



TECH UNITED LIGHTING COMPANY LIMITED

C E LVD REPORT

Prepared For :	TECH UNITED LIGHTING COMPANY LIMITED ROOM 804, 8/F. SINO CENTRE, 582-592 NATHAN RD., MONGKOK, KOWLOON HONG KONG
Product Name:	Ceiling Light
Trademark:	DECOLAMP, TECH UNITED, TECH
Main Test Model:	3811
Additional Model:	See Annex
Prepared By :	BST Testing (Shenzhen) Co.,Ltd. No.7, New Era Industrial Zone, Guantian, Bao'an District, Shenzhen, Guangdong, China
Test Date:	July 24, 2025 To Aug. 11, 2025
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**Annex:**

6821-X, 8810, 8810-X, 8811, 8811-X, 8812, 8812-X, 8813, 8813-X, 8801-X, 8802-X, 8804-X, 8805-X, 8806-X, 8807-X, 8815-X, 8824-X, 8825-X, 8826-X, 8827-X, 8828-X, 8829-X, 3805, 3806, 3807, 3808, 3811, 3813-X, 6823-X, 6824-X, 3819, 3820, 8951-X, 8952-X, 8953-X, 8954-X, 6603/1W, 6603/1P, 6603/1C, 6603/2W, 6603/1WS, 6631/3C, 6631/5C, 6653/20W, 6653/28W, 6700/1W, 6700/2W, 6700/3W, 6700/4C, 6700/4CB, 6702/1W, 6702/1PS, 6702/1PL, 6702/3PS, 6702/3C, 6702/2W, 6702/3W, 6702/3P, 6702/5P, 6703/1W, 6703/2W, 6703/3W, 6703/4C, 6704/1W, 6705/5W, 6705/10W, 6716/36W, 6716/30W, 6716/42W, 6716/20WP, 6716/28WP, 6716/6W, 6716/10W, 6721/4P, 6721/2P, 6721/3P, 6723/1W, 6723/2W, 6723/3W, 6727/5W, 6727/8W, 6733/1W, 6733/2W, 6733/3W, 6733/3C, 6740/20WP, 6740/28WP, 6740/6W, 6739/6WI, 6764/5WWB, 6764/9W, 6764/10WW, 6765/15WC, 6765/15WW, 6765/5WW, 6765/9WW, 6767/2X6W, 6767/2X12W, 6768/5W-M, 6769/5W-M, 6781/5WW, 6781/10WW, 6781/15W, 6781/20WC, 6781/15WC, 6785/5WW, 6785/10WW, 6785/15WC, 6785/15WW, 6785/20WC, 6786/10W, 6786/6W, 6786/6WB, 6786/10W, 6787/8W, 6787/12W, 6788/8W, 6788/12W, 6789/8WL, 6789/8WS, 6790/20WP, 6790/30WP, 6790/40WP, 6791/9W, 10202, 10201, 6781/5WP, 6781/15WP, 6781/25WP, 6911/1WBR, 6911/1WBC, 6911/1WR, 6912/1WBC, 6912/1WBR, 6912/1WBS, 6912/1WS, 6912/1WR, 6914/24WB, 6914/24WC, 6914/24WP, 6916/7W, 6916/12W, 6917/8W, 6917/12W, 6919/10W, 6919/6WW, 6919/36WP, 6922/2WBR, 6940/10WW, 6940/42WC, 6940/42WCB, 6947/8WS, 6948/36WC, 6948/42WC, 6949/10WW, 6949/36WC, 6949/50WC, 6950/10C, 6950/10P, 6953/20WC, 6953/40WC, 6953/40WP, 6953/42WP, 6953/50WPB, 6953/8WA, 6953/12WW, 6953/12WA, 6953/20WW, 6853/8WW, 6964/8W, 6965/12W, 6967/7W, 6967/12W, 6971/12W, 6971/8W, 6972/7W, 6972/10W, 6974/12W, 6974/20W, 6975/12W, 6975/20W, 6973/10W, 6976/10WW, 6976/15WW, 6976/36WP, 6976/80WP, 6976/50WP, 6978/6WW, 6825/10W, 6994/12WW, 6994/8WW, 6995/12W, 6995/8W, 6996/12W, 6996/8W, 6997/8W, 6997/12W, 6998/12W, 6998/4W, 6977/14WW-R, 6977/14WW-S, 6977/8WW-S, 6977/8WW-R, 6977/36WC, 6977/60WC, 6977/50WC, 6977/60WB, 6977/30WW, 6977/10WW, 6969/50WC-R, 6969/30WC-R, 6969/60WC-R, 6969/50WC-S, 6969/30WC-S, 6969/60WC-S, 7003/8WW, 7003/15WW, 7003/12WW, 7005/28WW, 7005/12WW, 7005/40WC, 7005/40WP, 7005/40WCB, 7005/40WPB, 7008/40WP, 7007/40WP-A, 7007/47WP-B, 6968/50WC, 6968/80WC, 7014/36WP-R, 7014/36WP-A, 7012/6W, 7015/36WP-A, 7016/36WP-A, 7018/1C, 7014/36WA, 7014/36WB, 7016/36WP, 7015/36WP, 7020/40W, 7020/60W, 7020/80W, 7020/40WB, 7021/50WP, 7021/25WP, 7021/25WPB, 7021/8WP, 7022/8WP, 7022/60WP, 7022/50WP, 7022/25WP, 7022/8WC, 7023/20WP, 7023/6WP, 7024/20W, 7024/60W, 7024/42W, 7025/8W, 7025/12W, 7003/8WW, 7003/12WW, 7003/8WWB, 7003/12WWB, 7205/12W, 7205/20W, 7202/12WS, 7202/12WR, 7033/40WA, 7033/50WA, 7034/40WP, 7034/50WP, 7034/60WP, 7035/5+3W, 7035/12W+2*3W, 7035/12W, 7035/24W, 7035/36W, 7036/12W, 7036/24W, 7036/36W, 7037/8W, 7037/30W, 7037/40W, 7039/6W, 7039/12W, 7043/12W, 7044/8W, 7045/8W, 7046/12W, 7046/36W, 7046/24W, 7029/8W, 7029/25WP, 7029/40WP, 7029/40WPB, 6001-1, 6001-2, 6039-160, 6068-A, 8417

