

Light Pollution

*is everyone's
problem*

*Presentation by
John Batinsey*



What is Light Pollution?

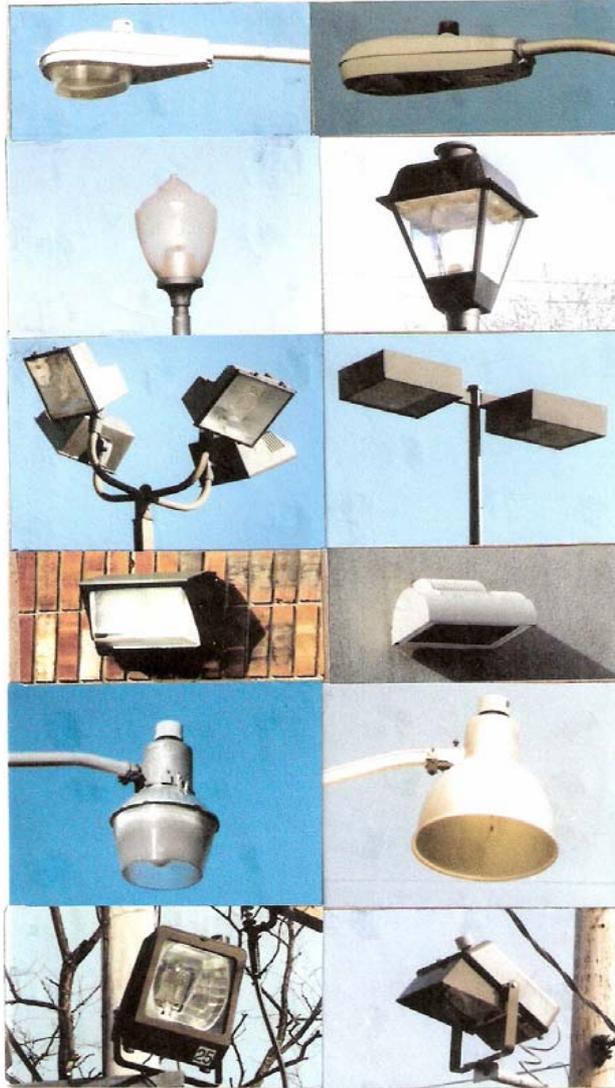
Misdirected or excessive outdoor lighting that causes:

- GLARE
- LIGHT TRESPASS (NUISANCE)
- ENERGY WASTE
- UNNECESSARY SKY GLOW

Luminaire Types

Non-Cutoff

Cutoff



Change Location: Enter US City or Zip C

Live Weather Camera for: Monmouth Beach, NJ 07750

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More Cameras: Click to go Live!

Station Name	Location	Distance
Farmingdale ES	Farmingdale, NJ	8.90 Miles
J.R. Bolger MS	Keansburg, NJ	9.94 Miles
Howell Weather Station	Howell, NJ	13.69 Miles
Wemrock Brook School	Englishtown, NJ	14.68 Miles
Sayreville Upper Elem. School	Parlin, NJ	16.94 Miles

Marketplace

- | | |
|--|---|
| <p>Business</p> <ul style="list-style-type: none"> WeatherBug for First Responders WeatherBug Weather Station WeatherBug Professional Cameras WeatherBug for Business | <p>Consumer</p> <ul style="list-style-type: none"> WeatherBug LIVE Streaming Data WeatherBug Plus Education |
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Monmouth Beach ES



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- [Local Camera](#)
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**Non-cutoff Roadway Lights
like these are a bad choice.**



