

Australian Standard™

Refrigerated display cabinets

**Part 9: Electrical energy consumption
test**

This Australian Standard was prepared by Committee ME/8, Refrigerated Display Cabinets. It was approved on behalf of the Council of Standards Australia on 28 April 2000 and published on 10 August 2000.

The following interests are represented on Committee ME/8:

Australian Food and Grocery Council
Australian Retailers Association
Commercial Refrigeration Manufacturers Association of Australia
Food Science Australia
New South Wales Health Department

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Refrigerated display cabinets

Part 9: Electrical energy consumption test

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PREFACE

This Standard was prepared by Standards Australia Committee ME/8, Refrigerated Display Cabinets, to supersede (in part) AS 1731—1983, *Frozen food retail cabinets*.

The Scope of the original Standard has been extended to include requirements for retail chiller cabinets as well as retail freezer cabinets.

This Standard is based on British Standard BS EN 441:1994, *Refrigerated display cabinets* (Part 9).

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
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

The objective of this series of Standards is to provide standardized construction requirements and performance assessment procedures for refrigerated display cabinets for use by manufacturers, suppliers, purchasers, operators and regulators of these systems.

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STANDARDS AUSTRALIA

Australian Standard

Refrigerated display cabinets

Part 9: Electrical energy consumption test

1 SCOPE

1.1 Scope of Standard

This Standard specifies terminology, general mechanical and physical requirements, test conditions as well as installation and maintenance, including a user's guide, for refrigerated display cabinets for the sale or display, or both, of food products.

This Standard does not cover refrigerated vending machines, cabinets intended for use in catering or similar non-retail applications, or food service cabinets.

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

3 TEST PROCEDURE

3.1 Test conditions

Locate and load the cabinet as for the temperature test (see AS 1731.4 and AS 1731.5) operate it in accordance with the manufacturer's instructions at the conditions appropriate to the test room climate class for which it is intended, and then operate it for at least 24 h after stable operating conditions have been reached (see AS 1731.4) or during the operating period of cabinets intended to be switched off at night (see AS 1731.5).

NOTE: This test may be carried out concurrently with the temperature test.

3.2 Lighting

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

3.3 Night covers

Where night-covers are supplied, the night-covers and cabinet lighting shall be manipulated as follows:

- (a) *First test* Night-covers removed and cabinet lighting on continuously during the test period.
- (b) *Second test* Night-covers removed and cabinet lighting switched on for a period of 12 h followed by a period of 12 h with the night-covers on and the cabinet lighting switched off.