

TEST REPORT

EN 60598-2-5

Luminaires

Part 2: Particular requirements
Section 5: Floodlights

Report Reference No....... SIT211213580101SR

Tested by (+ signature) JJ Lou

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Testing Laboratory Shenzhen SIT Testing Technology Co., Ltd.

Xixiang, Bao'an District, Shenzhen, Guangdong, China.

Testing location/address Same as above

Applicant's name...... GUANGDONG CHAOZHOU GUANGLI ELECTRONIC FACTORY

Address WOSHI INDUSTRIAL PARK, QIAODONG, XIANGQIAO,

CHAOZHOU, GUANGDONG, CHINA.

Test specification:

Standard EN 60598-2-5:2015 used in conjunction with

EN 60598-1:2015 + A1:2018

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

General disclaimer:

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Test item description Night light

Trade Mark:

GUANGL

Manufacturer Same as the applicant Address Same as the applicant

085, GL-087, GL-088, GL-089

Ratings Input: 220-240V~, 50/60Hz, 15W

List of Attachments:

- Attachment No.1: EU plug test data;

- Attachment No.2: Photo Documentation

Summary of testing:

The submitted samples were found to comply with requirements of standards:

- EN 60598-2-5:2015 used in conjunction with EN 60598-1:2015 + A1:2018;

Copy of marking plate:

- The artwork below may be only a draft.

- The under markings are the minimum requirements required by the safety standard. For the final. production samples, the additional markings which do not give rise to misunderstanding may be added.

Night light Model: GL-090

Input: 220-240V~, 50/60Hz, 15W





GUANGDONG CHAOZHOU GUANGLI ELECTRONIC FACTORY.

Made In China

E14 MAX15W

Remark:

Location: Rating label be stuck on enclosure.

(height of CE mark at least 5mm, height of WEEE mark at least 7mm, height of other marks at least 5mm,

height of letters and numerals at least 2mm.)



Test item particulars	
Classification of installation and use:	Class II, indoor use
Supply Connection:	Plug
ta:	25°C
Possible test case verdicts:	
- test case does not apply to the test object:	N/A
- test object does meet the requirement:	P(Pass)

Testing.....:

- test object does not meet the requirement...... F(Fail)

Date of receipt of test item December 13, 2021

Date (s) of performance of tests...... December 13, 2021 to December 22, 2021

General remarks:

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

The tested sample(s) and the sample information are provided by the client.

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

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

The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid.

When determining for test conclusion, measurement uncertainty of tests has been considered.

Name and address of factory (ies): Same as the Manufacturer

General product information:

- 1. All models have similar circuit diagram and construction except different model name.
- 2. All tests were conducted on model GL-090 and the tests results were pass.



	EN 60598-2-5		
Clause	Requirement + Test	Result - Remark	Verdict
5.4 (0+2)	CLASSIFICATION OF LUMINAIRES		Р
5.4 (0)	General requirements and tests	,	_
5.4 (0.3)	More sections applicable	Yes □ No ⊠ Section/s:	_
5.4 (0.5)	Components	(see Annex 1)	_
5.4 (0.7)	Information for luminaire design in light sources sta	andards	_
5.4 (0.7.2)	Light source safety standard		_
	Luminaire design in the light source safety standard		_
5.4 (2)	Classification of luminaires		
5.4 (2.2)	Type of protection	. Class II	
5.4 (2.3)	Degree of protection	. IP20	_
5.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ⊠ No □	_
5.4 (2.5)	Luminaire for normal use	Yes 🛛 No 🗌	_
	Luminaire for rough service	Yes No 🖂	
5.5 (3)	MARKING		Р
5.5 (3.2)	Mandatory markings		Р
	Position of the marking		Р
	Format of symbols/text		Р
5.5 (3.3)	Additional information		Р
	Language of instructions	English	Р
5.5 (3.3.1)	Combination luminaires		N/A
5.5 (3.3.2)	Nominal frequency in Hz	50/60Hz	Р
5.5 (3.3.3)	Operating temperature		N/A
5.5 (3.3.5)	Wiring diagram		N/A
5.5 (3.3.6)	Special conditions		N/A
5.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
5.5 (3.3.8)	Limitation for semi-luminaires		N/A
5.5 (3.3.9)	Power factor and supply current		N/A
5.5 (3.3.10)	Suitability for use indoors		N/A
5.5 (3.3.11)	Luminaires with remote control		N/A
5.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
5.5 (3.3.13)	Specifications of protective shields		N/A



	EN 60598-2-5		
Clause	Requirement + Test	Result - Remark	Verdict
5.5 (3.3.14)	Symbol for nature of supply	~	Р
5.5 (3.3.15)	Rated current of socket outlet		N/A
5.5 (3.3.16)	Rough service luminaire		N/A
5.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A
5.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
5.5 (3.3.19)	Protective conductor current in instruction if applicable		N/A
5.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
5.5 (3.3.21)	Non-replaceable and non-user replaceable light sources information provided		N/A
5.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
5.5 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		N/A
5.5 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A
5.5 (3.4)	Test with water	15s	Р
	Test with hexane	15s	Р
	Legible after test	Clearly visible	Р
	Label attached	No be easily removable, No curling	Р
5.5 (-)	Additional information if applicable		Р
	a) Operation position		N/A
	b) Weight and dimensions	See the instruction	Р
	c) Maximum protected area		N/A
	d) Limitation of use indoors and/or outdoor		N/A
	e) Maximum mounting height if ≤ 5 m		N/A

