

## COLD CATHODE LIGHTING SPECIFICATIONS System BNP (standard-output ballast-operated cold cathode)

**LAMPS:** Shall be 50,000-hour, 25mm triphosphor-coated cold cathode, operating at 100 mA and producing 386 lumens per foot (warm white 30TC). Manufacturer shall submit ITL photometric reports to substantiate.

**LAMP HOLDERS:** Shall be circuit interrupt UL listed (U.S. and Canada) type BL (surface mounted) or type BL-R (recess mounted), white electrical porcelain in 20-gauge, white, powder-coated enclosures. Phosphor bronze clips within the lampholders shall serve to electrically connect and retain the lamp. Circuit-interrupt function shall de-energize the ballast when a lamp is removed from the lampholders.

**BALLASTS:** Shall be UL listed (U.S. and Canada), class P thermally protected, sound rated A, circuit-interrupt type and shall be the models designated on the shop drawings. Ballasts shall be located within 55 feet of the lamps and shall be installed in an accessible location by installation: within the cove, an accessible electrical or maintenance closet, above a lay-in ceiling, or above an access panel. Ballast locations may not exceed 100 degrees F. To avoid any electrical noise interfering with computer, public address, or telecommunication systems, all cold cathode ballasts shall be supplied from distribution transformers dedicated to lighting only. If distribution or isolation transformers are not available, cold cathode ballasts must be fed from a dedicated circuit with separate neutral wiring. Additionally, all cold cathode ballasts and associated conduits and wiring shall maintain a 24" separation from any computer, public address, or telecommunications wiring and equipment. If ballast enclosures are mounted to a metallic surface, installing contractor may be required to provide a 1/8" neoprene pad between the ballast enclosure and the mounting surface to avoid any potential harmonics.

**WIRING AND CONDUIT:** Cathode Lighting Systems Inc. shall provide 1000-volt ballast wire to be installed in strict accordance with the instructions on the shop drawings. Installing contractor shall provide conduit, conduit fittings, and ground wire. All components and installation methods provided by the installing contractor shall comply with the NEC (National Electric Code) and applicable local codes.

**SHOP DRAWINGS:** Shall be CAD generated and shall be submitted for approval and future maintenance. Drawings shall show lighting layout, method of installation and a complete bill of materials. Installing contractor is responsible for furnishing "as built" dimensions or full-sized patterns, as requested on the shop drawings.

**DIMMING:** System BNP shall be furnished in a standard dimmable version, and specifier or contractor must verify with dimmer manufacturer that dimming system is compatible with normal power factor magnetic cold cathode ballasts.

**MANUFACTURER:** Shall be listed under UL (U.S. and Canada) category *IFAY - Electric Discharge Lighting Systems*. Manufacturer: Cathode Lighting Systems Inc., Gaithersburg, MD, USA; (800) 551-5012. Website: [www.CathodeLightingSystems.com](http://www.CathodeLightingSystems.com)