



**PROGRAMMABLE,  
DIGITAL, WIDE-RANGE  
AJUSTABLE CURRENT & DIMMING  
TYPE TL RATED**

**Constant Current LED Driver**

**Model Number  
AC-50CDI.4APBNZ**

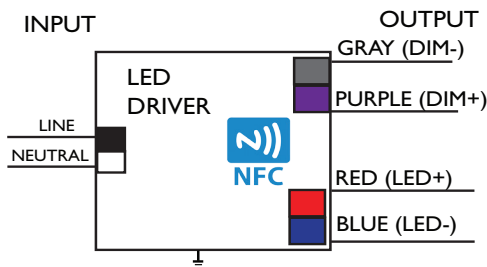
Input Voltage: 120-277V  
Input Frequency: 50/60Hz  
Bottom Mount Leads Options  
< 1 Sec. Start time/(Starting with batch code AKT.48)

**Dim-to-1% (Default)**

**ELECTRICAL SPECIFICATIONS:**

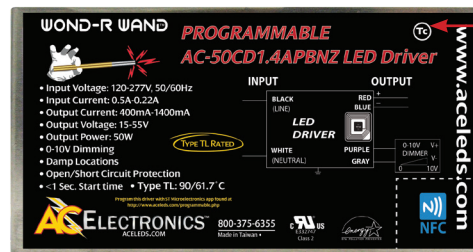
Output Power	Input Power	Input Current	Min PF (full load)	Max THD (full load)	Output Voltage	Output Current	T case Max	Min. Starting Temp	Efficiency Up To	Dimming Protocol	Dimming Range	IP Rating
50W	60W	0.5A@120V 0.22A@277V	>0.90	<20	15-55V	400mA-1400mA	90°C	-40°C	85%	0 to 10V	1 to 100%	64

**WIRING:**



Lead Lengths			
Black	5.9"	Blue	5.9"
White	5.9"	Red	5.9"
Purple	5.9"	Gray	5.9"

**PHYSICAL:**



Dimensions	Length	Width	Height
AC-50CDI.4APBNZ	4.56"	2.48"	1.18"

Tref Max Value (°C)	Tc/Tref Value (°C)	Ta/Value (°C)
90	58.2	40

**SAFETY:**

- UL and cUL Recognized
- UL Outdoor Type I
- Class A sound rating
- Overload Protection
- Open/Short Circuit Protection
- LED driver has a life expectancy of 50,000 hours at Tcase of ≤75°C
- LED driver has a life expectancy of 100,000 hours at Tcase of ≤65°C
- Warranty: 5 yrs based on max case temp of <75°C; 3 yrs based on max case temp of 90°C\*
- Input/Output Isolation
- FCC Title 47 CFR Part 15
- Surge Protection (3 KV)
- Dim-To-Off Programming Option
  - o Active: Code = 78 05 01 01
  - o Inactive: Code = 78 05 00 01

**INSTALLATION:**

- Max Remote installation distance is 18 ft
- LED driver cases should be grounded
- LED drivers shall be installed inside electrical enclosures
- 18 AWG 600V/105C tinned stranded copper lead-wires are required for installation



\*AC Electronics/AC LED Power Designs warrants to the purchaser that each LED Driver will be free from defects in material or workmanship for a period of 5 years when operated at max case temp of up to <75°C; 3 years from date of manufacture when operated at a max case temp of up to 90°C when properly installed and under normal conditions of use. See [aceleds.com](http://aceleds.com) for complete warranty policy.

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Data is based upon tests performed by AC Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.





