
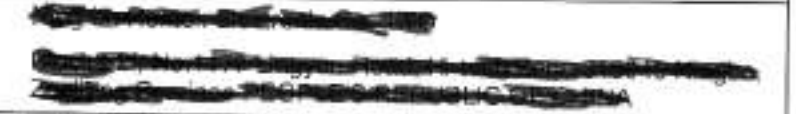




	Test Report issued under the responsibility of: NCB TÜV SÜD PSB Pte Ltd 1 Science Park Drive, 118221 Singapore Singapore	
TEST REPORT IEC 60598-2-22 Luminaires Part 2: Particular requirements Section 22: Luminaires for emergency lighting			
Report Number.....: Date of issue.....: Total number of pages.....:	083-1871601-000 2018-07-31 67		
Name of Testing Laboratory preparing the Report.....:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch		
Applicant's name.....: Address.....:			
Test specification: Standard.....: Test procedure.....: Non-standard test method.....:	IEC 60598-2-22:2014 used in conjunction with IEC 60598-1:2014 CB Scheme N/A		
Test Report Form No.....: Test Report Form(s) Originator.....: Master TRF.....:	IEC60598_2_22F Intertek Semko AB 2016-10		
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Test item description..... :	Emergency lighting appliances (Surface Mounted Emergency LED Spotlight)	
Trade Mark..... :	N/A	
Manufacturer..... :	Same as applicant	
Model/Type reference..... :	ECSL-S10, ECSL-S1C	
Ratings..... :	220-240V~, 50/60Hz, 2.5W, IP54, Class II, 6000K±5%, ta:40°C Rated emergency duration: 180mins Rated emergency luminous flux: 295lm	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/> CB Testing Laboratory:	TUV SUD Certification and Testing (China) Co., Ltd. Shanghai Branch No. 151 Heng Tong Road, Shanghai 200070, P. R. China	
Testing location/ address.....:	No. 1899, Duhui Road, Shanghai, 201108, P. R. China	
Tested by (name, function, signature).....:	Zhile GENG	
Approved by (name, function, signature)....:	Yin Ji	
<input type="checkbox"/> Testing procedure: CTF Stage 1:		
Testing location/ address.....:	N/A	
Tested by (name, function, signature).....:	N/A	
Approved by (name, function, signature)....:	N/A	
<input type="checkbox"/> Testing procedure: CTF Stage 2:		
Testing location/ address.....:	N/A	
Tested by (name + signature).....:	N/A	
Witnessed by (name, function, signature)....:	N/A	
Approved by (name, function, signature)....:	N/A	
<input type="checkbox"/> Testing procedure: CTF Stage 3:		
<input type="checkbox"/> Testing procedure: CTF Stage 4:		
Testing location/ address.....:	N/A	
Tested by (name, function, signature).....:	N/A	
Witnessed by (name, function, signature)....:	N/A	
Approved by (name, function, signature)....:	N/A	
Supervised by (name, function, signature) :	N/A	

List of Attachments (including a total number of pages in each attachment):					
Summary of testing:					
Tests performed (name of test and test clause): Complete tests Requirements of IEC 60598-2-1:1979 +AMD1:1987 used in conjunction with IEC 60598-1:2014 have been evaluated and found to be met by evaluation The test results comply with the requirements	Testing location: TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch No.1999, Duhui Road, Shanghai, 201108, P. R. China				
Summary of compliance with National Differences: N/A					
Copy of marking plate(sample):					
<p>The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>ECSL-S10 ta:40°C 220-240V~ 50/60Hz 2.5W IP54 Emergency luminous flux: 295lm Replaceable battery: IFR18650E 2S1P 6.4V 1500mAh Max Temp: 55°C Lithium-iron Phosphate</p> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">X</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">A</td> <td style="padding: 2px 5px;">180</td> </tr> </table>  </div> <p>Ningbo Rongsheng Electronics Co., Ltd</p>		X	0	A	180
X	0	A	180		
On enclosure <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>IFR18650E 2S1P Lithium-iron Phosphate 6.4V 1500mAh 2Cells Max Temp:55°C RED: + BLACK: - manufacturing: Commissioning.</p>   <p style="text-align: right; margin-right: 20px;">LIFePO4</p> </div>					
On battery <div style="border: 1px solid black; padding: 2px; display: inline-block;">Test</div>					
Near test switch Note 1: Height of letter and numeral not less than 2 mm, graphical symbol not less than 5 mm, WEEE not less than 7 mm Note 2: other labels are the same except the model name					

