UL 1480

STANDARD FOR SAFETY

Speakers for Fire Alarm and Signaling Systems, Including Accessories

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UL Standard for Safety for Speakers for Fire Alarm and Signaling Systems, Including Accessories, UL 1480

Sixth Edition, Dated January 28, 2016

Summary of Topics

The following revisions are being issued for the Sixth Edition of ANSI/UL 1480, the Standard for Speakers for Fire Alarm and Signaling Systems, Including Accessories:

1. Clarification of Scope, Abnormal Operation and Burnout Test, and Mechanical Strength Tests for Enclosures

2. Reference Document Changes and Editorial Corrections

The new requirements are substantially in accordance with Proposal(s) on this subject dated November 18, 2016.

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

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Prepared by:

ULC Standards
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Fourth Edition

Underwriters Laboratories Inc
UL 1480
Sixth Edition

Speakers for Fire Alarm and Signaling Systems, Including Accessories

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ANSI/UL 1480-2017

Approved by

Standards Council of Canada
Conseil canadien des normes

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Commitment for Amendments

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This ANSI/UL Standard for Safety consists of the Sixth Edition including revisions through September 7, 2017. The most recent designation of ANSI/UL 1480 as an American National Standard (ANSI) occurred on September 7, 2017. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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Preface

This is the common UL and ULC Standard for Speakers for Fire Alarm and Signaling Systems, Including Accessories. It is the Fourth edition of CAN/ULC-S541 and Sixth edition of ANSI/UL 1480.

This Joint Standard was prepared by Underwriters Laboratories Inc., ULC Standards, and the NEMA Technical Harmonization Committee on Notification Appliances. The standard was formally approved by the UL Standards Technical Panel on Signal Appliances and the ULC Technical Committee on Fire Alarm and Life Safety Equipment and Systems. The efforts and support of the NEMA Technical Harmonization Committee, UL Standards Technical Panel, and ULC Technical Committee are gratefully acknowledged.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This standard has been approved as a National Standard of Canada by the Standards Council of Canada.

This standard has been approved by the American National Standards Institute as an American National Standard.

Annexes A, C, and E are identified as informative and are for informational purposes only. Annexes B and D are identified as normative and form a mandatory part of this Standard.

> **Note:** *Although the intended primary application of this Standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.*

Level of Harmonization

This Standard is published as an equivalent standard for UL and ULC Standards. An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical deviations are allowed for codes and governmental regulations and those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental, climatic, geographical, technological or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is to be word for word except for editorial changes.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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Speakers for Fire Alarm and Signaling Systems, Including Accessories

1 Scope

1.1 These requirements apply to speakers, rated at 300 V or less, for fire alarm and signaling systems and intended for indoor and/or outdoor installation:

a) In Canada, in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations; and with CAN/ULC S524, Standard for Installation of Fire Alarm Systems.

Note: Refer to CAN/ULC-S525, Standard for Audible Signaling Devices for Fire Alarm Systems, Including Accessories, for requirements pertaining to audible signaling devices.

b) In the United States, in accordance with the National Electrical Code, NFPA 70, and the National Fire Alarm and Signaling Code, NFPA 72.

1.2 These requirements apply to speakers for use in ordinary (non-hazardous or non-corrosive) indoor locations and outdoor locations.

1.3 This Standard also covers protective covers and other accessories used with speakers.

1.4 Speakers for use in hazardous or corrosive locations shall comply with the requirements of this Standard and the applicable requirements

a) In Canada, CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, with respect to the location hazard;

b) In the United States, the National Electrical Code, NFPA 70.

Note: In the United States, general signaling appliances are covered by UL 464A.

1.5 Each product or device referred to as a speaker in this Standard is a speaker assembly suitable for separate installation as a component of a fire alarm system.

1.6 A supplementary visual signal, incorporated as part of Speaker which is intended for fire alarm application shall comply with the requirements of this Standard and the applicable requirements of:

a) In Canada, CAN/ULC-S526, Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories;

b) In the United States, Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, UL 1638, or Standard for Signaling Devices for the Hearing Impaired, UL 1971,

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1.7 Speakers intended for use with fire alarm systems and having integral amplifiers shall comply with the requirements in this standard in addition to the requirements in Standard for Amplifiers for Fire Protective Signaling Systems, UL 1711, and CAN/ULC-S527, Standard for Control Units for Fire Alarm Systems.

1.7.1 Speakers intended for installations requiring a low frequency (520 Hz) notification to awaken sleeping persons shall also be evaluated to ULC-S527, Control Units for Fire Alarm Systems and/or Standard for Control Units and Accessories for Fire Alarm Systems, UL 864.

1.8 Speakers intended for use in air-handling spaces (plenums) shall comply with the requirements in this standard and the requirements in the Standards for Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces, UL 2043 and ULC ORD-C2043.

1.9 These requirements do not cover the following:

a) Speakers intended for personal or private consumer use;

b) Speakers which are intended for commercial or professional audio applications;

c) Speakers intended for security applications.

2 General

2.1 Components

2.1.1 Except as indicated in 2.1.2 a component of a product covered by this Standard shall comply with the requirements for that component. See Annex A for a list of Standards that apply to components generally used in the products covered by this Standard.

2.1.2 A component need not comply with a specific requirement that:

a) Involves a feature or characteristic not needed in the application of the component in the product covered by this Standard; or

b) Is superseded by a requirement in this Standard.

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

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