



Report No.: BLC2007001E-B1

In Situ Temperature Measurement Test Report

For

ASMART LIGHT CO., LTD

(Brand Name: ASMART)

506 N GARFIELD AVE SUITE#210 ALHAMBRA CA 91801

Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area

Luminaires

Model name(s): AST-MWP03C-20D4BYFDA1-abeg

Remark: The letter "a" can be 2 letters represent lamp colors, "BH = Black, WH=White, BR=Brown or Customized". The letter "b" can be "P=Photocontrol" or "blank". The letter "e" can be two digits to represent CCT, 30=3000K, 40=4000K, 50=5000K. The letter "g" can be "A" for Auxiliary output 12V or empty for no Auxiliary output 12V.

Representative (Tested) Model: AST-MWP03C-20D4BYFDA1-ab30g(Tested at 0% CCT Setting)

Model Different: N/A

Test & Report By:

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Date: July 6, 2020

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Report Format Number BL-FM-SA-012



Table of Contents

1 General	3
1.1 Product Information	3
1.2 Standards or methods	4
1.3 Equipment list	4
2 Test conducted and method	4
2.1 Ambient Condition	4
2.2 Temperature Stabilization	4
2.3 Thermocouples	4
2.4 Thermocouples contact	5
3 Test Results	6
3.1 Test Data:	6
3.2 Test Photo:	6
3.3 Test Data of LED Driver:	8
3.4 Test Photo of LED Driver:	8



1 General

1.1 Product Information

Brand Name	AS MART
Model Number	AST-MWP03C-20D4BYFDA1-abeg
Luminaire Type	Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires
Nominal Power	20W
Rated Initial Lamp Lumen	--
Declared CCT	3000K,4000K,5000K(Color tunable)
LED Manufacturer	Lumileds Holding B.V.
LED Model	L128-3080RA35003H1 L128-5080RA35000H1
LED Driver Manufacturer	Shenzhen Daermay Electronics Technology Co., Ltd
LED Driver Model	HB-LPG020G-52
Sample Receipt Date	2020-07-01
Sample Number	BLC2007001E-B1

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	Last Calibration Date	Next Calibration Date
BL047	Power Meter	2020-06-29	2021-06-28
BL002	Temperature Tester	2020-06-17	2021-06-16

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

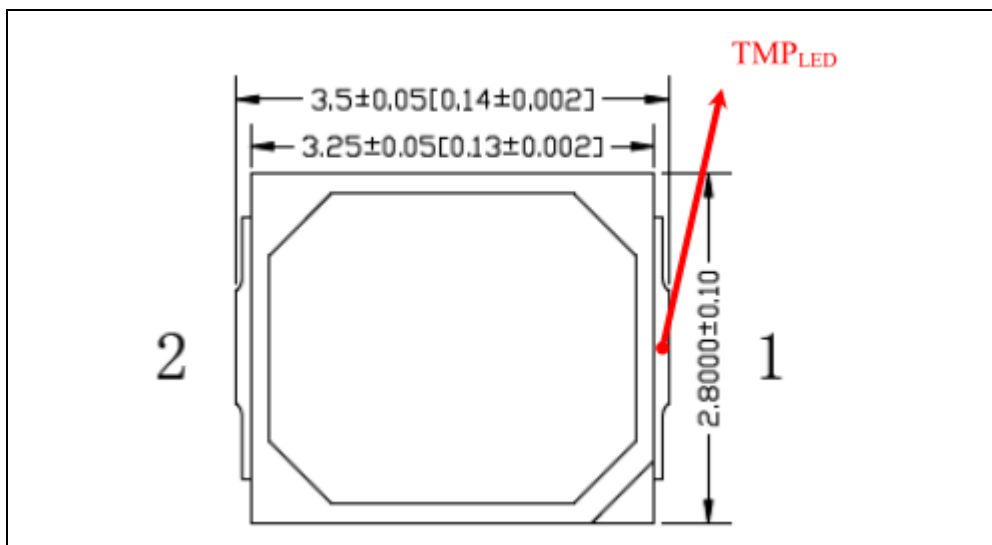
Test date	2020-07-02	Test Ambient	25.1 °C
Sample No.		LED Package Model	
BLC2007001E-B1		L128-3080RA35003H1 L128-5080RA35000H1	
LED driver of Each Lamp	Output voltage V	Measured LED working current (Max.) mA	
1	43.4	135.1	

3.1 Test Data:

Input Vol.	120.0V	Input Current	0.1621A	Input Wattage	19.30W	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	47.3	47.2	2	46.5	46.4	--	--	--
The highest in-situ measured temperature LED is 47.2°C								

