



TTEST REPORT IEC 60570 Luminaires Electrical supply track systems for luminaires	
Report Number.....:	PNT-JHT22AP8003LSR
Date of issue.....:	2022-04-20
Total number of pages	36 pages (not Including attachments)
Name of Testing Laboratory preparing the Report.....:	Pioneer Testing Technology (Hangzhou) Co., Ltd
Applicant's name.....:	FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD.
Address.....:	Datong Industrial Zone, Qiaobai Road, Xiqiao Town, Nanhai District, Foshan City.
Test specification:	
Standard.....:	IEC 60570:2003, AMD1:2017, AMD2:2019 used in conjunction with IEC 60598-1:2014, AMD1:2017
Test procedure.....:	--
Test item description.....: TRACK RAIL AND LIGHTING ACCESSORIES	
Trade Mark.....:	N/A
Manufacturer.....:	FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD. Datong Industrial Zone, Qiaobai Road, Xiqiao Town, Nanhai District, Foshan City.
Model/Type reference.....:	See "General product information"
Ratings.....:	220-240V~, 50/60Hz, 16A, IP20, ta: 25°C, Class I track, Details information see "General product information".
General disclaimer: This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report. the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.	



Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
☒	Testing Laboratory:	Pioneer Testing Technology (Hangzhou) Co., Ltd
Testing location/ address.....:		Room 401, Building 41, No.536 Shunfeng Road, Yuhang District, Hangzhou City 311199, Zhejiang Province, China
Tested by (name, function, signature).....:		Project Engineer Red Fan
Approved by (name, function, signature)...:		Product Line Manager Jason Liu
		
List of Attachments (including a total number of pages in each attachment): Attachment 1: Difference between IEC 60598-1:2014+A1:2017 and IEC 60598-1:2020, totally 6 pages; Attachment 2: European group differences and national differences, totally 2 pages; Attachment 3: Photo documentation, totally 8 pages.		
Summary of testing: Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods. A representative sample of the products covered by this report has been tested and complies with the applicable requirements of this standard.		
Tests performed (name of test and test clause): Model 2-wired Track was subjected to do full tests.		Testing location: Pioneer Testing Technology (Hangzhou) Co., Ltd Room 401, Building 41, No.536 Shunfeng Road, Yuhang District, Hangzhou City 311199, Zhejiang Province, China
Summary of compliance with National Differences: List of countries addressed The product fulfil the requirements of BS EN 60570:2003+A1:2018+A2:2020, BS EN IEC 60598-1:2021		

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective National Certification Body that own these marks.

Representative**TRACK RAIL AND LIGHTING ACCESSORIES**

Model: 2-wired Track

Input: 220-240V~ 50/60Hz 16A



FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD.

Made in China

Location: sticking on the track

2 wired Adaptor

220-240V~ 50/60Hz 16A

F max 100N



FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD.

Location: sticking on adaptor

2 wired "I" mini coupler

FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD.

Location: sticking on coupler

Remark:

1. The marking labels for other models are identical as above except model number.
2. The height of graphical symbols except WEEE shall not be less than 5 mm;
3. The height of letters and numerals shall not be less than 2 mm;
4. The height of graphical symbol WEEE was not less than 7mm;



Test item particulars :	
Classification of installation and use: Class I track for indoor use only	
Supply Connection: Terminal block	
Possible test case verdicts: - test case does not apply to the test object.....: N/A - test object does meet the requirement.....: P (Pass) - test object does not meet the requirement.....: F (Fail)	
Testing :	
Date of receipt of test item: 2022-04-01	
Date (s) of performance of tests: 2022-04-01 to 2022-04-18	
General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a ☐ comma / ☒ point is used as the decimal separator. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60335-1:	
The application for obtaining a test report includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided..... :	☐ Yes ☒ Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) : FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD. Datong Industrial Zone, Qiaobai Road, Xiqiao Town, Nanhai District, Foshan City.	

**General product information:**

1. The products are TRACK RAIL AND LIGHTING ACCESSORIES for indoor use only.
2. All models are same construction, difference is model name.
3. Rating: 220-240V~, 50/60Hz, 16A, Class I track, IP20, ta:25°C.

Model list:

No.	Model name	Length of Track
1	2-wired Track; 2 wired power supply connector; 2 wired end cap; 2 wired "I" mini coupler; 2 wired "L" coupler; 2 wired "T" coupler; 2 wired "X" coupler; 2 wired flexible coupler; 2 wired Adaptor; 2 wired Electrical Box; 2 wired Suspension Kit.	1m, 1.5m, 2m, 3m
2	2 Wires low voltage showcase Track; 2 Wires low voltage Adaptor.	
3	2 Wires high voltage showcase Track; 2 Wires high voltage Adaptor.	
4	Recessed 2 wired Track Recessed 2 wired power supply connector; Recessed 2 wired end cup; Recessed 2 wired "I" coupler; Recessed 2 wired "L" coupler; Recessed 2 wired "T" coupler; Recessed 2 wired "X" coupler.	



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

4 (2)	CLASSIFICATION		P
4 (2.2)	Type of protection (Class I, III or Mixed)..... :	Class I track	P
4 (-)	Classified as ordinary		P
4 (-)	Separate adaptor not classified as Class II		P

5 (-)	GENERAL TEST REQUIREMENTS		P
5.1 (-)	Equipment already tested to its own IEC standard:	Yes ☐ No ☒ Standard/s:	—
5.2 (-)	Type test		—
5.3 (-)	Minimum test samples		—
5.4 (-)	Test order		—

6 (3)	MARKING		P
6 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
6 (3.3)	Additional information		P
	Language of instructions		P
6 (3.3.1)	Combination luminaires		N/A
6 (3.3.2)	Nominal frequency in Hz	50/60Hz	P
6 (3.3.3)	Operating temperature		N/A
6 (3.3.4)	Symbol or warning notice		N/A
6 (3.3.5)	Wiring diagram		N/A
6 (3.3.6)	Special conditions		N/A
6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
6 (3.3.8)	Limitation for semi-luminaires		N/A
6 (3.3.9)	Power factor and supply current		N/A
6 (3.3.10)	Suitability for use indoors		N/A
6 (3.3.11)	Luminaires with remote control		N/A
6 (3.3.12)	Clip-mounted luminaire – warning		N/A
6 (3.3.13)	Specifications of protective shields		N/A
6 (3.3.14)	Symbol for nature of supply	~	P
6 (3.3.15)	Rated current of socket outlet		N/A
6 (3.3.16)	Rough service luminaire		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A
6 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
6 (3.3.19)	Protective conductor current in instruction if applicable		N/A
6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided		N/A
	Cautionary symbol		N/A
6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
6 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		N/A
6 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A
6 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
6.1 (-)	Track marked with rated current and voltage and with class III-symbol if appropriate		P
6.2 (-)	Marking on adaptor		P
6.3 (-)	Marking on couplers and connectors		P
	Identification for terminals		P
6.4 (-)	Marking with rated current and voltage visible after installation		P
6.5 (-)	Additional marking on track system or in mounting instruction		P
	a) maximum mechanical loading inclusive weight of luminaires	F_{max} 100N marked on the adaptor	P
	limitations of track positioning and maximum mechanical loading for non-horizontal mounting		P
	b) warning for inductive loads		N/A
	c) maximum track temperature		P
	d) user's responsibility		P
	Instructions supplied with the adaptor		P
6.6 (-)	Details in manufacturers mounting instruction for class III track system		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	a) warning only connection to SELV		N/A
	b) instruction for correct connection to transformer or lamp controlgear		N/A
	c) warning that class III are not compatible with class I and class III of other manufacturers track system		N/A
	d) instructions concerning means for overload and short circuit		N/A
	e) minimum area and maximum length of supply cable		N/A
	f) warning for connected control or audio signals		N/A
6.7 (-)	Warning in leaflet for class III track system		N/A
6.8 (-)	Marking for tracks using other circuits		P
6.9 (-)	Marking for track suitable for supplying emergency luminaires		N/A

