Ningbo TengLi Testing Co., Ltd

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ACCREDITED
Certificate#4703.02

In Situ Temperature Measurement Test Report

For

LEDVANCE LLC

(Brand Name: SYLVANIA)

200 BALLARDVALE STREET WILMINGTON, MA 01887

Model name(s): LEDRT4G650SC3

Type of Luminaire:	Directional downlights
Report Date:	2021-11-15
Prepared By:	Ningbo TengLi Testing Co., Ltd 2nd floor, Block B, Ningbo Testing and Certification Base, No. 66 Qingyi Road, Ningbo National Hi-Tech Zone, Ningbo, Zhejiang

Test & Report By:

Review By:

Engineer: Nick Song

Manager: Garman Mo

Note: 1. The results contained in this report pertain only to the tested samples

2. This report does not imply product certification, approval, or endorsement by A2LA, or any agency of the Federal Government.

Table of Contents

1 General

1.1 Product Information:

Model Number	LEDRT4G650SC3	
Remark	N/A	
Representative (Tested) Model	LEDRT4G650SC3	
Model Difference	N/A	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Directional downlights	
LED Manufacturer	Bridgelux,Inc.	
LED Model	BXFN-XXG-13H-98	
Dimming	Dimmable	
Integral Controls	No	
Sample Number	STD210933NB-B1	
Date of Receipt	Nov.03,2021	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

1.2 Rated Values:

Rated Voltage / Frequency	120Vac,60 Hz
Nominal Power	9W
Rated Initial Lamp Lumen	--
Declared CCT	2700K/3000K/3500K/4000K/5000K

1.3 Standards or methods

The following standards are partly or totally used or referenced for test:

No.	Name
ANSI/UL 1598:2008	**Luminaires**

1.4 Equipment list

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-704	Power Meter	2021-01-04	2022-01-03
ST-R-607	Temperature Tester	2021-01-04	2022-01-03

2 Test conducted and method

2.1 Ambient Condition

Test was conducted in an ambient temperature of 25±5°C. Ambient temperature variations above or below 25°C was subtracted from or added to temperatures recorded at points on the luminaire.
The ambient temperature was measured by a thermocouple which was immersed in 15ml of mineral oil in a glass container.

2.2 Temperature Stabilization

Temperatures were measured after they have stabilized when the test has been running for a minimum of 7.5 hours, or the test has been running for a minimum of 3 hours and three successive reading taken at 15 minutes intervals are with 1°C of another and are not rising.

2.3 Thermocouples

Type J thermocouple was used for temperature measurement. The thermocouple was 0.05mm2(30AWG), and complied with the requirements specified in ASTM MNL 12 and limits of error specified in NIST ITS 90 and ISA MC96.1.

2.4 Thermocouples contact

Thermocouples were in contact with the TMP LED location described in LM-80 test report. In order to gain the maximum temperature, if appropriate, more than one thermocouple were contact in these locations. For details information, please refer to clause 3.3 for the photo of thermocouple contact.

3 Test Results

Test date	2021-11-04	Test Ambient	25.1 °C
Sample No.		LED Package Model	
STD210933NB-B1		BXFN-XXG-13H-98	
LED driver of Each Lamp	Output voltage V	Measured LED working current (Max.) mA	
1	42.2	80	

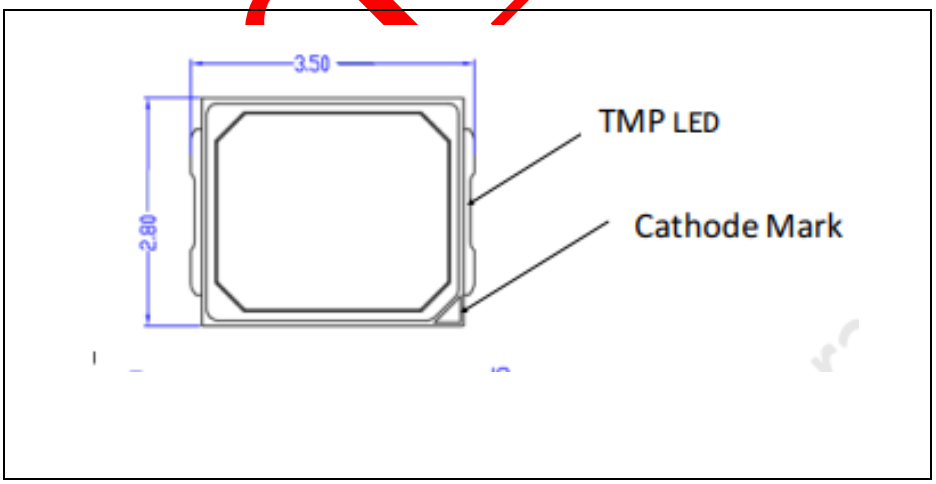
3.1 Test Data:

Input Vol.	119.9V	Input Current	0.0744A	Input Wattage	8.642W	Temperature stabilization time:	500 min

