

In Situ Temperature Measurement Test Report

For

ASMART LIGHT CO., LTD

(Brand Name: ASMART)

506 N GARFIELD AVE SUITE#210 ALHAMBRA CA 91801

Architectural Flood and Spot Luminaires

Model name(s): AST-LJ01-21WBMUDA1-a

Remark: "a" can be any two letters to represent color of luminaire.

Representative (Tested) Model:

AST-LJ01-21WBMUDA1-a (Setting at 3000K)

Model Different: All construction and rating are the same, except CCT

Test & Report By:

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1 General

1.1 Product Information

Brand Name	AS MART
Model Number	AST-LJ01-21WBMUDA1-a
Luminaire Type	Architectural Flood and Spot Luminaires
Nominal Power	21W
Rated Initial Lamp Lumen	--
Declared CCT	3000K, 4000K, 5000K(Color tunable)
LED Manufacturer	Lumileds Holding B.V.
LED Model	L128-XX80RC35003P1
LED Driver Manufacturer	--
LED Driver Model	HB-LJ01F021
Sample Receipt Date	2022-01-20
Sample Number	BLC2201019E-A1
Photo	
	
	

1.2 Standards or methods

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

No.	Name
ANSI/UL 1598:2008	Luminaires

1.3 Equipment list

Equipment ID	Equipment Name	Calibration Date
BL-009B	Power Meter	2021-10-09
BL003	Hybrid Recorder	2021-10-09

2 Test conducted and method

2.1 Ambient Condition

Test was conducted in an ambient temperature of $25 \pm 5^{\circ}\text{C}$. 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

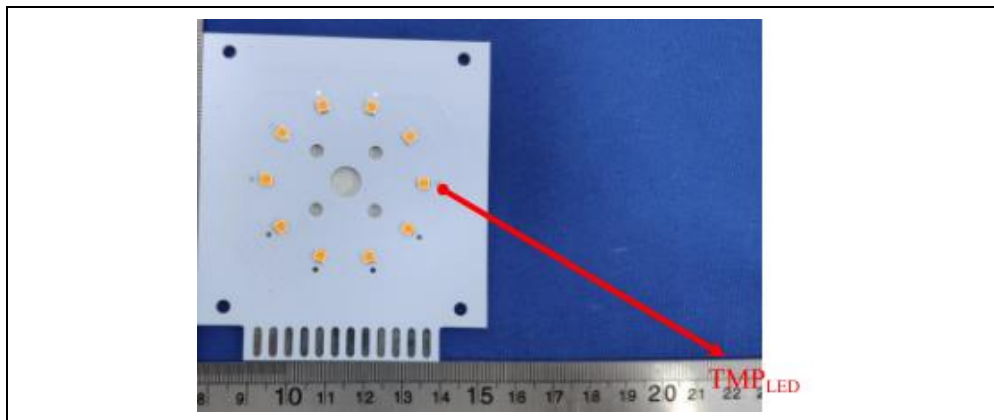
Test date	2022-01-26	Test Ambient	25.1 °C
Sample No.		LED Package Model	
BLC2201019E-A1		L128-XX80RC35003P1	
LED driver of Each Lamp	Output voltage V	Measured LED working current (Max.) mA	
1	41.7	41.2	

3.1 Test Data:

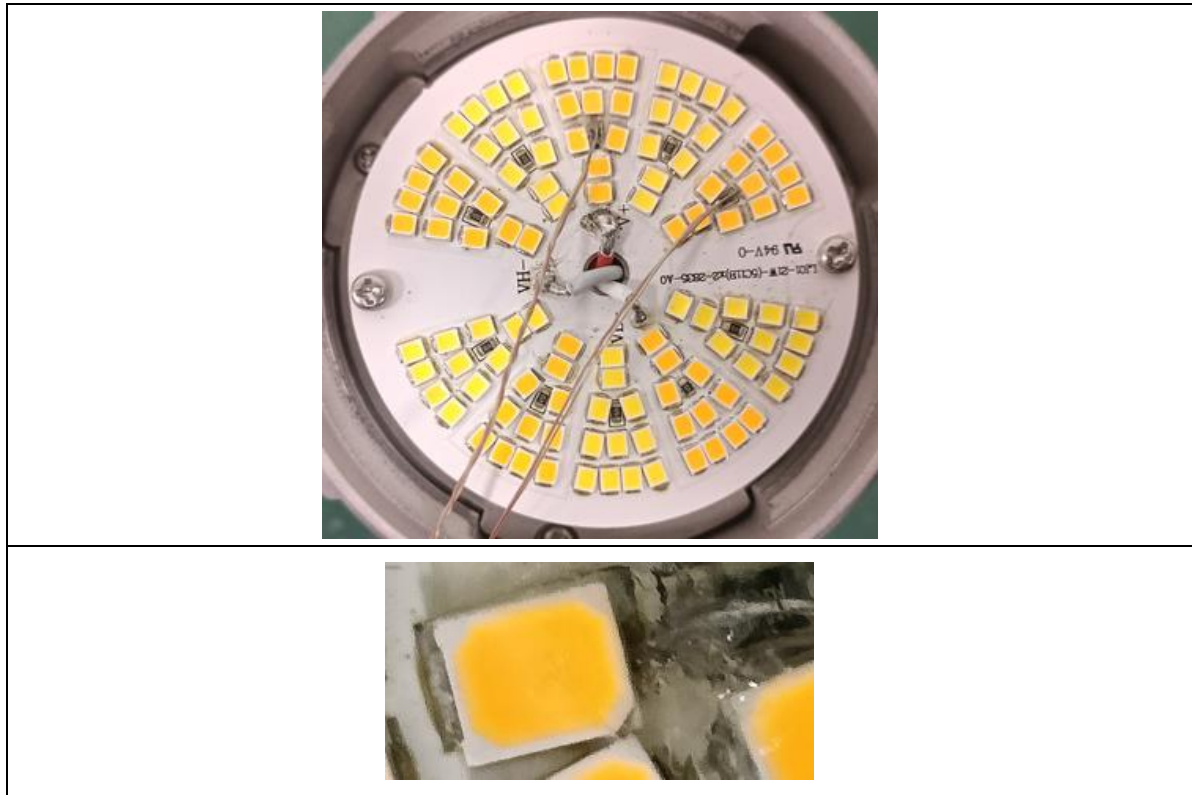
Input Vol.	120.0V	Input Current	0.180A	Input Wattage	21.21W	Temperature stabilization time:	500 min	
No.	Temperature (°C)		No.	Temperature (°C)		No.	Temperature (°C)	
	Measured	Corrected at 25°C		Measured	Corrected at 25°C		Measured	Corrected at 25°C
1	43.9	43.8	2	42.6	42.5	--	--	--
The highest in-situ measured temperature LED is 43.8°C								

3.2 Test Photo:

Ts Position:



Thermocouple Location on Temperature Measurement Point (TMP):



Results

Time (t) at which to estimate lumen maintenance (hours):	50,000
Lumen maintenance at time (t) (%):	89.94%
Reported L70 (hours):	>54000

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