7 (-)	GENERAL REQUIREMENTS AND RATINGS		P
	Rated current (A) of track system	16A for class I track	P
	Rated voltage (V) of track system.....	220-240V for class I track	P

8 (4)	CONSTRUCTION		P
8 (4.2)	Components replaceable without difficulty		N/A
8 (4.3)	Wireways smooth and free from sharp edges		P
8 (4.4)	Lampholders		N/A
8 (4.4.1)	Integral lampholder		N/A
8 (4.4.2)	Wiring connection		N/A
8 (4.4.3)	Lampholder for end- to-end mounting		N/A
8 (4.4.4)	Positioning		N/A
	- 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)		—
	After test the lampholder have not moved from its position and show no permanent deformation		N/A
8 (4.4.5)	Peak pulse voltage		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
8 (4.4.6)	Centre contact		N/A
8 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
8 (4.4.8)	Lamp connectors		N/A
8 (4.4.9)	Caps and bases correctly used		N/A
8 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
8 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
8 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
8 (4.7)	Terminals and supply connections		P
8 (4.7.1)	Contact to metal parts		P
8 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		P
8 (4.7.3)	Terminals for supply conductors		P
8 (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 15.6.2.3 and 15.6.2.4		N/A
8 (4.7.4)	Terminals other than supply connection		P
8 (4.7.5)	Heat-resistant wiring/sleeves		N/A
8 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
8 (4.8)	Switches		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	- compliance with IEC 61058-1 for electronic switches		N/A
8 (4.9)	Insulating lining and sleeves		N/A
8 (4.9.1)	Retainment		N/A
	Method of fixing.....:		N/A
8 (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
8 (4.10)	Double or reinforced insulation		P
8 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation	Plastic part	P
	Safe installation fixed luminaires		P
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
8 (4.10.2)	Assembly gaps:		P
	- not coincidental		P
	- no straight access with test probe		P
8 (4.10.3)	Retainment of insulation:		P
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		P
	- lining in lampholder		N/A
8 (4.11)	Electrical connections and current-carrying parts		P
8 (4.11.1)	Contact pressure		P
8 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
8 (4.11.3)	Screw locking:		P
	- spring washer		P
	- rivets		N/A
8 (4.11.4)	Material of current-carrying parts		P
8 (4.11.5)	No contact to wood or mounting surface		P



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Clause	Requirement + Test	Result - Remark	Verdict
8 (4.11.6)	Replaced by Cl.8.9 (-)		N/A
8 (4.12)	Screws and connections (mechanical) and glands		P
8 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part..... :	Screws fixed enclosure: 0.8Nm	P
	Torque test: torque (Nm); part..... :	Screws fixed earthing: 0.8Nm	P
	Torque test: torque (Nm); part..... :		N/A
8 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
8 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm)..... :		N/A
	- lampholder; torque (Nm)..... :		N/A
	- push-button switches; torque 0,8 Nm..... :		N/A
8 (4.12.5)	Screwed glands; force (Nm)..... :		N/A
8 (4.13)	Mechanical strength		P
8 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)..... :		N/A
	- other parts; energy (Nm)..... :	0.35Nm	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
8 (4.13.3)	Straight test finger		P
8 (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
8 (4.13.6)	Tumbling barrel		N/A
8 (4.14)	Suspensions, fixings and means of adjusting		P
8 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	B) torque 2,5 Nm		P



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Clause	Requirement + Test	Result - Remark	Verdict
	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 20 mm		N/A
	Fixed luminaire or independent control gear without fixing devices		N/A
8 (4.14.2)	Load to flexible cables		N/A
	Mass (kg)		—
	Stress in conductors (N/mm ²)		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
8 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles.....:		N/A
	- strands broken.....:		N/A
	- electric strength test afterwards		N/A
8 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
8 (4.14.5)	Guide pulleys		N/A
8 (4.14.6)	Strain on socket-outlets		N/A
8 (4.15)	Flammable materials		P
	- glow-wire test 650°C.....:	See Test Table 17 (13.3.2)	P
	- spacing ≥30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		P
	- thermal protection		N/A
	- electronic circuits exempted		N/A
8 (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
8 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	No lamp control gear.....:	(compliance with Section 12)	N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
8 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
8 (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
8 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	P
8 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
8 (4.18)	Resistance to corrosion		N/A
8 (4.18.1)	- rust-resistance		N/A
8 (4.18.2)	- season cracking in copper		N/A
8 (4.18.3)	- corrosion of aluminium		N/A
8 (4.19)	Ignitors compatible with ballast		N/A
8 (4.20)	Rough service vibration		N/A
8 (4.21)	Protective shield		N/A
8 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
8 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
8 (4.21.3)	No direct path		N/A
8 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment.....:	See Test Table 17 (13.3.2)	N/A
8 (4.22)	Attachments to lamps not cause overheating or damage		N/A
8 (4.23)	Semi-luminaires comply Class II		N/A
8 (4.24)	Photobiological hazards		N/A
8 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
8 (4.24.2)	Retinal blue light hazard		N/A
	Luminaires with E_{thr} :		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	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
8 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
8 (4.26)	Short-circuit protection		N/A
8 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
8 (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
8 (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
	Voltage drop test, resistance < 0,05 Ω		N/A
8 (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 ($^{\circ}\text{C}$)..... :		—
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
8 (4.29)	Luminaires with non-replaceable light source		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A
8 (4.30)	Luminaires with non-user replaceable light source		N/A
	If protective cover provide protection against electric shock and marked with “caution, electric shock risk” symbol:		N/A
	Minimum two fixing means		N/A
8 (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
8 (4.31.1)	SELV circuits		N/A
	Used SELV source		N/A
	Voltage $\leq$ 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
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
8 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage $\leq$ 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



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
8 (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 protection against indirect contacts with live parts:		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
8 (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
8.1 (-)	No risk of accidental contact		P
8.1.1 (-)	Interchange ability		P
8.2 (-)	Mechanical connection for class I adaptors		P
8.2.1 (-)	High-breaking fuse in adaptors, if any fuse		N/A
8.3 (-)	Contacts of adaptors		P
	Correct positioning		P
8.4 (-)	Mechanical locking		P
8.5 (-)	Adjacent lengths of track		P
8.6 (-)	Mechanical load (N).....:	5 x 50 N = 250 N / 1 h / 40 °C	P
	Bending 2,5 Nm		P
8.7 (-)	Test finger 30 N		P
8.8 (-)	Correct polarity is maintained		P
8.9 (-)	Mechanical/electrical endurance		P
	Mechanical support; 100 operations		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Electrical contacts operate simultaneously with the mechanical fixing devices; 100 operations		P
	Electrical contacts operate independently from the mechanical fixing devices; 1000 operations		N/A
	Class III connector/adaptor; 150 operations		N/A
	Electric strength test (10.2 reduced)		P
	No wear impairing further use		P
	No deterioration of enclosures or barriers		P
	No loosening of electrical or mechanical connections		P
8.10.1 (-)	Bridging by test probe		N/A
8.10.2 (-)	Chain test of SELV track system/sector opening		N/A
8.11 (-)	Interchangeability		P
8.11.1 (-)	No connections between live conductors and earth conductors		P
	Insulation between supply circuits and housing and control/signal interface in compliance with IEC 60598-1		N/A
	No conductors for mains supply used in SELV circuits		N/A
	SELV circuits in compliance with requirements for Class III track		N/A
	Track conductors for supply connection to luminaire may be other than SELV control signal		N/A
	No reduction of creepage distances and clearances between different circuits as specified in IEC 60598-1		N/A
	Track and adaptor in compliance with IEC 60598-1		N/A
8.11.2 (-)	Dimensions		N/A
	Class I: Openings max. 3,0 mm		N/A
	Class I: Conductor recessed min. 1,7 mm		N/A
	Class III: Contacts min. 3,5 mm		N/A
	Class III: Contacts protrusion min.1 mm from surface min.3,5 mm		N/A
	Opening giving access to control interface conductor in compliance with 8.11.2 for class I tracks		N/A
	Opening giving access to SELV control interface conductor in compliance with 8.11.1 for class III tracks		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
8.12 (-)	No accidental disconnection for track systems supplying emergency luminaires		N/A
	Track adaptor and luminaire suspension devices for emergency luminaires		N/A
	Locking system		N/A
	Adjustment or movement with aid of a tool		N/A
	Emergency lighting function switched off with aid of a tool		N/A
8.13 (-)	Track system for centrally supplied emergency luminaires		N/A
	Double or reinforced insulation between emergency circuit and normal mains circuit		N/A
	Working voltage of different circuits		N/A
	Terminal identification consistent within entire system		N/A