**TEST REPORT****EN IEC 60598-2-1****Luminaires****Part 2: Particular requirements****Section 1: Fixed general purpose luminaires**

Testing Laboratory Name	BST Testing (Shenzhen) Co.,Ltd.
Address	No.7, New Era Industrial Zone, Guantian, Bao'an District, Shenzhen, Guangdong, China
Testing location	BST Testing (Shenzhen) Co.,Ltd.
Applicant's Name	TECH UNITED LIGHTING COMPANY LIMITED
Address	ROOM 804, 8/F. SINO CENTRE, 582-592 NATHAN RD., MONGKOK, KOWLOON HONG KONG
Manufacturer	ZHONG SHAN JIE CHENG LIGHTING COMPANY LIMITED
Address	NO. 9, LEFENG 3 RD ROAD, MAO HUI IND. ZONE, HENGLAN TOWN, ZHONGSHAN CITY GUANG DONG PROVINCE, CHINA
Test specification	
Standard.....	EN IEC 60598-2-1:2021 EN IEC 60598-1:2021/ AMD11:2022
Procedure deviation	LVD
Non-standard test method	N/A
Test item description	Ceiling Light
Trademark	DECOLAMP, TECH UNITED, TECH
Model and/or type reference ..	3811
Rating(s).....	AC 220-240V, 50/60Hz, 6W
Test case verdicts	
Test case does not apply to the test object ... :	N/A
Test item does meet the requirement	P(ass)
Test item does not meet the requirement	F(ail)

**General remarks:**

This report shall not be reproduced except in full without the written approval of the testing laboratory.

The test results presented in this report relate only to the item(s) tested.

"(see remark #)" refers to a remark appended to the report.

"(see Annex #)" refers to an annex appended to the report.

Clause numbers between brackets refer to clauses in EN 60598-1

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

General product information:

The series products have the same circuit diagram, PCB layout and functionality. The differences are the model name, so, we select 3811 to test

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.

Ceiling Light
MODEL:3811
POWER: AC 220-240V, 50/60Hz, 6W



TECH UNITED LIGHTING COMPANY LIMITED

Location: Attached on the surface of luminaire;

Label material: PET film.

Remarks:

1. Height of CE mark at least 5mm, height of WEEE symbol should not less than 7mm, height of other marks at least 5mm, height of letters and numerals at least 2mm.

