UL 2592

Low Voltage LED Wire

Issue Number: 4

May 20, 2014

Summary of Topics

This fourth issue of the Outline of Investigation for Low Voltage LED Wire, UL 2592, has been revised to include optional requirements for wire used in a cable tray or other locations within a building.

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INTRODUCTION

1 Scope

1.1 These requirements cover single-conductor and multi-conductor, unjacketed, 18 – 10 AWG (0.807 – 5.16 mm^2), low voltage LED wire rated 105°C – 250°C (221°F – 482°F), and 300 or 600 volts, suitable for installation in dry and damp, or wet locations. These wires are for use with signs, outline lighting, and interior lighting where the wire is only connected to a secondary circuit, is only accessible during user servicing of the sign, and is not required to be additionally enclosed by the sign enclosure, in accordance with the Standard for Electrical Signs, UL 48.

1.2 Assemblies that include these wires and are intended for use as components of signs shall meet the requirements in the Standard for Electric-Sign Components, UL 879.

1.3 Wires that are surface marked ″-EX″ are for use as exposed runs between a cable tray and utilization equipment where the wires are continuously supported and protected against physical damage using mechanical protection such as struts, angles, or channels.

2 References

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

3 Units of Measurement

3.1 In addition to being stated in the inch/pound units that are customary in the USA, each of the requirements in this standard is also stated in units that make the requirement conveniently usable in countries employing the various metric systems (practical SI and customary). Equivalent – although not necessary exactly identical – results are to be expected from applying a requirement in USA or in metric terms. Equipment calibrated in metric units is to be used when a requirement is applied in metric terms.

4 Materials

4.1 Each material used in a wire shall be compatible with all of the other materials used in the wire.

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