APPLICATION FOR LOW VOLTAGE DIRECTIVE
On Behalf of
Shenzhen Qinhan Lighting Co., Ltd
LED High Bay Light
Model: QH-HBGKH-58W, QH-HBGKH-100W, QH-HBGKH-125W, QH-HBGKH-150W, QH-HBGKH-185W, QH-HBGKH-200W

Prepared For : **Shenzhen Qinhan Lighting Co., Ltd**
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TEST REPORT
EN 60598-2-1
Luminaires
Part 2: Particular requirements
Section 1: Fixed general purpose luminaires

Report

Report reference No.	R0117030017S
Compiled by	Toya Zhang
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Testing laboratory

Name	Shenzhen Anbotek Compliance Laboratory Limited
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Testing location	Same as above

Applicant

Name	Shenzhen Qinhan Lighting Co., Ltd
Address	5/F, Building B, Ideemonto Industrial Park, Shutianpu Community, Gongming Town, Guangming New District, Shenzhen City, Guangdong, China

Test specification

Standard	EN 60598-2-1:1989 EN 60598-1:2015
Procedure deviation	N.A.
Non-standard test method	N.A.

Test item Description

Product name	LED High Bay Light
Trademark	QINHAN
Manufactory	Shenzhen Qinhan Lighting Co., Ltd
Address	5/F, Building B, Ideemonto Industrial Park, Shutianpu Community, Gongming Town, Guangming New District, Shenzhen City, Guangdong, China
Factory	Shenzhen Qinhan Lighting Co., Ltd
Address	5/F, Building B, Ideemonto Industrial Park, Shutianpu Community, Gongming Town, Guangming New District, Shenzhen City, Guangdong, China
Model and/or type reference	QH-HBGKH-58W, QH-HBGKH-100W, QH-HBGKH-125W, QH-HBGKH-150W, QH-HBGKH-185W, QH-HBGKH-200W
Rating(s)	100-277V~, 50-60Hz, See attachment on page4

Test item particulars	
Classification of installation anduse ..……...:	Fixed
Supply connection ……..……..……:	Connecting leads
Protection class…… :	Class I
Degree of protection ……..……:	IP65
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)
Testing	
Date of receipt of test item……...:	Feb. 24, 2017
Date(s) of performance of test ……..……:	Feb. 24, 2017 to Mar. 06, 2017

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 tested.
Clause numbers between brackets refer to clauses in EN 60598-1.
"(see remark #)" refers to a remark appended to the report.
"(see Annex #)" refers to an annex appended to the report.
Throughout this report a comma is used as the decimal separator.
According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.

Summary of testing
Tests performed
- EN 60598-1:2015
- EN 60598-2-1:1989
- EN 62031:2008+A1:2013+A2:2015
- EN 62471: 2008
- EN 62493:2015

The submitted samples were found to comply with the above specification.

Copy of marking plate Location: Sticking on the enclosure. **(**take the model QH-HBGKH-200W for example**)**

LED High Bay Light
Model No: QH-HBGKH-200W
Rating: 100-277V~, 50-60Hz, 500W

Manufacturer: 5/F, Building B, Ideemonto Industrial Park, Shutianpu Community, Gongming Town, Guangming New District, Shenzhen City, Guangdong, China
Importer: XXXX

Attachment

Model No.	Rating
QH-HBGKH-58W	58W
QH-HBGKH-100W	100W
QH-HBGKH-125W	125W
QH-HBGKH-150W	150W
QH-HBGKH-185W	185W
QH-HBGKH-200W	200W

General product information:

Product: LED High Bay Light, 100-277V ~, 50/60Hz, Class I.

All the models have the similar appearance, and the same mechanical construction and electrical construction, only quantities of LED module and LED driver are different.