Prepared by :

Jade Zhan

Engineer

Reviewer :

Jacky Zhang

Supervisor

Approved & Authorized Signer :





EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.2 (0)	GENERAL TEST REQUIREMENTS		P
1.2 (0.1)	Information for luminaire design considered..... :	Standard Yes ☒ No ☐	—
1.2 (0.3)	More sections applicable..... :	Yes ☐ No ☒	—
1.2 (0.5)	Components	(see Annex 1)	—
1.2 (0.7)	Information for luminaire design in light sources standards		—
1.2 (0.7.2)	Light source safety standard		—
	Luminaire design in the light source safety standard		P

1.4 (2)	CLASSIFICATION		P
1.4 (2.2)	Type of protection	Class I	—
1.4 (2.3)	Degree of protection..... :	IP20	—
1.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces..... :	Yes ☒ No ☐	—
1.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—

1.5 (3)	MARKING		P
1.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
1.5 (3.3)	Additional information		P
	Language of instructions	English	P
1.5 (3.3.1)	Combination luminaires		N/A
1.5 (3.3.2)	Nominal frequency in Hz		P
1.5 (3.3.3)	Operating temperature		P
1.5 (3.3.4)	Symbol or warning notice		N/A
1.5 (3.3.5)	Wiring diagram		N/A
1.5 (3.3.6)	Special conditions		N/A
1.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
1.5 (3.3.8)	Limitation for semi-luminaires		N/A
1.5 (3.3.9)	Power factor and supply current		P



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5 (3.3.10)	Suitability for use indoors	IP20 for use indoor and outdoor	P
1.5 (3.3.11)	Luminaires with remote control		N/A
1.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
1.5 (3.3.13)	Specifications of protective shields		N/A
1.5 (3.3.14)	Symbol for nature of supply	~	P
1.5 (3.3.15)	Rated current of socket outlet		N/A
1.5 (3.3.16)	Rough service luminaire		N/A
1.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	type Y	P
1.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
1.5 (3.3.19)	Protective conductor current in instruction if applicable		N/A
1.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
1.5 (3.3.21)	Non-replaceable and non-user replaceable light sources information provided	non replaceable light sources	P
	Cautionary symbol		N/A
1.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
1.5 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		N/A
1.5 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A
1.5 (3.4)	Test with water	15s	P
	Test with hexane	15s	P
	Legible after test	Clearly visible	P
	Label attached	No be easily removable, No curling	P

1.6 (4)	CONSTRUCTION		P
1.6 (4.2)	Components replaceable without difficulty		P
1.6 (4.3)	Wireways smooth and free from sharp edges		P
1.6 (4.4)	Lamp holders		N/A
1.6 (4.4.1)	Integral lamp holder		N/A



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.4.2)	Wiring connection		N/A
1.6 (4.4.3)	Lamp holder for end-to-end mounting		N/A
1.6 (4.4.4)	Positioning		N/A
	- pressure test (N)		—
	After test the lamp holder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lamp holder the lamp holder have not moved from its position and show no permanent deformation		N/A
	- bending test (N)		—
	After test the lamp holder have not moved from its position and show no permanent deformation		N/A
1.6 (4.4.5)	Peak pulse voltage		N/A
1.6 (4.4.6)	Centre contact		N/A
1.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
1.6 (4.4.8)	Lamp connectors		N/A
1.6 (4.4.9)	Caps and bases correctly used		N/A
1.6 (4.4.10)	Light source for lamp holder or connection according IEC 60061 not connected another way		N/A
1.6 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
1.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
1.6 (4.7)	Terminals and supply connections		N/A
1.6 (4.7.1)	Contact to metal parts		N/A
1.6 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
1.6 (4.7.3)	Terminals for supply conductors		N/A
1.6 (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



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- mechanical test according to 15.8.2		N/A
	- electrical test according to 15.9		N/A
	- heat test according to 15.9.2.3 and 15.9.2.4		N/A
1.6 (4.7.4)	Terminals other than supply connection		N/A
1.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
1.6 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
1.6 (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
1.6 (4.9)	Insulating lining and sleeves		P
1.6 (4.9.1)	Retainment		P
	Method of fixing.....:		—
1.6 (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
1.6 (4.10)	Double or reinforced insulation		N/A
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N/A
	Safe installation outdoor light		N/A
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
1.6 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
1.6 (4.10.3)	Retainment of insulation:		N/A
	- fixed		N/A
	- unable to be replaced; luminaire inoperative		N/A



