## The Commonwealth of Massachusetts

## In the Year Two Thousand Nine

An act relative to expanding energy efficiency in the commonwealth..

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

- 1 Section 1. (A) Section 2 of chapter 25B of the general laws as appearing in the 2006
- 2 official edition, is hereby amended by inserting, after line 8, the following: -
- 3 "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as
- 4 the source of potable water.
- 5 (B) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby
- 6 further amended by inserting, after line 10, the following: -
- 7 "Combination television" means a system in which a television or television monitor and
- 8 an additional device or devices including, but not limited to, a DVD player, an HDD player or a
- 9 VCR, are combined into a single unit and which meets all of the following criteria: the additional
- devices are included in the television casing; it is not possible to measure the power requirements
- of the components separately without the removal of the television casing; and the system is
- 12 powered through a single power cable.

"Commercial hot food holding cabinet" means a heated, fully-enclosed compartment
with one or more solid or glass doors that is designed to maintain the temperature of hot food
that has been cooked in a separate appliance. It shall not include heated glass merchandizing
cabinets, drawer warmers, or cook-and-hold appliances.

(C) Said Section 2 of said chapter 25B of the general laws, as so appearing, is further amended by inserting, after line 11, the following: -

"Compact audio product," also known as a mini, mid, micro, or shelf audio system, means an integrated audio system encased in a single housing that includes an amplifier and radio tuner, attached or separable speakers, and can reproduce audio from one or more of the following media: magnetic tape, CD, DVD, or flash memory. "Compact audio product" does not include products that can be independently powered by internal batteries or that have a powered external satellite antenna, or that can provide a video output signal.

"Component television" means a television composed of two or more separate components (e.g., separate display device and tuner) marketed and sold as a television under one model or system designation. The system may have more than one power cord.

"Computer monitor" means an analog or digital device designed primarily for the display of computer generated signals, is "plug and play," and is not marketed for use as a television.

- (D) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting the following language after line 13
- "Digital versatile disc" and "DVD" mean a laser-encoded plastic medium capable of storing a large amount of digital audio, video, and computer data.

"Digital versatile disc player" and "digital versatile disc recorder" mean commercially-
available electronic products encased in a single housing that includes an integral power supply
and for which the sole purpose is, respectively, (1) the decoding and (2) production or recording
of digitized video signal on a DVD. "DVD recorder" does not include models that have an
electronic programming guide function that provides an interactive, onscreen menu of television
listings, and that downloads program information from the vertical blanking interval of a regular
television signal.

- (E) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 54, the following: -
- "On mode" means the television is connected to a power source and produces sound and a picture
  - "Portable electric spa" means a factory-built electric spa or hot tub, supplied with equipment for heating and circulating water.
  - "Portable luminaire" means a luminaire which connects to a power supply by means of a power cord and plug.
  - (F) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 102, the following: -
    - "Standby-passive mode" means the television is connected to a power source, produces neither sound nor images but can be switched into another mode with a remote control unit or an internal signal.

54	(G) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby
55	further amended by inserting, after line 115, the following: -
56	"Television" means an analog or digital device designed primarily for the display and
57	reception of a terrestrial, satellite, cable internet protocol tv (IPTV) or other broadcast or
58	recorded transmission of analog or digital signals. Televisions include combination televisions
59	television monitors, component televisions, and any product that is marketed as a television.
60	Televisions do not include computer monitors.
61	"Television monitor" means a television that does not have an internal tuner or receiver
62	or playback device.
63	(H) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby
64	further amended by inserting, after line 127, the following: -
65	"Water dispenser" means a factory-made assembly that mechanically cools and heats
66	potable water and that dispenses the cooler or heated water by integral or remote means.
67	Section 2. (A) section 3 of chapter 25B of the general laws, as so appearing, is hereby
68	amended by inserting, after subsection (j) the following subsections: -
69	(k) bottle-type water dispensers;
70	(l) commercial hot food holding cabinets;
71	(m) compact audio products;
72	(n) digital versatile disc players (DVD) and digital versatile disc recorders;
73	(o) portable electric spas;

74 (p) portable luminaires 75 (q) televisions (TVs); and 76 (r) any other products as may be designated by the Commissioner in accordance with 77 Section 7 of Chapter 25 of the general laws. 78 (B) Said section 3 of said chapter 25B of the general laws, as so appearing, is hereby 79 further amended by inserting, after line 29, the following: -80 "; or new products manufactured in the state and sold outside the state; new products 81 manufactured outside the state and sold at wholesale inside the state for final retail sale and 82 installation outside the state; products installed in mobile manufactured homes at the time of 83 construction; or products designed expressly for installation and use in recreational vehicles" 84 Section 3. (A) Section 4 of chapter 25B of the general laws, as so appearing, is hereby 85 amended by striking out the words "clauses (a) to (e) in line 1, and inserting in place thereof the 86 words "clauses (a) to (r) 87 (B) Said section 4 of said chapter 25B of the general laws, as so appearing, is hereby 88 further amended by striking out the words "clauses (a) to (e) in line 6 and inserting in place 89 thereof the words "clauses (a) to (r) 90 Section 4. (A) Section 5 of chapter 25B of the general laws, as so appearing, is hereby 91 amended by inserting, after the word "ninety" in line 12 the following language: -92 "Said commissioner may also by regulation increase the level of energy efficiency 93 standards for bottle-type water dispensers, commercial hot food holding cabinets, compact audio

