

TEST REPORT

Reference No..... : WTF18F12131184L
Applicant..... : VOLTACON UK LIMITED
Address..... : Burnsall Road, Industrial Estate Coventry CV5 6BU UK.
Manufacturer : The same as above
Address..... : The same as above
Product Name..... : Stainless Steel Wall Lamp
Model No..... : See model list on page 3
Standards..... : Luminaires
Part 2-1: Fixed general purpose luminaires
EN 60598-2-1:1989
EN 60598-1:2015 +A1:2018
Date of Receipt sample : 2018-12-07
Date of Test : 2018-12-07 to 2018-12-21
Date of Issue..... : 2019-01-02
Test Report Form No. : WSL-6059821A-01A
Test Result..... : Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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A handwritten signature in black ink, appearing to read 'Bonn Ding'.

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Michael Chen / Manager

Test item description..... : Fixed lamps

Trade Mark..... : --

Model/Type reference..... : See model list on page 3

Ratings..... : See model list on page 3

Copy of marking plate:

Models No.: DYL-3030
Input: 220~240V AC 50/60Hz
Rated power: E27 2xMax.25W



Voltacon UK LIMITED

On the luminaries surface

E27 MAX. 25W



The label nearest to each lampholder

Remark:

1. As declared by the applicant, the importer's (and manufacturer, if it is different) name, registered trade name or registered trade mark and the postal address will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities.
2. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.
3. The marking labels for other models are identical as above, except the model No. and power

Summary of testing:

1. Unless otherwise specified, the model DYL-3030 was chosen as representative models to perform all tests; the tests results complied with the requirements of the standards mentioned on page one. Construction had been checked on all models.
2. Assessment of lighting equipment related to human exposure to electromagnetic fields was evaluated and fulfilled the requirements of EN 62493:2015 and found to comply with the requirement.
3. Only the most unfavorable results are recorded in this report.

Test items particulars:

Classification of installation and use.....: Fixed
 Supply Connection.....: Connecting leads (tails)

Possible test case verdicts:

- test case does not apply to the test object.....: N (Not applicable)
 - test object does meet the requirement.....: P (Pass)
 - test object does not meet the requirement.....: F (Fail)

General remarks:

"(see remark #)" refers to a remark appended to the report.
 "(see appended table)" refers to a table appended to the report.
 Throughout this report a point is used as the decimal separator.

General product information:

- 1.Fixed general purpose luminaries, for outdoor use .
2. 220-240V~,50/60Hz other detail see model list:

Model list

Item	Factory No.	Customer No.	Rated power (W)	Protection against electric shock	IP degree
1	DYL-3030	V3V2-SSC8-LED	E27 2xMax.25	Class I	IP44
2	AST-LED-V3	--	E27 2xMax.25	Class I	IP44
3	LEDISON ARTIKA V1	--	E27 1xMax.25	Class I	IP44
4	V3V2-SSC8	--	E27 2xMax.25	Class I	IP44

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.2 (0)	GENERAL TEST REQUIREMENTS		P
1.2 (0.3)	More sections applicable.....	Yes ☐ No ☒	—
1.2 (0.5)	Components	(see Annex 1)	—
1.2 (0.7)	Information for luminaire design in light sources standards		—
1.2 (0.7.2)	Light source safety standard	EN 60432-1	—
	Luminaire design in the light source safety standard		P

1.4 (2)	CLASSIFICATION		P
1.4 (2.2)	Type of protection (Class 0 excluded)..... :	Class I	—
1.4 (2.3)	Degree of protection (Requirement: Ordinary)..... :	IP44	—
1.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ☒ No ☐	—
1.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—

