



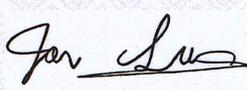
TEST REPORT

Of IES LM-82-12

Kunde: <i>Client:</i>	AOK INDUSTRIAL COMPANY LIMITED
Adresse: <i>Address:</i>	1# Building, Sans Souci Technology Industrial Park, Shajin street, Shenzhen city, Guangdong Provice, China.
Hersteller: <i>Manufacturer:</i>	AOK INDUSTRIAL COMPANY LIMITED
Adresse: <i>Address:</i>	1# Building, Sans Souci Technology Industrial Park, Shajin street, Shenzhen city, Guangdong Provice, China.
Name der Marke: <i>Brand Name:</i>	AOK
Beschreibungdes Produkts: <i>Product Description:</i>	LED Flood Light (Sport Light)
Modelle: <i>Models:</i>	AOK-580WiNS-NV-L5-00-4080-60-B
Bewertung: <i>Rating:</i>	100-277Vac, 50/60Hz, 580W, 4000K
Verfahren: <i>Method:</i>	IES LM-82-12: Approved Method for the Characterization of LED Light Engines and LED Lamps for Electrical and Photometric Properties as a Function of Temperature
Prüfergebnis*: <i>Test result*:</i>	N/A

Datum der Prüfung: <i>Date of Test:</i>	Datum der Emission: <i>Date of Issue:</i>	Klassifizierung: <i>Classification:</i>	Gegenstand der Prüfung: <i>Test item:</i>
2020-12-30 - 2021-01-05	2021-01-06	Commission Test	IES LM-82-12

Prüflabor (Testlabor) / Testing Laboratory:
Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

Test von/Test by: William Lian William Lian/ Project Engineer	Check von/Check by:  Ian Luo/ Director	Genehmigt von/Approved by:  Jesse Liu/ Manager
--	--	--

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
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 appliance. A general statement concerning the quality of the products from the series manufacturer cannot be derived therefore.



Table of Contents

1. Test Method.....	3
2. Product Information.....	4
3. Test equipment list.....	4
4. Test Results.....	5
4.1 Room Temperature Initial Measurement $T_b = T_{b,0}$ (25.1°C) :Test Data.....	5
4.2 Measurement at First Elevated Temperature $T_{b,1} = T_{b,0} + 25^\circ\text{C}$ (50.1°C):Test Data.....	5
4.3 Measurement at Second Elevated Temperature $T_{b,2} = 37.6^\circ\text{C}$: Test Data.....	5
4.4 Spectrum.....	6
4.5 Result Summary.....	6
5. UUT temperature monitoring point, T_b.....	7
6. Photo of sample.....	8



1. Test Method

Ambient Condition.....:	25.1°C
Number of hours operated prior to Measurement(h):	0h
Stabilization time(h):	1h/time
Orientation(burning position) of SSL product during test.....:	Down
Test Item.....:	Room Temperature Initial Measurement $T_b = T_{b,0}$ (25.1°C)
Test Method	The sample was tested according to the IES LM-79-2008. Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25°C ±1°C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.
Test Item.....:	Measurement at First Elevated Temperature $T_{b,2} = 37.6^\circ\text{C}$
Test Method.....:	The sample was tested with a device that controls the temperature T_b of the UUT, so that T_b reaches no lower than $T_{b,0} = 76.9^\circ\text{C}$. Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 40°C ± 1° C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.
Test Item.....:	Measurement at Second Elevated Temperature $T_{b,1} = T_{b,0} + 25^\circ\text{C}$ (50.1°C)
Test Method.....:	The sample was tested with a device that controls the temperature T_b of the UUT, so that T_b reaches no lower than $T_b = T_{b,0} + 25^\circ\text{C}$. Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 60°C ± 1° C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.



2. Product Information

Product description.....:	LED Flood Light (Sport Light)
Model Number.....:	AOK-580WINS-NV-L5-00-4080-60-B
Rated Inputs.....:	100-277Vac,50/60Hz
Rated Power.....:	580W
Declared CCT.....:	4000K
LED Manufacturer.....:	LUMILEDS
LED Model.....:	L150-4080502400000
Forward current of the LED chip.....:	200mA
LED Driver.....:	INVENTRONICS (EUD-600S740DV)
LED Driver Set Current.....:	5.6A
SPD.....:	SHENZHEN ZHONGYUAN TECHNOLOGY (ZYS-S20WLED)
Number of LEDs.....:	472 LEDs
LED package current.....:	48mA
Date of Receipt Samples.....:	December 29, 2020
Quantity of Receipt Samples.....:	1 unit

