

Australian Standard™

**Refrigerated display cabinets**

**Part 9: Electrical energy consumption  
test**



This Australian Standard was prepared by Committee ME-008, Refrigerated Display Cabinets. It was approved on behalf of the Council of Standards Australia on 26 September 2003.

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The following are represented on Committee ME-008:

Australian Greenhouse Office  
Australian Retailers Association  
Commercial Refrigeration Manufacturers Association of Australia  
Food Science Australia  
Institution of Engineers Australia  
Refrigeration Air Conditioning Companies Association

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Australian Standard™

## Refrigerated display cabinets

### Part 9: Electrical energy consumption test

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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-008, Refrigerated Display Cabinets, to supersede AS 1731.9—2000, *Refrigerated display cabinets, Part 9: Electrical energy consumption test*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

*This Standard incorporates Amendment No. 1 (December 2005). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

This Standard is based on International Standard prEN ISO 23953-2:2003, *Refrigerated display cabinets, Part 2: Classification, requirements and test conditions*.

The Standard is Part 9 of a series of Standards on refrigerated display cabinets, as follows:

### AS

- 1731 Refrigerated display cabinets
- 1731.1 Part 1: Terms and definitions
- 1731.2 Part 2: General mechanical and physical requirements
- 1731.3 Part 3: Linear dimensions, areas and volumes
- 1731.4 Part 4: General test conditions
- 1731.5 Part 5: Temperature test
- 1731.6 Part 6: Classification according to temperatures
- 1731.7 Part 7: Defrosting test
- 1731.8 Part 8: Water vapour condensation test
- 1731.9 Part 9: Electrical energy consumption test (this Standard)
- 1731.10 Part 10: Test for absence of odour and taste
- 1731.11 Part 11: Installation, maintenance and user guide
- 1731.12 Part 12: Measurement of the heat extraction rate of the cabinets when the condensing unit is remote from the cabinet
- 1731.13 Part 13: Test report
- 1731.14 Part 14: Minimum energy performance standard (MEPS) requirements

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## STANDARDS AUSTRALIA

### Australian Standard Refrigerated display cabinets

#### Part 9: Electrical energy consumption test

## 1 SCOPE

### 1.1 Scope of Standard

A1 | This Standard specifies terminology, general mechanical and physical requirements, test conditions as well as installation and maintenance, for commercial refrigerators and freezers used for the sale or display of food products including beverages.

This Standard does not cover refrigerated vending machines, ice-makers, cabinets intended for use in catering and similar non-retail applications.

### 1.2 Scope of Part 9

This Part of AS 1731 specifies the method of measuring the consumption of electrical energy of refrigerated display cabinets.

## 2 REFERENCED DOCUMENTS

The following documents are referred in this Standard.

### AS

- 1731 Refrigerated display cabinets
- 1731.4 Part 4: General test conditions
- 1731.5 Part 5: Temperature test
- 1731.13 Part 13: Test report

## 3 OBJECTIVE

The objective of this Standard is to establish a procedure for testing energy consumption in refrigerated display cabinets for use by manufacturers, suppliers, purchasers, operators and regulators of these systems.

## 4 TEST PROCEDURE

### 4.1 Test conditions

Locate, load and operate the cabinet as for the temperature test (see AS 1731.4 and AS 1731.5) and in accordance with the manufacturer's instructions at the conditions appropriate to the test room climate class for which it is intended, in accordance with Clause 4.4.

A1 | This test shall be carried out concurrently with the temperature test.

### 4.2 Lighting

For cabinets supplied without night-covers, any built-in cabinet lighting shall be on continuously during the test.