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The Evaluation of an Office Building According to LEED Certificate Lighting Criteria. L&E 27 (6) 2019

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Abstract:

The progress in industrial and technological areas, which started with the Industrial Revolution, has deteriorated the ecological balance and depleted the natural resources. Sustainability, which initially seemed as a solution within this concept, became an important part of Interior Architecture as in disciplines related to design. The lighting systems of the offices that are the secondary living areas should be evaluated in terms of sustainability as well.

In this paper, the energy savings and loss of the artificial office lighting systems has been calculated according to the ASHRAE/IES standard 90.1-2007¹ which are included in the Leadership in Energy and Environmental Design (LEED) certificate's lighting criteria [1]. The wattage of the artificial lighting systems has been calculated while the systems were in use. The results of these measurements have been compared with lighting wattage and thus the lighting energy savings and loss have been configured. The office has been comparatively analyzed according to LEED criteria.

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