



**TEST REPORT  
IEC 60598-2-5  
Luminaires  
Part 2: Particular requirements  
Section 5: Floodlights**

**Report Number** ..... : AOC251125006S  
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**Name of Testing Laboratory preparing the Report** ..... : Shenzhen AOCE Electronic Technology Service Co., Ltd  
 Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China

**Applicant's name** ..... : Shenzhen RMS Technology Co.,LTD  
**Address** ..... : 4F, Building 1, Anhongji Industrial Park (Yangtai Mountain Campus), Tanluo Huajing Road, Longhua District, Shenzhen, China

**Test specification:**

**Standard** ..... :  IEC 60598-2-5:2015  
 IEC 60598-1:2020  
 European Group Differences And National Differences

**Test procedure** ..... : Type testing

**Non-standard test method** ..... : N/A

**Test Report Form No.** ..... : IEC60598\_2\_5F

**Test Report Form(s) Originator** .... : Intertek Semko AB

**Master TRF** ..... : Dated 2018-04-06

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<b>Test item description .....</b>	LED Flood Light	
<b>Trade Mark .....</b>	N/A	
<b>Manufacturer .....</b>	Shenzhen RMS Technology Co.,LTD 4F, Building 1, Anhongji Industrial Park (Yangtai Mountain Campus), Tanluo Huajing Road, Longhua District, Shenzhen, China	
<b>Model/Type reference.....</b>	See Mdel List	
<b>Ratings.....</b>	100-277 V~, 50/60Hz, 600 W, Class I, IP 66, ta: 45 °C	
<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/>	<b>Testing Laboratory:</b>	Shenzhen AOCE Electronic Technology Service Co., Ltd
	<b>Testing location/ address .....</b>	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
	<b>Tested by (name, function, signature) .....</b>	ZhiCong Xian Technical Engineer <i>ZhiCong Xian</i>
	<b>Approved by (name, function, signature) ..</b>	Robin Liu Technical Manager <i>Robin Liu</i>
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 1:</b>	N/A
	<b>Testing location/ address .....</b>	
	<b>Tested by (name, function, signature) .....</b>	
	<b>Approved by (name, function, signature) ..</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 2:</b>	N/A
	<b>Testing location/ address .....</b>	
	<b>Tested by (name + signature).....</b>	
	<b>Witnessed by (name, function, signature) .:</b>	
	<b>Approved by (name, function, signature) ..</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 3:</b>	N/A
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 4:</b>	N/A
	<b>Testing location/ address .....</b>	
	<b>Tested by (name, function, signature) .....</b>	
	<b>Witnessed by (name, function, signature) .:</b>	
	<b>Approved by (name, function, signature) ..</b>	
	<b>Supervised by (name, function, signature) :</b>	

**List of Attachments (including a total number of pages in each attachment):****Attachment No.1:** European Group Differences And National Differences.**Attachment No.2:** Clause 13 of EN IEC 62031**Attachment No.3:** IEC TR 62778**Attachment No.4:** Photo document.**Summary of testing:****Tests performed (name of test and test clause):**

- EN 60598-2-5:2015
- EN IEC 60598-1:2024+A11:2024
- Clause 13 of EN IEC 62031:2020+A11:2021
- IEC TR 62778:2014
- EN 62493:2015+A1:2022

**Testing location:**

Shenzhen AOCE Electronic Technology Service Co., Ltd  
 Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China

**Summary of compliance with National Differences:**

European Group Differences And National Differences.

**The product fulfils the requirements of EN 60598-2-5:2015 & EN IEC 60598-1:2024+A11:2024**

**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.

**Remark:**

1. The marking plate of others are identical with model FL600F , except the model number and rated power.
2. The above marking is the minimum requirements required by the safety standard. For the final production, the additional mark which do not give rise to misunderstanding may be added.
3. The height of graphical symbols shall not be less than 5 mm, the height of letters shall not be less than 2 mm

<b>Test item particulars</b> ..... :	
<b>Classification of installation and use</b> ..... :	Fixed luminaire
<b>Supply Connection</b> .....	Supply cords
..... :	
<b>Possible test case verdicts:</b>	
- 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)
<b>Testing</b> ..... :	
<b>Date of receipt of test item</b> .....	2025-11-10
<b>Date (s) of performance of tests</b> .....	2025-11-10 to 2025-12-05
<b>General remarks:</b>	
<p>The tested sample(s) and the sample information are provided by the client.          "(See Enclosure #)" refers to additional information appended to the report.          "(See appended table)" refers to a table appended to the report.  <b>Note: EN Group Differences together with National Differences and Special National Conditions, if any, are in the Appendix to the main body of this TRF.</b>  <b>Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.</b>          The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid.          When determining for test conclusion, measurement uncertainty of tests has been considered.          Clause numbers between brackets refer to clauses in IEC 60598-1.  <b>Note: clauses marked “*” not included in CNAS scope.</b></p>	
<b>Manufacturer’s Declaration per sub-clause 4.2.5 of IEC 02:</b>	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided . :	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
<b>When differences exist; they shall be identified in the General product information section.</b>	
<b>Name and address of factory (ies)</b> .....	Same as manufacturer

**General product information and other remarks:**

Class I luminaires

Model List:

Model name	Size(mm)	Power(W)
FL010A	225x185x42mm	10W
FL020A		20W
FL030A		30W
FL050A		50W
FL070A		70W
FL100A	295x240x52mm	100W
FL120A		120W
FL150A		150W
FL200A		200W
FL240A		240W
FL300A	440x390x62mm	300W
FL010F	198x194x42mm	10W
FL020F		20W
FL030F		30W
FL050F		50W
FL070F		70W
FL100F	310x300x53mm	100W
FL120F		120W
FL150F		150W
FL200F		200W
FL240F		240W
FL300F	430x400x58mm	300W
FL400F	445x548x70mm	400W
FL500F	560x555x76mm	500W
FL600F	630x630x76mm	600W
FL010B	148x150x30mm	10W
FL020B		20W
FL030B		30W
FL050B		50W
FL070B		70W
FL100B	238x228x35mm	100W
FL120B		120W
FL150B		150W
FL200B		200W
FL240B		240W
FL300B	360x350x50mm	300W
FL400B	425x380x50mm	400W
FL500B	460x410x50mm	500W

IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
<b>5.4 (0+2)</b>	<b>CLASSIFICATION OF LUMINAIRES</b>		P
<b>5.4 (0)</b>	<b>General requirements and tests</b>		—
5.4 (0.3)	More sections applicable .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Section/s:	—
5.4 (0.5)	Components	(see Annex 1)	—
5.4 (0.7)	Information for luminaire design in light sources standards		—
5.4 (0.7.2)	Light source safety standard .....	IEC 62031	—
	Luminaire design in the light source safety standard		—
<b>5.4 (2)</b>	<b>Classification of luminaires</b>		—
5.4 (2.2)	Type of protection .....	Class I	P
5.4 (2.3)	Degree of protection .....	IP 66	P
5.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
5.4 (2.5)	Luminaire for normal use .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
	Luminaire for rough service .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—

