

TEST REPORT

LED Flood Light

Test Model: AOK-240WFLC-NV-A5-00-4070-T5-A

Report Number : LCSB04016060S

Applicant : AOK Industrial Company Limited
Address : 1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4,
ST George's Science and Technology Industrial Park, Northside of Xinyu
Road, Xiangshan Community, Xinqiao Street Baoan District, 518000
Shenzhen, Guangdong, CHINA

Manufacturer : AOK Industrial Company Limited
Address : 1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4,
ST George's Science and Technology Industrial Park, Northside of Xinyu
Road, Xiangshan Community, Xinqiao Street Baoan District, 518000
Shenzhen, Guangdong, CHINA

Prepared by : Shenzhen Southern LCS Compliance Testing Co., Ltd.
Address : 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community,
Matian Street, Guangming District, Shenzhen, China

Date of receipt sample : April 19, 2026
Date of test : April 19, 2026 ~April 21, 2026
Date of issue : April 22, 2026

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full. without prior written permission of the company, The report would be invalid without specific stamp of test institute and the signatures of approver.



TEST REPORT

Client:	AOK Industrial Company Limited		
Address:	1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4, ST George's Science and Technology Industrial Park, Northside of Xinyu Road, Xiangshan Community, Xinqiao Street Baoan District, 518000 Shenzhen, Guangdong, CHINA		
Manufacturer:	AOK Industrial Company Limited		
Address:	1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4, ST George's Science and Technology Industrial Park, Northside of Xinyu Road, Xiangshan Community, Xinqiao Street Baoan District, 518000 Shenzhen, Guangdong, CHINA		
Brand Name:	 Quality, Honesty, Service and Innovation		
Product Description:	LED Flood Light		
Models:	AOK-240WFLC-NV-A5-00-4070-T5-A		
Rating:	AC120-277V, 50/60Hz, 240W		
Test item:	ISTMT+TM21 Test		
Method:	According to requirement clause 14.4.1 of IEC 60598-1:2024		
Test result*:	Pass		
Date of sample receipt:	Date of Test:	Date of Issue:	Classification:
2026-04-19	2026-04-19~2026-04-21	2026-04-22	Commission Test
Testing Laboratory: Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China			
Test by:	Check by:	Approved by:	
 Rose Cao/ Project Engineer	 Torres He/ Director	 Jesse Liu/ Manager	
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4. No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Modified Information

Version	Report No.	Revision Date	Summary
V1.0	LCSB04016060S	/	Original Version

General product information:

- Measurement was conducted at a stable ambient temperature $50^{\circ}\text{C} \pm 1^{\circ}\text{C}$.
- The ISTMT was performed with the cover installed on the LED package and the luminaire was installed according to actual use of the installation status.

Model List:

Model No.	Rating	CCT	LED Driver
AOK-240WFLC-NV-A5-00-4070-T5-A	AC120-277V, 50/60Hz, 240W	4000K	SS-240NH-V300BHB

LED specification:

Model/Series	Manufacturer	VF (V)	IF (mA)
TS1-H50YL-0801BB	Shenzhen Tongyifang Optoelectronic Technology Co.,Ltd.	24V	150mA

Equipment list:

Equipment No.	Equipment Name	Specification data	Cal. Date
SLCS-S-004	Digital Power Meter	YOKOGAWA/ WT210 / 91L424211	2025/4/27
SLCS-S-011	J Thermocouple	DE AO/J	2025/4/28
SLCS-S-210	Temperature rising recorder	34972A	2025/4/30
SLCS-S-102	Aging House	LA-201207002	2025/12/20