Attachment to test report

Attachment No.1: Test report of EN 62031:2008+A1:2013+A2:2015

Attachment No.2: Test report of EN 62471:2008

Attachment No.3: Test report of EN 62493:2015

Attachment No.4: Photo documentation

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.2 (0)	**GENERAL TEST REQUIREMENTS**		—
1.2 (0.1)	Information for luminaire design considered .....:	Yes ☐ No ☒	—
1.2 (0.3)	More sections applicable ..... :	Yes ☐ No ☒	—
1.4 (2)	**CLASSIFICATION**		—
1.4 (2.2)	Type of protection .....:	Class I	—
1.4 (2.3)	Degree of protection .....:	IP65	—
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**		—
1.5 (3.2)	Mandatory markings	(see page 3)	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
1.5 (3.3.2)	Nominal frequency in Hz	50/60Hz	P
1.5 (3.3.3)	Operating temperature		N
1.5 (3.3.4)	Symbol or warning notice		N
1.5 (3.3.5)	Wiring diagram		P
1.5 (3.3.6)	Special conditions		N
1.5 (3.3.7)	Metal halide lamp luminaire – warning		N
1.5 (3.3.8)	Limitation for semi-luminaires		N
1.5 (3.3.9)	Power factor and supply current		N
1.5 (3.3.10)	Suitability for use indoors		P
1.5 (3.3.11)	Luminaires with remote control		N
1.5 (3.3.12)	Clip-mounted luminaire – warning		N
1.5 (3.3.13)	Specifications of protective shields		N
1.5 (3.3.14)	Symbol for nature of supply	~	P
1.5 (3.3.15)	Rated current of socket outlet		N
1.5 (3.3.16)	Rough service luminaire		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N
1.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N
1.5 (3.3.19)	Protective conductor current in instruction if applicable		N
1.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N
1.5 (3.3.21)	Non replaceable and non-user replaceable light sources information provided		P
	Cautionary symbol		N
1.5 (3.3.22)	Controllable luminaires, insulation		N
1.5 (3.4)	Test with water	15s with water	P
	Test with hexane	15s with hexane	P
	Legible after test		P
	Label attached		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)	Lampholders		N
1.6 (4.4.1)	Integral lampholder		N
1.6 (4.4.2)	Wiring connection		N
1.6 (4.4.3)	Lampholder for end-to-end mounting		N
1.6 (4.4.4)	Positioning		N
	- pressure test (N) .....:		—
	After test the lampholder comply with relevant standard sheets and show no damage		N
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N
	- bending test (Nm) .....:		—
	After test the lampholder have not moved from its position and show no permanent deformation		N
1.6 (4.4.5)	Peak pulse voltage		N
1.6 (4.4.6)	Centre contact		N
1.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N
1.6 (4.4.8)	Lamp connectors		N
1.6 (4.4.9)	Caps and bases correctly used		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N
1.6 (4.5)	Starter holders		N
	Starter holder in luminaires other than class II		N
	Starter holder class II construction		N
1.6 (4.6)	Terminal blocks		P
	Tails		P
	Unsecured blocks		N
1.6 (4.7)	Terminals and supply connections		P
1.6 (4.7.1)	Contact to metal parts		P
1.6 (4.7.2)	Test 8 mm live conductor		N
	Test 8 mm earth conductor		N
1.6 (4.7.3)	Terminals for supply conductors		P
1.6 (4.7.3.1)	Welded connections:		N
	- stranded or solid conductor		N
	- spot welding		N
	- welding between wires		N
	- Type Z attachment		N
	- mechanical test according to 15.8.2		N
	- electrical test according to 15.9		N
	- heat test according to 15.9.2.3 and 15.9.2.4		N
1.6 (4.7.4)	Terminals other than supply connection		P
1.6 (4.7.5)	Heat-resistant wiring/sleeves		N
1.6 (4.7.6)	Multi-pole plug		N
	- test at 30 N		N
1.6 (4.8)	Switches:		N
	- adequate rating		N
	- adequate fixing		N
	- polarized supply		N
	- compliance with IEC 61058-1 for electronic switches		N
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

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Resistant to a temperature > 20 °C to the wire temperature or		N
	a) & c) Insulation resistance and electric strength		N
	b) Ageing test. Temperature (°C) .....:		N
1.6 (4.10)	Double or reinforced insulation		P
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N
	Safe installation fixed luminaires		P
	Capacitors and switches		N
	Interference suppression capacitors according to IEC 60384-14		N
1.6 (4.10.2)	Assembly gaps:		N
	- not coincidental		N
	- no straight access with test probe		N
1.6 (4.10.3)	Retainment of insulation:		N
	- fixed		N
	- unable to be replaced; luminaire inoperative		N
	- sleeves retained in position		N
	- lining in lampholder		N
1.6 (4.11)	Electrical connections and current-carrying parts		P
1.6 (4.11.1)	Contact pressure		P
1.6 (4.11.2)	Screws:		P
	- self-tapping screws		P
	- thread-cutting screws		N
1.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N
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
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
	Torque test: torque (Nm); part .....:	Earthing screw: 0.4Nm	P
	Torque test: torque (Nm); part .....:		N
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.12.4)	Locked connections:		N
	- fixed arms; torque (Nm).....:		N
	- lampholder; torque (Nm) .....:		N
	- push-button switches; torque 0,8 Nm.....:		N
1.6 (4.12.5)	Screwed glands; force (Nm).....:		N
1.6 (4.13)	Mechanical strength		P
1.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:	0.20 Nm	P
	- other parts; energy (Nm) .....:	0.35 Nm	P
	1) live parts		P
	2) linings		N
	3) protection		P
	4) covers		P
1.6 (4.13.3)	Straight test finger		N
1.6 (4.13.4)	Rough service luminaires		N
	- IP54 or higher		N
	a) fixed		N
	b) hand-held		N
	c) delivered with a stand		N
	d) for temporary installations and suitable for mounting on a stand		N
1.6 (4.13.6)	Tumbling barrel		N
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
	C) bracket arm; bending moment (Nm).....:		N
	D) load track-mounted luminaires		N
	E) clip-mounted luminaires, glass-shelve. Thickness (mm) .....:		N
	Metal rod. diameter (mm) .....:		N
	Fixed luminaire or independent control gear without fixing devices		N
1.6 (4.14.2)	Load to flexible cables		N
	Mass (kg) .....:		—
	Stress in conductors (N/mm²) .....:		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Mass (kg) of semi-luminaire .....:		—
	Bending moment (Nm) of semi-luminaire .....:		N
1.6 (4.14.3)	Adjusting devices:		N
	- flexing test; number of cycles .....:		N
	- strands broken.....:		N
	- electric strength test afterwards		N
1.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N
1.6 (4.14.5)	Guide pulleys		N
1.6 (4.14.6)	Strain on socket-outlets		N
1.6 (4.15)	Flammable materials:		P
	- glow-wire test 650°C .....:	See Test Table 4.15 (13.3.2)	P
	- spacing ≥30 mm		N
	- screen withstanding test of 13.3.1		N
	- screen dimensions		N
	- no fiercely burning material		P
	- thermal protection		N
	- electronic circuits exempted		P
1.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		N
	a) construction		N
	b) temperature sensing control		N
	c) surface temperature		N
1.6 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	No lamp control gear .....:	(compliance with Section 12)	N
1.6 (4.16.1)	Lamp control gear spacing:		N
	- spacing 35 mm		N
	- spacing 10 mm		N
1.6 (4.16.2)	Thermal protection:		N
	- in lamp control gear		N
	- external		N
	- fixed position		N
	- temperature marked lamp control gear		N
1.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N
1.6 (4.17)	Drain holes		N
	Clearance at least 5 mm		N