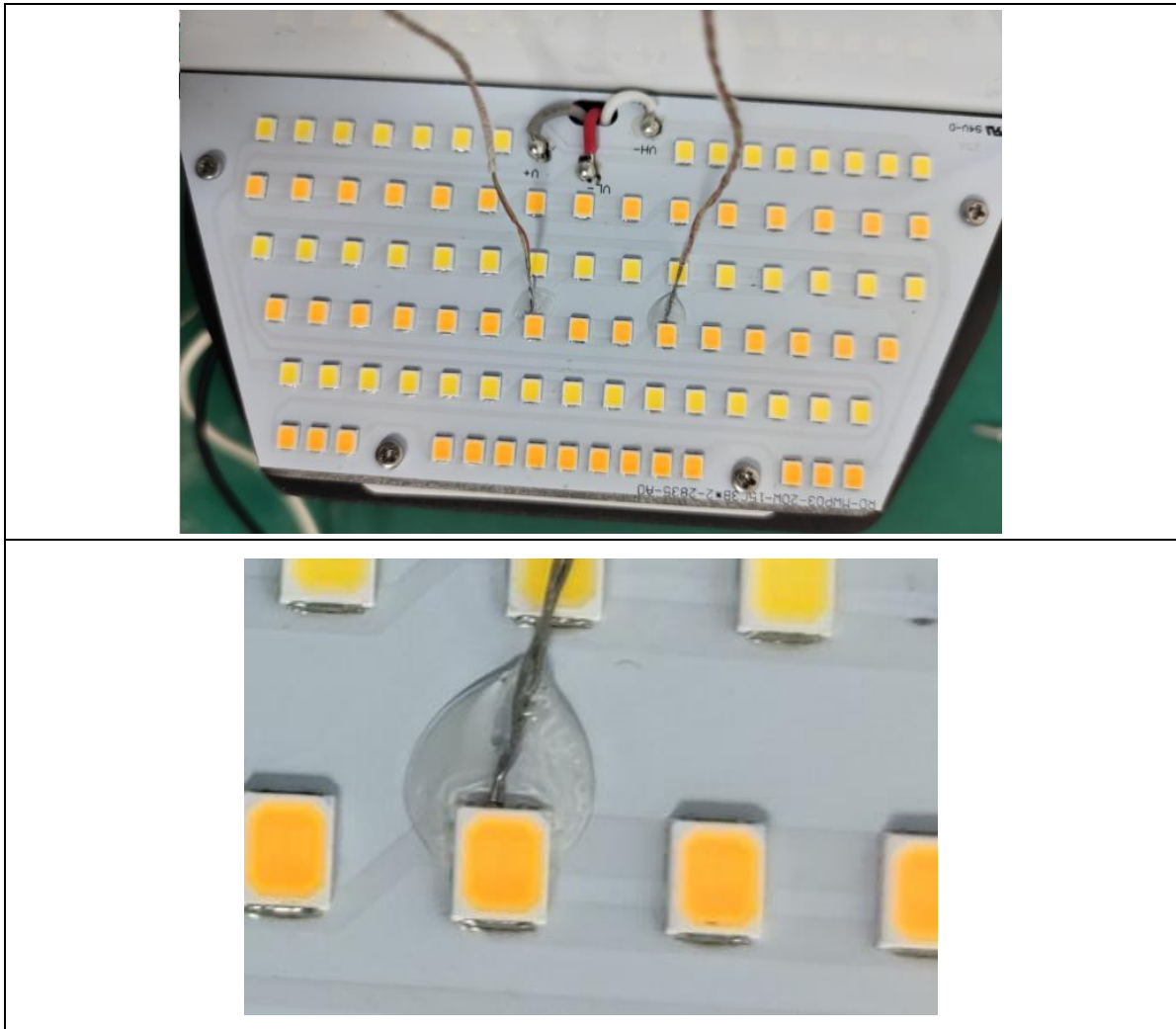
3.2 Test Photo:

Ts Position:





Thermocouple Location on Temperature Measurement Point (TMP):



Results

Time (t) at which to estimate lumen maintenance (hours):	36,000
Lumen maintenance at time (t) (%):	92.88%
Reported L90 (hours):	51,000

