



# D700C150UVT-F

## 700mA LED Driver w/ Tuning

- Universal Input Voltage 120 – 277 Vac
- 0-10V Dimming to 10%
- Thermal Foldback Control



### Performance

|                       |                      |
|-----------------------|----------------------|
| Input Voltage         | 120 ~ 277 Vac        |
| Input Current Max     | 1.40 /120V 0.59/277V |
| Input Power Max       | 165W /120V 161W/277V |
| Input Frequency       | 50 - 60 (Hz)         |
| Power Factor          | > 0.95               |
| THD max               | < 20 %               |
| Output Voltage        | 75V-215V             |
| Output Current        | 70-700mA             |
| Output Power          | 150W Max             |
| Line Regulation       | ±1 %                 |
| Load Regulation       | ±3 %                 |
| Output Current Ripple | <10%                 |
| Inrush Current        | 120V: 31A / 210uS    |
| Peak / >50% Duration  | 277V: 74A / 200uS    |

- \* Refer to charts for additional information
- Harmonic Emissions comply with ANSI C82.77
- Inrush current complies with NEMA 410

### Environmental

|                               |   |
|-------------------------------|---|
| EMI and RFI                   | Meets FCC part 15 (Class A) Non-Consumer Limits |
| Minimum Operating Temperature | -40°C (-40°F)                                   |
| Storage Temperature           | -40°C to 85°C                                   |
| Temperature                   | (-40°F to 185°F)                                |
| tc                            | 85°C (185°F) max                                |
| Location Rating               | UL Dry & Damp, Type HL                          |
| Transient Protection          | IEEE C62.41 6kV**                               |

\*\*Driver uses MOVs for transient protection.  
Refer to application note EVD07 at [www.unvlt.com](http://www.unvlt.com) for additional information on Hi-Pot Testing.

### Physical

|                            |                    |
|----------------------------|--------------------|
| Length                     | 9.50 in (241.3 mm) |
| Width                      | 2.40 in (61.0 mm)  |
| Height                     | 1.55 in (39.4 mm)  |
| Mounting Length            | 8.89 in (225.8 mm) |
| Weight (lbs)               | 2.6                |
| Lead Lengths               |                    |
| Blk, Wht, Blk/Wht, Blu/Wht | 11.5 +/- 1.0 in    |
| Red(+), Blue(-), Gry, Prp  | 11.5 +/- 1.0 in    |

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

### Protection

Over voltage, Overload and short circuit, over temp.

### Safety:

UL 8750 & CSA 250.13  
UL Class P

### Ordering Information

| Order Number      | Description      | Qty/Carton |
|-------------------|------------------|------------|
| D700C150UVT-F20KC | Standard Product | 10         |
| D700C150UVT-FR00C | Rated IP66       | 10         |

\*Consult Factory for Tuning ordering information

### Wiring Diagram:



- **NOTE:** Unused Black/White and Blue/White leads must be individually capped off when thermal foldback control is not used.



Application and operation performance specification information subject to change without notification.



## Programmable Tuned Output Settings

- This Everline LED Driver can be configured to set its current output to a selected fraction of their maximum rated design level. This function is called tuning (or also high-end trim) and it can be implemented with the LDTC01A using the Selector rotary switches. Tuning assignments are stored in driver memory and are not lost when power is removed. All factory produced drivers are tuned to maximum output unless otherwise noted on the label.
- Tuning SET Levels are listed in the table to the right. The SET Level corresponds to an associated Output Current value.
- Tuned output tolerance of  $\pm 5\%$ .
- Refer to application note EVD06 at [www.unvlt.com](http://www.unvlt.com) for additional information.

| Set Value | Output Current (A) |
|-----------|--------------------|
| 100       | 0.700              |
| 99        | 0.690              |
| 98        | 0.680              |
| 97        | 0.670              |
| 96        | 0.661              |
| 95        | 0.651              |
| 94        | 0.641              |
| 93        | 0.632              |
| 92        | 0.623              |
| 91        | 0.613              |
| 90        | 0.604              |
| 89        | 0.595              |
| 88        | 0.586              |
| 87        | 0.577              |
| 86        | 0.568              |
| 85        | 0.560              |
| 84        | 0.551              |
| 83        | 0.542              |
| 82        | 0.534              |
| 81        | 0.525              |

| Set Value | Output Current (A) |
|-----------|--------------------|
| 80        | 0.517              |
| 79        | 0.509              |
| 78        | 0.501              |
| 77        | 0.493              |
| 76        | 0.484              |
| 75        | 0.476              |
| 74        | 0.469              |
| 73        | 0.461              |
| 72        | 0.453              |
| 71        | 0.445              |
| 70        | 0.438              |
| 69        | 0.430              |
| 68        | 0.422              |
| 67        | 0.415              |
| 66        | 0.407              |
| 65        | 0.400              |
| 64        | 0.393              |
| 63        | 0.385              |
| 62        | 0.378              |
| 61        | 0.371              |

