



CE LVD REPORT

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| Prepared For : | shenzhenshimuyushiyeyouxiangongsi longhuaqudalangjiedao, gaofengsheququeshanxincun39hao3ceng3270shi, shenzhen, guangdong, 518000, CN |
| Product Name: | LED Night Light |
| Main Test Model : | SB-496 |
| Additional Models: | / |
| Prepared By : | Dongguan True Safety Testing Co., Ltd. Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China |
| Test Date: | Jan. 15, 2024 To Jan. 26, 2024 |
| Date of Report : | Jan. 26, 2024 |
| Report No.: | TST20240104133-1SR |



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|---|--|
| LVD REPORT EN 60598-1 & EN 60598-2-12 Luminaires Part 1: General requirements and tests Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights | |
| Testing Laboratory Name | Dongguan True Safety Testing Co., Ltd. |
| Address | Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China |
| Testing location | Dongguan True Safety Testing Co., Ltd. |
| Applicant's Name | shenzhenshimuyushiyeouxiangongsi |
| Address | longhuaqudalangjiedao, gaofengsheququeshanxincun39hao3ceng3270shi, shenzhen, guangdong, 518000, CN |
| Manufacturer | shenzhenshimuyushiyeouxiangongsi |
| Address | longhuaqudalangjiedao, gaofengsheququeshanxincun39hao3ceng3270shi, shenzhen, guangdong, 518000, CN |
| Test specification | |
| Standard..... | EN 60598-2-12:2013 EN IEC 60598-1:2021 |
| Procedure deviation | N/A |
| Non-standard test method | N/A |
| Test item description | LED Night Light |
| Model and/or type reference | SB-496 |
| Rating(s)..... | 220V 50/60Hz 0.1W |
| Test case verdicts | |
| Test case does not apply to the test object | N/A |
| Test item does meet the requirement | P(ass) |
| Test item does not meet the requirement | F(ail) |

General remarks

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

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

"(see remark #)" refers to a remark appended to the report.

"(see Annex #)" refers to an annex appended to the report.

Clause numbers between brackets refer to clauses in IEC 60 598-1 (EN 60 598-1)

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

Attached with:

A. photo documentation

B. General product information:

The series products have the same circuit diagram, PCB layout and functionality. The differences are the model name and appearance, so, we select SB-496 to test.

Artwork of Marking Label:

LED Night Light

Model: SB-496

Rating: 220V 50/60Hz 0.1W



Shenzhenshimuyushiyeyouxiangongsi

Made in China



Name and address of the testing laboratory: Dongguan True Safety Testing Co., Ltd.

Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China

Janice Li

Jan. 26, 2024

Test by : _____
Signature

_____ Date

Technician
Title

Apple Li

Jan. 26, 2024

Review by : _____
Signature

_____ Date

Project Engineer
Title

Andy



Jan. 26, 2024

Approved by : _____
Signature

_____ Date

Andy Zheng/Manager
Name and Title



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--------------------|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |

| | | | |
|------------|---|--|---|
| 12.1 (0) | SCOPE | | P |
| 12.1 (0.1) | More sections applicable..... | Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] | — |
| 12.4 (2) | CLASSIFICATION | | P |
| 12.4 (2.2) | Type of protection..... | Class II | — |
| 12.4 (2.3) | Degree of protection..... | IP 20 | — |
| 12.4 (2.4) | Portable or handheld luminaire | Yes | — |
| | Fixed luminaire suitable for normally flammable surfaces..... | Direct plug-in luminaire | — |
| | Fixed luminaire suitable for non-combustible materials only | No | — |
| 12.4 (2.5) | Luminaire for normal use | Yes | — |
| | Luminaire for rough service | No | — |

| | | | |
|---------------|--------------------------------------|---|-----|
| 12.5 (3) | MARKING | | P |
| 12.5 (3.2) | Mandatory markings | | -- |
| | Position of the marking | On the enclosure | P |
| | Format of symbols/text | Symbols: 5.0mm min; Letter: 2.0mm min. | P |
| 12.5 (3.3) | Additional information | | -- |
| | Language of instructions | English | P |
| 12.5 (3.3.1) | Combination luminaires | | N/A |
| 12.5 (3.3.2) | Nominal frequency in Hz | 50/60Hz | P |
| 12.5 (3.3.3) | Operating temperature | | N/A |
| 12.5 (3.3.4) | Symbol or warning notice | | P |
| 12.5 (3.3.5) | Wiring diagram | | P |
| 12.5 (3.3.6) | Special conditions | | N/A |
| 12.5 (3.3.7) | Metal halid lamp luminaire – warning | | N/A |
| 12.5 (3.3.8) | Limitation for semi-luminaires | | N/A |
| 12.5 (3.3.9) | Power factor and supply current | | N/A |
| 12.5 (3.3.10) | Suitability for use indoors | Yes | P |
| 12.5 (3.3.11) | Luminaires with remote control | | N/A |
| 12.5 (3.3.12) | Clip-mounted luminaire – warning | | N/A |
| 12.5 (3.3.13) | Specifications of protective shields | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.5 (3.3.14) | Symbol for nature of supply | ~ | P |
| 12.5 (3.3.15) | Rated current of socket outlet | No socket outlet | N/A |
| 12.5 (3.3.16) | Rough service luminaire | | N/A |
| 12.5 (3.3.17) | Mounting instruction for type Y, type Z and some type X attachments | | N/A |
| 12.5 (3.3.18) | Non-ordinary luminaires with PVC cable | | N/A |
| 12.5 (3.3.19) | The protective conductor current shall be clearly stated in the manufacturers' instructions | | N/A |
| 12.5 (3.4) | Test with water | 15s with water | P |
| | Test with hexane | 15s with hexane | P |
| | Legible after test | Yes | P |
| | Label attached | The marking not be easily removable and shows no curling | P |

