

TEST REPORT

LED STREET LIGHT

Test Model: AOK-100WILH-NV-A5-00-4070-T252-P

Report Number : LCSB02026087S

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 : February 27, 2026
Date of test : March 06, 2026
Date of issue : March 09, 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, | | |
| 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, | | |
| Brand Name: |  <small>Quality, Honesty, Service and Innovation</small> | | |
| Product Description: | LED STREET LIGHT | | |
| Models: | AOK-100WiLH-NV-A5-00-4070-T252-P | | |
| Rating: | 220-240V~, 50/60Hz, 100W | | |
| 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: |
| 2026-02-27 | 2026-03-06 | 2026-03-09 | 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:  Rose Cao/ Project Engineer | Check by:  Torres He/ Director | Approved by:  Jesse Liu/ Manager | |
| <p><i>Remark: The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacturer cannot be derived therefore.</i></p> | | | |

General remarks:

1. The test results presented in this report relate only to the object tested.
2. This report shall not be reproduced, except in full, without the written approval of the Issuing Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the Testing Laboratory, responsible for this Test Report.
3. The general information of applicant and manufacturer (such as the name and address), product name, model/type reference, trademark and other similar information contained in this report are all provided by the applicant, the laboratory is not responsible for verifying its authenticity.

Modified Information

| Version | Report No. | Revision Date | Summary |
|---------|---------------|---------------|------------------|
| V1.0 | LCSB02026087S | / | Original Version |

General product information:

- Measurement was conducted at a stable ambient temperature $55^{\circ}\text{C} \pm 1^{\circ}\text{C}$.
- 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-100WiLH-NV-A5-00-4070-T252-P | 220-240V~, 50/60Hz, 100W | 4000K | SS-100NH-V300BHB |

LED specification:

| Model/Series | Manufacturer | VF (V) | IF (mA) |
|------------------|---|------------|---------|
| TS1-H50YL-1001BB | Shenzhen Tongyifang Optoelectronic Technology Co., Ltd. | 27.0-30.0V | 100mA |

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 STREET LIGHT |
| Model Number | AOK-100WiLH-NV-A5-00-4070-T252-P |
| Manufacturer of LED Driver | Shenzhen SOSEN Electronics Co., Ltd |
| LED Driver models | SS-100NH-V300BHB |
| Rated Inputs | 220-240V~, 50/60Hz |
| Rated Power | 100W |
| Declared CCT. | 4000K |
| LED Package, Array or Module | 8S9P, total 72pcs LED chip(s) |
| Date of Receipt Samples | 2026-02-27 |
| 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-1001BB |
| Forward voltage of the LED chip | 27.0-30.0V |
| Forward current of the LED chip | 100mA |
| 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 | 0.443A |
| Total power | 100.5W |
| Power factor | 0.986 |
| Current on each LED module | 46.89mA |
| Remark: There are 8S9P, total 72pcs LED chip(s) in models AOK-100WILH-NV-A5-00-4070-T252-P, That we are measurement the total current of a driver output was 422mA, and current on each parallel was 46.89mA ($422\text{mA}/9=46.89\text{mA}$), Because in each series that the forward current on each LED chip(s) was equivalent, so forward current on each LED chip(s) was 46.89mA. | |

2.2 Temperature data

| Ambient Temperature, ° C : | 55±1°C | Relative Humidity, %Rh : | 45%Rh~75%Rh | |
|--|---------------------------------------|--------------------------|--------------------|-----------|
| Supply voltage: | 230Vac, 50Hz | Type of thermocouples: | J | |
| Test Product Model | AOK-100WiLH-NV-A5-00-4070-T252-P | | | |
| Test LED Model | TS1-H50YL-1001BB | | | |
| Test LED Driver Model | SS-100NH-V300BHB | | | |
| Test Duration | ≥3.5Hours | | | |
| Item | Parts | Test Result (°C) | Revise to ta. (°C) | Limit(°C) |
| 1 | Measured maximum Temperature @ TEMLED | 63.4 | 63.3 | 105 |
| 2 | tc of LED driver | 59.2 | 59.1 | 90 |
| 3 | Ambient | 55.1 | 55.0 | -- |
| 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-1001BB | | |
| Number of LED light source tested | 25units | | |
| Drive Current | 100mA | | |
| 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 |
|---|---------|
| 50000h at which to estimate lumen maintenance | 92.02% |
| Drive current on each LED light source | 46.89mA |
| Reported L70 lumen maintenance life | >108000 |



