LVD TEST REPORT

EN 60598-1:2015/A1:2018

Luminaires - Part 1: General requirements and tests

EN 60598-2-17:2018

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

For

Guangzhou BaoLun Electronics Co., Ltd.

NO.1 Building B Block Zhongcun Street Panyu Guangzhou China

Model: TL-PSB0-01, TL-PSA0-01, TL-PSA0-02

January 25, 2019

This Report Concerns:	**Equipment Type:**
☒ Original Report	**Strobe light**

Test By:	Eric /
Report Number:	TH19AR-140S
Test Date:	January 18~ 25, 2019
Reviewed By:	Prince /
Approved By:	Prince /
Prepared By:	**Shenzhen Tian Hai Test Technology Co., Ltd.** 4F, A3 BLDG, The Silicon Valley Power intelligent terminal industrial park, Guanlan street, Longhua district, Shenzhen Tel : 86-755-86615100 Fax: 86-755-86615105

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen Tian Hai Test Technology Co.,Ltd.

TEST REPORT

EN 60598-1:2015/A1:2018

Luminaires –General requirements and tests

EN 60598-2-17:2018

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

Report	
Report reference No..... :	TH19AR-140S
Tested by (+ signature)..... :	Eric
Reviewed by (+ signature)..... :	Prince
Approved by (+ signature)..... :	Prince
Date of issue ..... :	January 25, 2019

Testing laboratory	
Name ..... :	**Shenzhen Tian Hai Test Technology Co.,Ltd.**
Address ..... :	4F, A3 BLDG, The Silicon Valley Power intelligent terminal industrial park, Guanlan street, Longhua district, Shenzhen
Testing location ..... :	Same as above

Client	
Name ..... :	**Guangzhou BaoLun Electronics Co., Ltd.**
Address..... :	NO.1 Building B Block Zhongcun Street Panyu Guangzhou China

Test specification	
Standard..... :	EN 60598-1:2015/A1:2018 EN 60598-2-17:2018
Test procedure ..... :	--
Procedure deviation ..... :	N.A.
Non-standard test method ..... :	N.A.
Trademark ..... :	ITC

Description..... :	**Strobe light**
Model and/or type reference ..... :	TL-PSB0-01, TL-PSA0-01, TL-PSA0-02
Manufacturer..... :	**Guangzhou BaoLun Electronics Co., Ltd.**
Address ..... :	NO.1 Building B Block Zhongcun Street Panyu Guangzhou China
Rating(s) ..... :	AC100 -240V, 50/60Hz, 0.45A, 100W
Note..... :	All of test performed on the model TL-PSA0-02.

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Copyright blank test report..... :	--
Test case verdicts	
Test case does not apply to the test object..... :	N(.A.)
Test item does meet the requirement ..... :	P(ass)
Test item does not meet the requirement..... :	F(ail)

General remarks

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

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

Clause numbers between brackets refer to clauses in IEC 60598-1 (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.

Marking Label:

Strobe light
Model: TL-PSA0-02
Rating: AC100 -240V, 50/60Hz, 0.45A, 100W

CE

Guangzhou BaoLun Electronics Co., Ltd.

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
17.1 (0)	SCOPE		P
17.1 (0.1)	More sections applicable..... :		--
17.4 (2)	CLASSIFICATION		P
17.4 (2.2)	Type of protection :	Class Ⅰ	P
17.4 (2.3)	Degree of protection..... :		P
17.4 (2.4)	Portable or handheld luminaire .....:	No	N
	Fixed luminaire suitable for normally flammable surfaces..... :	No	N
	Fixed luminaire suitable for non-combustible materials only .....:	No	N
17.4 (2.5)	Luminaire for normal use ..... :	Yes	P
	Luminaire for rough service ..... :	No	N
17.5 (3)	MARKING		P
17.5 (3.2)	Mandatory markings		P
	Position of the marking	Product body	P
	Format of symbols/text		P
17.5 (3.3)	Additional information	No	N
	Language of instructions	English	P
17.5 (3.3.1)	Combination luminaires		N
17.5 (3.3.2)	Nominal frequency in Hz	50/60Hz	P
17.5 (3.3.3)	Operating temperature		N
17.5 (3.3.4)	Symbol or warning notice		P
17.5 (3.3.5)	Wiring diagram		P
17.5 (3.3.6)	Special conditions		N
17.5 (3.3.7)	Metal halid lamp luminaire – warning		N
17.5 (3.3.8)	Limitation for semi-luminaires		N
17.5 (3.3.9)	Power factor and supply current	0.45A	P
17.5 (3.3.10)	Suitability for use indoors		N
17.5 (3.3.11)	Luminaires with remote control		P
17.5 (3.3.12)	Clip-mounted luminaire - warning		N
17.5 (3.3.13)	Specifications of protective shields		P
17.5 (3.3.14)	Symbol for nature of supply	AC supply	P
17.5 (3.3.15)	Rated current of socket outlet		N
17.5 (3.3.16)	Rough service luminaire		N