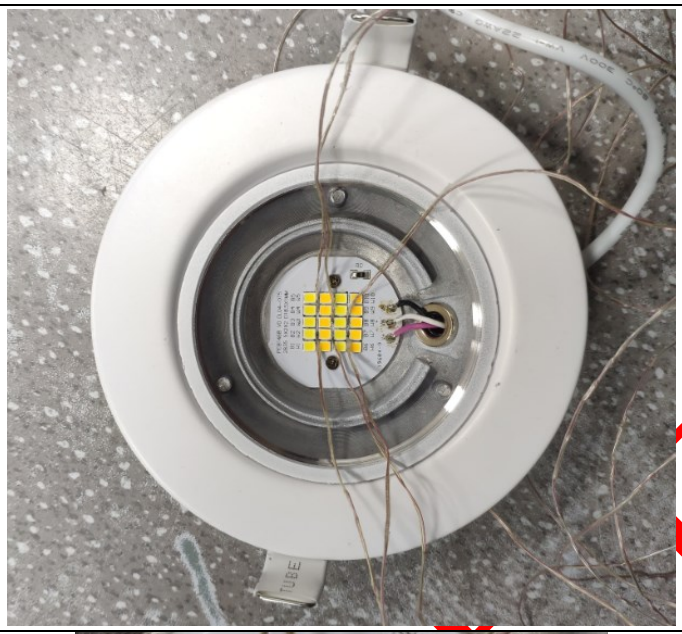
No.	Temperature (°C)		No.	Temperature (°C)		No.	Temperature (°C)	
	Measured	Corrected at 25°C		Measured	Corrected at 25°C		Measured	Corrected at 25°C
1	84.9	84.8	3	85.4	85.3	5	86.2	86.1
2	86.0	85.9	4	85.7	85.6	6	86.1	86.0
The highest in-situ measured temperature LED is 86.1 °C								

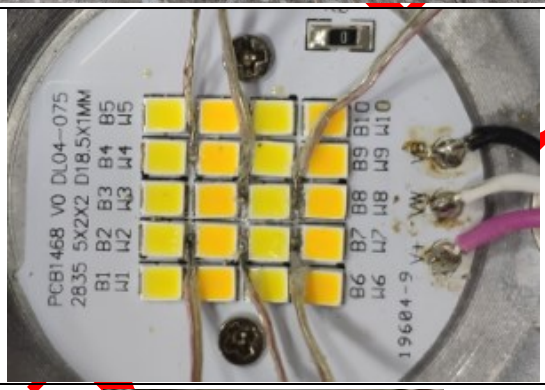
3.2 Test Photo:

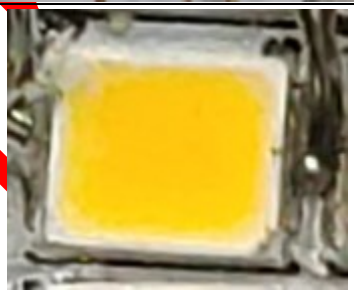
Ts Position:



Thermocouple Location on Temperature Measurement Point (TMP):







Time (t) at which to estimate lumen maintenance (hours):	50,000
Lumen maintenance at time (t) (%):	86.24%
Reported L70 (hours):	>72000

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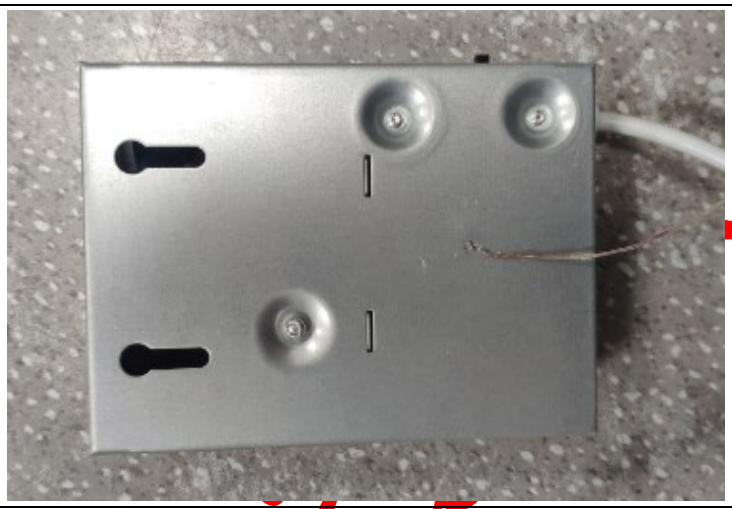
3.3 Test Data of LED Driver:

Input Vol.	119.9V	Input Current	0.0744A	Input Wattage	8.642W	Temperature stabilization time:	500 min

No	Measured TC Temperature (°C)		Temperature Limited of Life ⩾ 50000 hours
	Measured	Corrected at 25°C	
1	66.7	66.6	105

3.4 Test Photo:

Thermocouple Location on Temperature Measurement Point (TMP):



4. Product Photo

****** END OF THE TEST REPORT******