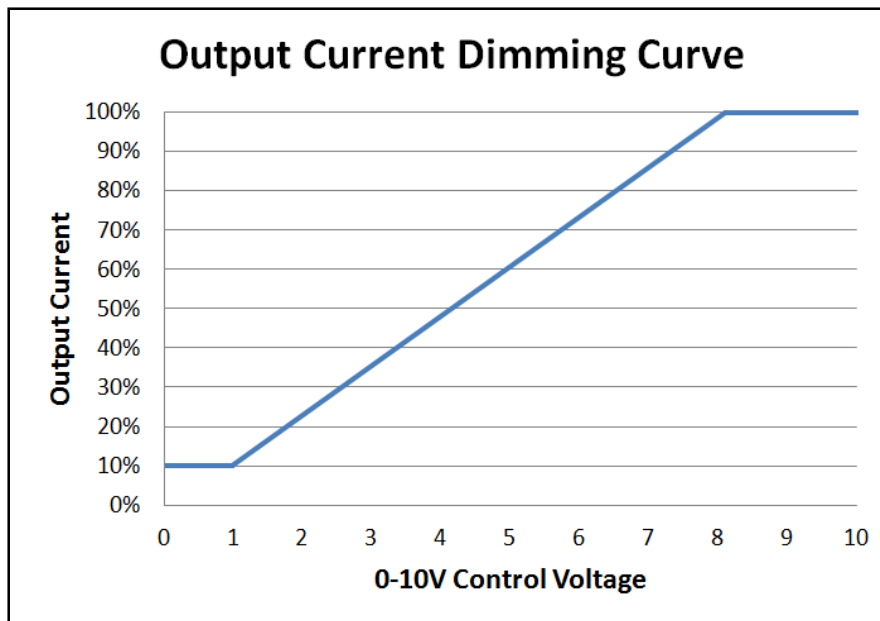
| Set Value | Output Current (A) |
|-----------|--------------------|
| 60        | 0.364              |
| 59        | 0.357              |
| 58        | 0.350              |
| 57        | 0.343              |
| 56        | 0.336              |
| 55        | 0.329              |
| 54        | 0.322              |
| 53        | 0.315              |
| 52        | 0.308              |
| 51        | 0.301              |
| 50        | 0.295              |
| 49        | 0.288              |
| 48        | 0.281              |
| 47        | 0.275              |
| 46        | 0.268              |
| 45        | 0.261              |
| 44        | 0.255              |
| 43        | 0.248              |
| 42        | 0.242              |
| 41        | 0.235              |
| 40        | 0.229              |



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## 0-10V Dimming



### 0-10V Analog Dimming Interface

- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Gray (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = minimum output
- Wiring Violet & Gray together provides min. light output.
- Capping Violet & Gray separately provides 100% light output.
- 0-10V interface can be wired as Class 1 or Class 2 Circuit.
- Driver will source a maximum of 200uA for control needs.
- Controller must sink current from the 0-10V control leads.