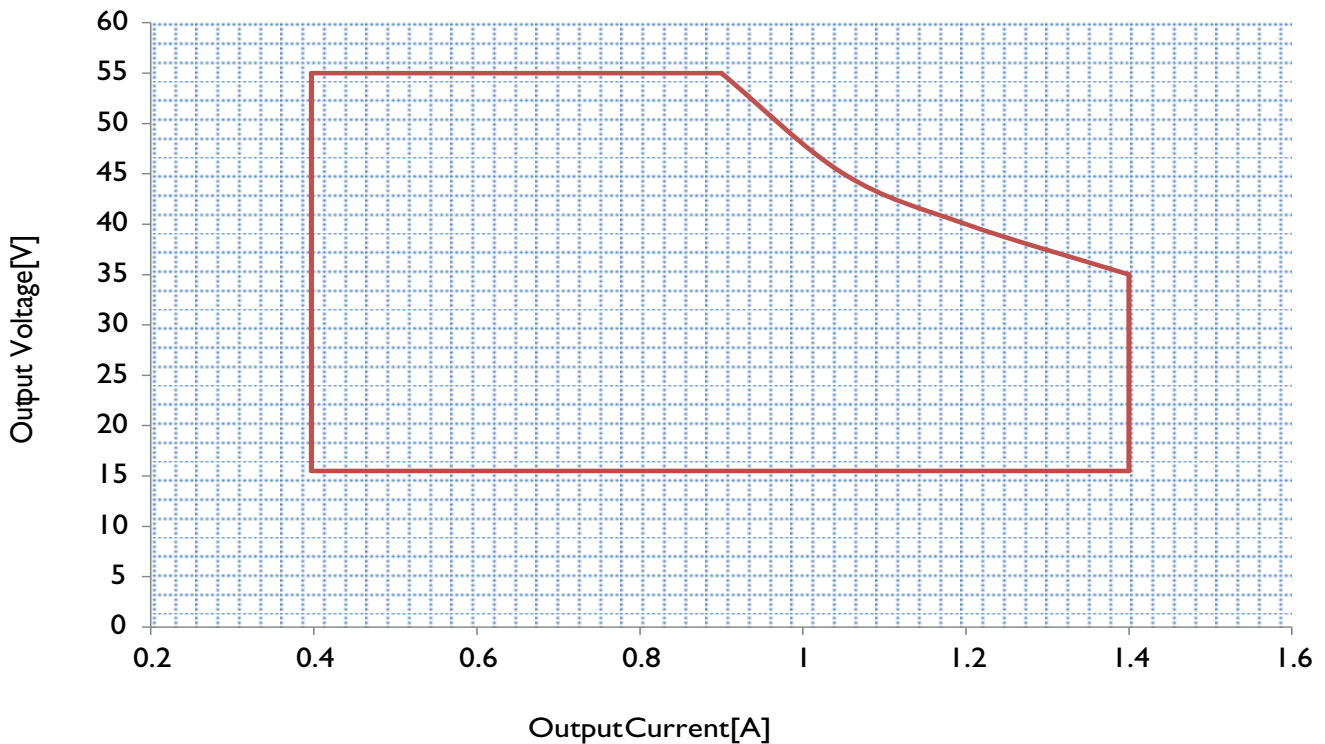
**Phone Instructions**

First you must have a Android device (phone/tablet) with NFC-V app downloaded.  
 Open App; then place the device on top of the driver matching up sensors untile it syncs up  
 Basic format  
 Write  
 Insert the appropriate code from chart above  
 Write  
 Successfully written will appear

To Check: Read  
 Read  
 Shows the Block - 00 00 00 00  
 This is where the code you input appears