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- sleeves retained in position		N/A
	- lining in lamp holder		N/A
1.6 (4.11)	Electrical connections and current-carrying parts		P
1.6 (4.11.1)	Contact pressure		N/A
1.6 (4.11.2)	Screws:		P
	- self-tapping screws		N/A
	- thread-cutting screws		P
1.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N/A
1.6 (4.11.4)	Material of current-carrying parts		P
1.6 (4.11.5)	No contact to wood or mounting surface		P
1.6 (4.11.6)	Electro-mechanical contact systems		N/A
1.6 (4.12)	Screws and connections (mechanical) and glands		P
1.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part.....:		P
	Torque test: torque (Nm); part.....:		N/A
	Torque test: torque (Nm); part.....:		N/A
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
1.6 (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
1.6 (4.12.5)	Screwed glands; force (Nm).....:		N/A
1.6 (4.13)	Mechanical strength		P
1.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:		N/A
	- other parts; energy (Nm).....:	0.35Nm, no damage	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.13.3)	Straight test finger		P
1.6 (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
1.6 (4.13.6)	Tumbling barrel		N/A
1.6 (4.14)	Suspensions, fixings and means of adjusting		P
1.6 (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)..... :		N/A
	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
1.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg) :		—
	Stress in conductors (N/mm ²) :		N/A
	Mass (kg) of semi-luminaire :		—
	Bending moment (Nm) of semi-luminaire :		N/A
1.6 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles..... :		N/A
	- strands broken..... :		N/A
	- electric strength test afterwards		N/A
1.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
1.6 (4.14.5)	Guide pulleys		N/A
1.6 (4.14.6)	Strain on socket-outlets		N/A
1.6 (4.15)	Flammable materials		P



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- glow-wire test 650°C..... :	See Test Table 1.15 (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
1.6 (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
1.6 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	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
1.6 (4.16.1)	Lamp control gear spacing:		P
	- spacing 35 mm		N/A
	- spacing 10 mm		P
1.6 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear		N/A
	- external		N/A
	- fixed position		P
	- temperature marked lamp control gear		N/A
1.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
1.6 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
1.6 (4.18)	Resistance to corrosion		N/A
1.6 (4.18.1)	- rust-resistance		N/A
1.6 (4.18.2)	- season cracking in copper		N/A
1.6 (4.18.3)	- corrosion of aluminium		N/A
1.6 (4.19)	Igniters compatible with ballast		N/A
1.6 (4.20)	Rough service vibration		N/A
1.6 (4.21)	Protective shield		N/A



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
1.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
1.6 (4.21.3)	No direct path		N/A
1.6 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 1.15 (13.3.2)	N/A
1.6 (4.22)	Attachments to lamps not cause overheating or damage		N/A
1.6 (4.23)	Semi-luminaires comply Class II		N/A
1.6 (4.24)	Photobiological hazards		N/A
1.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
1.6 (4.24.2)	Retinal blue light hazard		N/A
	Luminaires with E_{thr} :		N/A
	a) outdoor light		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
1.6 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
1.6 (4.26)	Short-circuit protection		N/A
1.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
1.6 (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
1.6 (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



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.6 (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
1.6 (4.29)	Luminaires with non-replaceable light source		P
	Not possible to replace light source		P
	Live part not accessible after parts have been opened by hand or tools		P
1.6 (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
	Minimum two fixing means		N/A
1.6 (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		N/A
1.6 (4.31.1)	SELV circuits		P
	Used SELV source		P
	Voltage $\leq$ ELV		P
	Insulating of SELV circuits from LV supply		P
	Insulating of SELV circuits from other non SELV circuits		N/A
	Insulating of SELV circuits from FELV		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Insulating of SELV circuits from other SELV circuits		N/A
	SELV circuits insulated from accessible parts according Table X.1		P
	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
1.6 (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
1.6 (4.31.3)	Other circuits		N/A
	Other circuits insulated from accessible parts according Table X.1		N/A
	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 of above		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
1.6 (4.32)	Overvoltage protective devices		N/A
	Comply with IEC 61643-11		N/A
	External to control gear and connected to earth:		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- only in outdoor light		N/A
	- only connected to protective earth		N/A
1.7 (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
1.7 (4.34)	Electromagnetic fields (EMF)		P
	No harmful electromagnetic fields		P
1.7 (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
1.7 (4.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A

1.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
1.7 (11.2)	Creepage distances and clearances.....:	See Table 1.7 (11.2)	P
	Working voltage (V).....:	200-240V~	—
	Rated pulse voltage (kV).....:		—
	Voltage form.....:	Sinusoidal ☒ Non-sinusoidal ☐	—
	PTI.....:	< 600 ☒ ≥ 600 ☐	—
	Impulse withstand category (Normal category II) (Category III Annex U)	Category II ☒ Category III ☐	—