TM-21 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-1001BB

| 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): | 100 |
| Tested case temperature 1 (T ₁ , °C): | 55 |
| Tested case temperature 2 (T ₂ , °C): | 85 |
| Tested case temperature 3 (T ₃ , °C): | 105 |

| In-Situ Inputs | |
|---|-------|
| Drive current for each LED package/array/module (mA): | 46.89 |
| In-situ case temperature (T _{amb} , °C): | 63.3 |
| 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) (%): | 92.02% |
| Reported L70 (hours): | >108000 |

LM-80 Test Inputs

| Test Data for 55°C Case Temperature | | Test Data for 85°C Case Temperature | | Test Data for 105°C Case Temperature | |
|-------------------------------------|-----------------------|-------------------------------------|-----------------------|--------------------------------------|-----------------------|
| Time (hours) | Lumen Maintenance (%) | Time (hours) | Lumen Maintenance (%) | Time (hours) | Lumen Maintenance (%) |
| 1000 | 100.14% | 1000 | 100.11% | 1000 | 100.02% |
| 2000 | 100.00% | 2000 | 99.86% | 2000 | 99.73% |
| 3000 | 99.84% | 3000 | 99.70% | 3000 | 99.52% |
| 4000 | 99.71% | 4000 | 99.55% | 4000 | 99.35% |
| 5000 | 99.56% | 5000 | 99.39% | 5000 | 99.18% |
| 6000 | 99.41% | 6000 | 99.25% | 6000 | 99.02% |
| 7000 | 99.25% | 7000 | 99.08% | 7000 | 98.85% |
| 8000 | 99.06% | 8000 | 98.83% | 8000 | 98.64% |
| 9000 | 98.83% | 9000 | 98.63% | 9000 | 98.42% |
| 10000 | 98.72% | 10000 | 98.53% | 10000 | 98.29% |
| 11000 | 98.57% | 11000 | 98.33% | 11000 | 98.12% |
| 12000 | 98.37% | 12000 | 98.13% | 12000 | 97.89% |
| 13000 | 98.19% | 13000 | 97.95% | 13000 | 97.73% |
| 14000 | 98.03% | 14000 | 97.77% | 14000 | 97.52% |
| 15000 | 97.84% | 15000 | 97.59% | 15000 | 97.38% |
| 16000 | 97.67% | 16000 | 97.45% | 16000 | 97.19% |
| 17000 | 97.53% | 17000 | 97.30% | 17000 | 97.06% |
| 18000 | 97.36% | 18000 | 97.15% | 18000 | 96.95% |



TM-21 Report

| Table 1: Report at each LM-80 Test Condition | | | |
|---|-----------------------------------|---|----------------|
| Description of LED Light Source Tested (manufacturer, model, catalog number) | | Shenzhen Tongyifang Optoelectronic Technology Co., Ltd. TS1-H50YL-1001BB | |
| Test Condition 1 - 55°C Case Temp | Test Condition 2 - 85°C Case Temp | Test Condition 3 - 105°C Case Temp | |
| Sample size | 25 | Sample size | 25 |
| Number of failures | 0 | Number of failures | 0 |
| DUT drive current used in the test (mA) | 100 | DUT drive current used in the test (mA) | 100 |
| Test duration (hours) | 18,000 | Test duration (hours) | 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 |
| Tested case temperature (°C) | 55 | Tested case temperature (°C) | 85 |
| α | 1.718E-06 | α | 1.742E-06 |
| B | 1.004 | B | 1.002 |
| Reported L70(18k) (hours) | >108000 | Reported L70(18k) (hours) | >108000 |