**IOUT/VOUT CURVE**

Use with NFC-V Reader App Available Free at Google App Store



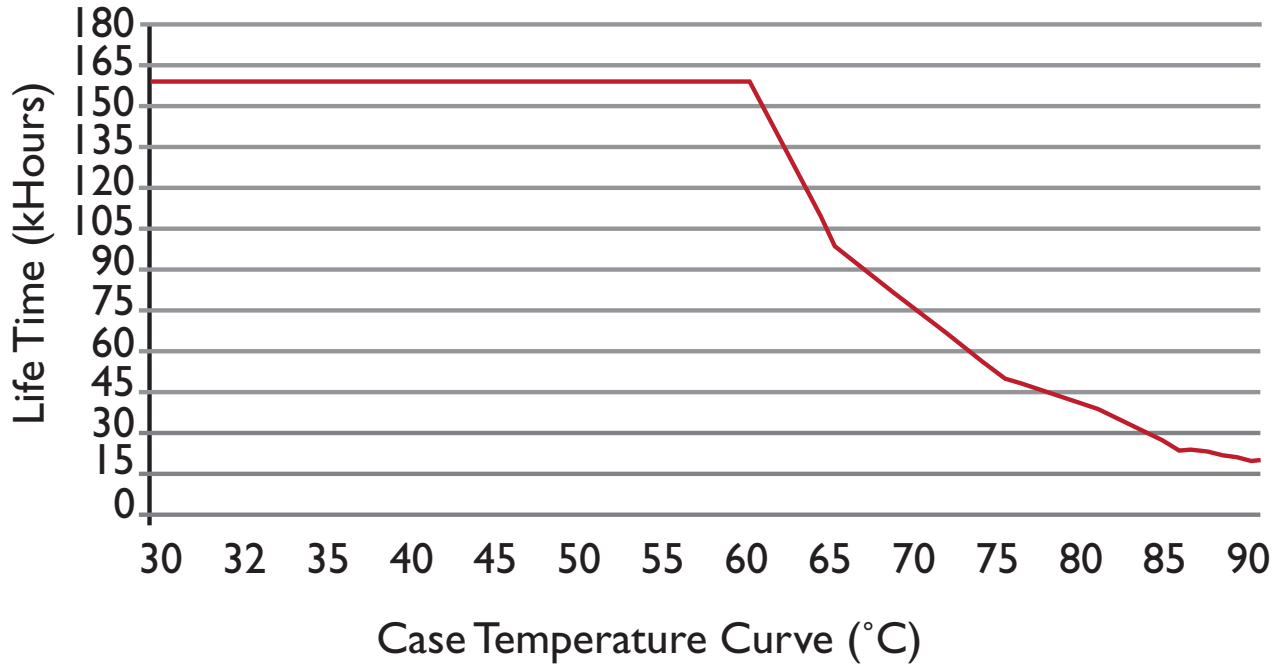
**CONTROL THE IOUT WITH THE PROGRAMMING WAND. DOWNLOAD SOFTWARE