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SUBJECT 1029A

OUTLINE OF INVESTIGATION

FOR

IGNITORS AND RELATED AUXILIARIES FOR HID LAMP BALLASTS

Issue Number: 1

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Summary of Topics

This is the first issue of the Outline of Investigation for Ignitors and Related Auxiliaries for HID Lamp Ballasts.

The UL Foreword is no longer located within the UL Outline of Investigation. For information concerning the use and application of the requirements contained in this Outline of Investigation, the current version of the UL Foreword is located on ULStandardsInfoNet at: <http://ulstandardsinfo.net.ul.com/ulforeword.html>.

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INTRODUCTION

1 Scope

1.1 These requirements address the construction requirements and tests for ignitors for high intensity discharge (HID) lamps that require an external starting pulse or pulses. These requirements are for ignitors that could be mounted outside of or remote from a luminaire as well as ignitors that must be installed within the electrical enclosure of a luminaire or sign.

1.2 These requirements include 2, 3, and 4 wire ignitors for use with high-pressure sodium and metal halide lamps, as well as ignitors known as "hot re-strike" type.

1.3 These requirements also cover certain auxiliaries for HID lamps and ballasts: two level dimming (by capacitors), time-out circuits, and controls for auxiliary tungsten lamps.

1.4 These requirements do not cover ballasts that connect with the devices covered by this outline.

2 General

2.1 Components

2.1.1 Except as indicated in 2.1.2, a component of a product covered by this outline shall comply with the requirements for that component. See Appendix A for a list of standards covering components used in the products covered by this outline.

2.1.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this outline, or
- b) Is superseded by a requirement in this outline.

2.1.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.1.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.2 Units of measurement

2.2.1 Except for conductor size, values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.2.2 All values of voltage and current are true root mean square (rms) values unless otherwise indicated.

2.2.3 For customary purposes wire sizes are in American Wire Gauge (AWG).

2.3 Reference publications

2.3.1 Any undated reference to a code or standard appearing in the requirements of this outline of investigation shall be interpreted as referring to the latest edition of the code or standard.

ASTM (American Society for Testing Materials)

ASTM 653

Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

NFPA (National Fire Protection Association)

NFPA 70

National Electrical Code

IEC (International Electrotechnical Commission)

IEC 61347-1

Lamp controlgear – Part 1: General and safety requirements

ISA (The Instrumentation, Systems, and Automation Society)

ISA MC 96.1

Temperature Measurement Thermocouples

UL Standards

UL 1029

Standard for High-Intensity-Discharge Lamp Ballasts