

# Specification for Freeway Lighting Systems Photo Cell Control

09/09/08

## Mechanical

1. Shall be a twist lock type.
2. Shall have a sealed control relay.
3. Shall Meet or exceed all requirements of ANSI C136.10- 2006 except as modified in this specification.
4. Shall have a housing color that is in compliance with table 1 of ANSI C136.10- 2006. The photocontrol shall be colored blue.
5. Shall have a housing constructed of opaque, impact resistant and UV resistant material.
6. Shall have an impact resistance of greater than 1.0 ft-lbs at -20°C.
7. Shall be capable of withstanding a drop of 3 feet to a concrete floor without causing damage to the housing or damage to the electrical operation.
8. Shall be marked with the month and year of manufacture.
9. Shall be marked with an individual serial number.
10. Shall be marked with the complete part number (model description)
11. Shall be marked with operating voltage range.
12. Shall be marked with load range.
13. Shall be marked or labeled as required by UL or CSA as a listed or registered part.

## Electrical

1. Shall be UL or CSA listed or recognized.
2. Shall operate at a line voltage of 105 – 305 VAC @ 50/60 hertz.
3. Shall have a load rating of 1800 VA.
4. Shall turn on at  $0.8 \pm 0.2$  ftc.
5. Shall turn off at 1.5 times greater than the turn on light level.
6. Shall have a sealed silicon photo sensor.
7. Cadmium sulphide photo sensors are not acceptable.
8. Shall use the normally closed contacts on the control relay.

9. Shall fail in the on state.
10. Shall have an instant on feature when the appropriate light level is reached.
11. Shall have a 2 -5 second off delay when the appropriate light level is reached.
12. Shall have transient suppression wired line to neutral capable of surviving 5 surges at 9500 amps at 1 minute intervals. The surge wave form shall be as described in ANSI C136.10-1996 section on High Surge.
13. Shall consume 0.5 watts of power or less at 120VAC.

**Warranty**

Shall have a 4 year warranty.