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Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.18)	Resistance to corrosion:		N
1.6 (4.18.1)	- rust-resistance		N
1.6 (4.18.2)	- season cracking in copper		N
1.6 (4.18.3)	- corrosion of aluminium		N
1.6 (4.19)	Igniters compatible with ballast		N
1.6 (4.20)	Rough service vibration		N
1.6 (4.21)	Protective shield:		N
1.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N
	Shield of glass if tungsten halogen lamps		N
1.6 (4.21.2)	Particles from a shattering lamp not impair safety		N
1.6 (4.21.3)	No direct path		N
1.6 (4.21.4)	Impact test on shield		N
	Glow-wire test on lamp compartment.....:	See Test Table 4.15 (13.3.2)	N
1.6 (4.22)	Attachments to lamps		N
1.6 (4.23)	Semi-luminaires comply Class II		N
1.6 (4.24)	**Photobiological hazards**		---
1.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N
1.6 (4.24.2)	Retinal blue light hazard		N
	Luminaires with E_{thr}		N
	a) Fixed luminaires		N
	- distance x m, borderline between RG1 and RG2 .. :		N
	- marking and instruction according 3.2.23		N
	b) Portable and handheld luminaires		N
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N
	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
1.6 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
1.6 (4.26)	Short-circuit protection:		N
1.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N
1.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N
	Test chain not melt through		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Test sample not exceed values of Table 12.1 and 12.2		N
1.6 (4.27)	Terminal blocks with integrated screwless earthing contacts		N
	Test according Annex V		N
	Pull test of terminal fixing (20 N)		N
	After test, resistance < 0,05 Ω		N
	Pull test of mechanical connection (50 N)		N
	After test, resistance < 0,05 Ω		N
	Voltage drop test, resistance < 0,05 Ω		N
1.6 (4.28)	Fixing of thermal sensing control		N
	Not plug-in or easily replaceable type		N
	Reliably kept in position		N
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N
	Not outside the luminaire enclosure		N
	Test of adhesive fixing:		N
	Max. temperature on adhesive material (°C) ..... :		N
	100 cycles between t min and t max		N
	Temperature sensing control still in position		N
1.6 (4.29)	Luminaires with non-replaceable light source		N
	Not possible to replace light source		N
	Live part not accessible after parts have been opened by hand or tools		N
1.6 (4.30)	Luminaires with non-user replaceable light source		P
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N
	Minimum two fixing means		P
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
1.6 (4.31.1)	SELV circuits		P
	Used SELV source		P
	Voltage ≤ ELV		P