1. GENERAL INFORMATION

1.1 Product Information

Information of product:	
Product description	LED Flood Light
Model Number	AOK-240WFLC-NV-A5-00-4070-T5-A
Manufacturer of LED Driver	Guangdong Sosen Power Technology Co.,Ltd
LED Driver models	SS-240NH-V300BHB
Rated Inputs	AC120-277V, 50/60Hz
Rated Power	240W
Declared CCT.	4000K
LED Package, Array or Module	12S8P, total 96pcs LED chip(s)
Date of Receipt Samples	2026-04-19
Quantity of Receipt Samples	1 unit
Information of LED chip:	
LED Chip Manufacturer	Shenzhen Tongyifang Optoelectronic Technology Co.,Ltd.
LED type	LED Package
Model of the LED chip(s)	TS1-H50YL-0801BB
Forward voltage of the LED chip	24V
Forward current of the LED chip	150mA
ISTMT temperature of the LED chip	105°C
IES LM-80 Test Report	Report No.: N02A24040931L00101R1 Issue Date: 2024-05-09 Tested and Prepared by: Guangdong Meide Testing Technology Co.,Ltd.

1.2 Reference Standards or Methods

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

According to requirement clause 14.4.1 of IEC 60598-1:2024

IES LM-84-14: Measuring Luminous Flux and Color Maintenance of LED Lamps, Light Engines, and Luminaires---Annex A: measurement of in-situ conditions LED case temperature.

2. Test Result of ISTMT

2.1 Electrical data

Criteria Item	Result
Input voltage	230Vac, 50Hz
Input current	1.057A
Total power	240.1W
Power factor	0.987
Current on each LED module	108mA
Remark: There are 12S8P, total 96pcs LED chip(s) in models AOK-240WFLC-NV-A5-00-4070-T5-A, That we are measurement the total current of a driver output was 864mA, and current on each parallel was 108mA ($864\text{mA}/8=108\text{mA}$), Because in each series that the forward current on each LED chip(s) was equivalent, so forward current on each LED chip(s) was 108mA.	

2.2 Temperature data

Ambient Temperature, ° C :		50+1°C	Relative Humidity, %Rh :	45%Rh~75%Rh	
Supply voltage:		230Vac, 50Hz	Type of thermocouples:	J	
Test Product Model		AOK-240WFLC-NV-A5-00-4070-T5-A			
Test LED Model		TS1-H50YL-0801BB			
Test LED Driver Model		SS-240NH-V300BHB			
Test Duration		≥3.5Hours			
Item	Parts	Test Result (°C)	Revise to ta. (°C)	Limit(°C)	
1	Measured maximum Temperature @ TEMLED	98.1	98.0	105	
2	tc of LED driver	85.2	85.1	90	
3	Ambient	50.1	50.0	--	
Remark: The ISTMT was performed with the cover installed on the LED package and the luminaire was installed according to actual use of the installation status.					

3. Lumen Maintenance Projection (IESNA TM-21-11 Method)

3.1 LM-80 report summary for LED chip(s)

Manufactured by	Shenzhen Tongyifang Optoelectronic Technology Co.,Ltd.		
LED Model	TS1-H50YL-0801BB		
Number of LED light source tested	25units		
Drive Current	150mA		
Case temperature	55°C	85°C	105°C
18000 hours lumen maintenance	97.36%	97.15%	96.95%
18000 hours color maintenance ($\Delta u'v'$)	0.0041	0.0044	0.0045

3.2 Lumen Maintenance Projection for luminaires

Criteria Item	Result
100000h at which to estimate lumen maintenance	84.04%
Drive current on each LED light source	108mA
Reported L70 lumen maintenance life	>108000

LM-80 Test Inputs

Instructions

Yellow fields are completed by the user. Fields not used should be left blank. Cyan fields are calculated based on user entries.

First, enter a description of the LED light source tested. Then complete the fields labeled "LM-80 Testing Details". Test duration must be at least 6,000 hours. If only one case temperature data set is to be used (no interpolation), complete only "Tested case temperature 1". For only two case temperature data sets, complete 1 and 2.

Next, further to the right, in the corresponding box(es) for each tested case temperature, enter the test data along with the time (in hours) at which each measurement was taken. Data entered must be normalized then averaged measured data (per TM-21 sections 5.2.1 and 5.2.2). If case temperatures have different test durations, enter data up to the lowest of the test durations for all of the case temperatures.

Enter drive current, *in-situ* temperature data and the percentage of initial lumens to project to in the fields labeled "*In-Situ* Inputs".

Results can be tailored to estimate lumen maintenance at a specific time by entering a value (t) in the yellow field. A complete TM-21 report will appear on the next tab labeled "Report".