| | | | |
|--------------|--|----------------------------|-----|
| 12.6 (4) | CONSTRUCTION | | -- |
| 12.6 (4.2) | Components replaceable without difficulty | | N/A |
| 12.6 (4.3) | Wireways smooth and free from sharp edges | | N/A |
| 12.6 (4.4) | Lampholders | | -- |
| 12.6 (4.4.1) | Integral lampholder | Not integral lampholder | N/A |
| 12.6 (4.4.2) | Wiring connection | | N/A |
| 12.6 (4.4.3) | Lampholder for end- to- end mounting | | N/A |
| 12.6 (4.4.4) | Positioning | | N/A |
| 12.6 (4.4.5) | Peak pulse voltage | | N/A |
| 12.6 (4.4.6) | Centre contact | | P |
| 12.6 (4.4.7) | Rough service luminaires | Ordinary luminaires | N/A |
| 12.6 (4.4.8) | Lamp connectors | No lamp connector provided | N/A |
| 12.6 (4.5) | Starter holders | | -- |
| | Starter holder in luminaires other than class II | | P |
| | Starter holder class II construction | | N/A |
| 12.6 (4.6) | Terminal blocks | | -- |
| | Tails | | N/A |
| | Unsecured blocks | | N/A |
| 12.6 (4.7) | Terminals and supply connections | | -- |
| 12.6 (4.7.1) | Contact to metal parts | | N/A |
| 12.6 (4.7.2) | Test 8 mm live conductor | | N/A |
| | Test 8 mm earth conductor | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|--------------------------------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.6 (4.7.3) | Terminals for supply conductors | | N/A |
| 12.6 (4.7.4) | Terminals other than supply connection | | N/A |
| 12.6 (4.7.5) | Heat-resistant wiring/sleeves | | N/A |
| 12.6 (4.7.6) | Multi-pole plug | | N/A |
| 12.6 (4.8) | Switches: | | -- |
| | - adequate rating | | N/A |
| | - adequate fixing | | N/A |
| | - polarized supply | | N/A |
| 12.6 (4.9) | Insulating lining and sleeves | | -- |
| 12.6 (4.9.1) | Retainment | | N/A |
| | Method of fixing..... : | | N/A |
| 12.6 (4.9.2) | Insulated linings and sleeves | | -- |
| | a) & c) Insulation resistance and electric strength | | N/A |
| | b) Ageing test. Temperature (°C) : | | N/A |
| 12.6 (4.10) | Insulation of Class II luminaires | | -- |
| 12.6 (4.10.1) | No contact, mounting surface - accessible metal parts - wiring of basic insulation | | P |
| | Safe installation fixed luminaires | | P |
| | Capacitors | | N/A |
| | Interference suppression capacitors according to IEC 60384-14 | No such capacitor | N/A |
| 12.6 (4.10.2) | Assembly gaps: | | -- |
| | - not coincidental | | N/A |
| | - no straight access with test probe | | N/A |
| 12.6 (4.10.3) | Retainment of insulation: | | -- |
| | - fixed | | N/A |
| | - unable to be replaced; luminaire inoperative | | N/A |
| | - sleeves retained in position | | N/A |
| | - lining in lampholder | | N/A |
| 12.6 (4.11) | Electrical connections | | -- |
| 12.6 (4.11.1) | Contact pressure | | N/A |
| 12.6 (4.11.2) | Screws: | | -- |
| | - self-tapping screws | Self-tapping screws not used | N/A |
| | - thread-cutting screws | Thread-cutting screws not used | N/A |
| | - at least two self-tapping screws | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|---|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.6 (4.11.3) | Screw locking: | | -- |
| | - spring washer | | N/A |
| | - rivets | | N/A |
| 12.6 (4.11.4) | Material of current-carrying parts | At least 50% copper | P |
| 12.6 (4.112.5) | No contact to wood | No wood material in the luminaire | N/A |
| 12.6 (4.112.6) | Electro-mechanical contact systems | No such systems | N/A |
| 12.6 (4.12) | Mechanical connections and glands | | -- |
| 12.6 (4.12.1) | Screws not made of soft metal | | P |
| | Screws of insulating material | | N/A |
| | Torque test: torque (Nm); part.....: | | P |
| | Torque test: torque (Nm); part.....: | | N/A |
| | Torque test: torque (Nm); part.....: | | N/A |
| 12.6 (4.12.2) | Screws with diameter < 3 mm screwed into metal | | P |
| 12.6 (4.12.4) | Locked connections: | | -- |
| | - fixed arms; torque (Nm).....: | | N/A |
| | - lampholder; torque (Nm).....: | | N/A |
| | - push-button switches; torque 0,8 Nm.....: | | N/A |
| 12.6 (4.12.5) | Screwed glands; force (N).....: | | N/A |
| 12.6 (4.13) | Mechanical strength | | -- |
| 12.6 (4.13.1) | Impact tests: | | -- |
| | - fragile parts; energy (Nm).....: | | N/A |
| | - other parts; energy (Nm).....: | 0.35Nm | P |
| | 1) live parts | Unlikely become accessible | P |
| | 2) linings | | N/A |
| | 3) protection | Continue to afford the degree of protection against ingress of dust, solid objects and moisture | P |
| | 4) covers | | N/A |
| 12.6 (4.13.3) | Straight test finger | | N/A |
| 12.6 (4.13.4) | Rough service luminaires | | -- |
| | a) fixed | Ordinary luminaire | 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 |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|---------------------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.6 (4.13.6) | Tumbling barrel | | N/A |
| 12.6 (4.14) | Suspensions and adjusting devices | | -- |
| 12.6 (4.14.1) | Mechanical load: | | -- |
| | A) four times the weight | | N/A |
| | B) torque 2,5 Nm | | N/A |
| | C) bracket arm; bending moment (Nm)..... : | | N/A |
| | D) load track- mounted luminaires | | N/A |
| | E) clip-mounted luminaires, glass-shelve. Thickness (mm) : | | N/A |
| | metal rod. Diameter (mm) : | | N/A |
| 12.6 (4.14.2) | Load to flexible cables | | -- |
| | Mass (kg)..... : | | N/A |
| | Stress in conductors (N/mm ²)..... : | | N/A |
| | Semi-luminaires – mass (kg) : | | N/A |
| | Semi-luminaires – bending moment (Nm)..... : | | N/A |
| 12.6 (4.14.3) | Adjusting devices: | | -- |
| | - flexing test; number of cycles..... : | | N/A |
| | - strands broken | | N/A |