1.5 (3)	MARKING		P
1.5 (3.2)	Mandatory markings	See "Copy of marking plate"	P
	Position of the marking		P
	Format of symbols/text		P
1.5 (3.3)	Additional information		P
	Language of instructions	In 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		N
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		N
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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5 (3.3.15)	Rated current of socket outlet		N
1.5 (3.3.16)	Rough service luminaire		N
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 arms reach		N
1.5 (3.3.21)	Non-replaceable and non-user replaceable light sources information provided		N
	Cautionary symbol		N
1.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N
1.5 (3.4)	Test with water		P
	Test 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		P
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		P
	- pressure test (N)	--	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)	E27: 2.0Nm	P
	After test the lampholder have not moved from its position and show no permanent deformation		P
1.6 (4.4.5)	Peak pulse voltage		N
1.6 (4.4.6)	Centre contact		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
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
1.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		P
1.6 (4.5)	Starter holders		N
	Starter holder in luminaires other than class II	No starter holder used	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		N
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		N
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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.9.1)	Retainment		P
	Method of fixing.....: Heat-shrink		P
1.6 (4.9.2)	Insulated linings and sleeves		P
	Resistant to a temperature > 20 °C to the wire temperature or		P
	a) & c) Insulation resistance and electric strength		N
	b) Ageing test. Temperature (°C).....: --		N
1.6 (4.10)	Insulation of Class II luminaires		P
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		P
	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:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		P
	- lining in lampholder		P
1.6 (4.10.4)	Protective impedance device		N
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N
	Y1 or Y2 capacitors comply with IEC 60384-14		N
	Resistors comply with test (a) in 14.1 of IEC 60065		N
1.6 (4.11)	Electrical connections		P
1.6 (4.11.1)	Contact pressure		P
1.6 (4.11.2)	Screws:		N
	- self-tapping screws		N
	- thread-cutting screws		N
1.6 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.11.4)	Material of current-carrying parts	> 50% Cu	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)	Mechanical connections 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.....:	Screw for fixing mounting bracket: 1.2Nm	P
	Torque test: torque (Nm); part.....:	--	N
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N
1.6 (4.12.4)	Locked connections:		P
	- fixed arms; torque (Nm)		P
	- lampholder; torque (Nm).....:	E27: 2.0Nm	P
	- 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)	--	N
	- other parts; energy (Nm).....:	All enclosure: 0.35 Nm	P
	1) live parts		P
	2) linings		P
	3) protection		P
	4) covers		N
1.6 (4.13.3)	Straight test finger	All enclosure: 30 N	P
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 and adjusting devices		P
1.6 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	B) torque 2,5 Nm		N

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Clause	Requirement + Test	Result - Remark	Verdict
	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)	--	N
	Stress in conductors (N/mm ²)	--	N
	Mass (kg) of semi-luminaire	--	N
	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	Waterproof gasket	P
	- spacing $\geq$ 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		N
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		P
1.6 (4.16.1)	Lamp control gear spacing:		N
	- spacing 35 mm		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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 12.6)	N
1.6 (4.17)	Drain holes		N
	Clearance at least 5 mm		N
1.6 (4.18)	Resistance to corrosion:		P
1.6 (4.18.1)	- rust-resistance		P
1.6 (4.18.2)	- season cracking in copper		P
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		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		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		N
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
	Class of risk group assessed according to IEC/TR 62778.....:	--	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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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)	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
	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 ($^{\circ}\text{C}$)..... --		—
	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		N
	If protective cover provide protection against electric shock and marked with "caution, electric shock risk" symbol:		N
	Minimum two fixing means		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.31)	Insulation between circuits		N
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		N
	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		N
	Used SELV source		N
	Voltage $\leq$ ELV		N
	Insulating of SELV circuits from LV supply		N
	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		N
	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 $\leq$ 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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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
	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		P
1.7 (11.2.1)	Impulse withstand category (Normal category II)	Category II ☒ Category III ☐	—
	Category III according Annex U		N
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N
1.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	P
	Creepage distances for frequency over 30 kHz:		N
	- Controlgear marked with $\hat{U}_{OUT}$ and f_{UOUT} according IEC 61347-1, clause 7.1, item w	See Test Table 1.7 (11.2) II	N
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N
1.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N
	- Controlgear marked with U_P	See Test Table 1.7 (11.2) II	N
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N

