ISTMT Test Report

For

IROCO AOTOM (HUBEI) PHOTOELECTRICITY CO., LTD

Aotom LED Industrial Park, Qingzhuanzhu Road 268, Huanggang, Hubei, China

LED Panel Light

Model name(s):
24AP5035A (CLC/WLC FPL24-835-50W-130LW-UNV-DIM1-WH)
24AP5040A (CLC/WLC FPL24-840-50W-130LW-UNV-DIM1-WH)
24AP5050A (CLC/WLC FPL24-850-50W-130LW-UNV-DIM1-WH)

Representative (Tested) Model:
24AP5035A (CLC/WLC FPL24-835-50W-130LW-UNV-DIM1-WH)

Model Difference: All is the same construction, except CCT

Prepare By:

Engineer: Leo Liu

Date: 2017-08-27

Review By:

Technical Lead: Vincent Yuan

Date: 2017-08-28

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

Product Information:

Client Name:	IRICO AOTOM (HUBEI) PHOTOECTRICITY CO., LTD
Brand Name:	AOTOM
Model Number:	**24AP5035A** (CLC/WLC FPL24-835-50W-130LW-UNV-DIM1-WH)
Product type:	2X4 Luminaires for Ambient Lighting of Interior Commercial Spaces
Rating Input:	100-277V, 50/60Hz, 50W
Declared CCT:	3500K
LED Manufacturer:	EVERLIGHT
LED Model:	67-21S
Forward current of LED Chip:	60mA
Driver Model:	LF-GMD055YS1250U
Date of Receipt Samples:	2017-08-11
Quantity of Receipt Samples:	1
Sample Number:	170811003-S1

Laboratory Information:

Test Laboratory:	Dongguan New Testing Centre Co., Ltd
Laboratory Address:	3F, No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China
Laboratory Contact Name:	Neil Zhong
Laboratory Contact E-mail:	Neil_ntc@163.com

Report Information

Issued Date of Test Report:	2017-08-28
Revised Date of Test Report:	N/A
Test Report No.:	NTCR17080055
Remark (*If applicable*)	N/A

Test Specifications:	
Date of Test	2017-08-28
Test item	1. ISTMT Test
Reference Standard	ANSI/UL 1598 Luminaire

Test Methods

1. ISTMT Test Method:

In-Situ Temperature Measurement test is conducted according to the ANSI/UL 1598, section 19.7, 19.10 to 19.16. The testing was conducted in a room with ambient temperature of 20-30°C. The apparatus construction followed those described in UL 1598 for normal temperature test. Thermocouples were placed on the LED package and LED Driver in the location indicated by LM-80 report and driver spec sheet.

The temperature was recorded after the luminaire was operating for a minimum 7.5 hours.

ISTMT Test Results

Electrical Data:

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Orientation	Stabilization Time	Test Time
120.0	60	0.3889	45.45	0.9737	Face Down	N/A	7.5 hours

Test Result

Thermocouple Location	Measured LED Drive Current (mA)	Temperature (°C)			Limits (°C)
		Ambient	Test Result	Corrected to 25°C	
TMP_{LED}	35	26.5	47.3	45.8	105
$TMP_{Negative}$	35	26.5	49.5	48.0	105
TMP_{Driver}	N/A	26.5	38.9	37.4	90

Test Result from TM-21

***In-Situ* Inputs**

Drive current for each LED package/array/module (mA):	35
In-situ case temperature (T_c, ^{0}C):	45.8
Percentage of initial lumens to project to (e.g. for L_{70}, enter 70):	70

Results

Time (t) at which to estimate lumen maintenance (hours):	50,000
Lumen maintenance at time (t) (%):	87.20%
Reported L70 (hours):	>54000

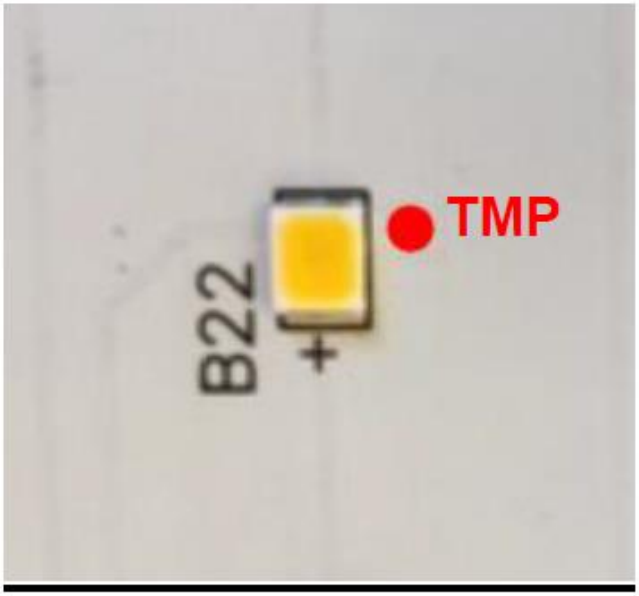
***In-Situ* Inputs**

Drive current for each LED package/array/module (mA):	35
In-situ case temperature (T_c, ^{0}C):	45.8
Percentage of initial lumens to project to (e.g. for L_{70}, enter 70):	90

