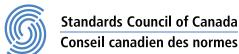


CSA C22.2 No. 37:20 National Standard of Canada







Legal Notice for Standards

Canadian Standards Association (operating as "CSA Group") develops standards through a consensus standards development process approved by the Standards Council of Canada. This process brings together volunteers representing varied viewpoints and interests to achieve consensus and develop a standard. Although CSA Group administers the process and establishes rules to promote fairness in achieving consensus, it does not independently test, evaluate, or verify the content of standards.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document's fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party's intellectual property rights. CSA Group does not warrant the accuracy, completeness, or currency of any of the information published in this document. CSA Group makes no representations or warranties regarding this document's compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL CSA GROUP, ITS VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF CSA GROUP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, CSA Group is not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and CSA Group accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

CSA Group is a private not-for-profit company that publishes voluntary standards and related documents. CSA Group has no power, nor does it undertake, to enforce compliance with the contents of the standards or other documents it publishes.

Intellectual property rights and ownership

As between CSA Group and the users of this document (whether it be in printed or electronic form), CSA Group is the owner, or the authorized licensee, of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. Without limitation, the unauthorized use, modification, copying, or disclosure of this document may violate laws that protect CSA Group's and/or others' intellectual property and may give rise to a right in CSA Group and/or others to seek legal redress for such use, modification, copying, or disclosure. To the extent permitted by licence or by law, CSA Group reserves all intellectual property rights in this document.

Patent rights

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. CSA Group shall not be held responsible for identifying any or all such patent rights. Users of this standard are expressly advised that determination of the validity of any such patent rights is entirely their own responsibility.

Authorized use of this document

This document is being provided by CSA Group for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in print or paper form may be distributed only to persons who are authorized by CSA Group to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and may not permit others to

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from CSA Group; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



Standards Update Service

CSA C22.2 No. 37:20 January 2020

Title: *Decorative lighting products*

To register for e-mail notification about any updates to this publication

- go to store.csagroup.org
- click on Product Updates

The List ID that you will need to register for updates to this publication is 2427653.

If you require assistance, please e-mail techsupport@csagroup.org or call 416-747-2233.

Visit CSA Group's policy on privacy at www.csagroup.org/legal to find out how we protect your personal information.

Canadian Standards Association (operating as "CSA Group"), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users — including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

Individuals, companies, and associations across Canada indicate their support for CSA Group's standards development by volunteering their time and skills to Committee work and supporting CSA Group's objectives through sustaining memberships. The more than 7000 committee volunteers and the 2000 sustaining memberships together form CSA Group's total membership from which its Directors are chosen. Sustaining memberships represent a major source of income for CSA Group's standards development activities.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in eight countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

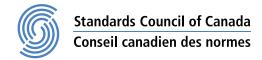
For further information on CSA Group services, write to CSA Group 178 Rexdale Boulevard Toronto, Ontario, M9W 1R3 Canada A National Standard of Canada is a standard developed by a Standards Council of Canada (SCC) accredited Standards Development Organization, in compliance with requirements and guidance set out by SCC. More information on National Standards of Canada can be found at www.scc.ca.

SCC is a Crown corporation within the portfolio of Innovation, Science and Economic Development (ISED) Canada. With the goal of enhancing Canada's economic competitiveness and social wellbeing, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts.

Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

Standards Council of Canada 600-55 Metcalfe Street Ottawa, Ontario, K1P 6L5 Canada





Cette Norme Nationale du Canada n'est disponible qu'en anglais.

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 to judge its suitability for their particular purpose.

[®]A trademark of the Canadian Standards Association, operating as "CSA Group"

National Standard of Canada

CSA C22.2 No. 37:20 **Decorative lighting products**



*A trademark of the Canadian Standards Association, operating as "CSA Group"



Published in January 2020 by CSA Group A not-for-profit private sector organization 178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3

To purchase standards and related publications, visit our Online Store at store.csagroup.org or call toll-free 1-800-463-6727 or 416-747-4044.