| | - electric strength test afterwards | | N/A |
| 12.6 (4.14.4) | Telescopic tubes: cords not fixed to tube; no strain on conductors | No telescopic tubes | N/A |
| 12.6 (4.14.5) | Guide pulleys | No guide pulleys | N/A |
| 12.6 (4.14.6) | Strain on socket-outlets | No socket-outlet | N/A |
| 12.6 (4.15) | Flammable materials: | | -- |
| | - glow- wire test 650 °C | | P |
| | - spacing ≥ 30 mm | | N/A |
| | - screen withstanding test of 13.3.1 | | N/A |
| | - screen dimensions | | N/A |
| | - no fiercely burning material | | N/A |
| | - thermal protection | | N/A |
| | - electronic circuits exempted | | N/A |
| 12.6 (4.15.2) | Luminaires made of thermoplastic material with lamp control gear | | -- |
| | a) construction | | N/A |
| | b) temperature sensing control | | N/A |
| | c) surface temperature | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|------------------------------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.6 (4.16) | Luminaires marked with F-symbol | | -- |
| | No lamp control gear | (compliance with Section 12) | P |
| 12.6 (4.16.1) | Lamp control gear spacing: | | -- |
| | - spacing 35 mm | | N/A |
| | - spacing 10 mm | | N/A |
| 12.6 (4.16.2) | Thermal protection: | | -- |
| | - in lamp control gear | | N/A |
| | - external | | N/A |
| | - fixed position | | N/A |
| | - temperature marked lamp control gear | | N/A |
| 12.6 (4.16.3) | "F" curve measured | (see 12.6) | N/A |
| 12.6 (4.17) | Drain holes | Not protection against water | N/A |
| | Clearance at least 5 mm | | N/A |
| 12.6 (4.18) | Resistance to corrosion: | | -- |
| 12.6 (4.18.1) | - rust-resistance | | N/A |
| 12.6 (4.18.2) | - season cracking in copper | | N/A |
| 12.6 (4.18.3) | - corrosion of aluminium | | N/A |
| 12.6 (4.19) | Igniters compatible with ballast | | N/A |
| 12.6 (4.20) | Rough service vibration.....: | | N/A |
| 12.6 (4.21) | Protective shield: | | -- |
| 12.6 (4.21.1) | Shield fitted | | N/A |
| 12.6 (4.21.2) | Particles from a shattering lamp not impair safety | | N/A |
| 12.6 (4.21.3) | No direct path | | N/A |
| 12.6 (4.21.4) | Impact test on shield | | N/A |
| | Glow-wire test on lamp compartment | | N/A |
| 12.6 (4.22) | Attachments to lamps | No attachments | N/A |
| 12.6 (4.23) | Semi-luminaires comply class II | | N/A |
| 12.6 (4.24) | UV radiation | | N/A |
| 12.6 (4.25) | No sharp point or edges | No sharp points or edges | P |
| 12.6 (4.26) | Short-circuit protection: | | N/A |
| 12.6 (4.26.1) | Uninsulated accessible SELV parts | | N/A |
| 12.6 (4.26.2) | Short-circuit test | | N/A |
| 12.6 (4.26.3) | Test chain according to IEC 61032 | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.6.1 | The plug portion of a mains socket-outlet mounted nightlight shall comply with the appropriate national standard sheets of IEC 60083. | | P |
| 12.6.2 | The plug portion of a mains socket-outlet mounted nightlight shall comply in all other respects with the appropriate constructional requirements of IEC 60884-1 or applicable National Standard. | | P |
| 12.6.3 | The mechanical strength tests of 4.13.1 of IEC 60598-1 shall be applied utilizing the forces prescribed in Table 4.3 of IEC 60598-1 for portable luminaries for children. | | P |
| 12.6.4 | Covers of mains socket-outlet mounted nightlights shall be so designed that when assembled as in normal use | | P |
| 12.6.5 | It shall not be possible to change a lamp whilst the mains socket-outlet mounted nightlight is connected to the supply. | | P |
| 12.6.6 | The base and cover of a mains socket-outlet mounted nightlight shall be firmly secured to each other. | | P |
| 12.6.7 | The mass and design of a mains socket-outlet mounted nightlight shall be such that it does not impose undue strain on an appropriate socket-outlet. | | P |
| 12.6.8 | Mains socket-outlet mounted nightlights shall not have a cover that is shaped and/or decorated so that it is likely to be treated as a toy by children. | | P |
| 12.6.9 | Where integral plug-pins are of a type where the corresponding plug incorporates a fuse, the mains socket-outlet mounted nightlight shall also incorporate a suitable fuse to provide overcurrent protection. | | P |
| 12.6.10 | Series resistors in mains socket-outlet mounted nightlights with neon lamps shall not be of the “composition” or “carbon film” type. | | P |
| 12.6.11 | Mains socket-outlet mounted nightlights incorporating an electroluminescent panel shall be capable of withstanding a voltage surge. | | P |
| | | | |
| 12.7 (11) | CREEPAGE DISTANCES AND CLEARANCES | | P |
| | Working voltage (V).....: | 220V~ | — |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|------------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | Voltage form | Sinusoidal | — |
| | PTI | < 600V | — |
| | Rated pulse voltage (kV) | -- | — |
| | (1) Current-carrying parts of different polarity: cr (mm); cl (mm)..... : | | P |
| | (2) Current-carrying parts and accessible parts: cr (mm); cl (mm)..... : | | P |
| | (3) Parts becoming live due to breakdown of basic insulation and metal parts: cr (mm); cl (mm)..... : | | N/A |
| | (4) Outer surface of cable where it is clamped and metal parts: cr (mm); cl (mm)..... : | | N/A |
| | (5) Current-carrying parts of switches and metal parts, after removal of insulation: cr (mm); cl (mm)..... : | | N/A |
| | (6) Current-carrying parts and supporting surface: cr (mm); cl (mm)..... : | | N/A |
| 12.7.1 | Mains socket-outlet mounted nightlights shall be provided with integral plug-pins for connection to the supply. | | P |