Description of LED Light Source Tested (manufacturer, model, catalog number)

Shenzhen Tongyifang Optoelectronic Technology Co., Ltd. TS1-H50YL-0801B

LM-80 Testing Details

Total number of units tested per case temperature:	25
Number of failures:	0
Number of units measured:	25
Test duration (hours):	18000
Tested drive current (mA):	150
Tested case temperature 1 (T _{case} °C):	55
Tested case temperature 2 (T _{case} °C):	85
Tested case temperature 3 (T _{case} °C):	105

In-Situ Inputs

Drive current for each LED package/array/module (mA):	108
In-situ case temperature (T _{case} °C):	98
Percentage of initial lumens to project to (e.g. for L70, enter 70):	70

Results

Time (t) at which to estimate lumen maintenance (hours):	100,000
Lumen maintenance at time (t) (%):	84.04%
Reported L70 (hours):	>108000

Test Data for 55° C Case Temperature

Time (hours)	Lumen Maintenance (%)
1000	100.14%
2000	100.00%
3000	99.84%
4000	99.71%
5000	99.56%
6000	99.41%
7000	99.25%
8000	99.06%
9000	98.83%
10000	98.72%
11000	98.57%
12000	98.37%
13000	98.19%
14000	98.03%
15000	97.84%
16000	97.67%
17000	97.53%
18000	97.36%

Test Data for 85° C Case Temperature

Time (hours)	Lumen Maintenance (%)
1000	100.11%
2000	99.86%
3000	99.70%
4000	99.55%
5000	99.39%
6000	99.25%
7000	99.08%
8000	98.83%
9000	98.63%
10000	98.53%
11000	98.33%
12000	98.13%
13000	97.95%
14000	97.77%
15000	97.59%
16000	97.45%
17000	97.30%
18000	97.15%

Test Data for 105° C Case Temperature

Time (hours)	Lumen Maintenance (%)
1000	100.02%
2000	99.73%
3000	99.52%
4000	99.35%
5000	99.18%
6000	99.02%
7000	98.85%
8000	98.64%
9000	98.42%
10000	98.29%
11000	98.12%
12000	97.89%
13000	97.73%
14000	97.52%
15000	97.38%
16000	97.19%
17000	97.06%
18000	96.95%

TM-21 Report

Table 1: Report at each LM-80 Test Condition						Table 2: Interpolation Report (projection based on <i>in-situ</i> temperature entered)	
Description of LED Light Source Tested (manufacturer, model, catalog number)		Shenzhen Tongyifang Optoelectronic Technology Co.,Ltd. TS1-H50YL-0801BB				T _{s1} (° C)	85.00
						T _{s1} (K)	358.15
Test Condition 1 - 55° C Case Temp		Test Condition 2 - 85° C Case Temp		Test Condition 3 - 105° C Case Temp		α ₁	1.742E-06
Sample size	25	Sample size	25	Sample size	25	B ₁	1.002
Number of failures	0	Number of failures	0	Number of failures	0	T _{s2} (° C)	105.00
DUT drive current used in the test (mA)	150	DUT drive current used in the test (mA)	150	DUT drive current used in the test (mA)	150	T _{s2} (K)	378.15
Test duration (hours)	18,000	Test duration (hours)	18,000	Test duration (hours)	18,000	α ₂	1.752E-06
Test duration used for projection (hour to hour)	9,000 - 18,000	Test duration used for projection (hour to hour)	9,000 - 18,000	Test duration used for projection (hour to hour)	9,000 - 18,000	B ₂	1.000
Tested case temperature (° C)	55	Tested case temperature (° C)	85	Tested case temperature (° C)	105	E _a /k ₀	3.94E+01
α	1.718E-06	α	1.742E-06	α	1.752E-06	A	1.944E-06
B	1.004	B	1.002	B	1.000	B ₀	1.001
Reported L70(18k) (hours)	>108000	Reported L70(18k) (hours)	>108000	Reported L70(18k) (hours)	>108000	T _{s3} (° C)	98.00
						T _{s3} (K)	371.15
						α ₃	1.748E-06
						Reported L70(18k) at 98° C (hours)	>108000

