



Test Procedure for the NCL30088LED1GEVB Evaluation Board

Overview

This procedure describes the functional testing of the NCL30088LED1GEVB T8 LED driver using a buck boost PFC 100 mA driver.

Basic Specifications

Input Voltage – 90 V ac to 277 V ac Input Frequency – 50/60 Hz

Output Voltage – 90 V dc to 180 V dc

Output Current –100 mA dc Nominal





Equipment Needed

AC Source – 90 V ac to 277 V ac 50/60 Hz Minimum 1A ac capability

AC Wattmeter – 30 W Minimum, True RMS Input Voltage and Current, Power Factor 0.2% accuracy or better

DC Voltmeter – 200 V dc minimum 0.1% accuracy or better

DC Ammeter – 0.5 A dc minimum 0.1% accuracy or better

LED Load – 90 V dc to 180 V dc rated for at least 100 mA dc operation

Test Set Up

1. Perform visual inspection to insure all parts are placed on board per BOM
2. Connect the Unit Under Test (UUT) per the test set up in Figure 1.

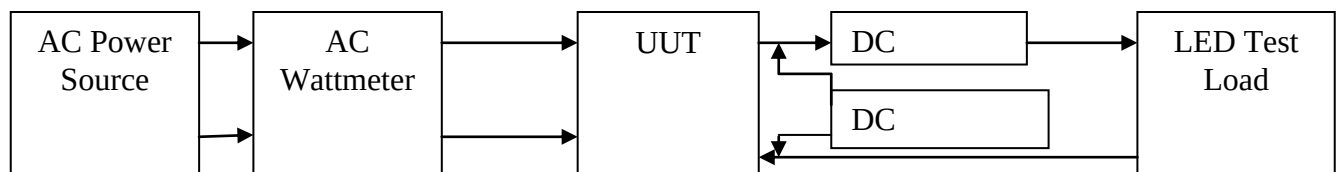


Figure 1. Test Set Up

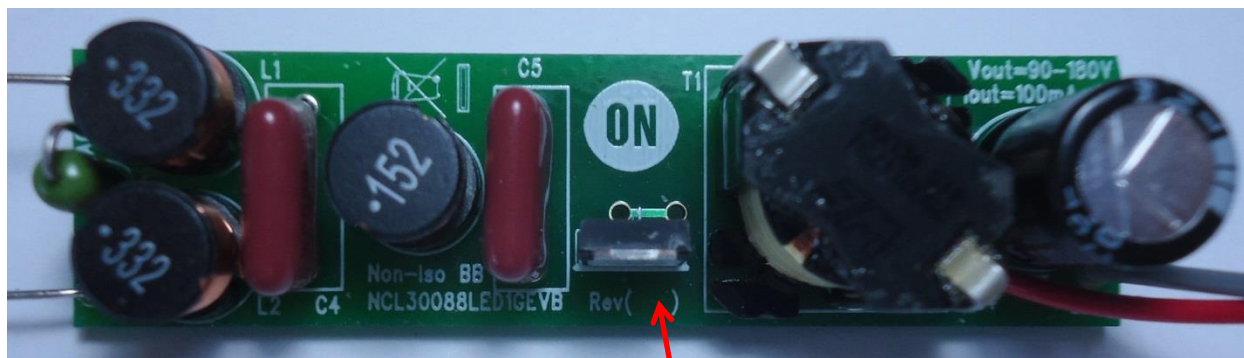
Note: Unless otherwise specified, all voltage measurements are taken at the terminals of the UUT.



Functional Test Procedure

Connect the UUT per figure 1

Test Condition	Test Variable	Test Limits		Pass / Fail (Circle One)
		Min	Max	
Vin = 90 V ac	Output Current	95mA	105mA	Pass / Fail
Vin = 120 V ac	Output Current	95mA	105mA	Pass / Fail
Vin = 277 V ac	Output Current	95mA	105mA	Pass / Fail
Vin = 277 V ac	Power Factor	0.9		Pass / Fail
Vin = 120V ac Vout = 180 V dc	Input Power		21W	Pass / Fail



Mark the Current Assembly Revision Here after test