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Insulating of SELV circuits from LV supply		P
	Insulating of SELV circuits from other non SELV circuits		N
	Insulating of SELV circuits from FELV		N
	Insulating of SELV circuits from other SELV circuits		N
	SELV circuits insulated from accessible parts according Table X.1		P
	Plugs not able to enter socket-outlets of other voltage systems		N
	Socket outlets does not admit plugs of other voltage systems		N
	Plugs and socket-outlets does not have protective conductor contact		N
1.6 (4.31.2)	FELV circuits		N
	Used FELV source		N
	Voltage ≤ ELV		N
	Insulating of FELV circuits from LV supply		N
	FELV circuits insulated from accessible parts according Table X.1		N
	Plugs not able to enter socket-outlets of other voltage systems		N
	Socket outlets does not admit plugs of other voltage systems		N
	Socket-outlets does not have protective conductor contact		N
1.6 (4.31.3)	Other circuits		N
	Other circuits insulated from accessible parts according Table X.1		N
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N
	- conductive parts are connected together		N
	- test according 7.2.3 of above		N
	- conductive part not cause an electric shock in case of an insulation fault		N
	- equipotential bonding in master/slave applications		N
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N
	- slave luminaire constructed as class I		N
1.6 (4.32)	Overvoltage protective devices		N
	Comply with IEC 61643-11		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	External to control gear and connected to earth:		N
	- only in fixed luminaires		N
	- only connected to protective earth		N
1.7 (11)	**CREEPAGE DISTANCES AND CLEARANCES**		—
1.7 (11.2)	Creepage distances and clearances .....:	See Table 4.7 (11.2)	—
	Working voltage (V) .....:	100-240V~	—
	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**		—
1.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω .....:	0.010Ω	P
	Self-tapping screws used		P
	Thread-forming screws		N
	Thread-forming screw used in a grove		N
	Earth makes contact first		N
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N
	Built-in control gear		N
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		N
4.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		P
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N
1.8 (7.2.5)	Earth terminal integral part of connector socket		N
1.8 (7.2.6)	Earth terminal adjacent to mains terminals		N
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal		P
1.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P

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Clause	Requirement + Test	Result - Remark	Verdict
1.8 (7.2.10)	Class II luminaire for looping-in		N
	Double or reinforced insulation to functional earth		N
1.8 (7.2.11)	Earthing core coloured green-yellow		P
	Length of earth conductor		N
1.9 (14)	**SCREW TERMINALS**		—
	Separately approved; component list .....:	(see Annex 1)	N
	Part of the luminaire.....:	(see Annex 3)	N
1.9 (15)	**SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS**		—
	Separately approved; component list .....:	(see Annex 1)	P
	Part of the luminaire.....:	Soldered connection	P
1.10 (5)	**EXTERNAL AND INTERNAL WIRING**		—
1.10 (5.2)	Supply connection and external wiring		P
1.10 (5.2.1)	Means of connection.....:	Connecting leads	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
1.10 (5.2.2)	Type of cable .....:		N
	Nominal cross-sectional area (mm²).....:		N
	Cables equal to IEC 60227 or IEC 60245		N
1.10 (5.2.3)	Type of attachment, X, Y or Z		N
1.10 (5.2.5)	Type Z not connected to screws		N
1.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
1.10 (5.2.8)	Insulating bushings:		N
	- suitably fixed		N
	- material in bushings		N
	- material not likely to deteriorate		N
	- tubes or guards made of insulating material		N
1.10 (5.2.9)	Locking of screwed bushings		N

EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		P
1.10 (5.2.10.1)	Cord anchorage for type X attachment:		N
	a) at least one part fixed		N
	b) types of cable		N
	c) no damaging of the cable		N
	d) whole cable can be mounted		N
	e) no touching of clamping screws		N
	f) metal screw not directly on cable		N
	g) replacement without special tool		N
	Glands not used as anchorage		N
	Labyrinth type anchorages		N
1.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N
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) .....:	0.15 Nm	P
	- displacement ≤ 2 mm	0.2 mm	P
	- no movement of conductors		P
	- no damage of cable or cord		P
	- function independent of electrical connection		P
1.10 (5.2.11)	External wiring passing into luminaire		P
1.10 (5.2.12)	Looping-in terminals		N
1.10 (5.2.13)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N
1.10 (5.2.14)	Mains plug same protection		N

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Clause	Requirement + Test	Result - Remark	Verdict
	Class III luminaire plug		N
	No unsafe compatibility		N
1.10 (5.2.16)	Appliance inlets (IEC 60320)		N
	Installation couplers (IEC 61535)		N
	Other appliance inlet or connector		N
	Relevant IEC standard		N
1.10 (5.2.17)	No standardized interconnecting cables properly assembled		N
1.10 (5.2.18)	Used plug in accordance with		N
	- IEC 60083		N
	- other standard		N
1.10 (5.3)	Internal wiring		P
1.10 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		N
	- not delivered/ mounting instruction		N
	- factory assembled		N
	- socket outlet loaded (A).....:		N
	- temperatures .....:	(see Annex 2)	N
	Green-yellow for earth only		P
1.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm²).....:		P
	Insulation thickness		N
	Extra insulation added where necessary		N
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Adequate cross-sectional area and insulation thickness		P
1.10 (5.3.1.3)	Double or reinforced insulation for class II		N
1.10 (5.3.1.4)	Conductors without insulation		N
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

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Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		P
	Joints, raising/lowering devices		N
	Telescopic tubes etc.		N
	No twisting over 360°		P
1.10 (5.3.3)	Insulating bushings:		N
	- suitable fixed		N
	- material in bushings		N
	- material not likely to deteriorate		N
	- cables with protective sheath		N
1.10 (5.3.4)	Joints and junctions effectively insulated		N
1.10 (5.3.5)	Strain on internal wiring		N
1.10 (5.3.6)	Wire carriers		N
1.10 (5.3.7)	Wire ends not tinned		P
	Wire ends tinned: no cold flow		N
1.11 (8)	**PROTECTION AGAINST ELECTRIC SHOCK**		—
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
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P
	Lampholder and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N
	Basic insulation only accessible under lamp or starter replacement		N
	Protection in any position		P
	Double-ended tungsten filament lamp		N
	Insulation lacquer not reliable		P
	Double-ended high pressure discharge lamp		N
	Relevant warning according to 3.2.18 fitted to the luminaire		N
1.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N