High Mast



Cobra Head



Offset



offset

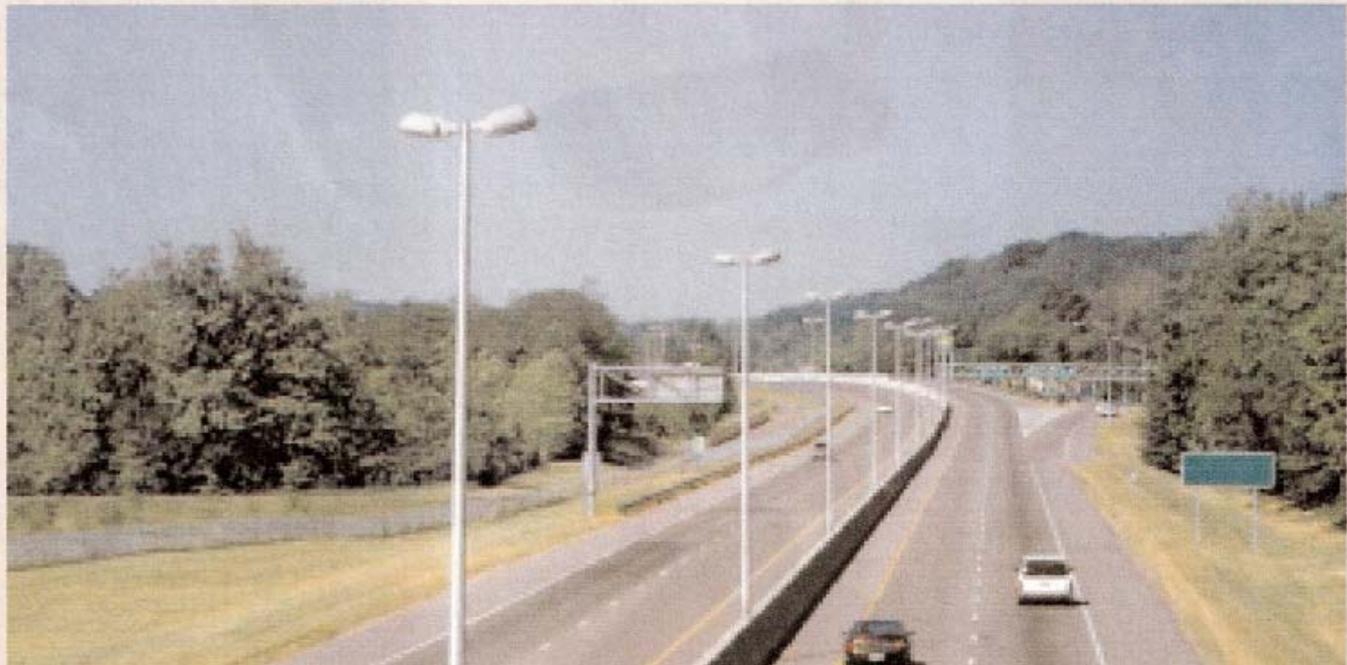
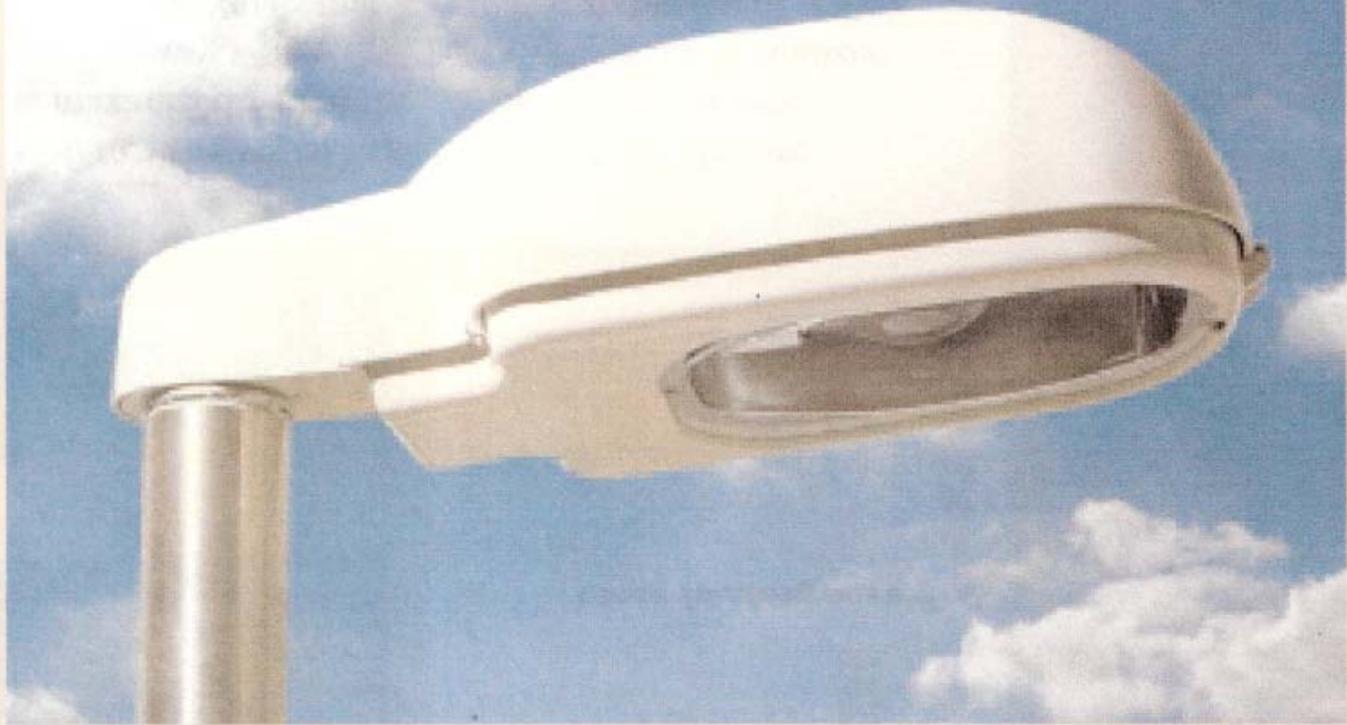