| | | | |
|----------------------|--|--|-----|
| 12.8 (7) | PROVISION FOR EARTHING | | N/A |
| 12.8 (7.2.1 + 7.2.3) | Accessible metal parts | | N/A |
| | Metal parts in contact with supporting surface | | N/A |
| | Resistance < 0,5 Ω | | N/A |
| | Two self-tapping screws used | | N/A |
| | Thread-forming screws | | N/A |
| | Connector earthing first | | N/A |
| 12.8 (7.2.2 + 7.2.3) | Earth continuity in joints etc. | | N/A |
| 12.8 (7.2.4) | Locking of clamping means | | N/A |
| | Compliance with 4.7.3 | | N/A |
| 12.8 (7.2.5) | Earth terminal integral part of connector socket | | N/A |
| 12.8 (7.2.6) | Earth terminal adjacent to mains terminals | | N/A |
| 12.8 (7.2.7) | Electrolytic corrosion of the earth terminal | | N/A |
| 12.8 (7.2.8) | Material of earth terminal | | N/A |
| | Contact surface bare metal | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|-------------------------------------|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.8 (7.2.10) | Class II luminaire for looping-in | | N/A |
| 12.8 (7.2.11) | Earthing core coloured green-yellow | | N/A |
| | Length of earth conductor | | N/A |
| 12.9 (14) | SCREW TERMINALS | | N/A |
| | Separately approved; component list | | N/A |
| | Part of the luminaire | | N/A |

