



ENERGY STAR[®] Program Requirements for Bottled Water Coolers

Eligibility Criteria

Below is the Version 1.1 product specification for ENERGY STAR qualified bottled water coolers. A product must meet all of the identified criteria to qualify as ENERGY STAR by its manufacturer.

- 1) **Definitions:** Below is a brief description of a bottled water cooler and common energy consumption characteristics relevant to ENERGY STAR. The ENERGY STAR specification focuses on reducing standby energy consumption.
 - A. **Bottled Water Cooler:** A freestanding device that consumes energy and dispenses water from removable 4- to 5-gallon plastic bottles commonly positioned on top of the unit.
 - B. **Compartment-Type Bottled Water Cooler:** A bottled water cooler which, in addition to the primary function of cooling and dispensing potable water, includes a refrigerated compartment with or without provisions for making ice.
 - C. **Standby Energy Consumption:** The required energy to maintain cold and/or hot water at appropriate dispensing temperatures.
- 2) **Qualifying Products:** For the purposes of ENERGY STAR, bottled water coolers include the following:
 - A. **Cold Only Bottled Units:** These units dispense either cold water only, or both cold and room-temperature water.
 - B. **Hot and Cold Bottled Units:** These units dispense both hot and cold water. Some units may have a third room-temperature tap. Units have an electric resistance heater and a refrigeration cycle.
 - C. **Cook and Cold Bottled Units:** These units dispense both cold and room-temperature water.
- 3) **Energy-Efficiency Specifications for Qualifying Products:** Only those products listed in Section 2 that meet the criteria outlined in Table 1 below may qualify as ENERGY STAR.

Table 1: Energy-Efficiency Criteria for ENERGY STAR Qualified Bottled Water Coolers

Product Category	Energy Use Under Test Conditions
cold only and cook and cold bottled units	≤ 0.16 kW-hours/day
hot and cold bottled units	≤ 1.20 kW-hours/day

- 4) **Test Criteria:** Test conditions are described below. Tests will focus on overall standby losses and water will not be withdrawn during the testing procedure.
 - A. **Power Measurement:** Energy use shall be measured as the total true power (kilowatt-hours)

consumed in one 24-hour period.

B. Starting Conditions: Before starting the energy measurements, the unit should be at operating conditions, with water temperatures as defined in item (F) below.

C. Water Withdrawal: No water may be withdrawn from the unit during the test.

D. Timer Usage: If the unit has an integral, automatic timer, the timer can be set to turn off the unit for not more than 10 hours in the 24-hour test period. The unit must operate for the last 2 hours of the 24-hour test to ensure that it fully warms up or cools down after the shut-off period.

E. Ambient Temperature: Ambient air and water temperature must be $75^{\circ} \pm 2^{\circ}\text{F}$.

F. Dispensed Water Temperatures: Cold water temperature shall not exceed 50°F and hot water temperature shall be at least 165°F . These temperatures shall be measured before conducting the standby energy use test described in this specification when the respective function, compressor, or heating element turns on.

G. Cooler Location: The unit must be no more than 6 inches from a wall at least 7 feet high and extending horizontally at least 2 feet from each side of the unit.

H. Airflow: Airflow around the unit must be natural; no artificial means of increasing the airflow are permitted. Airflow created by components integral to the unit itself, such as internal fans, are permitted.

I. Compartment Temperature: If the unit being tested is a compartment-type bottled water cooler, during the test, there shall be no melting of ice, nor shall the average temperature exceed 46.0°F [7.8°C] in the refrigerated compartment¹.

- 5) Effective Date: The date that manufacturers may begin to qualify products as ENERGY STAR will be defined as the *effective date* of the agreement. The ENERGY STAR Bottled Water Cooler (Version 1.1) specification is effective immediately.
- 6) Future Specification Revisions: ENERGY STAR reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions.

¹ ARI 2002 Standard 1010 for Self-Contained Mechanically-Refrigerated Drinking-Water Coolers