UL 2108

STANDARD FOR SAFETY

Low Voltage Lighting Systems

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UL Standard for Safety for Low Voltage Lighting Systems, UL 2108

Second Edition, Dated December 7, 2015

Summary of Topics

These revisions to ANSI/UL 2108 dated September 27, 2024 include the following changes in requirements:

– Electrical spacings for exposed bare conductors; 23.1 Exception No. 2 (deleted)

– Fuse temperature limit; Table 34.1

– Marking for cabinet and under-cabinet products; 48.4.1, 48.4.2 (deleted)

– Marking for recessed products; 48.5.1, 48.5.2

– Part 1 requirements applicable to Part II luminaires; Table 51.1

– Mounting Means Options for Class 2 Luminaires; 54.2

– Supply Connections; 59.2

– Luminaire Drop Impact Test; 53.3; 62.1; 62.4

– UL 1598 requirements applicable to non-Class 2 luminaires; Table 71.1, Table 76.1, Table 77.1

– Lithium battery charging voltage limit; 81.1

– Editorial updates; 34.2.3, 34.3.2.1, Figure 36.1, 45.3, 51.1, 62.4, 67.1.6, 67.3.2

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated July 19, 2024.

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December 7, 2015

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through September 27, 2024.

The most recent designation of ANSI/UL 2108 as an American National Standard (ANSI) occurred on September 27, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in ULSE's Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 These requirements apply to low voltage lighting systems and components intended for installation in accordance with the National Electrical Code, NFPA 70, Article 411.

1.2 These requirements cover:

a) Power units in which output is limited to 25 A and below the risk of electric shock voltage levels as defined in 3.19; and

b) Class 2, exposed bare conductor, POE, and other low-voltage luminaires and lighting systems.

1.3 These requirements do not cover lighting equipment covered by other standards such as, but not limited to, the Standard for Portable Electric Luminaires, UL 153, the Standard for Track Lighting Systems, UL 1574, or the Standard for Luminaires, UL 1598:

a) Luminaires provided with a cord and attachment plug intended for branch circuit connection. See the Standard for Portable Electric Luminaires, UL 153.

b) Luminaires intended to be mounted to and relocatable along a track, including when the track is supplied at low voltage. See the Standard for Track Lighting Systems, UL 1574.

c) Luminaires intended to be carried by hand or exclusively used not connected to a branch circuit. See the Standard for Flashlights and Lanterns, UL 1576.

d) Luminaires integrated with a power unit in a singular product. See the Standard for Luminaires, UL 1598.

1.4 Light emitting diode (LED) components, controls, and subassemblies integral to a low voltage lighting system shall comply with the applicable requirements of the Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750.

1.5 These requirements do not address certain specialized applications, including but not limited to hazardous/classified locations, emergency lighting, marine (ship-board) lighting, horticultural systems, germicidal luminaires, air-handling luminaires, or luminaires installed over cooking equipment. Low voltage lighting system equipment intended for such applications are to be investigated in accordance with standards written for the purpose.

2 Units of Measurement

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

3 Glossary

3.1 For the purpose of this standard the following definitions apply.

3.2 ACCESSIBILITY BARRIER – A material provided to limit access to uninsulated current-carrying parts that involve a risk of shock and insulated current-carrying parts not intended to be subject to user contact.

3.2.1 BATTERY – General term for (1) any single cell, or (2) a group of cells connected together either in a series and/or parallel configuration. May be ready for use or may be an installed component.

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