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INFLUENCE OF THE LUMINAIRE INTENSITY CURVE TYPE ON THE LEVEL OF LIGHT POLLUTION

Summary

Lighting of the outdoor areas is one of the fastest growing branches in contemporary lighting technology. Usually these are: road lighting, neon, billboards and illuminations of buildings or landscapes. This friendly and attractive lighting improves the safety of the area. However, at the same time the artificial lighting becomes a source of unwanted light in the environment known as a light pollution. It depends on the place of installation of the lighting fixture, the kind of light source and the properties of reflective objects in the vicinity of the luminaire. The light fixtures are characterized by multiple parameters which can be analyzed in order to determining their impact on the effect of light pollution. Analysis presented in this paper showed that the luminaire light distribution curve significantly affects this undesirable effect. The analysis, carried out using Dialux software, chosen ten types of light distribution curves of lighting fixtures which represent typical light fixtures used in the lighting technology. The article presents graphical interpretation of the level of light pollution emitted by given luminaire according to its specific light distribution curve.