TEST REPORT IEC 60598-2-17 Luminaires

Part 2: Particular requirements. Section 17: Luminaires for stage lighting, television and film studios (outdoor and indoor)

Name of Testing Laboratory Guangzhou ITL Co., Ltd preparing the Report:

Applicant's name BLUE SEA LIGHTING CO., LIMITED

Address.....: No.4, Ruixiang Road, Liqiu Industrial Area, Xiuquan

Street, Huadu District, Guangzhou City, China

Test specification:

Test procedure: CE LVD Non-standard test method: N/A

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

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Test item description:	Stage light				
Trade Mark(s):	N/A				
Manufacturer:	Same as applicant				
Model/Type reference:	···				
Ratings:	100-240V~, 50/60Hz, 270W				
Responsible Testing Laboratory (as a	applicable), testing procedure and testing location(s):				
	Guangzhou ITL Co., Ltd				
Testing location/ address	: 1-2/F., South Block, Building A2, No.3, Keyan Road, Science City, High-Tech Industrial Development Zone, Guangzhou, Guangdong, China				
Tested by (name, function, signature)	James Zhong (Project engineer) James Zhong James Zhong				
Approved by (name, function, signatu	Reviewer) Bob Dai				
Testing procedure: CTF Stage 1	:				
Testing location/ address	:				
Tested by (name, function, signature)) :				
Approved by (name, function, signatu	ure) :				
Testing procedure: CTF Stage 2	:				
Testing location/ address	:				
Tested by (name + signature)	:				
Witnessed by (name, function, signat	ure).:				
Approved by (name, function, signatu	ure) :				
Testing procedure: CTF Stage 3	Testing procedure: CTF Stage 3:				
Testing procedure: CTF Stage 4	:				
Testing location/ address	:				
Tested by (name, function, signature)) :				
Witnessed by (name, function, signat	ture).:				
Approved by (name, function, signatu	ure):				
Supervised by (name, function, signa	iture) :				

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List of Attachments (including a total number of	pages in each attachment):			
2 pages of EUROPEAN GROUP DIFFERENCES AN	2 pages of EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES;			
4 pages of Product Photos.	,			
r pages of r reader riotes.				
Summary of testing:				
Tests performed (name of test and test	Testing location:			
clause):	Guangzhou ITL Co., Ltd			
All applicable test clauses.	1-2 floor, South Block, Building A2, No. 3 Keyan Lu,			
••	Science City, Guangzhou, Guangdong, P.R. CHINA			
	Colonico Oity, Cuangenoa, Cuangaong, Firth Ormitive			
	OL AGA BLANCE CONTRACTOR			
	Clause 4.24- Photobiological hazards tests were			
	subcontracted to lab. Below:			
	Dongguan Hongnuo Product Testing Service Co.,			
	Ltd. which was an ISO/IEC 17025 Accredited lab.of			
	Registration No CNAS L9342			
	Address: NO.8, Jinqianling Street 5, huangjiang			
	Town, Dongguan			
Summary of compliance with National Difference	es (List of countries addressed):			
CENELEC member countries	(=:01 0: 000:::::::::::::::::::::::::::::			
CENELEC Member countries				
	AN GROUP DIFFERENCES AND NATIONAL			
DIFFERENCES according to EN IEC 60598-2-17:20				
1:2021/A11:2022	•			
Use of uncertainty of measurement for decisions	s on conformity (decision rule):			
,	, (,			
No decision rule is specified by the IEC standa	rd, when comparing the measurement result with the			
	at standard. The decisions on conformity are made			
	mple acceptance" decision rule, previously known as			
"accuracy method").	,			
,				
Other: (to be specified, for example when requ	ired by the standard or client, or if national			
accreditation requirements apply)	ired by the standard of offerth, of it flational			
accidantation requirements apply)				
Information on uncertainty of measurement:				

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

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

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

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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.

stage light

Valu - lenovat a - Per armance

MODEL: BP1818

VOLTAGE:100-240V~ 50-60Hz

POWER: 270W







WARNINGS /

Read instructions before use Always disconnect mains before opening The earth must always be connected Maximum ambient temperature ta=40°C

The flower marking shall be mark on marking plate:

Manufacturer: BLUE SEA LIGHTING CO., LIMITED

Address: No.4, Ruixiang Road, Liqiu Industrial Area, Xiuquan Street, Huadu District, Guangzhou

City, China

t_c:75°C

Note: CE mark shall not be less than 5mm, WEEE symbol shall not be less than 7mm.

The height of other graphical symbols shall not be less than 5 mm, the height of letters and numerals either shown separately or with or as part of symbols shall not be less than 2 mm.

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Test item particulars	Stage Luminaires		
Classification of installation and use	Class I		
Supply Connection	Non-detachable power supply cord connection		
Possible test case verdicts:			
- test case does not apply to the test object:	N/A		
- test object does meet the requirement:	P (Pass)		
- test object does not meet the requirement:	F (Fail)		
Testing:			
Date of receipt of test item:	2024-09-09		
Date (s) of performance of tests:	2024-09-09 to 2024-09-19		
Company to the second s			
General remarks:			
"(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to the			
Throughout this report a ☐ comma / ☒ point is u	sed as the decimal separator.		
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:		
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	☐ Yes ☐ Not applicable		
When differences exist; they shall be identified in t	·		
Name and address of factory (ies): Same as applicant			
General product information and other remarks:			
The test model BP1818 is Class I stage light with detact	chable flexible cord, for indoor use only.		
All models are consistent to each other except for appe			