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
17.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	Type Y	P
17.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N
17.5 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
17.6 (4)	CONSTRUCTION		P
17.6.1 (-)	Insulation not damaged when placing on support		P
17.6.2 (-)	Wiring fixed, to avoid rubbing		P
17.6.3 (-)	Stability 6		P
17.6.4 (-)	Candlestick luminaires with switch		P
17.6.5 (-)	E5 lampholders		N
17.6 (4.2)	Components replaceable without difficulty		P
17.6(4.3)	Wireways smooth and free from sharp egdes		P
17.6 (4.4)	Lampholders		P
17.6 (4.4.1)	Integral lampholder		P
17.6 (4.4.2)	Wiring connection		P
17.6 (4.4.3)	Lampholder for end- to- end mounting		P
17.6 (4.4.4)	Positioning		P
17.6 (4.4.5)	Peak pulse voltage	Non-trigger lamp	N
17.6 (4.4..6)	Centre contact	Non-trigger lamp	N
17.6 (4.4.7)	Rough service luminaires		N
17.6 (4.4.8)	Lamp connectors		N
17.6 (4.5)	Starter holders		N
	Starter holder in luminaires other than class II	No starter holders	N
	Starter holder class II construction		N
17.6 (4..6)	Terminal blocks		N
	Tails		N
	Unsecured blocks		N
17.6 (4.7)	Terminals and supply connections		P
17.6 (4.7.1)	Contact to metal parts		P
17.6 (4.7.2)	Test 8 mm live conductor		N

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
	Test 8 mm earth conductor		N
17.6 (4.7.3)	Terminals for supply conductors		N
17.6 (4.7.4)	Terminals other than supply connection		N
17.6 (4.7.5)	Heat-resistant wiring/sleeves		P
17.6 (4.7..6)	Multi-pole plug		N
17.6 (4.8)	Switches:		P
	- adequate rating	250 V, 10A	P
	- adequate fixing	Fixed within cord 50 mm	P
	- polarized supply	Control Live line, all-pole disconnection	P
17.6 (4.9)	Insulating lining and sleeves		P
17.6 (4.9.1)	Retainment		P
	Method of fixing.....:		P
17.6 (4.9.2)	Insulated linings and sleeves		P
	a) & c) Insulation resistance and electric strengh		P
	b) Ageing test. Temperature (C).....:	60℃, 240 h	P
17.6 (4.10)	Insulation of Class II luminaires	Class l luminaires	N
17.6 (4.10.1)	No contact, mounting surface - accessible metal parts - wiring of basic insulation		N
	Safe installation fixed luminaires		N
	Capacitors	No capacitors	N
	Interference suppression capacitors according to IEC 60384-14		N
17.6 (4.10.2)	Assembly gaps:		N
	- not coincidental		N
	- no straight access with test probe		N
17.6 (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
17.6 (4.11)	Electrical connections		P
17.6 (4.11.1)	Contact pressure		P