Test item particulars	Emergency lighting appliances (Surface Mounted Emergency LED Spotlight)
Classification of installation and use.....	Class II
Supply Connection	Terminals
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	: 2018-04-19
Date (s) of performance of tests	: 2018-04-19 to 2018-07-31
General remarks:	
<p>*(See Enclosure #)" refers to additional information appended to the report. *(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p> <p>Clause numbers between brackets refer to clauses in IEC 60598-1</p> <p>Remark 1: The following contents are included and as appendix of this test report:</p> <ul style="list-style-type: none"> • Test report IEC 60598-2-22:2014 used in conjunction with IEC 60598-1:2014 • Appendix 1: Requirements of IEC 62031:2008+A1:2012+A2:2014 • Appendix 2: Requirements of IEC 61347-2-13:2014+A1:2016 used in conjunction with IEC 61347-1:2015 for controlgear. • Appendix 3: Requirements of IEC 61347-2-7:2011 used in conjunction with IEC 61347-1:2015 for controlgear • Appendix 4: Requirements of IEC 61347-2-11:2001 used in conjunction with IEC 61347-1:2015 for manual touch device • Appendix 5: Requirements of IEC 62493:2015 • Appendix 6: Photographs • Data form for electrical equipment and machinery. 	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60598-1:	
The application for obtaining a CB Test Certificate 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.....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	

Name and address of factory (ies) : Ning bo Rontek Electronic Co.,LTD Block2-2f, No.1177 Lingyun Road, Hi-tech Zone 315040 Ningbo, Zhejiang Province PEOPLE'S REPUBLIC OF CHINA
General product information: These two products are Class II LED luminaires with same parameters, appearance and construction for emergency lighting only LED source non-replaceable, and battery is replaceable. Whilst connected to a live supply, the battery is charging and the lamp is not energized. Only when the normal supply fails, the emergency lighting lamp will be in operation and energized from the battery The test facility in product is a manual integral touch device, the product will simulate failure of the normal supply when people touch the device, if not touch the device the normal supply will recover. Indicator lamp and colour: - Green light normally on: charging and charging be finished - Green light off: error

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.4 (0)	GENERAL TEST REQUIREMENTS		P
22.4 (0.1)	Information for luminaire design considered	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Lamp standard: IEC 62031	—
22.4 (0.3)	More sections applicable	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Section/s: IEC 60598-2-1	—
22.4 (-)	Part provide normal lighting, test according relevant part of IEC 60598-2	IEC 60598-2-1	P
22.4 (-)	Adjacent part fulfils relevant part of this part 2		P
22.4 (-)	Self-contained portable emergency luminaires, requirements according Annex E	(see Annex E)	N/A
22.5 (2)	CLASSIFICATION		P
22.5 (2.2)	Type of protection	Class II	P
22.5 (2.3)	Degree of protection	IP 54	P
22.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
22.5 (2.5)	Luminaire for normal use	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
	Luminaire for rough service	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
22.5 (-)	Classified as luminaire suitable for direct mounting on normally flammable surfaces		P
22.5 (-)	Classification code according Annex B	(see Annex B)	P
22.6 (3)	MARKING		P
22.6 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
22.6 (3.3)	Additional information		P
	Language of instructions		P
22.6 (3.3.1)	Combination luminaires		N/A
22.6 (3.3.2)	Nominal frequency in Hz		P
22.6 (3.3.3)	Operating temperature		N/A
22.6 (3.3.4)	Symbol or warning notice		N/A
22.6 (3.3.5)	Wiring diagram		N/A
22.6 (3.3.6)	Special conditions		N/A
22.6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
22.6 (3.3.8)	Limitation for semi-luminaires		N/A
22.6 (3.3.9)	Power factor and supply current		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.6 (3.3.10)	Suitability for use indoors		N/A
22.6 (3.3.11)	Luminaires with remote control		N/A
22.6 (3.3.12)	Clip-mounted luminaire – warning		N/A
22.6 (3.3.13)	Specifications of protective shields		N/A
22.6 (3.3.14)	Symbol for nature of supply		P
22.6 (3.3.15)	Rated current of socket outlet		N/A
22.6 (3.3.16)	Rough service luminaire		N/A
22.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A
22.6 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A
22.6 (3.3.19)	Protective conductor current in instruction if applicable		N/A
22.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A
22.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non replaceable lamp according to IEC 60598-2-22	P
	Cautionary symbol †		N/A
22.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A
22.6 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P
22.6.1 (-)	Supply voltage		P
22.6.2 (-)	Classification according to annex B		P
22.6.3 (-)	Correct replacement lamp		N/A
22.6.4 (-)	Range of ambient temperatures		N/A
22.6.5 (-)	Fuse ratings and/or indicator lamps		N/A
22.6.6 (-)	Facilities to simulate normal supply failure		P
22.6.7 (-)	Marked with correct battery replacement		P
	Non-replaceable batteries		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.6.8 (-)	Battery marked with date of manufacture		P
	Space provided on battery label		P
22.6.9 (-)	Correct lamp replacement for combined emergency luminaires		N/A
	Green dot with min 5 mm diameter		N/A
	Instruction leaflet 22.6.10 – 22.6.12 and 22.6.14 – 22.6.16		N/A
22.6.10 (-)	Replacement of battery or luminaire		P
22.6.11 (-)	Details of test facilities		P
22.6.12 (-)	Details of connection leads		N/A
22.6.14 (-)	Details of device which changes the mode of operation		N/A
22.6.15 (-)	Photometric data available according 22.17		P
22.6.16 (-)	Any normal preparation procedure		P
22.6.17 (-)	Marking in 22.6.1, 22.6.2, 22.6.7 and 22.6.20 visible on installed luminaire		P
	Marking in 22.6.5, 22.6.7 and 22.6.9 visible during maintenance		P
22.6.18 (-)	Provided with warning if intended for external plug and socket connections		N/A
22.6.19 (-)	Instruction leaflet specifies if lamp and/or battery is/are non-replaceable		P
22.6.20 (-)	Marking if luminaire mounted on lighting track systems		N/A
	Photometric data in instruction leaflet		N/A

