

Technical Report No.: 68.140.23.0409.01

Date: 2023-10-12

Client: Name: 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, PEOPLE'S REPUBLIC OF CHINA
Contact person: Wendy

Manufacturer: Name: Same as client
Address: Same as client

Factory: Name: Same as client
Address: Same as client

Test object: Product: LED Street Light
Model: AOK-20WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-30WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-40WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-50WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-60WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-70WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-80WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-90WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-100WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-110WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-120WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-130WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-140WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-150WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-160WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-170WiLA-NV-L3-ZZ-XXYY-BN-P;
AOK-180WiLA-NV-L3-ZZ-XXYY-BN-P
'ZZ' stands for whether with NEMA receptacle and short circuit cap, can be 00 and SN, 00=without NEMA receptacle and short circuit cap, SN=with NEMA receptacle and short circuit cap;
'XX' stands for CCT of LED, can be 27, 30, 40, 50, 57 and 65, 27=2700K, 30=3000K, 40=4000K, 50=5000K, 57=5700K, 65=6500K

'YY' stands for CRI(color rendering index), can be 70, 80 and 90, 70= Ra: 70, 80= Ra: 80, 90= Ra: 90;
'BN' stands for beam angles Type, can be T2, T3 and T4, T2=Type II, T3=Type III, T4=Type IV

Trade Mark:



Test specification: Mechanical strength test (IK08) according to IEC 62262:2002, IEC 62262:2002/AMD1:2021, EN 62262:2002+A1:2021

Purpose of examination:

- Testing and evaluation according to the test specification

Test result: The test results show that the presented products are in compliance with the above listed test specifications.

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1. Description of the test object

1.1 Picture(s)

See 'Appendix 2 Photo document' for details

1.2 Function

Manufacturer's specification for intended use:
LED Street Light for outdoor use only.

1.3 Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment*
- ☐ Covered by attached risk analysis

*

1.4 Technical Data

Luminaires for road and street lighting (LED Street Light)

Rated Voltage	: 220-240VAC
Rated Frequency	: 50/60Hz
Rated Power	: See 'Appendix 1 Model list' for details
Protection Class	: II
Degree of Protection	: IP66
Blue Light Risk Group	: RG1
ta:	: 50°C

2. Order

2.1 Date of Purchase Order, Customer's Reference

2023-06-19

2.2 Test Sample(s)

- Reception date(s): 2023-07-05
- Location(s) of reception: TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business
Park, Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong 518052, China
- Condition of test sample(s): Good

2.3 Testing

- Testing date(s): 2023-07-05 to 2023-10-12
- Location(s) of testing: TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business
Park, Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong 518052, China

2.4 Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

"Decision rule according to IEC Guide 115:2023, clause 4.3 was applied."

3.1 Positive Test Results

All models have similar construction and all models have same material of glass cover, S/C cap and enclosure.

Model AOK-100WiLA-NV-L3-SN-6570-T2-P was chosen as representative model to perform this test.

Mechanical strength test (IK08) for glass cover, S/C cap and enclosure, as below:

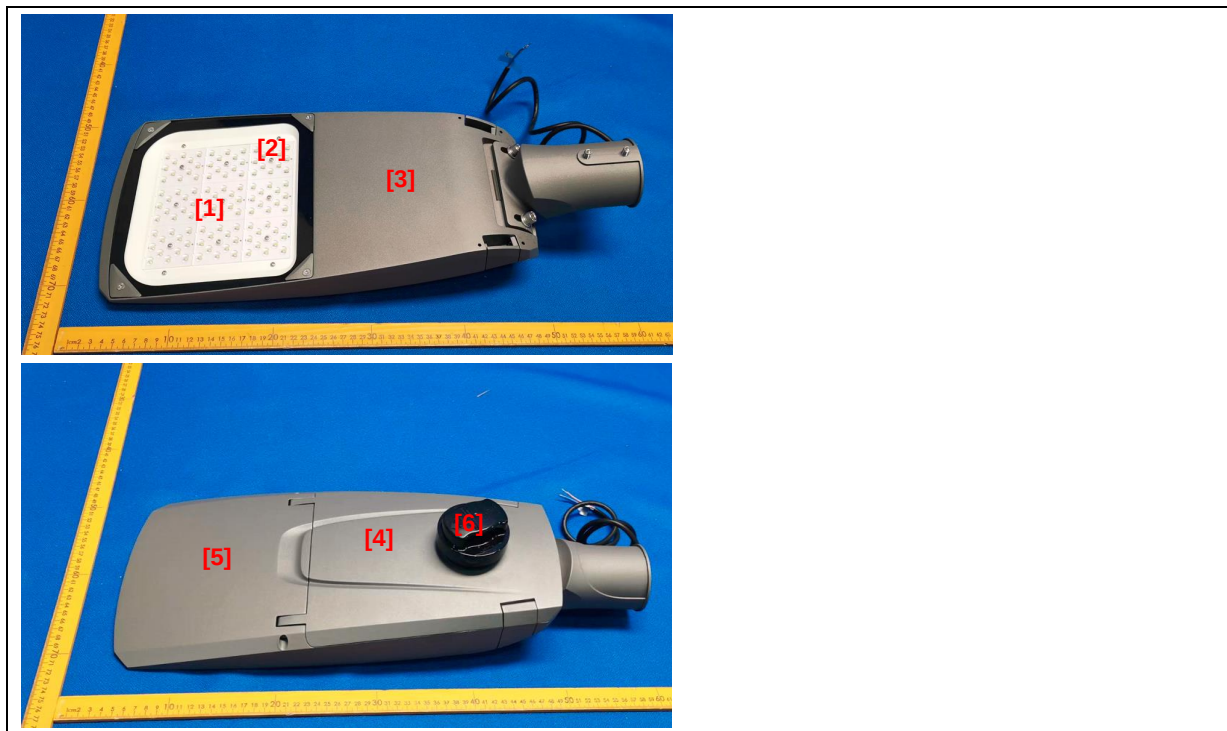
IEC/EN 62262			
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL TEST REQUIREMENTS		—
5.1	Ambient temperature		—
	Air pressure		—
5.3	Product standard		—
	EN 60598-1:2015+A1:2018		—
	Test equipment/ striking element used (IEC 60068-2-75)	Vertical hammer	P
	Number of samples tested (TR 62696)	1	P
	Specially prepared luminaire	N	P
	Condition of mounting (set-up) (ceiling mounted, floor, vertical wall mounted)	Floor	P
	Appliance energised		N/A
	Number of impacts (TR 62696)	3	P
	CLASSIFICATION OF LUMINAIRES		—
	IK 01/0.14J		N/A
	IK 02/0.2J		N/A
	IK 03/0.35J		N/A
	IK 04/0.5J		N/A
	IK 05/0.7J		N/A
	IK 06/1J		N/A
	IK 07/2J		N/A
	IK 08/5J		P
	IK 09/10J		N/A
	IK 10/20J		N/A
	IK 11/50J		N/A
	Degree of protection..... : IP66		—
4	Condition of acceptance		—

4.1	Safety of the luminaire maintained as 4.13 of EN 60598-1?		P
	IP rating retested		P
	Fixing to the mounting surface remain safe		N/A
	No safety critical damage enclosure / optics		P
	No parts detached		P
4.2	Protection of light source still provided		P
	Basic functioning maintained		P