ICS 97.180 ISBN 978-1-4883-2586-1

© 2020 Canadian Standards Association All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

Contents

Technical Committee on Consumer and Commercial Products 5		
Integrated Committee on Lighting Products (ICLP) 7		
Preface 13		
1 Scope 15		
2 Reference publications 16		
3 Definitions 18		
4 General <i>24</i>		
5 General requirements 25 5.1 Mechanical construction 25 5.1.1 General 25 5.1.2 Decorative parts 25 5.1.3 Mechanical assembly 26 5.1.4 Enclosures 26 5.1 Enclosures 26 5.2 Electrical construction 31 5.2.1 General 31 5.2.2 Overcurrent protection 33 5.2.3 Accessibility of live parts 34 5.2.4 Supply connections 35 5.2.5 Flexible cords and conductors 35 5.2.6 Wiring devices 36 5.2.7 Polarization 37 5.2.8 Terminals and conductive parts 38 5.2.9 Spacings 38 5.2.10 Splices 39 5.2.11 LVLE circuits 39 5.2.12 Switches 40 5.2.13 Printed circuit boards 41 5.2.14 Lamps 41 5.2.15 Lamping 41 5.2.16 Fuseholders and fused attachment plugs 42 5.2.17 Devices employing insulation-piercing terminals 42 5.3 Outdoor locations 43 5.4 Commercial use product 44 5.4.1 Commercial indoor use product 44 5.5 Motorized devices 44 5.6 Direct plug-in units — Supplementary requirements 44		
 5.7 Products with battery chargers 45 5.8 Tests for all products excluding ornaments and rope lighting systems 46 5.8.1 General 46 		

5.8.2	Leakage current test 46
5.8.3	Humidity conditioning 48
5.8.4	Test voltage and input rating 48
5.8.5	Temperature test 48
5.8.6	Stability test 54
5.8.7	Dielectric voltage-withstand test 54
5.8.8	Strain relief test and wire pull test 55
5.8.9	Wire re-insertion test 55
5.8.10	Abnormal operation test 56
5.8.11	Decorative part flammability test 57
5.8.12	Conductivity of decorative parts test 58
5.8.13	Insulation-piercing terminal tests 58
5.8.14	Abnormal tests for controllers 60
5.9	Additional tests for products with polymeric enclosures 61
5.9.1	General 61
5.9.2	Mould stress-relief test 61
5.9.3	Drop test 62
5.9.4	Impact test 62
5.9.5	Cold impact test 62
5.9.6	Enclosure resistance to crushing test 62
5.9.7	Adhesive test 62
5.10	Tests for products employing overcurrent protective devices 63
5.10.1	General 63
5.10.2	Overcurrent test 63
5.10.3	Fault current test 63
5.10.4	Fuseholder temperature test 64
5.10.5	Lampholder and fuseholder resistance to crushing 65
5.10.6	Fuseholder cover test 65
5.11	Additional tests for wiring devices 65
5.11.1	General 65
5.11.2	Strain relief test for wiring devices 66
5.11.3	Conductor secureness test 66
5.11.4	•
5.11.5	Insulation secureness test 67
5.12	Additional tests for products intended for outdoor locations 67
5.12.1	General 67
5.12.2	Rain test 68
5.12.3	Immersion test 68
5.12.4	Gasket tests 69
5.12.5	Gasket adhesion test 70
5.13	Additional tests for direct plug-in units 71
5.13.1	General 71
5.13.2	Plug blades loading test 71
5.14	Test apparatus 71
5.14.1	Articulate probe 71
5.14.2	Rain test apparatus 72
5.15 5.15.1	Manufacturing and production test 73 Production line dielectric voltage-withstand test 73
5.15.1	
۷.⊥۷.∠	r rougetion line polarization continuity test 13

5.15.3	Production line operation tests 73
5.15.4	Production line grounding continuity test 74
5.15.5	Production line standing water immersion test 74
5.15.6	Production line attachment plug and load fitting test 74
5.15.7	Production line lampholder test 74
5.16	Ratings 75
5.17	Markings 75
5.17.1	General 75
5.17.2	Product markings 76
5.17.3	Product and cord tag markings 76
5.17.4	Cord tag markings 77
5.17.5	Carton/stuffer sheet/product/cord tag markings 81
5.17.6	Retail packaging 82
5.18	Instruction manual 83
5.18.1	General 83
5.18.2	Safety instructions 84
5.18.3	Use and care instructions 86
5.18.4	User servicing instructions 87
5.18.5	Instructions for externally shunted products 89
5.18.6	Instructions to connect multiple products 90
C Door	nuntivo linkting strings 00
6 Decc 6.1	prative lighting strings 90 Lampholders 90
6.1.1	Lampholders 90 General 90
6.1.2	Series-connected lampholders 91
6.1.2.1	General 91
6.1.2.2	Miniature screw-base (E10) lampholder 91
6.1.2.3	Midget screw-base (E5) lampholder 92
6.1.2.4	Push-in lampholder 92
6.1.2.5	Lampholders for non-replaceable lamps 92
6.1.2.6	Outdoor locations 92
6.1.3	Parallel-connected lampholders 93
6.2	Series-connected strings — Supplementary requirements 93
6.3	Parallel-connected strings — Supplementary requirements 93
6.4	Additional tests for products with series-connected lampholders 94
6.4.1	General 94
6.4.2	Oven test 94
6.4.3	Lampholder strain relief tests 94
6.4.4	Lamp temperature test for external shunted sets 98
6.4.5	Mechanical contact make and break test 99
6.4.6	External shunt input test 99
6.4.7	Series-connected lighting string rain test 100
6.5	Additional tests for decorative lighting strings 101
6.5.1	Flexing 101
6.5.2	Temperature after flexing test 102
7 Deco	prative lighting outfits (silhouettes) 103
7.1	General requirements 103
7.2	Additional requirements for decorative outfits 104

