



THD TEST REPORT

Of IEC 61000-3-2 Applied for SASO-2927

Kunde: <i>Client:</i>	AOK Industrial Company Limited
Adresse: <i>Address:</i>	Building 1, Shengzuozhi Technology Industrial Park, Shajing Street, Shenzhen City, Guangdong, P.R. China
Hersteller: <i>Manufacturer:</i>	AOK Industrial Company Limited
Adresse: <i>Address:</i>	Building 1, Shengzuozhi Technology Industrial Park, Shajing Street, Shenzhen City, Guangdong, P.R. China
Name der Marke: <i>Brand Name:</i>	
Beschreibung des Produkts: <i>Product Description:</i>	LED STREET LIGHT
Modelle: <i>Models:</i>	AOK-150WiL02-NV-L3-00-40
Bewertung: <i>Rating:</i>	AC120-277V, 50/60Hz, 150W, 1560mA
Verfahren: <i>Method:</i>	SASO 2927: 2019:Energy efficiency functionality and labelling requirements for lighting products – Part 3: Street lighting IEC 61000-3-2: Electromagnetic compatibility (EMC) - Part 3-2: Limits -Limits for harmonic current emissions (equipment input current ≤16 A per phase)
Prüfergebnis*: <i>Test result*:</i>	

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>
2020-10-10--2021-06-21	2021-09-03	Commission Test	THD

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

Test von/Prepare by: <i>Seth Cai</i> Seth Cai/ Project Engineer	Check von/Check by: <i>Ian Luo</i> 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.

**General remarks:**

“(See attachment#)” refers to additional information appended to the report.

“(See remark#)” refers to a remark appended to the report.

“(See appended table)” refers to a table appended to the report.

Throughout this report a comma (point) is used as the decimal separator.

Remark:

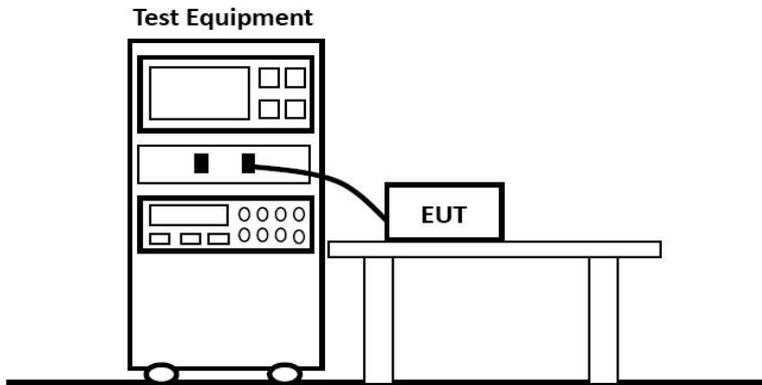
Measurement was conducted at a stable ambient temperature $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

Equipment list for test:

Item	Equipment	Manufacturer / Type / Series No	Due Date.
1	Power Analyzer Test System	Laplace/ AC2000A	2022-06-16

Test Item: Harmonic Current Emissions

1. Block Diagram of Test Setup



2. Test Standard

IEC 61000-3-2:2018 (for Class C equipment)

3. Limits

Rated Power > 25W:

Harmonic order	Maximum permissible harmonic current expressed as a percentage of the input current at the fundamental frequency
n	%
2	2
3	$30 \cdot \lambda^*$
5	10
7	7
9	5
$11 \leq h \leq 39$ (odd harmonics only)	3
* λ is the circuit power factor	

Rated power ≥ 5 W and ≤ 25 W:

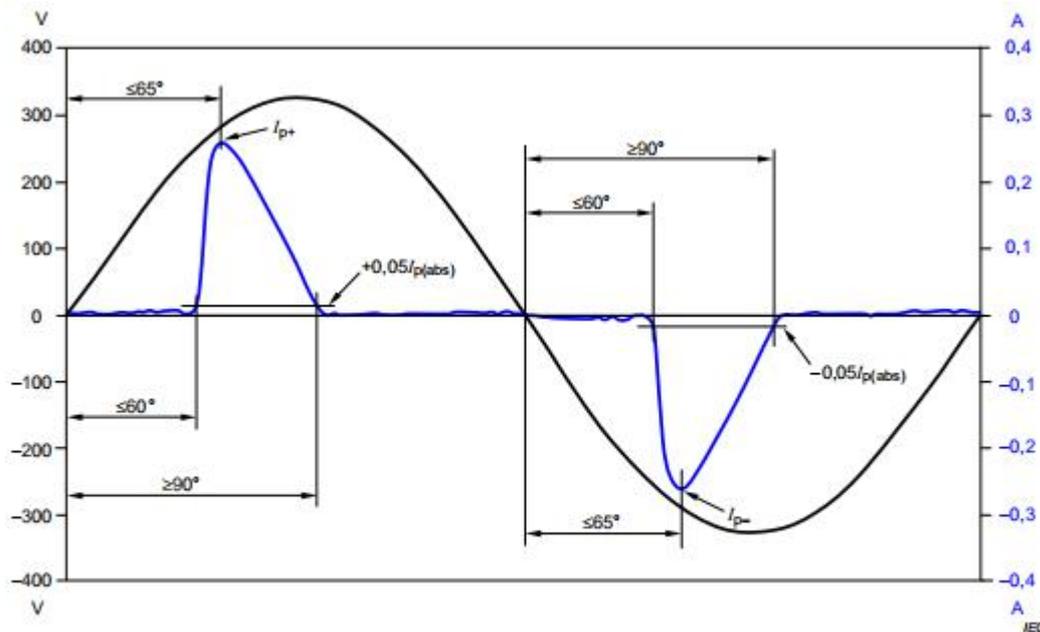
Lighting equipment having a rated power greater than or equal to 5 W and less than or equal to 25 W shall comply with one of the following three sets of requirements:

- the harmonic currents shall not exceed the power-related limits of Table;



Harmonic order n	Maximum permissible harmonic current per watt mA/W
3	3,4
5	1,9
7	1,0
9	0,5
11	0,35
13 ≤ h ≤ 39 (odd harmonics only)	3,85/h

– the third harmonic current, expressed as a percentage of the fundamental current, shall not exceed 86 % and the fifth harmonic current shall not exceed 61 %. In addition, the waveform of the input current shall be such that it reaches the 5 % current threshold before or at 60°, has its peak value before or at 65° and does not fall below the 5 % current threshold before 90°, referenced to any zero crossing of the fundamental supply voltage. The current threshold is 5 % of the highest absolute peak value that occurs in the measurement window, and the phase angle measurements are made on the cycle that includes this absolute peak value.



NOTE $I_{p(abs)}$ is the higher absolute value of I_{p+} and I_{p-} .

– the THD shall not exceed 70 %. The third order harmonic current, expressed as a percentage of the fundamental current, shall not exceed 35 %, the fifth order current shall not exceed 25 %, the seventh order current shall not exceed 30 %, the ninth and eleventh order currents shall not exceed 20 % and the second order current shall not exceed 5 %.

**Test Results**

Test Voltage (V):	120V	Frequency(Hz):	60
Sample No.	Power (W)	Power Factor	THD
1	150.90	0.998	2.52%
2	150.24	0.996	2.16%
3	150.99	0.998	2.33%
4	150.24	0.999	2.42%
5	151.06	0.994	2.48%
6	150.64	0.998	2.51%
7	150.71	0.996	2.06%
8	150.59	0.998	2.33%
9	150.39	0.995	2.17%
10	150.77	0.993	2.49%
Avg.	150.65	0.997	2.35%



Photo of sample

Photo document

Photos of AOK-150WIL02-NV-L3-00-40





Revision History

Revision	Issue Date	Revision Content	Revised By
V1.1	2021/09/03	Modify the Client 、 Manufacturer 、 Model and Trademark	Seth Cai

Remark: This report is based on the report No. LCS200722073BS. This report is invalid without the original report.

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