MOON EMERGENCY LIGHTING FIXTURE TECHNICAL SPECIFICATIONS

- 1. Luminaires must be certified by an independent testing organization in accordance with EN 60598-2-22 and certificates must be auditable at regular intervals.
- 2. All products must comply with the requirements of the Low Voltage Directive (LVD) and the Electromagnetic Compatibility Directive (EMC). 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 that comply with the requirements of the EU Regulation on the restriction of certain hazardous substances in electrical and electronic equipment and its annexes.
- 6. Emergency lighting fixtures must be self-contained.
- 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 must either turn off or turn a different color.
- 8. Luminaires should have a test button for emergency mode operation test without disconnecting the mains. Optionally, there should be a switch to perform manual battery test between 0-3 hours by disconnecting the mains.
- 9. The luminaire must have a plastic body with Class II insulation. (There must be double protection against contact with electrical parts. It should be such that no extra grounding is required for the products).
- 10. The luminaire housing must have IP65 protection class and this feature must be verified by test reports.
- 11. All plastic parts of the luminaire with the risk of battery contact must be made of polycarbonate material suitable for 850° glow-wire test.
- 12. The electronic control equipment must comply with EN 61347-1, EN 61347-2-7 and EN 61347-2-13 standards and must be certified by an accredited organization.
- 13. The control equipment shall have a safe extra low voltage output with SELV.
- 14. 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.
- 15. Batteries must have a design life of at least 4 years and be able to provide the declared capacity up to 55°C.
- 16. The LEDs used must comply with EN 62471 and EN 62031 standards and this compliance must be certified by an accredited organization.
- 17. 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 should be 6500K cool white.
- 18. Labels on the product must be prepared according to EN 60598-1 and EN 60598-2-22 standards.
- 19. Each product must be packaged in accordance with 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 lighting 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 lighting products should not be operated for long periods of time in an environment other than the operating ambient temperatures specified on the product. If operated, this may cause damage to the device and battery.
- **3.** Products should 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 lifetime of the battery.
- **4.** Batteries show a 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.** 5. The manufacturer will respond to users who report a fault within a maximum of 5 working days for fault resolution.

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