5.6 (4)	CONSTRUCTION	Р
5.6 (4.2)	Components replaceable without difficulty	Р
5.6 (4.3)	Wireways smooth and free from sharp edges	Р
5.6 (4.4)	Lampholders	Р
5.6 (4.4.1)	Integral lampholder	N/A
5.6 (4.4.2)	Wiring connection	N/A
5.6 (4.4.3)	Lampholder for end-to-end mounting	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.6 (4.4.4)	Positioning		Р
	- pressure test (N)		_
	After test the lampholder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A
	- bending test (N)	. 1,2Nm	_
	After test the lampholder have not moved from its position and show no permanent deformation		Р
5.6 (4.4.5)	Peak pulse voltage		N/A
5.6 (4.4.6)	Centre contact		N/A
5.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
5.6 (4.4.8)	Lamp connectors		N/A
5.6 (4.4.9)	Caps and bases correctly used		N/A
5.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		Р
5.6 (4.5)	Starter holders	1	N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
5.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
5.6 (4.7)	Terminals and supply connections		Р
5.6 (4.7.1)	Contact to metal parts		N/A
5.6 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
5.6 (4.7.3)	Terminals for supply conductors		Р
5.6 (4.7.3.1)	Welded method and material		N/A
	- stranded or solid conductor		N/A
	- spot welding		N/A
	- welding between wires		N/A
	- Type Z attachment		N/A
	- mechanical test according to 15.6.2		N/A
	- electrical test according to 15.6.3		N/A
	- heat test according to 15.6.3.2.3 and 15.6.3.2.4		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.6 (4.7.4)	Terminals other than supply connection		Р
5.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
5.6 (4.7.6)	Multi-pole plug		N/A
()	- test at 30 N		N/A
5.6 (4.8)	Switches		N/A
()	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
5.6 (4.9)	Insulating lining and sleeves		N/A
5.6 (4.9.1)	Retainment		N/A
	Method of fixing		N/A
5.6 (4.9.2)	Insulated linings and sleeves:		N/A
	Resistant to a temperature > 20 °C to the wire temperature or		N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C)		N/A
5.6 (4.10)	Double or reinforced insulation		Р
5.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		Р
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
5.6 (4.10.2)	Assembly gaps:		Р
	- not coincidental		Р
	- no straight access with test probe		Р
5.6 (4.10.3)	Retainment of insulation:		Р
	- fixed		Р
	- unable to be replaced; luminaire inoperative		Р
	- sleeves retained in position		Р
	- lining in lampholder		N/A
5.6 (4.10.4)	Protective impedance device		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Y1 or Y2 capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
5.6 (4.11)	Electrical connections and current-carrying parts	1	Р
5.6 (4.11.1)	Contact pressure		Р
5.6 (4.11.2)	Screws:	1	N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
5.6 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
5.6 (4.11.4)	Material of current-carrying parts		Р
5.6 (4.11.5)	No contact to wood or mounting surface		Р
5.6 (4.11.6)	Electro-mechanical contact systems		N/A
5.6 (4.12)	Screws and connections (mechanical) and glands		Р
5.6 (4.12.1)	Screws not made of soft metal		N/A
	Screws of insulating material		N/A
	Torque test: torque (Nm); part		N/A
	Torque test: torque (Nm); part		N/A
	Torque test: torque (Nm); part		N/A
5.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
5.6 (4.12.4)	Locked connections:	1	Р
	- fixed arms; torque (Nm)		N/A
	- lampholder; torque (Nm)	. 1,2Nm	Р
	- push-button switches; torque 0,8 Nm		N/A
5.6 (4.12.5)	Screwed glands; force (Nm)		N/A
5.6 (4.13)	Mechanical strength	1	Р
5.6 (4.13.1)	Impact tests:		Р
	- fragile parts; energy (Nm)	. 0,5 Nm	Р
	- other parts; energy (Nm)	. 0,7Nm	Р
	1) live parts		Р
	2) linings		Р
	3) protection		Р
	4) covers		Р
5.6 (4.13.2)	Metal parts have adequate mechanical strength		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.6 (4.13.3)	Straight test finger	30N	Р
5.6 (4.13.4)	Rough service luminaires		N/A
. ,	- IP54 or higher		N/A
	a) fixed		N/A
	b) hand-held		N/A
	c) delivered with a stand		N/A
	d) for temporary installations and suitable for mounting on a stand		N/A
5.6 (4.13.6)	Tumbling barrel	25	Р
5.6 (4.14)	Suspensions, fixings and means of adjusting		N/A
5.6 (4.14.1)	Mechanical load:		N/A
	A) four times the weight		N/A
	B) torque 2,5 Nm		N/A
	C) bracket arm; bending moment (Nm)		N/A
	D) load track-mounted luminaires		N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm)		N/A
	Metal rod. diameter (mm)		N/A
	Fixed luminaire or independent control gear without fixing devices		N/A
5.6 (4.14.2)	Load to flexible cables	,	N/A
	Mass (kg)		_
	Stress in conductors (N/mm²)		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
5.6 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles		N/A
	- strands broken		N/A
	- electric strength test afterwards		N/A
5.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
5.6 (4.14.5)	Guide pulleys		N/A
5.6 (4.14.6)	Strain on socket-outlets		N/A
5.6 (4.15)	Flammable materials		Р
	- glow-wire test 650°C	See Test Table 5.15 (13.3.2)	Р
	- spacing ≥30 mm		N/A



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Clause	Requirement + Test	Result - Remark	Verdict	
	- screen withstanding test of 13.3.1		N/A	
	- screen dimensions		N/A	
	- no fiercely burning material		Р	
	- thermal protection		N/A	
	- electronic circuits exempted		N/A	
5.6 (4.15.2)	Luminaires made of thermoplastic material with lamp	control gear	N/A	
	a) construction		N/A	
	b) temperature sensing control		N/A	
	c) surface temperature		N/A	
5.6 (4.16)	Luminaires for mounting on normally flammable surfa	aces	Р	
	No lamp control gear((compliance with Section 12)	N/A	
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A	
5.6 (4.16.1)	Lamp control gear spacing:		N/A	
	- spacing 35 mm		N/A	
	- spacing 10 mm		N/A	
5.6 (4.16.2)	Thermal protection:		N/A	
	- in lamp control gear		N/A	
	- external		N/A	
	- fixed position		N/A	
	- temperature marked lamp control gear		N/A	
5.6 (4.16.3)	Design to satisfy the test of 12.6 (s	see clause 12.6)	N/A	
5.6 (4.17)	Drain holes		N/A	
	Clearance at least 5 mm		N/A	
5.6 (4.18)	Resistance to corrosion		N/A	
5.6 (4.18.1)	- rust-resistance		N/A	
5.6 (4.18.2)	- season cracking in copper		N/A	
5.6 (4.18.3)	- corrosion of aluminium		N/A	
5.6 (4.19)	Ignitors compatible with ballast		N/A	
5.6 (4.20)	Rough service vibration		N/A	
5.6 (4.21)	Protective shield		N/A	
5.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A	
	Shield of glass if tungsten halogen lamps		N/A	
5.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A	



