#46 R8 Lombardy, Ontario K0G 1L0 800-278-2032 www.csbg.ca

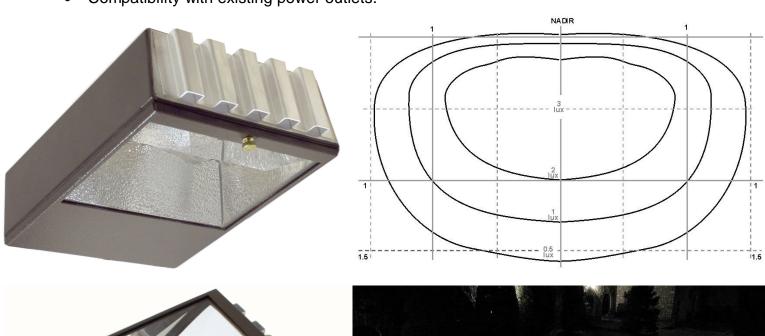
LUMINAIRE FIXTURE

Canadian Scotobiology Group (CSbG)

Artificial light at night is now recognized as an environmental pollutant and a contributor to poor health. Minimizing the impact of nighttime lighting can reduce these problems. CSbG luminaires minimize the ecological and human health effects by addressing the illumination level, extent of illumination and the colour of the emitted light.

This new luminaire has the following attributes.

- Full cut-off optics to limit the extent of the illumination,
- No blue light that disrupts human health and that of wildlife,
- Wide and uniform illumination to reduce over lighting, and requiring fewer fixtures,
- Adjustable light output to accommodate various mounting heights,
- Baffles to prevent the direct view of LED emitters,
- Low temperature LED operation,
- Night vision preservation,
- Low power consumption, and
- Compatibility with existing power outlets.







Requirements for Dark Sky Preservation

General

- Full cut-off optics to limit affected area
- Illumination level of < 3-Lux (adjustable)
- Emitted spectrum: >500 nm
- Timer and motion detection compatible

Applications

- Wall Mount (building entrance) Typical Mounting height: 2.3-meters Illuminated area: about 7 x 3 meters
- Pole Mount (pathway lighting) Typical Mounting height: 4-meters Illuminated area: about 10 x 6 meters
- Pole Mount (parking lot and roadway) Typical Mounting height: 6-meters Illuminated area: about 15 x 9 meters

CSbG Eco-Light Specifications

Illumination (Dark Sky compliant)

- Full (Sharp) cut-off (<1% in "glare zone")
- BUG Rating 0, 0, 0
- Minimal backlight
- Baffled LEDs for safe viewing
- Emitted spectrum: restricted to >0.5 microns
- 12 field-settable illumination levels
- Uniformity: 3:1 over target area

Mechanical

- Low LED temperature for long life
- Size: 20x26 cm square x 8 cm high
- Enclosure: Aluminium

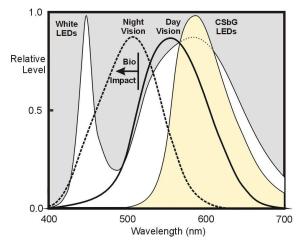
Electrical

- Voltage: 110/220/277 vac
- Electrical power: 10-watts (nominal)
- Interface uses existing switches and controls
- Accessible brightness controls

CSbG's "amber" spectrum avoids biologically sensitive range while maximizing illumination for photopic (cone cell) visibility while helping to preserve night vision.

The "blue peak" of white LEDs exhibits a poor fit to our daytime vision, while adversely affecting

our night vision and biology.



Imagine, stepping outside and not being blinded by the night. A light that let's us see the illuminated ground, and also the distant treeline and Milky Way.

FOR

wall mount, pathway, parking lot and roadway, off-grid security, patio and garage lighting – in rural and suburban areas.

Canadian Scotobiology Group #46 R8, Lombardy, ON, K0G 1L0

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Rationale for Specifications: www.csbg.ca/Specs.pdf www.csbg.ca/Poster.pdf

IES File: www.csbg.ca/images/IES-H875C.ies