1.8 (7)	PROVISION FOR EARTHING		P
1.8 (7.2.1 + 7.2.3)	Accessible metal parts		P



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Clause	Requirement + Test	Result - Remark	Verdict
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω: 0.033		P
	Self-tapping screws used		P
	Thread-forming screws		P
	Thread-forming screw used in a grove		N/A
	Earth makes contact first		N/A
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		N/A
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		P
1.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		N/A
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
1.8 (7.2.5)	Earth terminal integral part of connector socket		P
1.8 (7.2.6)	Earth terminal adjacent to mains terminals		P
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal		N/A
1.8 (7.2.8)	Material of earth terminal		N/A
	Contact surface bare metal		N/A
1.8 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
1.8 (7.2.11)	Earthing core coloured green-yellow		P
	Length of earth conductor		P

1.9 (14)	SCREW TERMINALS		N/A
	Separately approved; component list.....: (see Annex 1)		N/A
	Part of the luminaire.....: (see Annex 3)		N/A

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



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Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5)	EXTERNAL AND INTERNAL WIRING		P
1.10 (5.2)	Supply connection and external wiring		N/A
1.10 (5.2.1)	Means of connection.....:	Connecting leads or terminal block	P
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment		N/A
1.10 (5.2.2)	Type of cable.....:		P
	Nominal cross-sectional area (mm ²)..... :		P
	Cables equal to IEC 60227 or IEC 60245		N/A
1.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y	P
1.10 (5.2.5)	Type Z not connected to screws		N/A
1.10 (5.2.6)	Cable entries:		N/A
	- suitable for introduction		N/A
	- adequate degree of protection		N/A
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
1.10 (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
1.10 (5.2.9)	Locking of screwed bushings		N/A
1.10 (5.2.10)	Cord anchorage:		N/A
	- covering protected from abrasion		N/A
	- clear how to be effective		N/A
	- no mechanical or thermal stress		N/A
	- no tying of cables into knots etc.		N/A
	- insulating material or lining		N/A
1.10 (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



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Clause	Requirement + Test	Result - Remark	Verdict
	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
1.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		P
1.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N)..... : 60N		P
	- torque test: torque (Nm)..... : 0.35		P
	- displacement ≤ 2 mm	<2mm	P
	- no movement of conductors		P
	- no damage of cable or cord		P
	- function independent of electrical connection		N/A
1.10 (5.2.11)	External wiring passing into luminaire		N/A
1.10 (5.2.12)	Looping-in terminals		N/A
1.10 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
1.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
1.10 (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
1.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
1.10 (5.2.18)	Used plug in accordance with		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- IEC 60083		N/A
	- other standard		N/A
1.10 (5.3)	Internal wiring		P
1.10 (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		N/A
1.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm ²)..... :		N/A
	Insulation thickness		N/A
	Extra insulation added where necessary		N/A
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N/A
	Adequate cross-sectional area and insulation thickness		N/A
1.10 (5.3.1.3)	Double or reinforced insulation for class II		N/A
1.10 (5.3.1.4)	Conductors without insulation		N/A
1.10 (5.3.1.5)	SELV current-carrying parts		P
1.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
1.10 (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
1.10 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- cables with protective sheath		N/A
1.10 (5.3.4)	Joints and junctions effectively insulated		N/A
1.10 (5.3.5)	Strain on internal wiring		N/A
1.10 (5.3.6)	Wire carriers		N/A
1.10 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P
1.10 (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

1.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
1.11 (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
	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
1.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
1.11 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- basic insulation not accessible other than during starter or lamp replacement		N/A
	- glass protective shields not used as supplementary insulation		N/A
1.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
1.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- touch current		N/A
	- no-load voltage.....		N/A
	Other than ordinary luminaire:		N/A
	- nominal voltage		N/A
1.11 (8.2.4)	Portable luminaire have protection independent of supporting surface		N/A
1.11 (8.2.5)	Compliance with the standard test finger or relevant probe		P
1.11 (8.2.6)	Covers reliably secured		P
1.11 (8.2.7)	Discharging of capacitors $\geq 0,5 \mu\text{F}$		N/A
	Portable plug connected luminaire with capacitor		N/A
	Other plug connected luminaire with capacitor		N/A
	Discharge device on or within capacitor		N/A
	Discharge device mounted separately		N/A