22.7(4)	CONSTRUCTION		P
22.7 (4.2)	Components replaceable without difficulty		P
22.7 (4.3)	Wireways smooth and free from sharp edges		P
22.7 (4.4)	Lampholders		N/A
22.7 (4.4.1)	Integral lampholder		N/A
22.7 (4.4.2)	Wiring connection		N/A
22.7 (4.4.3)	Lampholder for end-to-end mounting		N/A
22.7 (4.4.4)	Positioning		N/A
	- pressure test (N)	N/A	—
	After test the lampholder comply with relevant standard sheets and show no damage		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A
	- bending test (N)	N/A	—
	After test the lampholder have not moved from its position and show no permanent deformation		N/A
22.7 (4.4.5)	Peak pulse voltage		N/A
22.7 (4.4.6)	Centre contact		N/A
22.7 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
22.7 (4.4.8)	Lamp connectors		N/A
22.7 (4.4.9)	Caps and bases correctly used		N/A
22.7 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
22.7 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
22.7 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
22.7 (4.7)	Terminals and supply connections		P
22.7 (4.7.1)	Contact to metal parts		P
22.7 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		N/A
22.7 (4.7.3)	Terminals for supply conductors		P
22.7 (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
22.7 (4.7.4)	Terminals other than supply connection		P
22.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
22.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.7 (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
22.7 (4.9)	Insulating lining and sleeves		N/A
22.7 (4.9.1)	Retainment		N/A
	Method of fixing		N/A
22.7 (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
22.7 (4.10)	Double or reinforced insulation		P
22.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		P
	Safe installation fixed luminaires		P
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A
22.7 (4.10.2)	Assembly gaps:		P
	- not coincidental		P
	- no straight access with test probe		P
22.7 (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
22.7 (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
	Y1 or Y2 capacitors comply with IEC 60384-14		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
22.7 (4.11)	Electrical connections and current-carrying parts		P
22.7 (4.11.1)	Contact pressure		P
22.7 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
22.7 (4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
22.7 (4.11.4)	Material of current-carrying parts		P
22.7 (4.11.5)	No contact to wood or mounting surface		P
22.7 (4.11.6)	Electro-mechanical contact systems		N/A
22.7 (4.12)	Screws and connections (mechanical) and glands		P
22.7 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part.....:	LED board; 0,5	P
	Torque test: torque (Nm); part.....:		N/A
	Torque test: torque (Nm); part.....:		N/A
22.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
22.7 (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
22.7 (4.12.5)	Screwed glands; force (Nm).....:		N/A
22.7 (4.13)	Mechanical strength		P
22.7 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm).....:		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
	- other parts; energy (Nm).....:	0,35	P
	1) live parts		P
	2) linings		P
	3) protection		P
	4) covers		P
22.7 (4.13.3)	Straight test finger		P
22.7 (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
22.7 (4.13.6)	Tumbling barrel		N/A
22.7 (4.14)	Suspensions, fixings and means of adjusting		P
22.7 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	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		P
22.7 (4.14.2)	Load to flexible cables		N/A
	Mass (kg)	N/A	—
	Stress in conductors (N/mm ²)		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
22.7 (4.14.3)	Adjusting devices: ^b		N/A
	- flexing test; number of cycles.....:		N/A

