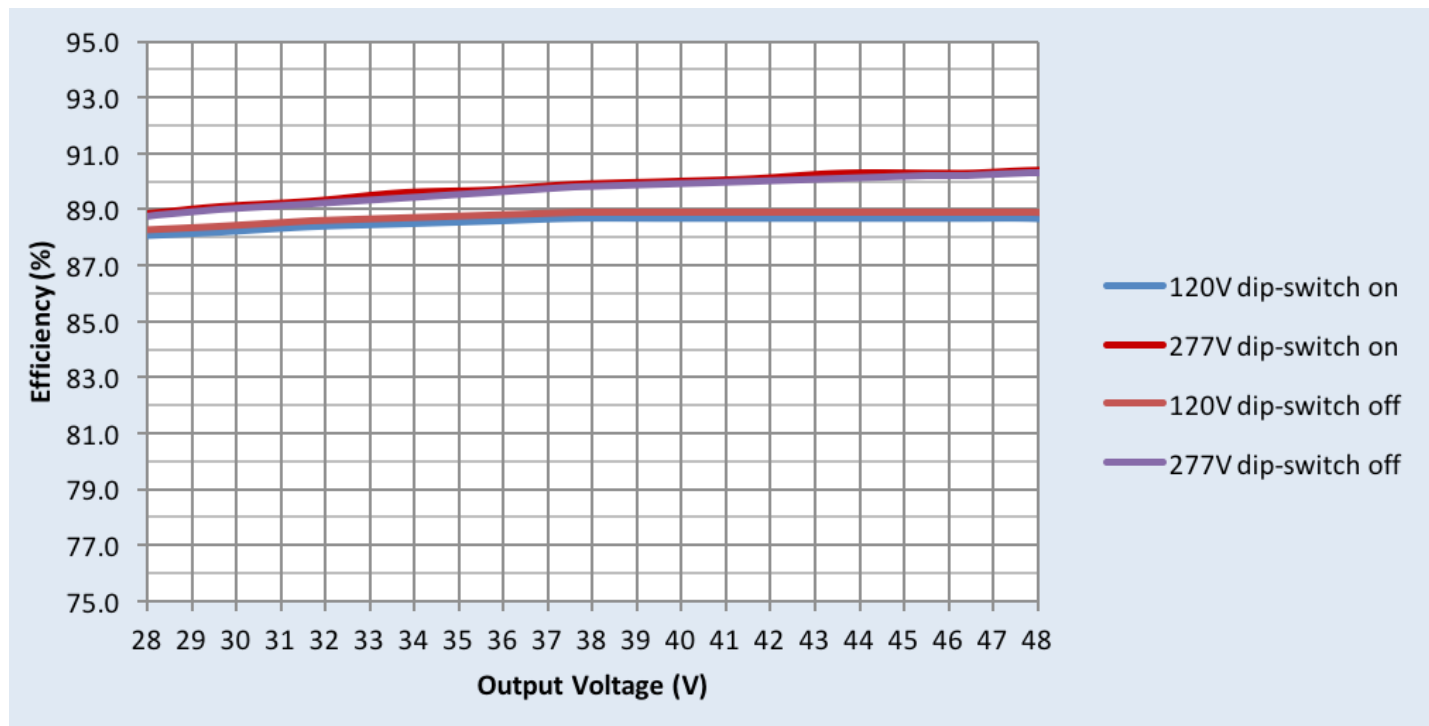
# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## 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.

## Efficiency Vs. Output Voltage



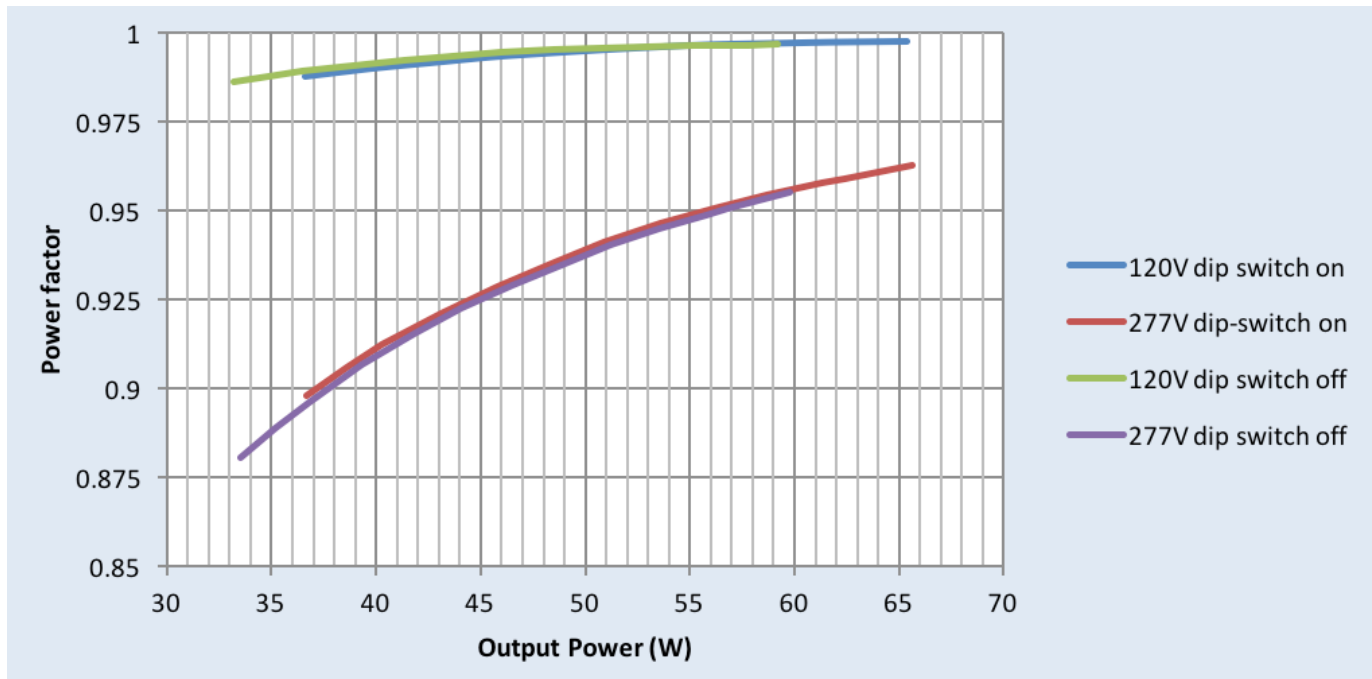
# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

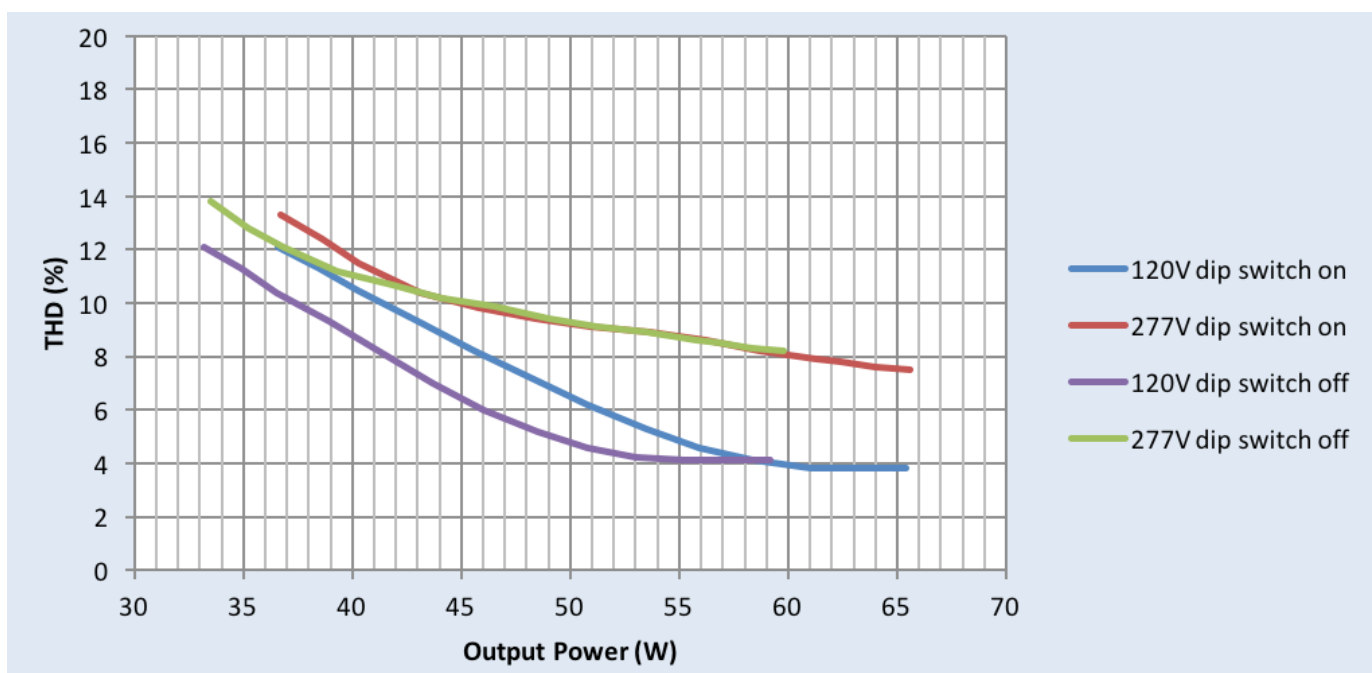
## Performance Characteristics

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



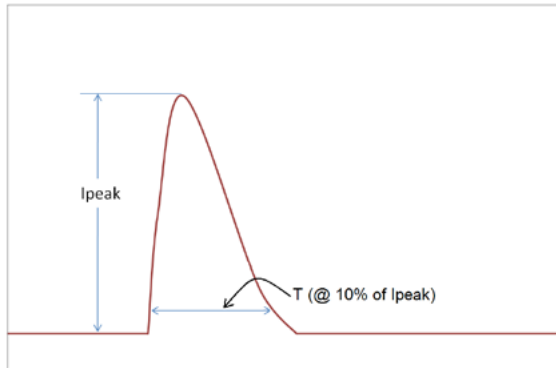
### Total Harmonic Distortion (THD) Vs. Output Power



# CertaDrive X CI065C135V048CDX1

65W 1.225/1.35A 48V 0-10V 120-277V

## Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	15.7A	9.1µS
277 Vrms	35.3A	9.6µS

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 30Ω)	2.5kV	2.5kV

## Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	-	2xU+1kV	2xU+1kV	2xU+1kV
Output	2xU+1kV	-	2xU+1kV	500V
0-10V	2xU+1kV	2xU+1kV	-	2xU+1kV
Enclosure	2xU+1kV	500V	2xU+1kV	-

U = Max working voltage