9 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
9 (11.2.1)	Impulse withstand category (Normal category II)	Category II ☒ Category III ☐	—
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
9 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 9 (11.2) I	P
	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 9 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 9 (11.2) II	N/A
9 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 9 (11.2) I	P
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with U_P	See Test Table 9 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 9 (11.2) II	N/A

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

10 (15)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		N/A
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IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

	Separately approved; component list..... :	(see Annex 1)	N/A
	Part of the luminaire..... :	(see Annex 4)	N/A

11 (5)	EXTERNAL AND INTERNAL WIRING		P
11 (5.2)	Supply connection and external wiring		P
11 (5.2.1)	Means of connection..... :	Terminal block	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/A
11 (5.2.2)	Type of cable..... :		N/A
	Nominal cross-sectional area (mm ²)..... :		N/A
	Cables equal to IEC 60227 or IEC 60245		N/A
11 (5.2.3)	Type of attachment, X, Y or Z		N/A
11 (5.2.5)	Type Z not connected to screws		N/A
11 (5.2.6)	Cable entries:		N/A
	- suitable for introduction		N/A
	- adequate degree of protection		N/A
11 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
11 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A
11 (5.2.9)	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
11 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	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
11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N/A
11 (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
	- no damage of cable or cord		N/A
	- function independent of electrical connection		N/A
11 (5.2.11)	External wiring passing into luminaire		N/A
11 (5.2.12)	Looping-in terminals		N/A
11 (5.2.13)	Wire ends tinned: no cold flow		N/A
11 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
11 (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
11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
11 (5.2.18)	Used plug in accordance with		
	- IEC 60083		N/A
	- other standard		N/A
11 (5.3)	Internal wiring		P
11 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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
11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		P
	Cross-sectional area (mm ²).....:	(see Annex 1)	P
	Insulation thickness (mm)		P
	Extra insulation added where necessary		P
11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		N/A
	Adequate cross-sectional area and insulation thickness		N/A
	Current limit rating according proven characteristics		N/A
11 (5.3.1.3)	Double or reinforced insulation for class II		N/A
11 (5.3.1.4)	Conductors without insulation		N/A
11 (5.3.1.5)	SELV current-carrying parts		N/A
11 (5.3.1.6)	Insulation thickness other than PVC or rubber		P
11 (5.3.2)	Sharp edges etc.		P
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		P
11 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
11 (5.3.4)	Joints and junctions effectively insulated		N/A
11 (5.3.5)	Strain on internal wiring		N/A
11 (5.3.6)	Wire carriers		N/A
11 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		P
5.10 (5.4)	Test to determine suitability of conductors having a reduced cross-sectional area		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	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
11 (-)	If a supply cable provided, cross-sectional area of cable conductors compatible with the rated current of track system		N/A

12 (12)	THERMAL ENDURANCE AND OPERATING TEMPERATURES		P
12.1 (-)	Thermal test, normal operation	(see Annex 2)	P
12.2 (-)	Temperatures of components of the track system	(see Annex 2)	P
12.2 (12)	Temperatures of components excluding the track:		P
12.2 (12.3)	Endurance test:		P
	- mounting- position..... :	As normal use	—
	- test temperature (°C)..... :	35	—
	- total duration (h)..... :	240	—
	- supply voltage: Un factor; calculated voltage (V):	264	—
	- lamp used..... :	--	—
12.2 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		P
	- marking legible		P
	- no cracks, deformation etc.		P
12.2 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
12.2 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
12.2 (12.6)	Thermal test (failed lamp control gear condition):		N/A
12.2 (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



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict
12.2 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions.....:		—
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C)....:		N/A
	- track-mounted luminaires		N/A
12.2 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
12.2 (12.7.1)	Luminaire without temperature sensing control		N/A
12.2 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A
	Test method 12.7.1.1 or Annex W		—
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions..... :		—
	- Ballast failure at supply voltage (V)		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex W:		N/A
	- case of abnormal conditions..... :		—
	- measured winding temperature (°C): at 1,1 Un...:		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un.....:		—
	- calculated temperature of fixing point/exposed part (°C).....:		—
	Ball-pressure test..... :	See Table 17 (13.2.1)	N/A
12.2 (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 Table 17 (13.2.1)	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
12.2 (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
12.2 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link..... :	Yes ☐ No ☐	—
	- manual reset cut-out..... :	Yes ☐ No ☐	—
	- auto reset cut-out..... :	Yes ☐ No ☐	—
	- case of abnormal conditions..... :		—
	- highest measured temperature of fixing point/ exposed part (°C):..... :		—
	Ball-pressure test:..... :	See Table 17 (13.2.1)	N/A
12.3 (-)	Thermal endurance of the track		—
12.3.1 (-)	- test temperature maintained for 168 h (°C)..... :	80	P
	- no visible signs of deterioration		P
	- any shrinkage of insulating liner of the track still complies with clause 8, 13.1 and 15.1		P
12.3.2 (-)	Class III track/sector tested according to clause 12.3 of IEC 60598-1		N/A
	Voltage drop across contact max 22,5 mV		N/A

13 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
13 (8.2.1)	Live parts not accessible		P
	Basic insulated parts not used on the outer surface without appropriate protection		N/A
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires		P
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N/A
	Basic insulation only accessible under lamp or starter replacement		N/A
	Protection in any position		P



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Clause	Requirement + Test	Result - Remark	Verdict
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		N/A
	Double-ended high pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
13 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
13 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		N/A
	- glass protective shields not used as supplementary insulation		N/A
13 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
13 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- touch current		N/A
	- no-load voltage.....		N/A
	Other than ordinary luminaire:		N/A
	- nominal voltage		N/A
13 (8.2.4)	Portable luminaire have protection independent of supporting surface		N/A
13 (8.2.5)	Compliance with the standard test finger or relevant probe		P
13 (8.2.6)	Covers reliably secured		P
13 (8.2.7)	Discharging of capacitors $\geq 0,5 \mu\text{F}$		N/A
	Portable plug connected luminaire with capacitor		N/A
	Other plug connected luminaire with capacitor		N/A
	Discharge device on or within capacitor		N/A
	Discharge device mounted separately		N/A
13.1 (-)	Test with test probe D in Table 9.1 of IEC 60598-1		P
13.2 (-)	Live parts of adaptors are not touchable		P
13.3 (-)	Not possible to remove, by hand, parts preventing access to live parts		P



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Clause	Requirement + Test	Result - Remark	Verdict

