



**PROJECT TITLE:** DEMONSTRATING URBAN OUTDOOR LIGHTING FOR PEDESTRIAN SAFETY AND SECURITY

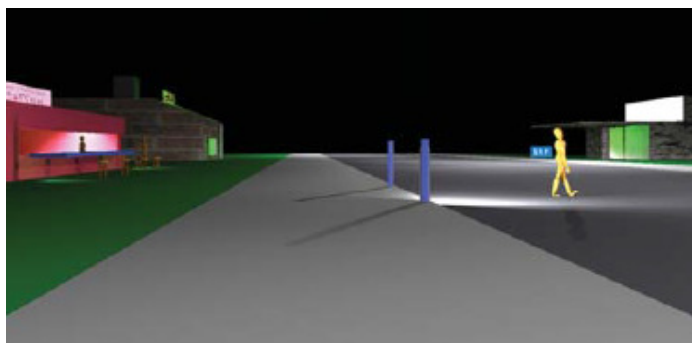
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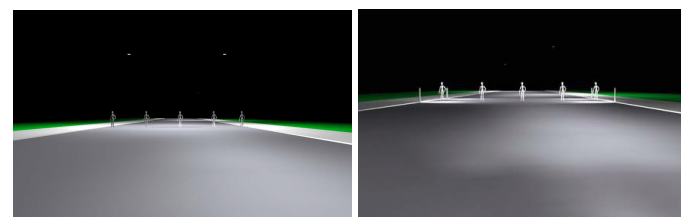
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**P**edestrian safety is a critical element of urban transportation. A review of published literature, as well as real-world demonstration activities, indicate that bollard-level crosswalk lighting has excellent potential for enhancing pedestrian visibility and improving safety at crosswalks, particularly where the presence of a crosswalk might not be expected by approaching drivers.



**S**uch locations include midblock crossings, roundabouts and locations near schools and other public venues that might experience high levels of pedestrian traffic at sporadic or unexpected times. The light levels produced by the system and measured during a nighttime demonstration installation were sufficient to achieve high levels of visual performance.



**T**he push button control used by the prototype bollard system allowed the luminaires to produce a relatively low, glare-free light level when not in use, while still making them highly visible to pedestrians and drivers. The temporary cycling between low and high light levels that occurred when the button was pressed could act as a visual alert to warn drivers that a pedestrian is present and waiting to cross the street, and the higher light level of at least 10 vertical lux in the crosswalk resulted in high levels of visibility.