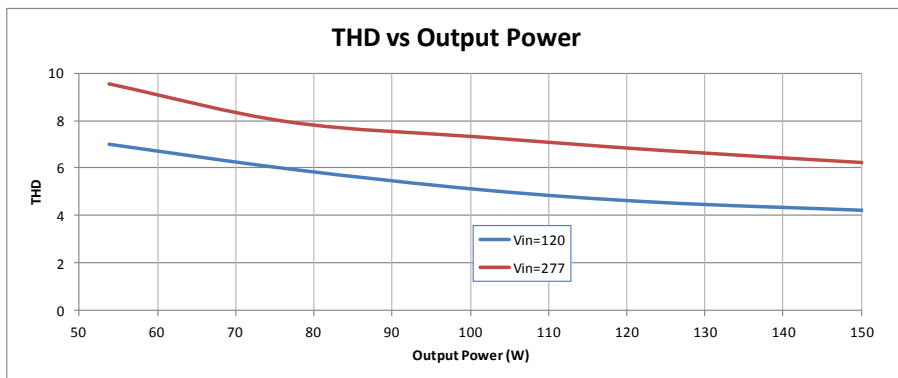
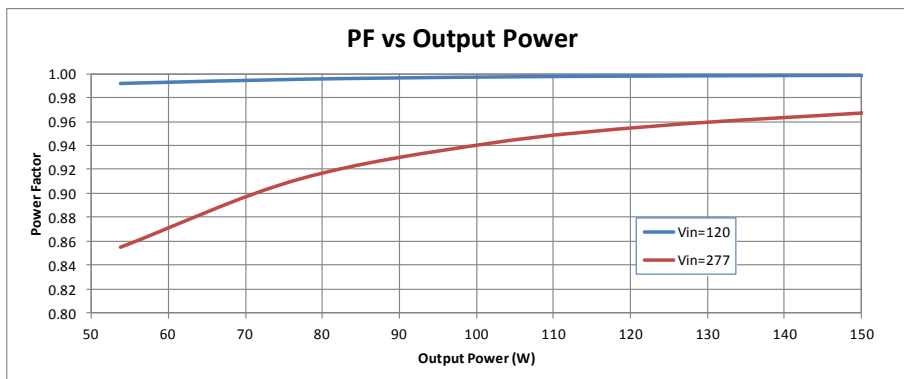
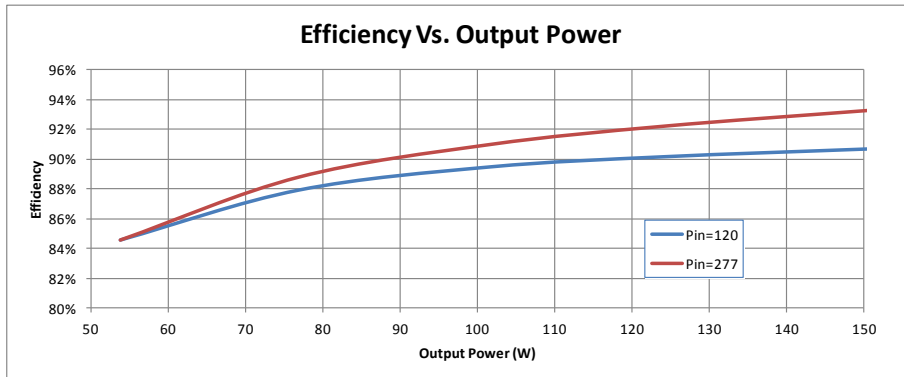


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## Performance: Efficiency, THD, & Power Factor

Typical performance measurements are shown. The charts are to be used as a guideline and not for specification use.



Output power based on maximum rated output current and varying load voltages.



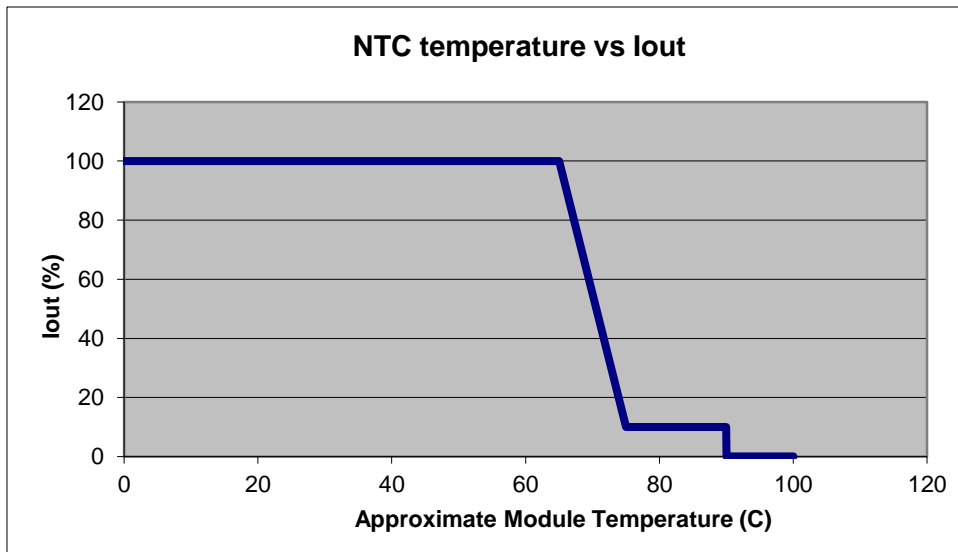
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## Module Thermal Foldback Protection