14 (9)	RESISTANCE TO HUMIDITY		P
14 (9.3)	Humidity test 48 h		P

15 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
15 (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).....	See below	—
	SELV		N/A
	- between current-carrying parts of different polarity (MΩ).....		N/A
	- between current-carrying parts and mounting surface (MΩ).....		N/A
	- between current-carrying parts and metal parts of the luminaire (MΩ).....		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts (MΩ).....		N/A
	- Insulation bushings as described in Section 5		N/A
	Other than SELV		P
	- between live parts of different polarity (MΩ).....	>100MΩ	P
	- between live parts and mounting surface (MΩ)....	>100MΩ	P
	- between live parts and metal parts (MΩ).....	>100MΩ	P
	- between live parts of different polarity through action of a switch (MΩ).....		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts (MΩ).....		N/A
	- Insulation bushings as described in Section 5		N/A
15 (10.2.2)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V).....	See below	P
	SELV		N/A
	- between current-carrying parts of different polarity (V).....		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- between current-carrying parts and mounting surface (V).....:		N/A
	- between current-carrying parts and metal parts of the luminaire (V).....:		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts (V).....:		N/A
	- Insulation bushings as described in Section 5 (V) :		N/A
	Other than SELV		P
	- between live parts of different polarity (V).....:	1480V	P
	- between live parts and mounting surface (V).....:	1480V for metal part 2960 V for plastic part	P
	- between live parts and metal parts (V).....:	1480V for metal part 2960 V for plastic part	P
	- between live parts of different polarity through action of a switch (V).....:		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts (V).....:		N/A
	- Insulation bushings as described in Section 5 (V) :		N/A
15 (10.3)	Touch current or protective conductor current (mA).....:	0.07mA	P
15.1 (-)	Insulation resistance >100 MΩ / m		P
15.2 (-)	Track system complying with this standard in compliance with 10.3 of IEC 60598-1 without testing		—
15.3 (-)	Electric strength test between mains sector and SELV sector on mixed supply system: Test voltage 3750V		N/A

16 (7)	PROVISION FOR EARTHING		P
16 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω.....:	0.03Ω	P
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a grove		N/A
	Earth makes contact first		P



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Clause	Requirement + Test	Result - Remark	Verdict
	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
16 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		N/A
16 (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/A
16 (7.2.5)	Earth terminal integral part of connector socket		N/A
16 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
16 (7.2.7)	Electrolytic corrosion of the earth terminal		P
16 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
16 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
16 (7.2.11)	Earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A
16.1 (-)	Resistance $\leq 0,1 \Omega$ (current $> 25 \text{ A}$)		N/A
	Resistance $\leq 0,5 \Omega$ (current $> 10 \text{ A}$) for adapters and luminaire supply connectors with rating $< 6 \text{ A}$		N/A
16.2 (-)	No risk of corrosion/oxidation		N/A
16.3 (-)	Earth makes contact first		N/A
16.4 (-)	Length of earth conductor		N/A
	Earth conductor part of the track		N/A

17 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
17 (13.2.1)	Ball-pressure test (modified):	See Test Table 17 (13.2.1)	P
17.1 (13.2.1)	- first track insulation sample tested; temperature (°C).....:	80°C, 1.1mm	P
	- second track insulation sample tested; temperature (°C).....:	80°C, 1.1mm	P
17.2 (13.2.1)	a) track components; insulating material retaining current-carrying parts; temperature (°C).....:	125°C, 1.3mm	P
	b) track components; insulating material providing protection against electric shock; temperature (°C) :	805°C, 1.1mm	P



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Clause	Requirement + Test	Result - Remark	Verdict

17 (13.3.1)	Needle-flame test (10 s)..... :	See Test Table 17 (13.3.1)	N/A
17 (13.3.2)	Glow-wire test (650°C)..... :	See Test Table 17 (13.3.2)	P

18 (15)	Terminals and connections for external wiring		N/A
	Class III track..... :	see Test Table (15.6.3.1) (15.6.3.2)	N/A

9 (11.2)	TABLE I: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. up to 30 kHz sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*						P
	Insulation type **	Measured clearance	Required		Measured creepage	Required	
			clearance	*Table		creepage	*Table
Distance 1:	B	3.0	1.5	11.1B	3.0	2.5	11.1A
Working voltage (V)..... :					240V		—
PTI..... :					< 600 ☒ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)					--		—
Supplementary information: Between L and N							
Distance 2:	B	3.0	1.5	11.1B	3.0	2.5	11.1A
Working voltage (V)..... :					240V		—
PTI..... :					< 600 ☒ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)					--		—
Supplementary information: Between live part and accessible parts or mounting surface							
Distance 3:	--	--	--	--	--	--	--
Working voltage (V)..... :					--		—
PTI..... :					< 600 ☐ ≥ 600 ☐		—
Pulse voltage or U_P if applicable (kV)					--		—
Supplementary information:							

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



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Clause	Requirement + Test	Result - Remark	Verdict

9 (11.2)	TABLE II: Creepage distances and clearances						N/A
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 60570			
Clause	Requirement + Test	Result - Remark	Verdict

17 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics				P
Allowed impression diameter (mm)			2		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)		Impression diameter (mm)	
Terminal block box	See Annex 1	75		1.0	
Enclosure of coupler	See Annex 1	75		1.1	
Supplementary information:					

17 (13.3.1)	TABLE: Needle-flame test (IEC 60695-11-5)				N/A
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:					

17 (13.3.2)	TABLE: Glow-wire test (IEC 60695-2-11)				P
Glow wire temperature		650°C	—		
Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
Terminal block box	See Annex 1	No	0	P	
Enclosure of coupler	See Annex 1	No	0	P	
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No)..... :					No
Supplementary information:					



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1 TABLE: Critical components information						P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Terminal block	B	FOSHAN JIN HAOTAI LIGHTING ACCESSORIES CO., LTD	--	Copper >60%	--	TUV/VDE approve
Terminal block box	B,C	CHI MEI CORPORATION	PC-110(+)	PC material, V-2, 105°C.	--	Tested with appliance and UL E56070
End cover	B,C	CHI MEI CORPORATION	PC-110(+)	PC material, V-2, 105°C.	--	Tested with appliance and UL E56070
Internal wire of coupler	B	GUANGZHOU JINYING SPECIAL WIRE FACTORY	(N)6Y	1 x 1.5mm ²	--	VDE 40001868
Enclosure of coupler	B,C	CHI MEI CORPORATION	PC-110(+)	PC material, V-2, 105°C	--	Tested with appliance and UL E56070

Supplementary information:

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

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 60570			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	TABLE: Thermal tests of Section 12		
	Type reference.....	2-wired Track	—
	Lamp used.....	N/A	—
	Lamp control gear used.....	N/A	—
	Mounting position of luminaire.....	As normal use	—
	Supply wattage (W).....	--	—
	Supply current (A).....	16 A	—
	Temperatures in test 1 - 4 below are corrected for ta (°C)	25	—
	- abnormal operating mode.....	--	—
1.12 (12.4)	- test 1: rated voltage	--	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current	1.06 x 240V=254.4V	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage.....	--	—
	Through wiring or looping-in wiring loaded by a current of A during the test	--	—
1.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current.....	--	—

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
		test 1	test 2	test 3	limit	test 4	limit
Terminal block	25	--	26.8	--	Ref.	--	--
Terminal block box	25	--	27.2	--	Ref.	--	--
Track	25	--	30.7	--	Ref.	--	--
End cover	25	--	26.3	--	Ref.	--	--
Internal wire of coupler	25	--	28.4	--	Ref.	--	--
Enclosure of coupler	25	--	29.1	--	Ref.	--	--
Mounting surface	25	--	28.5	--	90	--	--

Supplementary information:



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	Screw terminals (part of the luminaire)		N/A
(14)	SCREW TERMINALS		N/A
(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 (mm ²).....:		—
(14.3.3)	Conductor space (mm).....:		N/A
(14.4)	Mechanical tests		N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread).....:	M	N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm).....:		N/A
	Torque (Nm).....:		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N).....:		N/A
(14.4.8)	Without undue damage		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

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)	Terminals and connections for internal wiring		N/A
(15.5.1)	Mechanical tests		N/A
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples).....:		N/A
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples).....:		N/A
	Insertion force not exceeding 50 N		N/A
(15.5.1.2)	Permanent connections: pull-off test (20 N)		N/A
(15.5.2)	Electrical tests		N/A
	Voltage drop (mV) after 1 h (4 samples).....:		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles:		—
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples).....:		N/A
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples).....:		N/A
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples).....:		N/A
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples).....:		N/A
(15.6)	Terminals and connections for external wiring		N/A
(15.6.1)	Conductors		N/A



IEC 60570			
Clause	Requirement + Test	Result - Remark	Verdict

	Terminal size and rating		N/A
15.6.2	Mechanical tests		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N)		N/A
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N)		N/A
(15.6.3)	Electrical tests		N/A
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N/A