7.2.1	General 104
7.2.2	Light sculptures 105
7.2.3	Frame 106
7.2.4	Flexing test for motorized devices 107
7.2.5	Slip-ring endurance test 107
7.2.6	Additional tests for motorized devices 107
7.3	Additional requirements for ornaments 108
7.3.1	General 108
7.3.2	Additional tests for electronic ornaments 109
7.3.3	Additional tests for non-electronic ornaments 114
8 Artif	ficial trees and tree stands 115
8.1	General 115
8.2	Additional tests for artificial trees and tree stands 116
8.2.1	General 116
8.2.2	Stability test 116
8.2.3	Overflow test 116
Annex A	(normative) — Lamps for decorative lighting products 117
Annex B	(normative) — Parallel-connected lampholders for decorative lighting products 122
Annex C	C (normative) — Printed circuit boards (PCB) 126
Annex D	(normative) — Flexible light cable systems (rope lights) 131
Annex E	(normative) — Markings — French translations 166
	(normative) — String lights for year-round use 174

Decorative lighting produces

Chair

Vice-Chair

Technical Committee on Consumer and Commercial Products

S. Lawrence Synamedia Vividtec Canada ULC,

Scarborough, Ontario, Canada Category: Producer Interest

F. LaRiccia Health Canada,

Ottawa, Ontario, Canada Category: Regulatory Authority

G. Benjamin ABB Installation Products Ltd.,

Dorval, Québec, Canada Category: Producer Interest

D. Brière CSA Group Testing & Certification Inc.,

Toronto, Ontario, Canada Category: General Interest

W. J. Burr Burr and Associates,

Campbell River, British Columbia, Canada

Category: User Interest

J. Clements Dallas, Texas, USA

Category: General Interest

J. E. Evans Evans Regulatory Certification Consulting,

Jasper, Ontario, Canada Category: User Interest

N. Hanna Electrical Safety Authority,

Mississauga, Ontario, Canada Category: Regulatory Authority

W. Hansen Trane Ingersoll Rand,

La Crosse, Wisconsin, USA Category: Producer Interest

J. A. Huzar Consumers Council of Canada,

Victoria, British Columbia, Canada

Category: User Interest

R. J. Kelly Ingleside, Ontario, Canada

Category: User Interest

Decorative lighting products

B. K. Lowe Vancouver, British Columbia, Canada

Category: General Interest

S. Mercier Régie du bâtiment du Québec,

Montréal, Québec, Canada Category: Regulatory Authority

J. Potts Government of Nunavut,

Iqaluit, Nunavut, Canada Category: Regulatory Authority

A. Z. Tsisserev AES Engineering Ltd.,

Vancouver, British Columbia, Canada

Category: General Interest

M. B. Williams Association of Home Appliance Manufacturers

(AHAM),

Washington, District of Columbia, USA

Category: Producer Interest

A. Andronescu CSA Group,

Toronto, Ontario, Canada

Project Manager

Integrated Committee on Lighting Products (ICLP)