4. Photos

4.1 Thermocouple contact photo of @TEM_{LED}



Photo 1

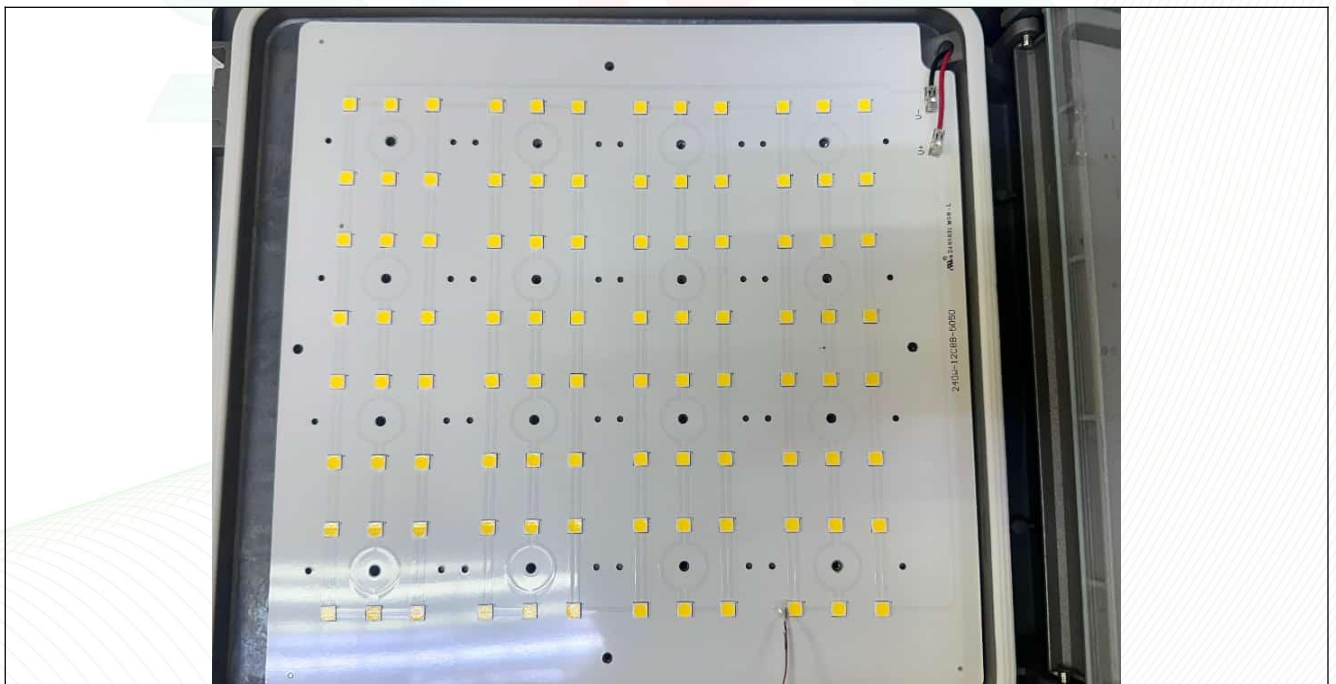