1.8 (7)	PROVISION FOR EARTHING		P
1.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω	0.007 Ω	P
	Self-tapping screws used		N
	Thread-forming screws		N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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
	Protective earthing of the luminaire not via built-in control gear		N
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints etc.		P
1.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		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		P
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal		N
1.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
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		P
	Separately approved; component list	(see Annex 1)	P
	Part of the luminaire	(see Annex 3)	N

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

1.10 (5)	EXTERNAL AND INTERNAL WIRING		P
1.10 (5.2)	Supply connection and external wiring		P
1.10 (5.2.1)	Means of connection..... :	Connecting leads (tails)	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 :	See annex 1	N
	Nominal cross-sectional area (mm ²)..... :	See annex 1	N

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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:		N
	- suitable for introduction		N
	- adequate degree of protection		N
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		N
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
1.10 (5.2.10)	Cord anchorage:		N
	- covering protected from abrasion		N
	- clear how to be effective		N
	- no mechanical or thermal stress		N
	- no tying of cables into knots etc.		N
	- insulating material or lining		N
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:		N
	- impossible to push cable; unsafe		N
	- pull test: 25 times; pull (N).....: --		N

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Clause	Requirement + Test	Result - Remark	Verdict
	- torque test: torque (Nm) :	--	N
	- displacement ≤ 2 mm		N
	- no movement of conductors		N
	- no damage of cable or cord		N
1.10 (5.2.11)	External wiring passing into luminaire		N
1.10 (5.2.12)	Looping-in terminals		N
1.10 (5.2.13)	Wire ends not tinned		N
	Wire ends tinned: no cold flow		N
1.10 (5.2.14)	Mains plug same protection		N
	Class III luminaire plug		N
	No unsafe compatibility		N
1.10 (5.2.16)	Appliance inlets (IEC 60320)		N
	Appliance couplers of class II type		N
	Other appliance inlet or connector according 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	(see Annex 1)	P
	Through wiring		N
	- not delivered/ mounting instruction		N
	- factory assembled		N
	- socket outlet loaded (A) :	--	N
	- temperatures :	--	N
	Green-yellow for earth only		P
1.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm ²) :	(see Annex 1)	P
	Insulation thickness		P
	Extra insulation added where necessary		N
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N
	Adequate cross-sectional area and insulation thickness		N
1.10 (5.3.1.3)	Double or reinforced insulation for class II		P

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Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5.3.1.4)	Conductors without insulation		N
1.10 (5.3.1.5)	SELV current-carrying parts		N
1.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N
1.10 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N
	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
1.10 (-)	1) The requirement of one part of cord anchorage shall be fixed to the luminaire not apply for table lamps of glass or ceramic		—
	2) Luminaire with a mass less than 1 kg the current $\leq 2,5$ A and cable ≤ 2 m and conductor $\geq 0,5$ mm ²		N
1.10 (5.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N
	No damage to luminaire wiring after test		N
1.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
1.11 (8.2.1)	Live parts not accessible with standard test finger		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 and adjustable luminaires		N
	Basic insulated parts not accessible with $\varnothing 50$ mm probe from outside, other types of luminaires		P

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Clause	Requirement + Test	Result - Remark	Verdict
	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		P
	Protection in any position		P
	Double-ended tungsten filament lamp		N
	Insulation lacquer not reliable		N
	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
1.11 (8.2.3.a)	Class II luminaire:		P
	- basic insulated metal parts not accessible during starter or lamp replacement		P
	- basic insulation not accessible other than during starter or lamp replacement		P
	- 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
	- voltage under load (V)	--	N
	- no-load voltage (V)	--	N
	- touch current if applicable (mA)		N
	One conductive part insulated if required		N
	Other than ordinary luminaire:		N
	- nominal voltage	--	N
	Class III luminaire only for connection to SELV		N
	Class III luminaire not provided with means for protective earthing		N
1.11 (8.2.4)	Portable luminaire:		N
	- protection independent of supporting surface		N
	- terminal block completely covered		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