IEC 60598-2-22			
Clause	Requirement + Test ¹	Result - Remark	Verdict
	- strands broken		N/A
	- electric strength test afterwards		N/A
22.7 (4.14.4)	Telescopic tubes; cords not fixed to tube; no strain on conductors		N/A
22.7 (4.14.5)	Guide pulleys		N/A
22.7 (4.14.6)	Strain on socket-outlets		N/A
22.7 (4.15)	Flammable materials		P
	- glow-wire test 650°C.....:	See Test Table 22.16 (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
22.7 (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
22.7 (4.16)	Luminaires for mounting on normally flammable surfaces		P
	No lamp control gear	(compliance with Section 12)	N/A
22.7 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
22.7 (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
22.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
22.7 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.7 (4.18)	Resistance to corrosion		N/A
22.7 (4.18.1)	- rust-resistance		N/A
22.7 (4.18.2)	- season cracking in copper		N/A
22.7 (4.18.3)	- corrosion of aluminium		N/A
22.7 (4.19)	Igniters compatible with ballast		N/A
22.7 (4.20)	Rough service vibration		N/A
22.7 (4.21)	Protective shield		N/A
22.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
22.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
22.7 (4.21.3)	No direct path		N/A
22.7 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment	See Test Table 22.16 (13.3.2)	N/A
22.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
22.7 (4.23)	Semi-luminaires comply Class II		N/A
22.7 (4.24)	Photobiological hazards		P
22.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
22.7 (4.24.2)	Retinal blue light hazard		P
	Class of risk group assessed according to IEC/TR 62778	ECSL-S10: RG1 Lb: 5,934e+003 W/m2/sr	—
	Luminaires with Esc.		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

IEC 60598-2-22			
Clause	Requirement + Test	Result - Remark	Verdict
22.7 (4.25)	Mechanical hazard		P
	No sharp point or edges		P
22.7 (4.26)	Short-circuit protection		N/A
22.7 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
22.7 (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
22.7 (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
22.7 (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 ($^{\circ}\text{C}$): N/A		—
	100 cycles between t_{min} and t_{max}		N/A
	Temperature sensing control still in position		N/A
22.7 (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
22.7 (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
22.7 (4.31)	Insulation between circuits		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		P
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
22.7 (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
22.7 (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
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
22.7 (4.31.3)	Other circuits		P
	Other circuits insulated from accessible parts according Table X.1		P

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Clause	Requirement + Test	Result - Remark	Verdict
	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
22.7 (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
22.7 (-)	Luminaire with automatic testing system complies with IEC 62034		N/A
	Specific items according IEC 61347-2-7 Annex K		N/A
22.7.1 (-)	No glow starters in circuit in start of or during the emergency mode		P
22.7.2 (-)	Lamp control gears comply with relevant part 2 of IEC 61347		P
22.7.3 (-)	Protective device disconnect luminaire in case of failure		P
22.7.4 (-)	Impact test min. 0,35 Nm		P
22.7.5 (-)	Circuit separation (self-contained lum.)		N/A
22.7.6 (-)	Circuit separation (centrally supplied lum.)		N/A
22.7.7 (-)	Charging device		P
	Indicator lamp and colour		P
22.7.8 (-)	Battery meet requirements in Annex A	(see Annex A)	P
	Battery designed to provide duration for at least four years		P
	Battery only for emergency function		P
22.7.10 (-)	No switch in self-contained emergency luminaire between battery and emergency lighting lamps		P
	No switch in self-contained and central supplied emergency luminaire isolating emergency circuits from mains supply		P
	Installation according IEC 60364-5-56		P

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Clause	Requirement + Test	Result - Remark	Verdict
22.7.11 (-)	Failure of lamp(s) not impair operation of the battery		P
22.7.12 (-)	Batteries in self-contained emergency luminaire comply with cl. 23 of IEC 61347-2-7 if applicable		P
22.7.13 (-)	No influence in emergency mode in self-contained emergency luminaire by short-circuit, contact to earth or interruption in normal supply wiring		P
22.7.14 (-)	Self-contained emergency luminaire with remote inhibiting and/or rest mode meet requirements of clause 25 of IEC 61347-2-7		N/A
22.7.19 (-)	Lamp voltage in self-contained emergency luminaire with tungsten filament lamps not exceed 1,05 rated voltage		N/A
22.7.20 (-)	Battery in self-contained emergency luminaire according manufacturers specification and Annex A		P
22.7.21 (-)	Batteries and chargers within self-contained emergency luminaire or in remote box		P
22.7.22 (-)	Remote box in self-contained emergency luminaire comply with same requirements as for the luminaire		N/A
22.7.23 (-)	Locking system for emergency luminaire on track system used for display lighting requires aid of tool		N/A