Photo 2

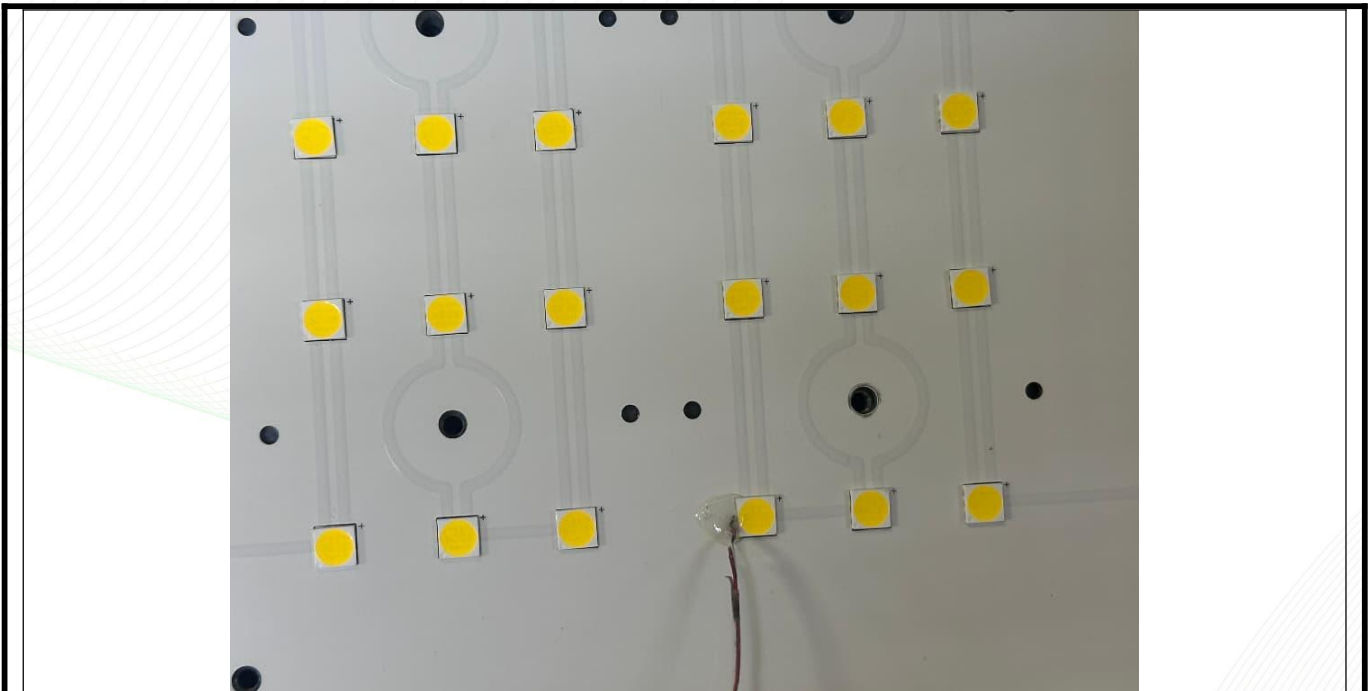


Photo 3



Photo 4

4.2 Product Photos

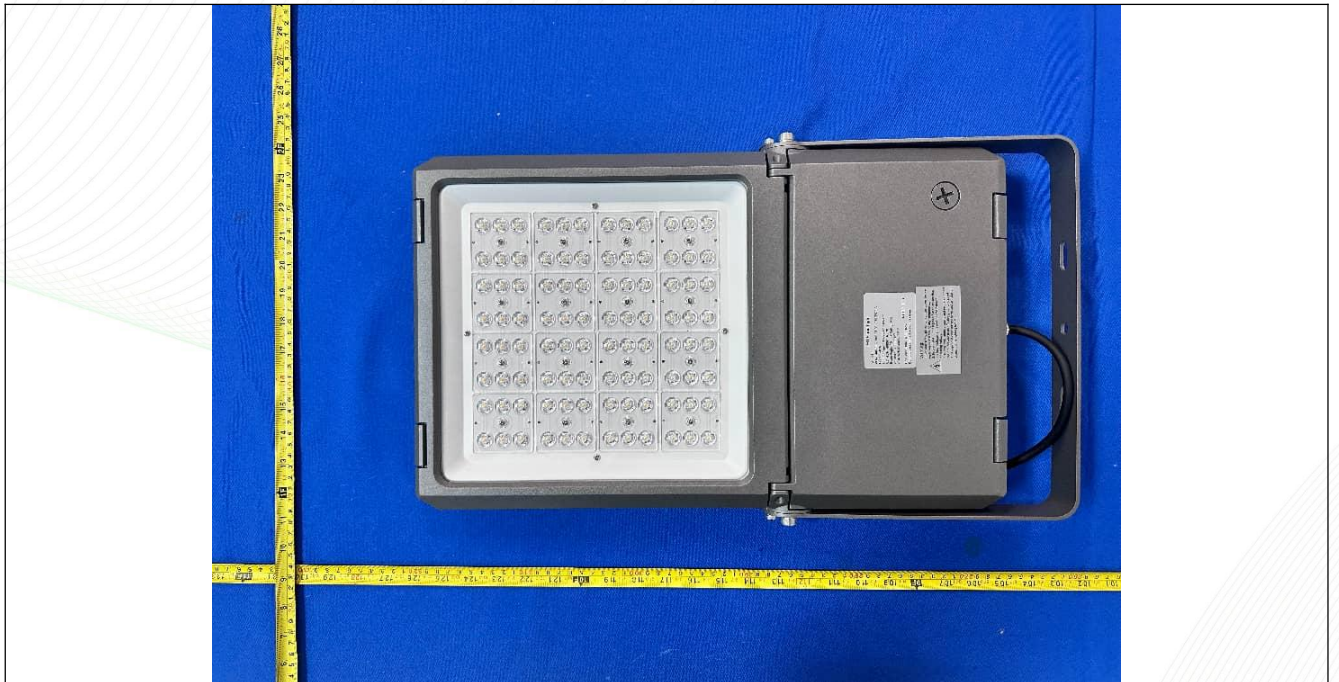