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Clause	Requirement + Test	Result - Remark	Verdict
1.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection		N
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N

1.12 (12)	ENDURANCE TEST AND THERMAL TEST		P
1.12 (12.3)	Endurance test:		P
	- mounting-position	Acc. to user manual	—
	- test temperature (°C)	35 °C	—
	- total duration (h)	240 h	—
	- supply voltage: Un factor; calculated voltage (V):	1.05Un	—
	- lamp used	E27 2 x 25W	—
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.		P
1.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	N
1.12 (12.5)	Thermal test (abnormal operation)	--	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

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 V	--	—
	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
	- Test with standard test finger after the test		N
	Test according to Annex V:		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:		N
	- part tested; temperature (°C)..... :	--	N
	- part tested; temperature (°C)..... :	--	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:		N
	- part tested; temperature (°C)..... :	--	N
	- part tested; temperature (°C)..... :	--	N
1.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N
	- case of abnormal conditions		—

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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:		N
	- part tested; temperature (°C):..... :	--	N
	- part tested; temperature (°C):..... :	--	N

1.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		P
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP	IP44	—
	- mounting position during test	Acc. to user manual	—
	- fixing screws tightened; torque (Nm)..... :	--	—
	- tests according to clauses	9.2.0&9.2.5	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N
	b) no talcum in dust-tight luminaire		N
	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		N
	e) no water in watertight luminaire		N
	f) no contact with live parts (IP 2X)		P
	f) no entry into enclosure (IP 3X and IP 4X)		P
	f) no contact with live parts (IP3X and IP4X)		P
	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%RH	P

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Clause	Requirement + Test	Result - Remark	Verdict
1.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
1.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø	--	—
	Insulation resistance (MΩ)		—
	SELV:		N
	- 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
	- 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	100 MΩ	P
	- between live parts and mounting surface	100 MΩ	P
	- between live parts and metal parts	100 MΩ	P
	- between live parts of different polarity through action of a switch	--	N
	- 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 ..	100 MΩ	P
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):		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
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	--	N

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Clause	Requirement + Test	Result - Remark	Verdict
	- Insulation bushings as described in Section 5 .. :	--	N
	Other than SELV:		P
	- between live parts of different polarity	1480V	P
	- between live parts and mounting surface..... :	1480V	P
	- between live parts and metal parts..... :	1480V; 2960V for Class II construction;	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 .. :	1480V	P
1.14 (10.3)	Touch current (mA)..... :	--	N
	Protective conductor current (mA)..... :	Max. 0.016mA	P

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

IEC 60598-2-1							
Clause	Requirement + Test				Result - Remark		Verdict
1.7 (11.2)	TABLE: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. (50/60 Hz) sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1* and 11.2*						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	B	3.0	1.5	11.1	3.0	2.5	11.1
Working voltage (V).....:					240		—
PTI.....:					< 600 ☒ ≥ 600 ☐		—
Pulse voltage if applicable (kV)					--		—
Supplementary information: Current-carrying parts of different polarity							
Distance 2:	B	3.0	1.5	11.1	3.0	2.5	11.1
Working voltage (V).....:					240		—
PTI.....:					< 600 ☒ ≥ 600 ☐		—
Pulse voltage if applicable (kV)					--		—
Supplementary information: Current-carrying parts and accessible part							
Distance 3:	--	--	--	--	--	--	--
Working voltage (V).....:					240		—
PTI.....:					< 600 ☒ ≥ 600 ☐		—
Pulse voltage if applicable (kV)					--		—
Supplementary information: Current-carrying parts and supporting surface							