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	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
17.4 (0)	GENERAL TEST REQUIREMENTS		Р
17.4 (0.3)	More sections applicable:	Yes ☐ No ☒ Section/s:	_
17.4 (0.5)	Components	(see Annex 1)	_
17.4 (0.7)	Information for luminaire design in light sources s	standards	_
17.4 (0.7.2)	Light source safety standard:	IEC 62031	
	Luminaire design in the light source safety standard		Р
17.5 (2)	CLASSIFICATION OF LUMINAIRES		Р
17.5 (2.2)	Type of protection:	Class I	Р
17.5 (2.3)	Degree of protection:	IP20	_
17.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces:	Yes ⊠ No □	—
17.5 (2.5)	Luminaire for normal use:	Yes ⊠ No □	
	Luminaire for rough service:	Yes □ No ⊠	_
17.6 (3)	MARKING		Р
17.6 (3.2)	Mandatory markings		Р
17.0 (0.2)	Position of the marking		Р
	Format of symbols/text		Р
17.6 (3.3)	Additional information		Р
11.0 (0.0)	Language of instructions	English instruction provided	P
17.6 (3.3.1)	Combination luminaires	2.19.011 mod dodon provided	N/A
17.6 (3.3.2)	Nominal frequency in Hz	50-60	P
17.6 (3.3.3)	Operating temperature		N/A
17.6 (3.3.5)	Wiring diagram	Direct connected to mains supply	N/A
17.6 (3.3.6)	Special conditions		N/A
17.6 (3.3.7)	Metal halide lamp luminaire – warning		Р
17.6 (3.3.8)	Limitation for semi-luminaires	Not a semi-luminaire	N/A
17.6 (3.3.9)	Power factor and supply current		Р
17.6 (3.3.10)	Suitability for use indoors	Indoor use only	Р
17.6 (3.3.11)	Luminaires with remote control	No such function	N/A
17.6	Clip-mounted luminaire – warning		N/A

	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
17.6 (3.3.13)	Specifications of protective shields		N/A
17.6 (3.3.14)	Symbol for nature of supply	\sim	Р
17.6 (3.3.15)	Rated current of socket outlet	No socket outlet used	N/A
17.6 (3.3.16)	Rough service luminaire	Not for rough service	N/A
17.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Detachable power supply cord	N/A
17.6 (3.3.18)	Non-ordinary luminaires with PVC cable	Ordinary luminaire	N/A
17.6 (3.3.19)	Protective conductor current in instruction if applicable	The protective conductor current is lower than 10 mA	N/A
17.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
17.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non-user replaceable light sources	Р
17.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
17.6 (3.3.23)	Luminaires without control gear provided with necessary information for selection of appropriate component	Luminaire provided with built-in controlgear	N/A
17.6 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A
17.6 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
17.6 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A
17.6 (3.4)	Test with water		Р
	Test with hexane		Р
	Legible after test		Р
	Label attached		Р
17.6.1 (-)	If luminaire design imposes restriction of use the lumin	naire is marked with	N/A
	a) Indication of the "top"		N/A
	b) Designed position or range of angle		N/A
	c) Mounting arrangements		N/A
17.6.2 (-)	Warnings if replaceable light sources		N/A
17.6.3 (-)	Maximum ambient temperature t _a	40°C marked on the label	Р

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	IEC 60598-2-17			
Clause	Requirement + Test	Result - Remark	Verdict	
17.6.4 (-)	Minimum distances from flammable materials	Luminaire suitable for direct mounting on normally flammable surfaces	Р	
17.6.5 (-)	Warning against opening immediately if applicable		Р	
17.6.6 (-)	Highest exterior surface temperature if exceeds 70 °C	75°C marked in the label	Р	
17.6.7 (-)	Instruction leaflets contain warnings		Р	
	a) Visibly damaged shields shall be changed		Р	
	b) Damaged or thermally deformed lamp shall be changed		Р	
	c) Only intended for professional use		Р	

17.7 (4)	CONSTRUCTION	Р
17.7 (4.2)	Components replaceable without difficulty	Р
17.7 (4.3)	Wireways smooth and free from sharp edges	Р
17.7 (4.4)	Lamp holders	N/A
17.7 (4.4.1)	Integral lamp holder	N/A
17.7 (4.4.2)	Wiring connection	N/A
17.7 (4.4.3)	Lamp holder for end-to-end mounting	N/A
17.7 (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 has not moved from its position and show no permanent deformation	N/A
	- bending test (N):	_
	After test the lamp holder has not moved from its position and show no permanent deformation	N/A
17.7 (4.4.5)	Peak pulse voltage	N/A
17.7 (4.4.6)	Centre contact	N/A
17.7 (4.4.7)	Parts in rough service luminaires resistant to tracking	N/A
17.7 (4.4.8)	Lamp connectors	N/A
17.7 (4.4.9)	Caps and bases correctly used	N/A
17.7 (4.4.10)	Light source for lamp holder or connection according IEC 60061 not connected another way	N/A
17.7 (4.5)	Starter holders	N/A
	Starter holder in luminaires other than class II	N/A

	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
	Starter holder class II construction		N/A
17.7 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
17.7 (4.7)	Terminals and supply connections		Р
17.7 (4.7.1)	Contact to metal parts		Р
17.7 (4.7.2)	Test 8 mm live conductor	No such supply terminals	N/A
	Test 8 mm earth conductor	,	N/A
17.7 (4.7.3)	Terminals for supply conductors		Р
17.7	Welded method and material	1	N/A
(4.7.3.1)		1	
	- 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
17.7 (4.7.4)	Terminals other than supply connection		Р
17.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
17.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
17.7 (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
17.7 (4.9)	Insulating lining and sleeves		Р
17.7 (4.9.1)	Retainment		Р
	Method of fixing:	By using heat-shrinkable tube	Р
17.7 (4.9.2)	Insulated linings and sleeves:		Р
	Resistant to a temperature > 20 °C to the wire temperature or	UL approved tube, min. 125°C	N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C):		N/A

	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.10)	Double or reinforced insulation		N/A
17.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation	Class I luminaire	N/A
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
17.7 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
17.7 (4.10.3)	Retainment of insulation:		Р
	- fixed		Р
	- unable to be replaced; luminaire inoperative		Р
	- sleeves retained in position		N/A
	- lining in lamp holder		N/A
17.7 (4.10.4)	Protective impedance device		N/A
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.2 of IEC 60065		N/A
17.7 (4.11)	Electrical connections and current-carrying parts		Р
17.7 (4.11.1)	Contact pressure		Р
17.7 (4.11.2)	Screws:		Р
	- self-tapping screws	No such screw used	N/A
	- thread-cutting screws	No such screw used	N/A
17.7 (4.11.3)	Screw locking:		Р
	- spring washer		Р
	- rivets		N/A
17.7 (4.11.4)	Material of current-carrying parts	Min. 50% Copper material used	Р
17.7 (4.11.5)	No contact to wood or mounting surface	No wood used	Р