	EN 60598-2-5	
Clause	Requirement + Test Result - Remark	Verdict
5.6 (4.21.3)	No direct path	N/A
5.6 (4.21.4)	Impact test on shield	N/A
3.0 (4.21.4)	Glow-wire test on lamp compartment	
5.6 (4.22)	Attachments to lamps not cause overheating or damage	N/A
5.6 (4.23)	Semi-luminaires comply Class II	N/A
5.6 (4.24)	Photobiological hazards	N/A
5.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)	N/A
5.6 (4.24.2)	Retinal blue light hazard	N/A
<u> </u>	Class of risk group assessed according to IEC/TR 62778	_
	Luminaires with E _{thr} :	N/A
	a) Fixed luminaires	N/A
	- distance x m, borderline between RG1 and RG2	N/A
	- marking and instruction according 3.2.23	N/A
	b) Portable and handheld luminaires	N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778	N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC/62778	N/A
5.6 (4.25)	Mechanical hazard	Р
	No sharp point or edges	Р
5.6 (4.26)	Short-circuit protection	N/A
5.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts	N/A
5.6 (4.26.2)	Short-circuit test with test chain according 4.26.3	N/A
	Test chain not melt through	N/A
	Test sample not exceed values of Table 12.1 and 12.2	N/A
5.6 (4.27)	Terminal blocks with integrated screwless earthing contacts	N/A
	Test according Annex V	N/A
	Pull test of terminal fixing (20 N)	N/A
	After test, resistance < 0,05 Ω	N/A
	Pull test of mechanical connection (50 N)	N/A
	After test, resistance < 0,05 Ω	N/A



	EN 60598-2-5		
Clause	Requirement + Test	Result - Remark	Verdict
	Voltage drop test, resistance $< 0.05 \Omega$		N/A
5.6 (4.28)	Fixing of thermal sensing control		N/A
,	Not plug-in or easily replaceable type		N/A
	Reliably kept in position		N/A
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material (°C)		_
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
5.6 (4.29)	Luminaires with non-replaceable light source		N/A
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A
5.6 (4.30)	Luminaires with non-user replaceable light source		N/A
	If protective cover provide protection against electr "caution, electric shock risk" symbol:	ic shock and marked with	N/A
	Minimum two fixing means		N/A
5.6 (4.31)	Insulation between circuits		N/A
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
5.6 (4.31.1)	SELV circuits		N/A
	Used SELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of SELV circuits from LV supply		N/A
	Insulating of SELV circuits from other non SELV circuits		N/A
	Insulating of SELV circuits from FELV		N/A
	Insulating of SELV circuits from other SELV circuits		N/A
	SELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter socket-outlets of other voltage systems		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
5.6 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of FELV circuits from LV supply		N/A
	FELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
5.6 (4.31.3)	Other circuits		N/A
	Other circuits insulated from accessible parts according Table X.1		N/A
	Class II construction with equipotential bonding for contacts with live parts:	protection against indirect	N/A
	- conductive parts are connected together		N/A
	- test according 7.2.3		N/A
	- conductive part not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
5.6 (4.32)	Overvoltage protective devices		N/A
	Comply with IEC 61643-11		N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A
5.6.1 (-)	At least IPX3 if for outdoor use		N/A
5.6.2 (-)	Lampholder brackets and lamp supports		N/A
5.6.3 (-)	Adjusting means		N/A
5.6.4 (-)	Controlling components		N/A



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	EN 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict	
5.6.5 (-)	Fixing device		N/A	
	Wind force test		N/A	
5.6.6 (-)	Locking of angular adjustment		N/A	
5.6.7 (-)	Vibration resistance		N/A	
5.6.8 (-)	Requirement on glass cover if mounting height > 5 m		N/A	
	Method of protection:		_	

5.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		Р
5.7 (11.2.1)	Impulse withstand category (Normal category II)	Category II Category III	_
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		Р
5.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 5.7 (11.2) I	Р
	Creepage distances for frequency over 30 kHz:		N/A
	- Controlgear marked with \hat{U}_{OUT} and f_{UOUT} according IEC 61347-1, clause 7.1, item w	See Test Table 5.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 5.7 (11.2) II	N/A
5.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 5.7 (11.2) I	Р
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with $U_{\mathbb{P}}$	See Test Table 5.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 5.7 (11.2) II	N/A

5.8 (7)	PROVISION FOR EARTHING	N/A
5.8 (7.2.1 + 7.2.3)	Accessible metal parts	N/A
	Metal parts in contact with supporting surface	N/A
	Resistance < 0,5 Ω	N/A
	Self-tapping screws used	N/A
	Thread-forming screws	N/A
	Thread-forming screw used in a grove	N/A
	Earth makes contact first	N/A
	Terminal blocks with integrated screwless earthing contacts tested according Annex V	N/A
	Protective earthing of the luminaire not via built-in control gear	N/A