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Clause	Requirement + Test	Result - Remark	Verdict

1.11 (8.2.3.a)	Class II luminaire:		N
	- basic insulated metal parts not accessible during starter or lamp replacement		N
	- basic insulation not accessible other than during starter or lamp replacement		N
	- glass protective shields not used as supplementary insulation		N
1.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N
1.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N
	Ordinary luminaire:		N
	- touch current .....:		N
	- no-load voltage .....:		N
	Other than ordinary luminaire:		N
	- nominal voltage .....:		N
1.11 (8.2.4)	Portable luminaire have protection independent of supporting surface		N
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 ≥ 0,5 μF		N
	Portable plug connected luminaire with capacitor		N
	Other plug connected luminaire with capacitor		N
	Discharge device on or within capacitor		N
	Discharge device mounted separately		N

1.12 (12)	**ENDURANCE TEST AND THERMAL TEST**		—
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 in normal use	—
	- test temperature (°C) .....:	55℃	—
	- total duration (h) .....:	240	—
	- supply voltage: Un factor; calculated voltage (V) ...:	1,1x277V=304.7V AC	—
	- lamp used .....:	LED	—

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Clause	Requirement + Test	Result - Remark	Verdict
1.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N
	- marking legible		P
	- no cracks, deformation etc.		N
1.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
1.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N
1.12 (12.6)	Thermal test (failed lamp control gear condition):		N
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
	- measured winding temperature (°C): at 1,1 Un .....:		—
	- measured mounting surface temperature (°C) at 1,1 Un .....:		N
	- calculated mounting surface temperature (°C) .....:		N
	- track-mounted luminaires		N
1.12 (12.6.2)	Temperature sensing control		N
	- case of abnormal conditions.....:		—
	- thermal link		N
	- manual reset cut-out		N
	- auto reset cut-out		N
	- measured mounting surface temperature (°C).....:		N
	- track-mounted luminaires		N
1.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N
1.12 (12.7.1)	Luminaire without temperature sensing control		N
1.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N
	Test method 12.7.1.1 or Annex W .....:		—
	Test according to 12.7.1.1:		N
	- case of abnormal conditions.....:		—
	- Ballast failure at supply voltage (V) .....:		—
	- Components retained in place after the test		N

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Clause	Requirement + Test	Result - Remark	Verdict
	- Test with standard test finger after the test		N
	Test according to Annex W:		N
	- 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 4.15 (13.2.1)	N
1.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N
	- 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 4.15 (13.2.1)	N
1.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N
	- case of abnormal conditions.....:		—
	- Components retained in place after the test		N
	- Test with standard test finger after the test		N
1.12 (12.7.2)	Luminaire with temperature sensing control		N
	- 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 4.15 (13.2.1)	N

1.13 (9)	**RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE**		—
1.13 (-)	If IP > IP 20 the order of tests as specified in clause 4.12		—
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		—
	- classification according to IP .....:	IP65	—

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Clause	Requirement + Test	Result - Remark	Verdict
	- mounting position during test .....:	As in normal use	—
	- fixing screws tightened; torque (Nm).....:	--	—
	- tests according to clauses .....:	Clause 9.2.0	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		P
	b) no talcum in dust-tight luminaire		P
	c) no trace of water on current-carrying parts or SELV parts or where it could become a hazard		P
	d) i) For luminaires without drain holes – no water entry		P
	d) ii) For luminaires with drain holes – no hazardous water entry		P
	e) no water in watertight luminaire		P
	f) no contact with live parts (IP 2X)		N
	f) no entry into enclosure (IP 3X and IP 4X)		N
	f) no contact with live parts (IP3X and IP4X)		N
	g) no trace of water on part of lamp requiring protection from splashing water		P
	h) no damage of protective shield or glass envelope		P
1.13 (9.3)	Humidity test 48 h	25°C; 93% R.H.	P

1.14 (10)	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		—
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		P
	- between current-carrying parts of different polarity:		N
	- between current-carrying parts and mounting surface .....:	100MΩ	P
	- between current-carrying parts and metal parts of the luminaire .....:	100MΩ	P
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts .....:		N
	- Insulation bushings as described in Section 5 .....:		N
	Other than SELV		P