<b>5.5 (3)</b>	<b>MARKING</b>		P
5.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
5.5 (3.3)	Additional information		P
	Language of instructions		P
5.5 (3.3.1)	Combination luminaires		N/A
5.5 (3.3.2)	Nominal frequency in Hz		P
5.5 (3.3.3)	Operating temperature		N/A
5.5 (3.3.5)	Wiring diagram		N/A
5.5 (3.3.6)	Special conditions		N/A
5.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
5.5 (3.3.8)	Limitation for semi-luminaires		N/A
5.5 (3.3.9)	Power factor and supply current		P
5.5 (3.3.10)	Suitability for use indoors		N/A
5.5 (3.3.11)	Luminaires with remote control		N/A

<b>IEC 60598-2-5</b>			
Clause	Requirement + Test	Result - Remark	Verdict
5.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
5.5 (3.3.13)	Specifications of protective shields		N/A
5.5 (3.3.14)	Symbol for nature of supply		P
5.5 (3.3.15)	Rated current of socket outlet		N/A
5.5 (3.3.16)	Rough service luminaire		N/A
5.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y	P
5.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
5.5 (3.3.19)	Protective conductor current in instruction if applicable		N/A
5.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
5.5 (3.3.21)	Non-replaceable and non-user replaceable light sources information provided	Non-user replaceable	P
5.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
5.5 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		N/A
5.5 (3.3.24)	If not supplied with terminal block, information on the packaging		P
5.5 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
5.5 (-)	Additional information if applicable		P
	a) Operation position		P
	b) Weight and dimensions		P
	c) Maximum protected area		P
	d) Limitation of use indoors and/or outdoor		P
	e) Maximum mounting height if $\leq 5$ m		N/A
<b>5.6 (4)</b>	<b>CONSTRUCTION</b>		P
5.6 (4.2)	Components replaceable without difficulty		P
5.6 (4.3)	Wireways smooth and free from sharp edges		P



IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
<b>5.6 (4.4)</b>	<b>Lampholders</b>		N/A
5.6 (4.4.1)	Integral lampholder		N/A
5.6 (4.4.2)	Wiring connection		N/A
5.6 (4.4.3)	Lampholder for end-to-end mounting		N/A
5.6 (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
5.6 (4.4.5)	Peak pulse voltage		N/A
5.6 (4.4.6)	Centre contact		N/A
5.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
5.6 (4.4.8)	Lamp connectors		N/A
5.6 (4.4.9)	Caps and bases correctly used		N/A
5.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
<b>5.6 (4.5)</b>	<b>Starter holders</b>		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
<b>5.6 (4.6)</b>	<b>Terminal blocks</b>		N/A
	Tails		N/A
	Unsecured blocks		N/A
<b>5.6 (4.7)</b>	<b>Terminals and supply connections</b>		P
5.6 (4.7.1)	Contact to metal parts		N/A
5.6 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
5.6 (4.7.3)	Terminals for supply conductors		P
5.6 (4.7.3.1)	Welded method and material		N/A

<b>IEC 60598-2-5</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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
5.6 (4.7.4)	Terminals other than supply connection		N/A
5.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
5.6 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
<b>5.6 (4.8)</b>	<b>Switches</b>		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
<b>5.6 (4.9)</b>	<b>Insulating lining and sleeves</b>		N/A
5.6 (4.9.1)	Retainment		N/A
	Method of fixing .....		N/A
5.6 (4.9.2)	Insulated linings and sleeves:		N/A
	Resistant to a temperature > 20 °C to the wire temperature or		N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C) .....		N/A
<b>5.6 (4.10)</b>	<b>Double or reinforced insulation</b>		N/A
5.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N/A
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
5.6 (4.10.2)	Assembly gaps:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- not coincidental		N/A
	- no straight access with test probe		N/A
5.6 (4.10.3)	Retainment of insulation:		N/A
	- fixed		N/A
	- unable to be replaced; luminaire inoperative		N/A
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
5.6 (4.10.4)	Protective impedance device		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A
	Y1 or Y2 capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
<b>5.6 (4.11)</b>	<b>Electrical connections and current-carrying parts</b>		<b>P</b>
5.6 (4.11.1)	Contact pressure		P
5.6 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
5.6 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
5.6 (4.11.4)	Material of current-carrying parts		P
5.6 (4.11.5)	No contact to wood or mounting surface		P
5.6 (4.11.6)	Electro-mechanical contact systems		N/A
<b>5.6 (4.12)</b>	<b>Screws and connections (mechanical) and glands</b>		<b>P</b>
5.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part.....: 0.5 Nm, Fixing screw of the earthing	0.5 Nm, Fixing screw of the earthing	P
	Torque test: torque (Nm); part.....: 0.5 Nm, Fixing screw of the LED driver	0.5 Nm, Fixing screw of the LED driver	P
	Torque test: torque (Nm); part.....: 1.2 Nm, Fixing screw of the enclosure	1.2 Nm, Fixing screw of the enclosure	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Torque test: torque (Nm); part.....:	1.2 Nm, Fixing screw of the LED PCB	P
5.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
5.6 (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
5.6 (4.12.5)	Screwed glands; force (Nm).....:	6.25Nm	P
<b>5.6 (4.13)</b>	<b>Mechanical strength</b>		<b>P</b>
5.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm) .....	0.5	P
	- other parts; energy (Nm) .....	0.7	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
5.6 (4.13.2)	Metal parts have adequate mechanical strength		P
5.6 (4.13.3)	Straight test finger		P
5.6 (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
	Tumbling barrel		N/A
<b>5.6 (4.14)</b>	<b>Suspensions, fixings and means of adjusting</b>		<b>P</b>
5.6 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	B) torque 2,5 Nm		N/A
	C) bracket arm; bending moment (Nm).....:		P
	D) load track-mounted luminaires		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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
5.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg) .....		—
	Stress in conductors (N/mm <sup>2</sup> ) .....		N/A
	Mass (kg) of semi-luminaire .....		N/A
	Bending moment (Nm) of semi-luminaire .....		N/A
5.6 (4.14.3)	Adjusting devices:		P
	- flexing test; number of cycles.....	45	P
	- strands broken.....	No broken	P
	- electric strength test afterwards		P
5.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
5.6 (4.14.5)	Guide pulleys		N/A
5.6 (4.14.6)	Strain on socket-outlets		N/A
<b>5.6 (4.15)</b>	<b>Flammable materials</b>		<b>P</b>
	- glow-wire test 650°C .....	See Test Table 5.15 (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
5.6 (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
<b>5.6 (4.16)</b>	<b>Luminaires for mounting on normally flammable surfaces</b>		<b>P</b>
	No lamp control gear .....	(compliance with Section 12)	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
5.6 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
5.6 (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
5.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
<b>5.6 (4.17)</b>	<b>Drain holes</b>		N/A
	Clearance at least 5 mm		N/A
<b>5.6 (4.18)</b>	<b>Resistance to corrosion</b>		<b>P</b>
5.6 (4.18.1)	- rust-resistance		P
5.6 (4.18.2)	- season cracking in copper		N/A
5.6 (4.18.3)	- corrosion of aluminium		N/A
5.6 (4.19)	Igniters compatible with ballast		N/A
5.6 (4.20)	Rough service vibration		N/A
<b>5.6 (4.21)</b>	<b>Protective shield</b>		<b>N/A</b>
5.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
5.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
5.6 (4.21.3)	No direct path		N/A
5.6 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 5.15 (13.3.2)	N/A
5.6 (4.22)	Attachments to lamps not cause overheating or damage		N/A
5.6 (4.23)	Semi-luminaires comply Class II		N/A
<b>5.6 (4.24)</b>	<b>Photobiological hazards</b>		<b>P</b>
5.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.6 (4.24.2)	Retinal blue light hazard		P
	Class of risk group assessed according to IEC/TR 62778 .....		—
	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
<b>5.6 (4.25)</b>	<b>Mechanical hazard</b>		<b>P</b>
	No sharp point or edges		P
<b>5.6 (4.26)</b>	<b>Short-circuit protection</b>		N/A
5.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
5.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
<b>5.6 (4.27)</b>	<b>Terminal blocks with integrated screwless earthing contacts</b>		N/A
	Test according Annex V		N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 $\Omega$		N/A
	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 $\Omega$		N/A
	Voltage drop test, resistance < 0,05 $\Omega$		N/A
<b>5.6 (4.28)</b>	<b>Fixing of thermal sensing control</b>		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