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
17.6 (4.11.2)	Screws:		P
	- self-tapping screws		P
	- thread-cutting screws		N
	- at least two self-tapping screws		N
17.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		P
17.6 (4.11.4)	Material of current-carrying parts		P
17.6 (4.11.5)	No contact to wood		N
17.6 (4.11.6)	Electro-mechanical contact systems		N
17.6 (4.12)	Mechanical connections and glands		N
17.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N
	Torque test: torque (Nm); part.....:		--
	Torque test: torque (Nm); part.....:		--
	Torque test: torque (Nm); part.....:		--
17.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal	Screws with diameter > 3mm	N
17.6 (4.12.4)	Locked connections:		P
	- fixed arms; torque (Nm).....:		N
	- lampholder; torque (Nm).....:		P
	- push-button switches; torque 0,8 Nm.....:		P
17.6 (4.12.5)	Screwed glands; force (N).....:	No screw glands	N
17.6 (4.13)	Mechanical strength		P
17.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:	0.35Nm	P
	- other parts; energy (Nm).....:	0.5Nm	P
	1) live parts	No damage	P
	2) linings		P
	3) protection		P
	4) covers		P
17.6 (4.13.3)	Straight test finger	30N,No mental can contact	P
17.6 (4.13.4)	Rough service luminaires		P
	a) fixed		P

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Clause	Requirement Test	Result	Verdict
	b) hand-held		N
	c) delivered with a stand		N
	d) for temporary installations and suitable for mounting on a stand		N
17.6 (4.13.6)	Tumbling barrel		N
17.6 (4.14)	Suspensions and adjusting devices		P
17.6 (4.14.1)	Mechanical load:		N
	A) four times the weight		N
	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
17.6 (4.14.2)	Load to flexible cables		N
	Mass (kg)..... :		N
	Stress in conductors (N/mm²)..... :		N
	Mass (kg) of semi-luminaire.....:		N
	Bending moment (Nm) of semi-luminaire..... :		N
17.6 (4.14.3)	Adjusting devices:		N
	- flexing test; number of cycles.....:		N
	- strands broken		N
	- electric strength test afterwards		N
17.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N
17.6 (4.14.5)	Guide pulleys		N
17.6 (4.14.6)	Strain on socket-outlets		N
17.6 (4.15)	Flammable materials:		P
	- glow- wire test 650 C		P
	- spacing 30 mm		P
	- screen withstanding test of 13.3.1		P
	- screen dimensions		P
	- no fiercely burning material		P
	- thermal protection		N

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Clause	Requirement Test	Result	Verdict
	- electronic circuits exempted		P
17.6 (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
17.6 (4.16)	Luminaires marked with F-symbol		P
	No lamp control gear		N
17.6 (4.16.1)	Lamp control gear spacing:		P
	- spacing 35 mm		N
	- spacing 10 mm		P
17.6 (4.16.2)	Thermal protection:		N
	- in lamp control gear		N
	- external		N
	- fixed position		N
	- temperature marked lamp control gear		N
17.6 (4.16.3)	“F” curve measured		N
17.6 (4.17)	Drain holes		N
	Clearance at least 5 mm		N
17.6 (4.18)	Resistance to corrosion:		P
17.6 (4.18.1)	- rust- resistance		P
17.6 (4.18.2)	- season cracking in copper		P
17.6 (4.18.3)	- corrosion of aluminium	Not such appliance	N
17.6 (4.19)	Ignitors compatible with ballast	Not such appliance	N
17.6 (4.20)	Rough service vibration		N
17.6 (4.21)	Protective shield:		N
17.6 (4.21.1)	Shield fitted		N
17.6 (4.21.2)	Particles from a shattering lamp not impair safety		N
17.6 (4.21.3)	No direct path		N
17.6 (4.21.4)	Impact test on shield		N
	Glow-wire test on lamp compartment		N
17.6 (4.22)	Attachments to lamps		N
17.6 (4.23)	Semi-luminaires comply Class II		N
17.6 (4.24)	UV radiation, metal halide lamps		N