| Table 2: Interpolation Report (projection based on in-situ temperature entered) | |
|--|-----------|
| T _{s,1} (°C) | 55.00 |
| T _{s,1} (K) | 328.15 |
| α ₁ | 1.718E-06 |
| B ₁ | 1.004 |
| T _{s,2} (°C) | 85.00 |
| T _{s,2} (K) | 358.15 |
| α ₂ | 1.742E-06 |
| B ₂ | 1.002 |
| E ₉₀ /k ₀ | 5.33E+01 |
| A | 2.021E-06 |
| B ₀ | 1.003 |
| T _{s,i} (°C) | 63.30 |
| T _{s,i} (K) | 336.45 |
| α _i | 1.725E-06 |
| Reported L70(18k) at 63.3°C (hours) | >108000 |

4. Photos

4.1 Thermocouple contact photo of @TEM_{LED}



Photo 1

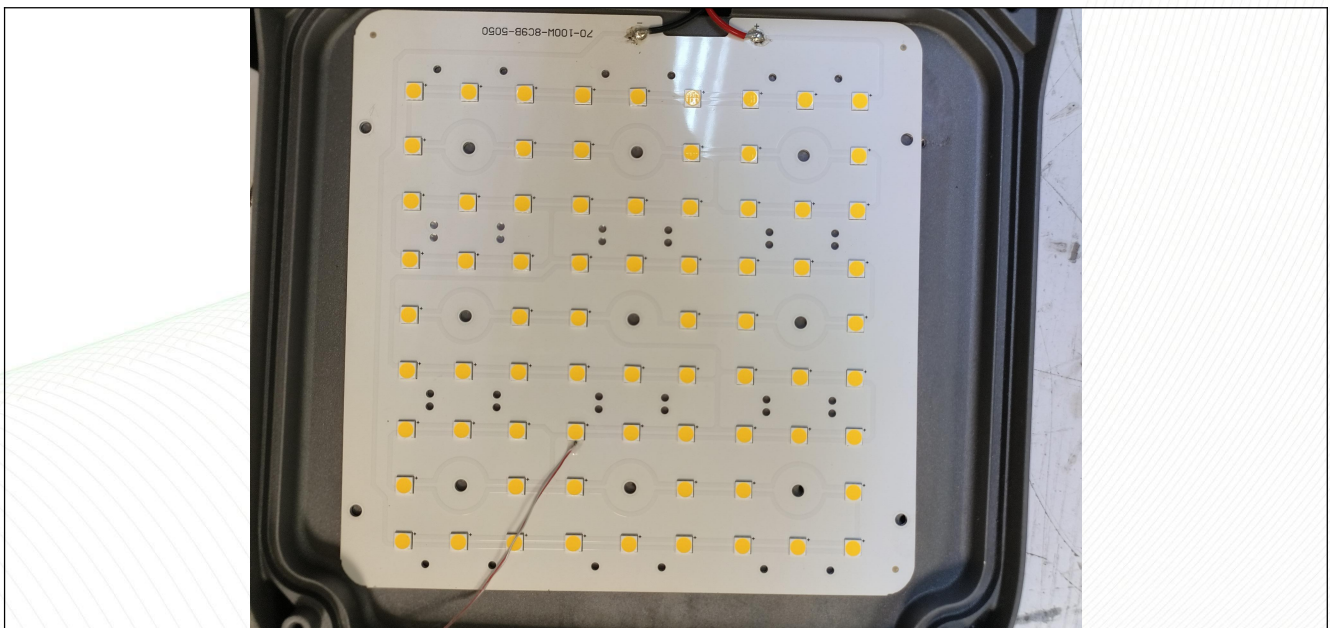