| | | | |
|-----------|--|--|-----|
| 12.9 (15) | SCREWLESS TERMINALS | | N/A |
| | Separately approved; component list | | N/A |
| | Part of the luminaire | | N/A |
| 12.9.1 | It shall not be possible to gain access to the lampholder or other internal live parts with the mains socket-outlet mounted nightlight inserted in an appropriate socket-outlet. | | P |

| | | | |
|----------------|---|--------------------------|-----|
| 12.10 (5) | EXTERNAL AND INTERNAL WIRING | | N/A |
| 12.10 (5.2) | Supply connection and external wiring | | -- |
| 12.10 (5.2.1) | Means of connection.....: | Direct plug-in luminaire | N/A |
| 12.10 (5.2.2) | Type of cable.....: | | N/A |
| | Nominal cross-sectional area (mm ²).....: | | N/A |
| 12.10 (5.2.3) | Type of attachment, X, Y or Z | Direct plug-in outlet | N/A |
| 12.10 (5.2.5) | Type Z not connected to screws | | N/A |
| 12.10 (5.2.6) | Cable entries: | | -- |
| | - suitable for introduction | | N/A |
| | - adequate degree of protection | | N/A |
| 12.10 (5.2.7) | Cable entries through rigid material have rounded edges | | N/A |
| 12.10 (5.2.8) | Insulating bushings: | | -- |
| | - suitably fixed | | N/A |
| | - material in bushings | | N/A |
| | - tubes or guards made of insulating material | | N/A |
| 12.10 (5.2.9) | Locking of screwed bushings | | N/A |
| 12.10 (5.2.10) | Cord anchorage: | | -- |
| | - covering protected from abrasion | | N/A |
| | - clear how to be effective | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | - no mechanical or thermal stress | | N/A |
| | - no tying of cables into knots etc. | | N/A |
| | - insulating material or lining | | N/A |
| 12.10 (5.2.10.1) | Cord anchorage for type X attachment: | | -- |
| | 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 |
| 12.10 (5.2.10.2) | Adequate cord anchorage for type Y and type Z attachment | | N/A |
| 12.10 (5.2.10.3) | Tests: | | N/A |
| | - impossible to push cable; unsafe | | N/A |
| | - pull test: 25 times; pull (N).....: | | N/A |
| | - torque test: torque (Nm)..... : | | N/A |
| | - displacement ≤ 2 mm | | N/A |
| | - no movement of conductors | | N/A |
| | - no damage of cable or cord | | N/A |
| 12.10 (5.2.11) | External wiring passing into luminaire | | N/A |
| 12.10 (5.2.12) | Looping- in terminals | | N/A |
| 12.10 (5.2.13) | Wire ends not tinned | | N/A |
| | Wire ends tinned: no cold flow | | N/A |
| 12.10 (5.2.14) | Mains plug same protection | | N/A |
| | Class III luminaire plug | | N/A |
| 12.10 (5.2.15) | Colour code low voltage | | N/A |
| 12.10 (5.2.16) | Appliance inlets (IEC 60320) | | N/A |
| | Appliance couplers of class II type | | N/A |
| 12.10 (5.3) | Internal wiring | | -- |
| 12.10 (5.3.1) | Internal wiring of suitable size and type | | N/A |
| | Through wiring | | -- |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | - not delivered/ mounting instruction | | N/A |
| | - factory assembled | | N/A |
| | - socket outlet loaded (A)..... : | | N/A |
| | - temperatures..... : | | N/A |
| | Green- yellow for earth only | | N/A |
| 12.10 (5.3.1.1) | Internal wiring connected directly to fixed wiring | | -- |
| | Cross-sectional area (mm ²)..... : | | N/A |
| | Insulation thickness | | N/A |
| | Extra insulation added where necessary | | N/A |
| 12.10 (5.3.1.2) | Internal wiring connected to fixed wiring via internal current-limiting device | | -- |
| | Adequate cross-sectional area and insulation thickness | | N/A |
| 12.10 (5.3.1.3) | Double or reinforced insulation for class II | | N/A |
| 12.10 (5.3.1.4) | Conductors without insulation | | N/A |
| 12.10 (5.3.12.5) | SELV current-carrying parts | | N/A |
| 12.10 (5.3.12.6) | Insulation thickness other than PVC or rubber | | N/A |
| 12.10 (5.3.2) | Sharp edges etc. | | N/A |
| | No moving parts of switches etc. | | N/A |
| | Joints, raising/lowering devices | | N/A |
| | Telescopic tubes etc. | | N/A |
| | No twisting over 360° | | N/A |
| 12.10 (5.3.3) | Openings | | N/A |
| | Bushings not removable | | N/A |
| | Bushings in sharp openings | | N/A |
| | Cables with protective sheath | | N/A |
| 12.10 (5.3.4) | Joints and junctions effectively insulated | | N/A |
| 12.10 (5.3.5) | Strain on internal wiring | | N/A |
| 12.10 (5.3.6) | Wire carriers | | N/A |
| 12.10 (5.3.7) | Wire ends not tinned | | N/A |
| | Wire ends tinned: no cold flow | | N/A |
| 12.11 (8) | PROTECTION AGAINST ELECTRIC SHOCK | | P |
| 12.11 (8.2.1) | Live parts not accessible | | P |
| | Protection in any position | | P |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | Double-ended tungsten filament lamp | | N/A |
| | Insulation lacquer not reliable | No insulation lacquer | N/A |
| | Double-ended high pressure discharge lamp | No double-ended high pressure discharge lamp | N/A |
| 12.11 (8.2.2) | Portable luminaire adjusted in most unfavourable position | Fixed luminaire | N/A |
| 12.11 (8.2.3) | Class II luminaire: | | -- |
| | - basic insulated metal parts not accessible during starter or lamp replacement | | P |
| | - basic insulation not accessible other than during starter or lamp replacement | | P |
| | - glass protective shields not used as supplementary insulation | Without glass protective shields | N/A |
| | Class I luminaire with BC lampholder | | N/A |
| 12.11 (8.2.4) | Portable luminaire: | | -- |
| | - protection independent of supporting surface | Direct plug-in luminaires | N/A |
| | - terminal block completely covered | | N/A |
| 12.11 (8.2.6) | Covers reliably secured | | N/A |
| 12.11 (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 |

