



TEST REPORT
IEC 60598-2-3
Luminaires
Part 2: Particular requirements
Section 3: Luminaires for road and street lighting

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Total number of pages..... 44 (not including attachments)

Name of Testing Laboratory preparing the Report..... TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch

Applicant's name: AOK Industrial Company Limited

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Test specification:

Standard.....: IEC 60598-2-3:2002, IEC 60598-2-3:2002/AMD1:2011 used in conjunction with IEC 60598-1:2020

Test procedure: ENEC Scheme

Non-standard test method: N/A

TRF template used.....: IECEE OD-2020-F1:2021, Ed.1.4

Test Report Form No.: IEC60598_2_3M

Test Report Form(s) Originator: Intertek Semko AB

Master TRF.....: 2021-11-11

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Test item description :	Luminaires for road and street lighting (LED Street Light)
Trade Mark(s)	 AOK
Manufacturer	Same as applicant.
Model/Type reference	AOK-ZZWILE-NV-O5-00-XXYY-BN-P-II; AOK-ZZWILE-NV-O5-00-XXYY-BN-P-II-2; ('ZZ' stands for Rated Power, can be 18-75, in steps of 1W, e.g. 18=18W, 75=75W; 'XX' stands for CCT of LED, can be 22, 27, 30 and 40, 22=2200K, 27=2700K, 30=3000K, 40=4000K; 'YY' stands for CRI(color rendering index), can be 70 and 80, 70= Ra: 70, 80= Ra: 80; 'BN' stands for different LED lens type, can be T201-T411, in steps of 1, e.g. T201, T202, ...T410, T411)
Ratings	Rated Voltage: 220-240VAC Rated Frequency: 50/60Hz Rated Power: See 'General product information' for details Protection Class: II Degree of Protection: IP66 Blue Light Risk Group: RG1 ta: 50°C

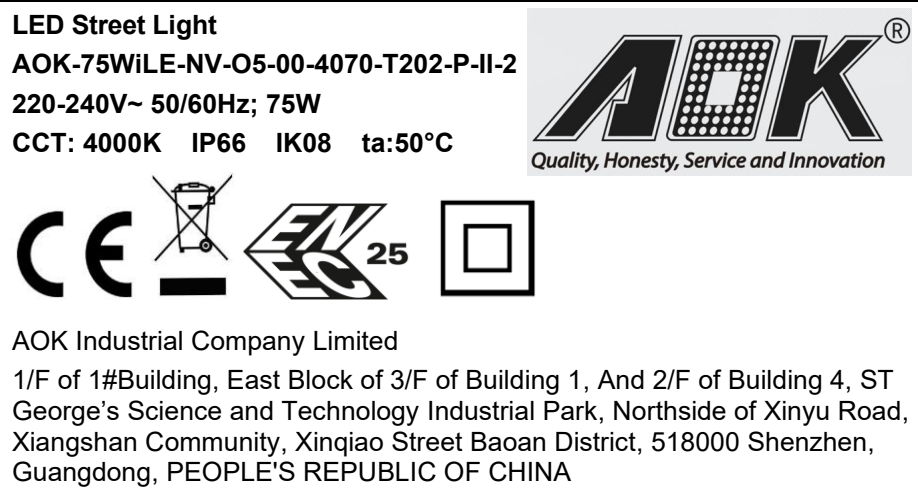
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	Testing Laboratory:	TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
Testing location/ address.....:		5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou 510656 China
Tested by (name, function, signature)		Annie Wang (Project Handler)
Approved by (name, function, signature) ...:		Kenny Chen (Designated Reviewer)
 		
☐	Testing procedure: CTF Stage 1:	
Testing location/ address.....:		
Tested by (name, function, signature)		
Approved by (name, function, signature) ...:		
☐	Testing procedure: CTF Stage 2:	
Testing location/ address.....:		
Tested by (name + signature)		
Witnessed by (name, function, signature) .:		
Approved by (name, function, signature) ...:		
☐	Testing procedure: CTF Stage 3:	
☐	Testing procedure: CTF Stage 4:	
Testing location/ address.....:		
Tested by (name, function, signature)		
Witnessed by (name, function, signature) .:		
Approved by (name, function, signature) ...:		
Supervised by (name, function, signature) :		

List of Attachments (including a total number of pages in each attachment):	
Attachment No.1:	2 pages of test report for EU Group Differences and National differences for EN IEC 60598-1:2021+A11:2022;
Attachment No.2:	7 pages of test report for IEC TR 62778:2014 (for blue light risk);
Attachment No.3:	15 pages of test report for IEC 62493:2015, IEC 62493:2015/AMD1:2022 (for EMF);
Attachment No.4:	12 pages of test report for Photo documentation.
Summary of testing:	
Tests performed (name of test and test clause): All applicable tests as described in the compliance checklist were performed at AOK-75WiLE-NV-O5-00-4070-T202-P-II-2.	Testing location: 5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou 510656 China
Summary of compliance with National Differences (List of countries addressed): European group differences ☒ The product fulfils the requirements of European group difference: EN 60598-2-3:2003+A1:2011, EN IEC 60598-1:2021+A11:2022, EN 62493:2015+A1:2022	
Use of uncertainty of measurement for decisions on conformity (decision rule): ☒ 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"). ☐ Other: (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)	
Information on uncertainty of measurement: The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE. IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer. Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.	

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Representative model AOK-75WiLE-NV-O5-00-4070-T202-P-II-2.



Main label, sticking on outside of metal enclosure.



(Caution, risk of electric shock, the height of the symbol at least 15mm) For models with Non-SELV drivers.

Sub-label sticking on glass cover.

Remark:

- The labels for other models are as the above label except that the model number, rated power and CCT are different.
- The height of CE mark at least 5mm, height of WEEE mark at least 7mm, height of letters and numerals at least 2mm, height of other marks at least 5mm.

Test item particulars	LED Street Light
Classification of installation and use	Fixed for outdoor use only
Supply Connection.....	Supply cord without plug
Possible test case verdicts:	
- test case does not apply to the test object..... : N/A	
- test object does meet the requirement	
- test object does not meet the requirement..... : F (Fail)	
Testing	See below
Date of receipt of test item	2025-08-06
Date (s) of performance of tests.....	2025-08-06 to 2026-05-13
General remarks:	
"(See Enclosure #)" refers to additional information 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. Clause numbers between brackets refer to clauses in IEC 60598-1	
Name and address of factory (ies)	Same as applicant

General product information and other remarks:

The manufacturer/ Importer has to ensure the appliance placing on the EU market conforms to the applicable EU directives which provide the affixing of the CE marking, such as LVD, EMC, RoHS, ErP, and so on.

According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.

The products covered in this report are Class II LED street light, equipped with non-user replaceable light source and for outdoor use only.

The product covered by this report is the luminaire up to the socket. Device connected to the socket may affect the compliance of the full system and are not covered by this report.

The Mount height is 4-12m.

For models with LED drivers OT 40/170-240/0A7 4DIM NFC G3 CE, OT 75/170-240/1A0 4DIM NFC G3 CE, IT DX 75/220-240/1A0 NFC E and OT DX 75/170-240/1A0 DIMA NFC G2 CE:

- Reinforced insulation was provided between LV supply and output circuit;
- Basic insulation was provided between LV supply and dimming circuit.

There are two constructions for all models as below:

Construction 1	without Zhaga socket & sealing cap
Construction 2	with Zhaga socket & sealing cap

Model list for luminaire:

Model No.	'ZZ' can be 18 to 75 which stands for Rated Power 18W to 75W, in steps of 1W	Rated Power (W)	LED driver	LED module	LED module qty. (pcs)	Weight (kg)	Size L*W*H (mm)	Max. projected area (m ²)
AOK-ZZWILE-NV-O5-00-XXYY-BN-P-II	ZZ=18 to 41	18-41	OT 40/170-240/0A7 1DIM NFC G3 CE or OT 40/170-240/0A7 4DIM NFC G3 CE or OT 75/170-240/1A0 4DIM NFC G3 CE	Fortimo FastFlex LED 2x4/zcc DA HE or Fortimo FastFlex LED 2x6/zcc DA HE	2	5,1	602x245x99	0,12
AOK-ZZWILE-NV-O5-00-XXYY-BN-P-II-2	ZZ=26 to 75	26-75	IT DX 75/220-240/1A0 NFC E or OT DX 75/170-240/1A0 DIMA NFC G2 CE or OT 75/170-240/1A0 4DIM NFC G3 CE	PL-BRICK HP 1900 XYY 2x4 HE or PL-BRICK HP 2850 XYY 2x6 HE	3			

Remark 1:

'ZZ' stands for Rated Power, can be 18-75, in steps of 1W, e.g. 18=18W, 75=75W;
 'XX' stands for CCT of LED, can be 22, 27, 30 and 40, 22=2200K, 27=2700K, 30=3000K, 40=4000K;
 'YY' stands for CRI(color rendering index), can be 70 and 80, 70= Ra: 70, 80= Ra: 80;
 'BN' stands for different LED lens type, can be T201-T411, in steps of 1, e.g. T201, T202, ...T410, T411

Remark 2:

For LED module: Fortimo FastFlex LED 2x4/zcc DA HE and Fortimo FastFlex LED 2x6/zcc DA HE:
 'z' stands for CRI(color rendering index), can be 7 and 8, 7= Ra: 70, 8= Ra: 80;

'cc' stands for CCT of LED, can be 22, 27, 30 and 40, 22=2200K, 27=2700K, 30=3000K, 40=4000K;

For LED module: PL-BRICK HP 1900 XYY 2x4 HE and PL-BRICK HP 2850 XYY 2x6 HE

'X' stands for CRI(color rendering index), can be 7 and 8, 7= Ra: 70, 8= Ra: 80;

'YY' stands for CCT of LED, can be 22, 27, 30 and 40, 22=2200K, 27=2700K, 30=3000K, 40=4000K;

Driver model list:

Model No.	Rated input	Rated output	ta; tc (°C)	Remark	Certificate
OT 40/170-240/0A7 1DIM NFC G3 CE	220- 240VAC; 50/60Hz	30-77VDC; CC; 0,15-0,7A; U _{out} :120VDC; P _{rated} :40W	60; 80	Built-in type; SELV; 	VDE 40050684*
OT 40/170-240/0A7 4DIM NFC G3 CE	220- 240VAC; 50/60Hz	30-77VDC; CC; 0,15-0,7A; U _{out} :120VDC; P _{rated} :40W	60; 80	Built-in type; SELV; 	VDE 40050684*
OT 75/170-240/1A0 4DIM NFC G3 CE	220- 240VAC; 50/60Hz	35-115VDC; CC; 0,15-1,05A; U _{out} :120VDC; P _{rated} :75W	55; 90	Built-in type; SELV; 	VDE 40050684*
IT DX 75/220- 240/1A0 NFC E	220- 240VAC; 50/60Hz	35-150VDC; CC; 0,2-1,05A; U _{out} :200VDC; P _{rated} :75W	55(0,2- 0,7A), 50(0,7- 1,05A); 90	Built-in type; isolating (Non-SELV) ; 	DEKRA ENEC 31- 153441*
OT DX 75/170- 240/1A0 DIMA NFC G2 CE	220- 240VAC; 50/60Hz	35-150VDC; CC; 0,15-1,05A; U _{out} :180VDC; P _{rated} :75W	55; 85	Built-in type; isolating (Non-SELV) ; 	VDE 40050684*

All models have similar construction except for above difference.

Unless otherwise specified, model AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 was chosen as representative model to perform all tests.

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
3.2 (0)	GENERAL TEST REQUIREMENTS		—
3.2 (0.3)	More sections applicable..... :	Yes ☐ No ☒	—
3.2 (0.5)	Components	(see Annex 1)	—
3.2 (0.7)	Information for luminaire design in light sources standards		—
3.2 (0.7.2)	Light source safety standard	IEC/EN IEC 62031	—
	Luminaire design in the light source safety standard		P

3.4 (2)	CLASSIFICATION OF LUMINAIRES		—
3.4 (2.2)	Type of protection	Class II	P
3.4 (2.3)	Degree of protection	IP66	P
3.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ☒ No ☐	—
3.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—
3.4 (-)	Modes of installation of road or street lighting		—
	a) on a pipe	Yes ☒ No ☐	—
	b) on a mast arm	Yes ☒ No ☐	—
	c) on a post top	Yes ☐ No ☒	—
	d) on span or suspension wires	Yes ☐ No ☒	—
	e) on a wall	Yes ☐ No ☒	—

3.5 (3)	MARKING		—
3.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
3.5 (3.3)	Additional information		P
	Language of instructions	English	P
3.5 (3.3.1)	Combination luminaires		N/A
3.5 (3.3.2)	Nominal frequency in Hz	50/60Hz	P
3.5 (3.3.3)	Operating temperature		N/A
3.5 (3.3.5)	Wiring diagram		N/A
3.5 (3.3.6)	Special conditions		N/A
3.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
3.5 (3.3.8)	Limitation for semi-luminaires		N/A
3.5 (3.3.9)	Power factor and supply current		N/A

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
3.5 (3.3.10)	Suitability for use indoors		N/A
3.5 (3.3.11)	Luminaires with remote control		N/A
3.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
3.5 (3.3.13)	Specifications of protective shields		N/A
3.5 (3.3.14)	Symbol for nature of supply		P
3.5 (3.3.15)	Rated current of socket outlet		N/A
3.5 (3.3.16)	Rough service luminaire		N/A
3.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y	P
3.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
3.5 (3.3.19)	Protective conductor current in instruction if applicable		N/A
3.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
3.5 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non-user replaceable light sources	P
3.5 (3.3.22)	Controllable luminaires, classification of insulation provided		P
3.5 (3.3.23)	Luminaires without control gear provided with necessary information for selection of appropriate component		N/A
3.5 (3.3.24)	If not supplied with terminal block, information on the packaging		P
3.5 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
3.5 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A
3.5 (3.4)	Test with water	15s	P
	Test with hexane	15s	P
	Legible after test		P
	Label attached		P
3.5 (-)	Additional information in instruction leaflet		P
	a) Design attitude		P
	b) Weight		P
	c) Overall dimensions		P
	d) Maximum projected area if applicable		P
	e) Cross-sectional area of wires if applicable		N/A
	f) Suitability for indoors use		N/A
	g) Dimensions of the compartment		N/A
	h) Torque setting to be applied to bolts or screws		P

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
	i) Maximum mounting height		P
3.6 (4)	CONSTRUCTION		—
3.6 (4.2)	Components replaceable without difficulty		P
3.6 (4.3)	Wireways smooth and free from sharp edges		P
3.6 (4.4)	Lampholders		N/A
3.6 (4.4.1)	Integral lampholder		N/A
3.6 (4.4.2)	Wiring connection		N/A
3.6 (4.4.3)	Lampholder for end-to-end mounting		N/A
3.6 (4.4.4)	Positioning		N/A
	- pressure test (N)		—
	After test the lampholder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A
	- bending test (N)		—
	After test the lampholder have not moved from its position and show no permanent deformation		N/A
3.6 (4.4.5)	Peak pulse voltage		N/A
3.6 (4.4.6)	Centre contact		N/A
3.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
3.6 (4.4.8)	Lamp connectors		N/A
3.6 (4.4.9)	Caps and bases correctly used		N/A
3.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
3.6 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
3.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
3.6 (4.7)	Terminals and supply connections		P
3.6 (4.7.1)	Contact to metal parts		P
3.6 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		N/A
3.6 (4.7.3)	Terminals for supply conductors		P

