

# Lightwaves

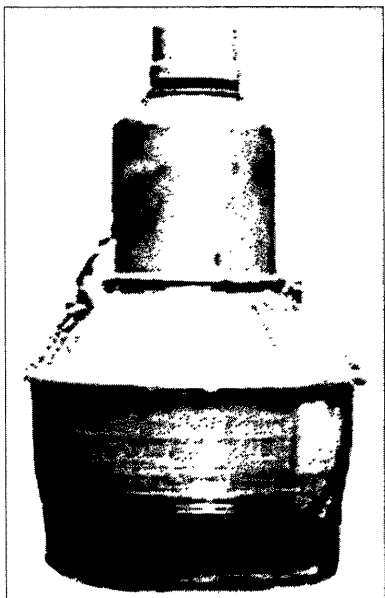
by Bill Broderick, Kingston Centre

## THE HUBBELL SKYCAP

Do you have a dusk-to-dawn security light? Do you know someone who does? Chances are it is a variety known as the NEMA (National Electrical Manufacturer's Association) head type, distributed by Hubbell Canada and others. Over ten million NEMA head outdoor lights are in use in the United States – that equates to probably one million in Canada.

One feature of the NEMA head type of light is that it has a glass or plastic cylindrical glare diffuser, or lens, that tapers inward towards an open bottom. It does almost nothing to diffuse the glare and approximately half of the light is allowed to shine horizontally and upward. Some 45% of the light never reaches the ground where it, presumably, is wanted.

In 1994, Hubbell came out with a spun aluminum reflector called the "Skycap." The reflector replaces the transparent refractor-type "lens" with dramatic improvements to the performance of the light. Outdoor Lighting Associates' info sheet says: "At a standard mounting height of 25 feet (7.5 m), the Hubbell Skycap effectively lights an area 200 feet in diameter. Glare is greatly reduced and direct uplight is totally eliminated. Light trespass onto adjacent properties is history. Light levels on the ground are increased by up to 130 percent (45 percent on the average), so a 70 W HPS lamp is adequate for most any situation."



A standard NEMA head light fixture

Following the introduction of the Hubbell Skycap, Outdoor Lighting Associates came out with their own version, making what they feel are a couple of improvements. Essentially, they are a "centering ring" and improvements to the latching mechanism to "provide a stronger attachment to the NEMA head." Outdoor Lighting sells their product for \$US 35 plus \$US 10 for shipping. They will ship up to three units for the same ten dollars. Note: Shipping costs to Canada are probably a bit higher, and exchange, duty and applicable taxes will increase the cost considerably.

The original Hubbell Skycap can be purchased from Hubbell Canada, or any electrical supply outlet which sells Hubbell lighting products. Ask for catalog item NPU-BI "Replacement Retrofit Optics." The cost is about \$53 plus taxes. You can purchase a complete NEMA head unit with Skycap optics for approximately \$211 plus taxes. The assembly, containing a 70 W high-pressure sodium bulb, is part number NPU-07S1-B1.

Is the Skycap a good buy? I saw the Outdoor Lighting Associates' version demonstrated at a light pollution conference which was held in Milwaukee, Wisconsin last year, and I certainly think it is. In my opinion, the Skycap transformed a perfectly awful light into something fairly decent – and fairly inexpensively, too!

If you are interested in the Skycap for yourself or a friend, here are the addresses to contact:

Outdoor Lighting Associates, Inc.  
1208 Wilson Avenue  
Ames, Iowa 50010-5426  
Telephone/FAX (515) 233-0117  
E-mail: outdoorltg@aol.com

Hubbell Canada Inc.  
870 Brock Road South  
Pickering, Ontario L1W 1Z8  
Telephone (905) 839-1138  
Fax (905) 839-9108

Before closing, I should mention two more products that I am sure would make many "security lights" more user-friendly – a simple on-off switch and/or a motion-detector switch. A security light that comes on only when someone is moving around is much more effective at frightening away intruders than one that is on all the time after dark. Think about how you would react if you were "snooping" around someone's

property and the lights suddenly came on. Burglars are people too.