(15.6.3.1) (15.6.3.2)	TABLE: Contact resistance test / Heating tests										N/A
	Voltage drop (mV) after 1 h										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop of two inseparable joints										N/A
	Voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 50th alt. 100th cycle										N/A
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 10th alt. 25th cycle										N/A
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
	Continued ageing: voltage drop after 50th alt. 100th cycle										N/A
	Max. allowed voltage drop (mV).....:										—
terminal	1	2	3	4	5	6	7	8	9	10	
voltage drop (mV)											
										N/A	
Supplementary information:											

**Attachment 1**

Clause	Requirement + Test	Result - Remark	Verdict
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Difference between IEC 60598-1:2014+A1:2017 and IEC 60598-1:2020

3	MARKING		N/A
3.3.25	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A
3.3.26	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A

4	CONSTRUCTION		P
4.10	Double or reinforced insulation		N/A
4.10.4	Protective impedance device		N/A
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.2 of IEC 60065		N/A
4.13	Mechanical strength		P
4.13.6	Tumbling barrel		N/A
4.26	Short-circuit protection		N/A
4.26.1	Adequate means of uninsulated accessible SELV / PELV parts		N/A
4.26.2	Short-circuit test with test chain according 4.26.3:		N/A
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
4.30	Luminaires with non-user replaceable light source		N/A
	At least one fixing means requiring use of tool		N/A
4.31	Insulation between circuits		N/A
4.31.1	SELV or PELV circuits		N/A
	Used SELV/PELV source		N/A
	Voltage $\leq$ ELV		N/A
	Insulating of SELV/PELV circuits from LV supply		N/A

**Attachment 1**

Clause	Requirement + Test	Result - Remark	Verdict
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulating of SELV/PELV circuits from FELV		N/A
	Insulating of SELV/PELV circuits from other SELV/PELV circuits		N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Plugs and socket-outlets does not have protective conductor contact		N/A
4.33	Luminaire powered via information technology communication cabling		N/A
	Requirements for Class III luminaire		N/A
	Rated voltage within the range of ES1 and does not exceed maximum voltage of used connector		N/A
	Luminaire does not create any hazard from overvoltage	(see Annex 2)	N/A
4.34	Electromagnetic fields (EMF)		P
	No harmful electromagnetic fields		P
4.35	Protection against moving fan blades		N/A
	Test with a standard test finger		N/A
	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire		N/A
	Blades rounded with radius ≥ 0.5 mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan ≤ 2 W at rated voltage		N/A
4.36	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
7	PROVISION FOR EARTHING		N/A
7.2.12	PELV circuit connected to protective earth for functional purpose		N/A

**Attachment 1**

Clause	Requirement + Test	Result - Remark	Verdict
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5	EXTERNAL AND INTERNAL WIRING		P
5.2	Supply connection and external wiring		P
5.2.1	Means of connection.....:	Terminal block	P
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
5.2.2	Type of cable.....:		N/A
	Nominal cross-sectional area (mm ²).....:		N/A
	Cables equal to IEC 60227 or IEC 60245		N/A
5.2.10	Cord anchorage:		N/A
5.2.10.4	Luminaire with/ designed for use with supply cord with maximum current of 2A:		N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25 V RMS/60 V DC		N/A
	- Ordinary Class III luminaire supplied with PELV ≤ 12 V RMS/30 V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage ≤ 12 V RMS/30 V DC		N/A
	Pull test of 30N		N/A
5.2.14	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
5.2.15	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
5.2.16	Appliance inlet or connector systems (IEC 61984)		N/A
5.3	Internal wiring		
5.3.1.5	SELV/PELV current-carrying parts		N/A

8	PROTECTION AGAINST ELECTRIC SHOCK		N/A
8.2.3.c	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A
	- interrupted DC voltage (V)		N/A
	- touch current if applicable (mA) :		N/A
	One conductive part insulated if required		N/A

**Attachment 1**

Clause	Requirement + Test	Result - Remark	Verdict
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	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV		N/A
	Class III luminaire not provided with means for protective earthing		N/A
8.2.3.d	PELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V).....:		N/A
	- voltage under load/ no-load DC (V).....:		N/A
	One pole insulated if required		N/A

12	ENDURANCE TEST AND THERMAL TEST		P
12.3	Endurance test		P
12.3.1d	d) Class III luminaires powered via information technology communication cable:		N/A
	- voltage under normal operation (V).....:		—
	- voltage under abnormal operation (V).....:		—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		N/A
12.4	Thermal test (normal operation)	(see Annex 2)	P
12.5	Thermal test (abnormal operation)	(see Annex 2)	N/A

9	RESISTANCE TO DUST AND MOISTURE		P
9.2	Tests for ingress of dust, solid objects and moisture:		P
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		P

10	INSULATION RESISTANCE AND ELECTRIC STRENGTH		P
10.2.1	Insulation resistance test		P



Attachment 1

Clause	Requirement + Test	Result - Remark	Verdict
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø	Metal foil	—
	Insulation resistance (MΩ):		P
	SELV/PELV:		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/PELV:		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/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
1.15 (10.2.2)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V):		P
	SELV/PELV:		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

**Attachment 1**

Clause	Requirement + Test	Result - Remark	Verdict
	Other than SELV/PELV:		P
	- between live parts of different polarity..... :	1480 V	P
	- between live parts and mounting surface..... :	1480 V for class I part; 2960 V for class II part	P
	- between live parts and metal parts..... :	1480 V for class I part; 2960 V for class II part	P
	- 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
1.15 (10.3)	Touch current (mA)..... :		N/A
	Protective conductor current (mA)..... :	0.07mA	P

**Attachment 2**

Clause	Requirement + Test	Result - Remark	Verdict
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**ATTACHMENT TO TEST REPORT IEC 60598-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES****Differences according to.....: EN IEC 60598-1:2021**

	CENELEC COMMON MODIFICATIONS (EN)	P
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3	MARKING	N/A
3.3.101	For luminaires not supplied with terminal block: Adequate warning on the package	N/A

4	CONSTRUCTION	N/A
4.11.6	Electro-mechanical contact systems	N/A

5	EXTERNAL AND INTERNAL WIRING	N/A
5.2.1	Connecting leads	N/A
	- without a means for connection to the supply	N/A
	- terminal block specified	N/A
	- relevant information provided	N/A
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1	N/A
5.2.2	Cables equal to EN 50525	N/A
	Replace table 5.1 – Supply cord	N/A

12	ENDURANCE TESTS AND THERMAL TESTS	N/A
12.4.2c	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring	N/A

ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	N/A
(3.3)	DK: power supply cords of class I luminaires with label	N/A
(4.5.1)	DK: socket-outlets	N/A
(5.2.1)	CY, DK, FI, GB: type of plug	N/A

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	N/A
(4 & 5)	FR: Shuttered socket-outlets 10/16A	N/A

