

International Dark-Sky Association

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Rep. Thomas Golden 24 Beacon St. Room 473B Boston, MA 02133

Sen. Mike Barrett 24 Beacon Street Room 416 Boston, MA 02133

Dear Rep. Golden and Sen. Barrett:

On behalf of the International Dark-Sky Association's 411 Massachusetts members, I write to offer our organization's support for bills S.1937 and H.2858 ("An Act improving outdoor lighting and increasing dark-sky visibility"), which are currently before the Joint Committee on Telecommunications, Utilities and Energy.

IDA is encouraged by the bills' contents as well as their progress to date in the 191st General Court. If enacted, S.1937 and H.2858 would immediately become one of the country's most progressive state laws regulating outdoor lighting for the benefits of reduced light pollution, improved night-time visibility, and increased energy savings. It sets a clear standard with regard to the use of artificial light at night that provides for public safety and convenience while also contributing to government responsibility through reduced energy dependence and reliance on the deployment of cost-effective outdoor lighting technologies.

In particular, I want to call attention to two specific aspects of the bills. One provision requires that outdoor lighting is shielded to the greatest practical extent in all applications, and fully shielded for a meaningful subset of those applications. We know of no more effective way of reducing light pollution, including obtrusive light and glare, than confining the use of outdoor lighting only to the places that is needed and thus vastly reducing waste. Importantly, this approach also reduces the impact of skyglow, especially at large distances from the light-emitting sources.

The other significant aspect of the legislation is groundbreaking among U.S. state laws, in that the bills would establish a statewide limit of 3000 kelvins (K) for the correlated color temperature of lighting funded by state or municipal governments. We believe that this would be the first instance in which a U.S. state has established such a statewide standard by law, therefore making Massa-

chusetts a nationwide leader in this arena. Thanks to more than a decade of activism by IDA, a correlated color temperature threshold of 3000K has become recognized as a best practice in the outdoor lighting industry. It is therefore essential, as the national conversion from older lighting technologies to white light-emitting diodes (LEDs) continues, to limit the emission of harmful bluerich white light into the nocturnal environment. Enacting this restriction on the color of publicly funded lighting is a sensible step in this direction.

Since 2014, IDA has called on governments and the lighting industry alike to commit to the sale and installation of only those lighting products whose blue-light emissions are sensibly limited to the fraction associated with "warm" sources at or below the 3000K cutoff. The enactment of S.1937 and H.2858 would send an important message to the public about the benefits of this kind of light, and show that the Commonwealth has obligated itself to leading by example.

We encourage the Joint Committee's full and fair consideration of the bills for the benefit of all Massachusetts residents, and urge you to report them out favorably at the earliest possible opportunity.

Sincerely,

John Barentine, Ph.D.
Director of Public Policy