



CSA C657:15
National Standard of Canada
(reaffirmed 2020)



Energy performance standard for commercial refrigeration equipment



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Revision History

CSA C657:15, Energy performance standard for commercial refrigeration equipment

National Standard of Canada — September 2016
Outside front cover, National Standard of Canada text, title page, and preface.

Standards Update Service

CSA C657:15 November 2015

Title: *Energy performance standard for commercial refrigeration equipment*

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Standards Council of Canada
600-55 Metcalfe Street
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CSA C657:15

Energy performance standard for commercial refrigeration equipment



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*Published in November 2015 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 97.130.20
ISBN 978-1-4883-0171-1*

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Contents

Technical Committee on Heating, Ventilation, Air Conditioning, and Refrigeration	3
Subcommittee on Refrigerated Display Cabinets	5
Preface	7
1 Scope	9
2 Reference publications	10
3 Definitions	11
4 General requirements	17
5 Preparation of test sample (Test procedure A)	17
5.1 General	17
5.2 Energy management systems	18
5.3 Lighting	18
5.4 Customer display signs/lights	18
5.5 Condensate pan heaters and pumps	18
5.6 Anti-sweat door heaters	18
5.7 Ultraviolet lights	18
5.8 Illuminated temperature displays and alarms	18
5.9 Condenser filters	18
5.10 Refrigeration system security covers	19
5.11 Night curtains and covers	19
5.12 Grill options	19
5.13 Misting or humidification systems	19
5.14 Air purifiers	19
5.15 General purpose outlets	19
5.16 Crankcase heaters	19
5.17 Drawers	19
6 Test conditions (test procedure A)	19
6.1 Integrated average temperatures	19
6.2 Lowest application product temperature	19
6.3 Testing at NSF test conditions	20
7 Procedures for determining energy consumption (Test procedure A)	20
7.1 Determination of daily energy consumption	20
7.2 Methodology for determining applicability of transparent door equipment families	20
8 Determination of volume and total display area (Test procedure A)	20
8.1 Determination of volume	20
8.2 Determination of total display area (TDA)	21
9 Preparation of test sample (Test procedure B)	21

9.1	General	21
9.2	Energy management systems	21
9.3	Lighting	21
9.4	Lighting occupancy sensors and controls	21
9.5	Customer display signs/lights	21
9.6	Condensate pan heaters and pumps	21
9.7	Anti-sweat door heaters	22
9.8	Ultraviolet lights	22
9.9	Illuminated temperature displays and alarms	22
9.10	Condenser filters	22
9.11	Refrigeration system security covers	22
9.12	Night curtains and covers	22
9.13	Grill options	22
9.14	Misting or humidification systems	22
9.15	Air purifiers	22
9.16	General purpose outlets	22
9.17	Crankcase heaters	23
9.18	Drawers	23
10	Test conditions (Test procedure B)	23
10.1	Integrated average temperatures	23
10.2	Lowest application product temperature	23
10.3	Testing at NSF test conditions	23
11	Procedures for determining energy consumption (Test procedure B)	24
11.1	Determination of daily energy consumption	24
11.2	Determination of the effects of lighting effects of occupancy sensor and controls	24
11.3	Methodology for determining applicability of transparent door equipment families	26
12	Determination of volume and total display area (Test procedure B)	26
12.1	Determination of volume	26
12.2	Determination of total display area (TDA)	26
13	Maximum energy consumption limit	26
13.1	Requirements for units tested (Test procedure A)	26
13.2	Requirements for units tested (Test procedure B)	28
13.3	Exclusions	29
14	Sampling plan	29
14.1	Sample size	29
14.2	Measure of energy efficiency	30

Annex A (informative)	— Examples of how to calculate the dimension associated with the calculations of total display area	36
Annex B (informative)	— Classification (self-contained condensing units)	39