**Attachment 2**

Clause	Requirement + Test	Result - Remark	Verdict
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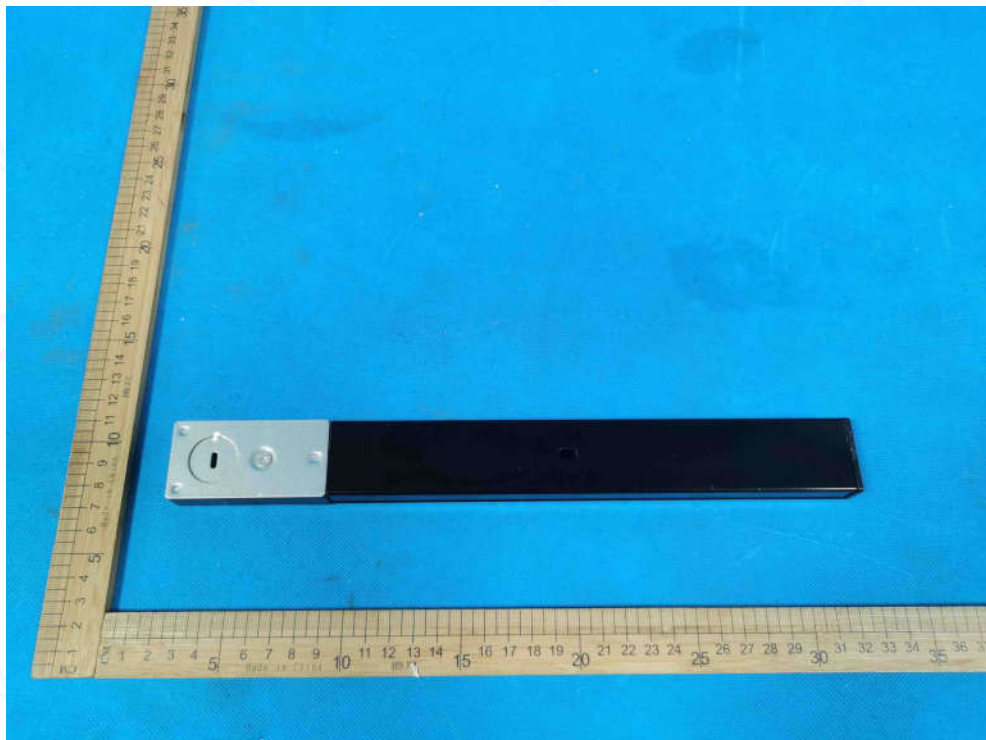
	FR: Safety requirements for high buildings (Arrêté du 30 décembre 2011 portant règlement de sécurité pour la construction des immeubles de grande hauteur et leur protection contre les risques d'incendie et de panique; Section VIII; Article GH 48, Eclairage) Glow-wire test for outer parts of luminaires:		N/A
	- 850°C for luminaires in stairways and horizontal travel paths		N/A
	- 650°C for indoor luminaires		N/A
(13.3)	GB: Requirements according to United Kingdom Building Regulation		N/A