	EN 60598-2-5		
Clause	Requirement + Test	Result - Remark	Verdict
5.8 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		N/A
5.8 (7.2.4)	Locking of clamping means		N/A
	Compliance with 4.7.3		N/A
	Terminal blocks with integrated screwless earthing contacts tested according Annex V		N/A
5.8 (7.2.5)	Earth terminal integral part of connector socket		N/A
5.8 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
5.8 (7.2.7)	Electrolytic corrosion of the earth terminal		N/A
5.8 (7.2.8)	Material of earth terminal		N/A
	Contact surface bare metal		N/A
5.8 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
5.8 (7.2.11)	Earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
5.9 (14)	SCREW TERMINALS		N/A
()	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 3)	N/A
5.9 (15)	SCREWLESS TERMINALS AND ELECTRICAL CO	NNECTIONS	N/A
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 4)	N/A
5.10 (5)	EXTERNAL AND INTERNAL WIRING		Р
5.10 (5,2)	Supply connection and external wiring		P
5.10 (5.2.1)	Means of connection	plug	P
5.10 (5.2.1)	Outdoor luminaire has not PVC insulated external	piug	N/A
	wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment		IN/A
5.10 (5.2.2)	Type of cable	(see Annex 1)	N/A
	Nominal cross-sectional area (mm²)	(see Annex 1)	N/A
	Cables equal to IEC 60227 or IEC 60245		N/A
5.10 (5.2.3)	Type of attachment, X, Y or Z		N/A
5.10 (5.2.5)	Type Z not connected to screws		N/A
5.10 (5.2.6)	Cable entries:	•	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- suitable for introduction		N/A
	- adequate degree of protection		N/A
5.10 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
5.10 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
5.10 (5.2.9)	Locking of screwed bushings		N/A
5.10 (5.2.10)	Cord anchorage:		N/A
	- covering protected from abrasion		N/A
	- clear how to be effective		N/A
	- no mechanical or thermal stress		N/A
	- no tying of cables into knots etc.		N/A
	- insulating material or lining		N/A
5.10 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
5.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N/A
5.10 (5.2.10.3)	Tests:		N/A
	- impossible to push cable; unsafe		N/A
	- pull test: 25 times; pull (N)		N/A
	- torque test: torque (Nm)	•	N/A
	- displacement ≤ 2 mm		N/A
	- no movement of conductors		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- no damage of cable or cord		N/A
	- function independent of electrical connection		N/A
5.10 (5.2.11)	External wiring passing into luminaire		N/A
5.10 (5.2.12)	Looping-in terminals		N/A
5.10 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
5.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
5.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Other appliance inlet or connector according relevant IEC standard		N/A
5.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
5.10 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
5.10 (5.3)	Internal wiring		N/A
5.10 (5.3.1)	Internal wiring of suitable size and type		N/A
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A)		N/A
	- temperatures	(see Annex 2)	N/A
	Green-yellow for earth only		N/A
5.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm²)		N/A
	Insulation thickness (mm)		N/A
	Extra insulation added where necessary		N/A
5.10 (5.3.1.2)	Internal wiring connected to fixed wiring via interna	l current-limiting device	N/A
	Cross-sectional area (mm²)		N/A
5.10 (5.3.1.3)	Double or reinforced insulation for class II		N/A
5.10 (5.3.1.4)	Conductors without insulation		N/A
5.10 (5.3.1.5)	SELV current-carrying parts		N/A
5.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.10 (5.3.2)	Sharp edges etc.		N/A
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		N/A
5.10 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
5.10 (5.3.4)	Joints and junctions effectively insulated		N/A
5.10 (5.3.5)	Strain on internal wiring		N/A
5.10 (5.3.6)	Wire carriers		N/A
5.10 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
5.10 (5.4)	Test to determine suitability of conductors having a	reduced cross-sectional area	N/A
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N/A
	No damage to luminaire wiring after test		N/A

5.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK	Р
5.11 (8.2.1)	Live parts not accessible	Р
	Basic insulated parts not used on the outer surface without appropriate protection	Р
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires	Р
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires	N/A
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	Р
	Basic insulation only accessible under lamp or starter replacement	Р
	Protection in any position	Р
	Double-ended tungsten filament lamp	N/A
	Insulation lacquer not reliable	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Double-ended high-pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
5.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		Р
5.11 (8.2.3.a)	Class II luminaire:	-	Р
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		Р
	- glass protective shields not used as supplementary insulation		N/A
5.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
5.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load (V)		N/A
	- no-load voltage (V)		N/A
	- touch current if applicable (mA)		N/A
	One conductive part insulated if required		N/A
	Other than ordinary luminaire:		N/A
	- nominal voltage (V)		N/A
	Class III luminaire only for connection to SELV		N/A
	Class III luminaire not provided with means for protective earthing		N/A
5.11 (8.2.4)	Portable luminaire has protection independent of supporting surface		Р
5.11 (8.2.5)	Compliance with the standard test finger or relevant probe		Р
5.11 (8.2.6)	Covers reliably secured		N/A
5.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μF not exceed 50 V 1 min after disconnection		N/A
	Portable luminaire with capacitor $> 0.1~\mu F$ (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor $> 0.1~\mu F$ (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.12 (12)	ENDURANCE TEST AND THERMAL TEST		Р
5.12.2 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6 specified in 5.13	6) after (9.2) before (9.3)	_
5.12 (12.2)	Selection of lamps and ballasts		_
	Lamp used according Annex B	(Lamp used see Annex 2)	_
	Controlgear if separate and not supplied	(Controlgear used see Annex 2)	_
5.12 (12.3)	Endurance test		Р
	a) mounting-position	As normal used	_
	b) test temperature (°C)	. 35°C	_
	c) total duration (h)	. 240 h	_
	d) supply voltage (V)	. 252V	_
	d) if not equipped with controlgear, constant voltage/current (V) or (A)		_
	e) luminaire ceases to operate		_
5.12 (12.3.2)	After endurance test:		Р
	- no part unserviceable		Р
	- luminaire not unsafe		Р
	- no damage to track system		N/A
	- marking legible		Р
	- no cracks, deformation etc.		Р
5.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	Р
5.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
5.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
5.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)		_
	- case of abnormal conditions		_
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un	•	_
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
5.12 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions		_
	- thermal link		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
5.12 (12.7)	Thermal test (failed lamp control gear in plastic lum	ı ninaires):	N/A
5.12 (12.7.1)	Luminaire without temperature sensing control		N/A
5.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A
	Test method 12.7.1.1 or Annex W		_
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions		
	- Ballast failure at supply voltage (V)		
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex W:		N/A
	- case of abnormal conditions		
	- measured winding temperature (°C): at 1,1 Un		_
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		_
	- calculated temperature of fixing point/exposed part (°C)		_
	Ball-pressure test:		N/A
5.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp >	70W, transformer > 10 VA	N/A
	- case of abnormal conditions		
	- measured winding temperature (°C): at 1,1 Un		
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		_
	- calculated temperature of fixing point/exposed part (°C)		_
	Ball-pressure test	See Test Table 5.15 (13.2.1)	N/A
5.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N/A
	- case of abnormal conditions		_
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
5.12 (12.7.2)	Luminaire with temperature sensing control		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	T	l	
	- thermal link	Yes No	_
	- manual reset cut-out	Yes No	_
	- auto reset cut-out	Yes No C	—
	- case of abnormal conditions		_
	- highest measured temperature of fixing point/ exposed part (°C):		_
	Ball-pressure test:	See Test Table 5.15 (13.2.1)	N/A
5.12.1 (-)	Reduction 10 °C of measured temperatures if for outdoor use		_
5.12.2 (-)	Glass covers used within the thermal limits		N/A
5.13 (9)	RESISTANCE TO DUST AND MOISTURE		Р
5.13.1 (-)	If IP > IP 20 the order of tests as specified in clause	e 5.12	N/A
5.13 (9.2)	Tests for ingress of dust, solid objects and moisture	e:	Р
	- classification according to IP	. IP20	
	- mounting position during test		
	- fixing screws tightened; torque (Nm)		
	- tests according to clauses		_
	- electric strength test afterwards		Р
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		N/A
	c.1) For luminaires without drain holes – no water entry		N/A
	c.2) For luminaires with drain holes – no hazardous water entry		N/A
	d) no water in watertight or pressure watertight luminaire		N/A
	e) no contact with live parts (IP 2X)		Р
	e) no entry into enclosure (IP 3X and IP 4X)		N/A
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A
	f) no trace of water on part of lamp requiring protection from splashing water		N/A
	g) no damage of protective shield or glass envelope		N/A
5.13 (9.3)	Humidity test 48 h	25°C, 93%R.H. for 48h	Р