Technical Committee on Heating, Ventilation, Air Conditioning, and Refrigeration

A. Carrier	Hydro-Québec, Montréal, Québec <i>Category: User Interest/Regulatory Authority</i>	<i>Chair</i>
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J.K. Hodge	Toronto, Ontario	<i>Associate</i>
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S. Krsikapa	Ontario Ministry of Energy, Toronto, Ontario <i>Category: User Interest/Regulatory Authority</i>	
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P. Rhodes	Reliance Home Comfort, Toronto, Ontario <i>Category: Producer Interest</i>	
D. Terlizzi	Heating, Refrigeration and Air Conditioning Institute of Canada, Mississauga, Ontario <i>Category: Producer Interest</i>	
R. Tmej	Ontario Ministry of Energy, Toronto, Ontario	<i>Associate</i>
T. Wong	CSA Group, Toronto, Ontario	<i>Project Manager</i>

Subcommittee on Refrigerated Display Cabinets

C. Le Bel	Laboratoire des technologies de l'énergie (LTE), Shawinigan, Québec	<i>Chair</i>
C.C. Hon	True Manufacturing Co., Inc., O'Fallon, Missouri, USA	
S. Cousins	Coca-Cola North America, Atlanta, Georgia, USA	
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D. Swofford	Hill Phoenix, Colonial Heights, Virginia, USA	
M. Tepic	Minus Forty Technologies Corp., Georgetown, Ontario	
R. Tmej	Ontario Ministry of Energy, Toronto, Ontario	

C. Vanellande

Arneg Canada,
Lacolle, Québec

T. Wong

CSA Group,
Toronto, Ontario

Project Manager

Preface

This is the fourth edition of CSA C657, *Energy performance standard for commercial refrigeration equipment*. It supersedes the previous editions, published in 2012 and in 2004 under the title *Energy performance standard for refrigerated display cabinets (merchandisers)*, and published in 1995 under the title *Energy Performance Standard for Commercial Refrigerated Display Cabinets and Merchandisers*.

This edition has been revised to

- a) merge this Standard with CAN/CSA-C827, *Energy performance of food service refrigerators and freezers*;
- b) harmonize this Standard with ANSI/AHRI 1200/1201, *Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets*;
- c) make use of the test method specified in ANSI/ASHRAE 72, *Method of Testing Commercial Refrigerators and Freezers*, and harmonize its performance levels with those of the U.S. Department of Energy; and
- d) include two different test procedures: Test procedure "A" and Test procedure "B", to be used in conjunction with its respective maximum energy consumption limits.

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

This Standard was prepared by the Subcommittee on Refrigerated Display Cabinets, under the jurisdiction of the Technical Committee on Heating, Ventilation, Air-Conditioning, and Refrigeration and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, 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.

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.*
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 - c) *wording of the proposed change; and*
 - d) *rationale for the change.*

CSA C657:15

Energy performance standard for commercial refrigeration equipment

1 Scope

1.1

This Standard specifies methods for measuring the volume, energy consumption, and total display area (TDA) of electrically operated commercial refrigeration equipment.

1.2

This Standard applies to commercial refrigerator, refrigerator-freezer, and freezer cabinets and merchandisers that are intended for displaying, storing, or holding food products including canned and bottled beverages, ice intended for human consumption, and other perishable merchandise (e.g., cut flowers).

1.3

This Standard applies to

- a) both permanently connected and cord-connected equipment;
- b) cabinets equipped with or designed to work with electrically driven system;
- c) refrigeration equipment designed for storage temperatures either above or below freezing temperatures, or both in separate compartments;
- d) open and closed cabinets of self-contained and remote type;
- e) commercial refrigerated storage cabinets; and

Note: *Example of products include*

- a) *reach-in cabinets;*
 - b) *roll-in or roll-through cabinets;*
 - c) *pass-through cabinets;*
 - d) *reach-in wine coolers;*
 - e) *fish or poultry files;*
 - f) *ice cream cabinets;*
 - g) *milk or beverage cabinets;*
 - h) *meat cases;*
 - i) *cheese cases;*
 - j) *worktop tables;*
 - k) *undercounter cabinets;*
 - l) *chef base or griddle stand; and*
 - m) *cabinets with drawers.*
- f) closed refrigerated cabinets, regardless of the material used for the door(s) of such cabinets, provided that the closed cabinets are designed for holding and storing.

1.4

This Standard does not apply to

- a) walk-in refrigerators and freezers, water coolers, refrigerated vending machines, or ice-making machines;