### Thermal Foldback Control

- Luminaire temperature monitoring/protection
- LED Driver reduces output current for external thermal protection if an NTC (Negative Thermal Coefficient) is connected to the Black/White and Blue/White leads.
- **NOTE:** Unused Black/White and Blue/White leads must be individually capped off when thermal foldback control is not used.
- See application note on [www.unvlt.com](http://www.unvlt.com) for more information.



(Example with the Murata NTC p/n NCP18XV103J03RB)

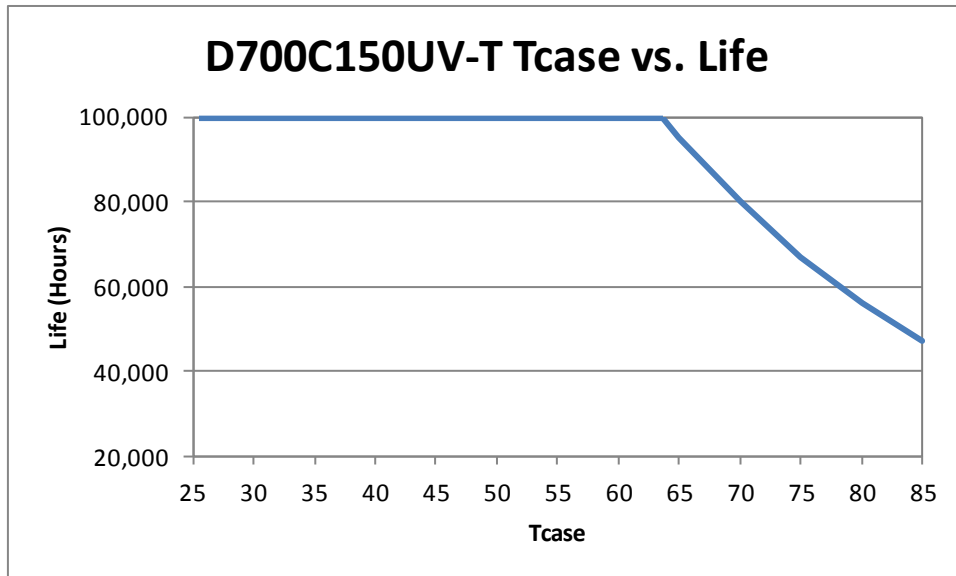


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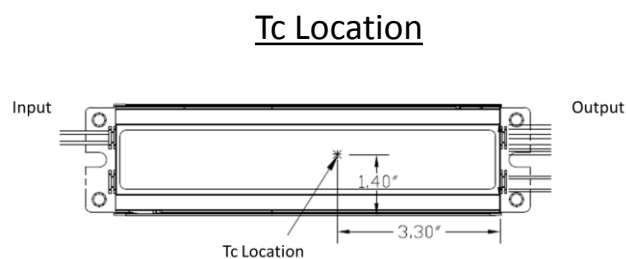
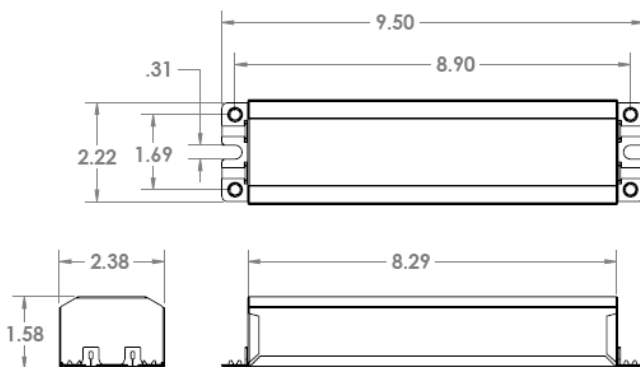
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## Life Rating Prediction



The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.

## Dimensional Diagram



### Warranty:

Universal Lighting Technologies warrants to the purchaser that each power supply will be free from defects in material or workmanship for a period of 5 years from the date of manufacture when properly installed per instructions and under normal operating conditions of use. Call 1-800-225-5278 for technical assistance.



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