Vertical

**At night, these lights appear
as bright blobs of glare.**

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Media Coverage

- Too much astronomy/dark sky spin
- Issue is not Light versus Darkness
- Issue is Good Lights versus Bad Lights

Why did Eatontown need an ordinance?

- Light pollution (LP) affects everyone
- Controlling LP benefits all (public and business)
- Showed examples of “good” and “bad” lighting
- Follow IES guidelines and State LP Commission

Average Illuminance Levels

TYPE OF FACILITY	MAXIMUM FOOT CANDLES EATONTOWN	COMMONLY ALLOWED FOOT CANDLES
Fast Food Restaurants	2.5	20.0
Car Dealers-Front Row	20.0	120.0
Car Dealers- Other Rows	5.0	100.0
Gas Stations	20.0	150.0
Shopping Malls	2.5	10.0
Industrial	1.5-2.5	7.0

How does LP ordinance work?

- Use full cutoff lights (pole and wall mounted)
- Confine other lights to intended target
- IES illuminance guidelines not exceeded

Submissions

- Full description/picture of every luminaire
- Photometric grid
- Computed average, uniformity ratios
- After business lighting (when applicable)

LP Committee Reviews Lighting Plan

- First, discuss any problems with applicant
- Then, issue letter of recommendations for compliance to Planning Board
- Full agreement easily reached by following IES guidelines
- Ordinance is effective and easy to administer

Glare Nuisance Ordinance

Applicable to all existing lighting, adopted 2006

- Business lighting affecting roadways and other business property
- Business lighting affecting residential property
- Electric utility floodlights affecting roadways and all other property

Information Available for Review

- Identifying Good and Bad Lighting Fixtures (2 pages)
- Outdoor Lighting Ordinance Guide (17 pages)*

*Guide contains Model Outdoor Lighting Ordinance similar to Eatontown's. Also contains key information quoted from various IESNA publications. Intended as a tool for municipal engineers and officials.