JR Series

JR Series - Performance Specification for Industrial Grade LED Luminaires

1. Luminaire Housing and System Design

1.1. LabTest Certification (LC) to match the specific area rating.
1.2. Flexible mounting options to allow implementation of the luminaire category for a variety of applications.
1.3. Passes 7J impact exceeding IK08 requirements.
1.4. High-pressure die-cast low copper aluminum alloy housing.
1.5. Multi-layer powder-coated housing for chemical and UV resistance.
1.6. Glass or Polycarbonate impact, flame and UV resistant lens.
1.7. Stainless steel fasteners.
1.8. Pressure equalized housing with breathing membrane to accommodate atmospheric differences between the sealed interior and external environment.
1.9. Secondary fastening point for all overhead luminaires.
1.10. Ingress protection rating of IP66 and IP67.
1.11. Retention straps for all accessible junction points.
1.12. Field replaceable light engine with quick disconnects. Field soldering not permitted.
1.13. IP66 rated field accessible power supply chamber for future upgrades (where applicable).
1.14. Heat sink fin spacing, and orientation shall be optimized for drainage, snow/ice melt as well as debris shedding.

2. Light Emitting Diode Specification

2.1. Reported TM21 Lifetime data for L90 shall be greater than 60,000h based on typical junction point temperature at 25°C ambient temperature and typical drive current.
2.2. Correlated colour temperature shall be 5,000K (+/- 300K) for indoor and 3,000K (+/- 300K) for outdoor applications.
2.3. Minimum CRI value of 70 to provide accurate representation of colors and increased visual acuity.

3. Optical Control

3.1. 0% up light when the fixture is installed horizontally in reference to the ground, ensuring no light trespass above the horizontal plane.

3.2. A glare-reduction lens and sharp cutoff to reduce the potential for glare.

3.3. Secondary optics to shape the light and deliver targeted illumination, which reduces light spillage into sensitive areas.

4. Power Supply Specification

4.1. Auto ranging constant-current output power supplies that are optimized for the anticipated thermal load.

4.2. 0-10V dimmable.

4.3. Lifetime projection (not MTBF) of > 100,000h.

4.4. Field replaceable power supplies with spring-clamp splicing connectors that provide enhanced vibration resistance and lower probability of loose connections.

4.5. Built-in surge suppression.

5. Manufacturing

5.1. Manufacturer shell have no less than 10 years of experience in supplying industrial and hazardous location LED based luminaires.

5.2. The luminaire shell be manufactured in an ISO 9001:2015 certified facility in North America.

5.3. Project documentation and final packaging labels must match the luminaire types (where applicable) to support rapid deployment during the construction stage.

6. Warranty

6.1. The manufacturer shall provide a 5-year luminaire warranty, which shall include housing, light engine and power supply.

6.2. The warranty shall be tied to and tracked based on luminaire serial number and be transferable from the original purchaser to the final facility owner / operator.