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	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.11.6)	Electro-mechanical contact systems	No such system inside	N/A
17.7 (4.12)	Screws and connections (mechanical) and glands		Р
17.7 (4.12.1)	Screws not made of soft metal	No screws made of soft metal used	Р
	Screws of insulating material	No such screws	N/A
	Torque test: torque (Nm); part:	2.0Nm for 4.87mm diameter screws used to metal enclosure	Р
	Torque test: torque (Nm); part:	0.5 Nm for 2.90mm diameter screws used to fix control PCB	Р
	Torque test: torque (Nm); part:	1.2Nm for 3.8mm diameter screws used to fix DC fan metal frame	Р
	Torque test: torque (Nm); part:	0.8Nm for 3.4mm diameter screws used to fix earthing wire	Р
	Torque test: torque (Nm); part:	0.50Nm for 2.89mm diameter screws used to fix PCB of power supply	Р
17.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		Р
17.7 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm):		N/A
	- lamp holder; torque (Nm):		N/A
	- push-button switches; torque 0,8 Nm:		N/A
17.7 (4.12.5)	Screwed glands; force (Nm):		N/A
17.7 (4.13)	Mechanical strength		Р
17.7 (4.13.1)	Impact tests:		Р
	- fragile parts; energy (Nm):	0.35 Nm used, no hazard	Р
	- other parts; energy (Nm):	0.5 Nm used, no hazard	Р
	1) live parts	No hazard	Р
	2) linings	No hazard	Р
	3) protection	No hazard	Р
	4) covers	No hazard	Р
17.7 (4.13.2)	Metal parts have adequate mechanical strength		Р
17.7 (4.13.3)	Straight test finger	The finger is pressed against the surface with a force of 30 N, no hazard.	Р

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Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher	Not for rough service use	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
17.7 (4.13.6)	Tumbling barrel		N/A
17.7 (4.14)	Suspensions, fixings and means of adjusting		N/A
17.7 (4.14.1)	Mechanical load:		N/A
	A) four times the weight	No suspensions and adjusting devices	N/A
	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
17.7 (4.14.2)	Load to flexible cables		N/A
	Mass (kg)		_
	Stress in conductors (N/mm²):		N/A
	Mass (kg) of semi-luminaire:		N/A
	Bending moment (Nm) of semi-luminaire:		N/A
17.7 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles:		N/A
	- strands broken		N/A
	- electric strength test afterwards		N/A
17.7 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors	No telescopic tubes	N/A
17.7 (4.14.5)	Guide pulleys	No guide pulley used	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.14.6)	Strain on socket-outlets	Not such luminaire	N/A
17.7 (4.15)	Flammable materials		Р
	- glow-wire test 650°C:	No such parts	N/A
	- spacing ≥30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		Р
	- thermal protection		N/A
	- electronic circuits exempted		Р
17.7 (4.15.2)	Luminaires made of thermoplastic material with lamp	o control gear	Р
	a) construction		Р
	b) temperature sensing control		N/A
	c) surface temperature		N/A
17.7 (4.16)	Luminaires for mounting on normally flammable surfaces		Р
	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
17.7 (4.16.1)	Lamp control gear spacing:		Р
	- spacing 35 mm		N/A
	- spacing 10 mm		Р
17.7 (4.16.2)	Thermal protection:		N/A
	- in lamp control gear	No thermal protection used	N/A
	- external		N/A
	- fixed position		N/A
	- temperature marked lamp control gear		N/A
17.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
17.7 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
17.7 (4.18)	Resistance to corrosion		N/A
17.7 (4.18.1)	- rust-resistance		N/A

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	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.18.2)	- season cracking in copper		N/A
17.7 (4.18.3)	- corrosion of aluminium		N/A
17.7 (4.19)	Ignitors compatible with ballast		N/A
17.7 (4.20)	Rough service vibration		N/A
17.7 (4.21)	Protective shield		N/A
17.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
17.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
17.7 (4.21.3)	No direct path		N/A
17.7 (4.21.4)	Impact test on shield	Compliance clause 4.13.1	N/A
	Glow-wire test on lamp compartment:	See Test Table 17.16 (13.3.2)	N/A
17.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
17.7 (4.23)	Semi-luminaires comply Class II		N/A
17.7 (4.24)	Photobiological hazards		Р
17.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
17.7 (4.24.2)	Retinal blue light hazard		Р
	Class of risk group assessed according to IEC/TR 62778	RG1	_
	Luminaires with E _{thr} :		N/A
	a) Fixed luminaires		N/A
	- distance x m, borderline between RG1 and RG2:		N/A
	- marking and instruction according 3.2.23		N/A
	b) Portable and handheld luminaires		N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC/62778		N/A
17.7 (4.25)	Mechanical hazard		Р
	No sharp point or edges		Р
17.7 (4.26)	Short-circuit protection		Р

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	IEC 60598-2-17		T
Clause	Requirement + Test	Result - Remark	Verdict
17.7 (4.26.1)	Adequate means of uninsulated accessible SELV / PELV parts		Р
17.7 (4.26.2)	Short-circuit test with test chain according 4.26.3:		N/A
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
17.7 (4.27)	Terminal blocks with integrated screwless protective	ve earthing contacts	N/A
	Test according Annex V		N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Voltage drop test, resistance < 0,05 Ω		N/A
17.7 (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 (°C):		_
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
17.7 (4.29)	Luminaires with non-replaceable light source		N/A
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A
17.7 (4.30)	Luminaires with non-user replaceable light source		Р
	If protective cover provide protection against electric shelectric shock risk" symbol:	nock and marked with "caution,	Р
	At least one fixing means requiring use of tool		Р
17.7 (4.31)	Insulation between circuits		Р
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		Р