*The national Light Pollution Committee could use two or three additional members. If you are interested, we would certainly like to hear from you. Also, if you have any thoughts or comments about anything we have written, or what you think the committee should be doing, please drop us a line. Your ideas and input are important. Please write to:*

Bill Broderick

RR #1

Shannonville, Ontario K0K 3A0 ●

*Bill Broderick keeps an eye on the light pollution situation from his observatory northeast of Belleville, Ontario. He is enjoying his retirement from federal public service by pursuing a variety of interests which include several public advocacy issues such as light pollution. Bill is a member of the Kingston Centre, the Belleville Astronomy Club and, of course, the International Dark-Sky Association.*

## LIGHT POLLUTION QUESTIONNAIRE

The Light Pollution Committee wants to know how you feel about the issue of light pollution. Please take a few moments to answer the following questions and give us your comments. Return a copy of this form to:

Bill Broderick

RR #1, Shannonville, Ontario K0K 3A0

- Do you consider light pollution to be a serious problem for astronomy?  
 Yes     No     Not Sure
- Is light pollution a problem for you?  
 Yes     No     Not Sure
- Have you found the articles on light pollution in recent issues of the Bulletin interesting, informative and helpful to your understanding of the issues involved?  
 Yes     No     Not Sure
- Do you think that the RASC should be involved, through its light pollution committee, in seeking and promoting solutions to the problem of light pollution?  
 Yes     No     Not Sure
- Do you support the idea of a Canadian campaign for dark skies involving amateur and professional astronomers and their organizations and other interested individuals and organizations?  
 Yes     No     Not Sure
- Would you consider donating money and/or time to such a campaign if given the opportunity to do so? (If yes, please provide name, address, phone number.)  
 Time:     Yes     No     Not Sure  
 Money:     Yes     No     Not Sure

Additional comments:

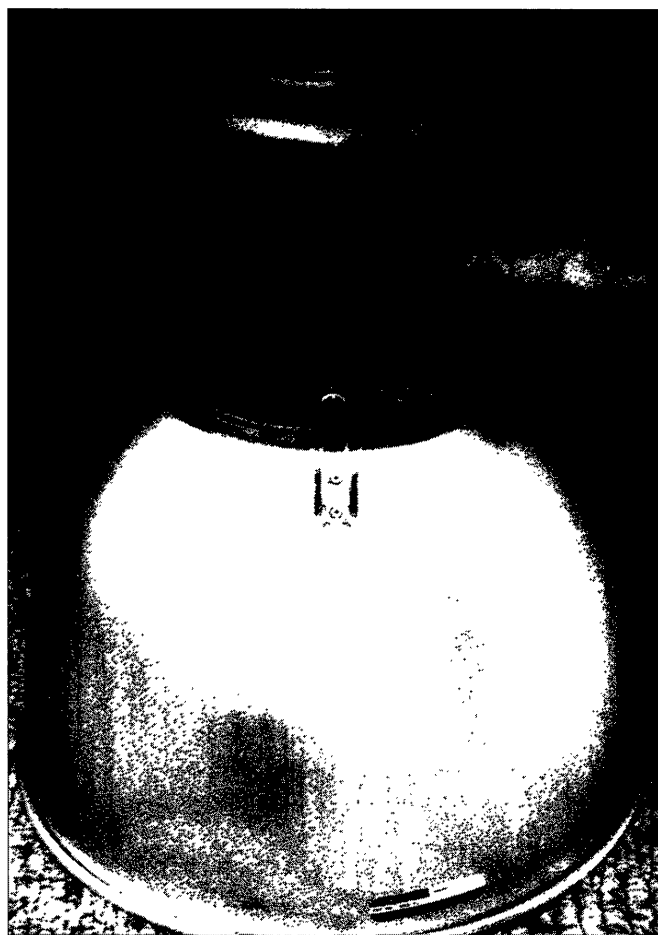
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*The enhanced version of the Hubbell Skycap*



*A NEMA fixture, retrofitted with a Skycap*