§ 431.205 Units to be tested.

For each basic model of illuminated exit sign selected for testing, a sample of sufficient size shall be selected at random and tested to ensure that—
(a) Any represented value of estimated input power demand or other measure of energy consumption of a basic model for which consumers would favor lower values shall be no less than the higher of:
   (1) The mean of the sample, or
   (2) The upper 95 percent confidence limit of the true mean divided by 1.10; and
(b) Any represented value of the energy efficiency or other measure of energy consumption of a basic model for which consumers would favor higher values shall be no greater than the lower of:
   (1) The mean of the sample, or
   (2) The lower 95 percent confidence limit of the true mean divided by 0.90.
(Components of similar design may be substituted without requiring additional testing if the represented measures of energy continue to satisfy the applicable sampling provision.)

[75 FR 669, Jan. 5, 2010]

ENERGY CONSERVATION STANDARDS

§ 431.206 Energy conservation standards and their effective dates.

An illuminated exit sign manufactured on or after January 1, 2006, shall have an input power demand of 5 watts or less per face.

Subpart M—Traffic Signal Modules and Pedestrian Modules

SOURCE: 70 FR 60417, Oct. 18, 2005, unless otherwise noted.

§ 431.221 Purpose and scope.

This subpart contains energy conservation requirements for traffic signal modules and pedestrian modules, pursuant to Part B of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6291–6309.

§ 431.222 Definitions concerning traffic signal modules and pedestrian modules.

Basic model means, with respect to traffic signal modules and pedestrian modules, all units of a given type of traffic signal module or pedestrian module (or class thereof) manufactured by one manufacturer and which have the same primary energy source, which have electrical characteristics that are essentially identical, and which do not have any differing electrical, physical, or functional characteristics that affect energy consumption.

Maximum wattage means the power consumed by the module after being operated for 60 minutes while mounted in a temperature testing chamber so that the lensed portion of the module is outside the chamber, all portions of the module behind the lens are within the chamber at a temperature of 74 °C and the air temperature in front of the lens is maintained at a minimum of 49 °C.

Nominal wattage means the power consumed by the module when it is operated within a chamber at a temperature of 25 °C after the signal has been operated for 60 minutes.

Pedestrian module means a light signal used to convey movement information to pedestrians.

Traffic signal module means a standard 8-inch (200 mm) or 12-inch (300 mm) traffic signal indication that—
(1) Consists of a light source, a lens, and all other parts necessary for operation; and
(2) Communicates movement messages to drivers through red, amber, and green colors.

[70 FR 60417, Oct. 18, 2005, as amended at 71 FR 71373, Dec. 8, 2006]

TEST PROCEDURES

§ 431.223 Materials incorporated by reference.

(a) General. The Department incorporates by reference the following test procedures into subpart M of part 431. The Director of the Federal Register...
§ 431.224 Uniform test method for the measurement of energy consumption for traffic signal modules and pedestrian modules.

(a) Scope. This section provides the test procedures for measuring, pursuant to EPCA, the maximum wattage and nominal wattage of traffic signal modules and pedestrian modules. For purposes of 10 CFR part 431 and EPCA, the test procedures for measuring the maximum wattage and nominal wattage of traffic signal modules and pedestrian modules shall be the test procedures specified in § 431.223(b).

(b) Testing and Calculations. Determine the nominal wattage and maximum wattage of each covered traffic signal module or pedestrian module by conducting the test procedure set forth in Environmental Protection Agency, “ENERGY STAR Program Requirements for Traffic Signals,” Version 1.1, section 1, “Definitions,” and section 4, “Test Criteria.” (Incorporated by reference, see § 431.223) Use a wattmeter having an accuracy of ±1% to measure the nominal wattage and maximum wattage of a red and green traffic signal module, and a pedestrian module when conducting the photometric and colormetric tests as specified in the testing procedures in VTCSH 2005.

[71 FR 71373, Dec. 8, 2006]

§ 431.225 Units to be tested.

For each basic model of traffic signal module or pedestrian module selected for testing, a sample of sufficient size shall be selected at random and tested to ensure that—

(a) Any represented value of estimated maximum and nominal wattage or other measure of energy consumption of a basic model for which consumers would favor lower values shall be no less than the higher of:

(1) The mean of the sample, or

(2) The upper 95 percent confidence limit of the true mean divided by 1.10; and

(b) Any represented value of the energy efficiency or other measure of energy consumption of a basic model for...