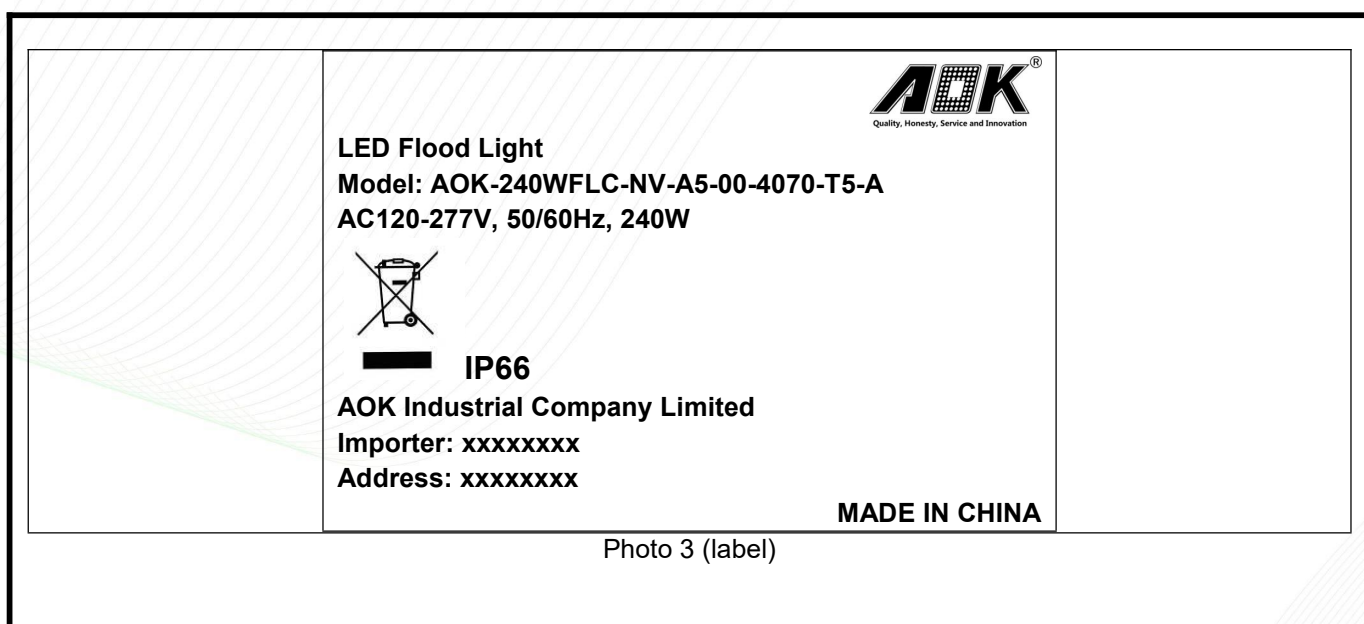


Photo 1



Photo 2



----- End of test report -----

SLS