

Abstract Submitted
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Color separation in metal halide lamps W.W. STOFFELS, T. NIMALASURIYA, A.J. FLIKWEERT, W.J.M. BROK, J.J.A.M. MULLEN, G.M.W. KROESEN, M. HAVERLAG, Eindhoven University of Technology, P.O. Box 513 5600 MB Eindhoven, The Netherlands — Metal halide discharge lamps are efficient lighting sources. However their widespread application is hindered by several problems. One problem is color separation. This is caused by a non-homogeneous distribution of radiating species within the lamp. It is believed to be the result of a complex interplay between diffusion and convection processes. In this contribution convection in the lamp is varied by placing the lamp in a rotating centrifuge. The resulting centrifugal force of up to ten times the normal gravitational force enhances the convection within the lamp and allows studying its effect on the color separation.

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