## Abstract Submitted for the OSS10 Meeting of The American Physical Society

## The Helmholtz-Kohlrausch Effect with Application to Exit Signs

ROBERT DONOFRIO, OSA — This paper reviews the reported luminance of exit signs and the Helmholtz-Kohlrausch effect with application to exit signs. We discuss a number of types of exit signs and show how the Helmholtz Kohlrausch effect is involved with low light levels. We will review our studies on the brightness of LED mesopic luminaires and discuss how exit signs may operate at a lower luminance then is presently required. The use of LED signs under these mesopic conditions may improve energy efficiency of exit signs.

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