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

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

1.7 (11.2)	TABLE II: Creepage distances and clearances						N
Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages							
Applicable part of IEC 61347-1 Table 7 and 8* or IEC 60664-4 Table 1 and 2							
Distances	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI.....:					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							
Distance 2:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI.....:					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							
Distance 3:							
Working voltage (V).....:							—
Frequency if applicable (kHz).....:							—
PTI.....:					< 600 ☐ ≥ 600 ☐		—
Peak value of the working voltage $\hat{U}_{out}$ if applicable (kV)							—
Supplementary information:							

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

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

1.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			N
Allowed impression diameter (mm)			≤2.0	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
--	--	--	--	
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)					N
Glow wire temperature				650°C		—
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test glow (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
--	--	--	--	--	--	
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No)					Yes	
Supplementary information:						

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

IEC 60598-2-1						
Clause	Requirement + Test			Result - Remark		Verdict
	ANNEX 1 components					P
object/part No.	Code	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
Power cord	B	Foshan City Nanhai Tengxiang Wire & Cable Co.,Ltd	(N)6YAR	1x 0.75mm²	EN 50525-2-11	VDE 40040643
Lead wire to Lampholder	B	Foshan City Nanhai Tengxiang Wire & Cable Co.,Ltd	(N)6YAR	1x 0.75mm²	EN 50525-2-11	VDE 40040643
Ground wire	B	FOSHAN SHUNDE LONGHEN INDUSTRY CO LTD	1015	1x 0.75mm²	--	UL E254394
Lampholder cord	B	Zhongshan City Xiaolan Town Hongshang Lighting Processing Department	H03VV-F	2 x 0.75mm²	EN 50525-2-11	VDE 40024362
E27 lampholder	B	Zhongshan Guzhen heyi electrical appliance factory	HS- 2027,HS- 2027/1,HS- 2027/2	250V; 4A; T210	EN 60238	CE UNI201603 3109SC-01
Heat- shrinkable tube	B	DONGGUAN SALIPT CO LTD	SALIPT S- 901-600; SALIPT S- HPT-600	600V; 125°C	--	UL E209436
Fiberglass sleeving	B	FOSHAN SHUNDE BEIJIAO YONGYING INSULATING MATERIAL CO LTD	YY01, YY02	600V; 200°C	--	UL E236323

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

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

ANNEX 2	Temperature measurements, thermal tests of Section 12	P
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	Type reference.....	DYL-3030	—
	Lamp used	E27 2 x 25W	—
	Lamp control gear used	--	—
	Mounting position of luminaire	Acc. to user manual	—
	Supply wattage (W)	--	—
	Supply current (A)	--	—
	Calculated power factor	--	—
	Table: measured temperatures corrected for $t_a = 25\text{ }^{\circ}\text{C}$:		P
	- abnormal operating mode.....		—
	- test 1: rated voltage	--	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage	1,05 times rated wattage	—
	- 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 measurements, ($^{\circ}\text{C}$)							
Part	Ambient	Clause 12.4 – normal				Clause 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Mounting box (inside)	25.0	--	28.8	--	Ref	--	--
Lampholder contact	25.0	--	74.3	--	210	--	--
Internal wires of lampholder at a distance of 10mm from lampholder terminals	25.0	--	73.6	--	120	--	--
Lighting object (10cm)	25.0		27.4	--	90	--	--
Illuminated surface (0.1m)	25.0	--	29.1	--	90	--	--

IEC 60598-2-1			
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 (mm ²)	--	N
(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
(14.4.6)	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)	Terminals and connections for internal wiring		N
(15.5.1)	Mechanical tests		N
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples).....:		N
(15.5.1.1.2)	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 10th alt. 25th cycle (4 samples).....:		N
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples).....:		N
(15.6)	Terminals and connections for external wiring		N
(15.6.1)	Conductors		N
	Terminal size and rating		N

