

Thesis Abstract cohort 2012-2014
The International Master of Science in Fire Safety Engineering

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Virtual Reality experiments on the impact of way-finding lighting systems on egress from smoke-filled railway tunnel

The thesis presents an experimental study, performed at Lund University, Sweden, focused on the evacuation of a railway tunnel filled with smoke. The experiment is aimed at the evaluation of the efficiency of high-bright and dynamic lights situated at the intersection between the tunnel walls and the sidewalk. The experiment is carried out in a Virtual Reality environment using an Head Mounted display. The behaviour of 60 test participants has been investigated given the presence or absence of this particular way-finding installation. The final goal of this study is to determine if the use of dynamic and flashing lights can support participants' evacuation in an emergency situation.