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Clause	Requirement Test	Result	Verdict
17.6 (4.25)	No sharp point or edges		P
17.6 (4.2.6)	Short-circuit protection:		N
17.6 (4.26.1)	Uninsulated accessible SELV parts		N
17.6 (4.26.2)	Short-circuit test		N
17.6 (4.26.3)	Test chain according to IEC 61032		N
17.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
	Working voltage (V)..... :	Class Ⅰ equipment	P
	Voltage form	Sinusoidal [x] Non-sinusoidal [ ]	P
	PTI	< 600 [ ] ≥ 600 [x]	P
	Rated pulse voltage (Kv)..... :		P
	(1) Current-carrying parts of different polarity: cr (mm); cl (mm)..... :	Require cl: 1.7mm; cr: 1.7mm. Measure: cl=cr: 3.5mm.	P
	(2) Current-carrying parts and accessible parts: cr (mm); cl (mm)..... :	Require cl=cr: 6.5mm. Measure: cl=cr>6.5mm.	P
	(3) Parts becoming live due to breakdown of basic insulation and metal parts: cr (mm); cl (mm)..... :	Require cl=cr: 6.5mm. Measure: cl=cr>6.5mm.	P
	(4) Outer surface of cable where it is clamped and metal parts: cr (mm); cl (mm)..... :		P
	(5) Current-carrying parts of switches and metal parts, after removal of insulation: cr (mm); cl (mm)..... :		P
	(6) Current-carrying parts and supporting surface: cr (mm); cl (mm)..... :		P
17.8 (7)	PROVISION FOR EARTHING		P
17.8 (7.2.1, 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance <0,5 Ω	0.21Ω	P
	Two self-tapping screws used		P
	Thread-forming screws		P
	Connector earthing first		P
17.8 (7.2.2, 7.2.3)	Earth continuity in joints etc.		P
17.8 (7.2.4)	Locking of clamping means		P

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Clause	Requirement Test	Result	Verdict
	Compliance with 7.3		P
17.8 (7.2.5)	Earth terminal integral part of connector socket	No such part used	N
17.8 (7.2.6)	Earth terminal adjacent to mains terminals		N
17.8 (7.2.7)	Electrolytic corrosion of the earth terminal		P
17.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
17.8 (7.2.10)	Class II luminaire for looping-in		N
17.8 (7.2.11)	Earthing core coloured green-yellow		P
	Length of earth conductor		P
17.9 (14)	SCREW TERMINALS		P
	Separately approved; component list		P
	Part of the luminaire	(see Annex3)	P
17.9 (15)	SCREWLESS TERMINALS		N
	Separately approved; component list		N
	Part of the luminaire		N
17.10 (5)	EXTERNAL AND INTERNAL WIRING		P
17.10 (5.2)	Supply connection and external wiring		P
17.10 (5.2.1)	Means of connection.....:		P
17.10 (5.2.2)	Type of cable..... :		P
	Nominal cross-sectional area (mm²):	0.75	P
17.10 (5.2.3)	Type of attachment, X, Y or Z	Type Y attachment	P
17.10 (5.2.5)	Type Z not connected to screws		N
17.10 (5.2.6)	Cable entries:		N
	- suitable for introduction		N
	- adequate degree of protection		N
17.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
17.10 (5.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P
	- tubes or guards made of insulating material		P
17.10 (5.2.9)	Locking of screwed bushings		P
17.10 (5.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P

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Clause	Requirement Test	Result	Verdict
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		P
17.10 (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
17.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	Type Y	P
17.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25times; pull (N).....:	30	P
	- torque test: torque (Nm).....:	0.08	P
	- displacement 2mm	0.12 mm	P
	- no movement of conductors		P
	- no damage of cable or cord		P
17.10 (5.2.11)	External wiring passing into luminaire		P
17.10 (5.2.12)	Looping- in terminals	No looping-in terminals	N
17.10 (5.2.13)	Wire ends not tinned		N
	Wire ends tinned: no cold flow		P
17.10 (5.2.14)	Mains plug same protection		P
	Class III luminaire plug	Class Ⅰ luminaires	N
17.10 (5.2.15)	Colour code low voltage		N
17.10 (5.2.16)	Appliance inlets (IEC 60320)	No appliance inlets	N
	Appliance couplers of class II type		N
17.10 (5.3)	Internal wiring		P
17.10 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		P

