

EMERGENCY DIRECTIONAL LUMINAIRES TECHNICAL SPECIFICATION (IP20)

1. Luminaires must be certified by an independent testing organization in accordance with EN 60598-2-22 and the certificates must be auditable at regular intervals.
2. All products must comply with Low Voltage Directive (LVD) and Electromagnetic Compatibility Directive (EMC) requirements. The conformity of the products to EN 61547 and EN 55015 standards must be tested and certified by an accredited organization.
3. CE declaration must be supported by the test report of accredited organizations for LVD and EMC compliance. Only company declaration should not be accepted.
4. Luminaires must be produced by a manufacturer with EN ISO 9001 certificate.
5. Components in luminaires must use RoHS 2.0 materials in accordance with the requirements of the EU Regulation on the restriction of certain hazardous substances in electrical and electronic equipment and its annexes.
6. Emergency directional luminaires must be self-contained.
7. All luminaires must have a charge indicator LED in accordance with 60598-2-22 article 22.7.7 and must be green. In addition, when the battery is removed, this LED should either turn off or turn a different color.
8. Luminaires must have a test button for emergency mode operation test without disconnecting the mains.
9. The luminaire must have an aluminum anodized body with Class I insulation. (It must have grounding protection against contact with electrical parts.)
10. The luminaire housing must have IP20 protection class.
11. All plastic parts with the risk of battery contact in the luminaire must be made of polycarbonate material suitable for 850° glow-wire test.
12. Directional signs should be applied with serigraphic printing on transparent plexiglass.
13. All emergency directional luminaires must have photometric measurements of the directional sign in accordance with product functionality safety standard EN 60598-1, EN 60598-2-22.
14. The green and white ratios specified in the EN 1838 standard should be applied in the sign formats of emergency directional luminaires. It should also consist of symbols and markings in accordance with the format described in EN ISO 7010. These conformities must be tested and included in the relevant luminaire test reports.
15. The conformity of the pictogram height and maximum viewing distances of the directional luminaires with the layout in the projects attached to the tender must be checked and confirmed. Pictograms must comply with ISO 16069.
16. The brightness of safety signs shall meet the requirements of ISO 3864-1 and ISO 3864-4 and shall be verified by test reports.
17. The electronic control equipment shall comply with EN 61347-1, EN 61347-2-7 and EN 61347-2-13 and shall be certified by an accredited body.

18. The control equipment shall have a safe extra low voltage output with SELV.
19. Batteries must be manufactured in accordance with EN 61951-1 (NiCd) or EN 61951-2 (NiMh) and have accredited test reports. Compliance with these norms must be certified by an independent test organization.
20. Batteries must have a design life of at least 4 years and must be able to provide the declared capacity up to 55°C.
21. The LEDs used must comply with EN 62471 and EN 62031 standards and this compliance must be certified through an accredited organization.
22. SMD LED chip lighting will be used in the luminaire. LED chip life should be at least 50.000 hours. SMD LED chip color temperature must be 6500K cool white.
23. Labels on the product must be prepared according to EN 60598-1 and EN 60598-2-22 standards.
24. Each product must be packaged in its own form with special boxes designed without any gaps to prevent possible shaking. Company logo or name must be printed on the boxes.

WARRANTY COVERED CASES

1. Emergency guidance products must be installed and operated in environments in accordance with the IP Protection Class conditions specified on the device and in a way that will not damage the IP feature. Operating the device in environments other than the specified conditions may cause damage to the device and battery.
2. Emergency guidance products should not be operated for a long time in an environment other than the operating ambient temperatures specified on the device. If they are operated, this may cause damage to the device and battery.
3. The products must be tested and maintained regularly. A function test should be performed at least once a month and a duration test should be performed once a year. This practice increases the performance and life of the battery.
4. Batteries show 15% capacity loss per month when not in use. Batteries shipped installed in the products should not be stored for more than 3 months. A battery that has been removed from its socket should not be stored for more than 6 months.
5. The manufacturer will respond to users who report a malfunction within a maximum of 5 business days to resolve the malfunction..