Results

Time (t) at which to estimate lumen maintenance (hours):	50,000
Lumen maintenance at time (t) (%):	87.20%
Reported L90 (hours):	40,000

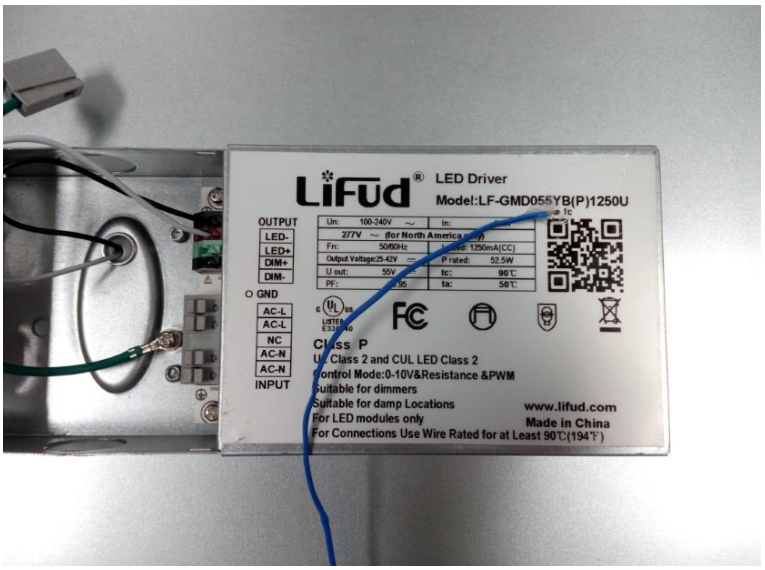
TMP Position in LM-80:



Thermocouple position on TMP:

TMP Position in Driver Specification:

Thermocouple position on TMP:



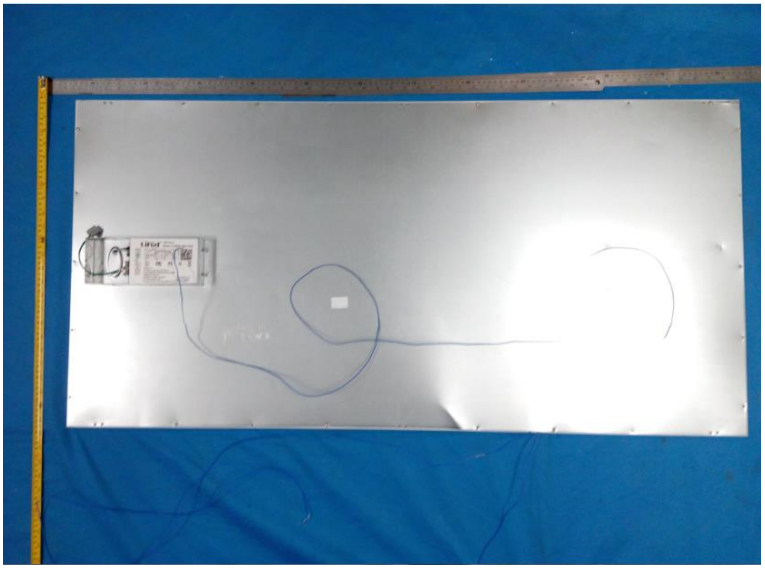
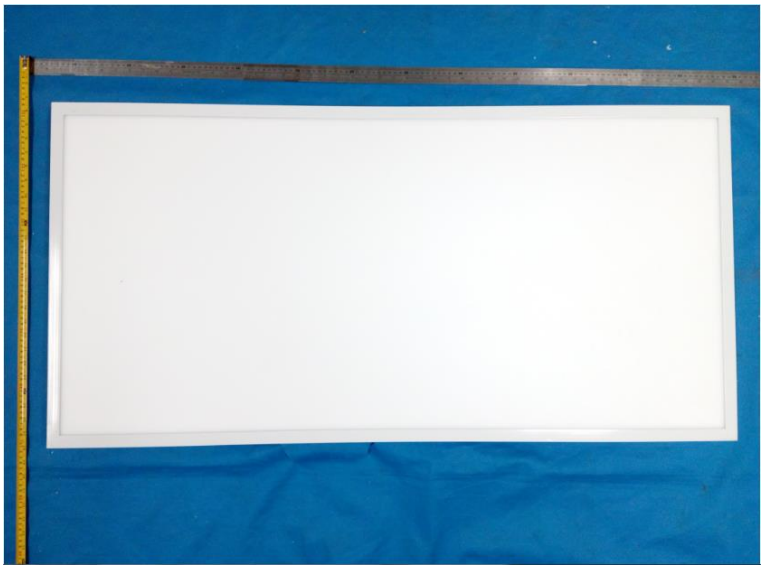


Photo of Sample:



Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTCD-S001	Temperature Data Logger	2017-01-20	2018-01-19
NTC-F01-031	Digital Power Meter	2016-12-05	2017-12-04
NTC-F01-019	Temperature & Humidity Meter	2016-11-28	2017-11-27

*******END OF DATASHEET*******

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