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Clause	Requirement + Test	Result - Remark	Verdict
	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
17.7 (4.31.1)	SELV or PELV circuits		Р
	Used SELV/PELV source		Р
	Voltage ≤ ELV		Р
	Insulating of SELV/PELV circuits from LV supply	By reinforced insulation	Р
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits	By reinforced insulation	Р
	Insulating of SELV/PELV circuits from FELV		N/A
	Insulating of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1	Comply with basic insulation	Р
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		Р
	Socket outlets does not admit plugs of other voltage systems		Р
	Plugs and socket-outlets does not have protective conductor contact		Р
17.7 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage ≤ 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 make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets have protective conductor contact		N/A
17.7 (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 prowith live parts:	otection against indirect contacts	N/A
	- conductive parts are connected together		N/A

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Clause	Requirement + Test	Result - Remark	Verdic
	- 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
17.7 (4.32)	Overvoltage protective devices		N/A
	Comply with IEC 61643-11		N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A
17.7 (4.33)	Luminaire powered via information technology con	mmunication 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
17.7 (4.34)	Electromagnetic fields (EMF)		Р
	No harmful electromagnetic fields	High-pressure discharge lamp technologies used	Р
17.7 (4.35)	Protection against moving fan blades		Р
	Test with a standard test finger		Р
	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
17.7 (4.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
17.7.1 (-)	Not possible to insert a lamp into a "live" lamp holder if applicable		N/A
17.7.2 (-)	Prevent immediate access to the lamp or marked according 17.6.5 if applicable		N/A
17.7.3 (-)	Retain particles of glass or quarts produced in the event of the lamp shattering if glass bulb lamp		N/A

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Clause	Requirement + Test	Result - Remark	Verdict		
	Comply with test 4.21.4 in IEC 60598-1 with 0,5 Nm		N/A		
17.7.4 (-)	Bearing parts of hanger are capable to support six time the weight of the luminaire		N/A		
	Non-combustible materials		N/A		
	Parts of hanger carrying a proportion of the weight of the luminaire are capable to support six time the proportion of weight		N/A		
	Connection between hanger and luminaire locked		N/A		
	Test 1 h with six times the weight of the luminaire		N/A		
17.7.5 (-)	Removable accessories cannot fall out of the luminaire from any position		Р		
17.7.6 (-)	If applicable a secondary suspension provided and passed the test		Р		

17.8 (11)	CREEPAGE DISTANCES AND CLEARANCES		Р
17.8 (11.2.1)	Impulse withstand category (Normal category II)	Category II Category III	_
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
17.8 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 17.8 (11.2) I	Р
	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 17.8 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 17.8 (11.2) II	N/A
17.8 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 17.8 (11.2) I	Р
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U _P	See Test Table 17.8 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 17.8 (11.2) II	N/A

17.9 (7)	PROVISION FOR EARTHING	PROVISION FOR EARTHING	
17.9 (7.2.1 + 7.2.3)	Accessible metal parts		Р
	Metal parts in contact with supporting surface		Р

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Clause	Requirement + Test	Result - Remark	Verdict	
	Resistance < 0,5 Ω:	0.09Ω	Р	
	Self-tapping screws used		N/A	
	Thread-forming screws		Р	
	Thread-forming screw used in a grove		N/A	
	Protective earth makes contact first		Р	
	Terminal blocks with integrated screwless protective earthing contacts tested according Annex V		N/A	
	Protective earthing of the luminaire not via built-in control gear		Р	
17.9 (7.2.2 + 7.2.3)	Protective earth continuity in joints, etc.		Р	
17.9 (7.2.4)	Locking of clamping means	Screwed	Р	
	Compliance with 4.7.3		Р	
17.9 (7.2.5)	Protective earth terminal integral part of connector socket		Р	
17.9 (7.2.6)	Protective earth terminal adjacent to mains terminals		Р	
17.9 (7.2.7)	Electrolytic corrosion of the protective earth terminal	Ordinary luminaire	N/A	
17.9 (7.2.8)	Material of protective earth terminal	Stainless material used	Р	
	Contact surface bare metal	Contact surface is bare	Р	
17.9 (7.2.10)	Class II luminaire for looping-in		N/A	
	Double or reinforced insulation to functional earth		N/A	
17.9 (7.2.11)	Protective earthing core coloured green-yellow	Green-yellow wire used	Р	
	Length of protective earthing conductor	Separately approved inlet provided	N/A	
17.9 (7.2.12)	PELV circuit connected to protective earth for functional purpose		N/A	

17.10 (14)	.10 (14) SCREW TERMINALS		N/A
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 3)	N/A

17.10 (15)	17.10 (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
17.11 (5)	EXTERNAL AND INTERNAL WIRING		Р
17.11 (5.2)	Supply connection and external wiring		Р
17.11 (5.2.1)	Means of connection	Non-detachable flexible cord used	Р
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
17.11 (5.2.2)	Type of cable:	H03VVH2-F or H03VV-F	Р
	Nominal cross-sectional area (mm²):	At least 3 x 0.75 mm ² shall be used	Р
	Cables equal to IEC 60227 or IEC 60245	See table annex 1	Р
17.11 (5.2.3)	Type of attachment, X, Y or Z	Type Y	Р
17.11 (5.2.5)	Type Z not connected to screws		N/A
17.11 (5.2.6)	Cable entries:		Р
	- suitable for introduction		Р
	- adequate degree of protection		Р
17.11 (5.2.7)	Cable entries through rigid material have rounded edges		Р
17.11 (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
17.11 (5.2.9)	Locking of screwed bushings		N/A
17.11 (5.2.10)	Cord anchorage:		Р
	- covering protected from abrasion		Р
	- clear how to be effective		Р
	- no mechanical or thermal stress		Р
	- no tying of cables into knots etc.		Р
	- insulating material or lining		Р

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Clause	Requirement + Test	Result - Remark	Verdict
17.11 (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
17.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		Р
17.11 (5.2.10.3)	Tests:		Р
	- impossible to push cable; unsafe		Р
	- pull test: 25 times; pull (N):	30	Р
	- torque test: torque (Nm)	0.08	Р
	- displacement ≤ 2 mm		Р
	- no movement of conductors		Р
	- no damage of cable or cord		Р
	- function independent of electrical connection		Р
17.11 (5.2.10.4)	Luminaire with/designed for use with supply cord with	maximum current of 2A:	N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25V RMS/60V DC		N/A
	- Ordinary Class III luminaire supplied with PELV ≤12V RMS/30V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage ≤12V RMS/30V DC		N/A
	Pull test of 30N		N/A
17.11 (5.2.11)	External wiring passing into luminaire		Р
17.11 (5.2.12)	Looping-in terminals		N/A
17.11 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		Р

