

In Situ Temperature Measurement Test Report

For

Antec Lighting Inc**(Brand Name: )**
Quality, Hardly, Service and Innovation

Uniy C, 3979 E Guasti Road, Ontario, CA 91761

Architectural Flood and Spot Luminaires

Model name(s): AOK-400WoF-NV-X5-XX-XX70-30-P

Remark: The first “XX” can be “00” for without sensor or “SN” for with Photocontrol function. The second “XX” represents different CCT as below: 30=3000K, 40=4000K, 50=5000K, 57=5700K; “P” can be blank, “A” or “B”, blank is ceiling and wall mounted, “A” stands for Ceiling mounted only, “B” stands for Wall mounted only.

Representative (Tested) Model: AOK-400WoF-NV-X5-00-3070-30-A

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

Test & Report By:

Clint Chen

Engineer: Clint Chen

Date: Jul.29,2018

Review By:

John Li

Manager: John Li

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

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

Laboratory: Standard-Tech Co. Ltd Testing Center**NVLAP CODE: 201011-0**

Report Format Number STD/QR4918-A/0

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1 General

1.1 Product Information

Brand Name	
Model Number	AOK-400WoF-NV-X5-XX-XX70-30-P
Luminaire Type	Architectural Flood and Spot Luminaires
Nominal Power	400W
Rated Initial Lamp Lumen	--
Declared CCT	3000K, 4000K, 5000K, 5700K.
LED Manufacturer	Lumileds
LED Model	L150-3070500600000
Sample Receipt Date	Jul.23,2018
Sample Number	JAE180410-F1(3000K)
Photo	
	
	

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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
ST-R-049	Power Meter	2018-07-01	2019-06-30
ST-R-401	Temperature Tester	2018-01-29	2019-01-28

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

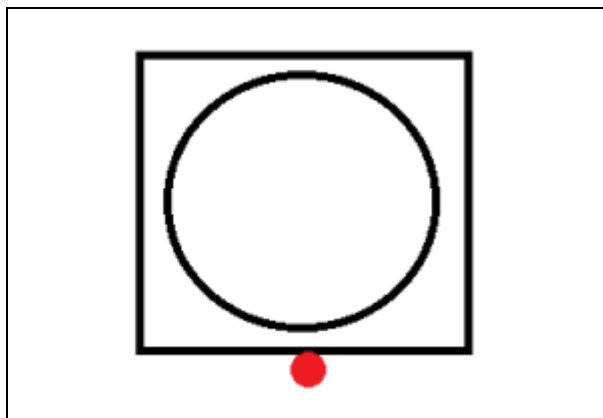
Test date	2018-07-25	Test Ambient	25.1 °C
Sample No.		LED Package Model	
JAE180410-F1		L150-3070500600000	
LED driver of Each Lamp	Output voltage V	Measured LED working current (Max.) mA	
1	40.5	176.9	

3.1 Test Data:

Input Vol.	120.0V	Input Current	3.4096A	Input Wattage	406.9W	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	51.0	50.9	3	50.7	50.6	5	50.4	50.3
2	51.4	51.3	4	49.9	49.8	6	49.6	49.5
The highest in-situ measured temperature LED is 51.3°C								

3.2 Test Photo:

Ts Position:



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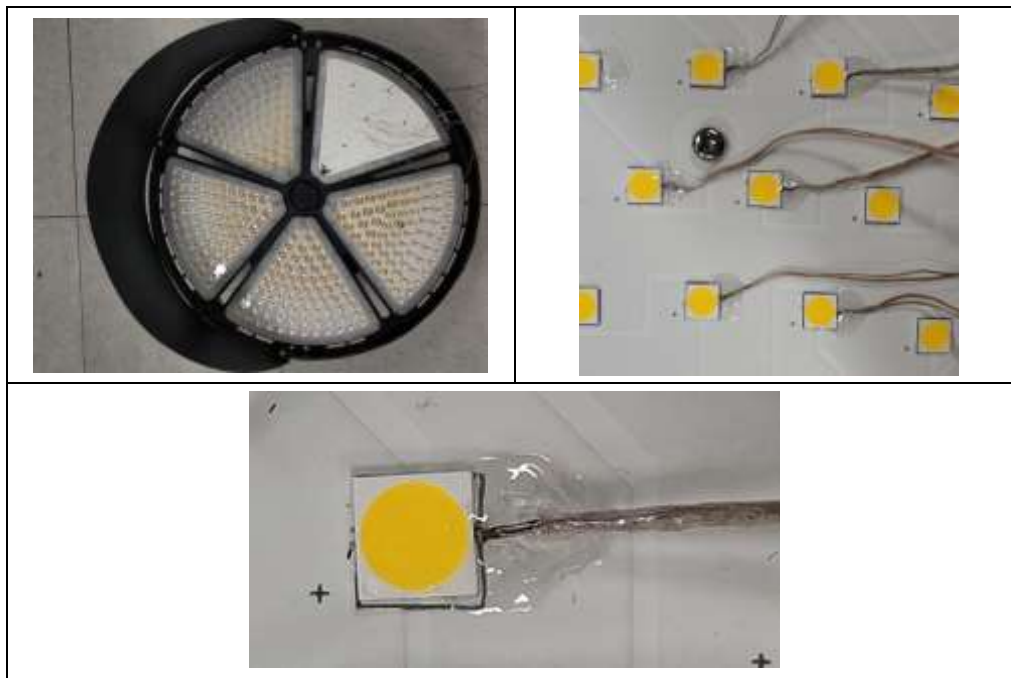
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Thermocouple Location on Temperature Measurement Point (TMP):



Results

Time (t) at which to estimate lumen maintenance (hours):	50,000
Lumen maintenance at time (t) (%):	88.25%
Reported L70 (hours):	>54000