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Clause	Requirement + Test	Result - Remark	Verdict

5.14 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH	Р
5.14 (10.2.1)	Insulation resistance test	Р
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø	_
	Insulation resistance (MΩ)	_
	SELV	N/A
	- between current-carrying parts of different polarity	N/A
	- between current-carrying parts and mounting surface	N/A
	- between current-carrying parts and metal parts of the luminaire	N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	N/A
	- Insulation bushings as described in Section 5	N/A
	Other than SELV	Р
	- between live parts of different polarity>100MΩ	Р
	- between live parts and mounting surface>100MΩ	Р
	- between live parts and metal parts	N/A
	- between live parts of different polarity through action of a switch	N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts	N/A
	- Insulation bushings as described in Section 5	N/A
5.14 (10.2.2)	Electric strength test	Р
	Dummy lamp	N/A
	Luminaires with ignitors after 24 h test	N/A
	Luminaires with manual ignitors	N/A
	Test voltage (V)	Р
	SELV	N/A
	- between current-carrying parts of different polarity	N/A
	- between current-carrying parts and mounting surface	N/A
	- between current-carrying parts and metal parts of the luminaire	N/A



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Clause	Requirement + Test	Result - Remark	Verdict						
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A						
	- Insulation bushings as described in Section 5		N/A						
	Other than SELV		Р						
	- between live parts of different polarity	1480V	Р						
	- between live parts and mounting surface	2960V	Р						
	- between live parts and metal parts		N/A						
	- between live parts of different polarity through action of a switch		N/A						
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A						
	- Insulation bushings as described in Section 5		N/A						
5.14 (10.3)	Touch current or protective conductor current (mA).:	0,005mA	Р						

5.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING			
5.15 (13.2.1)	Ball-pressure test	See Test Table 5.15 (13.2.1)	Р	
5.15 (13.3.1)	Needle-flame test (10 s)	See Test Table 5.15 (13.3.1)	Р	
5.15 (13.3.2)	Glow-wire test (650°C)	See Test Table 5.15 (13.3.2)	Р	
5.15 (13.4)	Proof tracking test (IEC 60112)	See Test Table 5.15 (13.4)	N/A	



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Clause	Requirement + Test	Result - Remark	Verdict

5.7 (11.2)	TABLE I: Cr	TABLE I: Creepage distances and clearances							
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages								
	Applicable p	art of IEC 605	98-1 Table 11.	1.A*, 11.1.B*	and 11.2*		Р		
	Insulation	Measured	Req	uired	Measured	Requir	ed		
	type **	clearance	clearance	*Table	creepage	creepage	*Table		
Distance 1:	В	>3,0	1,5	11.1	>3,0	2,5	11.1		
Working v	oltage (V)			:	240V		_		
PTI				:	< 600 ⊠	<u>></u> 600 □	_		
Pulse volta	age or <i>U</i> _P if a	pplicable (kV)		:			_		
Supplemen	ntary informa	tion: Between	L and N		-				
Distance 2:	R	>5,0	3,0	11.1	>5,0	5,0	11.1		
Working v	oltage (V)			:	240V		_		
PTI				:	< 600 ⊠	≥ 600 □	_		
Pulse voltage or <i>U</i> _P if applicable (kV):									
Supplementary information: Between live parts and outer surface of enclosure									
Supplemen	Supplementary information:								
** In a letter time D. Deste O. Ommittee of the D. Detector I. On the IFO 00500 4 Annual M									

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

5.7 (11.2) TABLE II: Creepage distances and clearances										
	Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages									
	Applicabl	e part of IEC	61347-1 Tabl	e 7 and 8* or I	EC 60664-4 Ta	able 1 and 2				
Distances	Insulation	Measured	Req	uired	Measured	Requi	ed			
	type **	clearance	clearance	*Table	creepage	creepage	*Table			
Distance 1:										
Working volt	age (V)			·····:			_			
Frequency if	applicable (kHz)		:			_			
PTI				:	< 600 🗌	<u>></u> 600 □	_			
Peak value o	f the workin	g voltage Û	_{out} if applicabl	le (kV):			_			
Supplementa	ry information	on:								
Distance 2:										
Working voltage (V):						_				
Frequency if applicable (kHz):						_				
PTI				·····:	< 600 🗌	<u>></u> 600 🗌	_			



	Clause		Requi	Resul	t - Remark	Verdict				
Ρ	Peak value of the working voltage Û _{out} if applicable (kV):									
S	upplementary	/ information	on:							
D	istance 3:									
W	/orking voltag	ge (V)			:			_		
F	requency if a	pplicable (kHz)		:			_		
Ρ	TI				:	< 600 🗌	≥ 600 □	_		
Р	eak value of t	the workin	g voltage Û			_				
S	upplementary	/ information	on:							

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



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Clause		Requirement + Test		Resu	ılt - Remark	Verdict	
	1						
5.15 (13.2.1)	1) TABLE: Ball Pressure Test of Thermoplastics						
Allowed impre	ssion diamete	er (mm):				_	
•		Manufacturer/ trademark	Test temperat	ture (°C)	Impression diamet	er (mm)	
lampholder		See ANNEX 1	125		1,2		
Supplementary	information:						

5.15 (13.3.1)	1) TABLE: Needle-flame test (IEC 60695-11-5)							
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		
lampholder See ANNEX 1		See ANNEX 1	10	No	0	Р		
Supplementary	inforn	nation:						

5.15 (13.3.2) TABLE: Glow-wire test (IEC 60695-2-11)								
Glow wire temperature:			:	650°C		_		
Object/ Part No. Material		Manufacturer/ trademark		Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict		
Enclosure		See ANNEX 1		No	0	Pass		
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No)								
Supplementary	Supplementary information:							

5.15 (13.4)	TABLE: Proof tracking test (IEC 60112)					N/A
Test voltage PTI:		: 175 V			_	
Object/ Part No./ Material Manufacturer/ trademark			Withstand 50 d	lrops without fail ree specimens	lure on three	Verdict
_				_	_	_
		_	_	_	_	
Supplementary	information:		•		•	