1.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
1.12 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 4.13		—
1.12 (12.3)	Endurance test:		P
	- mounting- position.....	As normal used	—
	- test temperature (°C).....	35°C	—
	- total duration (h).....	240h	—
	- supply voltage: Un factor; calculated voltage (V)...	1.1*240V=264V	—
	- lamp used.....		—
1.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P



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Clause	Requirement + Test	Result - Remark	Verdict
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
1.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
1.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
1.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
1.12 (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
1.12 (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
1.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
1.12 (12.7.1)	Luminaire without temperature sensing control		N/A
1.12 (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



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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 1.15 (13.2.1)	N/A
1.12 (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 1.15 (13.2.1)	N/A
1.12 (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
1.12 (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.....:		—
	- highest measured temperature of fixing point/ exposed part (°C):.....:		—
	Ball-pressure test.....:	See Table 1.15 (13.2.1)	N/A
1.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
1.13 (-)	If IP > IP 20 the order of tests as specified in clause 1.12		P



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Clause	Requirement + Test	Result - Remark	Verdict
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		—
	- classification according to IP..... :	IP20	—
	- mounting position during test..... :	As in normal use	—
	- 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		N/A
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		N/A
	d) i) For luminaires without drain holes – no water entry		N/A
	d) ii) For luminaires with drain holes – no hazardous water entry		N/A
	e) no water in watertight luminaire		N/A
	f) no contact with live parts (IP 2X)		N/A
	f) no entry into enclosure (IP 3X and IP 4X)		N/A
	f) no contact with live parts (IP3X and IP4X)		N/A
	g) no trace of water on part of lamp requiring protection from splashing water		N/A
	h) no damage of protective shield or glass envelope		N/A
1.13 (9.3)	Humidity test 48 h	25.3°C, 93%RH	P

1.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
1.14 (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..... :		N/A
	- between live parts and mounting surface..... :	> 100MΩ	P
	- between live parts and metal parts..... :	> 100MΩ	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
	- Insulation bushings as described in Section 5 :		N/A
1.14 (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)..... :		P
	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..... :	1480V	N/A
	- between live parts and mounting surface..... :	2960V	P
	- between live parts and metal parts..... :	2960V	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..... :		N/A
	- Insulation bushings as described in Section 5 :		N/A
1.14 (10.3)	Touch current or protective conductor current (mA):	0.13mA	P

1.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
1.15 (13.2.1)	Ball-pressure test..... :	See Test Table 1.15 (13.2.1)	P
1.15 (13.3.1)	Needle-flame test (10 s)..... :	See Test Table 1.15 (13.3.1)	P
1.15 (13.3.2)	Glow-wire test (650°C)..... :	See Test Table 1.15 (13.3.2)	P
1.15 (13.4)	Proof tracking test (IEC 60112)..... :	See Test Table 1.15 (13.4)	N/A

1.8 (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:	B	>3.0	1.5	11.1.B	>3.0	2.5	11.1.A	
Working voltage (V)..... :					200-240V~		—	
PTI..... :					< 600 ☒ ≥ 600 ☐		—	
Pulse voltage or U_P if applicable (kV) :					--		—	
Supplementary information: L and N								
Distance 2:	R	>5.0	3.0	11.1.B	>5.0	5.0	11.1.A	
Working voltage (V)..... :					200-240V~		—	
PTI..... :					< 600 ☒ ≥ 600 ☐		—	
Pulse voltage or U_P if applicable (kV) :					--		—	
Supplementary information: Lives parts and accessible parts								
Distance 3:	--	--	--	--	--	--	--	
Working voltage (V)..... :					--		—	
PTI..... :					< 600 ☐ ≥ 600 ☐		—	
Pulse voltage or U_P if applicable (kV) :					--		—	
Supplementary information:--								



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Clause	Requirement + Test	Result - Remark	Verdict

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

1.8 (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 ☐		—
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 ☐ ≥ 600 ☐		—
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 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV) :					--		—
Supplementary information:--							

Measured TABLE:

1.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			--
Allowed impression diameter (mm)		2,0mm		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Terminal block	--	125	1.1	
Pastic Shell	--	125	1.2	
Supplementary information:--				



BST Testing (Shenzhen) Co., Ltd.