Results

Time (t) at which to estimate lumen maintenance (hours):	36,000
Lumen maintenance at time (t) (%):	91.51%
Reported L90 (hours):	42,000

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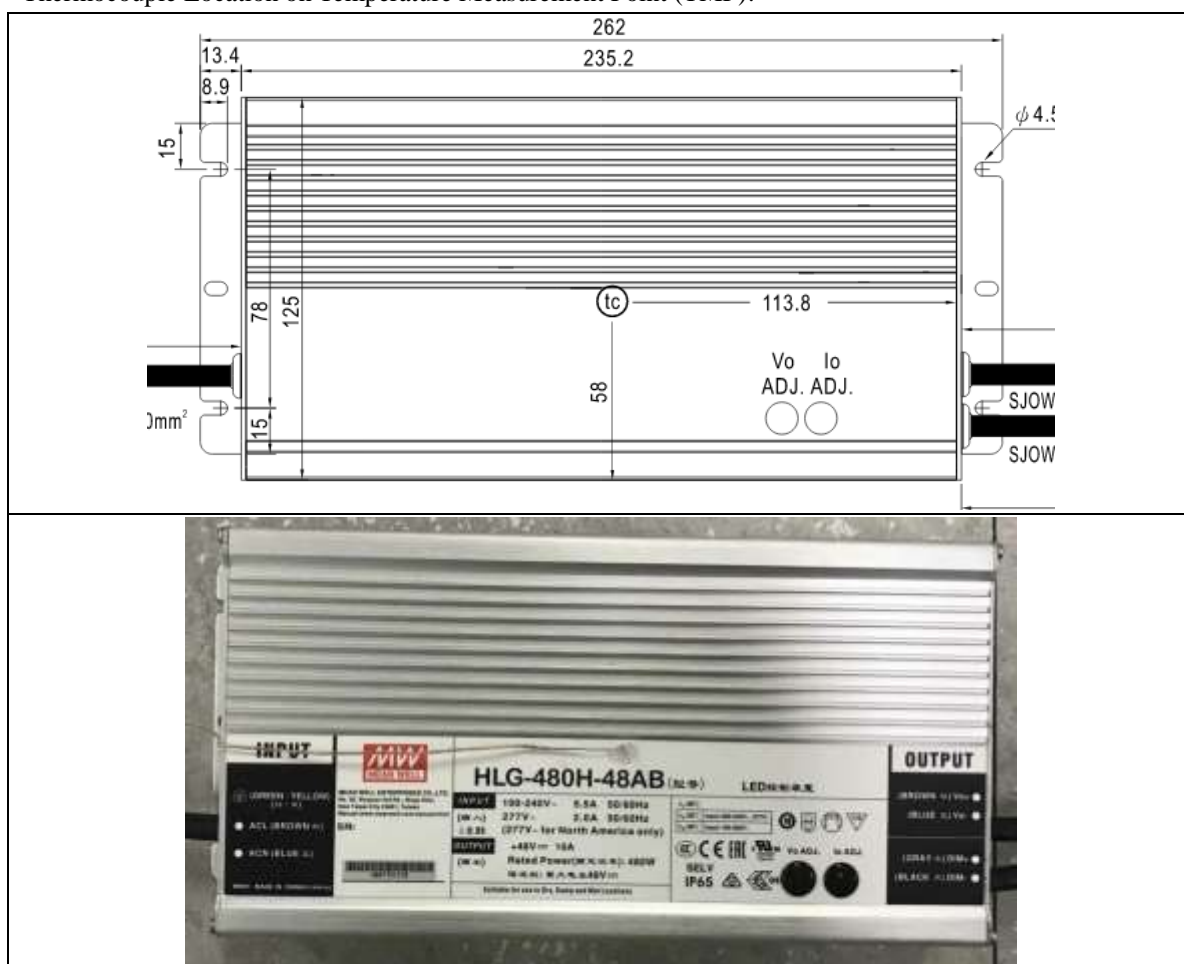
<http://www.standard-tech.com>

3.3 Test Data of LED Driver:

Input Vol.	120.0V	Input Current	3.4096A	Input Wattage	406.9W	Temperature stabilization time:	500 min
No	Measured TC Temperature (°C)			Temperature Limited of Life \geq 50000 hours			
	Measured		Corrected at 25°C				
1	54.3		54.2	75			

3.4 Test Photo:

Thermocouple Location on Temperature Measurement Point (TMP):



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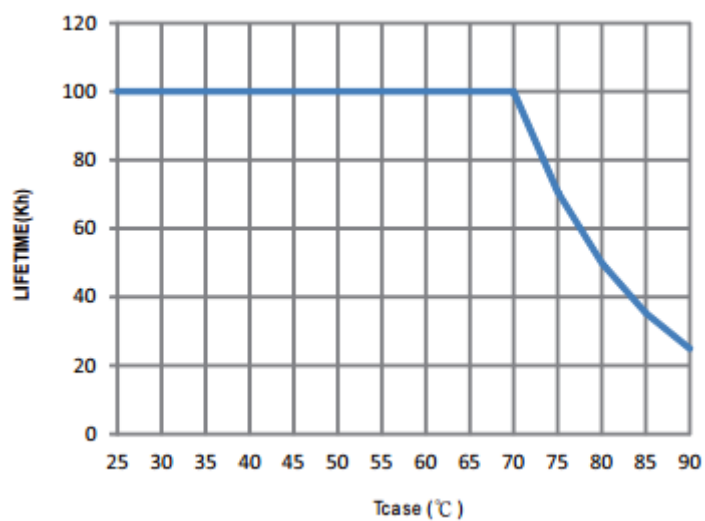
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***** END OF THE TEST REPORT*****

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