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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	TABL	E: Critical components	information				Р
object/part No.	code	manufacturer/ trademark	type/model	technical data	standard		k(s) of formity
Plug	В	GUANGDONG CHAOZHOU GUANGLI ELECTRONIC FACTORY	-	AC250V; 2.5A	EN 50075	Tes with app	
Enclosure	С	GUANGDONG CHAOZHOU GUANGLI ELECTRONIC FACTORY	-	-	-	Tes with app	
E14 lampholder	В,С	Zhong Shan Yi Hang Electric Co., Ltd.	YH266	AC250V, 2.5A	EN 60238	VDE Tes with app	ted

Supplementary information:

The codes above have the following meaning:

- A The component is replaceable with another one, also certified, with equivalent characteristics
- B The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component

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



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Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	TABLE: Temperature	measure	ements, ther	mal tests	of Section	12		Р	
	Type reference			GL-	090			_	
	Lamp used tungsten lamp								
	Lamp control gear use	ed						_	
	Mounting position of le	uminaire.		As i	n normal us	e			
	Supply wattage (W)							_	
	Supply current (A)							_	
	Calculated power fact	or						_	
	Table: measured temp	peratures	corrected for	ta = 25 °	C:				
	- abnormal operating	mode						_	
	- test 1: rated voltage							_	
	- test 2: 1,06 times rat				1,05Pn				
		ng to socket-outlet, 1,06 times wattage							
	- test 4: 1,1 times rate rated wattage								
	Through wiring or loop current of A during the							_	
	1	Temperat	ure measure	ments, (°	C)				
4	(00) - f		Clause 12.4	4 – norma	al	Clause 12.5	– a	bnormal	
temperature	(°C) or part	test 1	test 2	test 3	limit	test 4		limit	
Mounting sur	face		39,2		90				
Enclosure, in	side		66,4		Ref				
Lampholder			92,1		210				
Supplementa	ary information:								

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



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Clause	Requirement + Test	Result - Remark	Verdict
(14.3.3)	Conductor space (mm)	.]	N/A
(14.4)	Mechanical tests		N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread)		N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm)		N/A
	Torque (Nm)		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N)		N/A
(14.4.8)	Without undue damage		N/A

ANNEX 4	Screwless terminals (part of the luminaire)	N/A
(15)	SCREWLESS TERMINALS	N/A
(15.2)	Type of terminal	_
	Rated current (A)	_
(15.3.1)	Material	N/A
(15.3.2)	Clamping	N/A
(15.3.3)	Stop	N/A
(15.3.4)	Unprepared conductors	N/A
(15.3.5)	Pressure on insulating material	N/A
(15.3.6)	Clear connection method	N/A
(15.3.7)	Clamping independently	N/A
(15.3.8)	Fixed in position	N/A
(15.3.10)	Conductor size	N/A
	Type of conductor	N/A
(15.5.1)	Terminals internal wiring	N/A
(15.5.1.1)	Pull test spring-type terminals (4 N, 4 samples)	N/A
(15.5.1.2)	Pull test pin or tab terminals (4 N, 4 samples)	N/A



EN 60598-2-5								
Requirement + Test	Result - Remark	Verdict						
Insertion force not exceeding 50 N		N/A						
Permanent connections: pull-off test (20 N)		N/A						
Electrical tests		N/A						
Voltage drop (mV) after 1 h (4 samples)		N/A						
Voltage drop of two inseparable joints		N/A						
Number of cycles:		_						
Voltage drop (mV) after 10th alt. 25 th cycle (4 samples)		N/A						
Voltage drop (mV) after 50th alt. 100 th cycle (4 samples)		N/A						
After ageing, voltage drop (mV) after 10th alt. 25 th cycle (4samples)		N/A						
After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples)		N/A						
Terminals external wiring		N/A						
Terminal size and rating		N/A						
Pull test spring-type terminals or welded connections (4 samples); pull (N)		N/A						
Pull test pin or tab terminals (4 samples); pull (N)		N/A						
	Insertion force not exceeding 50 N Permanent connections: pull-off test (20 N) Electrical tests Voltage drop (mV) after 1 h (4 samples)	Insertion force not exceeding 50 N Permanent connections: pull-off test (20 N) Electrical tests Voltage drop (mV) after 1 h (4 samples)						

(15.6.3.1)	TAE	BLE:	LE: Contact resistance test								N/A	
	Volt	age	age drop (mV) after 1 h							_		
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop (n	nV)											
	,	Volta	age dro	p of two	insepara	ble joints	;					N/A
	,	Volta	age dro	p after 1	0th alt. 2	5th cycle						N/A
	Max. allowed voltage drop (mV):											
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop (n	nV)											
	,	Volta	age dro	p after 5	0th alt. 1	00th cycl	е					N/A
		Max	k. allowe	ed voltag	e drop (n	nV)	:					
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop (n	nV)											
Continued age		ageing: v	oltage di	op after	10th alt.	25th cyc	le			N/A		
	Max. allowed voltage drop (mV):											
terminal			1	2	3	4	5	6	7	8	9	10



				ı	EN 60598	8-2-5					
Clause		Requirement + Test						Result -	Remark		Verdict
		1									
voltage drop (n	nv)										
		Continued	ageing:	voltage d	rop after	50th alt.	100th cy	cle			N/A
		Max. allov	ved voltag	ge drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop (mV)											
Supplementary	' infoi	mation:				-					
,											



	Att	achment No. 1: EN 5	0075							
Clause	Requiremer	nt + Test	Result - Remark	Verdict						
6	Marking									
	Appliances shall be marked as follows:									
	Rated current in amperes (A)									
	Rated Voltage in volts (V	()		Р						
	Symbol for nature of sup	pply (~)		Р						
	Name, trade mark or ider manufacturer or respons			Р						
	Type reference		Incorporated plug portion of adaptor	Р						
				1						
7	Dimensions			Р						
	Plugs shall comply with	Standard Sheet 1	(see attached drawing)							
	Between two pins (pin base)	18.0 - 19.2 mm	18.32 mm	Р						
	Between two pins (pin top)	17.0 - 18.0 mm 17.14 mm		Р						
	Diameter of pin (metallic part)	4 ±0.06 mm	4.04 mm	Р						
	Diameter of pin (pin base)	max. 4.0 mm	3.78 mm	Р						
	Diameter of pin (middle part)	max. 3.8 mm	3.66 mm	Р						
	Pin length	19 ±0.5 mm	18.96 mm	Р						
	Length of pin except metal part	10 +1/-0 mm	10.23 mm	Р						
	Shape of pin top		round shape	Р						
	Length of plug base	35.3 ±0.7 mm	35.28 mm	Р						
	Width of plug base	13.7± 0.7 mm	14.19 mm	Р						
	Diagonal dimension of plug base	26.1± 0.5 mm	26.12 mm	Р						
	within a distance of 18mm	≥18 mm	18.90mm	Р						
	1									
8	Protection against electric			P						
8.1	Live parts of the plug no (standard test finger)	t accessible		Р						
8.2	No connection between a socket outlet	one plug-pin and		Р						