| | | | |
|----------------|---|-----------------|-----|
| 12.12 (12) | ENDURANCE TEST AND THERMAL TEST | | P |
| 12.12 (12.3) | Endurance test: | | P |
| | - mounting- position.....: | Normal position | — |
| | - test temperature (°C).....: | 35°C | — |
| | - total duration (h).....: | 240h | — |
| | - supply voltage: Un factor; calculated voltage (V).....: | 242V | — |
| | - lamp used.....: | LED | — |
| 12.12 (12.3.2) | After endurance test: | | -- |
| | - no part unserviceable | | P |
| | - luminaire not unsafe | | P |
| | - no damage to track system | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|--|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | - marking legible | Marking still legible and shows no curling | P |
| | - no cracks, deformation etc. | | P |
| 12.12 (12.4) | Thermal test (normal operation) | (see Annex 2) | P |
| 12.12 (12.5) | Thermal test (abnormal operation) | | N/A |
| 12.12 (12.6) | Thermal test (failed lamp control gear condition): | | -- |
| 12.12 (12.6.1) | - 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 |
| 12.12 (12.6.2) | Temperature sensing control | | -- |
| | - 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 |
| 12.12 (12.7) | Thermal test (failed lamp control gear in plastic luminaires): | | N/A |
| | - case of abnormal conditions..... : | | — |
| 12.12 (12.7.1) | - measured winding temperature (°C) at 1,1 Un..... : | | — |
| | - measured temperature of fixing point/ exposed part (°C) at 1,1 Un..... : | | N/A |
| | - calculated temperature of fixing point/ exposed part (°C)..... : | | N/A |
| 12.12 (12.7.2) | Temperature sensing control | | -- |
| | - thermal link | | N/A |
| | - manual reset cut- out | | N/A |
| | - auto reset cut- out | | N/A |
| | - measured temperature of fixing point/ exposed part (°C) : | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.12.1 | Any metal parts of mains socket-outlet mounted nightlight other than the plug-pins, which are exposed on the engagement face of the mains socket-outlet mounted nightlight and are in contact with live parts shall be recessed at least 3 mm below the engagement surface. | | P |

| | | | |
|-------------|---|-----------|-----|
| 12.13 (9) | RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE | | P |
| 12.13 (9.2) | Tests for ingress of dust, solid objects and moisture: | | -- |
| | - classification according to IP.....: | IP20 | — |
| | - mounting position during test.....: | | — |
| | - fixing screws tightened; torque (Nm).....: | | — |
| | - tests according to clauses.....: | | — |
| | - electric strength test afterwards | | N/A |
| | a) no deposit in dust-proof luminaire | | N/A |
| | b) no talcum in dust- tight luminaire | | N/A |
| | c) no trace of water on current-carrying parts or where it could become a hazard | | N/A |
| | d) i) For luminaires without drain holes – no water entry | | N/A |
| | d) ii) For luminaires with drain holes – no hazardous water entry | | N/A |
| | e) no water in watertight luminaire | | N/A |
| | f) no contact with live parts (IP 2X) | | N/A |
| | f) no entry into enclosure (IP 3X and IP 4X) | | N/A |
| 12.13 (9.3) | Humidity test 48 h | 25°C, 93% | P |
| 12.13.1 | During the tests of Section 12 the maximum permissible temperature of plug-pins shall be as specified in the appropriate National Standard referenced within IEC 60083 and the maximum temperature of the socket-outlet engagement face shall not exceed 65 °C. | | P |
| 12.13.2 | During the tests of Section 12 the maximum temperature of accessible parts of mains socket-outlet mounted nightlights shall be a) 55 °C for metal parts, and b) 65 °C for other parts | | P |
| 12.13.3 | During the abnormal operation thermal test, mains socket-outlet mounted nightlights shall be installed as for normal use and operated at rated voltage continuously for 7 h or until failure occurs, whichever is the sooner. | | P |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|------------------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.14 (10) | INSULATION RESISTANCE AND ELECTRIC STRENGTH | | P |
| 12.14 (10.2.1) | Insulation resistance test | | -- |
| | Insulation resistance (MΩ): | | -- |
| | SELV: | | N/A |
| | - between current-carrying parts of different polarity : | | N/A |
| | - between current-carrying parts and mounting surface : | | N/A |
| | - between current-carrying parts and metal parts of the luminaire..... : | | N/A |
| | Other than SELV: | | -- |
| | - between live parts of different polarity..... : | > 10MΩ | P |
| | - between live parts and mounting surface..... : | > 10MΩ | P |
| | - between live parts and enclosure..... : | > 10MΩ | P |
| | - between live parts of different polarity through action of a switch..... : | | N/A |
| 12.14 (10.2.2) | Electric strength test | | -- |
| | Dummy lamp | | N/A |
| | Luminaires with ignitors after 24 h test | | N/A |
| | Luminaires with manual ignitors | | N/A |
| | Test voltage (V): | | -- |
| | 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 |
| | Other than SELV: | | -- |
| | - between live parts of different polarity..... : | 1440V, no broken | P |
| | - between live parts and mounting surface..... : | 2880V, no broken | P |
| | - between live parts and enclosure..... : | 2880V, no broken | P |
| | - between live parts of different polarity through action of a switch..... : | | N/A |
| 12.14 (10.3.1) | Leakage current (mA)..... : | 0.013mA | P |
| 12.15 (13) | RESISTANCE TO HEAT, FIRE AND TRACKING | | P |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|--|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| 12.15 (13.2.1) | Ball-pressure test: | | P |
| | - part tested; temperature (°C)..... : | | P |
| | - part tested; temperature (°C)..... : | | N |
| 12.15 (13.3.1) | Needle flame test (10 s): | | P |
| | - part tested..... : | | P |
| | - part tested..... : | | N |
| 12.15 (13.3.2) | Glow wire test (650°C): | | -- |
| | - part tested..... : | | N |
| | - part tested..... : | | N |
| 12.15 (13.4.1) | Tracking test: part tested..... : | | N |
| 12.15.1 | Screw terminals shall not be utilized in sealed mains socket-outlet mounted nightlights. | | P |
| 12.16 | Screwless terminals and electrical connections | | P |
| | The provisions of Section 15 of IEC 60598-1 apply. | | P |