Photo 2

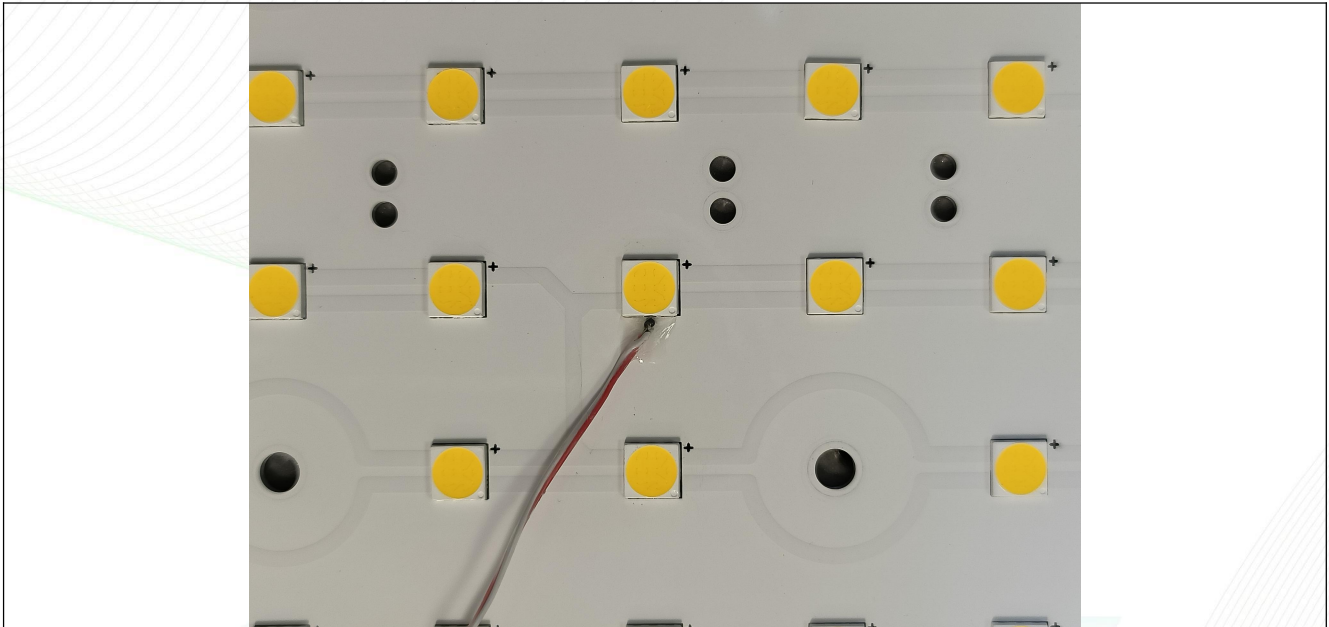


Photo 3

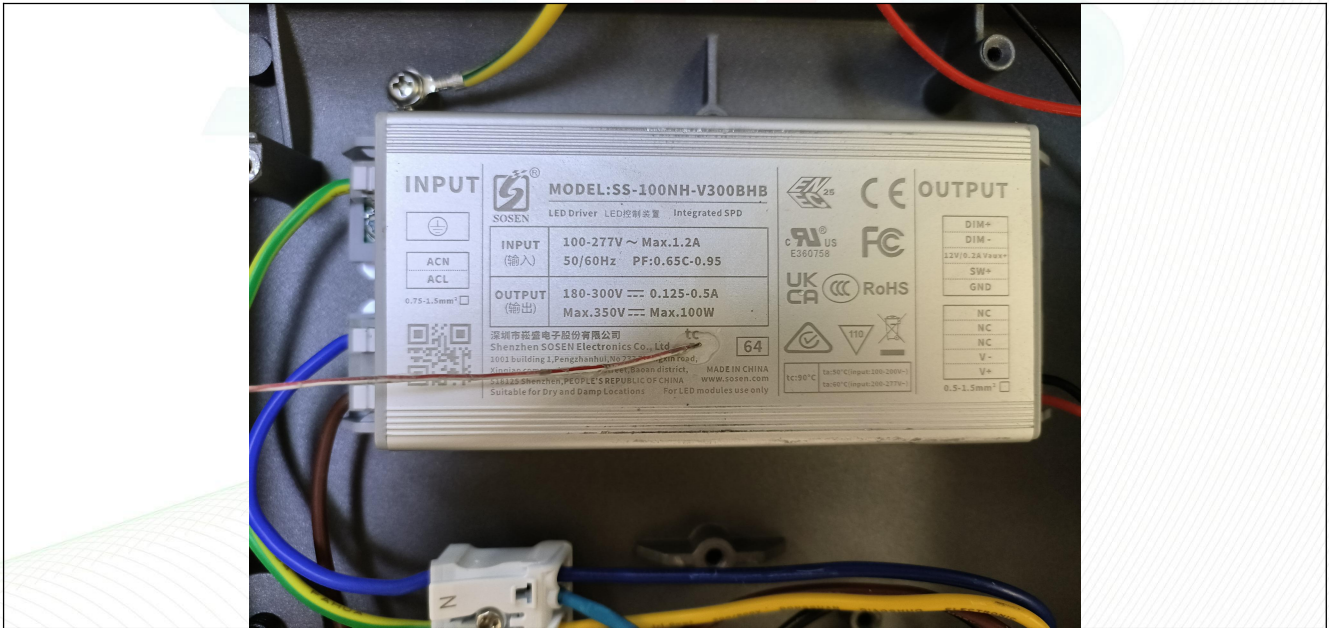


Photo 4

4.2 Product Photos



Photo 1



Photo 2

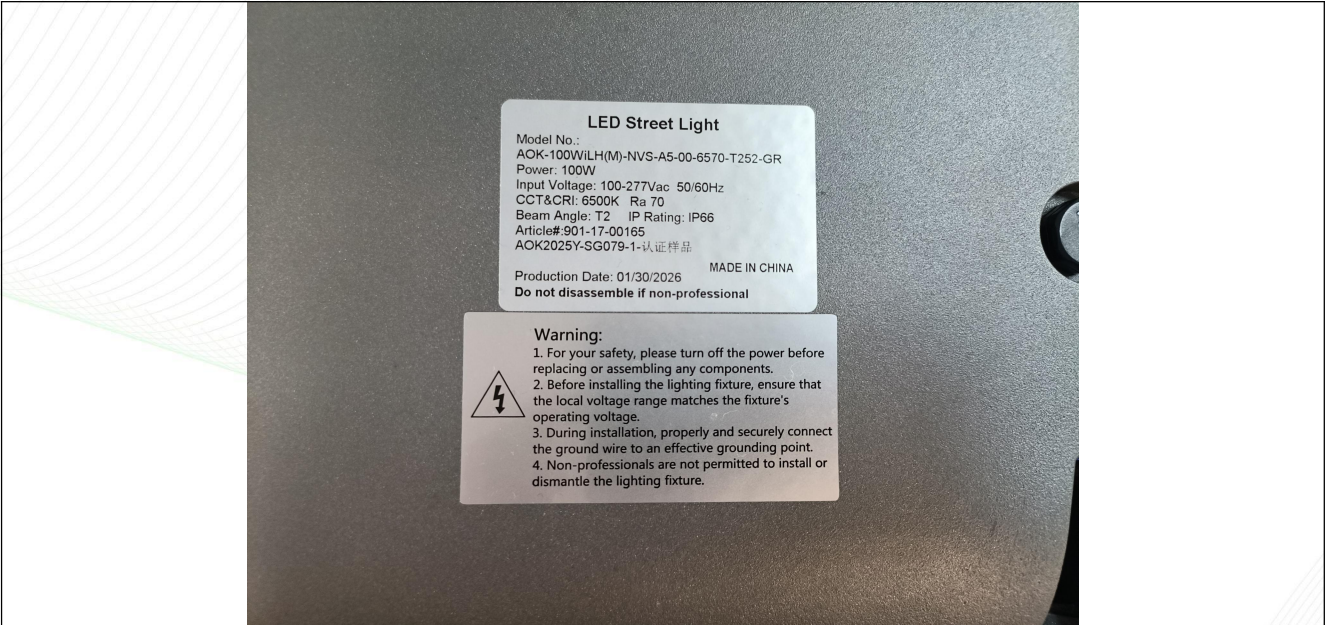


Photo 3 (label)

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