	Attachment No. 1: EN 5	UU/3	1
Clause	Requirement + Test	Result - Remark	Verdict
8.3	External parts of insulating material	External parts except pins are insulating material.	Р
9	Construction		Р
9.1	Plugs not replaceable	Not replaceable	Р
9.2	Switches, fuses, lampholders not incorporated	Not incorporated	Р
9.3	Solid pins		Р
	Adequate mechanical strength	As above	Р
9.4	Pins locked against rotation		Р
	Adequate fixed into the body	Each pin shaft is designed with ridges to lock into the pin holder	P
9.5	Kind of connection	Soldered to plug portion	Р
9.6	Easily to be withdrawn from socket-outlet	The equipment provides sufficient gripping surface	Р
10	Resistance to humidity		Р
	-Humidity treatment for 48 hours	Performed at 30 °C, 95% R.H. for 48h for each model.	Р
11	Insulation resistance and electric strength		P
11.1	Insulation resistance (500 V, min 5 M Ω)	Pins against body: 100 M Ω Each pin against body: 100 M Ω Required: 7 M Ω Pin against Pin: 100 M Ω	Р
11.2	Electric strength (2,000 V)	Required: 2MΩ Pins against body: 4200V Each pin against body: 4200V Pin against Pin: 2100V	P
13	Mechanical strength		P
13.1	Pressed with 150 N for 5 min	No deformation or deviation from the dimensions	Р
13.2	Tumbling barrel		Р
	No damages after the test		Р
	Requirements of clause 7 and 8.2 still fulfilled	Deformations allowed according to the equipment standard	Р