22.8 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
22.8 (11.2)	Creepage distances and clearances	See Table 22.8 (11.2)	P
	Impulse withstand category (Normal category II) (Category III Annex U, Table U.1)	Category II <input checked="" type="checkbox"/> Category III <input type="checkbox"/>	—

22.9 (7)	PROVISION FOR EARTHING		N/A
22.9 (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 groove		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

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Clause	Requirement + Test	Result - Remark	Verdict
22.9 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.		N/A
22.9 (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
22.9 (7.2.5)	Earth terminal integral part of connector socket		N/A
22.9 (7.2.6)	Earth terminal adjacent to mains terminals		N/A
22.9 (7.2.7)	Electrolytic corrosion of the earth terminal		N/A
22.9 (7.2.8)	Material of earth terminal		N/A
	Contact surface bare metal		N/A
22.9 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
22.9 (7.2.11)	Earthing core coloured green-yellow		N/A
	Length of earth conductor		N/A

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

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

22.11 (5)	EXTERNAL AND INTERNAL WIRING		P
22.11 (5.2)	Supply connection and external wiring		P
22.11 (5.2.1)	Means of connection.....	Terminals	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
22.11 (5.2.2)	Type of cable.....	Specified in manual	N/A
	Nominal cross-sectional area (mm ²).....		N/A
	Cables equal to IEC 60227 or IEC 60245		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
22.11 (5.2.3)	Type of attachment, X, Y or Z		N/A
22.11 (5.2.5)	Type Z not connected to screws		N/A
22.11 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
22.11 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
22.11 (5.2.8)	Insulating bushings:		P
	- suitably fixed		P
	- material in bushings		P
	- material not likely to deteriorate		P
	- tubes or guards made of insulating material		P
22.11 (5.2.9)	Locking of screwed bushings		N/A
22.11 (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
22.11 (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
	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
22.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
22.11 (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 \leq 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
22.11 (5.2.11)	External wiring passing into luminaire		N/A
22.11 (5.2.12)	Looping-in terminals		N/A
22.11 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
22.11 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
22.11 (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
22.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
22.11 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
22.11 (5.3)	Internal wiring		P
22.11 (5.3.1)	Internal wiring of suitable size and type		P
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A).....		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- temperatures.....:	(see Annex 2)	N/A
	Green-yellow for earth only		N/A
22.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm ²)		N/A
	Insulation thickness		N/A
	Extra insulation added where necessary		N/A
22.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Adequate cross-sectional area and insulation thickness		P
22.11 (5.3.1.3)	Double or reinforced insulation for class II		N/A
22.11 (5.3.1.4)	Conductors without insulation		N/A
22.11 (5.3.1.5)	SELV current-carrying parts		N/A
22.11 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
22.11 (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
22.11 (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
22.11 (5.3.4)	Joints and junctions effectively insulated		N/A
22.11 (5.3.5)	Strain on internal wiring		N/A
22.11 (5.3.6)	Wire carriers		N/A
22.11 (5.3.7)	Wire ends not tinned		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Wire ends tinned: no cold flow		N/A
22.11.1 (-)	Permanently connected		P
22.12 (8)	PROTECTION AGAINST ELECTRIC SHOCK		P
22.12 (8.2.1)	Live parts not accessible		P
	Basic insulated parts not used on the outer surface without appropriate protection		P
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires		N/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
	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
22.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
22.12 (8.2.3.a)	Class II luminaire:		P
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A
	- basic insulation not accessible other than during starter or lamp replacement		P
	- glass protective shields not used as supplementary insulation		N/A
22.12 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A
22.12 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load (V)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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
22.12 (8.2.4)	Portable luminaire have protection independent of supporting surface		N/A
22.12 (8.2.5)	Compliance with the standard test finger or relevant probe		P
22.12 (8.2.6)	Covers reliably secured		P
22.12 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection		P
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N/A

22.13 (12)	ENDURANCE TEST AND THERMAL TEST		P
22.13.1 (-)	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 22.14		—
22.13 (12.3)	Endurance test:		P
	- mounting-position	Normal	—
	- test temperature ($^{\circ}$ C)	50	—
	- total duration (h)	390	—
	- supply voltage: Un factor; calculated voltage (V) ...	264	—
	- lamp used	Original lamp	—
22.13 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P