FROM <http://www.aceleds.com/products-programmable.php>**

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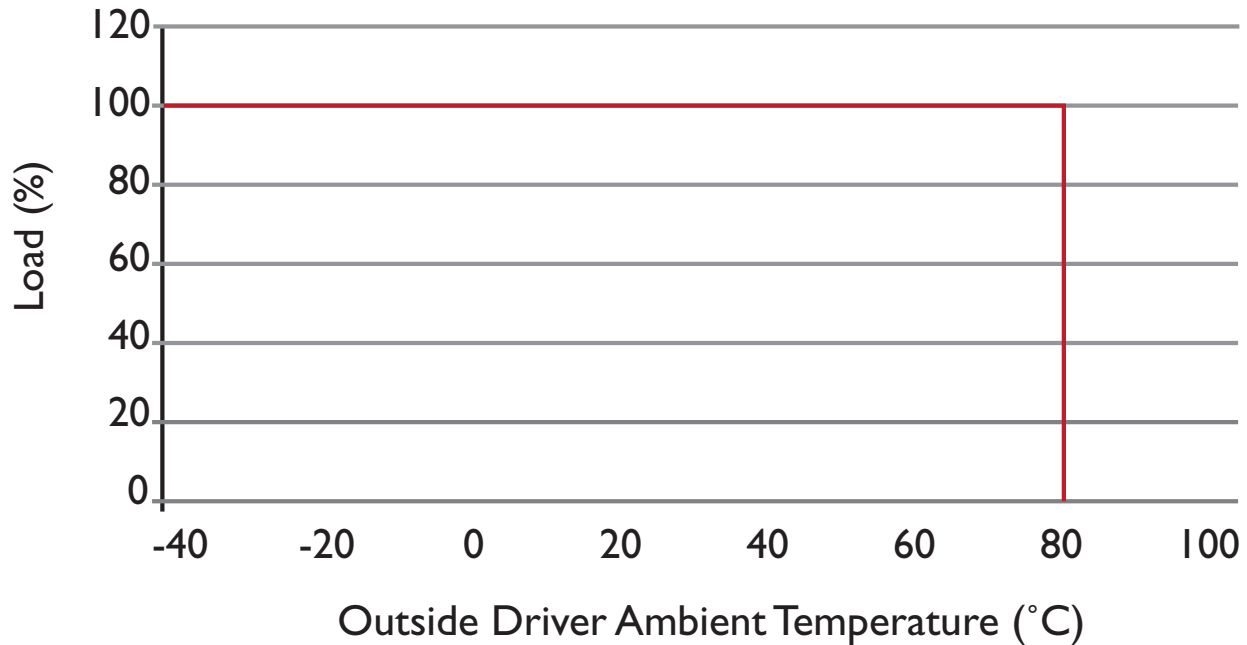
**Performance Characteristics**