- products, digital versatile disc players (DVDs) and recorders, portable luminaries, portable electric spas, and televisions (TVs).
- (B) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after the word "users" in line 14, the following: -
  - "and promote energy conservation in the commonwealth,"

- Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by striking out the words "clauses (f) to (s) in line 23 and inserting in place thereof the words "clauses (a) to (r)".
- (C) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after subsection (5) the following subsections: -
- (6) Bottle-type water dispensers designed for dispensing both hot and cold water shall not have standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance with the test criteria contained in version 1 of the U.S. environmental protection agency's "Energy Star Program Requirements for Bottled Water Coolers," except units with an integral, automatic timer shall not be tested using Section D, "timer usage," of the test criteria.
- (7) Commercial hot food holding cabinets shall have a maximum idle energy rate of 40 watts per cubic foot of interior volume, as determined by the "idle energy rate-dry test" in ASTM F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by ASTM International. Interior volume shall be measured in accordance with the method shown in the U.S. environmental protection agency's "Energy Star Program Requirements for Commercial Hot Food Holding Cabinets" as in effect on August 15, 2003.

115	Compact audio products shall not use more than 2 watts in standby-passive mode for
116	those without a permanently illuminated clock display and 4 watts in standby-passive mode for
117	those with a permanently illuminated clock display, as measured in accordance with the
118	international electrotechnical commission (IEC) test method 62087:2002(E), "Methods of
119	measurement for the power consumption of audio, video, and related equipment."
120	Digital versatile disc players and digital versatile disc recorders shall not use more than 3
121	watts in standby-passive mode, as measured in accordance with international electrotechnical
122	commission (IEC) test method 62087:2002(E), "Methods of measurement for the power
123	consumption of audio, video, and related equipment."
124	(10) Portable luminaires shall meet one or more of the following requirements:
125	(i) Be equipped with a dedicated fluorescent lamp socket connected to a high frequency
126	electronic ballast contained within the luminaire. Dedicated fluorescent luminaires must meet the
127	requirements of the U.S. environmental protection agency's "Energy Star Program for
128	Residential Light Fixtures Version 4.2".
129	(ii) Be equipped with only GU-24 line voltage sockets and not be rated for use with
130	incandescent lamps of any type, including line voltage or low voltage;
131	(iii) Be an LED luminaire or a luminaire with an LED light engine with integral heat sink
132	and comply with the following minimum requirements:
133	Minimum light output: 200 lumens (initial)
134	Minimum LED luminaire efficacy: 29 lumens/watt
135	Minimum LED light engine efficacy: 40 lumens/watt

136	Color Correlated Temperature (CCT): 2700K through 5000K
137	Minimum Color Rendering Index (CRI): 75
138	(iv) Be equipped with an E12, E17, or E26 screw-based socket and be prepackaged and
139	sold together with one screw-based compact fluorescent lamp or screw-based LED lamp for each
140	screw-based socket on the luminaire. The compact fluorescent or LED lamps prepackaged with
141	the luminaire shall be fully compatible with any luminaire controls incorporated into the
142	luminaire (e.g., luminaires with dimmers shall be packed with dimmable lamps). Compact
143	fluorescent lamps prepackaged with luminaires shall meet the requirements of the U.S.
144	Environmental Protection Agency's Energy Star Program for CFLs Version 4.0.
145	(v) Be equipped with one or more single-ended, non-screw based halogen lamp sockets
146	(line or low voltage), a dimmer control or high-low control, and be rated for a maximum of
147	100W.
148	Artwork luminaires that meet all of the following requirements are not required to be
149	prepackaged and sold together with compact fluorescent or LED lamps: -
150	(a) designed only to be mounted directly to art work only for the purpose of illuminating
151	that art work;
152	(b) fitted only with E-12 screw-based line-voltage sockets;
153	(c) having no more than three sockets per luminaire; and
154	(d) controlled with an integral high/low switch.

Art work luminaires with a single socket shall have a maximum relamping rated wattage of 25 watts, luminaires with two or three sockets shall have a maximum relamping rated wattage of 15 watts per socket, as listed on a permanent label in accordance with Underwriters Laboratories (UL) 153.

- (11) Portable electric spas shall not have a standby power greater than 5(V2/3) Watts where V=the total volume in gallons, as measured in accordance with the test method for portable electric spas contained in section 1604, title 20, California code of regulations.
- (12) Televisions shall use no more than (0.20\*screen area (in2) + 32) watts in on mode and no more than one (1) watt in standby-passive mode. On and after January 1, 2013, televisions shall use no more than (0.12\*screen area (in2) + 25) watts in on mode and no more than one (1) watt in standby passive mode. Television on mode energy use shall be measured according to International Electrotechnical Commission (IEC) 62087, Edition 2.0 "Methods of Measurement for Power Consumption of Audio, Video, and Related Equipment," as applied by the U.S. Environmental Protection Agency in the "Energy Star Program Requirements for Televisions, Version 3.0" Television standby-passive mode energy use shall be measured according to international electrotechnical commission (IEC) 62301, Edition 1.0: household electrical appliances -measurement of standby power," as applied by the U.S. environmental protection agency in the "Energy Star Program Requirements for Televisions, Version 3.0"
- (D) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, in line 75, after the figure "2008" the following: -
- "On or after January 1, 2011, no new bottle-type water dispenser, commercial hot food holding cabinet, compact audio product, digital versatile disc player or digital versatile disc

- 177 recorder, portable electric spa, portable luminaire or television may be sold or offered for sale in
- the state unless the efficiency of the new product meets or exceeds the efficiency standards set
- 179 forth in the regulations adopted pursuant to Section 5."