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Clause	Requirement + Test	Result - Remark	Verdict
17.11 (5.2.14)	Mains plug same protection		Р
	Class III luminaire plug		Р
	No unsafe compatibility		Р
17.11 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
17.11 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
17.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
17.11 (5.2.18)	Used plug in accordance with		Р
	- IEC 60083		N/A
	- other standard		Р
17.11 (5.3)	Internal wiring		Р
17.11 (5.3.1)	Internal wiring of suitable size and type		Р
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A):		N/A
	- temperatures	(see Annex 2)	N/A
	Green-yellow for protective earth only		Р
17.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm²):		N/A
	Insulation thickness (mm):		N/A
	Extra insulation added where necessary		N/A
17.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal cu	urrent-limiting device	Р
	Cross-sectional area (mm²)		Р
17.11 (5.3.1.3)	Double or reinforced insulation for class II	Apply for class II construction	Р
17.11 (5.3.1.4)	Conductors without insulation		N/A
17.11 (5.3.1.5)	SELV/PELV current-carrying parts		Р

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Clause	Requirement + Test	Result - Remark	Verdict
17.11 (5.3.1.6)	Insulation thickness other than PVC or rubber	PVC insulation	Р
17.11 (5.3.2)	Sharp edges etc.		Р
	No moving parts of switches etc.		Р
	Joints, raising/lowering devices		Р
	Telescopic tubes etc.	No telescopic tubes used	N/A
	No twisting over 360°		Р
17.11 (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
17.11 (5.3.4)	Joints and junctions effectively insulated		Р
17.11 (5.3.5)	Strain on internal wiring		N/A
17.11 (5.3.6)	Wire carriers		Р
17.11 (5.3.7)	Wire ends not tinned		Р
	Wire ends tinned: no cold flow		N/A
17.11 (5.4)	Test to determine suitability of conductors having area	g a reduced cross-sectional	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
17.11.1 (-)	Cross-sectional area - current (A)	See Annex 1	Р
	- area (mm²):		
17.11.2 (-)	Plugs and sockets not interchangeable		Р

17.12 (8)	PROTECTION AGAINST ELECTRIC SHOCK	
17.12 (8.2.1)	Live parts not accessible	
	Basic insulated parts not used on the outer surface without appropriate protection	Р

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Clause	Requirement + Test	Result - Remark	Verdict
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		Р
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		Р
	Lamp and starter holders 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		Р
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		Р
	Double-ended high-pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
17.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
17.12 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible		N/A
	- required insulation from live parts in compliance with Table X.1		N/A
	- glass protective shields not used as supplementary insulation		N/A
17.12 (8.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
17.12 (8.2.3.c)	SELV circuits with exposed current carrying parts:		Р
	Ordinary luminaire:		Р
	- voltage under load/ no-load AC (V):		N/A
	- voltage under load/ no-load DC (V)		N/A
	- interrupted DC voltage (V)		N/A
	- touch current if applicable (mA):		N/A
	One conductive part insulated if required		Р
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V):		N/A
	- voltage under load/ no-load DC (V)		N/A
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV/PELV		N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
17.12 (8.2.3.d)	PELV circuits with exposed current carrying parts:		N/A	
	Ordinary luminaire:		N/A	
	- voltage under load/ no-load AC (V):		N/A	
	- voltage under load/ no-load DC (V)		N/A	
	Other than ordinary luminaire:		N/A	
	- voltage under load/ no-load AC (V):		N/A	
	- voltage under load/ no-load DC (V)		N/A	
	One pole insulated if required		N/A	
17.12 (8.2.4)	Portable luminaire has protection independent of supporting surface		Р	
17.12 (8.2.5)	Compliance with the standard test finger or relevant probe		Р	
17.12 (8.2.6)	Covers reliably secured		Р	
17.12 (8.2.7)	Luminaire other than below with capacitor $> 0.5~\mu F$ does not exceed 50 V 1 min after disconnection		N/A	
	Portable luminaire with capacitor $>$ 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N/A	
	Other luminaires with capacitor $>$ 0,1 μF (0.25) with plug and track adaptors do not exceed 60 V 5 s after disconnection	2V after 5s	Р	

17.13 (12)	ENDURANCE TEST AND THERMAL TEST		Р
17.13 (12.2)	Selection of lamps and ballasts		_
	Lamp used according to Annex B	(Lamp used see Annex 2)	_
	Control gear if separate and not supplied	(Control gear used see Annex 2)	_
17.13 (12.3)	Endurance test		Р
	a) mounting-position:	Mounted as manufacturer recommend in user manual	_
	b) test temperature (°C):	50	_
	c) total duration (h):	240	_
	d) supply voltage (V):	264	_
	d) if not equipped with control gear, constant voltage/current (V) or (A):	Built-in controlgear used	_
17.13 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- voltage under normal operation (V)		_
	- voltage under abnormal operation (V)		
	e) luminaire ceases to operate		
	f) luminaire with constant light output function		N/A
17.13 (12.3.2)	After endurance test:		Р
	- no part unserviceable		Р
	- luminaire not unsafe		Р
	- no damage to track system	Non track mounted type	N/A
	- marking legible		Р
	- no cracks, deformation etc.		Р
17.13 (12.4)	Thermal test (normal operation)	(see Annex 2)	Р
17.13 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	Р
17.13 (12.6)	Thermal test (failed lamp control gear condition):		N/A
17.13 (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
17.13 (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
17.13 (12.7)	Thermal test (failed lamp control gear in plastic lu	minaires):	N/A
17.13 (12.7.1)	Luminaire without temperature sensing control		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
17.13 (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:		_
	- calculated temperature of fixing point/exposed part (°C):		_
	Ball-pressure test:	See Test Table 17.16 (13.2.1)	N/A
17.13 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70	W, 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 17.16 (13.2.1)	N/A
17.13 (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
17.13 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link:	Yes No	_
	- manual reset cut-out:	Yes No No	_
	- auto reset cut-out:	Yes No No	_
	- case of abnormal conditions:		_