**Life Time v.s. Case Temperature Curve**



**Derating Curve**

120Vac & 277Vac

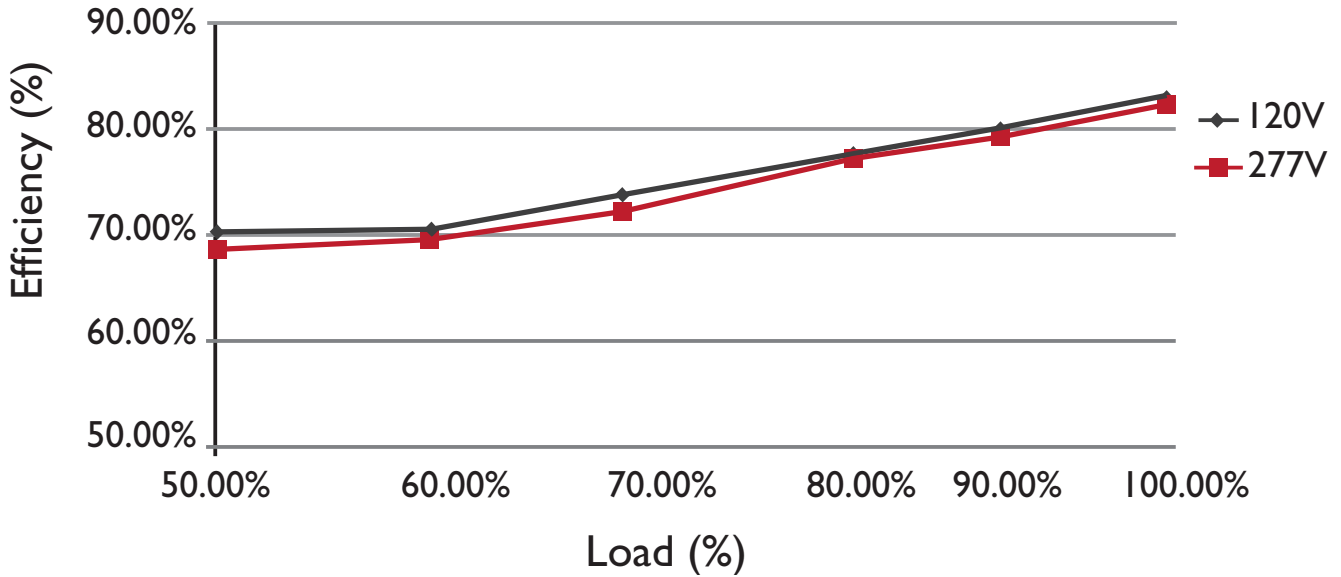


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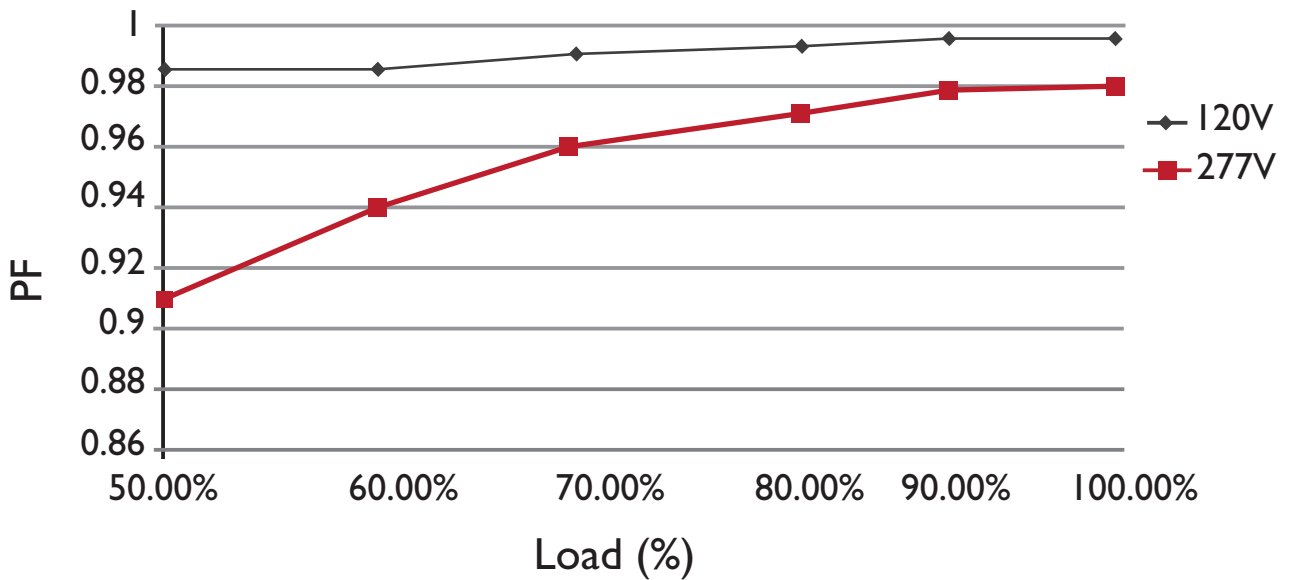
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**Performance Characteristics**

