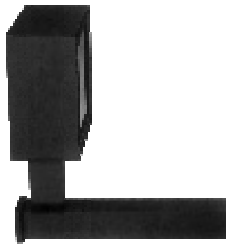


OUTDOOR FIXTURE EXAMPLES

GOOD



BAD



What can **you** do to reduce light pollution?

- * Get educated on the issues.
- * Make sure outdoor fixtures at your house are only on when needed.
- * Adjust or replace fixtures that shine light outward rather than downward.
- * Talk to your neighbors about using motion-sensing lights or retrofitting existing outdoor lights to reduce light pollution
- * Use the correct type of light for the situation: i.e. Low Pressure Sodium (preferred).
- * Talk to local businesses such as car dealerships, gas stations, and restaurants of the benefits of full cutoff down shine lighting:
 - * Energy savings
 - * Reduced glare
 - * Environmental impact from wasted light.
- * Contact your local government. Each year more West Michigan townships and cities are protecting the night sky with practical lighting ordinances.

Websites for more information on Light Pollution

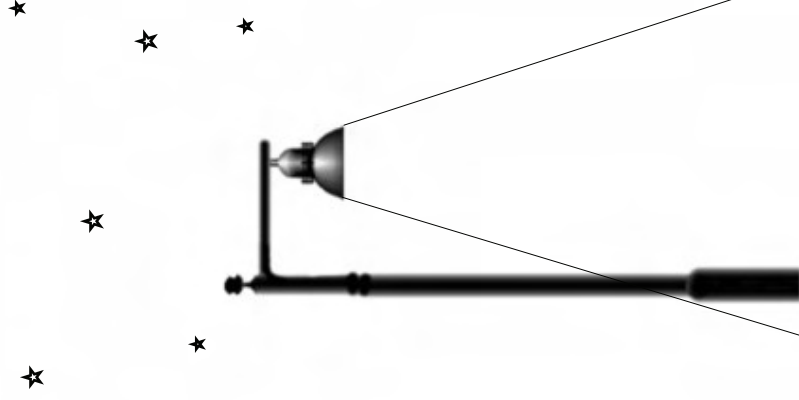
Grand Rapids Amateur
Astronomical Association
www.graaa.org

International Dark-Sky Association
www.darksky.org

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RECOMMENDATIONS FOR COMMON SENSE OUTDOOR LIGHTING



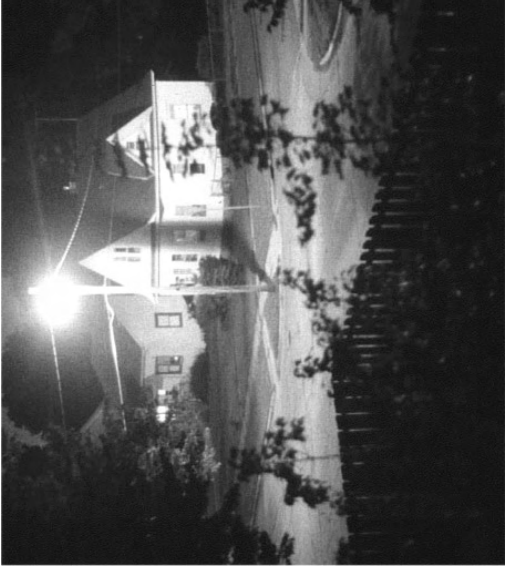
What you can do to minimize light pollution in your community

Have you ever driven down a street at night and been suddenly blinded by the bright lights from a roadside business? Or have you ever tried to sleep at night while the light from a nearby business or a neighbor's mercury vapor light shines in your bedroom window? If so, you have experienced light pollution.

Growth in West Michigan brings larger residential areas, more commercial development, and increased outdoor lighting. This also increases the number of outdoor lighting fixtures. However, depending on the design and style of outdoor lighting fixtures chosen, light pollution, blinding glare and wasted energy can be kept to a minimum. Good down shine style fixtures direct light where it is needed: on the ground; out of the eyes of drivers; out of neighbors windows. Don't waste light by shining it up into the sky.

Benefits of using down shine fixtures

- ★ Energy costs are greatly reduced since light is used more efficiently.
- ★ Public safety is increased via the proper combination of lights and lighting fixtures
- ★ Reduced glare on roadways is safer for motorists and pedestrians.
- ★ Aiming light where it's needed results in less glare and light trespass.
- ★ Preserving the night sky as a natural resource for education of our children and enjoyment by all.



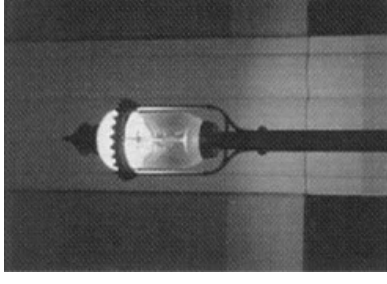
These photos were taken from a bedroom window. Notice the obvious benefits of the improved down shine street light (below).



These lighting codes represent a nationwide movement to combat the ill-effects of poor outdoor lighting. Public health and safety are enhanced by responsible night lighting.



For years businesses have thought that the bright signs, brightly lit buildings and parking lots attract more customers. However, recent studies prove that gas stations, restaurants, and other businesses show an increase in sales and business when using more appealing outdoor down shine lighting.



Decorative streetlights should avoid glaring fixtures such as the one shown on the above left. The better design on the right positions the bulb near the top of the fixture. Light is sent downward where it is needed rather than wasted.