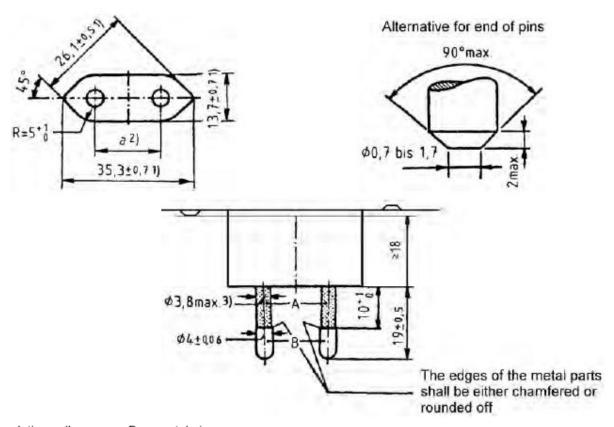


13.3 Rubbing test of plug-pins: 10,000 cycles, 4 N See test below No damage of the pins No visible damage Pull test at 70°C with 40 N See test below Pins not more than 1 mm displaced Displacement: 0.2mm 14 Resistance to heat and to ageing 14.1 Sufficient resistant to heat See test below 14.1.1 After 1 h in heating cabinet at 100°C no damage shown After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage and a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 14.2 Aging test - at 70°C for 168h - at room temperature for 96h No traces of cloth at a force of 5N Material does not soften No damage leads to non-compliance No visible damage 15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear		_	Report No.: SIT211213	35801015		
13.3 Rubbing test of plug-pins: 10,000 cycles, 4 N See test below No damage of the pins Pull test at 70°C with 40 N See test below Pins not more than 1 mm displaced 14 Resistance to heat and to ageing 14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1 h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test 14.2 Aging test 14.3 See test below 14.4 See test below 15 See test below No visible damage 16 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 17 See test below 18 See test below 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 19 Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 10 Performed a 125°C ball pressure test on the material does not soften No visible damage 10 Current-carrying parts and connections resistance to heat and to ageing 10 Performed a 125°C ball pressure test on the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of the material does not soften No visible damage of th		Attachment No. 1: EN 50075				
No damage of the pins Pull test at 70°C with 40 N Pins not more than 1 mm displaced Displacement: 0.2mm 14 Resistance to heat and to ageing 14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1 h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test See test below Performed a 125°C ball pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour 14.2 Aging test See test below - at 70°C for 168h - at room temperature for 96h No traces of cloth at a force of 5N Material does not soften No damage leads to non-compliance No visible damage 15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Some compliance No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm	Clause	Requirement + Test	Result - Remark	Verdic		
Pull test at 70°C with 40 N Pins not more than 1 mm displaced Displacement: 0.2mm 14.1 Resistance to heat and to ageing 14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test - at 70°C for 168h - at room temperature for 96h No traces of cloth at a force of 5N No damage leads to non-compliance 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm	13.3	Rubbing test of plug-pins: 10,000 cycles, 4 N	See test below	Р		
Pins not more than 1 mm displaced Displacement: 0.2mm Resistance to heat and to ageing 14.1 Sufficient resistant to heat See test below No visible damage damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test - at 70°C for 168h - at room temperature for 96h No traces of cloth at a force of 5N No damage leads to non-compliance 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm Performed a 125°C ball Performed a 125°C ball pressure test on the material of plug portion which material of plug portion which material of plug portion which material does not soften No visible damage Description of pressure test below No visible damage of the material does not soften No visible damage Complied Complied Complied No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion Creepage distances, clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and		No damage of the pins	No visible damage	Р		
14. 1 Resistance to heat and to ageing 14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test 14.1.2 Aging test 14.1.2 Aging test 14.1.2 Aging test 15.2 Current-carrying parts and connections resistance to heat and to ageing stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.3 Current carrying parts of copper 15.4 Consections withstand the mechanical stresses occurring in normal use 15.3 Current carrying parts of copper 15.4 Contact pressure not through isolating material 15.5 Current carrying parts of copper 15.6 Consections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.4 Copper content 58.3%-59.3% 15.6 No electroplated coating when part is subjected to mechanical wear 15.6 Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation 16 Creepage distances , clearances and distances through insulation 17 Through insulation between live parts and 100°C and materiance of the subjects and 100°C and materiance 100°C and material		Pull test at 70°C with 40 N	See test below	Р		
14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test 14.2 Aging test 15.2 See test below 15.1 Current-carrying parts and connections resistance to heat and to ageing stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.4 Current carrying parts of copper 15.5 Current carrying parts of copper 15.6 Current carrying parts of copper 15.7 Contact pressure not through isolating material 15.8 Current carrying parts of copper 15.9 Contact pressure not through isolating material 15.0 Current carrying parts of copper 15.1 Contact pressure not through isolating material 15.2 Contact pressure not through isolating complied 15.3 Current carrying parts of copper 15.4 Copper content 58.3%-59.3% No rolled sheet used 15.6 No electroplated coating when part is subjected to mechanical wear 15.7 Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation 17.5 mm 18.7 Through insulation between live parts and 51.5 mm		Pins not more than 1 mm displaced	Displacement: 0.2mm	Р		
14.1 Sufficient resistant to heat 14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test 14.2 Aging test 15.2 See test below 15.1 Current-carrying parts and connections resistance to heat and to ageing stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.4 Current carrying parts of copper 15.5 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.4 Contact pressure not through isolating complied 15.5 Current carrying parts of copper 15.6 Current carrying parts of copper 15.7 Contact pressure not through isolating complied 15.8 Current carrying parts of copper 15.9 Contact pressure not through isolating complied 15.0 Current carrying parts of copper 15.1 Contact pressure not through isolating complied 15.2 Contact pressure not through isolating complied 15.3 Current carrying parts of copper 15.4 Copper content sa.3%-59.3% No rolled sheet used 15.6 No electroplated coating when part is subjected to mechanical wear 15.7 Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation 16 Creepage distances , clearances and distances through insulation 17.5 mm	14	Resistance to heat and to ageing		Р		
14.1.1 After 1 h in heating cabinet at 100°C no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown 14.1.2 Aging test 14.2 Aging test 14.2 Aging test 15.2 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper 15.4 Corrent carrying parts of copper 15.5 Current carrying parts of copper 15.6 Current carrying parts of copper 15.7 Contact pressure not through isolating material 15.8 Current carrying parts of copper 15.9 Copper content 58.3%-59.3% No rolled sheet used 15.0 No electroplated coating when part is subjected to mechanical wear 15.1 Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation 16 Creepage distances , clearances and distances through insulation 17 Live parts of different polarity: 3 mm 18 Through insulation between live parts and 19 2.5 mm			See test below	P		
force of 20 N through the jaws no damage shown force of 20 N through the jaws no damage shown force of 20 N through the jaws no damage shown force of 20 N through the jaws no damage shown force of 20 N through the jaws no damage shown force of 20 N through the jaws no damage pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1 hour See test below - at 70°C for 168h		After 1 h in heating cabinet at 100°C no		Р		
- at 70°C for 168h - at room temperature for 96h No traces of cloth at a force of 5N No damage leads to non-compliance No visible damage 15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion 16 Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm	14.1.2	force of 20 N through the jaws no damage	pressure test on the material of plug portion which maintains live parts. 1.2mm measured after 1	P		
- at room temperature for 96h No traces of cloth at a force of 5N No damage leads to non-compliance 15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No such materials used. 16 Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm >3 mm Through insulation between live parts and	14.2	Aging test	See test below	Р		
No traces of cloth at a force of 5N No damage leads to non-compliance 15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No electroplated coating when the part is subjected to mechanical strength, an electrical conductivity and a resistance to corrosion Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm		- at 70°C for 168h	70°C for 168h applied.	Р		
No damage leads to non-compliance No visible damage		- at room temperature for 96h		N/A		
15 Current-carrying parts and connections resistance to heat and to ageing 15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No such materials used. 16 Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm		No traces of cloth at a force of 5N	Material does not soften	Р		
15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No such materials used. Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm		No damage leads to non-compliance	No visible damage	Р		
15.1 Connections withstand the mechanical stresses occurring in normal use 15.2 Contact pressure not through isolating material 15.3 Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No such materials used. Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm	15	Current-carrying parts and connections resistance	e to heat and to ageing	Р		
Through insulation between live parts and Current carrying parts of copper Copper content 58.3%-59.3% No rolled sheet used No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion No such materials used.		Connections withstand the mechanical	T	P		
No electroplated coating when part is subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion Creepage distances, clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >3.5 mm	15.2		Complied	Р		
Subjected to mechanical wear Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion Creepage distances, clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm	15.3	Current carrying parts of copper	58.3%-59.3%	Р		
an electrical conductivity and a resistance to corrosion Creepage distances , clearances and distances through insulation Live parts of different polarity: 3 mm Through insulation between live parts and >1.5 mm			No electroplated coating	Р		
Live parts of different polarity: 3 mm >3 mm Through insulation between live parts and >1.5 mm		an electrical conductivity and a resistance to	No such materials used.	N/A		
Live parts of different polarity: 3 mm >3 mm Through insulation between live parts and >1.5 mm						
Through insulation between live parts and >1.5 mm	16			P		
		<u> </u>		P -		
			>1.5 mm	P		



	Attachment No. 1: EN 5007	75	
Clause	Requirement + Test	Result - Remark	Verdict

17	Resistance of insulating material to abnormal h	Resistance of insulating material to abnormal heat and fire	
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on	Р
		plug portion with: 750°C	



A = Insulating collar B =

B = metal pin

- 1)These dimensions shall not be exceeded within a distance of 18mm from the engagement face of the plug.
- 2)Dimension a is:

18mm to 19.2mm in the plane of the engagement face

17mm to 18mm at the ends of the pins

3)This dimension may be increased to 4mm within a distance of 4mm from the engagement face of the plug.



Attachment No. 2:

Photo Documentation



Fig.1 General View

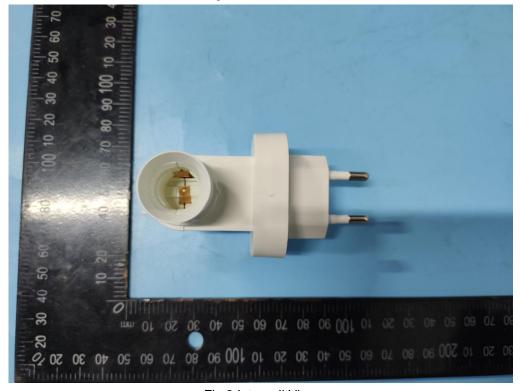


Fig.2 Internall View
*** End of Report***