| COMMON MODIFICATIONS | | | |
|--|---|--|-----|
| | | | N/A |
| (3.3.101 + 5.2.1) | For luminaires connected by tails, information about terminal block | | N/A |
| (5.2.2) | Cables equal to HD 21 S2 or HD 22 S2 | | N/A |
| (5.2.15) | Colour code low voltage | | N/A |
| | | | |
| ZB ANNEX ZB, SPECIAL NATIONAL CONDITIONS | | | |
| (2.2) | Class 0 not accepted | | N/A |
| (3.3) | DK: power supply cord with label | | N/A |
| | IT: warning label on Class 0 luminaire | | N/A |
| (4.5.1) | DK: socket-outlets | | N/A |
| (4.5.1) | FR: socket-outlets | | N/A |
| (5.2.1) | DK, FI, SE, GB: type of plug | | N/A |

| ZC ANNEX ZC, NATIONAL DEVIATIONS | | | |
|----------------------------------|---|--|-----|
| (13.3) | DK: Needle flame test or glow-wire test 750°C for luminaires in access routes | | N/A |
| (13.3) | GB: Requirements according to United Kingdom Building Regulation | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| (13.3.2) | FR: Glow-wire test 850°C alt. 750°C for luminaires in premises open to public and workers | | N/A |

| ANNEX 1: components | | | | | P |
|---------------------|----------------------------|------------|----------------|----------|--------------------------|
| object/part No. | manufacturer/ trademark | type/model | technical data | standard | mark(s) of conformity |
| Enclosure | Various | Various | 80°C V-0 | -- | VDE |
| Lamp | Various | Various | 0.1W | -- | VDE |
| Plug | Various | Various | 250V 2A | -- | VDE |

| ANNEX 2: temperature measurements, thermal tests of Section 12 | | P |
|--|-----------------|---|
| Type reference..... | SB-496 | — |
| Lamp used..... | -- | — |
| Lamp control gear used..... | -- | — |
| Mounting position of luminaire..... | Normal position | — |
| Supply wattage (W)..... | 0.1W | — |
| Supply voltage (V)..... | 233.2V | — |
| Supply current (A)..... | 0.246 | — |
| Calculated power factor..... | 0.952 | — |
| Table: measured temperatures corrected for ta = 25 °C: | | P |
| - abnormal operating mode..... | -- | — |
| - test 1: rated voltage..... | -- | — |
| - test 2: 1,06 times rated voltage or 1,05 times rated wattage..... | 233.2V | — |
| - test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage..... | -- | — |
| - test 4: 1,1 times rated voltage or 1,05 times rated wattage..... | | — |

| temperature (°C) of part | clause 12.4 - normal | | | | clause 12.5 - abnormal | |
|--------------------------|----------------------|--------|--------|--------|------------------------|-------|
| | test 1 | test 2 | test 3 | limits | test 4 | limit |
| Enclosure | | 36.9 | | 75 | | |
| Lamp | | 44.2 | | Ref. | | |
| Ambient | | 25.9 | | -- | | |

| ANNEX 3: screw terminals (part of the luminaire) | | P |
|--|-----------------------|----|
| (14) | SCREW TERMINALS | -- |
| (14.2) | Type of terminal..... | — |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| | 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)..... : | | N/A |
| (14.3.3) | Conductor space (mm)..... : | | N/A |
| (14.4) | Mechanical tests | | -- |
| (14.4.1) | Minimum distance | | N/A |
| (14.4.2) | Cannot slip out | | N/A |
| (14.4.3) | Special preparation | | N/A |
| (14.4.4) | Nominal diameter of thread (metric ISO thread)..... : | | N/A |
| | External wiring | | N/A |
| | No soft metal | | N/A |
| (14.4.5) | Corrosion | | N/A |
| (14.4.6) | Nominal diameter of thread (mm)..... : | | N/A |
| | Torque (Nm)..... : | | N/A |
| (14.4.7) | Between metal surfaces | | N/A |
| | Lug terminal | | N/A |
| | Mantle terminal | | N/A |
| | Pull test; pull (N)..... : | | N/A |
| (14.4.8) | Without undue damage | | N/A |
| | ANNEX 4: SCREWLESS TERMINALS (PART OF THE LUMINAIRE) | | N/A |
| (15) | SCREWLESS TERMINALS | | -- |
| (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 |