**Efficiency v.s. Load**



**Power Factor v.s. Load**

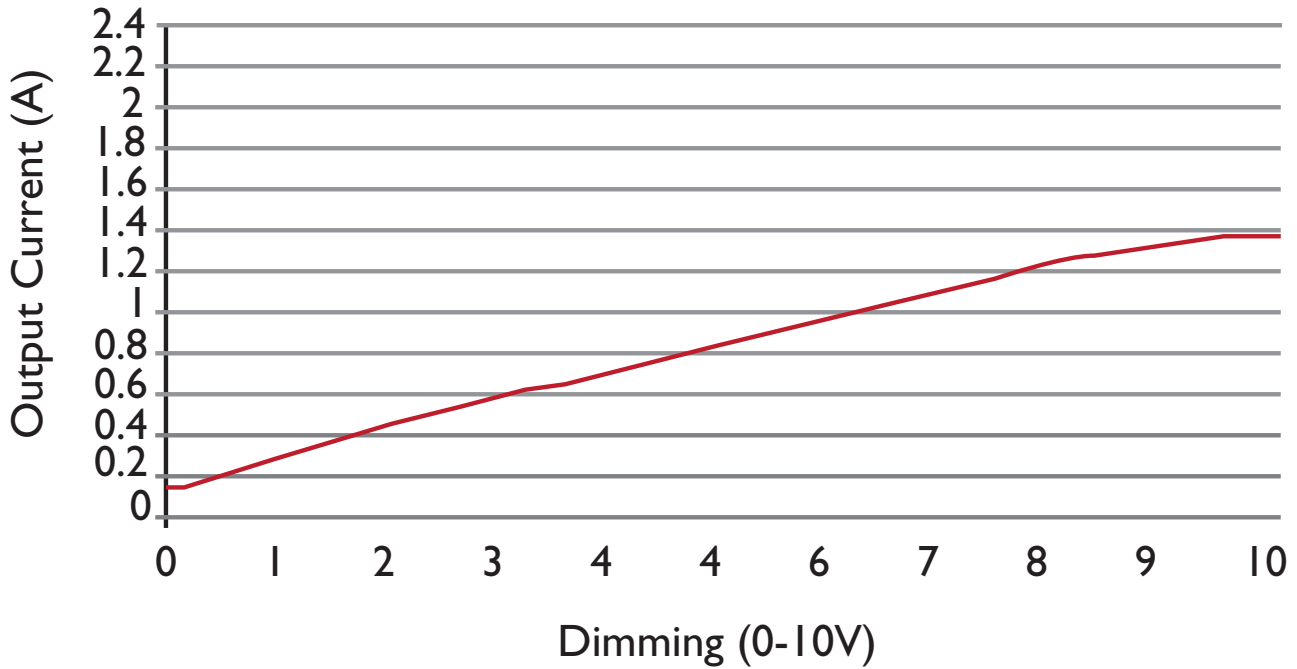


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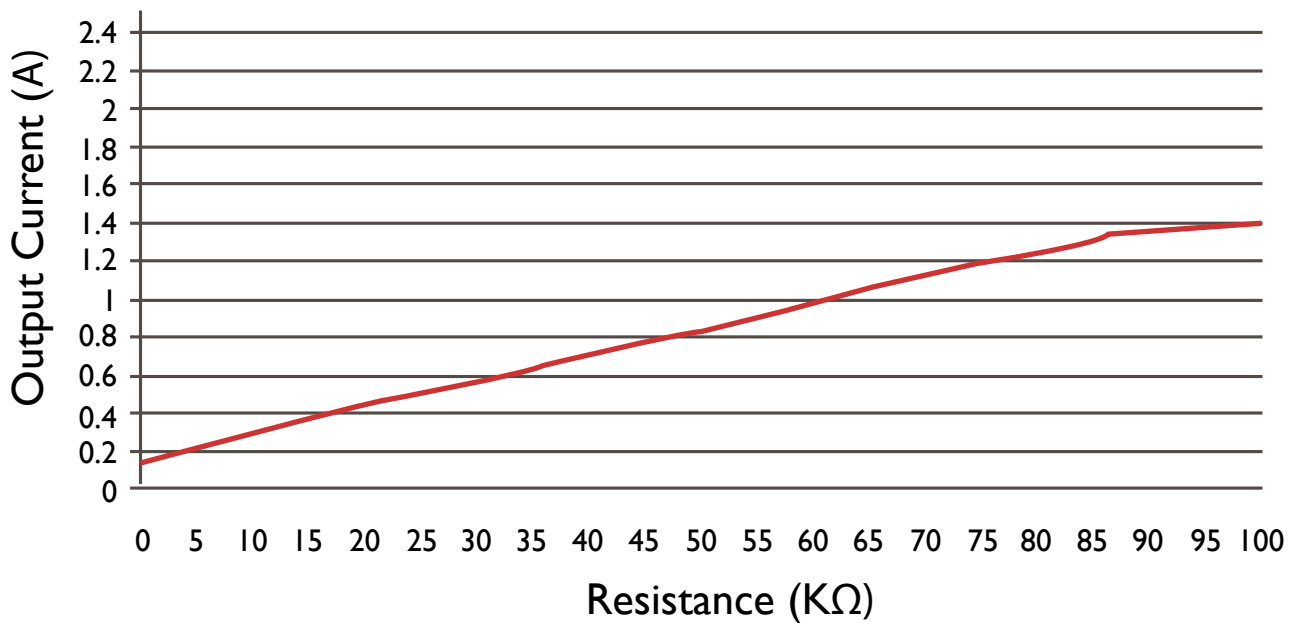
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**Performance Characteristics**

**Output Current v.s. Dimming**



**Output Current v.s. Resistance**



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