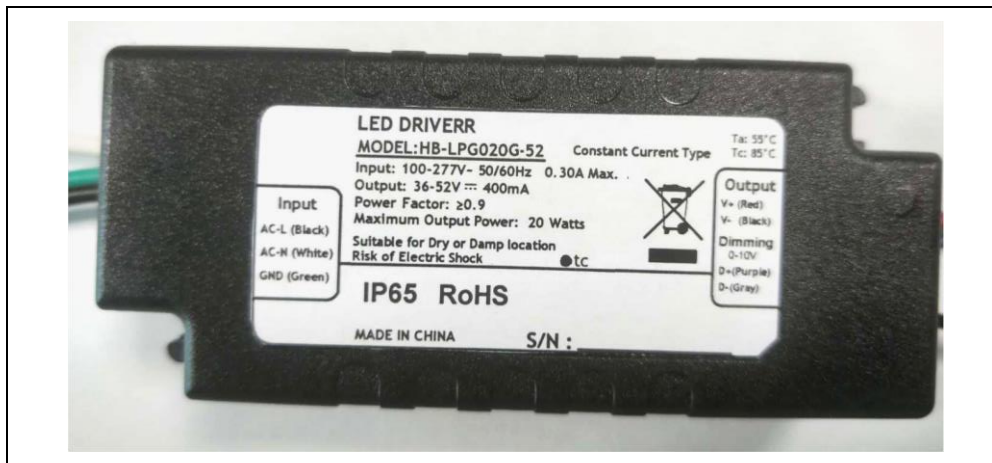


3.3 Test Data of LED Driver:

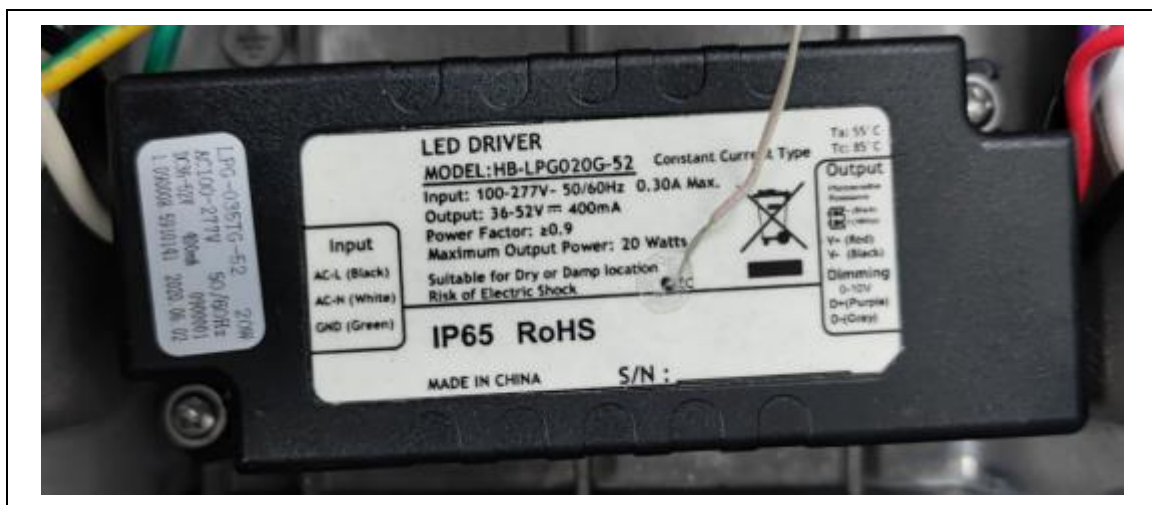
Input Vol.	120.0V	Input Current	0.1621A	Input Wattage	19.30W	Temperature stabilization time:	500 min
No	Measured TC Temperature (°C)			Temperature Limited of Life \geq 50000 hours			
	Measured		Corrected at 25°C				
1	44.7		44.6	70			

3.4 Test Photo of LED Driver:

Ts Position:

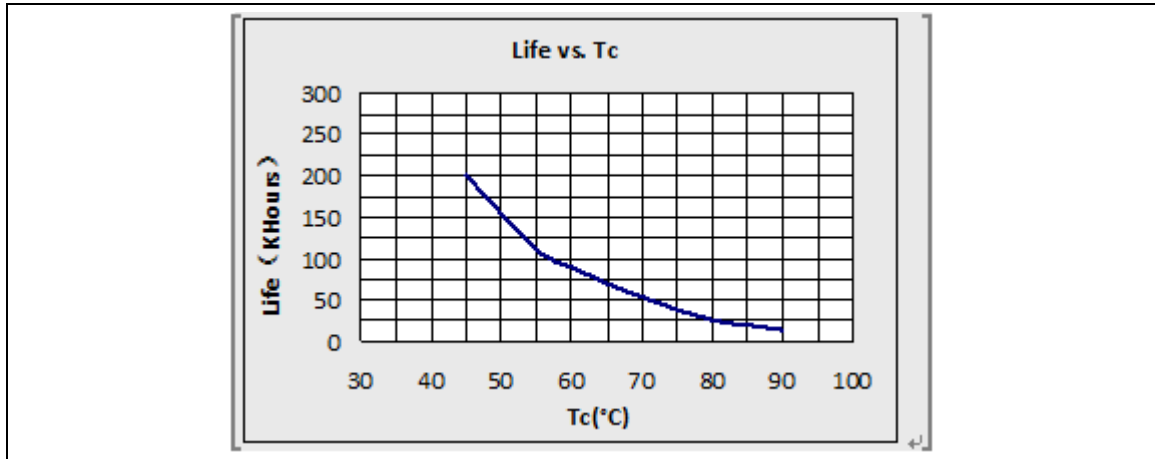


Thermocouple Location on Temperature Measurement Point (TMP):





Certificate#4810.01



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