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Clause	Requirement + Test	Result - Remark	Verdict
	- between live parts of different polarity.....:	Approved LED driver	P
	- 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 .....:	100MΩ	P
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts .....:		N
	- Insulation bushings as described in Section 5 .....:		N
1.14 (10.2.2)	Electric strength test		P
	Dummy lamp		N
	Luminaires with ignitors after 24 h test		N
	Luminaires with manual ignitors		N
	Test voltage (V):		—
	SELV		P
	- between current-carrying parts of different polarity:		N
	- between current-carrying parts and mounting surface .....:	500V	P
	- between current-carrying parts and metal parts of the luminaire .....:	500V	P
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts .....:		N
	- Insulation bushings as described in Section 5 .....:		N
	Other than SELV		P
	- between live parts of different polarity.....:	1554V	p
	- between live parts and mounting surface.....:	1554V	P
	- between live parts and metal parts.....:	1554V	P
	- between live parts of different polarity through action of a switch .....:		N
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts .....:		N
	- Insulation bushings as described in Section 5 .....:		N
1.14 (10.3)	Touch current or protective conductor current (mA).:	0.40mA: touch current 0.10mA: protective current	P

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Clause	Requirement + Test	Result - Remark	Verdict

1.15 (13)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		—
1.15 (13.2.1)	Ball-pressure test.....:	See Test Table 4.15 (13.2.1)	P
1.15 (13.3.1)	Needle-flame test (10 s) .....:	See Test Table 4.15 (13.3.1)	P
1.15 (13.3.2)	Glow-wire test (650°C) .....:	See Test Table 4.15 (13.3.2)	P
1.15 (13.4)	Proof tracking test (IEC 60112) .....:	See Test Table 1.15 (13.4)	N

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Clause	Requirement + Test	Result - Remark	Verdict

1.7 (11.2)	**TABLES: Creepage distances and clearances**	P
Table 11.1	**Minimum distances (mm) for a.c. (50/60 Hz) sinusoidal voltages**	P

RMS working voltage (V) not exceeding	50	150	250	500	750	1000
Creepage distances						
Required basic insulation, PTI ≥ 600	0,6	0,8	1,5	3	4	5,5
Measured	---	---	---	---	---	---
Required basic insulation, PTI < 600	1,2	1,6	2,5	5	8	10
Measured(Current-carrying parts of different polarity)	---	---	2.5	---	---	---
Required supplementary insulation PTI ≥ 600	-	0,8	1,5	3	4	5,5
Measured	---	---	---	---	---	---
Required supplementary insulation PTI < 600	-	1,6	2,5	5	8	10
Measured	---	---	---	---	---	---
Required reinforced insulation	-	3,2	5	6	8	11
Measured(Current-carrying parts of different polarity)	---	---	5	---	---	---
Clearances						
Required basic insulation	0,2	0,8	1,5	3	4	5,5
Measured(Current-carrying parts of different polarity)	---	---	1.5	---	---	---
Required supplementary insulation	-	0,8	1,5	3	4	5,5
Measured	---	---	---	---	---	---
Required reinforced insulation	-	1,6	3	6	8	11
Measured(Current-carrying parts of different polarity)	---	---	3	---	---	---

Table 11.2	**Minimum distances (mm) for non-sinusoidal pulse voltages**						
Rated pulse voltage (peak kV)	2,0	2,5	3,0	4,0	5,0	6,0	8,0
Required clearances	1,0	1,5	2	3	4	5,5	8
Measured	---	---	---	---	---	---	---
Rated pulse voltage (peak kV)	10	12	15	20	25	30	40
Required clearances	11	14	18	25	33	40	60
Measured	---	---	---	---	---	---	---
Rated pulse voltage (peak kV)	50	60	80	100	-	-	-
Required clearances	75	90	130	170	-	-	-
Measured	---	---	---	---	---	---	---

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Clause	Requirement + Test	Result - Remark	Verdict

1.15 (13.2.1)	**TABLE: Ball Pressure Test of Thermoplastics**			P
Allowed impression diameter (mm) .....:		2mm		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Lamp cover	---	75	1,2	
Enclosure	---	75	1,2	
Supplementary information:--				

1.15 (13.3.1)	**TABLE: Needle-flame test (IEC 60695-11-5)**				N
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
---	---	---	---	---	---
---	---	---	---	---	---
Supplementary information:--					

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
Lamp cover	---	30	No	0	P
Enclosure	---	30	No	0	P
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:					

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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1:	Components			P
object/part No.	manufacturer/ trademark	type/model	technical data	mark(s) of conformity
Metal enclosure	Shenzhen Qinhan Lighting Co., Ltd	AL6063-T5	Aluminum. 1mm thick min.	CE
Internal wiring	Shenzhen Qinhan Lighting Co., Ltd	H05RN-F 3*1.0 mm^2	H05RN-F,60245,IEC,57(YZW)3G*1.0 mm^2,300/500V	CE
Internal wiring	Shenzhen Qinhan Lighting Co., Ltd	H03VV-F 2*0.75mm^2	2271EC52,H03VV-F,2C*0.75 mm^2, KELF-75,N15075,NF-USE,1327,A003828,300/500V	VDE
LED PCB	ChengZhiYi TECHNOLOGY CO.,LTD	FR4	94V-0,130℃,1.0mm Thickness	UL
LED	Shenzhen Qinhan Lighting Co., Ltd	2835	3.2V,60mA, 0.2W.	NR
LED driver	MW	HBG-240-48A	Input:100-240V~, 50/60Hz, Output:49VDC, IP65	CE