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Clause	Requirement + Test	Result - Remark	Verdict
15.6.2	Mechanical tests		N
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N)		N
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N)		N
(15.6.3)	Electrical tests		N
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N

(15.6.3.1) (15.6.3.2)	TABLE: Contact resistance test / Heating tests										N
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)										N	
	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)										N	
	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)										N	
	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)										N	
	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)										N	
										N	
Supplementary information:											

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

ANNEX 5	National Differences for (country name) or Group Differences	P
	CENELEC COMMON MODIFICATIONS (EN)	P

ATTACHMENT TO TEST REPORT IEC 60598-2-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES Luminaires Part 2: Particular Requirements: Section One – Fixed general purpose luminaires	
Differences according to.....:	EN 60598-2-1:1989 used in conjunction with EN 60598-1:2015 +A1:2018
Annex Form No.....:	--
Annex Form Originator	--
Master Annex Form.....:	--
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ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	N
(3.3)	DK: power supply cords of class I luminaires with label	N
(4.5.1)	DK: socket-outlets	N
(5.2.1)	CY, DK, FI, GB: type of plug	N

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	N
(4 & 5)	FR: Shuttered socket-outlets 10/16A	N
	FR: Safety requirements for high buildings (Arrêté du 30 décembre 2011 portant règlement de sécurité pour la construction des immeubles de grande hauteur et leur protection contre les risques d'incendie et de panique; Section VIII; Article GH 48, Eclairage) Glow-wire test for outer parts of luminaires:	N
	- 850°C for luminaires in stairways and horizontal travel paths	N
	- 650°C for indoor luminaires	N
	GB: Requirements according to United Kingdom Building Regulation	N

EN 62493			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 6	Assessment Of Lighting Equipment Related To Human Exposure To Electromagnetic Fields according to standard EN 62493:2015	P
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4	LIMITS			P
4.1	General			P
	Comply with Van der Hoofden test limit in 4.2.3 or inherently compliant in 4.2.2 and pass assessment procedure for intentional radiators in 4.3			P
4.2	Unintentional radiating part of lighting equipment			P
4.2.2	Lighting equipment deemed to comply with the Van der Hoofden test without testing			P
	1) electronic controlgear	Yes	☐ No ☒	—
	2) incandescent-lamp technology	Yes	☒ No ☐	—
	3) LED-light-source technology	Yes	☐ No ☒	—
	4) OLED-light-source technology	Yes	☐ No ☒	—
	5) high-pressure discharge lamp	Yes	☐ No ☒	—
	6) low-pressure discharge lamp technologies with exposure distance ≥ 50 cm	Yes	☐ No ☒	—
	7) independent auxiliary	Yes	☐ No ☒	—
	Not fulfil any of 1-7 above subject to 4.2.3			—
4.2.3	Applications of limits			N
	Not fulfil any of 1-7 in 4.2.2 but the compliance factor F is ≤ 1			N
4.3	Intentional radiating part of lighting equipment			N
	Comply with one of methods in Clause 7 if intentional radiator			N

6	MEASUREMENT PROCEDURE FOR THE VAN DER HOOFDEN TEST		N
6.1	General		N
	Measurements carried out under conditions according Clause 6.1 – 6.6	See Table 6	N

7	ASSESSMENT PROCEDURE INTENTIONAL RADIATORS		N
7.2	Low-power exclusion method		N
7.2.1	Input $P_{\text{int,rad}}$		—
	Exclusion level P_{max}		—
	Input power $P_{\text{int,rad}} < \text{exclusion level } P_{\text{max}}$		N
7.3	Application of the EMF product standard for body worn-equipment		N

EN 62493					
Clause	Requirement + Test			Result - Remark	Verdict
	If not Clause 7.2 is met and expose distance ≤ 0.05 m, comply with IEC 62209-2				N
7.4	Application of the EMF product standard for base stations				N
	If not Clause 7.2 is met and if intentional radiator is base station, comply with IEC 62232				N
7.5	Application of another EMF standard				N
	If not Clause 7.2 is met and if intentional radiator cannot be considered as in Clause 7.3 or 7.4, comply with IEC 62311				N

