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§ 431.204 Uniform test method for the measurement of energy consumption of illuminated exit signs.

(a) *Scope.* This section provides the test procedure for measuring, pursuant to EPCA, the input power demand of illuminated exit signs. For purposes of this part 431 and EPCA, the test procedure for measuring the input power demand of illuminated exit signs shall be the test procedure specified in § 431.203(b).

(b) *Testing and Calculations.* Determine the energy efficiency of each covered product by conducting the test procedure, set forth in the Environmental Protection Agency's "ENERGY STAR Program Requirements for Exit Signs," Version 2.0, section 4 (Test Criteria), "Conditions for testing" and "Input power measurement." (Incorporated by reference, see § 431.203)

[71 FR 71373, Dec. 8, 2006]

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 all units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy

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efficiency, water consumption, or water efficiency.

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; 76 FR 12504, Mar. 7, 2011]

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 has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE test procedures unless and until DOE amends its test procedures. The Department incorporates the material as it exists on the date of the approval by the Federal Register and a notice of any change in the material will be published in the FEDERAL REGISTER.

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(b) *List of test procedures incorporated by reference.* (1) Environmental Protection Agency, “ENERGY STAR Program Requirements for Traffic Signals,” Version 1.1 issued February 4, 2003.

(2) Institute of Transportation Engineers (ITE), “Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement,” June 27, 2005.

(c) *Availability of references*—(1) *Inspection of test procedures.* The test procedures incorporated by reference are available for inspection at:

(i) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/code-of-federal-regulations/ibr-locations.html>.

(ii) U.S. Department of Energy, Forrestal Building, Room 1J-018 (Resource Room of the Building Technologies Program), 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9127, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

(2) *Obtaining copies of standards.* Standards incorporated by reference may be obtained from the following sources:

(i) Copies of the Environmental Protection Agency “ENERGY STAR Program Requirements for Traffic Signals,” Version 1.1, may be obtained from the Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, (202) 272-0167 or at <http://www.epa.gov>.

(ii) Institute of Transportation Engineers, 1099 14th Street, NW., Suite 300 West, Washington, DC 20005-3438, (202) 289-0222, or ite_staff@ite.org.

[71 FR 71373, Dec. 8, 2006]

§ 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 $\pm 1\%$ 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 colorimetric tests as specified by the testing procedures in VTCSH 2005.

[71 FR 71373, Dec. 8, 2006]

ENERGY CONSERVATION STANDARDS

§ 431.226 Energy conservation standards and their effective dates.

Any traffic signal module or pedestrian module manufactured on or after January 1, 2006, shall meet both of the following requirements:

(a) Have a nominal wattage and maximum wattage no greater than:

	Maximum wattage (at 74 °C)	Nominal wattage (at 25 °C)
Traffic Signal Module Type:		
12" Red Ball	17	11
8" Red Ball	13	8
12" Red Arrow	12	9
12" Green Ball	15	15
8" Green Ball	12	12
12" Green Arrow	11	11
Pedestrian Module Type:		
Combination Walking		
Man/Hand	16	13
Walking Man	12	9
Orange Hand	16	13

(b) Be installed with compatible, electrically connected signal control interface devices and conflict monitoring systems.

[70 FR 60417, Oct. 18, 2005, as amended at 71 FR 71374, Dec. 8, 2006]