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Clause	Requirement + Test	Result - Remark	Verdict
	- no cracks, deformation etc.		P
22.13 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
22.13 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	P
22.13 (12.6)	Thermal test (failed lamp control gear condition):		N/A
22.13 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)	N/A	—
	- case of abnormal conditions	N/A	—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un	N/A	—
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
22.13 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions	N/A	—
	- 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
22.13 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
22.13 (12.7.1)	Luminaire without temperature sensing control		N/A
22.13 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A
	Test method 12.7.1.1 or Annex W	N/A	—
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions	N/A	—
	- Ballast failure at supply voltage (V)	N/A	—
	- 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	N/A	—

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Clause	Requirement + Test	Result - Remark	Verdict
	- measured winding temperature (°C): at 1,1 Un	N/A	—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un	N/A	—
	- calculated temperature of fixing point/exposed part (°C)	N/A	—
	Ball-pressure test.....	See Table 22.16 (13.2.1)	N/A
22.13 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N/A
	- case of abnormal conditions	N/A	—
	- measured winding temperature (°C): at 1,1 Un	N/A	—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un	N/A	—
	- calculated temperature of fixing point/exposed part (°C)	N/A	—
	Ball-pressure test.....	See Table 22.16 (13.2.1)	N/A
22.13 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N/A
	- case of abnormal conditions	N/A	—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
22.13 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link.....	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- manual reset cut-out.....	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- auto reset cut-out	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- case of abnormal conditions	N/A	—
	- highest measured temperature of fixing point/ exposed part (°C):	N/A	—
	Ball-pressure test.....	See Table 22.16 (13.2.1)	N/A
22.13.1 (-)	Endurance test for self-contained luminaire		P
	Operate satisfactory during 50 supply switching		P
22.13.2 (-)	Thermal test 12.4 to 12.5 in IEC 60598-1	(see Annex 2)	P
22.13.3 (-)	Condition of tests		—
22.13.4 (-)	Battery discharge		—
22.13.5 (-)	Reduced temperature		—
22.13.6 (-)	Additional thermal test	(see Annex 2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
22.13.7 (-)	Provide V_{min} according Clause 20 of IEC 61347-2-7 at the end of operation		N/A

22.14 (9) RESISTANCE TO DUST AND MOISTURE			P
22.14 (-)	The order of tests as specified in clause 22.12		P
22.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP.....:	IP54	—
	- mounting position during test.....:	Normal	—
	- fixing screws tightened; torque (Nm).....:	2/3 torque	—
	- tests according to clauses	9,2,1 & 9,2,5	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		P
	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		P
	c.1) For luminaires without drain holes – no water entry		P
	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)		N/A
	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		P
	g) no damage of protective shield or glass envelope		P
22.14 (9.3)	Humidity test 48 h		P

22.15 (10) INSULATION RESISTANCE AND ELECTRIC STRENGTH			P
22.15 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm \varnothing	covered by metal foil	—
	Insulation resistance (M Ω).....:		—
	SELV		N/A
	- between current-carrying parts of different polarity:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 ¹ as described in Section 5		N/A
	Other than SELV		P
	- between live parts of different polarity	>19	P
	- between live parts and mounting surface	>19	P
	- between live parts and metal parts.....	>19	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
22.15 (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		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		P
	- between live parts of different polarity.....	1480	P
	- between live parts and mounting surface	2960	P
	- between live parts and metal parts.....	2960	P

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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
22.15 (10.3)	Touch current or protective conductor current (mA):	0,03	P

22.16 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		P
22.16 (13.2.1)	Ball-pressure test.....:	See Test Table 22.16 (13.2.1)	P
22.16 (13.3.1)	Needle-flame test (10 s).....:	See Test Table 22.16 (13.3.1)	P
22.16 (13.3.2)	Glow-wire test (650°C).....:	See Test Table 22.16 (13.3.2)	P
22.16 (13.4)	Proof tracking test (IEC 60112).....:	See Test Table 22.16 (13.4)	N/A
22.16 (-)	Glow-wire test (850°C) if applicable.....:	Enclosure, output terminal, PCB	P
	Glow-wire test (850°C) or fire resistant cable if applicable.....:		N/A