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Clause	Requirement + Test	Result - Remark	Verdict
	- highest measured temperature of fixing point/ exposed part (°C)::		_
	Ball-pressure test:	See Test Table 17.16 (13.2.1)	N/A
17.13.1 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (specified in 17.14	12.7) after (9.2) before (9.3)	N/A
17.13.2 (-)	Exterior surface temperature	(see Annex 2)	N/A

17.14 (9)			Р
17.14 (-)			_
17.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		Р
	- classification according to IP:	IP20	
	- mounting position during test:	Mounted as manufacturer recommend in user manual	_
	- fixing screws tightened; torque (Nm):	Considered	_
	- tests according to clauses:		_
	- electric strength test afterwards		N/A
	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
	c.1) For luminaires without drain holes – no water entry		N/A
	c.2) For luminaires with drain holes – no hazardous water entry		N/A
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		N/A
	e) no contact with live parts (IP 2X)		Р
	e) no entry into enclosure (IP 3X and IP 4X)		N/A
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A
	f) no trace of water on part of lamp requiring protection from splashing water		N/A
	g) no damage of protective shield or glass envelope		N/A
17.14 (9.3)	Humidity test 48 h	30°C, 93%RH, 48h	Р

17.15 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		Р
17.15 (10.2.1)	Insulation resistance test		Р

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Clause	Requirement + Test	Result - Remark	Verdict
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø		_
	Insulation resistance (MΩ):		N/A
	SELV/PELV:		Р
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface:	>100MΩ	Р
	- between current-carrying parts and metal parts of the luminaire:	>100MΩ	Р
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:		N/A
	- Insulation bushings as described in Section 5:		N/A
	Other than SELV/PELV:		Р
	- between live parts of different polarity:	>100MΩ	Р
	- between live parts and mounting surface:	>100MΩ	Р
	- between live parts and metal parts:	>100MΩ	Р
	- 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
17.15 (10.2.2)	Electric strength test		Р
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V):		Р
	SELV/PELV:		Р
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface:	500V	Р
	- between current-carrying parts and metal parts of the luminaire:	500V	Р
	- 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

	3	•	
	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
	Other than SELV/PELV:		Р
	- between live parts of different polarity:	1500V	Р
	- between live parts and mounting surface:	1500V	Р
	- between live parts and metal parts:	1500 V for earthed metal enclosure	Р
		3000V for DMX IN/OUT terminal	
	- 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
17.15 (10.3)	Touch current (mA)	L/N poles and plastic enclosure: 0.07mApeak	Р
		(Limit: 0.7mApeak)	
	Protective conductor current (mA)	L/N poles and earthed metal enclosure: 1.8mA (Limit: 2.0mA)	Р

17.16 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING				
17.16 (13.2.1)	Ball-pressure test:	See Test Table 17.16 (13.2.1)	Р		
17.16 (13.3.1)	Needle-flame test (10 s):	See Test Table 17.16 (13.3.1)	Р		
17.16 (13.3.2)	Glow-wire test (650°C):	See Test Table 17.16 (13.3.2)	N/A		
17.16 (13.4)	Proof tracking test (IEC 60112):	See Test Table 17.16 (13.4)	N/A		

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	1 490 01 01 1		011110. 2 10011010
	IEC 60598-2-	17	
Clause Requirement	t + Test	Result - Remark	Verdict

17.8 (11.2)	TABLE I: C	reepage dista	nces and clea	rances			Р		
	Minimum d	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages							
	Applicable	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*							
	Insulation		Requ	uired	Measured	Requ	ired		
	type **	clearance	clearance	*Table	creepage	creepage	*Table		
Distance 1:	В	5.1	1.5	11.1	5.1	2.5	11.1		
Distance 2:	В	3.2	1.5	11.1	3.2	2.5	11.1		
Norking volt	age (V)			:	100-240Vac		_		
					< 600 ⊠	≥ 600 □	_		
Pulse voltag	e or <i>U</i> _P if app	licable (kV)		:	2.5		_		
Distance 2: I' Distance 3:	Measured bet B	>3.3	1.5	11.1	>3.3	2.5	11.1		
Distance 2: N	Measured bet	ween two poin	s of Fuse						
			1.5		100-240Vac	2.5	11.1		
	- ,				< 600 ⊠	≥ 600 □			
					2.5	<u> </u>			
Supplementa	ary information	n:	and earthing r						
Distance 4:	В	>3.3	1.5	11.1	>3.3	2.5	11.1		
Norking volt	age (V)			:	100-240Vac	<u> </u>	_		
PTI:					< 600 ⊠	≥ 600 □	_		
Pulse voltage or U_P if applicable (kV):					2.5		_		
Supplementa	ary information	n:	rthing screw ar		surface				

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

			IEC 6	0598-2-17			
Clause	Requiremen	t + Test		Result - Remark		Verdict	
17.8 (11.2)	TABLE II: C	TABLE II: Creepage distances and clearances					
	Minimur	n distances	(mm) for a.c.	higher than 3	0 kHz sinusoi	dal voltages	
	Applicab	le part of IE	C 61347-1 Tab	ole 7 and 8* or	IEC 60664-4	Table 1 and 2	
Distances	Insulation	Measured	Requ	uired	Measured	Requ	uired
	type **	clearance	clearance	*Table	creepage	creepage	*Table
Distance 1:							
Working vol	tage (V)			:			_
Frequency if	f applicable (k	(Hz)					_
PTI				:	< 600 🗌	≥ 600 □	
Peak value	of the working	g voltage Û _{out}	if applicable (kV):			
Supplement	ary informatio	n:			•		•
Distance 2:							
Working vol	tage (V)						
Frequency it	f applicable (k	(Hz)		:			_
PTI				:	< 600 🗌	<u>></u> 600 □	
Peak value	of the working	g voltage Û _{out}	if applicable (kV):			
Supplement	ary informatio	n:					<u> </u>
Distance 3:							
Working vol	tage (V)			:			
Frequency if	f applicable (k	(Hz)					_
PTI					< 600 🗌	<u>></u> 600 □	_
Peak value	of the working	g voltage Û _{out}	if applicable (kV):			_
Supplement	ary informatio	n:			1		

^{**} Insulation type: B - Basic; S - Supplementary; R - Reinforced.