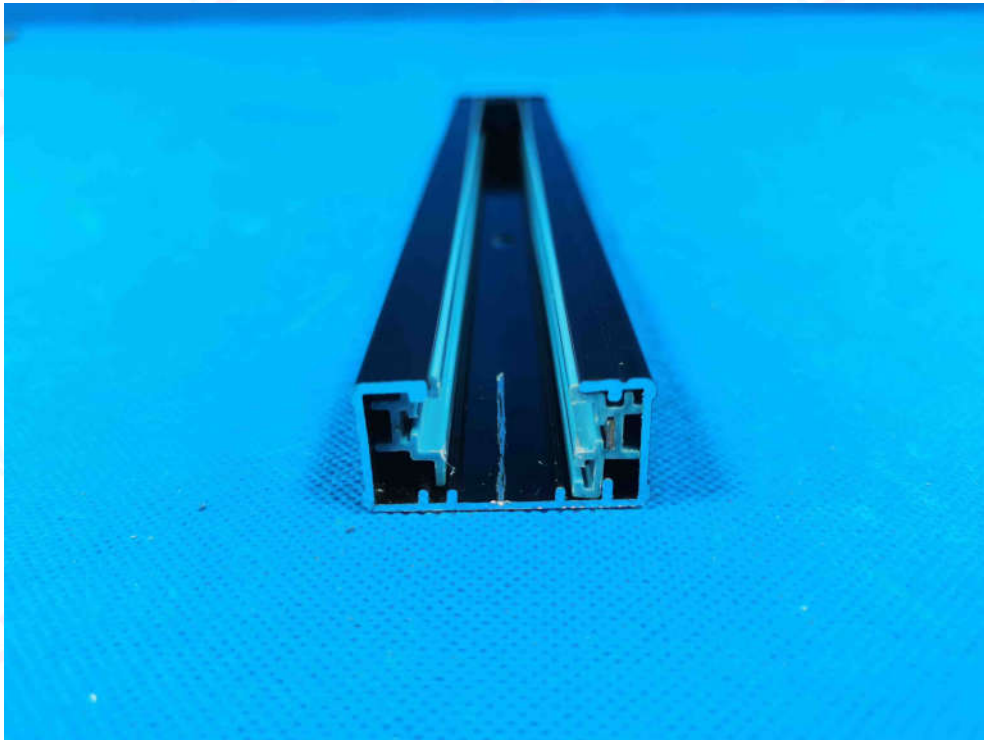
Attachment 3: Product photo



2-wired Track



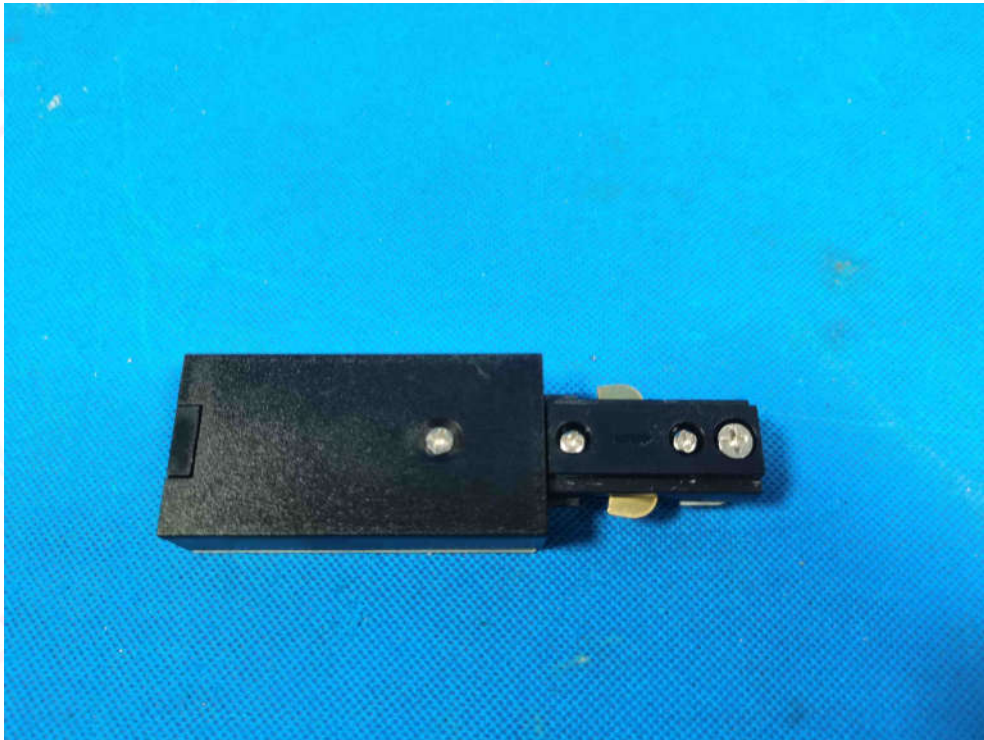
2-wired Track



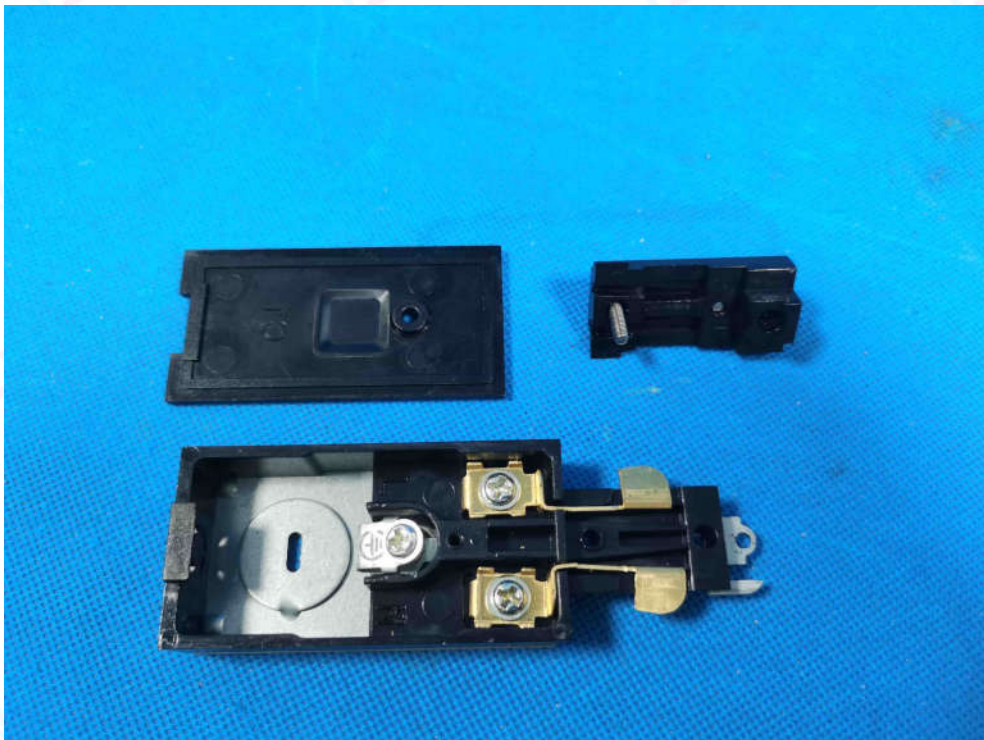
Internal view of 2-wired Track



End cover of 2-wired Track



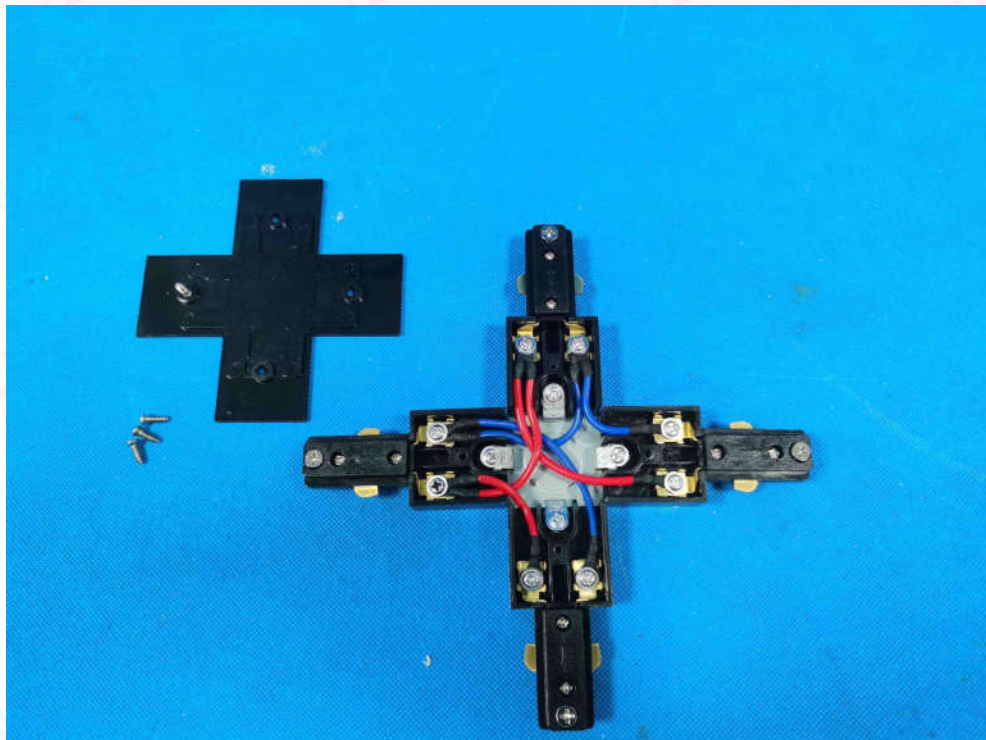
Power supply connector



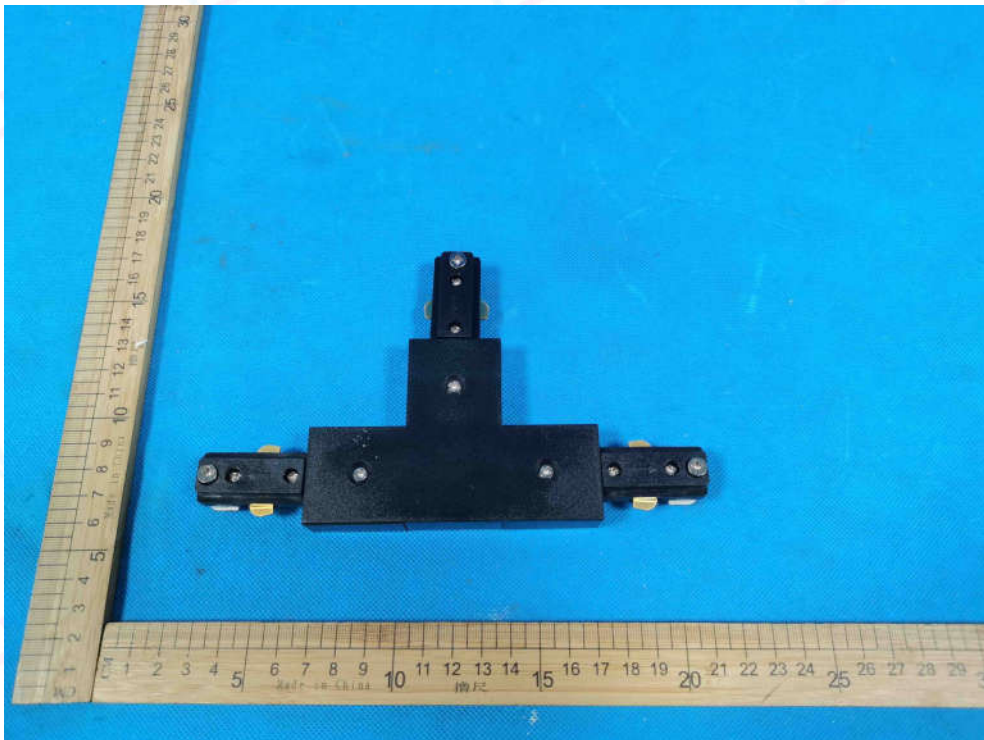
Internal view of power supply connector