22.17 (-)	PHOTOMETRIC DATA		P
22.17.1 (-)	Intensity distribution data available		P
	At least 50% of level declared photometric data 5 s after failure of supply		P
	100% of level declared photometric data if high-risk task-area lighting 0,5 s after failure of supply		N/A
	Photometric measurements according CIE 121 SP1		P
	All values at least minimum declared data		P
22.17.4 (-)	Colour-rendering index		N/A
22.17.5 (-)	Internally illuminated emergency safety sign meet requirements of ISO 30061		N/A
	Luminance of permanently illuminated safety sign meet requirements of ISO 3864-1 and ISO 3864-4		N/A
	Luminance measurements according Annex C	(see Annex C)	N/A

22.18 (-)	CHANGEOVER OPERATION		P
	Changeover device, comply with Clause 21 of IEC 61347-2-7		P

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Clause	Requirement + Test	Result - Remark	Verdict
22.19 (-)	HIGH TEMPERATURE OPERATION		P
	Operation at 70°C		P
	Relative light outputs		P
22.20 (-)	BATTERY CHARGERS FOR SELF-CONTAINED EMERGENCY LUMINAIRES		P
	Devices for recharging batteries comply with Clause 22 of IEC 61347-2-7		P
22.21 (-)	TEST DEVICES FOR EMERGENCY OPERATION		P
22.21.1 (-)	Self-contained luminaire provided with test facility		P
22.21.2 (-)	Remote testing device not influence proper function of safety illumination		N/A
22.21.3 (-)	Indicators colour according IEC 60073		P

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Clause	Requirement + Test				Result - Remark		Verdict
22.8 (11.2)	TABLE: Creepage distances and clearances						P
	Minimum distances (mm) for a.c. (50/60 Hz) sinusoidal voltages						P
	Applicable part of IEC 60598-1 Table 11.1* and 11.2*						P
	Insulation type **	Measured clearance	Required clearance		Measured creepage	Required creepage	
				*Table		*Table	
Distance 1:	B	3,1	1,5	11,1	3,1	2,5	11,1
Working voltage (V)					240	—	
PTI					< 600 <input checked="" type="checkbox"/>	≥ 600 <input type="checkbox"/>	—
Pulse voltage if applicable (kV)					N/A	—	
Supplementary information: Live parts of different polarity							
Distance 2:	R	9	3	11,1	9	5	11,1
Working voltage (V)					240	—	
PTI					< 600 <input checked="" type="checkbox"/>	≥ 600 <input type="checkbox"/>	—
Pulse voltage if applicable (kV)					N/A	—	
Supplementary information: Live parts and the outer accessible surface of insulating parts							
Distance 3:	R	9	3	11,1	9	5	11,1
Working voltage (V)					240	—	
PTI					< 600 <input checked="" type="checkbox"/>	≥ 600 <input type="checkbox"/>	—
Pulse voltage if applicable (kV)					N/A	—	
Supplementary information: Live parts and the supporting surface							

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

22.16 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics			P
Allowed impression diameter (mm)		2.0		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
Enclosure	See ANNEX 1	75	0,8	
Output terminal		125	1,0	
Lamp cover		75	0,9	
PCB		125	0,8	
Supplementary information:				

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Clause	Requirement + Test	Result - Remark			Verdict
22.16 (13.3.1)	TABLE: Needle-flame test (IEC 60695-11-5)				P
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
PCB	See ANNEX 1	10	No	No burning	P
Output terminal		10	No	5	P
Supplementary information:					

22.16 (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
Lamp cover	See ANNEX 1		No	No burning	P
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No).....					Yes
Supplementary information:					

22.16 (13.4)	TABLE: Proof tracking test (IEC 60112)				N/A
Test voltage PTI		175 V			—
Object/ Part No./ Material	Manufacturer/ trademark	Withstand 50 drops without failure on three places or on three specimens			Verdict
Supplementary information:					

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Clause	Requirement + Test	Result - Remark	Verdict

Annex A: Batteries for self-contained emergency luminaires			P
A.1	Type of batteries		P
A.2	Battery conform to relevant standard		P
	Luminaire operate within specific tolerances		P
A.3	Battery capacity		P
A.4	Sealed nickel cadmium batteries		N/A
A.4.1	Battery conform to IEC 61951-1		N/A
A.4.2.a	Maximum surface temperature of the battery °C		N/A
A.4.2.b	Maximum overcharge rate 0,08 C ₅ A		N/A
A.4.2.c	Minimum ambient temperature of the cells 5 °C		N/A
A.4.2.d	Maximum discharge rates		N/A
A.5	Sealed nickel metal-hydride batteries		N/A
A.5.1	Battery conform to IEC 61951-2		N/A
A.5.2.a	Maximum case temperature of the battery °C		N/A
A.5.2.b	Maximum overcharge rate 0,08 C ₅ A		N/A
A.5.2.c	Minimum ambient temperature of the cells 5 °C		N/A
A.5.2.d	Maximum discharge rates		N/A
A.6	Valve regulated lead acid batteries		N/A
A.6.1	Battery conform to relevant part of IEC 60869-21 or IEC 61056-1		N/A
A.6.2.a	Maximum surface temperature of the battery °C		N/A
A.6.2.b	Maximum recharge current 0,4 C ₂₀		N/A
A.6.2.c	Maximum discharge rates		N/A
A.6.2.d	Maximum r.m.s. ripple current 0,1 C ₂₀		N/A
A.6.2.e	Minimum ambient temperature of the cells 5 °C		N/A
A.7	Ambient temperature of the cells measured after 48 h		N/A
A.8	Alternative operating parameters and evidence if operating outside limits in A.4 and A.5		P
A.9	Battery only replaced by a competent person		P