| EN 60598-1 & EN 60598-2-12 | | | |
|----------------------------|---|--------|---------|
| Cl. | Requirement – Test | Result | Verdict |
| (15.5.1) | Terminals internal wiring | | N/A |
| (15.5.1.1) | Pull test spring-type terminals (4 N, 4 samples) | | N/A |
| (15.5.1.2) | Pull test pin or tab terminals (4 N, 4 samples) | | N/A |
| | Insertion force not exceeding 50 N | | N/A |
| (15.5.2) | Permanent connections: pull-off test (20 N) | | N/A |
| (15.6) | 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 |
| (15.7) | Terminals external wiring | | N/A |
| | Terminal size and rating | | N/A |
| (15.8.1) | Pull test spring-type terminals (4 samples); pull (N) | | N/A |
| | Pull test pin or tab terminals (4 samples); pull (N) | | N/A |
| (15.9) | Contact resistance test | | N/A |
| | Voltage drop (mV) after 1 h | | N/A |



| EN 60598-1 & EN 60598-2-12 | | | | | | | | | | | |
|----------------------------|--|---|---|---|---|--------|---|---|---|----|---------|
| Cl. | Requirement – Test | | | | | Result | | | | | Verdict |
| terminal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| voltage drop (mV) | | | | | | | | | | | |
| | Voltage drop of two inseparable joints | | | | | | | | | | |
| | Voltage drop after 10th alt. 25th cycle | | | | | | | | | | |
| | Max. allowed voltage drop (mV).....: | | | | | | | | | — | |
| terminal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| voltage drop (mV) | | | | | | | | | | | |
| | Voltage drop after 50th alt. 100th cycle | | | | | | | | | | |
| | Max. allowed voltage drop (mV).....: | | | | | | | | | — | |
| terminal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| voltage drop (mV) | | | | | | | | | | | |
| | Continued ageing: voltage drop after 10th alt. 25th cycle | | | | | | | | | | |
| | Max. allowed voltage drop (mV).....: | | | | | | | | | — | |
| terminal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| voltage drop (mV) | | | | | | | | | | | |
| | Continued ageing: voltage drop after 50th alt. 100th cycle | | | | | | | | | | |
| | Max. allowed voltage drop (mV).....: | | | | | | | | | — | |
| terminal | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| voltage drop (mV) | | | | | | | | | | | |



ANNEX A:

Photo-document

Photo 1 General appearance of the EUT



Photo 2 General appearance of the EUT



Photo 3 General appearance of the EUT

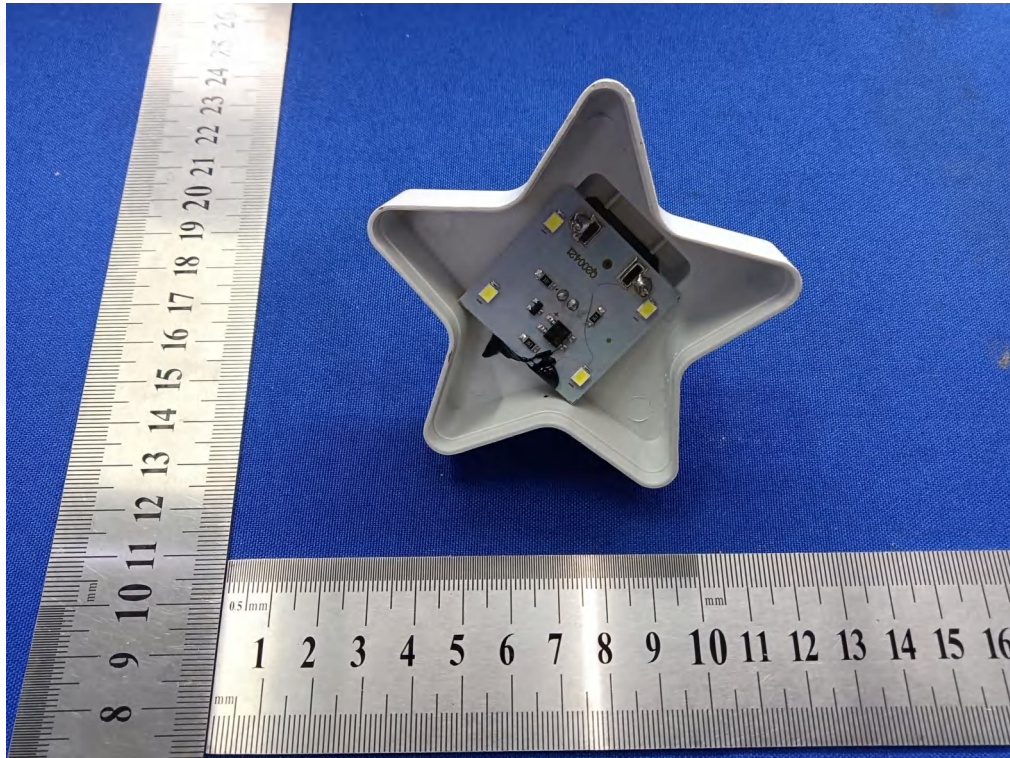


Photo 4 General appearance of the EUT



Photo 5 General appearance of the EUT



***** End of report *****