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Clause	Requirement Test	Result	Verdict
	- not delivered/ mounting instruction		N
	- factory assembE27		N
	- socket outlet loaded (A)..... :		N
	- temperatures..... :	(see Annex 2)	P
	Green- yellow for earth only		P
17.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm²)..... :		P
	Insulation thickness		P
	Extra insulation added where necessary		P
17.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Adequate cross-sectional area and insulation thickness		P
17.10 (5.3.1.3)	Double or reinforced insulation for class II		N
17.10 (5.3.1.4)	Conductors without insulation		N
17.10 (5.3.1.5)	SELV current-carrying parts		N
17.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N
17.10 (5.3.2)	Sharp edges etc.	No sharp edges	N
	No moving parts of switches etc.		P
	Joints, raising/lowering devices		N
	Telescopic tubes etc.		N
	No twisting over 360		P
17.10 (5.3.3)	Openings		N
	Bushings not removable		N
	Bushings in sharp openings		N
	Cables with protective sheath		N
17.10 (5.3.4)	Joints and junctions effectively insulated		N
17.10 (5.3.5)	Strain on internal wiring		N
17.10 (5.3.6)	Wire carriers		N
17.10 (5.3.7)	Wire ends not tinned		N
	Wire ends tinned: no cold flow		P
17.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
17.11.1 (-)	Luminaires with BCcap		N
17.11 (8.2.1)	Live parts not accessible		P
	Protection in any position		P

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Clause	Requirement Test	Result	Verdict
	Double-ended tungsten filament lamp		N
	Insulation lacquer not reliable		N
	Double-ended high pressure discharge lamp		N
17.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N
17.11 (8.2.3)	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
	Class I luminaire with BC lampholder		N
17.11 (8.2.4)	Portable luminaire:		N
	- protection independent of supporting surface		N
	- terminal block completely covered		N
17.11 (8.2.6)	Covers reliably secured		P
17.11 (8.2.7)	Discharging of capacitors 0,5F	No capacitors	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
17.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
17.12 (12.3)	Endurance test:		P
	- mounting- position..... :	Fix luminaires	P
	- test temperature (℃)..... :	28℃-32℃	--
	- total duration (h)..... :	168h	--
	- supply voltage: Un factor; calculated voltage (V)..... :		--
	- lamp used..... :		--
17.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
	- no damage to track system		P
	- marking legible		P
	- no cracks, deformation etc.		P
17.12 (12.4)	Thermal test (normal operation)	(see Annex2)	P
17.12 (12.5)	Thermal test (abnormal operation)	(see Annex2)	P
17.12 (-)	Test overturned position (overturns < 15)		N
17.12 (12.6)	Thermal test :		N
17.12 (12.6.1)	- case of abnormal conditions..... :		N
	- electronic lamp control gear		N
	- measured winding temperature (C): at 1,1Un.:		N
	- measured mounting surface temperature (C): at 1,1Un.....:		N
	- calculated mounting surface temperature (C).:		N
	- track- mounted luminaires		N
17.12 (12.17.6.2)	Temperature sensing control		N
	- case of abnormal conditions..... :		N
	- thermal link		N
	- manual reset cut- out		N
	- auto reset cut- out		N
	- measured mounting surface temperature (C):.:		N
	- track- mounted luminaires		N
17.12 (12.7)	Thermal test (faiE27 lamp control gear in plastic luminaires):		N
	- case of abnormal conditions		N
17.12 (12.7.1)	- measured winding temperature (C): at 1,1Un.:		N
	- measured temperature of fixing point/ exposed part (C): at 1,1Un.....:		N
	- calculated temperature of fixing point/ exposed part (C).....:		N
17.12 (12.7.2)	Temperature sensing control		N
	- thermal link		N
	- manual reset cut-out		N
	- auto reset cut-out		N
	- measured temperature of fixing point/ exposed part (C): .....:		N

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
17.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
17.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		N
	- classification according to IP.....:		--
	- mounting position during test.....:		--
	- fixing screws tightened; torque (Nm).....:		--
	- tests according to clauses.....:		--
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		P
	b) no talcum in dust- tight luminaire		P
	c) no trace of water on current-carrying parts or where it could become a hazard		N
	d) i) For luminaires without drain holes – no water entry		N
	d) ii) For luminaires with drain holes – no hazardous water entry		N
	e) no water in watertight luminaire		N
	f) no contact with live parts (IP 2X)		N
	f) no entry into enclosure (IP 3X and IP 4X)		N
17.13 (9.3)	Humidity test 48 h	30℃, 95%	P
17.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
17.14 (10.2.1)	Insulation reistance test		P
	Insulation resistance (M): > 100M		P
	SELV:		N
	- between current-carrying parts of different polarity.....:		N
	- between current-carrying parts and mounting surface.....:		N
	- between current-carrying parts and metal parts of the luminaire.....:		N
	Other than SELV:		P
	- between live parts of different polarity.....:	>100MΩ	P
	- between live parts and mounting surface.....:	>100MΩ	P
	- between live parts and metal parts.....:	>100MΩ	P