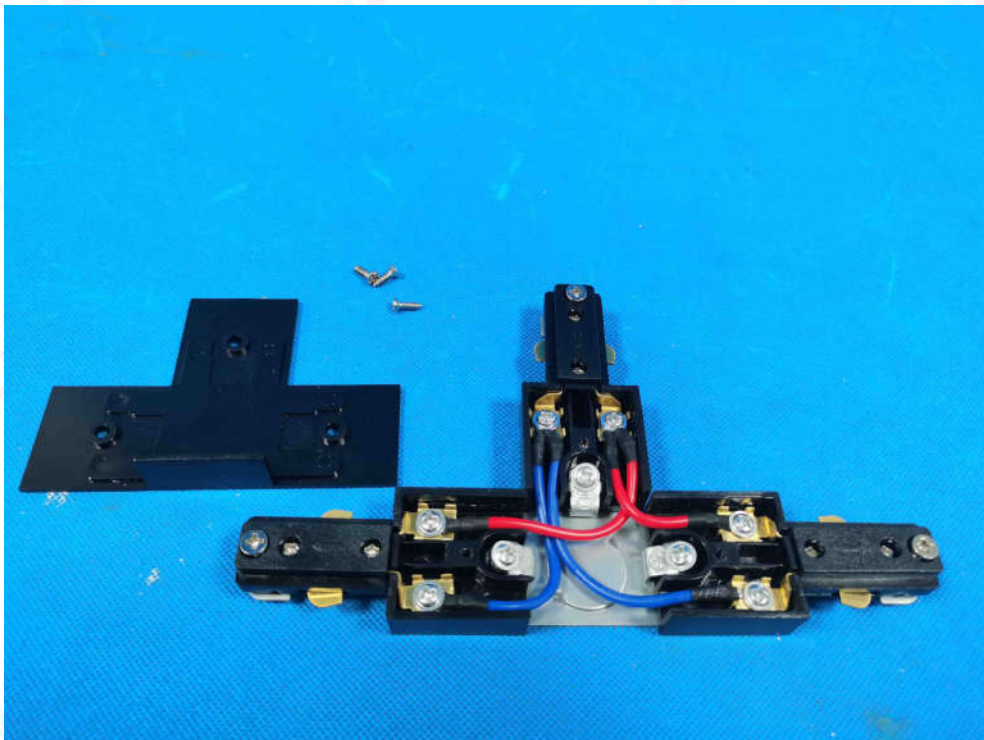
"X" coupler



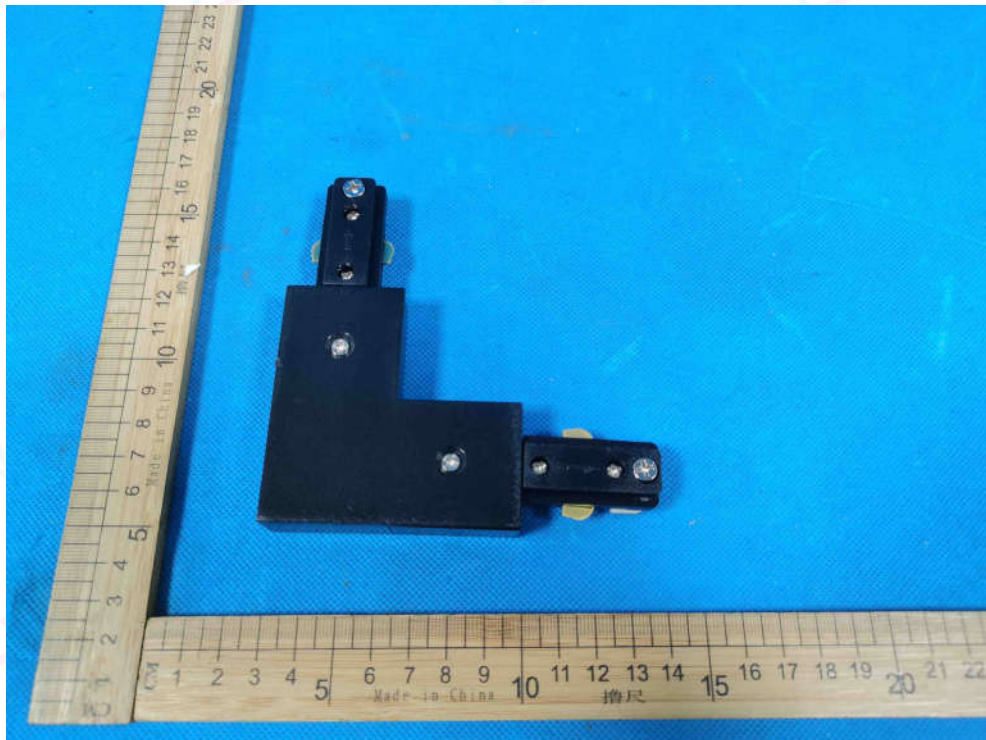
Internal view of "X" coupler



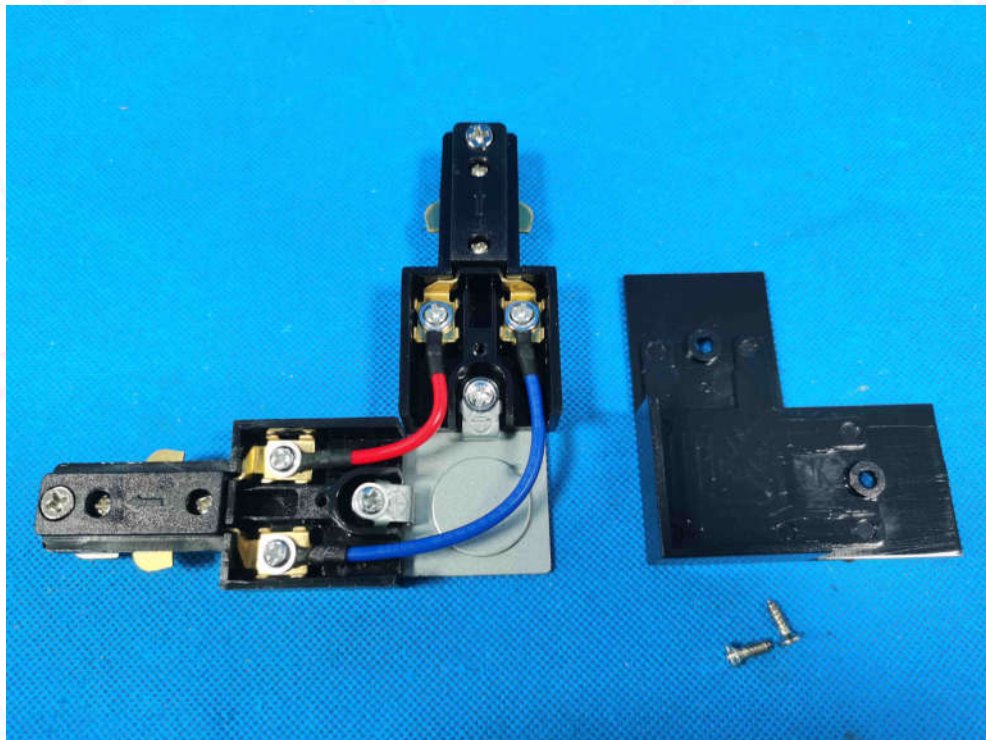
"T" coupler



Internal view of "T" coupler



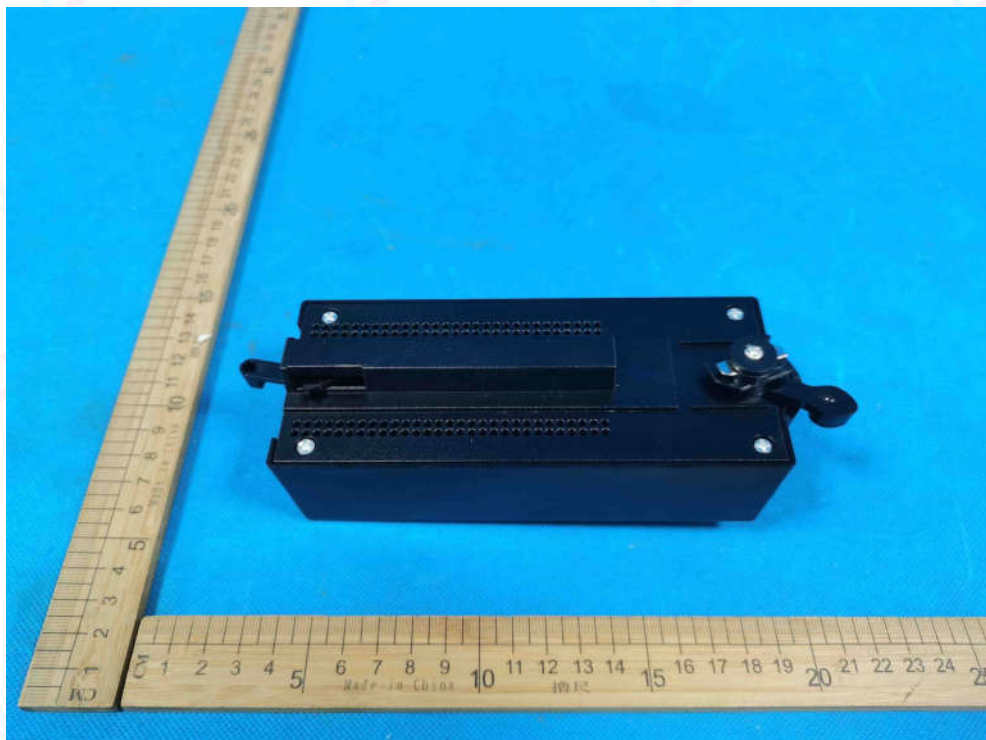
“L” coupler



Internal view of “L” coupler



"I" mini coupler



Adaptor



Adaptor

--- End of report ---