Report No.: XDD42251728080503SR

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Clause	Requirement + Test	Result - Remark	Verdict

1.15 (13.3.1)	TABLE: Needle-flame test (IEC 60695-11-5)				P
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
Terminal block	--	10	No	0	pass
Plastic Shell	--	10	No	0	pass
Supplementary information:--					

1.15 (13.3.2)	TABLE: Glow-wire test (IEC 60695-2-11)					P
Glow wire temperature :			650°C			—
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	
Terminal block	--	30	No	0	Pass	
Plastic Shell	--	30	No	0	Pass	
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No)..... :					Yes	
Supplementary information:--						

1.15 (13.4)	TABLE: Proof tracking test (IEC 60112)					N/A
Test voltage PTI :			175 V			—
Object/ Part No./ Material		Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
--		--	--	--	--	--
Supplementary information:--						

ANNEX 1	TABLE: Critical components information					
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.

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: Temperature measurements, thermal tests of Section 12		P			
	Type reference.....:	3811	—			
	Lamp used.....:	Integral LED module	—			
	Lamp control gear used.....:	--	—			
	Mounting position of luminaire.....:	See product manual	—			
	Supply wattage (W).....:	See below	—			
	Supply current (A).....:	See below	—			
	Calculated power factor.....:	See below	—			
	Table: measured temperatures corrected for ta = 25 °C:		P			
	- abnormal operating mode.....:		—			
	- test 1: rated voltage.....:		—			
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage.....:	1.06 x 240V = 254.4 V	—			
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....:	--	—			
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage.....:	1.1 x 240V= 264V	—			
	Through wiring or looping-in wiring loaded by a current of A during the test	--	—			
Temperature measurements, (°C)						
Part	Clause 12.4 – normal				Clause 12.5 – abnormal	
	test 1	test 2	test 3	limit	test 4	limit
Tc of LED driver	35	--	57.6	90	--	--
Output wire of LED driver near LED module	35	--	51.3	105		
Metal parts which can be adjusted	35	--	54.3	60		



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Clause	Requirement + Test			Result - Remark		Verdict
Metal parts which can be adjusted (5cm surrounding)	35	--	50.2	60	--	--
Metal enclosure for LED module part	35	--	58.3	Ref	--	--
Plastic sheet attach to LED	35		60.3	130		
Mounting surface	35		36.3	90		
Lighting object (10cm)	35		35.8	90		
Ambient	35		35.0	Ref.		
Supplementary information:						

ANNEX 3	Screw terminals (part of the luminaire)		N/A
(14)	SCREW TERMINALS		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 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)..... :		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



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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)	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



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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

(15.6.3.1)	TABLE: Contact resistance test / Heating tests										N/A
(15.6.3.2)	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										
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
Supplementary information:--											



EN IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60598-2-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES Luminaires Part 2: Particular requirements Section 1: Fixed general purpose luminaires			
Differences according to.....:		EN IEC 60598-2-1:2021 used in conjunction with EN IEC 60598-1:2021 + AMD11:2022	
TRF template used.....:		IECEE OD-2020-F2:2020, Ed. 1.1	
Attachment Form No.....:		EU_GD_IEC60598_2_1I	
Attachment Originator.....:		UL(Demko)	
Master Attachment.....:		2022-05-13	
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	CENELEC COMMON MODIFICATIONS (EN)		N/A
1.6 (3)	MARKING		N/A
1.6 (3.2.12)	Note 4 deleted		N/A
1.7 (4)	CONSTRUCTION		N/A
1.7 (4.11.6)	Electro-mechanical contact systems: electric strength test at 1 500 V		N/A
1.11 (5)	EXTERNAL AND INTERNAL WIRING”		P
1.11 (5.2.2)	Cables equal to EN 50525 (all parts)		P
	Paragraph 2 deleted		P
	Replace table 5.1 – Supply cord		P
1.13 (12)	ENDURANCE TESTS AND THERMAL TESTS		N/A
1.13 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		N/A
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)		N/A
(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
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	FR: Safety requirements for high buildings (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) 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

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



ANNEX A:

Photo-documentation

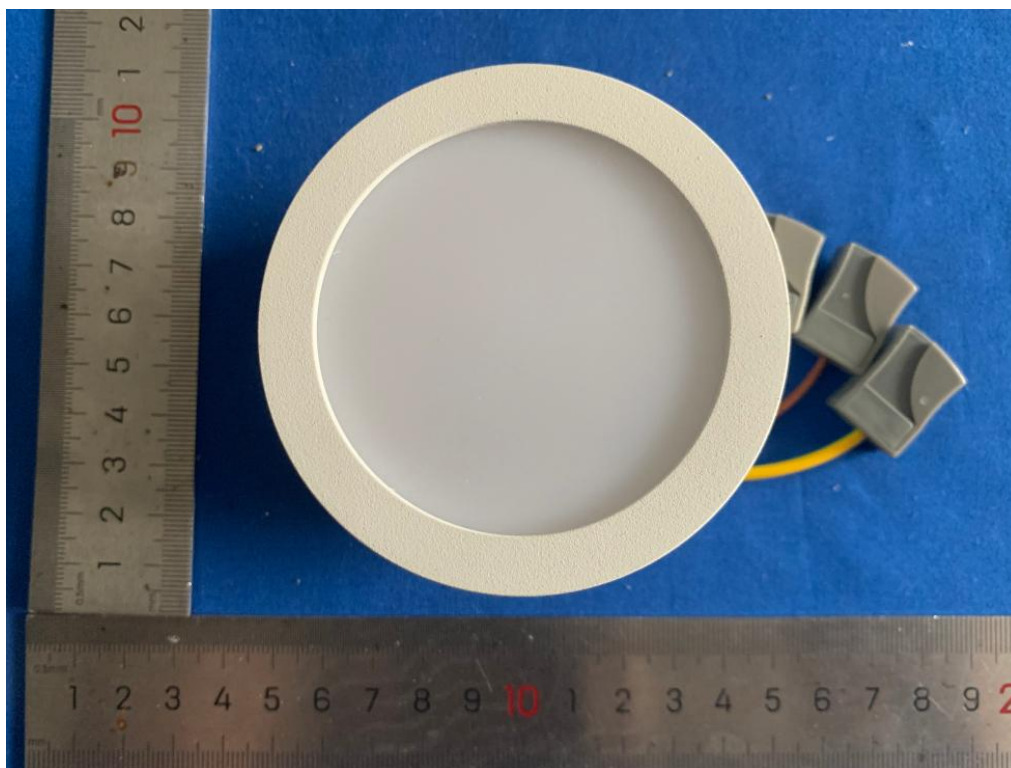


Photo 1

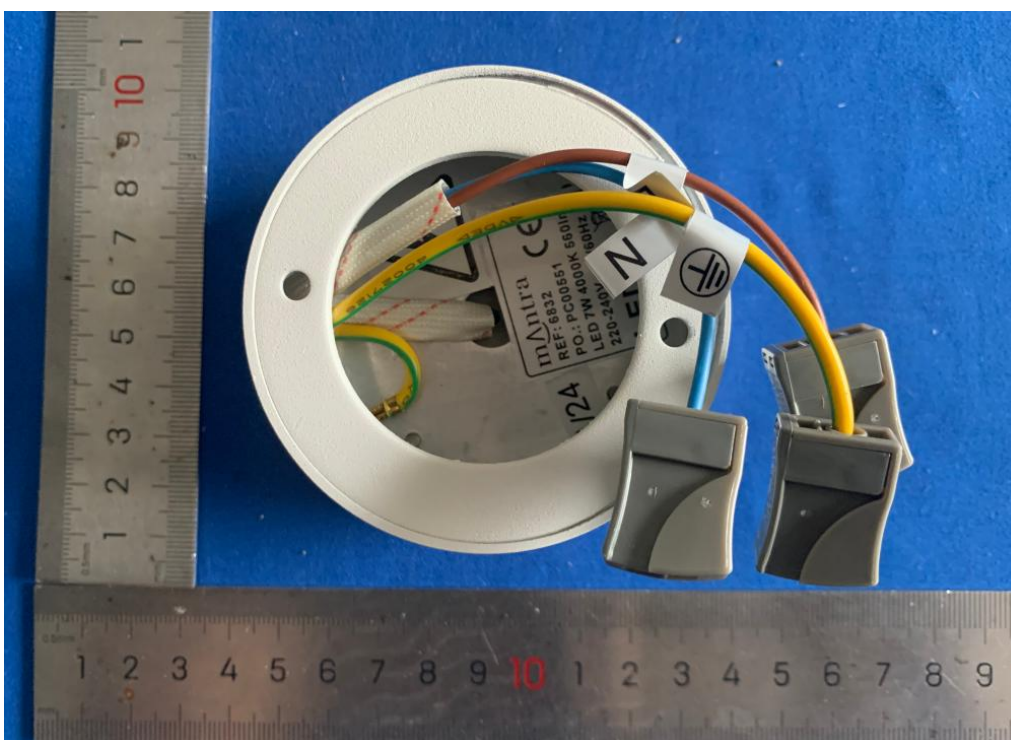


Photo 2

*****END*****