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
3.6 (4.7.3.1)	Welded method and material		N/A
	- stranded or solid conductor		N/A
	- spot welding		N/A
	- welding between wires		N/A
	- Type Z attachment		N/A
	- mechanical test according to 15.6.2		N/A
	- electrical test according to 15.6.3		N/A
	- heat test according to 15.6.3.2.3 and 15.6.3.2.4		N/A
3.6 (4.7.4)	Terminals other than supply connection		P
3.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
3.6 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
3.6 (4.8)	Switches		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
3.6 (4.9)	Insulating lining and sleeves		P
3.6 (4.9.1)	Retainment		P
	Method of fixing : Heat-shrinkable tube		P
3.6 (4.9.2)	Insulated linings and sleeves:		P
	Resistant to a temperature > 20 °C to the wire temperature or		P
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C) :		N/A
3.6 (4.10)	Double or reinforced insulation		P
3.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		P
	Safe installation fixed luminaires		P
	Capacitors and switches		N/A
3.6 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
3.6 (4.10.3)	Retainment of insulation:		P
	- fixed		N/A

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		P
	- lining in lampholder		N/A
3.6 (4.10.4)	Protective impedance device		N/A
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
3.6 (4.11)	Electrical connections and current-carrying parts		P
3.6 (4.11.1)	Contact pressure		P
3.6 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
3.6 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
3.6 (4.11.4)	Material of current-carrying parts		P
3.6 (4.11.5)	No contact to wood or mounting surface		P
3.6 (4.11.6)	Electro-mechanical contact systems		P
3.6 (4.12)	Screws and connections (mechanical) and glands		P
3.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part..... :	Screws for fixing mounting bracket; 8,0Nm	P
	Torque test: torque (Nm); part..... :	Screws for fixing glass cover, coupler terminal, LED driver, earthing, reflector; 1,2Nm	P
	Torque test: torque (Nm); part..... :	Screws for fixing terminal block, LED module PCB, LED lens; 0,5Nm	P
3.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
3.6 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm)		N/A
	- lampholder; torque (Nm)		N/A
	- push-button switches; torque 0,8 Nm		N/A

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
3.6 (4.12.5)	Screwed glands; force (Nm)..... :	Plastic gland; 3,25Nm	P
3.6 (4.13)	Mechanical strength		P
3.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm) :		N/A
	- other parts; energy (Nm)..... :	Glass cover, metal enclosure, Sealing cap(Zhaga); 0,7Nm	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
3.6 (4.13.2)	Metal parts have adequate mechanical strength		P
3.6 (4.13.3)	Straight test finger		P
3.6 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher		N/A
	a) fixed		N/A
	b) hand-held		N/A
	c) delivered with a stand		N/A
	d) for temporary installations and suitable for mounting on a stand		N/A
3.6 (4.13.6)	Tumbling barrel		N/A
3.6 (4.14)	Suspensions, fixings and means of adjusting		P
3.6 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	B) torque 2,5 Nm		P
	C) bracket arm; bending moment (Nm)..... :	2,5Nm	P
	D) load track-mounted luminaires		N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm) :		N/A
	Metal rod. diameter (mm) :		N/A
	Fixed luminaire or independent control gear without fixing devices		N/A
3.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg) :		—
	Stress in conductors (N/mm ²) :		N/A
	Mass (kg) of semi-luminaire :		N/A
	Bending moment (Nm) of semi-luminaire :		N/A
3.6 (4.14.3)	Adjusting devices:		P

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
	- flexing test; number of cycles..... :	45	P
	- strands broken	No strands broken	P
	- electric strength test afterwards		P
3.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
3.6 (4.14.5)	Guide pulleys		N/A
3.6 (4.14.6)	Strain on socket-outlets		N/A
3.6 (4.15)	Flammable materials		P
	- glow-wire test 650°C	See Test Table 3.15 (13.3.2)	P
	- spacing ≥ 30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		P
	- thermal protection		N/A
	- electronic circuits exempted		N/A
3.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		N/A
	a) construction		N/A
	b) temperature sensing control		N/A
	c) surface temperature		N/A
3.6 (4.16)	Luminaires for mounting on normally flammable surfaces		N/A
	No lamp control gear	(compliance with Section 12)	N/A
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
3.6 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
3.6 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear		N/A
	- external		N/A
	- fixed position		N/A
	- temperature marked lamp control gear		N/A
3.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
3.6 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
3.6 (4.18)	Resistance to corrosion		P

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Clause	Requirement + Test	Result - Remark	Verdict
3.6 (4.18.1)	- rust-resistance		N/A
3.6 (4.18.2)	- season cracking in copper		N/A
3.6 (4.18.3)	- corrosion of aluminium		P
3.6 (4.19)	Igniters compatible with ballast		N/A
3.6 (4.20)	Rough service vibration		N/A
3.6 (4.21)	Protective shield		N/A
3.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
3.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
3.6 (4.21.3)	No direct path		N/A
3.6 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment..... :	See Test Table 3.15 (13.3.2)	N/A
3.6 (4.22)	Attachments to lamps not cause overheating or damage		N/A
3.6 (4.23)	Semi-luminaires comply Class II		N/A
3.6 (4.24)	Photobiological hazards		P
3.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
3.6 (4.24.2)	Retinal blue light hazard		P
	Class of risk group assessed according to IEC/TR 62778	RG1	—
	Luminaires with E_{thr} :		N/A
	a) Fixed luminaires		N/A
	- distance x m, borderline between RG1 and RG2 .. :		N/A
	- marking and instruction according 3.2.23		N/A
	b) Portable and handheld luminaires		N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC/62778		N/A
3.6 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
3.6 (4.26)	Short-circuit protection		N/A
3.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
3.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
3.6 (4.27)	Terminal blocks with integrated screwless earthing contacts		N/A
	Test according Annex V		N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Voltage drop test, resistance < 0,05 Ω		N/A
3.6 (4.28)	Fixing of thermal sensing control		N/A
	Not plug-in or easily replaceable type		N/A
	Reliably kept in position		N/A
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material ($^{\circ}\text{C}$) :		—
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
3.6 (4.29)	Luminaires with non-replaceable light source		N/A
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A
3.6 (4.30)	Luminaires with non-user replaceable light source		N/A
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	At least one fixing means requiring use of tool	LED module has no energy when opening for replacing light source	N/A
3.6 (4.31)	Insulation between circuits		P
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		P
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		P
3.6 (4.31.1)	SELV or PELV circuits		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Used SELV/PELV source	Output circuit for models with SELV drivers	P
	Voltage $\leq$ ELV		P
	Insulating of SELV/PELV circuits from LV supply		P
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulating of SELV/PELV circuits from FELV		P
	Insulating of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1		P
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
3.6 (4.31.2)	FELV circuits		P
	Used FELV source	For dimming circuit	P
	Voltage $\leq$ ELV		P
	Insulating of FELV circuits from LV supply		P
	FELV circuits insulated from accessible parts according Table X.1		P
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
3.6 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1	Output circuit for models with Non-SELV drivers	P
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		P
	- conductive parts are connected together		P
	- test according 7.2.3		P
	- conductive part not cause an electric shock in case of an insulation fault		P
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- slave luminaire constructed as class I		N/A
3.6 (4.32)	Overvoltage protective devices		N/A
	Comply with IEC 61643-11		N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A
3.6 (4.33)	Luminaire powered via information technology communication cabling		N/A
	Requirements for Class III luminaire		N/A
	Rated voltage within the range of ES1 and does not exceed maximum voltage of used connector		N/A
	Luminaire does not create any hazard from overvoltage	(see Annex 2)	N/A
3.6 (4.34)	Electromagnetic fields (EMF)		P
	No harmful electromagnetic fields		P
3.6 (4.35)	Protection against moving fan blades		N/A
	Test with a standard test finger		N/A
	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire		N/A
	Blades rounded with radius ≥ 0.5 mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan ≤ 2 W at rated voltage		N/A
3.6 (4.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
3.6.1 (-)	At least IP X3 or X5 respectively. IP	IP66	P
	Column-integrated luminaires:		N/A
	- parts below 2,5 m. IP		N/A
	- parts above 2,5 m. IP		N/A
3.6.2 (-)	Suspension on span wires		N/A
3.6.3 (-)	Means for attaching the luminaire or external parts to its support appropriate to the weight		P
3.6.3.1 (-)	Static load test		P
	- drag coefficient.....	1,2	P
	- loaded area (m ²).....	0,12m ²	P
	- used load (N).....	238,5N	P
	- measured deformation (cm/m)	1,0 (limit 2cm/m)	P

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Clause	Requirement + Test	Result - Remark	Verdict
	- no rotation		P
3.6.4 (-)	Adjustable lampholders		N/A
3.6.5 (-)	Luminaires installed above 5 m, glass covers shall be:		P
	a) glass that fractures into small pieces (test according to 3.6.5.1), or		N/A
	b) glass having a high impact shock resistance (test according to 3.6.5.2), or		P
	c) protected by any means to retain glass fragments		N/A
	For tunnel luminaires 3.6.5.1 apply		N/A
	Method of protection declared by the manufacturer		P
3.6.5.1 (-)	Protection by the use of glass that fractures into small pieces		N/A
	- number of particles is more than 40.....:		N/A
3.6.5.2 (-)	Protection by the use of high impact resistant glass		P
3.6.5.2.1 (-)	Glass covers have high mechanical strength		P
	Test according IEC 62262 with test apparatus according IEC 60068-2-75 with impact energy of 5J on preconditioned sample		P
3.6.5.2.2 (-)	Glass covers not break into large pieces		P
	- test according 3.6.5.1, number of particles is more than 20	28 pcs	P
3.6.6 (-)	Connection compartment of column-integrated luminaire		N/A
	- provides adequate space		N/A
	- means for attachment		N/A
	- means for attachment of metal corrosion-resistant		N/A
3.6.7 (-)	Compliance with ISO standard or other		N/A
3.6.8 (-)	Doors of column-integrated luminaires:		N/A
	- corrosion-resistant		N/A
	- opening only possible for an authorized person		N/A
	- impact test 5 Nm		N/A
	- sample show no damage		N/A
3.6.9 (-)	Column-integrated luminaire:		N/A
	- dimension of the cable entry slot (mm)		N/A
	- cable path from the slot to the connection compartment (mm)		N/A
	- cable path free from obstruction that might cause abrasion of the cable		N/A

3.7 (11)	CREEPAGE DISTANCES AND CLEARANCES	—
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Clause	Requirement + Test	Result - Remark	Verdict
3.7 (11.2)	Creepage distances and clearances..... :	See Table 3.7 (11.2)	P
	Impulse withstand category (Normal category II) (Category III Annex U, Table U.1)	Category II ☒ Category III ☐	—
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
3.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 3.7 (11.2) I	P
	Creepage distances for frequency over 30 kHz:		N/A
	- Controlgear marked with $\hat{U}_{OUT}$ and f_{UOUT} according IEC 61347-1, clause 7.1, item w	See Test Table 3.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 3.7 (11.2) II	N/A
3.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 3.7 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U_P	See Test Table 3.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 3.7 (11.2) II	N/A

3.8 (7)	PROVISION FOR EARTHING		—
3.8 (7.2.1 + 7.2.3)	Accessible metal parts		N/A
	Metal parts in contact with supporting surface		N/A
	Resistance $< 0,5 \Omega$:		N/A
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a groove		N/A
	Protective earth makes contact first		N/A
	Terminal blocks with integrated screwless protective earthing contacts tested according Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		N/A
3.8 (7.2.2 + 7.2.3)	Protective earth continuity in joints, etc.		N/A
3.8 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A
3.8 (7.2.5)	Protective earth terminal integral part of connector socket		N/A
3.8 (7.2.6)	Protective earth terminal adjacent to mains terminals		N/A
3.8 (7.2.7)	Electrolytic corrosion of the protective earth terminal		N/A
3.8 (7.2.8)	Material of protective earth terminal		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Contact surface bare metal		N/A
3.8 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
3.8 (7.2.11)	Protective earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
3.8 (7.2.12)	PELV circuit connected to protective earth for functional purpose		N/A

3.9 (14)	SCREW TERMINALS		—
	Separately approved; component list	(see Annex 1)	P
	Part of the luminaire	(see Annex 3)	N/A

3.9 (15)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		—
	Separately approved; component list..... :	(see Annex 1)	P
	Part of the luminaire	(see Annex 4)	N/A

3.10 (5)	EXTERNAL AND INTERNAL WIRING		—
3.10 (5.2)	Supply connection and external wiring		P
3.10 (5.2.1)	Means of connection	Supply cord without plug	P
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
3.10 (5.2.2)	Type of cable	See Annex 1	P
	Nominal cross-sectional area (mm ²)	See Annex 1	P
	Cables equal to IEC 60227 or IEC 60245		P
3.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y	P
3.10 (5.2.5)	Type Z not connected to screws		N/A
3.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
3.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
3.10 (5.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P

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Clause	Requirement + Test	Result - Remark	Verdict
	- material not likely to deteriorate		P
	- tubes or guards made of insulating material		N/A
3.10 (5.2.9)	Locking of screwed bushings		N/A
3.10 (5.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		P
3.10 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
3.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	Type Y	P
3.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N) :	See clause 3.10.1(-)	P
	- torque test: torque (Nm) :	See clause 3.10.1(-)	P
	- displacement ≤ 2 mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
	- function independent of electrical connection		P
3.10 (5.2.10.4)	Luminaire with/for use with supply cord with maximum current of 2A:		N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25 V RMS/60V DC		N/A
	- Ordinary Class III luminaire supplied with PELV ≤ 12 V RMS/30V DC		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- Other than ordinary Class III luminaire supplied with voltage $\leq 12V$ RMS/30V DC		N/A
	Pull test of 30N		N/A
3.10 (5.2.11)	External wiring passing into luminaire		N/A
3.10 (5.2.12)	Looping-in terminals		N/A
3.10 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
3.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
3.10 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
3.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
3.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
3.10 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
3.10 (5.3)	Internal wiring		P
3.10 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A)		N/A
	- temperatures	(see Annex 2)	N/A
	Green-yellow for protective earth only		N/A
3.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm ²).....	See Annex 1	P
	Insulation thickness	Approved cable and wire	P
	Extra insulation added where necessary		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Cross-sectional area (mm ²)..... :	See Annex 1	P
3.10 (5.3.1.3)	Double or reinforced insulation for class II		P
3.10 (5.3.1.4)	Conductors without insulation		N/A
3.10 (5.3.1.5)	SELV/PELV current-carrying parts	For models with SELV LED drivers	P
3.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
3.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
3.10 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
3.10 (5.3.4)	Joints and junctions effectively insulated		N/A
3.10 (5.3.5)	Strain on internal wiring		N/A
3.10 (5.3.6)	Wire carriers		N/A
3.10 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		P
3.10 (5.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N/A
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N/A
	No damage to luminaire wiring after test		N/A
3.10.1 (-)	Cord anchorage if applicable		P
	- pull test: 25 times; pull (N)	60	P
	- torque test: torque (Nm)	0,25	P
3.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		—
3.11 (8.2.1)	Live parts not accessible		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Basic insulated parts not used on the outer surface without appropriate protection		P
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		P
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		N/A
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N/A
	Basic insulation only accessible under lamp or starter replacement		P
	Protection in any position		P
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		N/A
	Double-ended high pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
3.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
3.11 (8.2.3.a)	Class II luminaire:		P
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		P
	- glass protective shields not used as supplementary insulation		N/A
3.11 (8.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
3.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)..... :		N/A
	- voltage under load/ no-load DC (V)..... :		N/A
	- interrupted DC voltage (V) :		N/A
	- touch current if applicable (mA) :		N/A
	One conductive part insulated if required		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)..... :		N/A
	- voltage under load/ no-load DC (V)..... :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV		N/A
	Class III luminaire not provided with means for protective earthing		N/A
3.11 (8.2.3.d)	PELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....		N/A
	- voltage under load/ no-load DC (V).....		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....		N/A
	- voltage under load/ no-load DC (V).....		N/A
	One pole insulated if required		N/A
3.11 (8.2.4)	Portable luminaire have protection independent of supporting surface		N/A
3.11 (8.2.5)	Compliance with the standard test finger or relevant probe		P
3.11 (8.2.6)	Covers reliably secured		P
3.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection		P
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N/A

3.12 (12)	ENDURANCE TEST AND THERMAL TEST		—
3.12 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) before (9.3) as specified in 3.13		—
3.12 (12.2)	Selection of lamps and ballasts		—
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Control gear if separate and not supplied	(Control gear used see Annex 2)	—
3.12 (12.3)	Endurance test:		P
	a) mounting-position	As in normal use	—
	b) test temperature (°C)	60	—
	c) total duration (h)	240	—
	d) supply voltage (V)	264	—

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Clause	Requirement + Test	Result - Remark	Verdict
	d) if not equipped with control gear, constant voltage/current (V) or (A)	--	—
3.12 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		N/A
	- voltage under normal operation (V).....		—
	- voltage under abnormal operation (V).....		—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		N/A
3.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
3.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
3.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	P
3.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
3.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)		—
	- case of abnormal conditions		—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un		—
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
3.12 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions		—
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
3.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
3.12 (12.7.1)	Luminaire without temperature sensing control		N/A
3.12 (12.7.1.1)	Luminaire with fluorescent lamp $\leq 70W$		N/A
	Test method 12.7.1.1 or Annex W		—
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions		—
	- Ballast failure at supply voltage (V)		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex W:		N/A
	- case of abnormal conditions		—
	- measured winding temperature (°C): at 1,1 Un		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		—
	- calculated temperature of fixing point/exposed part (°C)		—
	Ball-pressure test	See Table 3.15 (13.2.1)	N/A
3.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp $> 70W$, transformer $> 10 VA$		N/A
	- case of abnormal conditions		—
	- measured winding temperature (°C): at 1,1 Un		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		—
	- calculated temperature of fixing point/exposed part (°C)		—
	Ball-pressure test	See Table 3.15 (13.2.1)	N/A
3.12 (12.7.1.3)	Luminaire with short circuit proof transformers $\leq 10 VA$		N/A
	- case of abnormal conditions		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
3.12 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link	Yes ☐ No ☐	—
	- manual reset cut-out	Yes ☐ No ☐	—
	- auto reset cut-out	Yes ☐ No ☐	—
	- case of abnormal conditions		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- highest measured temperature of fixing point/ exposed part (°C):		—
	Ball-pressure test:	See Table 3.15 (13.2.1)	N/A
3.12.1 (-)	Temperature reduction if for outdoor use only		P
3.12.2 (-)	(See above)		—
3.12.3 (-)	Glass covers used within the thermal limits declared by the glass manufacturer		P

3.13 (9)	RESISTANCE TO DUST AND MOISTURE		—
3.13.1 (-)	If IP > IP 20 the order of tests as specified in clause 3.12		P
3.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP	IP66	—
	- mounting position during test	As in normal use	—
	- fixing screws tightened; torque (Nm)	2/3x1,2Nm for fixing glass cover; 2/3x3,25Nm for plastic gland;	—
	- tests according to clauses	9.2.2 and 9.2.7	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		P
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		P
	c.1) For luminaires without drain holes – no water entry		P
	c.2) For luminaires with drain holes – no hazardous water entry		N/A
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		N/A
	e) no contact with live parts (IP 2X)		N/A
	e) no entry into enclosure (IP 3X and IP 4X)		N/A
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A
	f) no trace of water on part of lamp requiring protection from splashing water		N/A
	g) no damage of protective shield or glass envelope		P
3.13 (9.3)	Humidity test 48 h		P

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Clause	Requirement + Test	Result - Remark	Verdict

3.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		—
3.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø	Metal foil	—
	Insulation resistance (MΩ)		—
	SELV/PELV:		P
	- between current-carrying parts of different polarity :		N/A
	- between current-carrying parts and mounting surface	100 MΩ (required: 1MΩ); for models with SELV LED drivers	P
	- between current-carrying parts and metal parts of the luminaire	100 MΩ (required: 1MΩ); for models with SELV LED drivers	P
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5		N/A
	Other than SELV/PELV:		P
	- between live parts of different polarity	Approved LED drivers and coupler terminal	N/A
	- between live parts and mounting surface	Between live part (L/N) and mounting surface: 100MΩ (required: 4MΩ); Between live parts (dimming) to mounting surface: 100MΩ (required: 2MΩ); Between live part of LED module and mounting surface: 100MΩ (required: 2MΩ) (for models with Non-SELV LED drivers)	P
	- between live parts and metal parts	Between live part (L/N) and metal enclosure: 100MΩ (required: 4MΩ); Between live parts (dimming) to accessible parts: 100MΩ (required: 2MΩ) Between live part of LED module and enclosure: 100MΩ (required: 2MΩ) (for models with Non-SELV LED drivers)	P
	- between live parts of different polarity through action of a switch		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :	100M Ω (required: 2M Ω)	P
	- Insulation bushings as described in Section 5 :		N/A
3.14 (10.2.2)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V) :		N/A
	SELV/PELV:		P
	- between current-carrying parts of different polarity :		N/A
	- between current-carrying parts and mounting surface..... :	500V; for models with SELV LED drivers	P
	- between current-carrying parts and metal parts of the luminaire :	500V; for models with SELV LED drivers	P
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A
	- Insulation bushings as described in Section 5 :		N/A
	Other than SELV/PELV:		P
	- between live parts of different polarity :	Approved LED drivers and coupler terminal	N/A
	- between live parts and mounting surface :	Between live part (L/N) and mounting surface: 2960V; Between live parts (dimming) to mounting surface: 1525V; Between live part of LED module and mounting surface: Max.1400V (for models with Non-SELV LED drivers);	P
	- between live parts and metal parts :	Between live part (L/N) and metal enclosure: 2960V; Between live parts (dimming) to accessible parts: 1525V; Between live part of LED module and enclosure: Max.1400V (for models with Non-SELV LED drivers)	P
	- between live parts of different polarity through action of a switch..... :		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts..... :		N/A

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
	- Insulation bushings as described in Section 5		N/A
3.14 (10.3)	Touch current (mA).....	Max. 0,18mA (limit: 0,7mA)	P
	Protective conductor current (mA).....		N/A

3.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		—
3.15 (13.2.1)	Ball-pressure test	See Test Table 3.15 (13.2.1)	N/A
3.15 (13.3.1)	Needle-flame test (10 s).....	See Test Table 3.15 (13.3.1)	N/A
3.15 (13.3.2)	Glow-wire test (650°C)	See Test Table 3.15 (13.3.2)	P
3.15 (13.4)	Proof tracking test (IEC 60112).....	See Test Table 3.15 (13.4)	P

3.7 (11.2)	TABLE I: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	R	>10	3,0	11.1.B	>10	5,0	11.1.A
Distance 2:	B	3,9	1,5	11.1.B	3,9	2,1	11.1.A
Working voltage (V)					See below		—
PTI					< 600 ☒ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)					--		—
Supplementary information: Min. values were recorded.							
Distance 1: Between live parts (coupler terminal) and accessible metal parts (Max.240VAC);							
Distance 2: Between current carrying part of LED module and accessible metal parts (Max.200VDC)							

** Insulation type: B – Basic; S – Supplementary; R – Reinforced. See also IEC 60598-1 Annex M.

3.7 (11.2)	TABLE II: Creepage distances and clearances						N/A
	Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages						
	Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2						
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	--	--	--	--	--	--	--
Working voltage (V)					--		—
Frequency if applicable (kHz)					--		—
PTI					< 600 ☐ ≥ 600 ☐		—

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)		--	—
Supplementary information: --			

** Insulation type: B – Basic; S – Supplementary; R – Reinforced.

3.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			N/A
Allowed impression diameter (mm) :		≤ 2,0 mm		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
--	--	--	--	
Supplementary information: --				

3.15 (13.3.1)	TABLE: Needle-flame test				N/A
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
--	--	--	--	--	--
Supplementary information: --					

3.15 (13.3.2)	TABLE: Resistance to heat and fire - Glow wire tests						P
Object/ Part No./ Material	Manufacturer/ trademark	Glow wire test (°C)					Verdict
		650		750		850	
		te	ti	te	ti		
Sealing cap (Zhaga)	AOK Industrial company Ltd.	0	0	--	--	--	Pass
LED lens	IDEMITSU KOSAN CO LTD	0	0	--	--	--	Pass
Reflector	TEIJIN POLYCARBONATE CHINA LTD	0	0	--	--	--	Pass
Ignition of the specified layer placed underneath the test specimen (Yes/No)..... :							No
Supplementary information: --							

3.15 (13.4)	TABLE: Proof tracking test				P
Test voltage PTI		175 V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
Sealing cap (Zhaga)	AOK Industrial company Ltd.	Yes	Yes	Yes	Pass

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information: --

ANNEX 1 TABLE: Critical components information						P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
LED driver	B	OSRAM or Inventronics	See 'General product information' for details	See 'General product information' for details	IEC/EN 61347-1 IEC/EN 61347-2-13	See 'General product information' for details*
Supply cord	B	Ningbo Liansheng Wire & Cable Co., Ltd.	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE 40033764*
Alt.	B	Dongguan Wandu Cable Co., Ltd.	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE 40052148*
Alt.	B	Zhejiang Jinniu Cable Co., Ltd	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE 40028195*
Alt.	B	Zhongshancity Defang Wire & Cable Co., Ltd	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE 40049745*
Alt.	B	Foshan Defang Cable Co., Ltd.	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE 40054523*
Alt.	D	Interchangeable	H05RN-F; H07RN-F	2x1,0mm ²	DIN EN 50525-2-21	VDE*
Coupler terminal	B	Guangdong Ojun Technology Co., Ltd	M29; M29-B	250Vac; 16A; 0,75...2,5mm ² ; T110	IEC/EN 61984 IEC/EN 60998-2-1 IEC/EN 60998-1	TÜV SÜD B 094998 0005*
Alt.	B	Guangdong Ojun Technology Co., Ltd	M29 mini	250Vac; 16A; 0,5...1,5mm ² ; T110	IEC/EN 61984 IEC/EN 60998-2-1 IEC/EN 60998-1	TÜV SÜD B 094998 0005*
Alt.	B	GREENWAY	895	500Vac; 20A; 0,5...4mm ² ; T150	IEC/EN 61984	DEKRA 35-118788*
Alt.	B	Yuyao Sineyi Electronic Technology Co., Ltd.	M29; M29-3	450Vac; 16A; 0,5...4mm ² ; T110	IEC/EN 61984 IEC/EN 60998-2-1 IEC/EN 60998-1	TÜV SÜD B 092724 0011*

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	TABLE: Critical components information						P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
White terminal block	B	Guangdong Ojun Technology Co., Ltd	OJ-821 series; OJ-831 series; OJ-841 series; OJ-851 series	450V; 24A; 0,5-2,5mm ² ; 85°C or 110°C	IEC/EN 60998-1 IEC/EN 60998-2-2	DEKRA 35-111909*	
Input wire of LED driver; Lead wire of Zhaga socket	B	DONGGUAN ZHIHE ELECTRICAL CABLE TECH CO., LTD.	8043	0,75 mm ² ; 300/500V; double-insulated	DIN 57250 Teil 106	VDE 40043532*	
Alt.	B	DONGGUAN TRIUMPHCABLE CO LTD	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E249743* + Tested with appliance#	
Alt.	B	DONGGUAN DANYANG ELECTRONIC WIRE CO LTD	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E332522* + Tested with appliance#	
Alt.	B	Shenzhen Dingyu Electrical Technology Co Ltd	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E365423* + Tested with appliance#	
Alt.	D	Interchangeable	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758	UL *	
Output wire of LED driver; Input wire of LED module	B	DONG GUAN SHENG PAI ELECTRIC WIRE & CABLE CO LTD	3266	16...18AWG; 300V; 125°C	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E347603* + Tested with appliance#	
Alt.	B	DONGGUAN DANYANG ELECTRONIC WIRE CO LTD	3266	16...18AWG; 300V; 125°C	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E332522* + Tested with appliance#	
Alt.	D	Interchangeable	3266	16...18AWG; 300V; 125°C	UL 758	UL *	

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1		TABLE: Critical components information					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Alt.	B	DONGGUAN TRIUMPHCABLE CO LTD	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E249743* + Tested with appliance#	
Alt.	B	DONGGUAN DANYANG ELECTRONIC WIRE CO LTD	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E332522* + Tested with appliance#	
Alt.	B	Shenzhen Dingyu Electrical Technology Co Ltd	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E365423* + Tested with appliance#	
Alt.	D	Interchangeable	1672	16...18AWG; 300V; 105°C; double-insulated	UL 758	UL*	
Heat-shrinkable tube	B	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR; RSFR-H	600V; 125°C	UL 224 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E203950* + Tested with appliance#	
Alt.	B	Guangdong Yilian Electronic Technology Co Ltd	DWL	600V; 125°C	UL 224 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E521086* + Tested with appliance#	
Alt.	B	GUANGZHOU KAIHENG NEW MATERIAL CO LTD	K-102	600V; 125°C	UL 224 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E321827* + Tested with appliance#	
Alt.	D	Interchangeable	Interchangeable	600V; 125°C	UL 224	UL*	
LED module	B	OSRAM or Inventronics	PL-BRICK HP 2850 XYY 2x6 HE	Max.350VDC; Max.1400mA; Max.53,2W; 2200-4000K; Built-in; RG1; tc: 85°C	IEC/EN IEC 62031	VDE 40045382*	

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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1		TABLE: Critical components information					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Alt.	B	OSRAM or Inventronics	PL-BRICK HP 1900 XYY 2x4 HE	Max.350VDC; Max.1400mA; Max.35,5W; 2200-4000K; Built-in; RG1; tc: 85°C	IEC/EN IEC 62031	VDE 40045382*	
Alt.	B	SIGNIFY	Fortimo FastFlex LED 2x6/zcc DA HE	Max.575VDC; Max.1500mA; Max.75W; 2200-4000K; Built-in; tc: 95°C	IEC/EN IEC 62031	UL ENEC-01358-P5-M1*	
Alt.	B	SIGNIFY	Fortimo FastFlex LED 2x4/zcc DA HE	Max.575VDC; Max.1500mA; Max.75W; 2200-4000K; Built-in; tc: 95°C	IEC/EN IEC 62031	UL ENEC-01358-P5-M1*	
LED lens	B	IDEMITSU KOSAN CO LTD	LEV2200KL(f1)	PC; HB; 125°C	UL 94 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E48268*+ Tested with appliance#	
Reflector	B	TEIJIN POLYCARBONATE CHINA LTD	L-1250(##)(f2)(r2)	PC; V-2; 115°C	UL 94 + IEC/EN 60598-2-3 IEC/EN IEC 60598-1	UL E245526*+ Tested with appliance#	
Glass cover	B	AOK Industrial company Ltd.	Glass	T=4mm/ 5mm; -40°C to 250°C; ΔT: 150°C	IEC/EN 60598-2-3 IEC/EN IEC 60598-1	Tested with appliance#	
Zhaga socket with sealing cap	B	Guangdong Ojun Technology Co., Ltd.	OJ-M716 series (Zhaga socket); OJ-M718 series (sealing cap)	30VDC; 1,5A; -40°C to 70°C; IP66	IEC/EN 61984	DEKRA 35-136956* (CB) NL-105930*	
Alt.	B	BJB GmbH & Co. KG	47.121	24VDC; 2A; -40°C to 65°C; IP66	IEC/EN 61984	VDE 40049575*	
Sealing cap (Alternative)	B	AOK Industrial company Ltd.	--	PC	IEC/EN 60598-2-3 IEC/EN IEC 60598-1	Tested with appliance#	

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	TABLE: Critical components information						P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾	
Supplementary information: ¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039. * License available upon request. # Please refer TRF for the test standard publication year. The codes above have the following meaning: A - The component is replaceable with another one, also certified, with equivalent characteristics B - The component is replaceable if authorised by the test house C - Integrated component tested together with the appliance D - Alternative component							

ANNEX 2	TABLE: Thermal tests of Section 12			P
	Type reference	AOK-75WiLE-NV-O5-00-4070-T202-P-II-2		—
	Lamp used	LED		—
	Lamp control gear used	IT DX 75/220-240/1A0 NFC E		—
	Mounting position of luminaire	As in normal use		—
	Supply wattage (W)	74,9W [240V]		—
	Supply current (A)	0,319A [240V]		—
	Temperatures in test 1 - 4 below are corrected for ta (°C)	50°C		—
	- abnormal operating mode	LED driver output shorted circuit, output shutdown immediately, the temperature rise of components are lower than temperature rise of components at normal heating test		—
3.12 (12.4)	- test 1: rated voltage	240V		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current	240 x 1,06=254,4V		—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	--		—
	Through wiring or looping-in wiring loaded by a current of A during the test	--		—
3.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current	264V		—
Temperature measurements (°C)				
Part	Ambient	Cl. 12.4 – normal	Cl. 12.5 – abnormal	

IEC 60598-2-3							
Clause	Requirement + Test			Result - Remark			Verdict
		test 1	test 2	test 3	limit	test 4	limit
Supply cord	50	--	51,4	--	90	--	--
Coupler terminal	50	--	51,3	--	110	--	--
Lead wire of Zhaga socket	50	--	50,6	--	90	--	--
Zhaga socket body	50	--	46,1	--	70	--	--
Input wire of LED driver	50	--	53,2	--	90	--	--
tc of LED driver IT DX 75/220-240/1A0 NFC E	50	68,4	--	--	90	--	--
Output wire of LED driver	50	--	56,0	--	105	--	--
White terminal block	50	--	57,6	--	85	--	--
Coupler terminal(output)	50	--	58,8	--	110	--	--
Input wire of LED module PCB	50	--	73,5	--	105	--	--
Tc of LED module PL-BRICK HP 2850 740 2x6 HE	50	81,4	--	--	85	--	--
LED lens	50	--	79,0	--	Ref.	--	--
Glass cover inside	50	--	65,1	--	250	--	--
Metal enclosure	50	--	72,4	--	Ref.		
Sealing cap	50	--	45,2	--	Ref.	--	--
Mounting surface	50	--	44,3	--	90	--	--
Supplementary information: Max. temperatures were recorded.							
Product suitable for outdoor use only, 10°C have been deducted from the test maximum temperature values.							

	Type reference	1) AOK-41WiLE-NV-O5-00-4070-T202-P-II; 2) AOK-75WiLE-NV-O5-00-4070-T202-P-II-2; 3) AOK-75WiLE-NV-O5-00-4070-T202-P-II-2;	—
	Lamp used.....	LED	—
	Lamp control gear used.....	1) OT 40/170-240/0A7 4DIM NFC G3 CE; 2) OT 75/170-240/1A0 4DIM NFC G3 CE; 3) OT DX 75/170-240/1A0 DIMA NFC G2 CE;	—
	Mounting position of luminaire	As in normal use	—
	Supply wattage (W)	1) 40,4W [240V]; 2) 78,57W [240V]; 3) 76,9W [240V];	—

IEC 60598-2-3							
Clause	Requirement + Test			Result - Remark			Verdict
	Supply current (A) :			1) 0,174A [240V]; 2) 0,335A [240V]; 3) 0,329A [240V];			—
	Temperatures in test 1 - 4 below are corrected for ta (°C) :			50°C			—
	- abnormal operating mode :			LED driver output shorted circuit, output shutdown immediately, the temperature rise of components are lower than temperature rise of components at normal heating test			—
3.12 (12.4)	- test 1: rated voltage :			240V			—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current :			--			—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage :			--			—
	Through wiring or looping-in wiring loaded by a current of A during the test :			--			—
3.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current :			264V			—
Temperature measurements (°C)							
Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
1) tc of LED driver: OT 40/170- 240/0A7 4DIM NFC G3 CE	50	64,8	--	--	80	--	--
2) tc of LED driver: OT 75/170- 240/1A0 4DIM NFC G3 CE	50	79,6	--	--	90	--	--
3) tc of LED driver: OT DX 75/170-240/1A0 DIMA NFC G2 CE	50	75,0	--	--	85	--	--
3) tc of LED module: Fortimo FastFlex LED 2x6/740 DA HE	50	83,8	--	--	95	--	--
Supplementary information: Max. temperatures were recorded.							
Product suitable for outdoor use only, 10°C have been deducted from the test maximum temperature values.							

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX 3	Screw terminals (part of the luminaire)		N/A
(14)	SCREW TERMINALS		—
(14.2)	Type of terminal..... :		—
	Rated current (A)..... :		—
(14.3.2.1)	One or more conductors		N/A
(14.3.2.2)	Special preparation		N/A
(14.3.2.3)	Terminal size		N/A
	Cross-sectional area (mm ²)..... :		—
(14.3.3)	Conductor space (mm)..... :		N/A
(14.4)	Mechanical tests		N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread) :	M	N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm) :		N/A
	Torque (Nm) :		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N)..... :		N/A
(14.4.8)	Without undue damage		N/A

IEC 60598-2-3			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX 4	Screwless terminals (part of the luminaire)		N/A
(15)	SCREWLESS TERMINALS		N/A
(15.2)	Type of terminal..... :		—
	Rated current (A)..... :		—
(15.3.1)	Material		N/A
(15.3.2)	Clamping		N/A
(15.3.3)	Stop		N/A
(15.3.4)	Unprepared conductors		N/A
(15.3.5)	Pressure on insulating material		N/A
(15.3.6)	Clear connection method		N/A
(15.3.7)	Clamping independently		N/A
(15.3.8)	Fixed in position		N/A
(15.3.10)	Conductor size		N/A
	Type of conductor		N/A
(15.5.1)	Terminals internal wiring		N/A
(15.5.1.1)	Pull test spring-type terminals (4 N, 4 samples) :		N/A
(15.5.1.2)	Pull test pin or tab terminals (4 N, 4 samples) :	4N	N/A
	Insertion force not exceeding 50 N		N/A
(15.5.1.2)	Permanent connections: pull-off test (20 N)		N/A
(15.5.2)	Electrical tests		N/A
	Voltage drop (mV) after 1 h (4 samples) :		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles:		—
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples)..... :		N/A
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples)..... :		N/A
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples) :		N/A
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples) :		N/A
(15.6)	Terminals external wiring		N/A
	Terminal size and rating		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N) :		N/A
	Pull test pin or tab terminals (4 samples); pull (N) :		N/A

IEC 60598-2-3											
Clause	Requirement + Test					Result - Remark					Verdict
(15.6.3.1) (15.6.3.2)	TABLE: Contact resistance test / Heating tests										N/A
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop of two inseparable joints										N/A
	Voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 50th alt. 100th cycle										N/A
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 50th alt. 100th cycle										N/A
	Max. allowed voltage drop (mV) :										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
Supplementary information: --											

Attachment No. 1

Page 1 of 2

Report No.: 64142255020301

ATTACHMENT to IEC 60598-1:2020			
IEC 60598-1:2020			
EUROPEAN GROUP DIFFERENCES AND EUROPEAN NATIONAL DIFFERENCES			
Luminaires			
Part 1: General requirements and tests			
Differences according to : EN IEC 60598-1:2021 + A11:2022			
TRF template used : IECEE OD-2020-F2:2025, Ed. 2.1			
Attachment Form No. : EU_GD_IEC60598-1_2020B			
Attachment Originator : UL Solutions (Demko)			
Master Attachment : Dated 2025-10-30			
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Clause	Requirement + Test	Result - Remark	Verdict
	CENELEC COMMON MODIFICATIONS		—
3	MARKING		—
3.2.12	Note 4 deleted		N/A
4	CONSTRUCTION		—
4.11.6	Electro-mechanical contact systems: electric strength test at 1 500 V		P
5	EXTERNAL AND INTERNAL WIRING		—
5.2.2	Cables equal to EN 50525 series		P
	Paragraph 2 deleted		P
	Replace table 5.1 – Supply cord		P
12	ENDURANCE TESTS AND THERMAL TESTS		—
12.4.2 c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		P
	ANNEX ZB, SPECIAL NATIONAL CONDITIONS		—
3.3	DK: power supply cords of class I luminaires with label		N/A
5.2.1	CY, DK, FI, UK: type of plug		N/A
5.2.18	DK: socket-outlets		N/A
	ANNEX ZC, NATIONAL DEVIATIONS		—
4 & 5	FR: Shuttered socket-outlets 10/16A		N/A

Attachment No. 1

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Report No.: 64142255020301

Clause	Requirement + Test	Result - Remark	Verdict
	FR: Safety requirements for high buildings <i>(Decree of 30 December 2011 on safety regulations for the construction of high-rise buildings and their protection against fire and panic risks; Section VIII; Article GH 48, Lighting)</i> Glow-wire test for outer parts of luminaires:		N/A
	- 850°C for luminaires in stairways and horizontal travel paths		N/A
	- 650°C for indoor luminaires		N/A
	UK: Requirements according to United Kingdom Building Regulation		N/A

Attachment No. 2

Page 1 of 7

		
TEST REPORT IEC TR 62778 Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires		
Report Number. : 64142255020301 Date of issue : See main report of IEC 60598-2-3 Total number of pages : 7		
Name of Testing Laboratory preparing the Report : TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch		
Applicant's name : See main report of IEC 60598-2-3 Address : See main report of IEC 60598-2-3		
Test specification: Standard : IEC TR 62778:2014 (Second Edition) Test procedure : See main report of IEC 60598-2-3 Non-standard test method : N/A		
Test Report Form No. : IEC62778A Test Report Form(s) Originator : TÜV SÜD Product Service GmbH Master TRF : Dated 2016-02 Copyright © 2016 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved. This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context. This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.		
General disclaimer: The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.		

Attachment No. 2

Page 2 of 7

Report No.: 64142255020301

Test item description :	See main report of IEC 60598-2-3	
Trade Mark :	See main report of IEC 60598-2-3	
Manufacturer	See main report of IEC 60598-2-3	
Model/Type reference	See main report of IEC 60598-2-3	
Ratings :	See main report of IEC 60598-2-3	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒ Testing Laboratory:	TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch	
Testing location/ address	5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou 510656 China	
☐ Associated CB Testing Laboratory:		
Testing location/ address		
Tested by (name, function, signature) :	See main report of IEC 60598-2-3	
Approved by (name, function, signature) .. :	See main report of IEC 60598-2-3	
☐ Testing procedure: CTF Stage 1:		
Testing location/ address		
Tested by (name, function, signature) :		
Approved by (name, function, signature) .. :		
☐ Testing procedure: CTF Stage 2:		
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature) .. :		
Approved by (name, function, signature) .. :		
☐ Testing procedure: CTF Stage 3:		
☐ Testing procedure: CTF Stage 4:		
Testing location/ address		
Tested by (name, function, signature) :		
Witnessed by (name, function, signature) .. :		
Approved by (name, function, signature) .. :		
Supervised by (name, function, signature) :		

Attachment No. 2

Page 3 of 7

Report No.: 64142255020301

List of Attachments (including a total number of pages in each attachment): --	
Summary of testing:	
Tests performed (name of test and test clause): See main report of IEC 60598-2-3	Testing location: 5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou 510656 China
Summary of compliance with National Differences (List of countries addressed): See main report of IEC 60598-2-3	
Copy of marking plate: The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks. See main report of IEC 60598-2-3	

Attachment No. 2

Page 4 of 7

Report No.: 64142255020301

Test item particulars : See main report of IEC 60598-2-3	
Product evaluated : ☐ LED package ☐ LED module ☐ Lamp ☒ Luminaire	
Rated voltage (V) : See main report of IEC 60598-2-3	
Rated current (mA) : --	
Rated CCT (K) : --	
Rated Luminance (Mcd/m²) : --	
Component report data used : ☒ Not applicable ☐ LED package ☐ LED module ☐ Lamp Report number:	
Possible test case verdicts: - test case does not apply to the test object : N/A - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement : F (Fail)	
Testing : See main report of IEC 60598-2-3	
Date of receipt of test item : See main report of IEC 60598-2-3	
Date (s) of performance of tests : See main report of IEC 60598-2-3	
General remarks: "(See Enclosure #)" refers to additional information 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.	
Name and address of factory (ies) : See main report of IEC 60598-2-3	
General product information: See main report of IEC 60598-2-3	

Attachment No. 2

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Report No.: 64142255020301

IEC TR 62778			
Clause	Requirement + Test	Result - Remark	Verdict

7	MEASUREMENT INFORMATION FLOW		—
7.1	Basic flow		P
	'Law of conservation of luminance' applied		P
	Use of only true luminance/radiance values		P
	In case of luminaire: The light source is operated in the luminaire under similar conditions as when tested as a component		P
	In case E_{thr} value for RG2 was established the peak value was derived from angular light distribution		N/A
7.2	Conditions for the radiance measurement		P
	Standard condition applied (200mm distance, 0,011rad field of view)		P
	Non-standard condition applied		N/A
7.3	Special cases (I): Replacement by a lamp or LED module of another type		N/A
	Light source is a white light source		N/A
	Evaluation done based on highest luminance		N/A
	Evaluation done based on CCT value		N/A
7.4	Special cases (II): Arrays and clusters of primary light sources		N/A
	LED package is evaluated as : ☐ RG0 unlimited ☐ RG1 unlimited		N/A
	E_{thr} of LED package applies to array		N/A
8	RISK GROUP CLASSIFICATION		—
	Risk group achieved:		P
	- ..Risk Group 0 unlimited		N/A
	- ..Risk Group 1 unlimited		P
	- E_{thr} (lx) : Distance to reach RG1 (m) :		N/A

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Report No.: 64142255020301

IEC TR 62778			
Clause	Requirement + Test	Result - Remark	Verdict

TABLE: Spectroradiometric measurement				P
	Measurement performed on:	☐ LED package ☐ LED module ☐ Lamp ☒ Luminaire		
	Model number.....:	(1) AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (with LED module: PL-BRICK HP 2850 740 2x6 HE) (2) AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (with LED module: Fortimo FastFlex LED 2x6/740 DA HE)		—
	Test voltage (V).....:	240V		—
	Test current (A).....:	--		—
	Test frequency (Hz).....:	50Hz		—
	Ambient, t(°C).....:	25°C		—
	Measurement distance.....:	☒ 20 cm ☐ ... cm		—
	Source size	☒ Non-small ☐ Small: mm		—
	Field of view	☐ 100 mrad ☒ 11 mrad ☐ 1.7 mrad (for small sources)		—
Item	Symbol	Units	Result	Remark
Correlated colour temperature	CCT	K	--	--
x/y colour coordinates			--	--
Blue light hazard radiance	L _B	W/(m ² •sr ¹)	(1): 1,63E+03; (2): 1,44E+03;	RG1
Blue light hazard irradiance	E _B	W/m ²	--	--
Luminance	L	cd/m ²	(1): 1,33E+06; (2): 2,60E+06;	--
Illuminance	E	lx	--	--

Attachment No. 2

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Report No.: 64142255020301

IEC TR 62778			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

Measurement uncertainty statement for IEC TR 62778:2014			
Risk		Units	Expanded Uncertainty; coverage factor (k)
L _B	Blue light hazard radiance	W/(m ² •sr ¹)	U= 8,10%; k=2

	TABLE: Angular light distribution	N/A

Attachment No. 3

Page 1 of 15



TEST REPORT IEC 62493 Assessment of lighting equipment related to human exposure to electromagnetic fields		
Report Number	64142255020301	
Date of issue	See main report of IEC 60598-2-3	
Total number of pages	15	
Name of Testing Laboratory preparing the Report	TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch	
Applicant's name	See main report of IEC 60598-2-3	
Address	See main report of IEC 60598-2-3	
Test specification:		
TRF template used:	IECEE OD-2020-F7:2020; ed. 2.1	
Standards	IEC 62493:2015, IEC 62493:2015/AMD1:2022	
Test procedure	See main report of IEC 60598-2-3	
Test Report Form No.	IEC62493C	
Test Report Form(s) Originator	UL Solutions (US)	
Master TRF	Dated 2023-02-16	
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General disclaimer:		
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Attachment No. 3

Page 2 of 15

Report No.: 64142255020301

Test item description	See main report of IEC 60598-2-3	
Trademark or brand name.....	See main report of IEC 60598-2-3	
Manufacturer.....	See main report of IEC 60598-2-3	
Model/Type reference(s).....	See main report of IEC 60598-2-3	
Ratings	See main report of IEC 60598-2-3	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	Testing Laboratory:	TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
Testing location/ address		5F&8F East, Communication Building, No.163 Pingyun Road, Huangpu Ave. West, Guangzhou 510656 China
Tested by (name, function, signature)		See main report of IEC 60598-2-3
Approved by (name, function, signature) ...:		See main report of IEC 60598-2-3
☐	Testing procedure: CTF Stage 1:	
Testing location/ address		
Tested by (name, function, signature)		
Approved by (name, function, signature) ...:		
☐	Testing procedure: CTF Stage 2:	
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature) ...:		
Approved by (name, function, signature) ...:		
☐	Testing procedure: CTF Stage 3:	
☐	Testing procedure: CTF Stage 4:	
Testing location/ address		
Tested by (name, function, signature)		
Witnessed by (name, function, signature) ...:		
Approved by (name, function, signature) ...:		
Supervised by (name, function, signature) :		

Attachment No. 3

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Report No.: 64142255020301

List of Attachments (including a total number of pages in each attachment):

--

Summary of testing

Tests performed (name of test, test Clause and date test performed):

See main report of IEC 60598-2-3

Testing location:

5F&8F East, Communication Building, No.163
Pingyun Road, Huangpu Ave. West, Guangzhou
510656 China

Summary of compliance with National Differences

Country code

National differences standard

See main report of IEC 60598-2-3

Use of uncertainty of measurement for decisions on conformity (decision rule) :

☒ 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").

☐ Other:... (to be specified, for example when required by the standard or client).

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate

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See main report of IEC 60598-2-3

Attachment No. 3

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Possible test case verdicts:	
- test case does not apply to the test item .:	N/A (Not Applicable)
- test item does meet the requirement	P (Pass)
- test item does not meet the requirement .:	F (Fail)
Date of receipt of test item	See main report of IEC 60598-2-3
Date (s) of performance of tests	See main report of IEC 60598-2-3
General remarks:	
"(See Enclosure #)" refers to additional information 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. Note: Throughout this TRF, numerical data taken from IEC standards are using a comma as the decimal separator. Throughout this report, the term "Test item" is used over terms such as Test object, EUT or DUT.	
Name and address of factory (ies)	See main report of IEC 60598-2-3
General product information (GPI) and other remarks: See main report of IEC 60598-2-3	

Table of Contents:		
1	General description of test item	6
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1.4	Power rating(s).....	8
1.5	Additional parameters	8
1.6	Operating mode(s)	9
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1.9	Modifications to the test item during testing	10
2	Verdict summary section.....	10
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7.4	Application of the EMF product standard for base stations	15
7.5	Application of another EMF standard.....	15
8	List of test equipment	15

1 General description of test item

Note: The information in this section has been provided by the applicant.

1.1 Photo(s) of the test item

Photo 1.1.1	see attachment No. 4

Photo 1.1.2	see attachment No. 4

Attachment No. 3

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Report No.: 64142255020301

1.2 Test item(s)

No.	Test item name	Unique identification / type / description	Extent of test
1		<i>All models</i>	<i>No tested</i>
2			
3			
4			
5			
6			
7			
8			
Engineering statement for untested variants / product family:			
Supplementary information: --			

1.3 Port(s)

No.	Port Name	Type	Cable		
			Specified length in m	Attached during test	Shielded
1	Enclosure	Enclosure	-	-	-
2				☐	☐
3				☐	☐
4				☐	☐
5				☐	☐
6				☐	☐
7				☐	☐
8				☐	☐
9				☐	☐
10				☐	☐
Supplementary information: --					

Attachment No. 3

1.4 Power rating(s)

Power supply type..... :	☒	AC, 1 phase
	☐	AC, 2 phases
	☐	AC, 3 phases
	☒	Neutral
	☐	Protective Earth
	☐	DC
	☐	Battery, not rechargeable in the device
	☐	Battery, rechargeable in the device
Rated voltage	See main report of IEC 60598-2-3	
Rated frequency	See main report of IEC 60598-2-3	
Rated power.....	See main report of IEC 60598-2-3	

1.5 Additional parameters

Protection class	See main report of IEC 60598-2-3	
Clock frequencies.....	N/A	
Other parameters	N/A	
Software version	N/A	
Hardware version	N/A	
Dimensions (W x H x D)...	See main report of IEC 60598-2-3	
Mounting position	☐	Table-top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held equipment
	☒	Other: installation of road or street lighting

Attachment No. 3

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Report No.: 64142255020301

1.6 Operating mode(s)

No.	Abbreviation	Detailed description of the operating mode	Used for testing	
			Emission	Immunity
1			☐	☐
2			☐	☐
3			☐	☐
4			☐	☐
5			☐	☐
6			☐	☐
7			☐	☐
8			☐	☐
Supplementary information: --				

1.7 Auxiliary equipment

Advice to the TRF User: Include accessories which are not to be considered test items.

No.	Aux Item Name	Type and description	Manufacturer (if not the same)
1			
2			
3			
4			
5			
6			
7			
8			
Supplementary information: --			

Attachment No. 3

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1.8 Documents as provided by the applicant

No.	Document ref.	Type and description	Doc date
1		See main report of IEC 60598-2-3	
2			
3			
4			
5			
6			
7			
8			
Supplementary information: --			

1.9 Modifications to the test item during testing

☐	No modifications done during testing	
☐	Modifications done during testing (see details below)	
No.	Description of modification (if any)	Date of modification
1		
2		
3		
Supplementary information: --		

2 Verdict summary section

Rationale for verdicts, including N/A (Not Applicable), are listed on each test sheet.
If applicable test was not performed then CB Test Certificate cannot be issued.

Table/ Clause	Requirement – Test case	Basic standard	Verdict
6.6	Calculation of the results	IEC 62493: 2022	N/A
7.2	Low-power exclusion method	IEC 62493: 2022	N/A
7.3	Application of the EMF product standard for body worn-equipment	IEC 62209-2: 2010	N/A
7.4	Application of the EMF product standard for base stations	IEC 62232: 2011	N/A
7.5	Application of another EMF standard	IEC 62311: 2007	N/A
Supplementary information (e.g. detailed information to verdicts):			

2.1 Test setups

Figure 2.1.1	Test setup 1

Figure 2.1.2	Test setup 2

3 Limits

3.1 General

Devices must either be inherently compliant in 4.2.2 or comply with Van der Hoofden test limit in 4.2.3 and pass assessment procedure for intentional radiators in 4.3

4.2 Unintentional radiating part of lighting equipment

4.2.2 Lighting equipment deemed to comply with the Van der Hoofden test without testing

Name	See main report of IEC 60598-2-3
Date	See main report of IEC 60598-2-3
Rationale for verdict N/A	Considering submitted samples were LED-light-source technology, they were found to comply with the requirement of IEC 62493:2015, IEC 62493:2015/AMD1:2022 and EN 62493:2015+A1:2022 without test.

Lighting equipment is deemed to comply with the requirements of this standard without testing if it fulfils one of the following inherent-compliance conditions:	☐	electronic controlgear
	☐	incandescent-lamp technology
	☒	LED-light-source technology
	☐	OLED-light-source technology
	☐	high-pressure discharge lamp LED-light-source technologies
	☐	low-pressure discharge lamp technologies with exposure distance ≥ 50 cm
	☐	independent auxiliary
Supplementary information	--	

4.2.3 Application of limits

Name	N/A
Date	N/A
Rationale for verdict N/A	N/A

☐	Lighting equipment does not inherently comply with the Van der Hoofden test without testing but the compliance factor F is ≤ 1
Supplementary information	

5.6 Measurement uncertainty

Where relevant, the following measurement instrumentation uncertainty levels have been estimated for tests performed on the apparatus:

Type of disturbance / Test method	Calculated expanded uncertainty U_{Lab}	U_{basic}
Van der Hoofden Test		30%

5.8 Decision rule

If the uncertainty calculated with the instrumentation actually used for the test (U_{Lab}) is less than or equal to the uncertainty given in 5.6 (U_{basic}) then:

- compliance is deemed if the measurement result does not exceed the applicable limit;
- non-compliance is deemed to occur if the measurement result exceeds the applicable limit.

If the uncertainty calculated with the instrumentation used for the test () is higher than the uncertainty given in 5.6 (U_{basic}) then:

- compliance is deemed to occur if the measurement result, increased by ($U_{\text{Lab}} - U_{\text{basic}}$), does not exceed the applicable limit.
- non-compliance is deemed to occur if the measurement result, increased by ($U_{\text{Lab}} - U_{\text{basic}}$), exceeds the applicable limit.

6.2 Operating Conditions

Name	
Date	
Rationale for verdict N/A	

Test location (stand)		
Stabilization Time	☐	15 minutes for low-pressure discharge lamps
	☐	30 minutes for all other discharge lamps
	☐	Other (minutes):
Operating Conditions:	☐	Specified by the manufacturer (ref. cl. 1.6)
	☐	Multiple lamp lighting equipment with all lamps operated simultaneously
	☐	Self-contained emergency lighting operated from mains
	☐	Lighting equipment with light regulation measured at the minimum and maximum limit of light regulation.
Measurement Distance		
Supplementary information		

Photo 6.2.1	Test Setup – Van der Hoofden

Test results for Induced internal electric field	
Test item no(s) ref. cl. 1.2	
Operating mode no(s) ref. cl. 1.6 :	
Test setup no(s) ref. cl. 3.2	

7 Assessment procedure intentional radiators

Name	
Date	
Rationale for verdict N/A	

7.2 Low-power exclusion method

Input $P_{\text{int,rad}}$		
Exclusion level P_{max}		
Input power $P_{\text{int,rad}} < \text{exclusion level } P_{\text{max}}$	☐	Yes
	☐	No
Supplementary information		

7.3 Application of the EMF product standard for body worn-equipment

If low-power exclusion is not met and exposure distance ≤ 0.05 m, does device comply with IEC 62209-2	☐	Yes
	☐	No
Supplementary information		

7.4 Application of the EMF product standard for base stations

If low-power exclusion is not met and intentional radiator is a base station, does device comply with IEC 62232	☐	Yes
	☐	No
Supplementary information		

7.5 Application of another EMF standard

If low-power exclusion is not met and intentional radiator is not considered as body-worn equipment or base station equipment, does device comply with IEC 62311	☐	Yes
	☐	No
Supplementary information		

8 List of test equipment

Reference to test stand or test name (ID):			
Equipment ID	Equipment description	Last Calibration date	Calibration due date
--	--	--	--

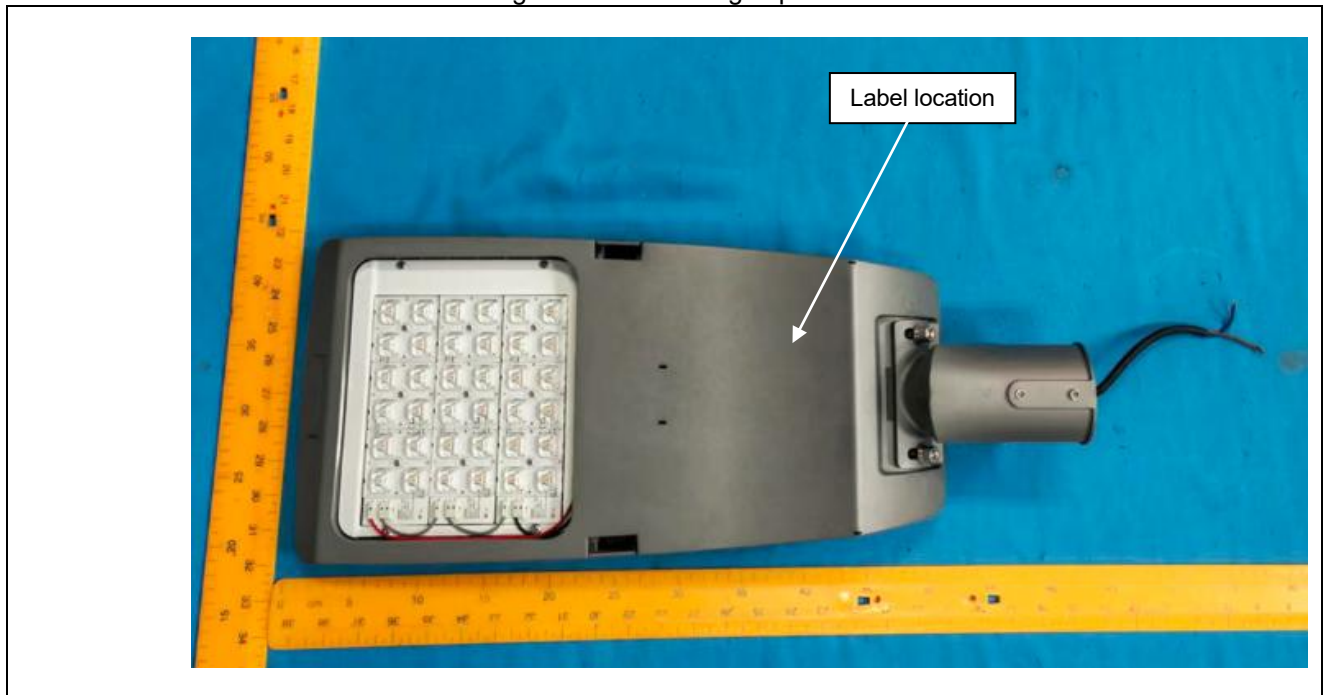
Attachment No. 4

Photo documentation

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Details of: Front view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 1: without Zhaga socket & sealing cap



Details of: Back view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 1: without Zhaga socket & sealing cap



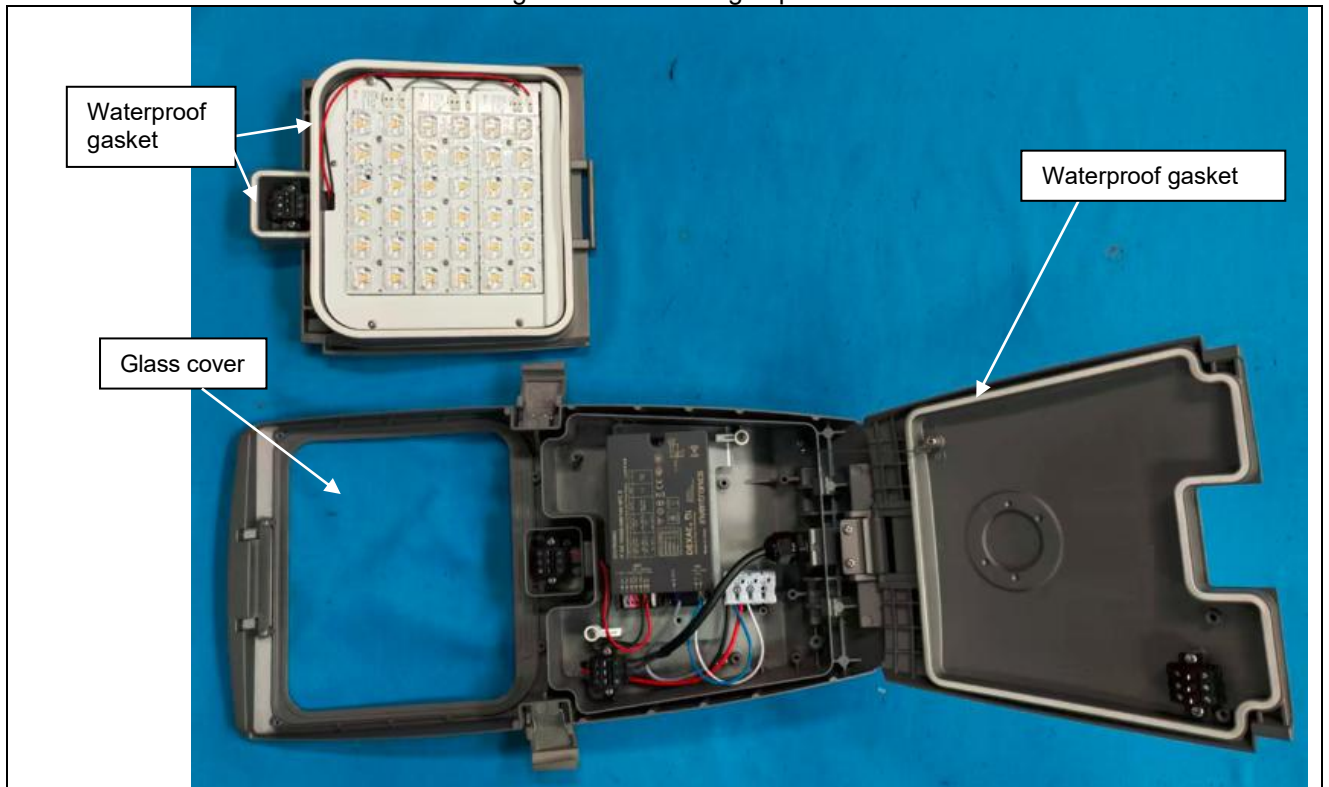
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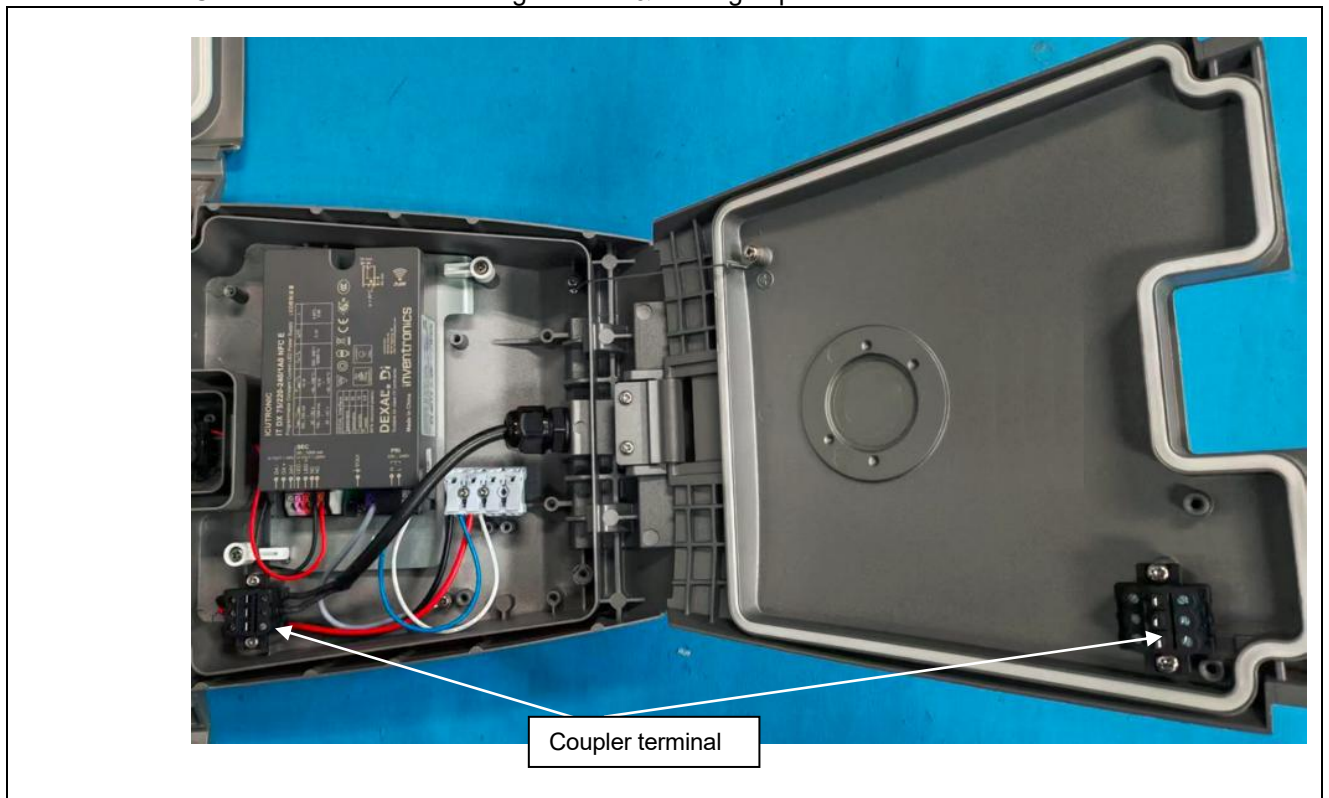
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Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 1: without Zhaga socket & sealing cap



Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 1: without Zhaga socket & sealing cap



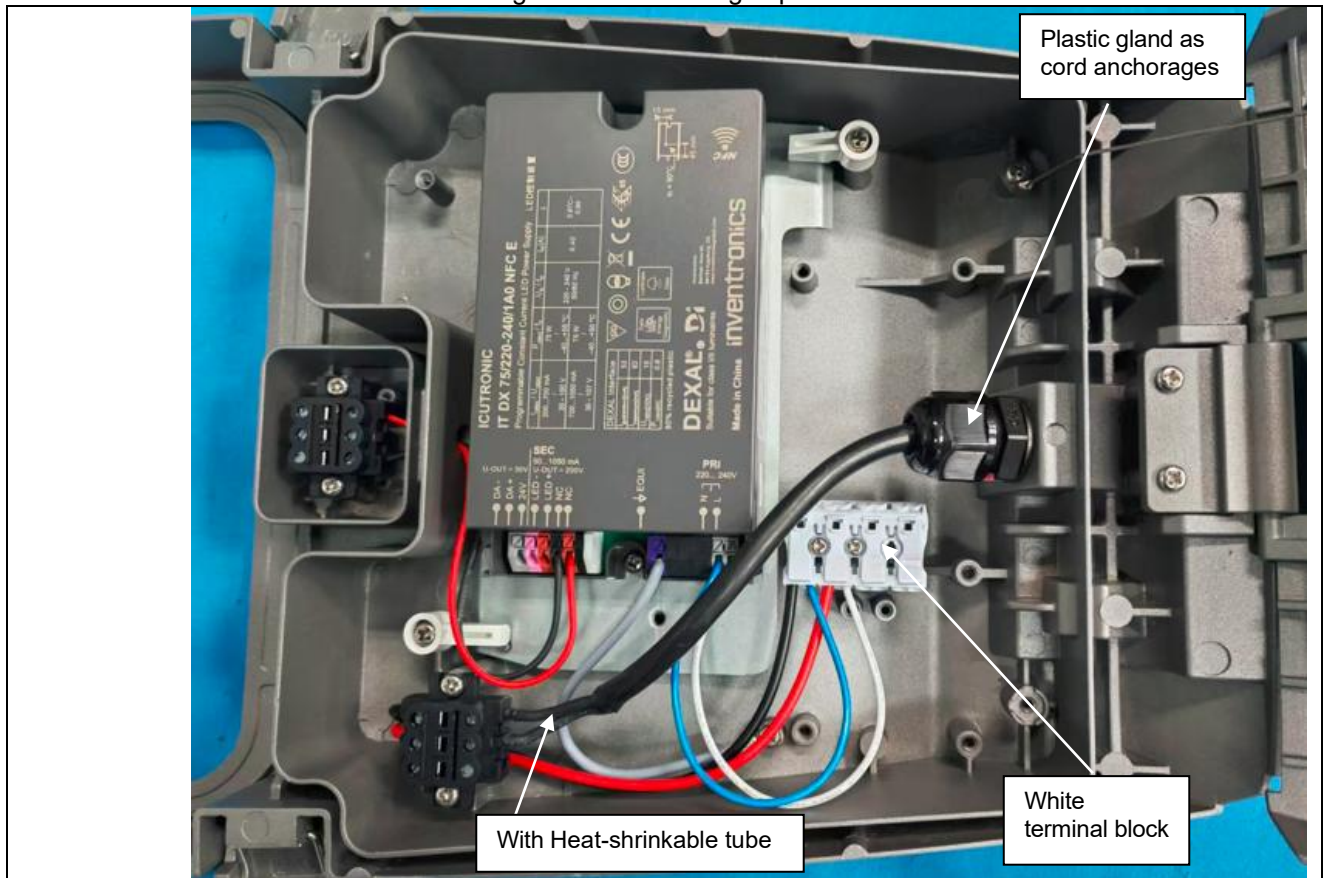
Attachment No. 4

Photo documentation

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Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 1: without Zhaga socket & sealing cap



Details of: Front view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



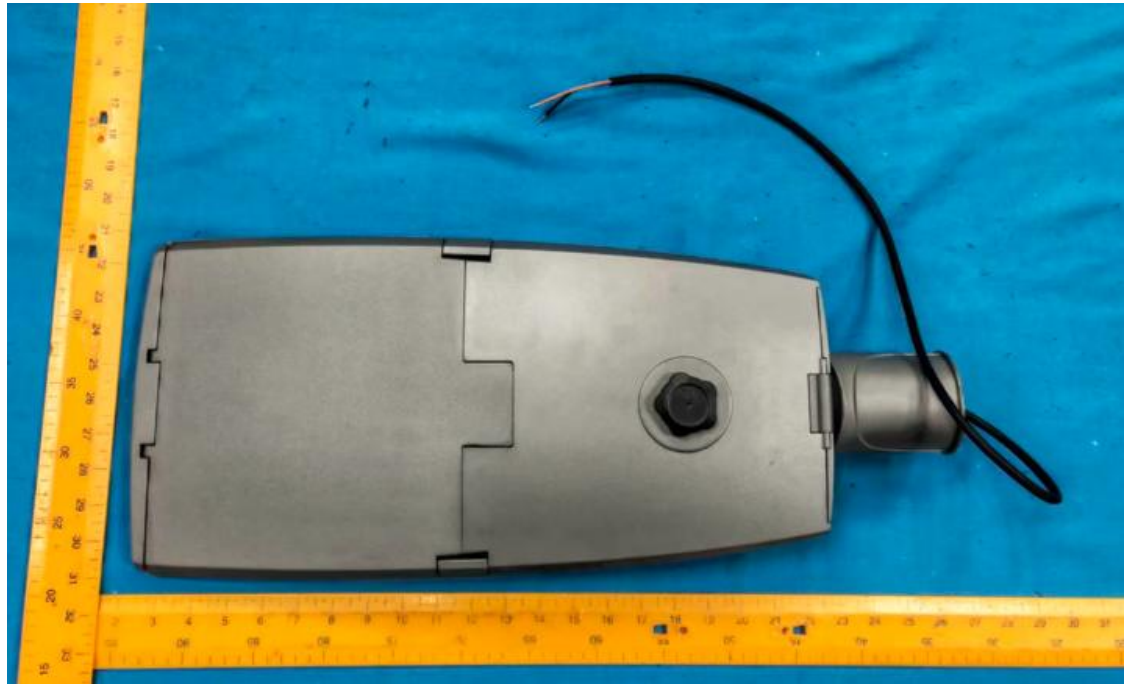
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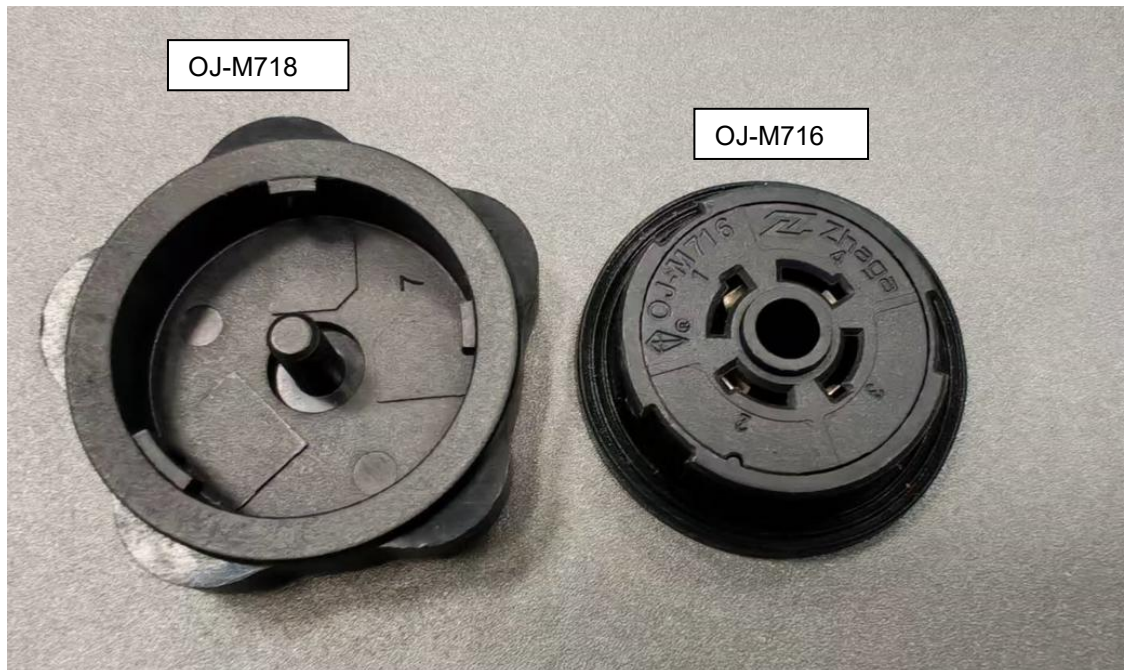
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Details of: Back view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



Details of: Internal view of Zhaga socket and Sealing cap for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



Attachment No. 4

Photo documentation

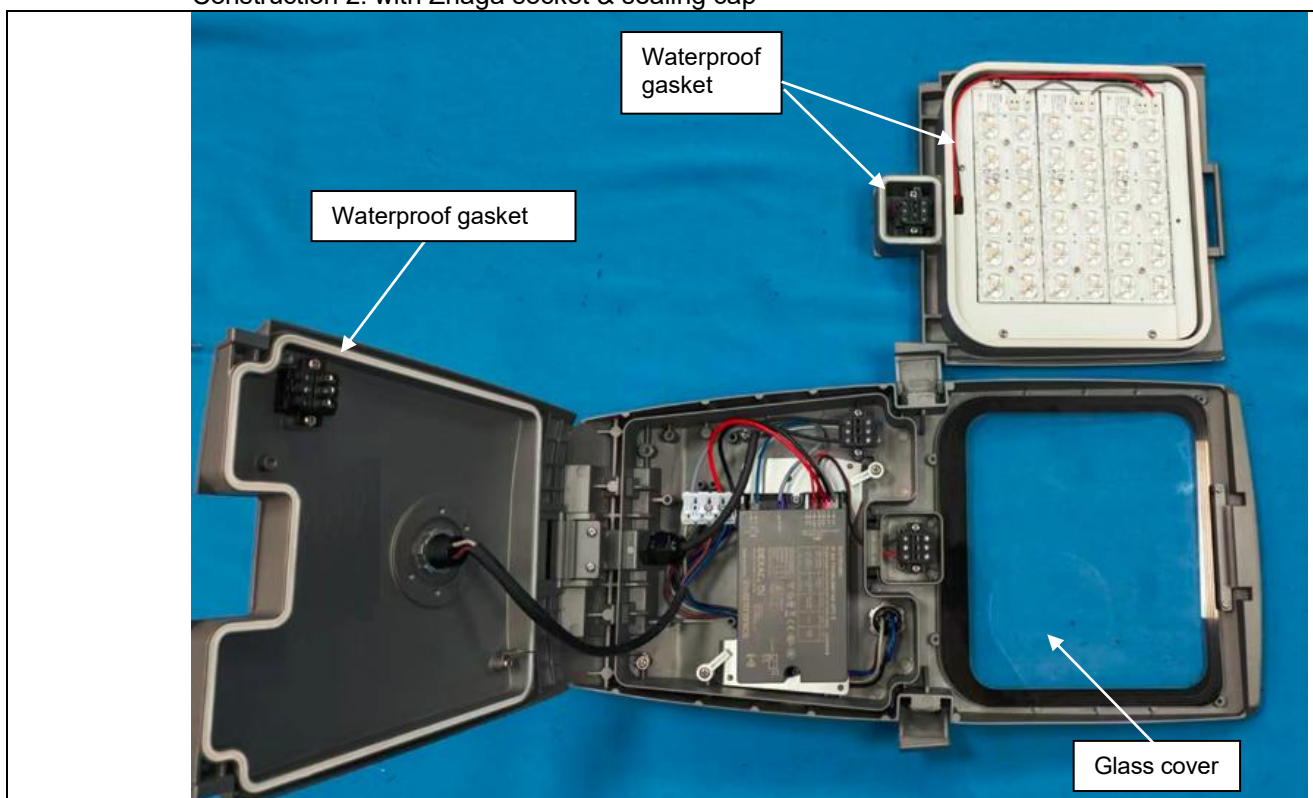
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Details of: Internal view of Zhaga socket and Sealing cap for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



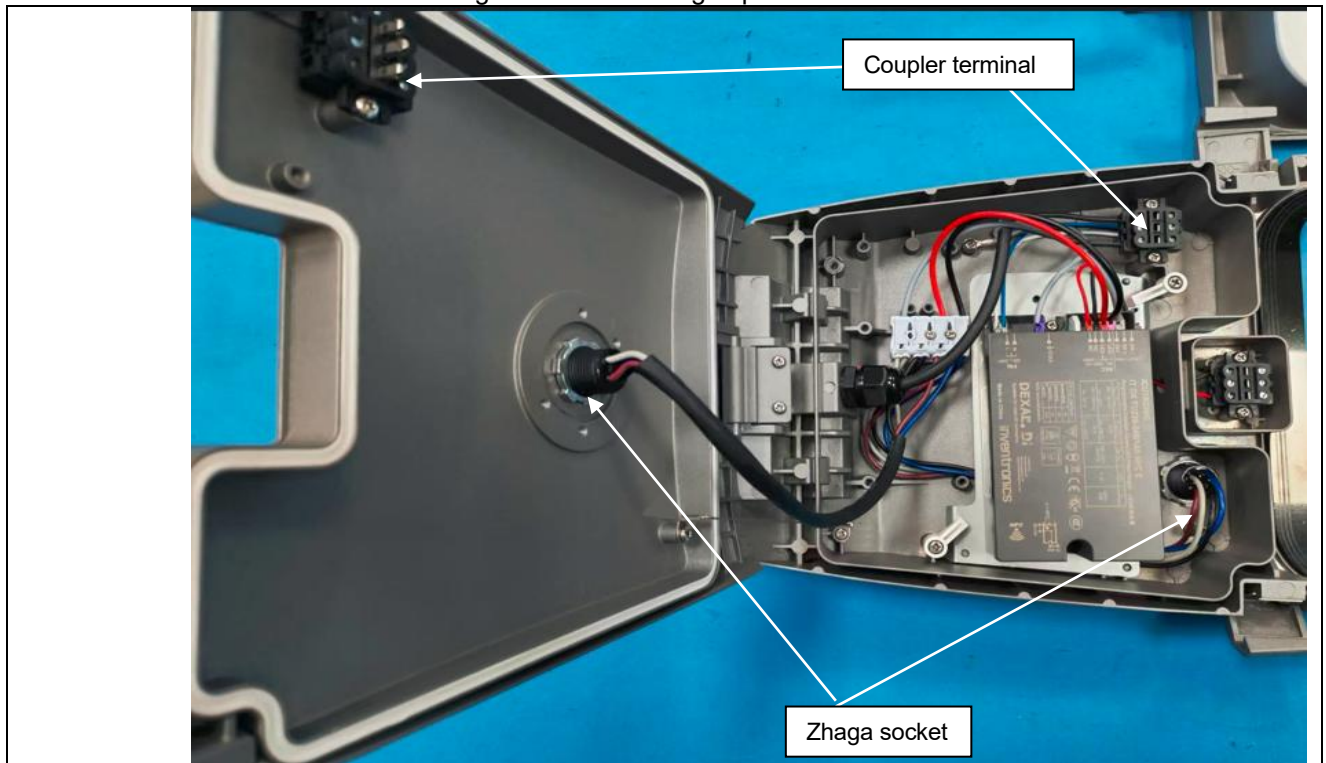
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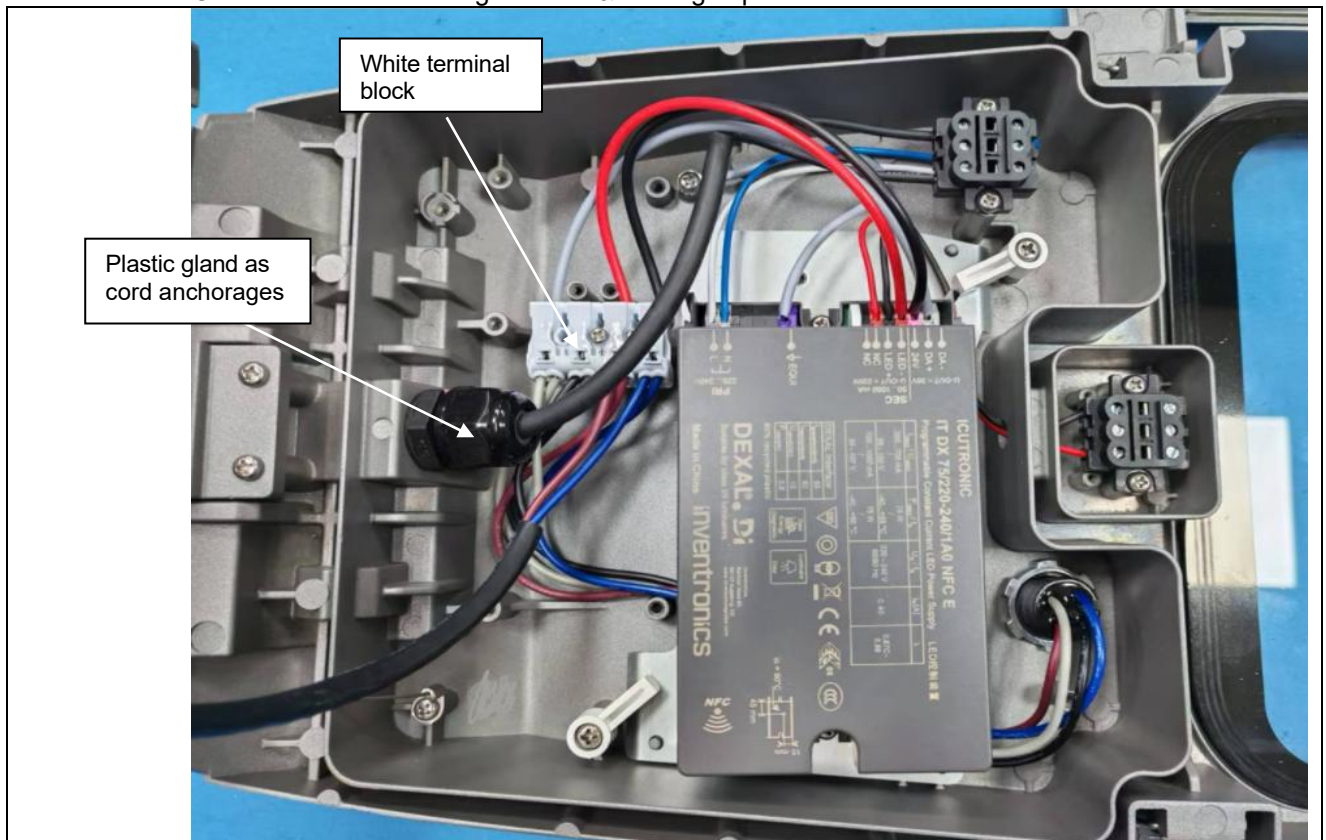
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Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)
Construction 2: with Zhaga socket & sealing cap



Attachment No. 4

Photo documentation

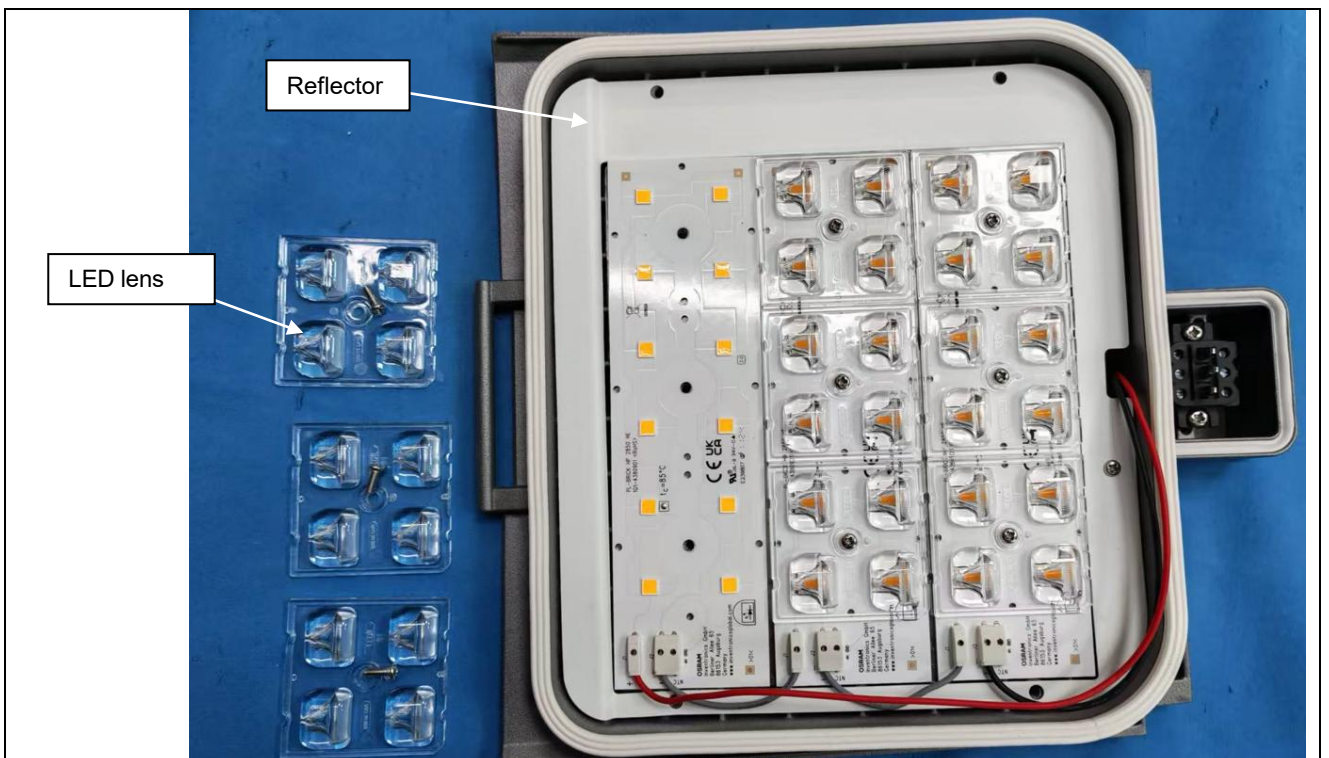
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Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)



Details of: Internal view for AOK-75WiLE-NV-O5-00-4070-T202-P-II-2 (representative model)