Picture appliance before test with point of impact verified

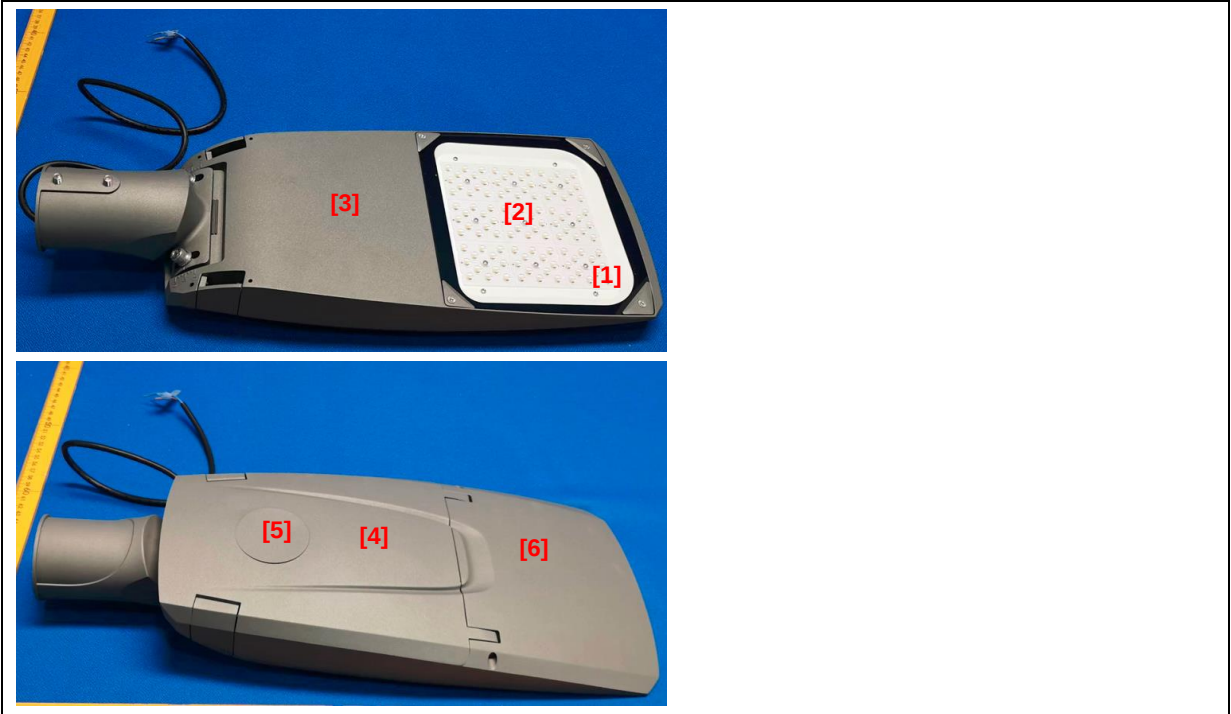
Test part	Impact point	Impact energy (J)	Test result	Verdict
Glass cover	[1]; [2]	5	No damage	Pass
S/C cap	[6]	5	No damage	Pass
Metal enclosure	[3]; [4] ; [5]	5	No damage	Pass

Impact point view for test model AOK-100WiLA-NV-L3-SN-6570-T2-P



Test part	Impact point	Impact energy (J)	Test result	Verdict
Glass cover	[1]; [2]	5	No damage	Pass
Metal enclosure	[3]; [4]; [5]; [6]	5	No damage	Pass

Impact point view for test model AOK-100WiLA-NV-L3-SN-6570-T2-P



4. Summary

“The test specification are met”

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

Tested by:


Jared Jiang, Project Handler

Approved by:


Kevin Liu, Designated Reviewer

Appendix 1 Model list:

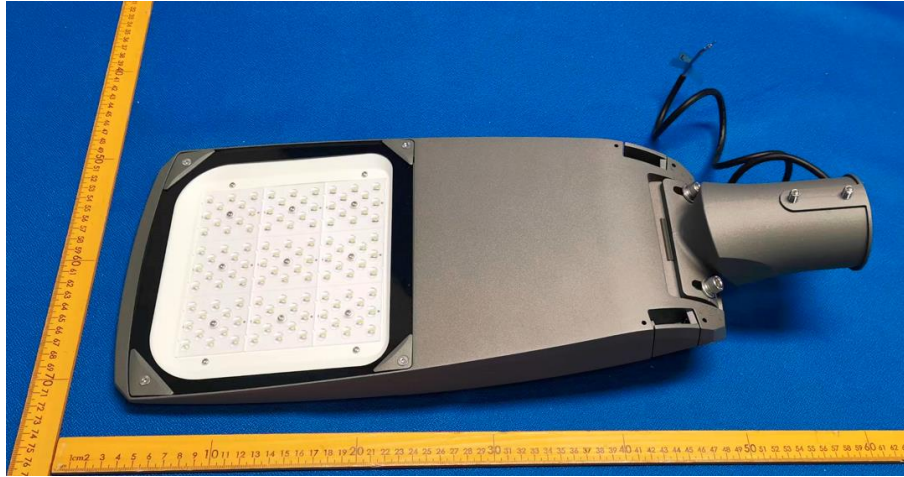
Model No.	Rated Power (W)	LED driver	LED Qty. (pcs)	Mount height (m)	Weight (kg); Size (mm) L*W*H	Max. projected area (m²)		
						Side	Front	Top
AOK-20WiLA-NV-L3-ZZ-XXYY-BN-P	20	SS-40PA-54B	36 or 72	4-12	3.5; 537*237*89	0.029	0.0152	0.10
		OT 20/170...240/1A0 4DIMLT2 G2 CE						
		U7-026D038						
AOK-30WiLA-NV-L3-ZZ-XXYY-BN-P	30	SS-40PA-54B	36 or 72					
		OT 40/170...240/1A0 4DIMLT2 G2 CE						
		U7-040D057						
AOK-40WiLA-NV-L3-ZZ-XXYY-BN-P	40	SS-40PA-54B	72 or 144					
		OT 40/170...240/1A0 4DIMLT2 G2 CE						
		U7-040D057						
AOK-50WiLA-NV-L3-ZZ-XXYY-BN-P	50	SS-75PA-108B	108 or 144 or 216					
		OT 75/170...240/1A0 4DIMLT2 G2 CE						
		U7-060D086						
AOK-60WiLA-NV-L3-ZZ-XXYY-BN-P	60	SS-75PA-108B	108 or 144 or 216					
		OT 75/170...240/1A0 4DIMLT2 G2 CE						
		U7-060D086						
AOK-70WiLA-NV-L3-ZZ-XXYY-BN-P	70	SS-75PA-108B	108 or 216	4-12	3.8; 587*257*89	0.0322	0.0167	0.12
		OT 75/170...240/1A0 4DIMLT2 G2 CE						
		U7-080D115						
AOK-80WiLA-NV-L3-ZZ-XXYY-BN-P	80	SS-110PA-160B	108 or 216					
		OT 110/170...240/1A0 4DIMLT2 G2 CE						
		U7-080D115						
AOK-90WiLA-NV-L3-ZZ-XXYY-BN-P	90	SS-110PA-160B	108 or 216					
		OT 110/170...240/1A0 4DIMLT2 G2 CE						
		U7-120D172						

AOK-100WiLA-NV-L3-ZZ-XXYY-BN-P	100	SS-110PA-160B	108 or 216										
		OT 110/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-110WiLA-NV-L3-ZZ-XXYY-BN-P	110	SS-110PA-160B	108 or 216										
		OT 110/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-120WiLA-NV-L3-ZZ-XXYY-BN-P	120	SS-160PA-235B	144 or 288	4-12	5.0; 632*259*8 9	0.035	0.0172 9	0.133 1					
		OT 165/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-130WiLA-NV-L3-ZZ-XXYY-BN-P	130	SS-160PA-235B	144 or 288										
		OT 165/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-140WiLA-NV-L3-ZZ-XXYY-BN-P	140	SS-160PA-235B	144 or 288										
		OT 165/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-150WiLA-NV-L3-ZZ-XXYY-BN-P	150	SS-160PA-235B	144 or 288										
		OT 165/170...240/1A0 4DIMLT2 G2 CE											
		U7-120D172											
AOK-160WiLA-NV-L3-ZZ-XXYY-BN-P	160	U7-200D286	192 or 288										
AOK-170WiLA-NV-L3-ZZ-XXYY-BN-P	170	U7-200D286	192 or 288										
AOK-180WiLA-NV-L3-ZZ-XXYY-BN-P	180	U7-200D286	192 or 288										
'ZZ' stands for whether with NEMA receptacle and short circuit cap, can be 00 and SN, 00=without NEMA receptacle and short circuit cap, SN=with NEMA receptacle and short circuit cap; 'XX' stands for CCT of LED, can be 27, 30, 40, 50, 57 and 65, 27=2700K, 30=3000K, 40=4000K, 50=5000K, 57=5700K, 65=6500K 'YY' stands for CRI(color rendering index), can be 70, 80 and 90, 70= Ra: 70, 80= Ra: 80, 90= Ra: 90; 'BN' stands for beam angles Type, can be T2, T3 and T4, T2=Type II, T3=Type III, T4=Type IV													