3. Test equipment list

Description	Equipment ID	Model	Calibration Date	Calibration Due Date
Integrating Sphere	SLCS-S-038	SPR-3000	2020/07/01	2021/07/01
Digital Power Meter	SLCS-S-058	WT310	2020/06/24	2021/06/23
AC Testing Power Source	SLCS-S-111	APW-105N	2020/06/24	2021/06/23
Standard Lamp	SLCS-S-118	S11010017	2020/07/02	2021/07/01



4. Test Results

4.1 Room Temperature Initial Measurement $T_{b,0} = 25.1^{\circ}\text{C}$: Test Data

Test type	Voltage (V AC)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
Input	220.04	60.0	2.6834	0.9970	588.68

Test type	Luminous Flux (lm)	Luminous efficacy(lm/w)	CCT(K)	Color Rendering Index (Ra)
Output	103743.08	176.23	3980	82.6

4.2 Measurement at First Elevated Temperature $T_{b,2} = 37.6^{\circ}\text{C}$: Test Data

Test type	Voltage (V AC)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
Input	220.06	60.0	2.6779	0.9965	587.23

Test type	Luminous Flux (lm)	Luminous efficacy(lm/w)	CCT(K)	Color Rendering Index (Ra)
Output	102741.76	174.96	3990	82.7

4.3 Measurement at Second Elevated Temperature $T_{b,1} = T_{b,0} + 25^{\circ}\text{C}$ (50.1°C): Test Data

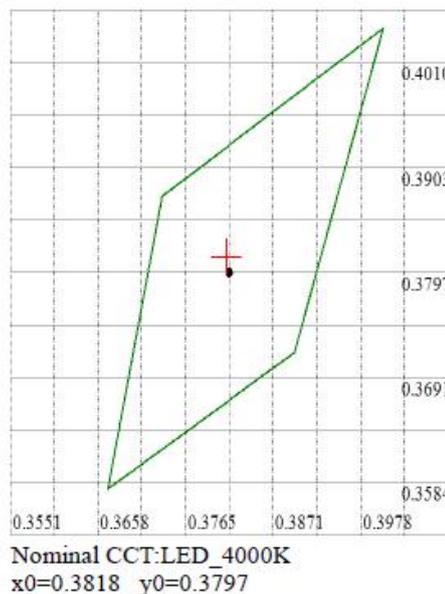
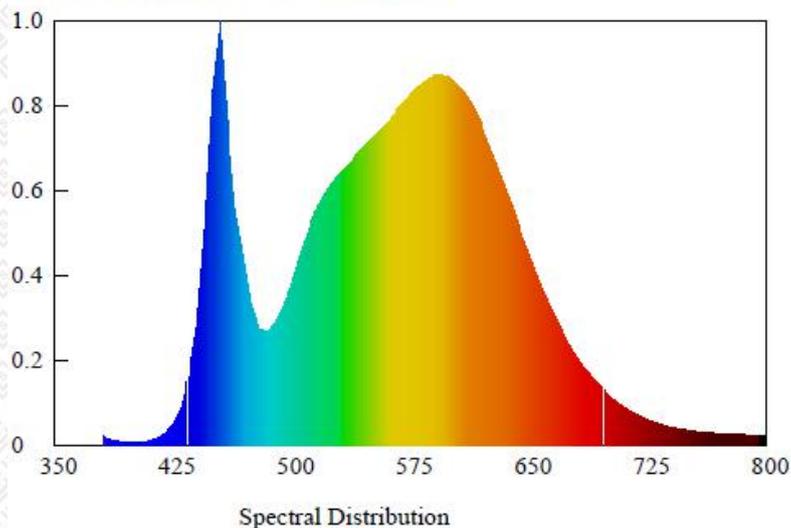
Test type	Voltage (V AC)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
Input	220.09	60.0	2.6763	0.9958	586.55

Test type	Luminous Flux (lm)	Luminous efficacy(lm/w)	CCT(K)	Color Rendering Index (Ra)
Output	101091.89	172.35	4006	82.9



