



STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION



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Office of the
Commissioner

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**Public Hearing – March 19, 2018
Environment Committee**

**Testimony Submitted by Commissioner James Redeker
Department of Transportation**

SB 425 – AAC LED Light Pollution in the State

The Department of Transportation opposes SB 425, which establishes a preference for the purchase of yellow-tinted LED lights whenever state funds are used for the purchase of LED lights, due to significant fiscal and safety impacts.

The lower temperature (3000 Kelvin) LED lamps typically emit 6-12% (depending on the manufacturer) fewer lumens per watt than the medium color temperature 4000 K LED lamps that the Department typically utilize. This means that the Department would be required to either use higher wattage fixtures or reduce spacing between fixtures in order to achieve minimum recommended light levels and uniformity ratios, and result in higher material and installation costs.

There would also be a reduction in energy efficiency. The practice of using more light fixtures or higher wattage fixtures to achieve minimum recommended light levels and uniformity ratios would be less energy efficient and oppose the original energy efficiency intent of Public Act 01-134.

CTDOT has installed thousands of 4000 K light fixtures through multiple Energize CT energy efficiency improvement programs at its facilities and to illuminate the state highways. The maintenance and spare part consistency would be reduced significantly if CTDOT were required to maintain two different fixture temperatures - 4000 K for all of the lighting systems that have been installed to date, and 3000 K fixtures and spare parts if CTDOT were to utilize 3000 K lighting systems going forward - leading to increased maintenance costs.

Finally, there are reduced color rendition (a measure of the ability of a light source to reproduce the colors of various objects being lit by the source) associated with lower temperature LED fixtures. The 4000 K LED fixtures CTDOT typically utilizes provide greater color rendition in order to assist motorists (especially senior motorists) in identifying pedestrians and obstacles within the roadway. Higher color rendition is typically recommended and desired for performing complex work tasks commonly performed at CTDOT facilities.

For further information or questions, please contact Pam Sucato (pamela.sucato@ct.gov) or CJ Strand (carl.strand@ct.gov) at the Department of Transportation, (860) 594-3013.