Appendix 2 Photo document

Details of: Front view for model AOK-100WiLA-NV-L3-SN-6570-T2-P (representative model)

Remark:



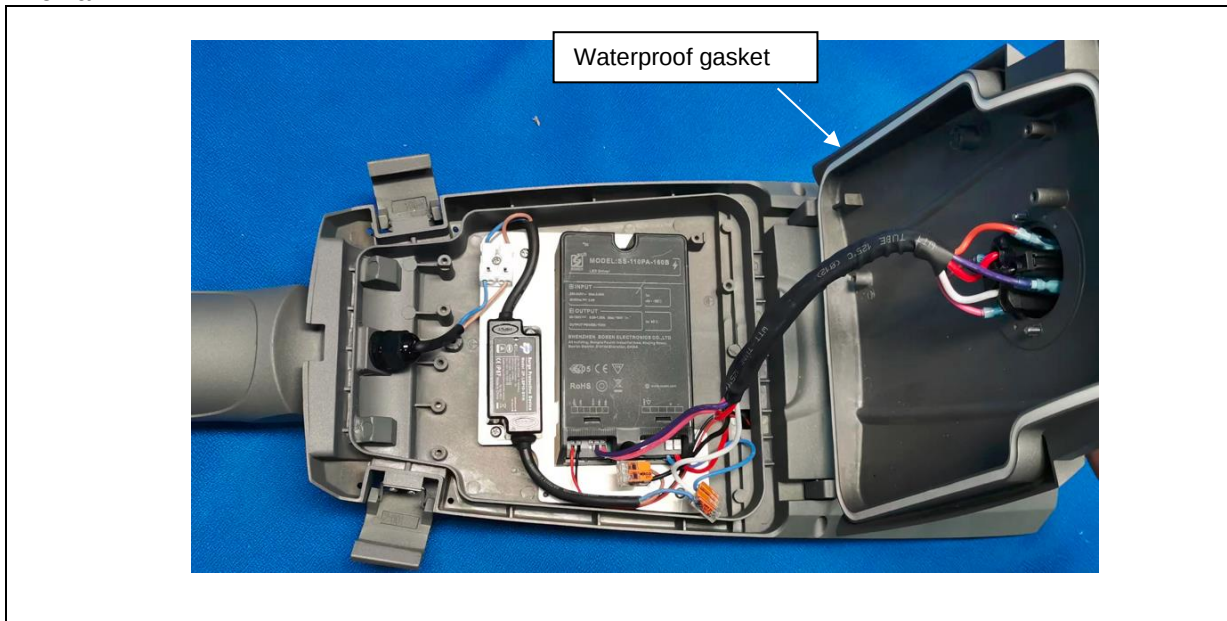
Details of: Back view for model AOK-100WiLA-NV-L3-SN-6570-T2-P (representative model)

Remark:



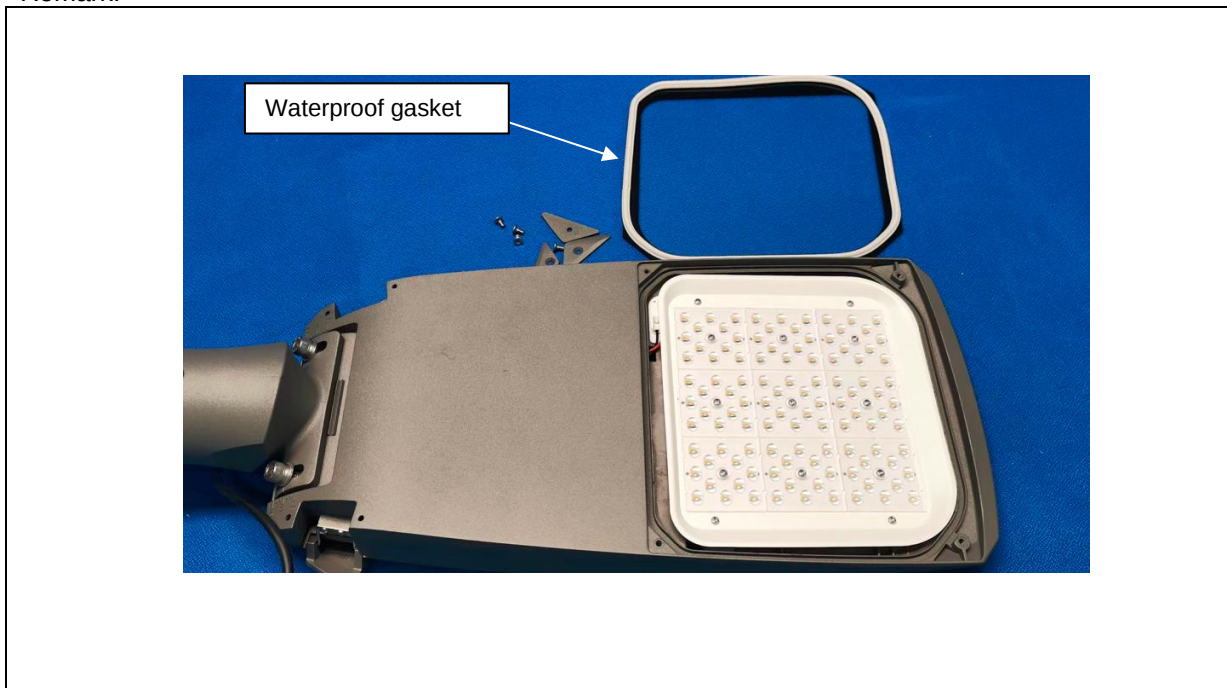
Details of: Internal view for model AOK-100WiLA-NV-L3-SN-6570-T2-P (representative model)

Remark:



Details of: Internal view for model AOK-100WiLA-NV-L3-SN-6570-T2-P (representative model)

Remark:



Details of: Front view for model AOK-100WiLA-NV-L3-00-6570-T2-P (representative model)
Remark:

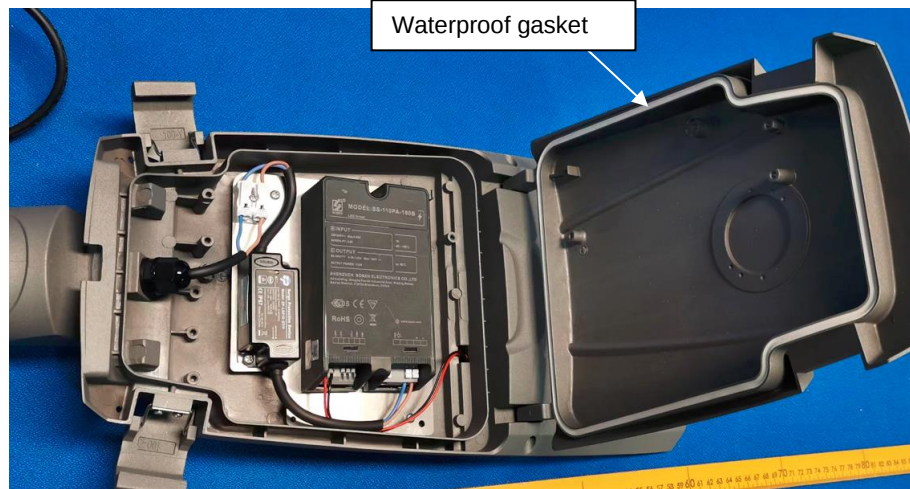


Details of: Back view for model AOK-100WiLA-NV-L3-00-6570-T2-P (representative model)
Remark:



Details of: Internal view for model AOK-100WiLA-NV-L3-00-6570-T2-P (representative model)

Remark:



Details of: Internal view for model AOK-100WiLA-NV-L3-SN-6570-T2-P (representative model)

Remark:



--- End of Report ---

Report No.: 68.140.23.0409.01

Rev.: 00

Date: 2023-10-12

Page 13 of 13

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TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong 518052, China
Telephone : +86 755 8828 6998
Telefax : +86 755 8828 5299