



ENERGY STAR® Program Requirements Product Specification for Automatic Commercial Ice Makers

Test Method Version 2.0

1 OVERVIEW

The following test method shall be used for determining product compliance with requirements in the ENERGY STAR Eligibility Criteria for Automatic Commercial Ice Makers (ACIM).

2 APPLICABILITY

ENERGY STAR test requirements are dependent upon the feature set of the product under evaluation. The following guidelines shall be used to determine the applicability of each section of this document:

2.1 Included Products

- A) All sections of this test method apply to all products covered in the scope defined in ENERGY STAR Eligibility Criteria for Automatic Commercial Ice Makers:
 - 1) Air-cooled batch and continuous type, Ice Making Head (IMH), Remote Condensing Units (RCU) with dedicated condensing units, and Self-contained Units (SCU).
 - 2) Air-cooled RCU units designed for connection to remote rack compressors that are alternately sold (with the same model number) with a dedicated remote condensing unit.

2.2 Excluded Products

- A) The following products are not included in the scope defined in ENERGY STAR Eligibility Criteria for Automatic Commercial Ice Makers:
 - 1) Air-cooled RCU units that are designed only for connection to remote rack compressors.

3 DEFINITIONS

Unless otherwise specified, all terms used in this document are consistent with the definitions in the ENERGY STAR Eligibility Criteria for Automatic Commercial Ice Makers.

- Variable Purge Setting: A setting that allows for the increase or decrease of purge water used during ice making to accommodate for different water hardness levels.

4 TEST CONDUCT

4.1 ENERGY STAR Guidance for Implementation of 10 Code of Federal Regulations (CFR) Part 431, Subpart H

- A) Testing of RCUs designed for connection to remote rack compressors that are alternately sold (with the same model number) with a dedicated remote condensing unit:

- 1) Unit under test (UUT) shall be tested using the least efficient dedicated remote condensing unit with which it is normally sold.

B) Purge Setting:

All variable purge settings shall be set in accordance with AHRI Standard 810-2007, *Performance Rating of Automatic Commercial Ice-Makers*.

5 TEST CONDITIONS

Unless otherwise specified within this Test Method, the test conditions for all portions of this method shall be in accordance with 10 CFR Part 431 Subpart H.

6 UNIT UNDER TEST (UUT) SETUP AND INITIALIZATION

6.1 Test Setup and Instrumentation

- A) Unless otherwise specified within this Test Method, the test setup and instrumentation for all portions of this method shall be in accordance with the following:

- 1) 10 CFR Part 431 Subpart H.

7 TEST METHOD

When testing Automatic Commercial Ice Makers, the following test method(s) shall be used to determine ENERGY STAR qualification:

Table 1: Test Methods for ENERGY STAR Qualification	
ENERGY STAR Requirement	Test Method Reference
Energy Consumption Rate (kWh/100 lbs ice)	10 CFR Part 431 Subpart H, with the guidance included in Section 4.1 .
Potable Water Use (gal/100 lbs ice)	AHRI Standard 810-2007, <i>Performance Rating of Automatic Commercial Ice Makers</i> with the guidance included in Section 4.1

8 REFERENCES

- A) AHRI 810-2007 with Addendum 1. Performance Rating of Automatic Commercial Ice-Makers. March 2011.
- B) 10 CFR Part 431 Subpart H, Automatic Commercial Ice Makers. 77 FR 1591. January 11, 2012.