			'	
		IEC 60598-2-17		
Clause	Requirement + Test		Result - Remark	Verdict

17.16 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics					
Allowed impression diameter (mm):		2		_		
Object/ Part No./ Material		Manufacturer/ trademark	Test temperature (°C) Impression diam		er (mm)	
Primary AC	connector		125	1.2		
Secondary SELV connector		125	1.1			
Supplementa	ary information:					

17.16 (13.3.1)	TABLE:	TABLE: Needle-flame test						
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		
Primary AC connector			10	No	No flame	Pass		
Secondary S connector	SELV		10	No	No flame	Pass		
Supplementary information:								

17.16 (13.3.2) TABLE: Resistance to heat and fire - Glow wire tests									
Object/ Part No./ Material		Manufacturer/)					
		trademark	t _E (s)	t _l (s)	t _R (s)	Verdict			
Ignition of the spe	Ignition of the specified layer placed underneath the test specimen (Yes/No):								
Supplementary information:									

17.16 (13.4)	TABLE: Proof tracking test						
Test voltage PTI:			175 V			_	
Object/ Part No./ Material Manufacturer/ trademark		Withstand 50 d	lrops without fail ree specimens	ure on three	Verdict		
Supplementa	ary information:						

	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1 TAE	LE: Cr	itical components	information				Р
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of mity ¹⁾
Mains plug	A	Guangdong KaiHua Electric Appliance Co., Ltd.	KH9902	250V, 16A (standard sheet DIN 49441-R2)	DIN VDE 0620- 2-1	VDE 400104	10
Power cord	A	Shenzhen Baohing Electric Wire & Cable Manufacture Co., Ltd.	H05VV-F	3×1.5mm ²	EN 50525-2-11	VDE 10	3727
Thermal cut-off	В	Foshan Nanhai Pingzhou Hengxin Precision Electrical Equipment Co Ltd	TP2-08505	AC 250V, 6A, 100°C	IEC/EN 60730- 1 EN IEC 60730- 2-22	VDE 400189	85
Fuse	А	Shenzhen Lanson Electronics Co., Ltd.	5K	AC 250V, T 6.3 A	EN 60127-1, EN 60127-2	VDE 400107	46
Internal wires (earthing wire)	A	ZhongshanShen Wan FuYuanTong Wire & Cable Co., Ltd.	1569	18AWG, VW-1, 300V, 105°C	UL 758	UL E24	1989
Internal wires	Α	ZhongshanShen Wan FuYuanTong Wire & Cable Co., Ltd.	1569	24AWG, 26AWG, VW-1, 300V, 105°C	UL 758	UL E24	1989
DC Fan	В	BI-SONIC TECHNOLOGY CORP	MD 8828PL	DC 24V, 0.15A	UL 507	UL E89	061
PCB	А	Shenzhen Jia Li Chuang Technology Development Co Ltd	JLC-2	130°C, V-0, Min. THK:1.3 mm	UL 796	UL E47	9892
Switching power supply	В	Fangda Power Supply Co., Ltd	FD-5R3	Input:100- 240Vac, 50/60Hz Output 1: 24Vdc, 5.8A, 139W Output 2: 12Vdc 1.5A, 18W Total:	EN 61347-2-13	CE separat approve See rep no: 160102	ed oort

		IEC 60598-2-17	·	
Clause	Requirement + Test		Result - Remark	Verdict

LED emitter	С	LedEngin., Inc	LQ4-00MD03-	10W,	EN 60598-2-17	Tested with
			0209	7.0mm×7.0mm×4		appliance
				.3mm,		
				RGBWx37pcs		

Supplementary information:

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

 $^{^{1)}\}mbox{Provided}$ evidence ensures the agreed level of compliance. See OD-CB2039.

		IEC 60598-2-17		
Clause	Requirement + Test		Result - Remark	Verdict

ANNEX 2	ANNEX 2 TABLE: Thermal tests of Section 12									
	Type refere	nce				:	BP1818			_
	Lamp used:									_
	Lamp contr		See Annex	(1		_				
	Mounting po	osition of lu	minaire			:	According	to the instr	uction	_
	Supply watt	age (W)				:	See below			_
	Supply curr	ent (A)				:	See below	,		_
	Temperatur ta (°C)						40			
	- abnormal									_
17.13 (12.4)	- test 1: rate	ed voltage				:				_
	- test 2: 1,0 wattage or						Normal op 254.4V, 0.		W, 60Hz	_
	- test 3: Loa voltage or 1									_
	Through win									_
17.13 (12.5)	wattage or	times rated voltage or 1,05 times rated 1,1 times constant voltage/current or of rated input voltage:			4(a) Ventilation openings blocked: 264V, 0.53A, 128.0W, 50Hz			_		
							4(b) DC fa 264V, 0.52		, 50Hz	
			Temp	erature	measur	ements	s (°C)			
Dowt		A mahianat	(CI. 12.4	– norma	ıl		Cl. 12.5 –	abnormal	
Part		Ambient	test 1	test 2	test 3	limit	test 4(a)	test 4(b)		limit
Power cord		40.0		48.5		90	55.6	58.7		
Cord anchor	Cord anchorage			56.9		75	75.0	78.5		
Earthing wire		40.0		44.3		105	63.2	65.9		-
Input wire to LED driver 4		40.0		62.5		105	88.4	95.8		-
Input connector to LED driver 40.0		40.0		64.3		80	82.3	84.8		-
L2 winding 40.0		40.0		67.6		130	116.6	131.9		175
NTC 40.0		40.0		69.9		Ref	103.0	112.4		Ref
X2 capacito	r	40.0		64.3		105	105.1	118.7		Ref
CY1 capacit	or	40.0		67.7		125	114.4	132.8		Ref