6	TABLE: Measurement results with Van der Hoofden test head					N
Location of EUT		Test model	Measuring distance	Result(F)	Limit(F)	Verdict
Reference Annex B of EN 62493:2015		--	--	--	≤1.0	N

===== End of Report =====

Photo Documentation

Model: DYL-3030

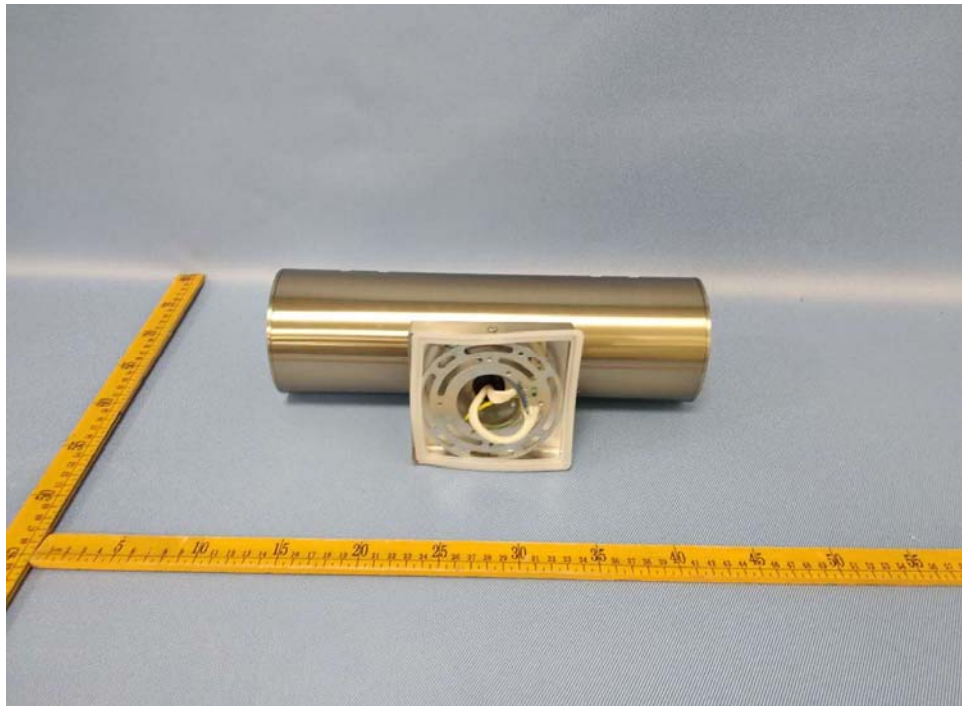


Photo 1