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EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
	- between live parts of different polarity through action of a switch.....:		P
17.14 (10.2.2)	Electric strength test		P
	Dummy lamp		P
	Luminaires with ignitors after 24 h test		N
	Luminaires with manual ignitors		N
	Test voltage (V):		N
	SELV:		N
	- between current-carrying parts of different polarity.....:		N
	- between current-carrying parts and mounting surface.....:		N
	- between current-carrying parts and metal parts of the luminaire.....:		N
	Other than SELV:		P
	- between live parts of different polarity.....:	2U+1000: 1480VAC	P
	- between live parts and mounting surface.....:	2U+1000: 1480VAC	P
	- between live parts and metal parts.....:	2U+1000: 1480VAC	P
	- between live parts of different polarity through action of a switch.....:		N
17.14 (10.3.1)	Leakage current (mA) :	Measure: < 0.7 mA	P
17.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
17.15 (13.2.1)	Ball-pressure test:		P
	- part tested; temperature (℃).....:	75℃	N
	- part tested; temperature (℃).....:	125℃	P
17.15 (13.3.1)	Needle flame test (10 s):		P
	- part tested..... :	Plastic enclosure	P
	- part tested..... :		--
17.15 (13.3.2)	Glow- wire test (650℃):		P
	- part tested..... :	Insulation gasket	P
	- part tested..... :		--
17.15 (13.1)	Tracking test: part tested.....:		P
NA	COMMON MODIFICATIONS		N
(3.3.101 + 5.2.1)	For luminaires connected by tails, information about terminal block		N
(5.2.2)	Cables equal to HD 21 S2 or HD 22 S2		N
(5.2.15)	Colour code low voltage		N
NB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS		N
(2.2)	Class 0 not accepted		N

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Clause	Requirement Test	Result	Verdict
	PL: class 0 and class I not permitted on portable luminaires		N
(3.3)	DK: power supply cord with label		N
	IT: warning label on Class 0 luminaire		N
(5.1)	DK: socket- outlets		N
(5.1)	FR: socket-outlets		N
(5.2.1)	DK, FI, SE, GB: type of plug		N
NC	ANNEXZC, NATIONAL DEVIATIONS		N
(13.3)	DK: Needle flame test or glow-wire test 750C for luminaires in access routes		N
(13.3)	GB: Requirements according to United Kingdom Building Regulation		N
(13.3.2)	FR: Glow-wire test 850C alt. 750C for luminaires in premises open to public and workers		N
ANNEX 2: temperature measurements, thermal tests of Section12			
	Type reference..... :		--
	Lamp used :		--
	Lamp control gear used :	No	--
	Mounting position of luminaire :		--
	Supply wattage (W) :	82.8W	--
	Supply current (A) :	0.345A	--
	Calculated power factor :		--
	Table: measured temperatures corrected for ta = 25 ℃:		--
	- abnormal operating mode..... :		--
	- test 1: rated voltage..... :		--
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage..... :	240*1.06=254V	--
	- 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..... :		--

temperature (C) of part	clause 12.4 – normal			clause 12.5 – abnormal	
	test 1	test 2	limits	test 3	Limit
Input wire	26.4	26.2	105	--	--
Mounting surface	22.4	22.7	90	--	--
F1 body	35.0	35.1	105	--	--
L1 winding	48.0	48.2	130	--	--

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Clause	Requirement Test		Result		Verdict
L2 winding	48.0	47.9	130	--	--
Lamp holder	51.1	51.2	165	--	--
body surface (lamp bulb position)	52.2	52.4	85	--	--
Switch body	26.4	26.5	55	--	--
Power cord (near lampholder)	27.5	28.2	90	--	--
ANNEX3: screw terminals (part of the luminaire)					
(14)	SCREW TERMINALS				N
(12)	Type of terminal..... :				N
	Rated current (A)..... :				N
(13.2.1)	One or more conductors				N
(13.2.2)	Special preparation				N
(13.2.3)	Terminal size				N
	Cross-sectional area (mm²)..... :				N
(13.3)	Conductor space (mm)..... :				N
(14)	Mechanical tests				N
(11)	Minimum distance				N
(12)	Cannot slip out				N
(13)	Special preparation				N
(14)	Nominal diameter of thread (metric ISO thread):				N
	External wiring				N
	No soft metal				N
(15)	Corrosion				N
(16)	Nominal diameter of thread (mm)..... :				N
	Torque (Nm)..... :				N
(17)	Between metal surfaces				N
	Lug terminal				N
	Mantle terminal				N
	Pull test; pull (N)..... :				N
(18)	Without undue damage				P
ANNEX4: screwless terminals (part of the luminaire)					
(15)	SCREWLESS TERMINALS				N
(15.2)	Type of terminal..... :				N
	Rated current (A)..... :				N
(15.3.1)	Material				N