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Clause	Requirement + Test ¹	Result - Remark				Verdict
	Annex B: Luminaire classification					P
	Classified and marked according Annex B	X	0	A	180	P
	Annex C: Luminance measurements					N/A
C.1	Contrast measurements					N/A
C.2	On site photometric tests					N/A
	according to Annex C of ISO 3864-4					N/A
	Measured values not less than specified in this standard					N/A
	Annex E: Requirements for self-contained portable emergency luminaires					N/A
E.5	Classification of luminaires					N/A
	Base unit and portable emergency luminaires with mains-voltage supplied integrated charger of Class I or Class II					N/A
	Self-contained portable emergency luminaire without integrated mains-voltage supplied charger of Class III					N/A
E.5.1	Classified according construction					—
E.5.1.a	Control unit contained in the self-contained portable emergency luminaire	Yes <input type="checkbox"/>	No <input type="checkbox"/>			—
E.5.1.b	Part of the control unit remains in the base unit	Yes <input type="checkbox"/>	No <input type="checkbox"/>			—
E.5.2	Classified according operation					—
E.5.2.a	Automatic initiation with manual control	Yes <input type="checkbox"/>	No <input type="checkbox"/>			—
E.5.2.b	Automatic initiation with automatic control	Yes <input type="checkbox"/>	No <input type="checkbox"/>			—
E.5.2.c	Manual control	Yes <input type="checkbox"/>	No <input type="checkbox"/>			—
E.5.3	Classified according photometric performance					—
	Distribution measured according IEC TR 61341					N/A
E.5.3.a	Narrow beam angels not greater than 15°					N/A
E.5.3.b	Medium beam angels between 15° and 25°					N/A
E.5.3.c	Wide beam angels greater than 25°					N/A
E.5.3.d	Variable beam angels – state the range of angels					N/A
E.6	Marking					N/A
E.6.1	Marking visible after installation					N/A
	Marking on both parts if separate charging device					N/A
	Class II symbol only on the charger if separate charging device					N/A

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Clause	Requirement + Test	Result - Remark	Verdict
E.6.2	Instruction for electrical, mechanical and use according classification		N/A
E.6.3	Warning notice on both parts to return the luminaire to base unit for recharging after use		N/A
E.6.4	Instruction with photometric data		N/A
E.7	Construction		N/A
E.7.1	Control unit completely contained in the luminaire or part of the control unit in the base unit		N/A
E.7.2	Mechanical strength tests according 4.13 of IEC 60598-1		N/A
	Mechanical strength tests according 4.13.4 of IEC 60598-1 of portable section		N/A
E.7.3	Base unit permanently connected to unswitched supply		N/A
E.7.4	Integral manual switch used to switch the unit between inhibit mode and emergency mode and vice versa		N/A
	Recharging before supply voltage reach 0,85 times nominal value		N/A
E.7.5	Integral over current protection device connected immediately after the terminals connecting to the supply		N/A
E.7.6	Power supply connection between the luminaire and its base unit made without a tool		N/A
	Connecting devices according relevant standard		N/A
E.7.7	No access to live parts during or after connection or disconnection		N/A
E.7.8	Supply cable disconnected from the portable part before use		N/A
E.7.9	Connection between the portable part and the charger mechanically interlocked to prevent incorrect polarised connection		N/A
E.7.10	At least two independent replaceable lamps if incandescent lamps		N/A
E.7.11	Colour rendering index of any emergency lamps R_a 40 or better		N/A
E.7.12	Audible and/or visible warning on re-instatement of normal supply		N/A
E.7.13	Failure of the mains supply the luminaire operate in emergency mode or an indicator identify the location of the luminaire		N/A
	Load $\leq 0,01C5/h$ of the battery if indicator is used		N/A