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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2:	**Temperature measurements, thermal tests of Section 12**		P
	Type reference..... :	QH-HBGKH-200W	—
	Lamp used..... :	LED	—
	Lamp control gear used..... :	See annex 1	—
	Mounting position of luminaire..... :	Normal use, most unfavourable position	—
	Calculated power factor..... :	0.96	—
	Table: measured temperatures corrected for Ta = 25°C:		P
	- abnormal operating mode ..... :	No abnormal operating mode	—
	- test 1: rated voltage..... :		—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage ..... :	1,06x277V=293.62VAC	—
	- 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 ..... :	--	—
	Through wiring or looping-in wiring loaded by a current of A during the test ..... :	--	—

temperature (°C) of part	Clause 12.4 – normal			Clause 12.5 – abnormal		
	test 1	test 2	test 3	limit	test 4	limit
Input wire	--	71.9	--	90	--	--
Tc of LED driver	--	71.1	--	85	--	--
Lamp plate	--	76.5	--	120	--	--
Lamp cover	--	61.9	--	Ref.	--	--
Enclosure	--	47.1	--	Ref.	--	--
Mounting surface	--	32.1	--	90	--	--
Light object (10cm)	--	71.9	--	90	--	--

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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	**Screw terminals (part of the luminaire)**		N
(14)	**SCREW TERMINALS**		N
(14.2)	Type of terminal ..... :		—
	Rated current (A) ..... :		—
(14.3.2.1)	One or more conductors		N
(14.3.2.2)	Special preparation		N
(14.3.2.3)	Terminal size		N
	Cross-sectional area (mm²) ..... :		—
(14.3.3)	Conductor space (mm) ..... :		N
(14.4)	Mechanical tests		N
(14.4.1)	Minimum distance		N
(14.4.2)	Cannot slip out		N
(14.4.3)	Special preparation		N
(14.4.4)	Nominal diameter of thread (metric ISO thread)..... :		N
	External wiring		N
	No soft metal		N
(14.4.5)	Corrosion		N
(14.1.6)	Nominal diameter of thread (mm) ..... :		N
	Torque (Nm)..... :		N
(14.4.7)	Between metal surfaces		N
	Lug terminal		N
	Mantle terminal		N
	Pull test; pull (N)..... :		N
(14.4.8)	Without undue damage		N

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

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Clause	Requirement + Test	Result - Remark	Verdict

	Pull test pin or tab terminals (4 samples); pull (N) ..... :										N
(15.6.3.1)	**TABLE: Contact resistance test**										N
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)	--	--	--	--	--	--	--	--	--	--	
	Voltage drop of two inseparable joints										N
	Voltage drop after 10th alt. 25th cycle										N
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)	--	--	--	--	--	--	--	--	--	--	
	Voltage drop after 50th alt. 100th cycle										N
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)	--	--	--	--	--	--	--	--	--	--	
	Continued ageing: voltage drop after 10th alt. 25th cycle										N
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)	--	--	--	--	--	--	--	--	--	--	
	Continued ageing: voltage drop after 50th alt. 100th cycle										N
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)	--	--	--	--	--	--	--	--	--	--	
Supplementary information:--											

Attachmentl: Attached report of EN 62031+A1+A2			
Clause	Requirement - Test	Result	Verdict

13	**FAULT CONDITIONS**		—
13.1	The module shall not impair safety when operated under fault conditions that may occur during the intended use		P
	When operated under fault conditions LED modules, compliance with :		—
	- does not emit flames or molten material		P
	- does not produce flammable gases		P
	- protection against accidental in accordance with 10.1 not impared		P
	- totally enclosed LED modules or components not be opened.		P
	-for LED modules marked with symbol of thermal protected, temperature at any place not exceed the marked temperature value		N
	Short circuit across creepage distance and clearance less than value specified in clause 16		N
	Short circuit across or interruption of semi-conductor devices		N
	Short circuit across insulation consisting of covering of lacuqer, enamel or textile		N
	Short circuit across electrolytic capacitors		N
13.2	Overpower condition		---
	The module shall be switched on and the power monitored (at the input side) and increased until 150 % of the rated voltage, current or power is reached.		P
	If the module contains an automatic protective device or circuit which limits the power, it is subjected to a 15 min operation at this limit		P
	After finalising the overpower mode, the module is operated under normal conditions until thermally being stable.		P

AttachmentII: Attached report of EN62471			
Clause	Requirement + Test	Result – Remark	Verdict