D. Lenasi Philips Lighting North America, *Chair*

Langley, British Columbia, Canada

G. Benjamin ABB Installation Products Ltd., Vice-Chair

Dorval, Québec, Canada

C. A. Coimbra Hydro One Networks Inc., Vice-Chair

Toronto, Ontario, Canada

B. Alsop Intertek,

Arlington Heights, Illinois, USA

S. Altamura Seasonal Specialties LLC,

Scarsdale, New York, USA

D. M. Berlin Intermatic Incorporated,

Spring Grove, Illinois, USA

J. Bettinelli Polefab Incorporated,

Sharon, Ontario, Canada

C. Bloomfield Intertek,

Arlington Heights, Illinois, USA

F. Carpenter Lithonia Lighting A Division of Acuity Holdings Inc.,

Conyers, Georgia, USA

N. Chen Orient Advantage Inc.,

Markham, Ontario, Canada

G. Chopra Electro Federation Canada,

Toronto, Ontario, Canada

T. De Francesco Aeromation Inc.,

Vancouver, British Columbia, Canada

P. Desilets Leviton Canada,

Pointe-Claire, Québec, Canada

Decorative lighting products

T. Dinic Electrical Safety Authority,

Mississauga, Ontario, Canada

M. Dionne-Sammut Standard-Stanpro,

Dorval, Québec, Canada

P. Doucet New Brunswick Department of Justice and Public

Safety,

Moncton, New Brunswick, Canada

S. Drew Health Canada,

Ottawa, Ontario, Canada

M. E. Duffy GE Consumer & Industrial,

Cleveland, Ohio, USA

A. Ertz Memphis, Tennessee, USA

J. S. Frederic Underwriters Laboratories Inc.,

Melville, New York, USA

J. A. Gibson TriVar Inc.,

Brampton, Ontario, Canada

I. Giosan Valmont West Coast Engineering Ltd.,

Delta, British Columbia, Canada

D. V. Grandin Bureau Veritas Consumer Products Services,

Buffalo, New York, USA

J. D. Green Lambda 530 Consulting, LLC,

Fayetteville, Georgia, USA

N. Gu Orient Advantage Inc.,

Markham, Ontario, Canada

J. Guarino Kenall Manufacturing Company, Inc.,

Gurnee, Illinois, USA

R. Harvey Osram Sylvania Products, Inc.,

Danvers, Massachusetts, USA

Decorative lighting products

M. Harwood William F White International Inc.,

Toronto, Ontario, Canada

R. Holden Sim Lighting and Grip,

Burnaby, British Columbia, Canada

T. Hum Leviton Canada,

Pointe-Claire, Québec, Canada

S. Hunt IATSE Local 891,

Vancouver, British Columbia, Canada

B. Keane Eaton,

Mississauga, Ontario, Canada

P. Kumar Hubbell Canada ULC,

Pickering, Ontario, Canada

L. Lecce Ceco Poles & Structures Inc.,

Calgary, Alberta, Canada

S. Léger Stanpro Lighting Systems Inc.,

Dorval, Québec, Canada

F. Li Ledup Enterprise Inc.,

Agoura Hills, California, USA

J. Lincoln Everstar Merchandise,

Canton, Connecticut, USA

G. A. Lue Illumineer Limited,

Mississauga, Ontario, Canada

F. Magisano Hubbell Canada ULC,

Pickering, Ontario, Canada

P. Martin NEOLUMENS Inc.,

Stoney Creek, Ontario, Canada

R. Mattatall Mattatall Signs Limited,

Dartmouth, Nova Scotia, Canada

Decorative lighting products

T. McGowan American Lighting Association,

Cleveland Heights, Ohio, USA

D. McMillan AES Engineering,

Vancouver, British Columbia, Canada

M. M. McRae National Tree Company,

Ormond Beach, Florida, USA

E. Mendoza Signify,

Rosemont, Illinois, USA

G. Montminy Régie du bâtiment du Québec,

Québec, Québec, Canada

M. S. O'Boyle Philips Professional Luminaires North America,

Fall River, Massachusetts, USA

J. Overton Technical Safety BC,

Cranbrook, British Columbia, Canada

J. Parisella Osram Sylvania Inc.,

Wilmington, Massachusetts, USA

A. Pontello Canadian Tire Corporation, Limited,

Toronto, Ontario, Canada

J. Porter Westbury National Show Systems Ltd.,

Scarborough, Ontario, Canada

M. Porumbaceanu Liteline Corp.,

Richmond Hill, Ontario, Canada

M. Primrose Kino Flo Inc.,

Burbank, California, USA

G. Prosser Kichler Lighting,

Cleveland, Ohio, USA

R. Rapeanu ABB Installation Products Ltd.,

Dorval, Québec, Canada

D. Rittenhouse Maple Ridge, British Columbia, Canada

Decorative lighting products

P. Rotiroti The Home Depot Canada Inc.,

Toronto, Ontario, Canada

S. Sajid Philips Lighting,

Burlington, Massachusetts, USA

C. S. Seaby Burlington, Ontario, Canada

F. Sellers Chauvet,

Sunrise, Florida, USA

J. Seregelyi Health Canada,

Ottawa, Ontario, Canada

A. W. Serres Lucidity Lights, Inc.,

Concord Twp, Ohio, USA

M. S. Shulman UL LLC,

San Jose, California, USA

S. K. Simon Zaneen Lighting Inc.,

Toronto, Ontario, Canada

R. Spehalski Lutron Electronics Company Inc.,

Coopersburg, Pennsylvania, USA

G. Steinman ABB Installation Products Ltd.,

Memphis, Tennessee, USA

A. Z. Tsisserev AES Engineering Ltd.,

Vancouver, British Columbia, Canada

K. Van Bavel Fifth Light Technology Ltd.,

