



PENNSYLVANIA OUTDOOR LIGHTING COUNCIL

AN OPEN LETTER TO MUNICIPAL OFFICIALS

The age of LED lighting is upon us, and unfortunately all too few municipalities have upgraded their outdoor-lighting ordinances to deal with LED's potential downsides. Unlike traditional lighting, LED lighting can be a significant source of discomfort, distraction and disabling glare and thereby adversely impact your citizens' health, safety and welfare.

Discomfort glare refers to the sense of annoyance, ranging from disturbing to unbearable, experienced from lighting that is too bright. Whether from glary signage, area or street lighting, discomfort glare becomes disabling glare when it is so bright it makes it difficult or impossible for a driver to see the road ahead or another hazard, or for a pedestrian to walk or perform tasks safely. The glare response is especially prevalent with the elderly and those on meds, with illnesses, or who are overly tired. Regaining adequate vision after being subjected to very glary lighting can take as long as 2 minutes.

It is strongly recommended that your municipality take the following steps to protect against this potential jeopardy to your citizens' health, safety and welfare, by revising existing ordinance language in accordance with the following suggested requirements and wording.

Area Lighting - In commercial and industrial zones, lighting shall be full-cutoff (all light directed downward, no light emitted above 90°) and except for all-night operations, shall be automatically extinguished by 11 p.m. nightly. Where afterhours site safety/security is an issue, lighting permitted after 11 p.m. shall be automatically dimmed to 25% of the normal level. Source Correlated Color Temperature (CCT) in residential zones shall not exceed 2700K and in industrial/commercial zones shall not exceed 3000K. Luminaire Back Very High (BVH) and Forward Very High (FVH) zonal lumens shall not exceed 240 for residential zones, and 375 for commercial/industrial zones.

Billboard/Sign Ordinance - LED/electronic/digital billboard and advertising sign lighting shall only be permitted in commercial and industrial districts, shall not be allowed to operate between 11:00 p.m. and dawn when located where sign face or its light output is visible from a residential district or use. On limited access highways, sign shall not be located within 1,000 feet of an approaching interchange or traffic-merging lanes. Except for time and weather signs, digital message shall not be permitted to change more than once each 30 seconds. From 30 minutes after sunset to 30 minutes before sunrise, sign brightness output shall be automatically reduced to a level whereby no white portion of sign face exceeds 120 cd/m² (nits). Where located in an area with existing high-ambient light levels, but sign face or its light output are not visible from a residential use, a sign-face brightness not exceeding 150 cd/m² may be permitted by the municipality. Signs and billboards shall have integral dimming capability to allow further brightness reduction if the municipality so requires. Light source Correlated Color Temperature shall not exceed 3000K.

As it relates to streetlights, it is recommended your municipality utilize 2700K sources for all residential districts, and 3000K sources for streets and roadways in commercial and industrial districts.

Please bring this important matter before your planning or governing body to initiate the process of upgrading your ordinance to protect your citizens health, safety and welfare. Please do not wait until an application is received, it will be too late.

If you have questions or would like assistance with ordinance content or wording, please let us know.