INTERNATIONAL DARK-SKY ASSOCIATION

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Ms. Emma Gonzalez-Laders
Division of Building Standards and Codes
New York Department of State
99 Washington Ave.
Albany, NY 12231-0001

Dear Ms. Gonzalez-Laders:

On behalf of the International Dark-Sky Association, I respectfully submit this letter in support of adopting the proposed code change (new subsection C405.2.6.6) to the New York State Energy Code in order to limit the emission of harmful light by commercial outdoor lighting fixtures.

An urgent need exists to control the emission of short-wavelength ("blue") light into the nighttime environment. It is increasingly evident that blue light has a disproportionate impact on the natural world.[1,2,3] Further, exposure to blue light at inappropriate times of day results in measurable changes in the human body that may be associated with chronic health problems.[4,5,6]

In 2010, IDA issued "Visibility, Environmental, and Astronomical Issues Associated with Blue-Rich White Outdoor Lighting", among the first reports drawing attention to the serious concerns associated with the emission of blue light into outdoor spaces at night.[7] It concluded that already at that time there existed "growing evidence for adverse impacts associated with wavelengths shorter than about 500 nanometers."

During the years that followed, the evidentiary basis for limiting blue light emission has only expanded. In 2014, based on adequate availability of lighting products on the commercial market meeting this specification, IDA set its current recommended lighting standard of 3000K.

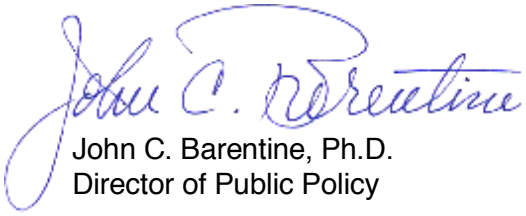
In view of the known and suspected harms of this kind of light, the American Medical Association adopted a resolution in 2016 recommending that the CCT of outdoor lighting not exceed 3000K.[8] Since the AMA findings were released in 2016, many cities and some utility companies have adopted its guidance. Some cities, such as Phoenix, Arizona, have municipal roadway lighting standards featuring CCT values as low as 2700K.

Blue light emission from outdoor lighting fixtures may be effectively reduced through the use of lighting products whose CCT values do not exceed 3000K. This light provides adequate illumination and good rendition of colors in every lighting application without compromising public safety.[9,10] Lighting products with these characteristics are readily

available on the commercial market, come at no added cost to the user, and achieve essentially the same performance as lighting whose CCT values exceed 3000K.

For these reasons, IDA encourages adoption of the proposed code change to limit blue-light emissions from all new commercial outdoor lighting fixtures by limiting their CCT to 3000K.

Sincerely,



John C. Barentine, Ph.D.
Director of Public Policy

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[8] "Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting H-135.927" (https://policysearch.ama-assn.org/policyfinder/detail/H-135.927?uri=%2FAMADoc%2FHOD-135.927.xml)

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