Oakville, Ontario, Canada

J. Vu Ledup Enterprise Inc.,

Agoura Hills, California, USA

H. L. Wolfman Lumispec Consulting,

Northbrook, Illinois, USA

S. Yang Dongguan Walter Electric Co., Ltd.,

Dongguan, Guangdong, China

CSA C22.2 NO. 37:20

A. Yearwood CSA Group,

Toronto, Ontario, Canada

A. Andronescu CSA Group,

CSA Group, Toronto, Ontario, Canada Project Manager

Decorative lighting products

Preface

This is the seventh edition of CSA C22.2 No. 37, *Decorative lighting products*, one of a series of Standards issued by CSA Group under Part II of the Canadian Electrical Code. It supersedes the previous editions published in 2017, 2014, 1989, 1964, 1958, and 1937.

This edition updates the 2017 edition of CSA C22.2 No. 37. The major differences include the addition of Annex <u>F</u> which covers the requirements for string lights for year-round use and updates to Table <u>5.3A</u> to include TFX-S, TXFW-S, and CXWT-S wire types. The changes also include updates to definitions for risk of fire and risk of electric shock.

CSA Group wishes to acknowledge the following material was taken from UL 588 standard for *Seasonal* and Holiday Decorative Products:

- UL Glossary paragraph 2.1-2.48 (CSA C22.2 No. 37, Clause 2, Definitions);
- UL Sections 122-127 for markings (CSA C22.2 No. 37, Clause 5.17, Markings); and
- UL Sections 128-131 for the instructions (CSA C22.2 No. 37, Clause 5.18 and Table 5.9).

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Integrated Committee on Lighting Products (ICLP), under the jurisdiction of the Technical Committee on Consumer and Commercial Products and the Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

<u>Interpretations</u>: The Strategic Steering Committee on Requirements for Electrical Safety has provided the following direction for the interpretation of standards under its jurisdiction: "The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant CSA committee interpretation has not already been published, CSA Group's procedures for interpretation shall be followed to determine the intended safety principle."

Notes:

- 1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- 2) 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.
- 3) This Standard was developed by consensus, which is defined by CSA Policy governing standardization Code of good practice for standardization as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.
- 4) To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:
 - a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - b) provide an explanation of circumstances surrounding the actual field condition; and
 - c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

- 5) This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:
 - a) Standard designation (number);
 - b) relevant clause, table, and/or figure number;
 - c) wording of the proposed change; and
 - d) rationale for the change.

Decorative lighting products

CSA C22.2 No. 37:20

Decorative lighting products

1 Scope

1.1

This Standard applies to decorative lighting strings, decorative lighting outfits, pre-lit trees, and accessories, intended for seasonal or commercial use connected to circuits of 120 V nominal or less by means of an attachment plug, and designed to be used in accordance with the rules of the *Canadian Electrical Code*, *Part I*, in non-hazardous locations.

1.2

These requirements cover electrically-assembled

- a) series or series-parallel-connected lighting strings;
- b) parallel-connected lighting strings;
- c) decorative outfits;
- d) controllers and flashers;
- e) motor operated tree stands;
- f) flexible light cable systems (rope lights); and
- g) string lights for year-round use.

1.3

These requirements additionally cover ornaments, which are provided with an adapter for connection to a push-in lampholder and are intended to replace a push-in lamp in a series-connected decorative lighting string.

1.4

These requirements do not cover

- a) permanently connected products;
- b) portable luminaries;
- c) cord sets, power supply cords, and cord-connected, multiple receptacle extension boxes;
- d) fibre-optic devices, if not used in conjunction with decorative lighting; and
- e) strings employing candelabra lampholders of the bayonet type.

1.5

Decorative lighting products not incorporating lighting strings are covered by the requirements of CSA C22.2 No. 250.4.

1.6

In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the Standard.