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Recommended Practice—Lamp Seasoning for Fluorescent Dimming Systems

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When new fluorescent lamps are installed in a dimming system, there is the possibility that some of the lamps will exhibit flicker or other visual instabilities. This condition can be caused by residual impurities that may be present in a new lamp as a result of normal manufacturing processes or affected by initial mercury distribution in a new lamp.

Operation of the lamps at the ballast's maximum light output setting should clear up any impurities or allow time for the mercury to distribute, eliminating any visual instability. An extensive study performed by NEMA of fluorescent dimming indicates that seasoning prior to dimming is not required to obtain rated lamp life.

NEMA fluorescent lamp manufacturers recommend that whenever flicker or instability is present, or, to reduce possible flicker or instability when new dimming systems are commissioned, lamps should be operated at the ballast's maximum light output setting overnight (approximately 12 hours).

Overnight seasoning is particularly recommended for optimum initial performance or installations where dimming performance (tracking, stability) is considered critical.

References:

1. *Dimming Fluorescent Systems Life Experiment*, M. Duffy, R. Erhardt, P. Hakkarainen, R. Hunt, T. Leyh, R. Nachtrieb, C. O'Rourke, T. Poehlman, R. Runkles, and H. Wolfman, Proceedings of the 11th International Symposium on the Science and Technology of Light Sources, May 2007, Shanghai, China.
2. *Dimming Fluorescent Systems Life Experiment*, M. Duffy, R. Erhardt, P. Hakkarainen, R. Hunt, T. Leyh, R. Nachtrieb, C. O'Rourke, T. Poehlman, R. Runkles, and H. Wolfman, IESNA Annual Conference, November 2008, Savannah, GA.

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