NXT™ SERIES

PERFORMANCE SPECIFICATIONS

1. LUMINAIRE DESIGN AND PERFORMANCE

1.1 cULus , NOM, C-Tick, CE listed.

1.2 Capable of ±5° of vertical tilt, with a built-in step mount with increments of 2.5°.

1.3 Surge protection of 10kV, 10kA as per ANSI C62.41.

1.4 Tool-less surge protection module (i.e. replaced without a single tool).

1.5 3G vibration testing as per ANSI C136.31 Roadway Luminaire Vibration. Required documentation: Independent 3rd party laboratory report.

1.6 Single-piece die-cast A360 aluminum housing. Housing shall not contain extruded aluminum, nor consist of multiple pieces fastened using bolts, screws, or other mechanical fastening devices.

1.7 NXT-S & NXT-M: Minimum Efficacy (Luminaire) of 105 Lm/W (350mA drive current, at 25°C/77°F ambient temperature). NXT-C: Minimum Efficacy (Luminaire) of 100 Lm/W (700mA drive current, at 25°C/77°F ambient temperature).

1.8 Lighting module (light engine and optics) shall be a single unit that is field-upgradeable without the use of a single tool, with a touch-time of less than 2 minutes.

1.9 Lighting distribution pattern shall be field changeable without the use of a single tool.

1.10 Optics shall be covered by a flat, IK09 rated glass lens.

1.11 Power supply chamber shall be ingress protection rated IP66. Sealed power supplies in an IP54 or other non-IP66 rated chamber shall not be acceptable.

1.12 Luminaire's IP66 chamber shall be fitted with a filter to accommodate pressure differences between sealed fixture internal chambers and the outside environment.

1.13 Area between heat sink fins shall be angled at a minimum of 5° to promote drainage, ice/snow removal, and shedding of other debris.

1.14 Shall have no exposed screws beyond those in the terminal block area, ground lug, and the door latch.

1.15 Painted luminaires shall be tested in accordance with ASTM B117 to 1,000 hours.

1.16 Independent 3rd party IES LM-79-08 report shall be provided for all luminaires submitted.

1.17 Luminaire shall be equipped with 7 pin receptacle as per ANSI C136.41

1.18 Luminaire shall be available with optional 20 year design life photocell with a minimum 10 year warranty.

1.19 Shall be suitable for secure mounting on a 42-60mm (1.625" - 2.375") outside diameter horizontal tenon and have optional vertical mount (post-top mount) capable of accepting 76mm (2.99") and 60mm (2.36") tenons.

2. LED SPECIFICATIONS

2.1 At 10,000 hours, LM-80 data shall demonstrate lumen maintenance of 97% or better at 85°C/185°F Junction Temperature and an operating current of 700mA.

2.2 LM-80 data shall demonstrate calculated L70 of 347,000 hours or higher at 85°C/185°F Junction Temperature based on minimum of 10,000 hours data at 700mA.

2.3 Correlated Color Temperature (CCT) shall be 4000K +/-400K, with a minimum CRI of 60 (Optional 5000K ±400K).

3. POWER SUPPLY (DRIVER) SPECIFICATIONS(120 - 240V STANDARD POWER SUPPLY)

3.1 Power supply shall be a high reliability system with design features and components that provide for a minimum of 20 years life expectancy at 20°C/68°F ambient temperature.

3.2 Power supply shall be upgradeable in the field without the use of a single tool, with a touch- time of less than 2 minutes.

3.3 The power supply drive current shall be less than or equal to 700mA unless it can be demonstrated that power supplies with higher drive currents can meet the Mean-Time-Between-Failure (MTBF) requirements defined by user.

3.4 Power supply shall contain no tar or urethane-based potting materials. Required documentation: Written confirmation of compliance from power supply manufacturer.

4. MANUFACTURING

4.1 Manufacturer shall have no less than five (5) years of LED street light manufacturing experience and a minimum of 100,000 LED street/roadway luminaires installed. Required documentation: Written confirmation from luminaire manufacturer.

4.2 ISO 9001 certification for power supply and light engine assembly facilities.

4.3 Power supply and LED light engine assembly shall take place in a single RoHS certified facility for quality and process control purposes. Required documentation: Certification of facility RoHS compliance.

4.4 Nitrogen shall be used in the soldering process. Required documentation: Compliance letter from the electronics facility utilized.

5. WARRANTY

5.1 Manufacturer shall provide a 20 year luminaire warranty, which shall include housing, power supply and LED light engine.

5.2 If luminaire manufacturer does not manufacture power supplies in-house, manufacturer shall supply a 10 year power supply warranty from the 3rd party power supply manufacturer (OEM). Required documentation: 10 year power supply warranty from power supply manufacturer.

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