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(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 (4N, 4samples)		N
(15.5.1.2)	Pull test pin or tab terminals (4 N, 4 samples)		N
	Insertion force not exceeding 50 N		N
(15.5.2)	Permanent connections: pull-off test (20 N)		N
(15.6)	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

EN 60598-1&EN 60598-2-17			
Clause	Requirement Test	Result	Verdict
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples)..... :		N
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples)..... :		N
(15.7)	Terminals external wiring		N
	Terminal size and rating		N
(15.8.1)	Pull test spring-type terminals (4 samples); pull (N)		N
	Pull test pin or tab terminals (4 samples); pull (N)		N
(15.9)	Contact resistance test		N
	Voltage drop (mV) after 1 h		N

terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										

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EN 60598-1&EN 60598-2-17										
Clause	Requirement Test					Result				Verdict
	Voltage drop of two inseparable joints									
	Voltage drop after 10th alt. 25th cycle									
	Max. allowed voltage drop (mV).....:									
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										
	Voltage drop after 50th alt. 100th cycle									
	Max. allowed voltage drop (mV).....:									
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										
	Continued ageing: voltage drop after 10th alt. 25th cycle									
	Max. allowed voltage drop (mV).....:									
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										
	Continued ageing: voltage drop after 50th alt. 100th cycle									
	Max. allowed voltage drop (mV).....:									
terminal	1	2	3	4	5	6	7	8	9	10
voltage drop (mV)										

Appendix for EUT Photos

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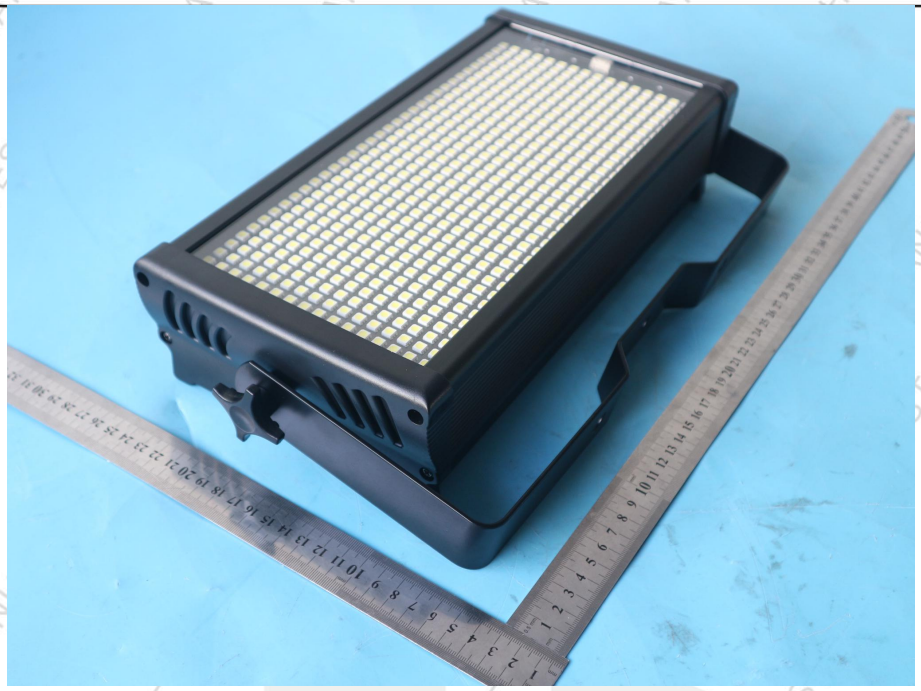

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