

# LED Power Supply



**UltraMax™** - Indoor Class 2 LED Driver  
(D050MP501/0V2SML 35656)

# Lumination™ LED Luminaires

UltraMax™ Programmable - Indoor Class 2 LED Driver  
D050MP501/0V2SML 35656



Project name \_\_\_\_\_

Date \_\_\_\_\_

Type \_\_\_\_\_

## Performance Summary:

**Description:** 50W 0.5A~1.0A 0-10V Dimmable/Programmable Class 2 PSU  
**Input Voltage:** 120-277Vac +/-10% (UL), 230Vac +/-10% (CE)  
**Input Frequency:** 50/60Hz  
**RoHS Compliant:** Yes

## Product Dimensions:



## Product Features:

### Physical

- Unit must be installed in compliance with the applicable requirements of the end-product standard for enclosure, mounting, spacing, casualty and segregation.
- Enclosure wiring must be rated to 600V & 105°C or higher.

### Performance

- The unit is classified as Class 2 as stipulated in UL1310.
- This unit is classified as Class P as stipulated in UL8750 (Section SE)
- Dimming circuit is classified as Class 2 as stipulated in UL1310.
- Minimum ambient operating temperature: -30°C.
- Maximum allowable casing temperature: 85°C.
- For reliability and failure rate information, contact LED Indoor Electronics Team.
- The unit is UL certified for operation in dry/damp locations.
- The unit is tolerant of extended open circuit and short circuit conditions.
- The unit is compliant to FCC Title 47 Part 15 Class A and EN55015.
- The unit is resistant to surges as per ANSI C62.41 – 2002 and IEC 61000-4-5.

### UL Conditions of Acceptability – E340135

- The unit has been examined to comply with Class 2 Output Criteria
- The unit is only to be used in dry or damp locations
- The metal casing must be connected to **EARTH**.
- The “LED” and “DIM” output circuits must remain isolated from one another to be considered class 2 circuits in the end use.



Output Power (W)	Output Current (A)	Output Voltage (V)	Efficiency at Full Load (277Vac Input)	Max Input Current (A) @ 480V	Input Power (W)	THD @ 25W Po (277Vac)	PF @ 25W Po (277Vac)	Inrush Current (A/mS)	Surge Protection (kv/kA)	Weight (lbs/kg)
50	0.5-1.0 ± 5%	21-51	>90%	0.51A (UL) 0.28A (CE)	58W	<20%	>0.9	See Page Below	3kv/0.25kA	1.33lbs/602kg

Dimming Function			
Dimming Method	Isolation	Dimming Range (%)	Current Source
0-10V	Class 2	100% - 5%	0.5mA

UltraMax™  
Programmable  
LED Driver  
**D050MP5010V2SML  
35656**

35656

**WARNING / AVERTISSEMENT**

Risk of electrical shock. Disconnect power before servicing or installing product.  
Risque de choc électrique. Couper l'alimentation avant de réparer ou d'installer le produit.

**120-277V**

Class 2  
Class P

Made in China, Designed & Distributed by General Electric Co.  
 GE Lighting  
 Nelo Park, Cleveland, Ohio 44112

For assistance call:  
**1-888-MYGELED**

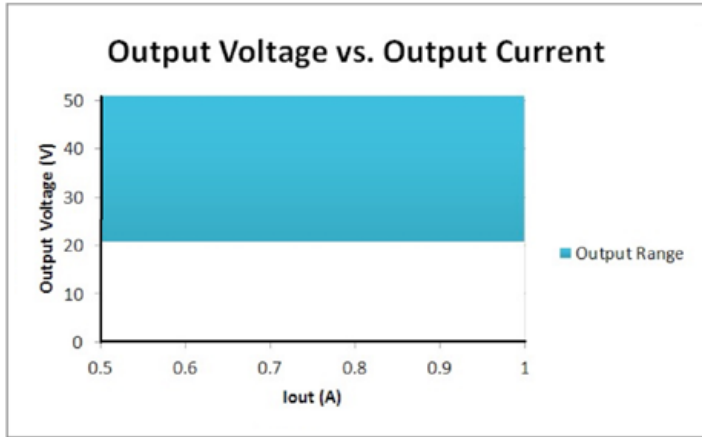
**INPUT** Measure 5mm down side  
 Voltage 120-277 VAC, 50/60 Hz per UL  
 Current 0.53 Amps per UL  
 PF > 0.9  
 Class 2 Power Supply

**OUTPUT**  
 23-53VDC  
 1A Max Output  
 50 Watts  
 Red (+)  
 Blue (-)  
 Violet (+)  
 Gray (-)

**120-277V**  
 0-10V Dimming LED Driver  
 Max Start Temp -30°C  
 to 85°C Max  
 Class 2  
 Class P  
 Firmware  
 FCC Part 15 Non-Consumer  
 CAN ICES-6094/NMB-0034  
 High Power Factor  
 Stand-By Free A  
 For Connections Use Wire Rated for at Least 90°C (194°F)  
 Install and ground per National Electric Code  
 For Dry or Damp Locations

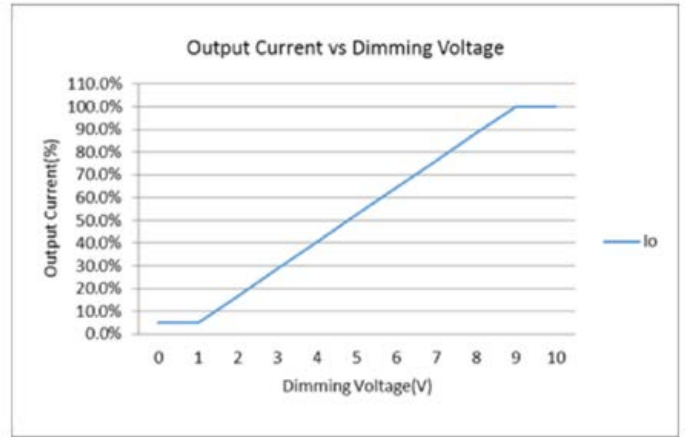
# Technical Information:

Output Voltage/Current Range  
(23V-52V, 0.9A – 1.75A)

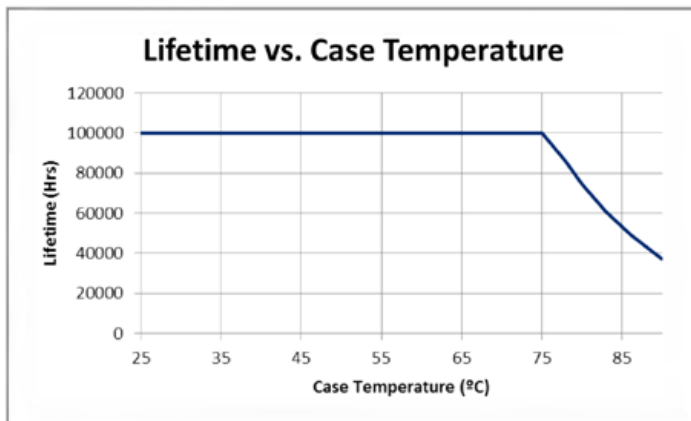


## 0-10V Dimming Curve

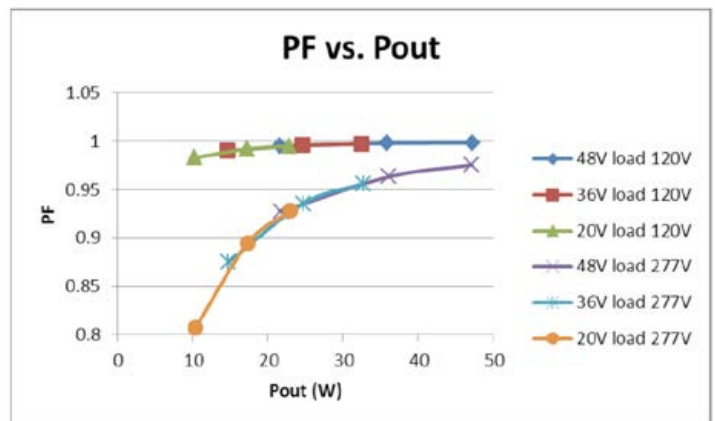
Driver sources 0.5mA current. Dimming Level range is from 5% to 100% programmable, default 10%.



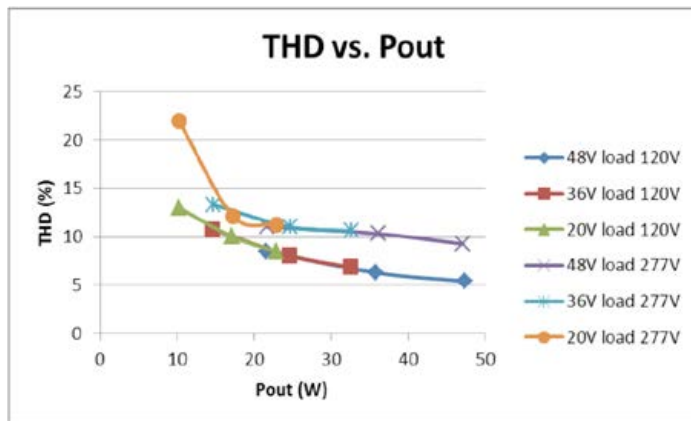
## Lifetime Expectation



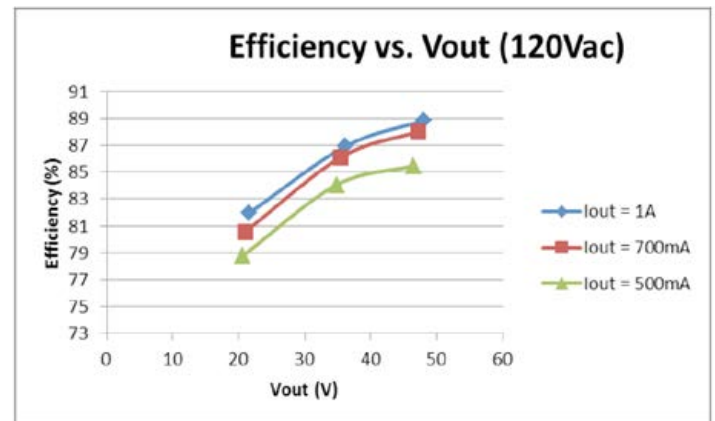
## Power Factor



## Total Harmonics Distortion

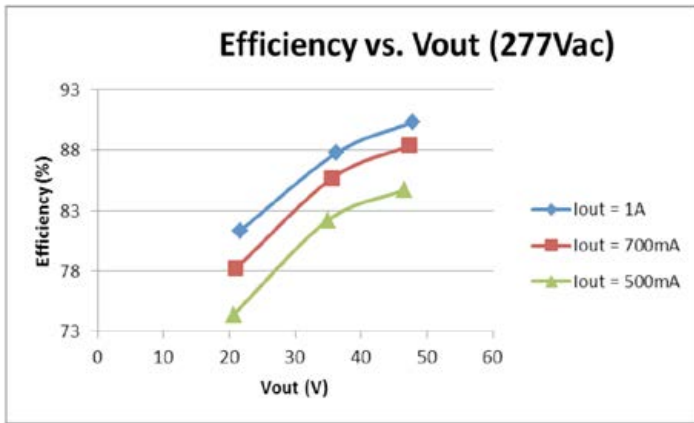


## Power Efficiency

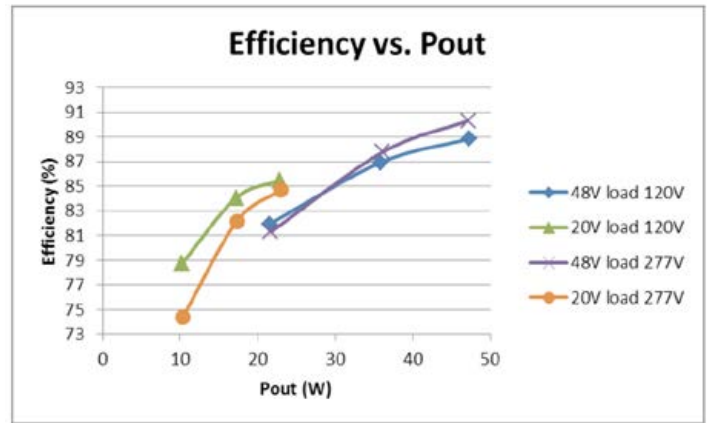


## Technical Information:

### Power Efficiency



### Power Efficiency



### Input Inrush Current

Input Inrush Current		
Input Voltage [V <sub>rms</sub> ]	Peak Current Pulse [A <sub>pk</sub> ]	Pulse Duration (50% of Peak) [us]
120V	22.4A	107.4
277V	49.6A	131.4

### Leakage Current

Input Voltage [V <sub>rms</sub> ]	Input Ground Leakage Current	
	S1 ON	S1 OFF
120V	0.27	0.27
240V	0.56	0.56
277V	0.60	0.60

### Current Programming Interface

Firstly set the Max Current to **1000mA** and the Min Current to **500mA** in the input box, then put the value to be programmed (between 500mA to 1000mA) into the input box for Current to Program, finally click the **Send** button to complete the programming of driver.