Table 6.1	Emission limits for risk groups of continuous wave lamps									P
Risk	Action spectrum	Symbol	Units	Emission Measurement						
				Exempt		Low risk		Mod risk		
				Limit	Result	Limit	Result	Limit	Result	
Actinic UV	$S_{UV}(\lambda)$	E_s	$W•m^{-2}$	0,003	1.39e-08	—	—	—	—	
Near UV		E_{UVA}	$W•m^{-2}$	33	3.23e-04	—	—	—	—	
Blue light	B(λ)	L_B	$W•m^{-2}•sr^{-1}$	10000	1.2ge+02	10500	—	4000000	—	
Blue light, small source	B(λ)	E_B	$W•m^{-2}$	0,01*	---	1,0	—	400	—	
Retinal thermal	R(λ)	L_R	$W•m^{-2}•sr^{-1}$	28000/α	1041	31000/α	—	71000/α	—	
Retinal thermal, weak visual stimulus**	R(λ)	L_{IR}	$W•m^{-2}•sr^{-1}$	—			—			
				6000/α 0,011≤ α ≤ 0,1			—			
IR radiation, eye	—	E_{IR}	$W•m^{-2}$	100	2,5789	570	—	3200	—	
* Small source defined as one with α < 0,011 radian. Averaging field of view at 10000 s is 0,1 radian. ** Involves evaluation of non-GLS source										

AttachmentIII: Attached report of EN62493			
Cl.	RequirementTest	Result-Remark	Verdict

4.2	**APPLICATION OF LIMITS (Test summary)**		—
	Specific absorption rate (SAR)		—
a)	CISPR 15 clause 4.3.1 Disturbance voltage mains terminals 20 kHz – 30 MHz	*)	P
b)	CISPR 15 clause 4.4 Radiated electromagnetic disturbances 100 kHz – 30 MHz	*)	P
c)	CISPR 15 clause 4.4.2 Radiated electromagnetic disturbances 30 MHz – 300 MHz	*)	P
*)	☒ See separate Test Report for measurements of a), b) and c) above ☐ Only measurement of d) below. See measurement results below. In this case this test report does not show compliance with IEC 62493.		—
	Induced current density		P
d)	Induced current density 20 kHz – 10 MHz	See measurement results below	P
4.2.d	**INDUCED CURRENT DENSITY**		—
	Power supply system utilised:		—
	Voltage ..... :	AC100-277V	—
	Frequency ..... :	50/60Hz	—
	Environmental conditions:		—
	Temperature ..... :	25°C	—
	Humidity ..... :	52% R.H.	—
	EuT operation mode:		—
	☒ Normal operation		—
	☐ Other operation:		—
4.2.d	**MEASUREMENT RESULTS**		—
	Measuring with “Van der Hoofden” test head		—

Location of EuT	Measuring distance	Result (F)	Limit (F)	Verdict
Front of EuT	30 cm	0,14	0,85	P
Rear of EuT	30 cm	0,20	0,85	P
Side of EuT	30 cm	0,24	0,85	P

Photo documentation

Photo 1	
Photo 2	

Photo documentation

Photo 3	

Photo 4	

Photo documentation

Photo 5	

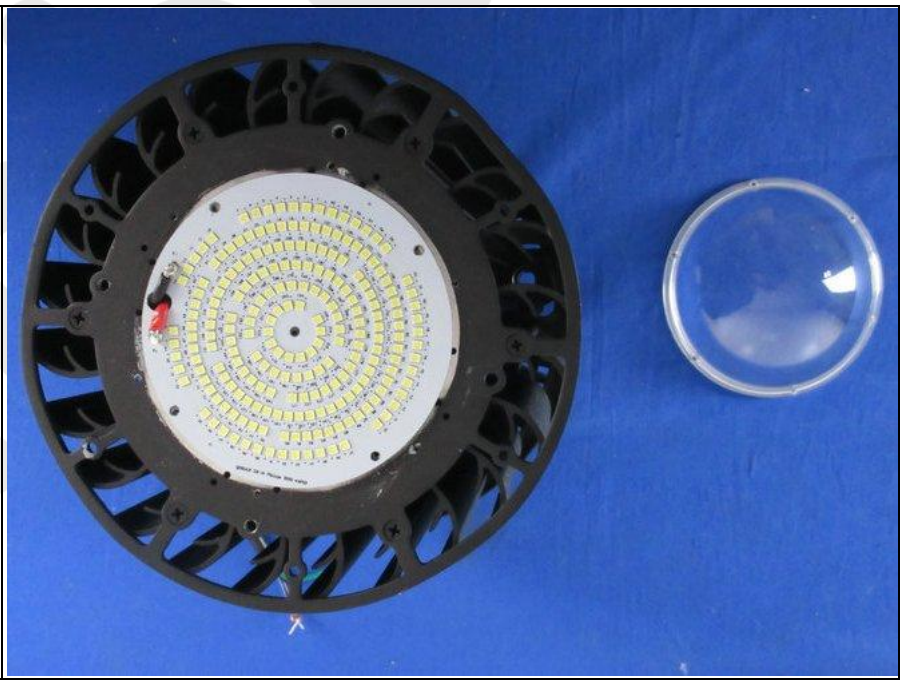
Photo 6	

Photo documentation

Photo 7