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Clause	Requirement + Test	Result - Remark	Verdict
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material (°C) .....:		—
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
<b>5.6 (4.29)</b>	<b>Luminaires with non-replaceable light source</b>		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
<b>5.6 (4.30)</b>	<b>Luminaires with non-user replaceable light source</b>		P
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	Minimum two fixing means		P
<b>5.6 (4.31)</b>	<b>Insulation between circuits</b>		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		N/A
5.6 (4.31.1)	SELV circuits		N/A
	Used SELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of SELV circuits from LV supply		N/A
	Insulating of SELV circuits from other non SELV circuits		N/A
	Insulating of SELV circuits from FELV		N/A
	Insulating of SELV circuits from other SELV circuits		N/A
	SELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter 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



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Clause	Requirement + Test	Result - Remark	Verdict
5.6 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage $\leq$ ELV		N/A
	Insulating of FELV circuits from LV supply		N/A
	FELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter 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
5.6 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1		P
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N/A
	- conductive parts are connected together		N/A
	- test according 7.2.3		N/A
	- conductive part not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
<b>5.6 (4.32)</b>	<b>Overvoltage protective devices</b>		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
<b>5.6 (4.33)</b>	<b>Luminaire powered via information technology communication cabling</b>		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		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
<b>5.6 (4.34)</b>	<b>Electromagnetic fields (EMF)</b>		P
	No harmful electromagnetic fields		P
<b>5.6 (4.35)</b>	<b>Protection against moving fan blades</b>		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 $\geq 0.5$ mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan $\leq 2$ W at rated voltage		N/A
<b>5.6 (4.36)</b>	<b>Track-mounted luminaires</b>		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
5.6.1 (-)	At least IPX3 if for outdoor use	IP 66	P
5.6.2 (-)	Lampholder brackets and lamp supports		N/A
5.6.3 (-)	Adjusting means		N/A
5.6.4 (-)	Controlling components		N/A
5.6.5 (-)	Fixing device		P
	Wind force test		P
5.6.6 (-)	Locking of angular adjustment		N/A
5.6.7 (-)	Vibration resistance		P
5.6.8 (-)	Requirement on glass cover if mounting height > 5 m		P
	Method of protection .....		—

<b>5.7 (11)</b>	<b>CREEPAGE DISTANCES AND CLEARANCES</b>		P
5.7 (11.2.1)	Impulse withstand category (Normal category II)	Category II <input checked="" type="checkbox"/> Category III <input type="checkbox"/>	—
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
5.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 5.7 (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 5.7 (11.2) II	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 5.7 (11.2) II	N/A
5.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 5.7 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with $U_p$	See Test Table 5.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 5.7 (11.2) II	N/A

<b>5.8 (7)</b>	<b>PROVISION FOR EARTHING</b>		P
5.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 $\Omega$ .....: 0.03		P
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a groove		N/A
	Earth makes contact first		P
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		P
5.8 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		P
5.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		P
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
5.8 (7.2.5)	Earth terminal integral part of connector socket		N/A
5.8 (7.2.6)	Earth terminal adjacent to mains terminals		P
5.8 (7.2.7)	Electrolytic corrosion of the earth terminal		P
5.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
5.8 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
5.8 (7.2.11)	Earthing core coloured green-yellow		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Length of earth conductor		P
<b>5.9 (14)</b>	<b>SCREW TERMINALS</b>		N/A
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 3)	N/A
<b>5.9 (15)</b>	<b>SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS</b>		N/A
	Separately approved; component list .....	(see Annex 1)	N/A
	Part of the luminaire .....	(see Annex 4)	N/A
<b>5.10 (5)</b>	<b>EXTERNAL AND INTERNAL WIRING</b>		P
<b>5.10 (5.2)</b>	<b>Supply connection and external wiring</b>		P
5.10 (5.2.1)	Means of connection .....	Supply cords	P
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV $\leq 25$ V a.c./60 V d.c. or protected from outdoor environment		N/A
5.10 (5.2.2)	Type of cable .....		P
	Nominal cross-sectional area (mm <sup>2</sup> ) .....		P
	Cables equal to IEC 60227 or IEC 60245		P
5.10 (5.2.3)	Type of attachment, X, Y or Z		P
5.10 (5.2.5)	Type Z not connected to screws		N/A
5.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
5.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
5.10 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
5.10 (5.2.9)	Locking of screwed bushings		N/A
5.10 (5.2.10)	Cord anchorage:		P

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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
5.10 (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
5.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		P
5.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N).....:		P
	- torque test: torque (Nm).....:		P
	- displacement $\leq 2$ mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
	- function independent of electrical connection		N/A
5.10 (5.2.11)	External wiring passing into luminaire		P
5.10 (5.2.12)	Looping-in terminals		N/A
5.10 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
5.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Other appliance inlet or connector according relevant IEC standard		N/A
5.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
5.10 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
<b>5.10 (5.3)</b>	<b>Internal wiring</b>		<b>P</b>
5.10 (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 earth only		P
5.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm <sup>2</sup> ) .....		N/A
	Insulation thickness (mm) .....		N/A
	Extra insulation added where necessary		N/A
5.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Cross-sectional area (mm <sup>2</sup> ) .....	(see Annex 1)	P
5.10 (5.3.1.3)	Double or reinforced insulation for class II		N/A
5.10 (5.3.1.4)	Conductors without insulation		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.10 (5.3.1.5)	SELV current-carrying parts		N/A
5.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
5.10 (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
5.10 (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
5.10 (5.3.4)	Joints and junctions effectively insulated		N/A
5.10 (5.3.5)	Strain on internal wiring		N/A
5.10 (5.3.6)	Wire carriers		N/A
5.10 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N/A
<b>5.10 (5.4)</b>	<b>Test to determine suitability of conductors having a reduced cross-sectional area</b>		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

<b>5.11 (8)</b>	<b>PROTECTION AGAINST ELECTRIC SHOCK</b>		P
5.11 (8.2.1)	Live parts not accessible		P
	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		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P

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Clause	Requirement + Test	Result - Remark	Verdict
	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		N/A
	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
5.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
5.11 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		N/A
	- glass protective shields not used as supplementary insulation		N/A
5.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
5.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load (V) .....		N/A
	- no-load 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
	- nominal 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
5.11 (8.2.4)	Portable luminaire has protection independent of supporting surface		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.11 (8.2.5)	Compliance with the standard test finger or relevant probe		P
5.11 (8.2.6)	Covers reliably secured		P
5.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 $\mu$ F not exceed 50 V 1 min after disconnection		P
	Portable luminaire with capacitor > 0,1 $\mu$ F (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 $\mu$ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N/A

<b>5.12 (12)</b>	<b>ENDURANCE TEST AND THERMAL TEST</b>		<b>P</b>
5.12.2 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 5.13		—
<b>5.12 (12.2)</b>	<b>Selection of lamps and ballasts</b>		—
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Controlgear if separate and not supplied	(Controlgear used see Annex 2)	—
<b>5.12 (12.3)</b>	<b>Endurance test</b>		<b>P</b>
	a) mounting-position .....	Normal mounting	—
	b) test temperature ( $^{\circ}$ C).....	60	—
	c) total duration (h) .....	240	—
	d) supply voltage (V).....	1.1x277	—
	d) if not equipped with controlgear, constant voltage/current (V) or (A) .....		—
	e) luminaire ceases to operate		—
5.12 (12.3.2)	After endurance test:		<b>P</b>
	- no part unserviceable		<b>P</b>
	- luminaire not unsafe		<b>P</b>
	- no damage to track system		<b>N/A</b>
	- marking legible		<b>P</b>
	- no cracks, deformation etc.		<b>P</b>
<b>5.12 (12.4)</b>	<b>Thermal test (normal operation)</b>	(see Annex a/b/c)	<b>P</b>
<b>5.12 (12.5)</b>	<b>Thermal test (abnormal operation)</b>	(see Annex 2)	<b>N/A</b>

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Clause	Requirement + Test	Result - Remark	Verdict
<b>5.12 (12.6)</b>	<b>Thermal test (failed lamp control gear condition):</b>		N/A
5.12 (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
5.12 (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
<b>5.12 (12.7)</b>	<b>Thermal test (failed lamp control gear in plastic luminaires):</b>		N/A
5.12 (12.7.1)	Luminaire without temperature sensing control		N/A
5.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 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.....		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- calculated temperature of fixing point/exposed part (°C) .....		—
	Ball-pressure test..... :	See Test Table 5.15 (13.2.1)	N/A
5.12 (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 Test Table 5.15 (13.2.1)	N/A
5.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 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
5.12 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link .....	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- manual reset cut-out .....	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- auto reset cut-out .....	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- case of abnormal conditions .....		—
	- highest measured temperature of fixing point/ exposed part (°C): .....		—
	Ball-pressure test..... :	See Test Table 5.15 (13.2.1)	N/A
5.12.1 (-)	Reduction 10 °C of measured temperatures if for outdoor use		—
5.12.2 (-)	Glass covers used within the thermal limits		N/A
<b>5.13 (9)</b>	<b>RESISTANCE TO DUST AND MOISTURE</b>		P
5.13.1 (-)	If IP > IP 20 the order of tests as specified in clause 5.12		P
5.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP .....	IP 66	—

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Clause	Requirement + Test	Result - Remark	Verdict
	- mounting position during test .....		—
	- fixing screws tightened; torque (Nm).....		—
	- tests according to clauses .....		—
	- 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 or pressure watertight 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		P
	g) no damage of protective shield or glass envelope		P
5.13 (9.3)	Humidity test 48 h		P

<b>5.14 (10)</b>	<b>INSULATION RESISTANCE AND ELECTRIC STRENGTH</b>		P
5.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø .....		—
	Insulation resistance (MΩ) .....		—
	SELV		N/A
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface .....		N/A
	- between current-carrying parts and metal parts of the luminaire .....		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 .....		N/A
	- Insulation bushings as described in Section 5 .....		N/A
	Other than SELV		P
	- between live parts of different polarity.....	>100 MΩ	P
	- between live parts and mounting surface .....	>100 MΩ	P
	- between live parts and metal parts .....	>100 MΩ	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 .....	>100 MΩ	P
	- Insulation bushings as described in Section 5 .....		N/A
5.14 (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		N/A
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface.....		N/A
	- between current-carrying parts and metal parts of the luminaire .....		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
	- Insulation bushings as described in Section 5 .....		N/A
	Other than SELV		P
	- between live parts of different polarity.....	1554 V	P
	- between live parts and mounting surface .....	1554 V	P
	- between live parts and metal parts .....	1554 V	P
	- between live parts of different polarity through action of a switch .....		N/A

IEC 60598-2-5			
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.....:	1554 V	P
	- Insulation bushings as described in Section 5 .....		N/A
5.14 (10.3)	Touch current or protective conductor current (mA) :	protective conductor current: 0.03mA	P

5.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
5.15 (13.2.1)	Ball-pressure test.....:	See Test Table 5.15 (13.2.1)	P
5.15 (13.3.1)	Needle-flame test (10 s) .....	See Test Table 5.15 (13.3.1)	P
5.15 (13.3.2)	Glow-wire test (650°C) .....	See Test Table 5.15 (13.3.2)	P
5.15 (13.4)	Proof tracking test (IEC 60112) .....	See Test Table 5.15 (13.4)	N/A

IEC 60598-2-5							
Clause	Requirement + Test				Result - Remark		Verdict
5.7 (11.2)	<b>TABLE I: Creepage distances and clearances</b>						P
	<b>Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages</b>						P
	<b>Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*</b>						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	B	> 3.1	2.31	11.1B	> 5.1	3.85	11.1A
Working voltage (V) .....					277V		—
PTI .....					< 600 <input checked="" type="checkbox"/> ≥ 600 <input type="checkbox"/>		—
Pulse voltage or $U_P$ if applicable (kV) .....					-		—
Supplementary information: Between L and N before fuse							
Distance 2:	B	> 3.1	2.31	11.1B	> 5.1	3.85	11.1A
Working voltage (V) .....					277 V		—
PTI .....					< 600 <input checked="" type="checkbox"/> ≥ 600 <input type="checkbox"/>		—
Pulse voltage or $U_P$ if applicable (kV) .....					-		—
Supplementary information: Between live parts and metal enclosure							
Distance 3:	B	> 3.1	2.31	11.1B	> 5.1	3.85	11.1A
Working voltage (V) .....					277 V		—
PTI .....					< 600 <input checked="" type="checkbox"/> ≥ 600 <input type="checkbox"/>		—
Pulse voltage or $U_P$ if applicable (kV) .....					-		—
Supplementary information: Between live parts and mounting surface							

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

5.7 (11.2)	<b>TABLE II: Creepage distances and clearances</b>						N/A
<b>Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages</b>							
<b>Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2</b>							
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:							
Working voltage (V) .....							—
Frequency if applicable (kHz) .....							—

IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
PTI .....		< 600 <input type="checkbox"/> ≥ 600 <input type="checkbox"/>	—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) .....			—
Supplementary information:			
Distance 2:			
Working voltage (V) .....			—
Frequency if applicable (kHz) .....			—
PTI .....		< 600 <input type="checkbox"/> ≥ 600 <input type="checkbox"/>	—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) .....			—
Supplementary information:			
Distance 3:			
Working voltage (V) .....			—
Frequency if applicable (kHz) .....			—
PTI .....		< 600 <input type="checkbox"/> ≥ 600 <input type="checkbox"/>	—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) .....			—
Supplementary information:			

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

5.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			P
Allowed impression diameter (mm) .....	2			—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
LED lens	See Annex 1	75	0.5	
LED PCB	See Annex 1	125	0.8	
Supplementary information: -				



IEC 60598-2-5					
Clause	Requirement + Test	Result - Remark			Verdict
<b>5.15 (13.3.1)</b>	<b>TABLE: Needle-flame test (IEC 60695-11-5)</b>				<b>P</b>
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
LED PCB	See Annex 1	10	No	0	Pass
Supplementary information: -					

<b>5.15 (13.3.2)</b>	<b>TABLE: Glow-wire test (IEC 60695-2-11)</b>				<b>P</b>
<b>Glow wire temperature .....</b>		650°C			—
Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
LED lens	See Annex 1	No	0	pass	
Supplementary information: -					

<b>5.15 (13.4)</b>	<b>TABLE: Proof tracking test (IEC 60112)</b>				<b>N/A</b>
<b>Test voltage PTI .....</b>		175 V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
Supplementary information:					

IEC 60598-2-5						
Clause	Requirement + Test			Result - Remark		Verdict
<b>ANNEX 1</b>	<b>TABLE: Critical components information</b>					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1)</sup>
LED	C	Bridgelux	SMD2835	VF:9.0V IF:100MA 2700-6500K	IEC 62778	Test with appliance
LED	C	Lumileds	SMD2835	VF:9.0V IF:100MA 2700-6500K	IEC 62778	Test with appliance
LED module PCB	C	Shenzhen Junxin Aluminum Substrate Co Ltd	JX-L	V-0, 130°C	IEC 60598-2-1 IEC 60598-1	UL E502851 Test with appliance
LED module PCB	C	HUIZHOU SEA INDUSTRY LTD	HC-02	V-0, 130°C	IEC 60598-2-1 IEC 60598-1	UL E346036 Test with appliance
LED cover	C	TEIJIN POLYCARBONATE CHINA LTD	L-1250U(#)(f1) , L-1250V(#)(f1) , L-1250Z(#)(f1)	PC	UL 94+ EN 60598-2-5 EN 60598-1	UL E245526+ Test with appliance
LED cover	C	FORMOSA IDEMITSU PETROCHEMICAL CORPORATION	IV2200R(f1)	PC	UL 94+ EN 60598-2-5 EN 60598-1	UL E238753+ Test with appliance
LED driver	B	Lifud Technology Co.,Ltd	LF-FAA100 LF-FAB100 LF-FAC100	Input: 100-240VAC, 50/60Hz,; Output: DC180-260V 0.25-0.5A	EN 61347-2-13	TUV ENEC No.U6 004006 0221 Rev.01
			LF-FAA150 LF-FAB150 LF-FAC150	Input: 100-240VAC, 50/60Hz,; Output: DC180-260V 0.5-0.75A		TUV ENEC No.U6 004006 0221 Rev.01
			LF-FAA200 LF-FAB200 LF-FAC200	Input: 100-240VAC, 50/60Hz,; Output: DC180-260V 0.65-0.9A		TUV ENEC No.U6 004006 0216 Rev.01
			LF-FAA240 LF-FAB240	Input: 100-240VAC,		TUV ENEC No.U6

IEC 60598-2-5						
Clause	Requirement + Test			Result - Remark		Verdict
			LF-FAC240	50/60Hz;; Output: DC180-260V 0.75-1.1A		004006 0216 Rev.01
			LF-FAA320 LF-FAB320 LF-FAC320	Input: 100-240VAC, 50/60Hz;; Output: DC180-260V 1.1-1.5A	EN 61347-2-13	TUV ENEC No.U6 004006 0216 Rev.01
LED driver	B	Shenzhen Sonsen Electronics Co., Ltd.	SS-80NH- V300BB SS-80NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.1-0.4A	IEC61347	TUV CB SG PSB-LE- 06260
			SS-100NH- V300BB SS-100NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.125-0.5A	IEC61347	TUV CB SG PSB-LE- 06260
			SS-150NH- V300BB SS-150NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.19-0.75A	IEC61347	TUV CB SG PSB-LE- 06260
			SS-200NH- V300BB SS-200NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.25-1.0A	IEC61347	TUV CB SG PSB-LE- 06260
			SS-240NH- V300BB SS-240NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.3-1.2A	IEC61347	TUV CB SG PSB-LE- 06260
			SS-320NH- V300BB SS-320NH- V300BHB	Input: 100-277VAC, 50/60Hz;; Output: DC180-300V 0.4-1.5A	IEC61347	TUV CB SG PSB-LE- 06260
		GUAN	DL-12W- C240-MPC	Input: 100-277VAC, 50/60Hz;; Output: DC21-42V 0.24A	IEC 61347-2-13	CE
			DL-20W- C400-MPC	Input: 100-277VAC, 50/60Hz;; Output: DC21-	IEC 61347-2-13	CE

IEC 60598-2-5						
Clause	Requirement + Test			Result - Remark		Verdict
LED driver	B	GDONG DONE POWER TECHNOLOGY CO.,LTD.	DL-30W-C600-MPC	42V 0.4A Input: 100-277VAC, 50/60Hz;; Output: DC25-50V 0.6A	IEC 61347-2-13	CE
			DL-50W-C1050-MPC	Input: 100-277VAC, 50/60Hz;; Output: DC25-50V 1.05A	IEC 61347-2-13	CE
LED driver	B	GUANGDONG DONE POWER TECHNOLOGY CO.,LTD.	DL-12W-Cxxx-MCC	Input: 100-240VAC, 50/60Hz;; Output: DC21-42V 0.21A	IEC 61347-2-13	TUV CB DE 2-032016
			DL-20W-Cxxx-MCC	Input: 100-240VAC, 50/60Hz;; Output: DC21-42V 0.4A	IEC 61347-2-13	TUV CB DE 2-032017
			DL-30Z-C600-MAC	Input: 100-277VAC, 50/60Hz;; Output: DC25-50V 0.6A	IEC 61347-2-13	TUV CB JPTUV-167901
			DL-50Z-C1050-MAC	Input: 100-277VAC, 50/60Hz;; Output: DC25-50V 1.05A	IEC 61347-2-13	TUV CB JPTUV-164131
Terminal block	C	Jiangxi Gaochao Industrial Co.,Ltd.	GC222-2, GC222-3, GC222-4, GC222-5, GC222-8, KB58-8	0.2-4.0mm <sup>2</sup> , T110, 450VAC	EN 60998-1 EN 60998-2-2	TUV No. B 003006 0008 Rev.00
Alt.	D	Yueqing Le Teng Electronic Technology Co.,Ltd.	PCT-212, PCT-213, PCT-215, PCT-223, LT-1	450VAC, T105, Max 32A	EN 60998-1 EN 60998-2-2	CQC CB (CN64187)
AC wire	C	Zhejiang Jinniu Cable Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40028195
		Guangdong	H05RN-F	300/500V	EN 50525-2-21	VDE

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IEC 60598-2-5						
Clause	Requirement + Test			Result - Remark		Verdict
Alt.	D	Rifeng Electrical Cable Co.,Ltd		3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>		40015999
Alt.	D	Shanghai Chuangqi Cable Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40025408
Alt.	D	Standard Electric Wire & Cable Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40016905
Alt.	D	Zhenjiang Zhongjia Electric Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40030173
Alt.	D	Shanghai Yusheng Enterprise Development Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40017662
Alt.	D	Dongguan Recheer Electric Wire & Cable Co.,Ltd	H05RN-F	300/500V 3x1.0mm <sup>2</sup> 5x1.0mm <sup>2</sup>	EN 50525-2-21	VDE 40015173
DC wire	C	Shenzhen City Youchuangda Special Wire & Cable Co Ltd	1015	14AWG 16AWG 18AWG	IEC 60598-2-5	Tested with appliance UL E494503
Alt.	D	NISSEI ELECTRIC SHENZHEN CO LTD	1015	14AWG 16AWG 18AWG	IEC 60598-2-5	Tested with appliance UL E318424
Alt.	D	DONGGUAN CHENG XING ELECTRONIC CO LTD	1015	14AWG 16AWG 18AWG	IEC 60598-2-5	Tested with appliance UL E249743
Alt.	D	DONGGUAN SHENG PAI ELECTRIC WIRE&CABLE CO LTD	1015	14AWG 16AWG 18AWG	IEC 60598-2-5	Tested with appliance UL E347603
Alt.	D	ZHONGSHAN YIXIN ELECTRICAL CO LTD	1015	14AWG 16AWG 18AWG	IEC 60598-2-5	Tested with appliance UL E351034
Alt.	D	Shenzhen City Youchuangda Special Wire & Cable Co Ltd	1332	18AWG 20AWG	IEC 60598-2-1	Tested with appliance UL E494503
Alt.	D	NISSEI ELECTRIC	1332 3239	16AWG 18AWG	IEC 60598-2-1	Tested with appliance

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IEC 60598-2-5						
Clause	Requirement + Test			Result - Remark		Verdict
		SHENZHEN CO LTD		20AWG		UL E318424
Alt.	D	DONGGUAN CHENG XING ELECTRONIC CO LTD	1332	18AWG 20AWG	IEC 60598-2-1	Tested with appliance UL E249743
Alt.	D	DONGGUAN SHENG PAI ELECTRIC WIRE&CABLE CO LTD	1332 3239	16AWG 18AWG 20AWG	IEC 60598-2-1	Tested with appliance UL E347603
Alt.	D	ZHONGSHAN YIXIN ELECTRICAL CO LTD	1332	18AWG 20AWG	IEC 60598-2-1	Tested with appliance UL E351034
<p>Supplementary information:</p> <p><sup>1)</sup> Provided evidence ensures the agreed level of compliance. See OD-CB2039.</p> <p>The codes above have the following meaning:</p> <p>A - The component is replaceable with another one, also certified, with equivalent characteristics</p> <p>B - The component is replaceable if authorised by the test house</p> <p>C - Integrated component tested together with the appliance</p> <p>D - Alternative component</p>						

IEC 60598-2-5							
Clause	Requirement + Test	Result - Remark				Verdict	
<b>ANNEX 2</b>	<b>TABLE: Thermal tests of Section 12</b>						<b>P</b>
	Type reference .....	FL600F				—	
	Lamp used .....	LEDs				—	
	Lamp control gear used .....	LED controlgear				—	
	Mounting position of luminaire .....	Normal mounting				—	
	Supply wattage (W).....	600 W				—	
	Supply current (A) .....	-				—	
	Temperatures in test 1 - 4 below are corrected for ta (°C) .....	45 °C				—	
	- abnormal operating mode .....	-				—	
1.12 (12.4)	- test 1: rated voltage .....	-				—	
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....	1.06x277 V				—	
	- 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 .....	-				—	
1.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current .....	-				—	
<b>Temperature measurements (°C)</b>							
Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Supply cord	45	--	53.5	--	90	--	--
Terminal block	45	--	72.3	--	90	--	--
Internal wire	45	--	72.6	--	90	--	--
LED lens	45	--	71.3	--	Cl.13.2.1	--	--
LED PCB	45	--	80.6	--	Cl.13.2.1	--	--
Tc of LED driver	45	--	75.2	--	90	--	--
Input wire of LED module PCB	45	--	80.1	--	105	--	--
Mounting surface	45	--	49.5	--	90	--	--
Illuminated surface (0.1m)	45	--	74.0	--	90	--	--
Supplementary information :-							

IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ANNEX 3</b>	<b>Screw terminals (part of the luminaire)</b>		N/A
<b>(14)</b>	<b>SCREW TERMINALS</b>		N/A
(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 <sup>2</sup> ) .....		—
(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 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
<b>ANNEX 4</b>	<b>Screwless terminals (part of the luminaire)</b>		N/A
<b>(15)</b>	<b>SCREWLESS TERMINALS</b>		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)	Terminals and connections for internal wiring		N/A
(15.5.1)	Mechanical tests		N/A
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples).....:		N/A
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples).....:		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 and connections for external wiring		N/A

IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
(15.6.1)	Conductors		N/A
	Terminal size and rating		N/A
15.6.2	Mechanical tests		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N) .....		N/A
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N) .....		N/A
(15.6.3)	Electrical tests		N/A
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N/A

<b>(15.6.3.1)</b> <b>(15.6.3.2)</b>	<b>TABLE: Contact resistance test / Heating tests</b>										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										
	Voltage drop after 10th alt. 25th cycle										
	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										
	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										
	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										

IEC 60598-2-5										
Clause	Requirement + Test					Result - Remark				Verdict
	Max. allowed voltage drop (mV) ..... :									—
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										
Supplementary information:										

ANNEX 5	EN 62493		
Assessment of lighting equipment related to human exposure to electromagnetic fields EMF			
	The tested product also complies to the requirements of EN 62493: 2015		--
	Limit.....0.85	Measured max.....0.012 %	P

**Attachment No.1**

## EU\_GD\_IEC60598\_2\_5E ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict
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<b>ATTACHMENT TO TEST REPORT IEC 60598-2-5</b> <b>EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b> <b>LUMINAIRES</b> <b>PART 2: PARTICULAR REQUIREMENTS</b> <b>SECTION 5: FLOODLIGHTS</b>			
<b>Differences according to</b> .....: EN 60598-2-5:2015 used in conjunction with EN IEC 60598-1:2024			
<b>Annex Form No.</b> ..... : EU_GD_IEC60598_2_5E			
<b>Annex Form Originator</b> ..... : IMQ S.p.A.			
<b>Master Annex Form</b> ..... : 2016-08			
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	<b>GENELEC COMMON MODIFICATIONS (EN)</b>		<b>P</b>
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<b>5.5 (3)</b>	<b>MARKING</b>		<b>P</b>
5.5 (3.3.101)	For luminaires not supplied with terminal block: Adequate warning on the package		P

<b>5.6 (4)</b>	<b>CONSTRUCTION</b>		<b>P</b>
5.6 (4.11.6)	Electro-mechanical contact systems		P

<b>5.10 (5)</b>	<b>EXTERNAL AND INTERNAL WIRING</b>		<b>P</b>
5.10 (5.2.1)	Connecting leads		P
	- without a means for connection to the supply		N/A
	- terminal block specified		P
	- relevant information provided		P
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1		P
5.10 (5.2.2)	Cables equal to EN 50525		P
	Replace table 5.1 – Supply cord		P

**Attachment No.1**

## EU\_GD\_IEC60598\_2\_5E ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict
<b>5.12 (12)</b>	<b>ENDURANCE TESTS AND THERMAL TESTS</b>		<b>P</b>
5.12 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		P

<b>ZB</b>	<b>ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)</b>		<b>N/A</b>
(3.3)	DK: power supply cords of class I luminaires with label		N/A
(4.5.1)	DK: socket-outlets		N/A
(5.2.1)	CY, DK, FI, GB: type of plug		N/A

<b>ZC</b>	<b>ANNEX ZC, NATIONAL DEVIATIONS (EN)</b>		<b>N/A</b>
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A
	FR: Safety requirements for high buildings  (Arrêté du 30 décembre 2011 portant règlement de sécurité pour la construction des immeubles de grande hauteur et leur protection contre les risques d'incendie et de panique; Section VIII; Article GH 48, Eclairage)  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
	GB: Requirements according to United Kingdom Building Regulation		N/A

## Attachment No.2

## BS EN IEC 62031

Clause	Requirement + Test	Result - Remark	Verdict
<b>13 (14)</b>	<b>FAULT CONDITIONS</b>		<b>P</b>
- (14.1)	In compliance with IEC 61347-1 (clause numbers between parentheses refer to IEC 61347-1)		N/A
	When operated under fault conditions the LED module:		N/A
	- does not emit flames or molten material		N/A
	- does not produce flammable gases		N/A
	- protection against accidental contact not impaired		N/A
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected		N/A
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (except between live parts and accessible metal parts)		N/A
	Creepage distances on printed boards less than specified in clause 16 in Part 1 provided with coating according to IEC 60664-3		N/A
- (14.3)	Short-circuit or interruption of semiconductor devices		N/A
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile		N/A
- (14.5)	Short-circuit across electrolytic capacitors		N/A
- (14.6)	After the tests has been carried out on three samples:		N/A
	The insulation resistance $\geq 1 \text{ M}\Omega$ .....		N/A
	No flammable gases		N/A
	No accessible parts have become live		N/A
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		N/A
- (14.7)	Relevant fault condition tests with high-power supply		N/A
<b>13.2</b>	<b>Overpower condition</b>		<b>P</b>
	Module withstands overpower condition >15 min.		P
	Module with automatic protective device or power limiter, test performed 15 min. at limit.		N/A
	No fire, smoke or flammable gas is produced		P
	Molten material does not ignite tissue paper, spread below the module		P

