



The Society of
Light and Lighting

Opinion: The role of outdoor lighting with pedestrian reassurance

1. Background

For centuries, naturally occurring moon and star light have been augmented with additional anthropogenic light to expand the daily capacity of humans. The expansion of night-time capability has since transformed the way humans live, work and play during hours of darkness.

In recent decades, lifestyle changes and work schedules have evolved to become more varied as humans are no longer constrained by hours of sunlight. For many, hours of darkness are necessary to complete daily activities, thus creating the potential for a higher volume of pedestrian/vehicle interaction at night.

2. The role of lighting

On occasion, there may be physical factors that inhibit pedestrians from walking at night including lack of infrastructure such as no sidewalks or safe pedestrian crossings. Many areas within a community have been designed primarily for vehicles and not pedestrians. Fast speeds, poorly designed intersections and multilane roads are not inviting for pedestrians.

An important consideration for outdoor lighting is when to apply, or not apply, lighting to create visual coherency at night. Night-time pedestrians have fundamental expectations for the outdoor environment such as orientation, wayfinding and hazard detection (i.e. illuminated pathways, changes of grade and moving objects).

Another possible deterrent is fear of the environment or the risk of walking alone at night. This can be compounded if the pedestrian is unsure of their surroundings and/or if there is a lack of other pedestrians to learn from.

3. Pedestrian reassurance

Reassurance, a subjective evaluation of confidence, is vital for night-time pedestrians to engage with and create active and vibrant spaces. Observing other people enjoying an outdoor environment is very important, especially if groups are talking and laughing. When properly illuminated, pedestrians will receive visual order and understanding of their surrounding environment, including the spatial periphery. This information will allow a threat assessment regarding points of egress versus pedestrians with questionable expressions, posture and body type.

Outdoor lighting itself has the ability to communicate information about a space. Having building facades and/or entries lighted with low-glare downlights provides a welcoming environment. Lighting, specifically for pedestrian walkways and paths that provide even illumination, minimal glare or brightness and some surrounding light, helps define the path where one can easily view approaching pedestrians. This ‘outdoor living room’ lighted with warm colour, low glare and yet consistent surround is familiar and comfortable.

4. Flexible lighting

With a wide range of daily tasks and a wide range of built environments surrounding them, outdoor lighting is being asked to meet countless visual scenarios. The age and reassurance of the user, the task itself, level of darkness, activity density, rural or urban conditions, special familiarity, surrounding background, potential hazards, weather, the season and global region all play a role in establishing the outdoor lighting needs for pedestrians.

The consumer goods world has capitalized on this scenario by moving away from mass production products with few options to newer business models that require special, custom, unique, low-volume products with high variability, it is called flexible manufacturing.

What if outdoor lighting followed suit and became flexible enough to respond to spatial conditions and user needs to create uniquely illuminated environments based on the varied inputs? Weather, cell phone activity density, regional preferences and law enforcement schedules could all factor into ‘just in time lighting’,

dimming and turning off lighting when it is not needed. This would save tremendous amounts of energy and provide less ecological harm from unwanted lighting in the outdoor environment. The stars would come back and be visible for everyone to enjoy with awe and wonder! The joy of being outside at night!

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