NEMA Standards Publication

NEMA 410

# Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Discharge Ballasts

National Electrical Manufacturers Association

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*Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Discharge Ballasts*

*Published by:*

**National Electrical Manufacturers Association**
1300 North 17th Street, Suite 1752
Rosslyn, Virginia 22209
Approved April 7, 2011

www.nema.org

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# Foreword

The purpose of this standard is to provide guidance for the design and testing of lighting controls and switching devices to be used with electronic drivers, discharge ballasts, and self-ballasted lamps. This document defines the worst case inrush current expected to be encountered in field installations, and establishes uniform test criteria for compatibility.

In the preparation of this standard, input of users and other interested parties has been sought and evaluated. Inquiries, comments, and proposed or recommended revisions should be submitted to the NEMA Wiring Device Section and Lighting Systems Division by contacting:

Vice President, Technical Services
National Electrical Manufacturers Association
1300 North 17th Street, Suite 1752
Rosslyn, Virginia 22209

This is the second edition of this guide.

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A NEMA working group that included representatives from the Lighting Systems Division and members of the Wiring Device Section developed this standard. Approval of this guide does not necessarily imply that all members voted for its approval or participated in its development.

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# Section 1
# SCOPE

This standard covers the definition, measurement, and testing of characteristics relevant to the use and application of lighting controls and electronic drivers, discharge ballasts, and self-ballasted lamps.

This standard covers devices rated 120 and 277 Vac intended to control electronic drivers, discharge ballasts, and self-ballasted lamp loads up to 16 amps of steady state current.

This standard does not cover or require additional testing for 15 and 20 amp general-use ac snap switches tested and listed in accordance with UL 20/CSA C22.2 No. 111, which includes a high inrush tungsten lamp load endurance test. They have been evaluated and determined to be compatible with the electronic drivers, discharge ballasts, and self-ballasted lamps as described in this publication.