

Calculation of Tunnel Lighting Quality Criteria

CIE 189:2010

Experience of making road tunnel lighting designs in accordance with publication CIE 88:2004 has shown that there are some aspects of calculation of the different lighting criteria where more specific guidance to the designers is necessary.

This document explains how the tunnel environment differs significantly from the open road situation. In particular, the presence of walls along the traffic road involves reflection effects between different surfaces. The variation of luminance level along the tunnel, the changes in the lighting installation along the entrance section of the tunnel and the use of different lighting systems in different parts of the tunnel introduce more complexity in the lighting calculations. The report gives guidance on determining the method for calculating the relevant lighting quality criteria for tunnel situations.

The publication is written in English, with a short summary in French and German. It consists of 18 pages with 4 figures, and is readily available via the website of the Central Bureau of the CIE (www.cie.co.at).

The price of this publication is 56, (Members of the National Committees of the CIE get 50% discount.