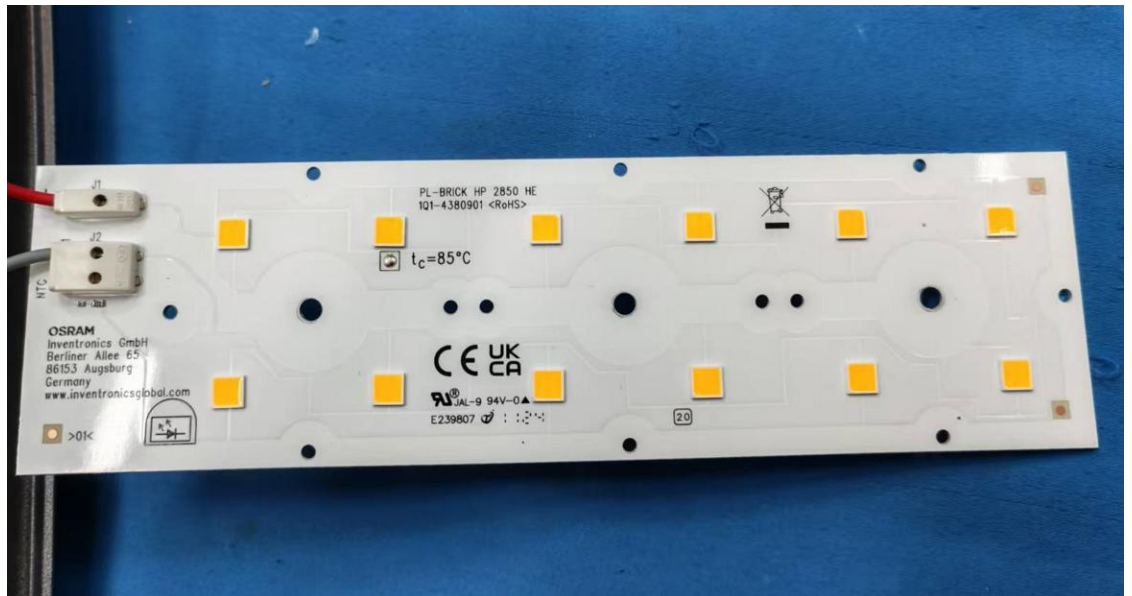
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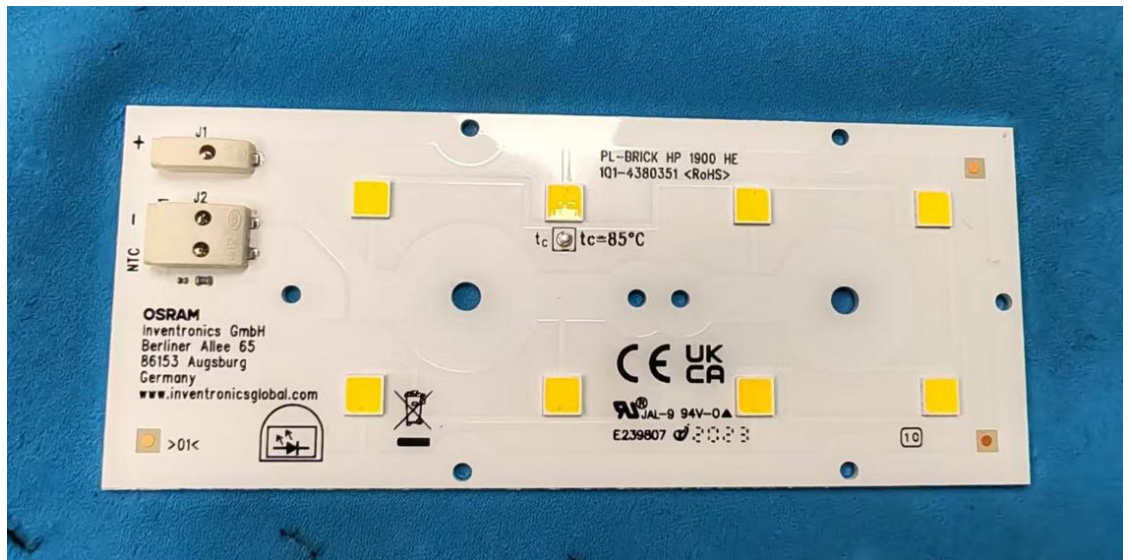
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Details of: LED module view for PL-BRICK HP 2850 XYZ 2x6 HE
representative model: PL-BRICK HP 2850 740 2x6 HE



Details of: LED module view for PL-BRICK HP 1900 XYZ 2x4 HE
representative model: PL-BRICK HP 1900 740 2x4 HE



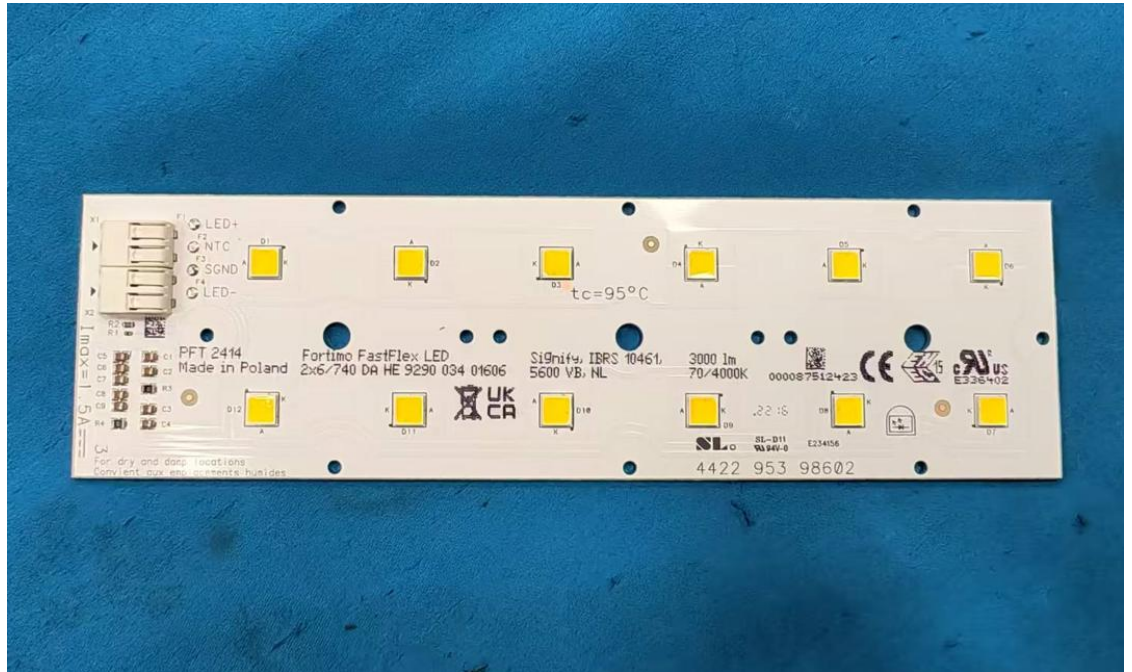
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Photo documentation

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Report No.: 64142255020301

Details of: LED module view for Fortimo FastFlex LED 2x6/zcc DA
representative model: Fortimo FastFlex LED 2x6/740 DA HE



Details of: LED module view for Fortimo FastFlex LED 2x4/zcc DA HE
representative model: Fortimo FastFlex LED 2x4/740 DA HE



Attachment No. 4

Photo documentation

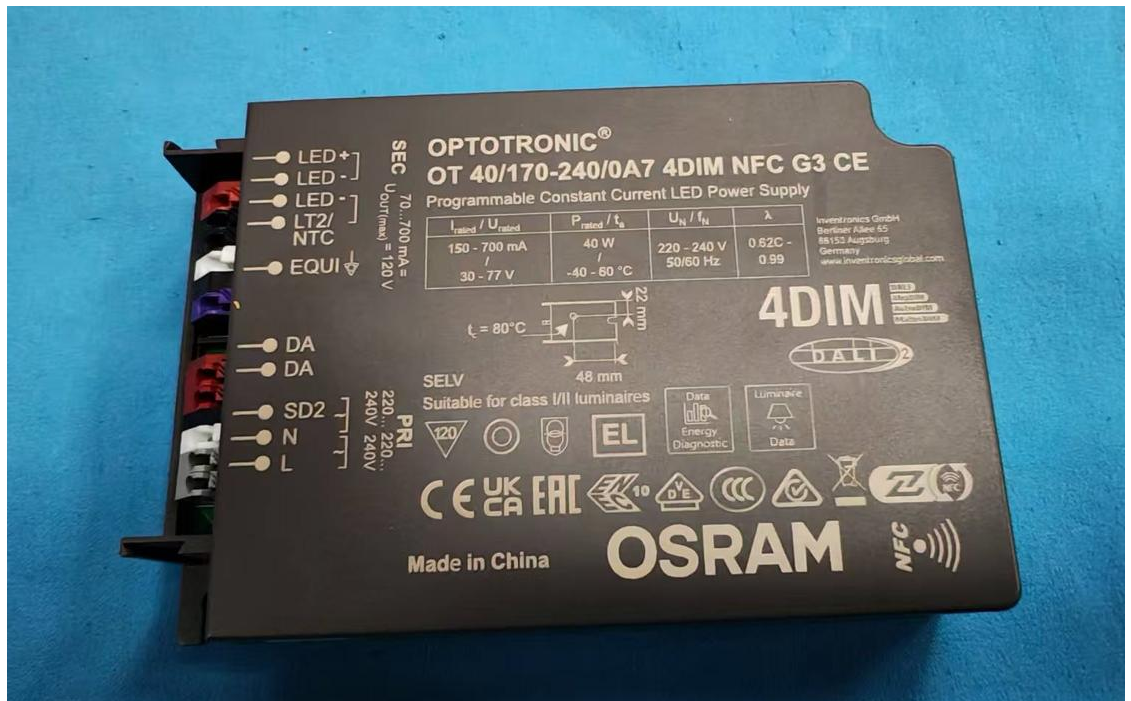
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Details of: LED driver view
OT 40/170-240/0A7 1DIM NFC G3 CE



Details of: LED driver view
OT 40/170-240/0A7 4DIM NFC G3 CE



Attachment No. 4

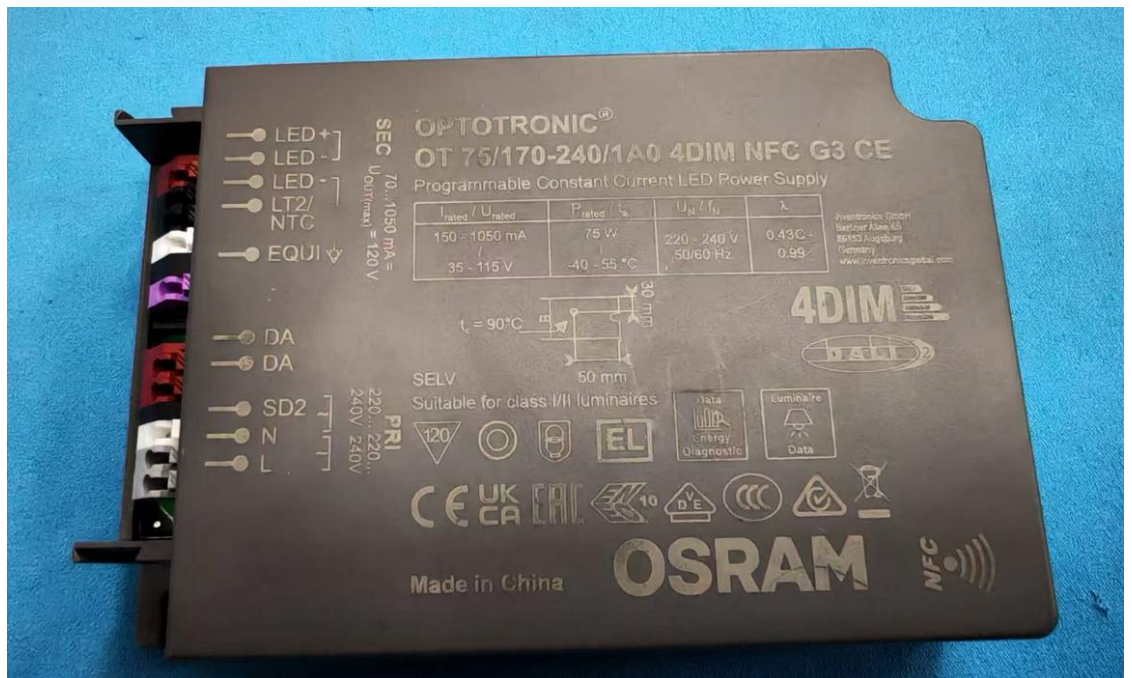
Photo documentation

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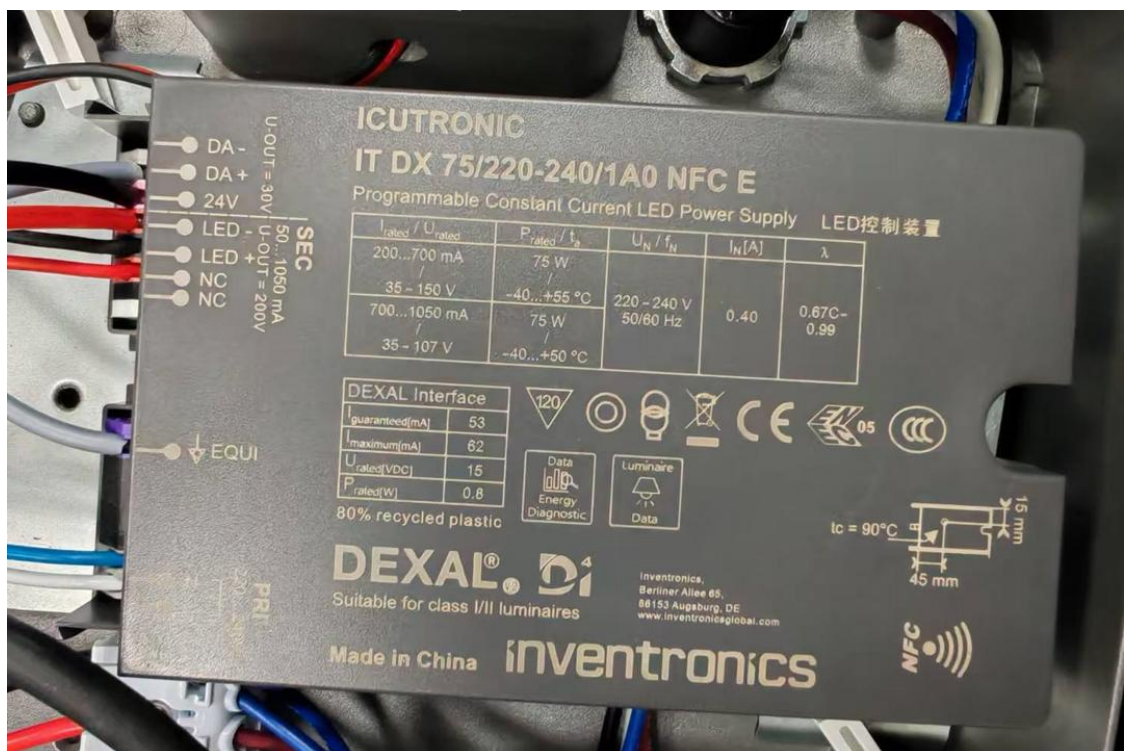
Details of: LED driver view

OT 75/170-240/1A0 4DIM NFC G3 CE



Details of: LED driver view

IT DX 75/220-240/1A0 NFC E



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Photo documentation

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Details of: LED driver view

OT DX 75/170-240/1A0 DIMA NFC G2 CE



End of report