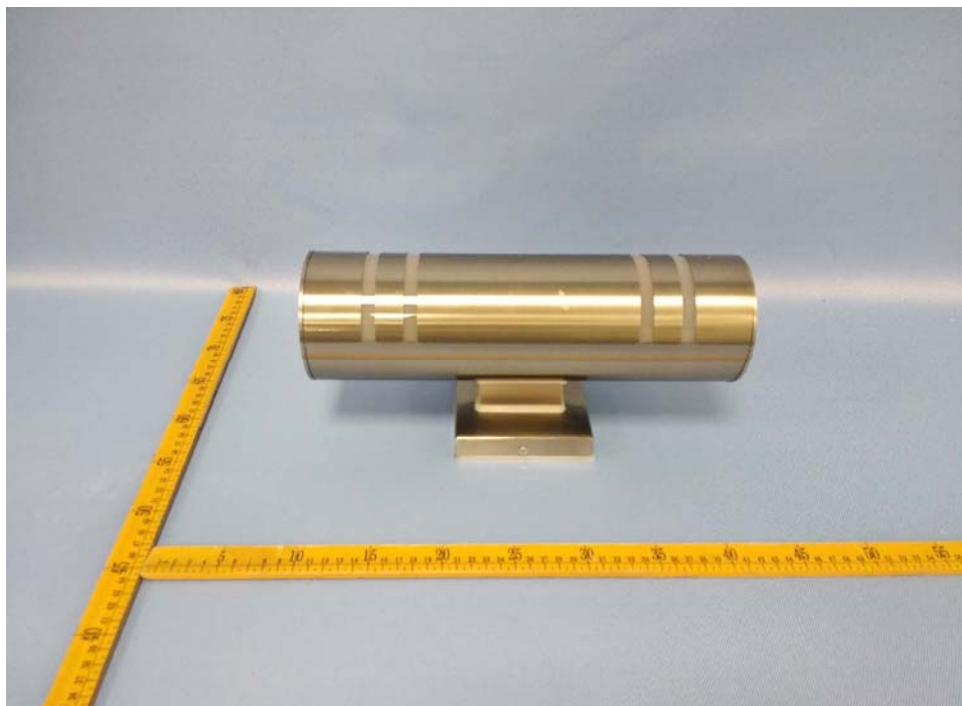


Photo 2

Photo Documentation



Photo 3



Photo 4

Photo Documentation



Photo 5

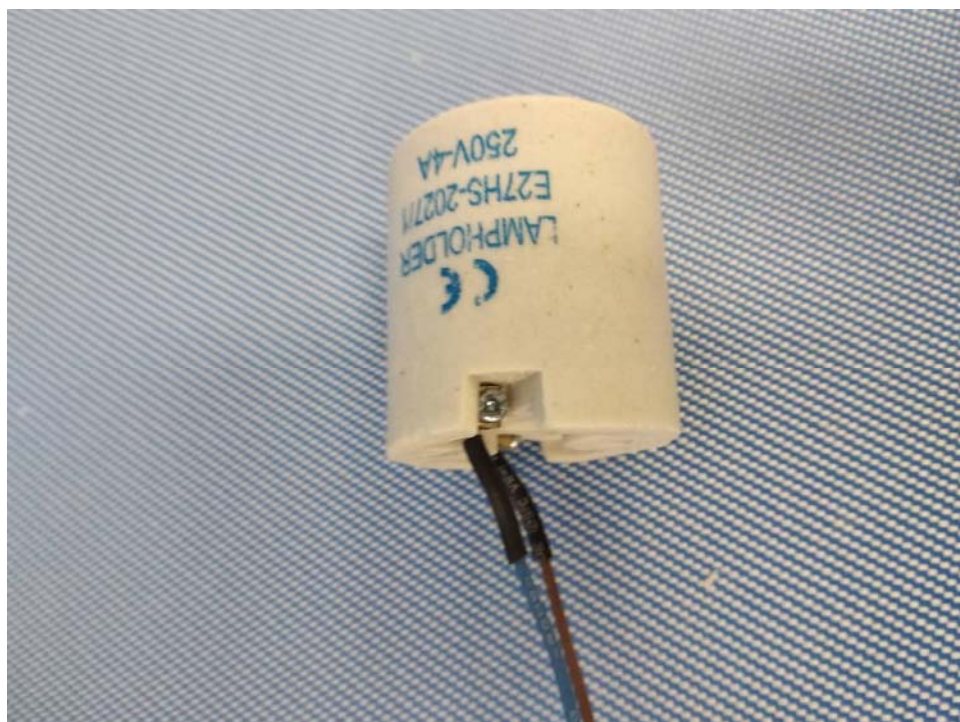


Photo 6

Photo Documentation

Model: AST-LED-V3



Photo 7

Model: LEDISON ARTIKA V1



Photo 8

Photo Documentation

Model: V3V2-SSC8



Photo 9

===== End of Photo =====