		IEC 6	0598-2-	17			
Clause Requi	rement + Test	Result - Remark				Verdict	
RV1	40.0	 67.7		85	103.0	113.3	
PCB below Q2	40.0	 72.8		130	120.5	134.7	
C26	40.0	 69.3		105	112.4	126.2	 Ref
T1 primary winding	40.0	 79.2		130	128.7	145.2	 175
T1 secondary windi	ng 40.0	 75.1		130	120.3	136.1	 175
T1 bobbin	40.0	 70.6		150	115.4	129.9	 175
PCB near T1	40.0	 73.9		130	109.7	120.6	
Output wire	40.0	 66.2		90	104.6	114.3	
Output terminal	40.0	 65.1	1	Ref	105.7	116.8	
DC fan plastic enclosure	40.0	 67.4		75	110.8	121.3	
The hottest point of internal wire	40.0	 46.9		Ref	43.3	46.4	
LED chip	40.0	 162.1		Ref	154.9	162.4	 Ref
LED chip plate	40.0	 128.7		Ref	132.0	137.4	 Ref
Input wire to LED module	40.0	 69.9		90	124.2	129.4	
Diffuser inside	40.0	 96.8		Ref	129.2	135.2	
The hottest point of metal enclosure	40.0	 51.0		Ref	68.9	71.5	 Ref
Objects lighted by L module from 0.5m	ED 40.0	 48.1		90	46.0	47.8	 Ref
Mounting surface	40.0	 43.2	-	90	47.8	49.6	 130
Supplementary info	rmation:	 					

		IEC 60598-2-17		
Clause	Requirement + Test		Result - Remark	Verdict

ANNEX 3	Screw terminals (part of the luminaire)		N/A			
(14)	SCREW TERMINALS					
(14.2)	Type of terminal:		_			
	Rated current (A):		_			
(14.3.2.1)	One or more conductors		N/A			
(14.3.2.2)	Special preparation		N/A			
(14.3.2.3)	Terminal size		N/A			
	Cross-sectional area (mm²)		_			
(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			

ANNEX 4	Screwless terminals (part of the luminaire)	N/A
(15)	15) SCREWLESS TERMINALS	
(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

	IEC 60598-2-17		
Clause	Requirement + Test	Result - Remark	Verdict
(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
(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) (15.6.3.2)	TABLE: Contact resistance test / Heating tests	N/A
	Voltage drop (mV) after 1 h	_

				I	EC 6059	8-2-17					
Clause	Requi	rement + Test					Resul	Result - Remark			Verdict
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Voltage dro	p of two	insepara	ble joints	3					
		Voltage dro	p after 1	0th alt. 2	5th cycle	;					
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Voltage dro	p after 5	0th alt. 1	00th cycl	le					
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Continued	ageing:	voltage c	lrop after	10th alt	ılt. 25th cycle				
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Continued	ageing v	oltage dr	op after 5	50th alt.	100th cyc	le			
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	voltage drop (mV)										
Supplementa	ry info	rmation:									

Attachment No. 1

	Page 1 of 2	Report N	o.: 2409110 ²
	IEC60598_2_17G ATT	ACHMENT	
Clause	Requirement + Test	Result - Remark	Verdict
	ATTACHMENT TO TEST REPO EUROPEAN GROUP DIFFERENCES AND Luminaires Part 2: Particular requ 17: Luminaires for stage lighting, television coording to	D NATIONAL DIFFERENCES uirements n and film studios (outdoor and	
	1:2021/A11:2022		
Annex Form N	lo EU_GD_IEC60598_2_	17G	
Annex Form (Originator Guangzhou ITL Co., Lt	d	
Master Annex	Form2023-02		
	1		
	CENELEC COMMON MODIFICATIONS (EN)	P
47.6.(2)	MADIZING		NI/A
17.6 (3)	MARKING		N/A
17.7 (4)	CONSTRUCTION		N/A
17.7 (4.11.6)	Electro-mechanical contact systems		N/A
17.11(5)	EXTERNAL AND INTERNAL WIRING		N/A
17.11 (5.2.2)	Cables equal to EN 50525	H05VV-F or equivalent	Р
	Replace table 5.1 – Supply cord		Р
17.13 (12)	ENDURANCE TESTS AND THERMAL TE	STS	Р
17.13 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		Р
ZB	ANNEX ZB, SPECIAL NATIONAL CONDI	TIONS (EN)	N/A
(3.3)	DK: power supply cords of class I luminaire with label		N/A
(5.2.18)	DK: socket-outlets		N/A
(5.2.1)	CY, DK, FI, GB: type of plug		N/A
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN	l)	Р
(4 & 5)	FR: Shuttered socket-outlets 10/16A	-	N/A

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Attachment No. 1

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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)	N/A
Glow-wire test for outer parts of luminaires:	
- 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	Р

Attachment 2: Photos

Type of equipment, model: Stage Luminaire, BP1818

Details of:



Details of: Stage Luminaire, BP1818



Report No.: 240911013

Attachment 2: Photos

Details of:



Details of:

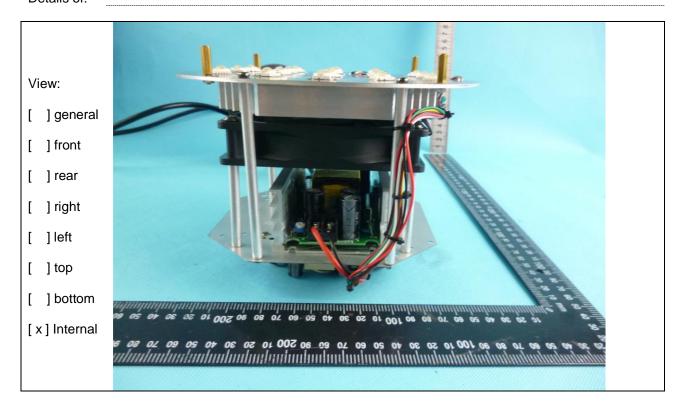


Attachment 2: Photos

Details of:



Details of:



Attachment 2: Photos

Details of:

