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HOUSE BILL 1003

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By Representatives Morris, Stanford, Frockt, Moeller, and Upthegrove

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1 AN ACT Relating to efficiency standards for consumer products;  
2 amending RCW 19.260.030, 19.260.040, and 19.260.050; and reenacting and  
3 amending RCW 19.260.020.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 **Sec. 1.** RCW 19.260.020 and 2009 c 565 s 18 and 2009 c 501 s 1 are  
6 each reenacted and amended to read as follows:

7 The definitions in this section apply throughout this chapter  
8 unless the context clearly requires otherwise.

9 (1) "Automatic commercial ice cube machine" means a factory-made  
10 assembly, not necessarily shipped in one package, consisting of a  
11 condensing unit and ice-making section operating as an integrated unit  
12 with means for making and harvesting ice cubes. It may also include  
13 integrated components for storing or dispensing ice, or both.

14 (2) "Bottle-type water dispenser" means a water dispenser that uses  
15 a bottle or reservoir as the source of potable water.

16 (3) "Commercial hot food holding cabinet" means a heated, fully  
17 enclosed compartment, with one or more solid or partial glass doors,  
18 that is designed to maintain the temperature of hot food that has been

1 cooked in a separate appliance. "Commercial hot food holding cabinet"  
2 does not include heated glass merchandising cabinets, drawer warmers,  
3 or cook and hold appliances.

4 (4)(a) "Commercial refrigerators and freezers" means refrigerators,  
5 freezers, or refrigerator-freezers designed for use by commercial or  
6 institutional facilities for the purpose of storing or merchandising  
7 food products, beverages, or ice at specified temperatures that: (i)  
8 Incorporate most components involved in the vapor-compression cycle and  
9 the refrigerated compartment in a single cabinet; and (ii) may be  
10 configured with either solid or transparent doors as a reach-in  
11 cabinet, pass-through cabinet, roll-in cabinet, or roll-through  
12 cabinet.

13 (b) "Commercial refrigerators and freezers" does not include: (i)  
14 Products with 85 cubic feet or more of internal volume; (ii) walk-in  
15 refrigerators or freezers; (iii) consumer products that are federally  
16 regulated pursuant to 42 U.S.C. Sec. 6291 et seq.; (iv) products  
17 without doors; or (v) freezers specifically designed for ice cream.

18 (5) "Compensation" means money or any other valuable thing,  
19 regardless of form, received or to be received by a person for services  
20 rendered.

21 (6) "Cook and hold appliance" means a multiple mode appliance  
22 intended for cooking food that may be used to hold the temperature of  
23 the food that has been cooked in the same appliance.

24 (7) "Department" means the department of commerce.

25 (8) "Drawer warmer" means an appliance that consists of one or more  
26 heated drawers and that is designed to hold hot food that has been  
27 cooked in a separate appliance at a specified temperature.

28 (9) "Heated glass merchandising cabinet" means an appliance with a  
29 heated cabinet constructed of glass or clear plastic doors which, with  
30 seventy percent or more clear area, is designed to display and maintain  
31 the temperature of hot food that has been cooked in a separate  
32 appliance.

33 (10) "Hot water dispenser" means a small electric water heater that  
34 has a measured storage volume of no greater than one gallon.

35 (11) "Mini-tank electric water heater" means a small electric water  
36 heater that has a measured storage volume of more than one gallon and  
37 a rated storage volume of less than twenty gallons.

1 (12) "Pass-through cabinet" means a commercial refrigerator or  
2 freezer with hinged or sliding doors on both the front and rear of the  
3 unit.

4 (13) "Point-of-use water dispenser" means a water dispenser that  
5 uses a pressurized water utility connection as the source of potable  
6 water.

7 (14) "Pool heater" means an appliance designed for heating  
8 nonpotable water contained at atmospheric pressure for swimming pools,  
9 spas, hot tubs, and similar applications.

10 (15) "Portable electric spa" means a factory-built electric spa or  
11 hot tub, supplied with equipment for heating and circulating water.

12 (16) "Reach-in cabinet" means a commercial refrigerator or freezer  
13 with hinged or sliding doors or lids, but does not include roll-in or  
14 roll-through cabinets or pass-through cabinets.

15 (17) "Residential pool pump" means a pump used to circulate and  
16 filter pool water in order to maintain clarity and sanitation.

17 (18)(a) "Roll-in cabinet" means a commercial refrigerator or  
18 freezer with hinged or sliding doors that allow wheeled racks of  
19 product to be rolled into the unit.

20 (b) "Roll-through cabinet" means a commercial refrigerator or  
21 freezer with hinged or sliding doors on two sides of the cabinet that  
22 allow wheeled racks of product to be rolled through the unit.

23 (19) "Showerhead" means a device through which water is discharged  
24 for a shower bath.

25 (20) "Showerhead tub spout diverter combination" means a group of  
26 plumbing fittings sold as a matched set and consisting of a control  
27 valve, a tub spout diverter, and a showerhead.

28 (21) "State-regulated incandescent reflector lamp" means a lamp  
29 that is not colored or designed for rough or vibration service  
30 applications, has an inner reflective coating on the outer bulb to  
31 direct the light, an E26 medium screw base, a rated voltage or voltage  
32 range that lies at least partially within 115 to 130 volts, and falls  
33 into one of the following categories:

34 (a) A bulged reflector or elliptical reflector bulb shape and which  
35 has a diameter which equals or exceeds 2.25 inches; or

36 (b) A reflector, parabolic aluminized reflector, or similar bulb  
37 shape and which has a diameter of 2.25 to 2.75 inches.

1 (22) "Tub spout diverter" means a device designed to stop the flow  
2 of water into a bathtub and to divert it so that the water discharges  
3 through a showerhead.

4 (23) "Wine chillers designed and sold for use by an individual"  
5 means refrigerators designed and sold for the cooling and storage of  
6 wine by an individual.

7 (24) "Audio standby-passive mode" means the appliance is connected  
8 to a power source, produces neither sound nor performs any mechanical  
9 function (e.g., playing, recording), but may be switched into another  
10 mode with the remote control unit or an internal signal.

11 (25)(a) "Class A external power supply" means an external power  
12 supply circuit that is used to convert household electric current into  
13 DC current or lower voltage AC current to operate a consumer product  
14 and that:

15 (i) Is designed to convert line voltage AC input into lower voltage  
16 AC or DC output;

17 (ii) Is able to convert to only one AC or DC output voltage at a  
18 time;

19 (iii) Is sold with, or intended to be used with, a separate end-use  
20 product that constitutes the primary load;

21 (iv) Is contained in a separate physical enclosure from the end-use  
22 product;

23 (v) Is connected to the end-use product via a removable or hard-  
24 wired male/female electrical connection, cable, cord, or wiring;

25 (vi) Has nameplate output power that is less than or equal to two  
26 hundred fifty watts; and

27 (vii) Is a federally regulated external power supply.

28 (b) The term "class A external power supply" does not include a  
29 device that requires federal food and drug administration listing and  
30 approval as a medical device in accordance with section 513 of the  
31 federal food, drug, and cosmetic act (21 U.S.C. 360c), or a device that  
32 powers the charger of a detachable battery pack or charges the battery  
33 of a product that is fully or primarily motor operated.

34 (26) "Compact audio product" means an integrated audio system  
35 encased in a single housing that includes an amplifier and radio tuner,  
36 attachable or separable speakers, and can reproduce audio from one or  
37 more of the following media: Magnetic tape, CD, DVD, or flash memory.

1 "Compact audio product" does not include products that can be  
2 independently powered by internal batteries or that have a powered  
3 external satellite antenna, or that can provide a video output signal.

4 (27) "Digital versatile disc (DVD)" means a laser-encoded plastic  
5 medium capable of storing a large amount of digital audio, video, and  
6 computer data.

7 (28) "Digital versatile disc player" or "DVD player" means a  
8 commercially available electronic product encased in a single housing  
9 that includes an integral power supply and for which the sole purpose  
10 is the decoding of digitized video signals on a DVD.

11 (29) "Digital versatile disc (DVD) recorder" or "DVD recorder"  
12 means a commercially available electronic product encased in a single  
13 housing that includes an integral power supply and for which the sole  
14 purpose is the production or recording of digitized video signals on a  
15 DVD. "DVD recorder" does not include models that have an electronic  
16 programming guide function.

17 (30) "Electronic programming guide" means an application that  
18 provides an interactive, onscreen menu of television listings and that  
19 downloads program information from the vertical blanking interval of a  
20 regular television signal.

21 (31) "On mode" means the product is connected to a power source and  
22 produces sound and a picture. The power requirement in this mode is  
23 typically greater than the power requirement in standby-passive and  
24 download acquisition mode.

25 (32) "Screen size" means the diagonal length from one corner to the  
26 corner furthest away of the viewable screen area of a television,  
27 measured in inches.

28 (33)(a) "State-regulated external power supply" means a single-  
29 voltage external AC to DC or AC to AC power supply that:

30 (i) Is designed to convert line voltage AC input into lower voltage  
31 DC or AC output;

32 (ii) Is able to convert to only one DC or AC output voltage at a  
33 time;

34 (iii) Is sold with, or intended to be used with, a separate end-use  
35 product that constitutes the primary load;

36 (iv) Is contained within a separate physical enclosure from the  
37 end-use product;

1 (v) Is connected to the end-use product via a removable or hard-  
2 wired male/female electrical connection, cable, cord, or other wiring;

3 (vi) Does not have batteries or battery packs that physically  
4 attach directly (including those that are removable) to the power  
5 supply unit;

6 (vii) Does not have a battery chemistry or type selector switch and  
7 an indicator light; or, does not have a battery chemistry or type  
8 selector switch and a state of charge meter; and

9 (viii) Has a nameplate output power less than or equal to two  
10 hundred fifty watts.

11 (b) "State-regulated external power supply" does not include a  
12 device that is a "class A external power supply" that is federally  
13 regulated.

14 (34) "Television" means an analog or digital device designed  
15 primarily for the display and reception of a terrestrial, satellite,  
16 cable, internet protocol television, or other broadcast or recorded  
17 transmission of analog or digital video and audio signals.  
18 "Television" includes combination televisions, television monitors,  
19 component televisions, and any unit that is marketed to the consumer as  
20 a television. "Television" does not include computer monitors.

21 (35) "Video standby-passive mode" means the appliance is connected  
22 to a power source, does not perform any mechanical function (e.g.,  
23 playing, recording), does not produce video or audio output signals,  
24 but may be switched into another mode with the remote control unit or  
25 an internal signal.

26 **Sec. 2.** RCW 19.260.030 and 2009 c 501 s 2 are each amended to read  
27 as follows:

28 (1) This chapter applies to the following types of new products  
29 sold, offered for sale, or installed in the state:

30 (a) Automatic commercial ice cube machines;

31 (b) Commercial refrigerators and freezers;

32 (c) State-regulated incandescent reflector lamps;

33 (d) Wine chillers designed and sold for use by an individual;

34 (e) Hot water dispensers and mini-tank electric water heaters;

35 (f) Bottle-type water dispensers and point-of-use water dispensers;

36 (g) Pool heaters, residential pool pumps, and portable electric  
37 spas;

- 1 (h) Tub spout diverters; (~~and~~)
- 2 (i) Commercial hot food holding cabinets;
- 3 (j) Compact audio products, digital versatile disc players, and
- 4 digital versatile disc recorders;
- 5 (k) State-regulated external power supplies, which are single
- 6 voltage external AC to DC or AC to AC power supplies included with
- 7 other retail products, and single voltage external AC to DC or AC to AC
- 8 power supplies sold separately, excluding power supplies that are
- 9 classified as devices for human use under the federal food, drug, and
- 10 cosmetic act and require the United States food and drug administration
- 11 listing and approval as a medical device; and

12 (1) Televisions.

