§ 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 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.


(c) Availability of references—(1) Inspection of test procedures. The test procedures incorporated by reference are available for inspection at:
§ 431.242 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 colorimetric tests as specified by the testing procedures in VTCSH 2005.

(71 FR 71373, Dec. 8, 2006)

§ 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:

<table>
<thead>
<tr>
<th>Traffic Signal Module Type</th>
<th>Maximum Wattage (at 74 °C)</th>
<th>Nominal Wattage (at 25 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12″ Red Ball</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>8″ Red Ball</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>12″ Red Arrow</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>12″ Green Ball</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>8″ Green Ball</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>12″ Green Arrow</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pedestrian Module Type</th>
<th>Maximum Wattage (at 74 °C)</th>
<th>Nominal Wattage (at 25 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination Walking Man/Hand</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Walking Man</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Orange Hand</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

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


Subpart N—Unit Heaters

§ 431.241 Purpose and scope.

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

§ 431.242 Definitions concerning unit heaters.

Unit heater means a self-contained fan-type heater designed to be installed...