## Attachment No.3

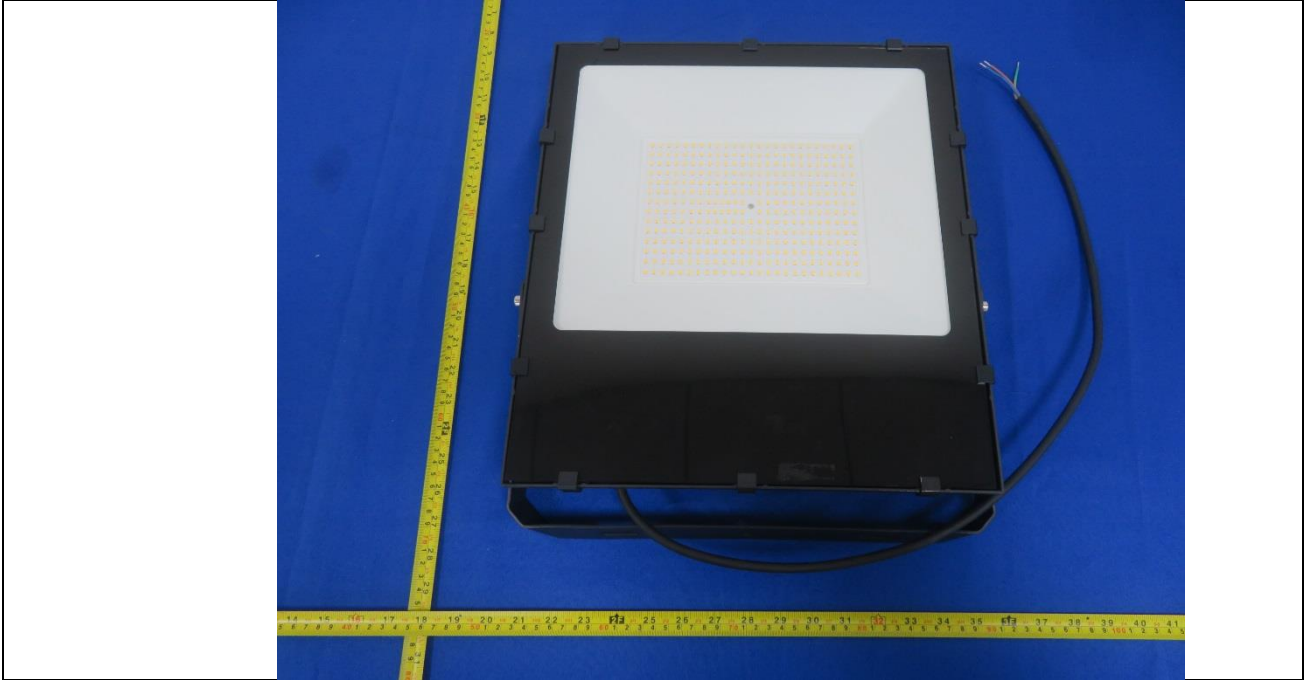
## IEC TR 62778

Clause	Requirement + Test			Result - Remark					Verdict
Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC)								—
	Photobiological safety of lamps and lamp systems (LED bulb emit white light )								P
Risk	Action spectrum	Symbol	Units	Emission limits					
				Exempt	Result	Low risk	Result	Mod risk	Result
Actinic UV	S <sub>UV</sub> (λ)	E <sub>s</sub>	mW·m <sup>-2</sup>	0,001	1.002E-06	0.003	--	--	--
Near UV	--	E <sub>UVA</sub>	W·m <sup>-2</sup>	0,33	3.455E-04	33	--	--	--
Blue light	B(λ)	L <sub>B</sub>	W·m <sup>-2</sup> ·sr <sup>-1</sup>	100	3.087E+00	10000	--	4000000	--
Blue light, small source	B(λ)	E <sub>B</sub>	W·m <sup>-2</sup>	1,0*	--	--	--	400	--
Retinal thermal	R(λ)	L <sub>R</sub>	W·m <sup>-2</sup> ·sr <sup>-1</sup>	28000/α	1.006E+03	1.011E+06	--	71000/α	--
Retinal thermal, weak visual stimulus**	R(λ)	L <sub>IR</sub>	W·m <sup>-2</sup> ·sr <sup>-1</sup>	545000	--				
				0,0017 ≤ α ≤ 0,011	--				
IR radiation, eye	--	E <sub>IR</sub>	W·m <sup>-2</sup>	6000/α 0,011 ≤ α ≤ 0,1	0.000E+00	570	--	3200	--
* Small source defined as one with α < 0,011radian. Averaging field of view at 10000 s is 0.1radian. ** Involves evaluation of non-GLS source NOTE 1. Angular subtense of apparent source: α=77.53 mrad 2. Measure distance is 200mm.									
Blue light	B(λ)	L <sub>B</sub>	W·m <sup>-2</sup> ·sr <sup>-1</sup>	100	3.746E+00	10000	--	4000000	--
NOTE Angular subtense of apparent source: α= 77.53 mrad. Measure distance 200mm.									

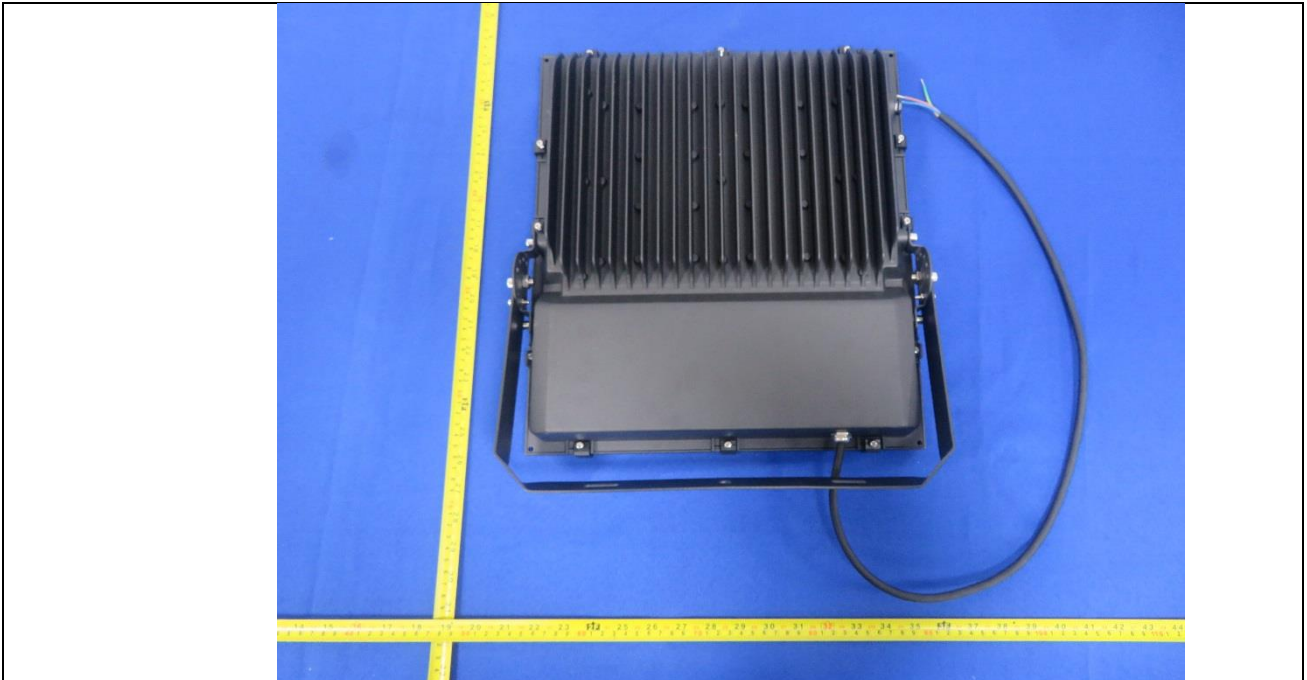
**Attachment No.4**

**Product Photos**

Details of:  Fig. 1



Details of:  Fig. 2



**- End of test report -**