4.4 Spectrum

Spectroradiometric Parameters



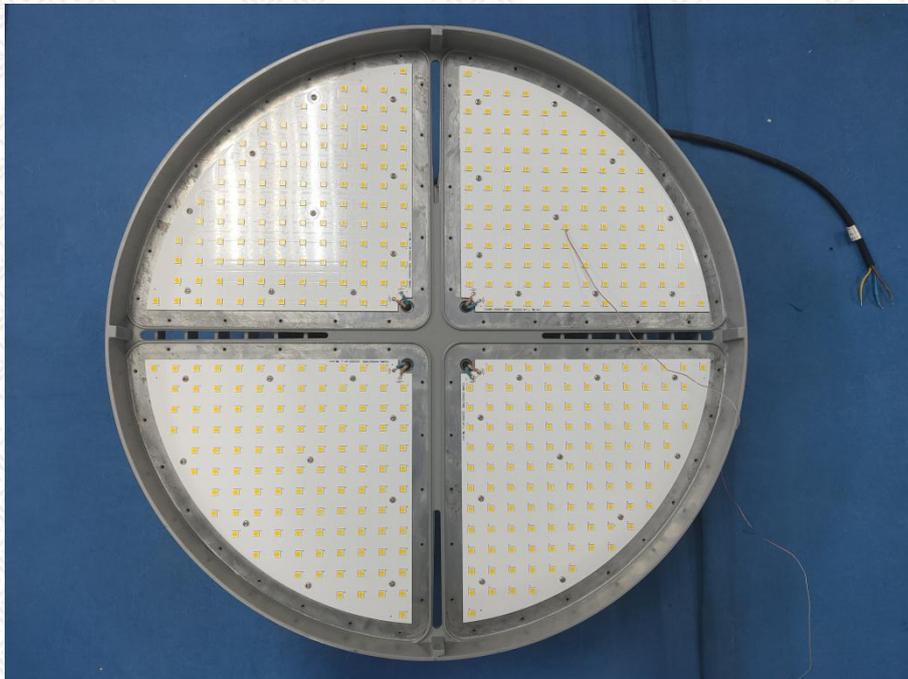
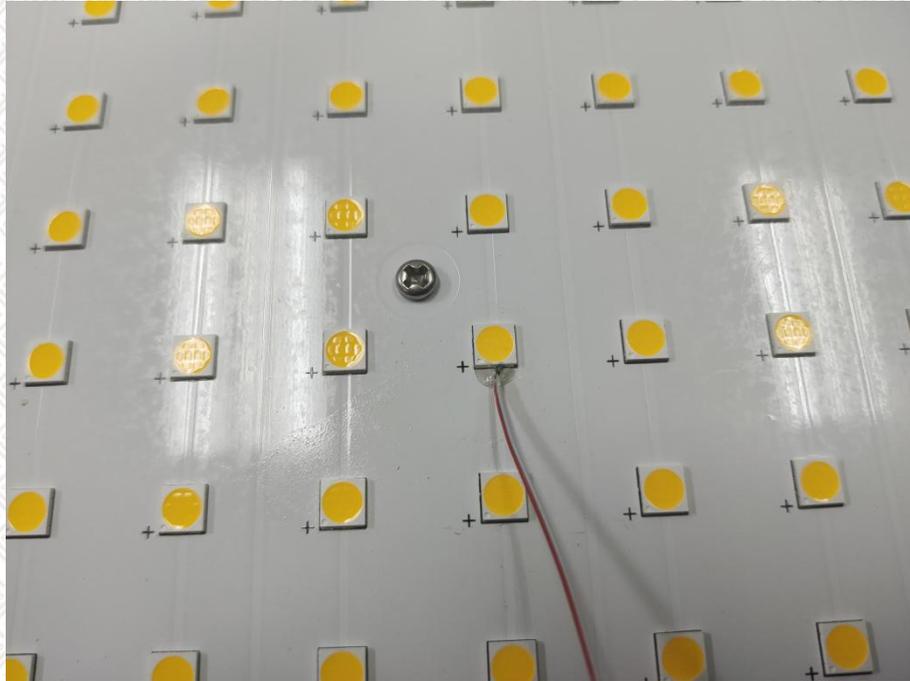
4.5 Result Summary

	Initial Temperature ($T_a@T_b,0=25^{\circ}\text{C}$)	First Elevated Temperature ($T_a=37.6^{\circ}\text{C}$)	Second Elevated Temperature ($T_a=50^{\circ}\text{C}$)
Measured Temperature of T_b ($^{\circ}\text{C}$)	25.1	50.0	85.6
Measured Temperature of T_d ($^{\circ}\text{C}$)	53.4	62.5	82.6
Input Power (W)	588.68	587.23	586.55
Input Voltage (V)	220.04	220.06	220.09
Input Current (A)	2.6834	2.6779	2.6763
Luminous Flux (lm)	103743.08	102741.76	101091.89
Luminous Efficacy (lm/W)	176.23	174.96	172.35
CIE Chromaticity (u')	0.2241	0.2241	0.2240
CIE Chromaticity (v')	0.5050	0.5044	0.5037
Correlated Color Temperature (CCT)	3980	4006	4006



5. UUT temperature monitoring point, T_b

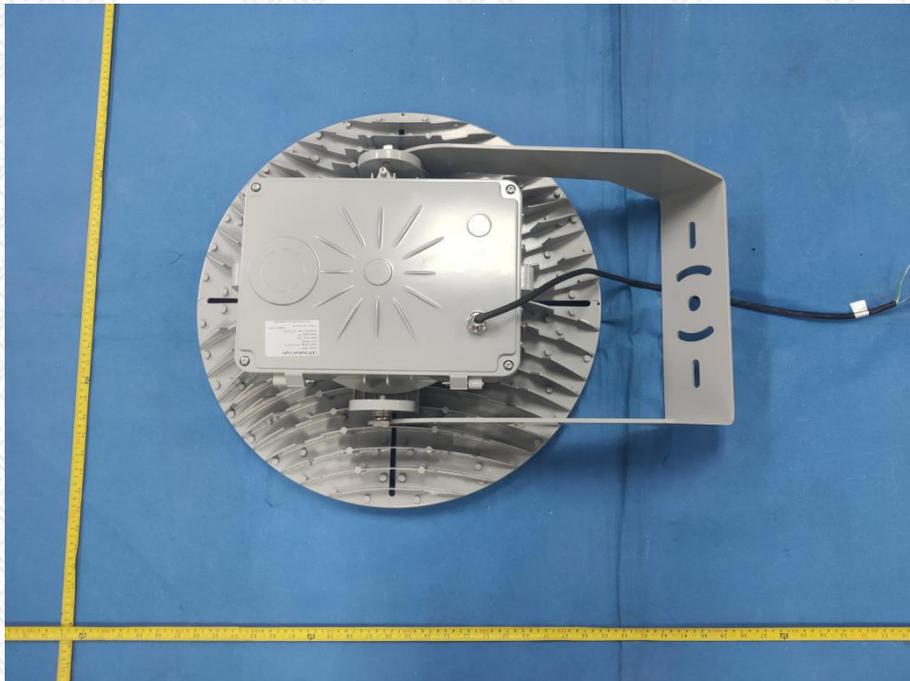
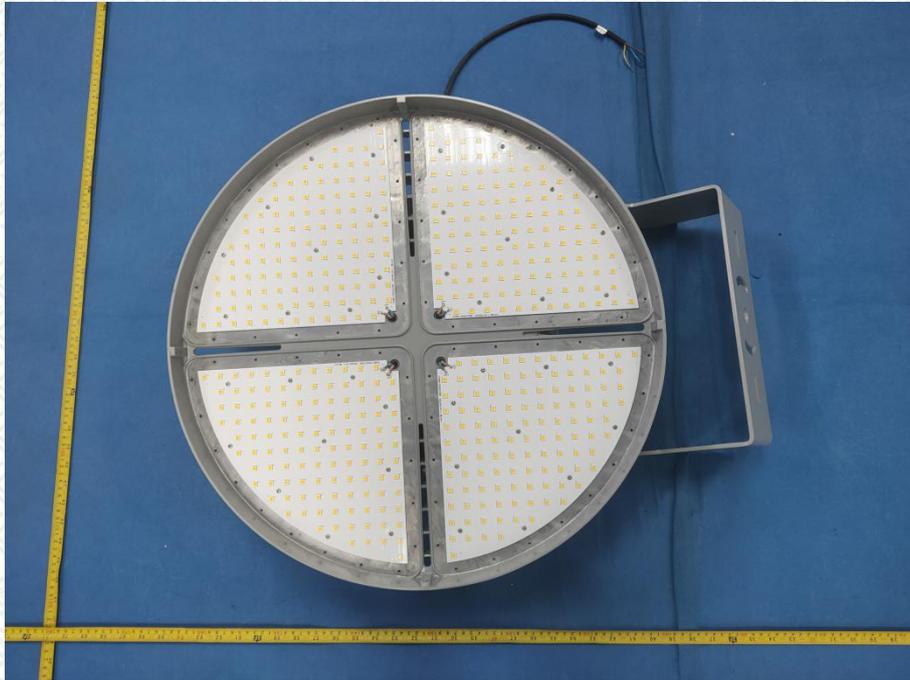
Photo document





6. Photo of sample

Photo document





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