13 (2) This chapter applies equally to products whether they are sold,  
 14 offered for sale, or installed as stand-alone products or as components  
 15 of other products.

16 (3) This chapter does not apply to:

17 (a) New products manufactured in the state and sold outside the  
 18 state;

19 (b) New products manufactured outside the state and sold at  
 20 wholesale inside the state for final retail sale and installation  
 21 outside the state;

22 (c) Products installed in mobile manufactured homes at the time of  
 23 construction; or

24 (d) Products designed expressly for installation and use in  
 25 recreational vehicles.

26 **Sec. 3.** RCW 19.260.040 and 2009 c 501 s 3 are each amended to read  
 27 as follows:

28 The minimum efficiency standards specified in this section apply to  
 29 the types of new products set forth in RCW 19.260.030.

30 (1)(a) Automatic commercial ice cube machines must have daily  
 31 energy use and daily water use no greater than the applicable values in  
 32 the following table:

Equipment type	Type of cooling	Harvest rate (lbs. ice/24 hrs.)	Maximum energy use (kWh/100 lbs.)	Maximum condenser water use (gallons/100 lbs. ice)
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1	Ice-making head	water	<500	7.80 - .0055H	200 - .022H
2			>=500<1436	5.58 - .0011H	200 - .022H
3			>=1436	4.0	200 - .022H
4	Ice-making head	air	450	10.26 - .0086H	Not applicable
5			>=450	6.89 - .0011H	Not applicable
6	Remote condensing but not remote compressor	air	<1000	8.85 - .0038	Not applicable
7			>=1000	5.10	Not applicable
8	Remote condensing and remote compressor	air	<934	8.85 - .0038H	Not applicable
9			>=934	5.3	Not applicable
10	Self-contained models	water	<200	11.40 - .0190H	191 - .0315H
11			>=200	7.60	191 - .0315H
12	Self-contained models	air	<175	18.0 - .0469H	Not applicable
13			>=175	9.80	Not applicable

14 Where H= harvest rate in pounds per twenty-four hours which must be reported within 5% of the tested value.

15 "Maximum water use" applies only to water used for the condenser.

16 (b) For purposes of this section, automatic commercial ice cube  
17 machines shall be tested in accordance with the ARI 810-2003 test  
18 method as published by the air-conditioning and refrigeration  
19 institute. Ice- making heads include all automatic commercial ice cube  
20 machines that are not split system ice makers or self-contained models  
21 as defined in ARI 810-2003.

22 (2)(a) Commercial refrigerators and freezers must meet the  
23 applicable requirements listed in the following table:

24	Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
25	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are refrigerators	Solid	0.10V+ 2.04
26		Transparent	0.12V+ 3.34
27	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are "pulldown" refrigerators	Transparent	.126V+ 3.51
30	Reach-in cabinets, pass-through cabinets, and roll-in or roll-through cabinets that are freezers	Solid	0.40V+ 1.38
31		Transparent	0.75V+ 4.10
32	Reach-in cabinets that are refrigerator- freezers with an AV of 5.19 or higher	Solid	0.27AV - 0.71



- 1 kWh= kilowatt hours
- 2 V= total volume (ft<sup>3</sup>)
- 3 AV= adjusted volume= [1.63 x freezer volume (ft<sup>3</sup>)]+ refrigerator volume (ft<sup>3</sup>)

4 (b) For purposes of this section, "pulldown" designates products  
 5 designed to take a fully stocked refrigerator with beverages at 90  
 6 degrees Fahrenheit and cool those beverages to a stable temperature of  
 7 38 degrees Fahrenheit within 12 hours or less. Daily energy  
 8 consumption shall be measured in accordance with the American national  
 9 standards institute/American society of heating, refrigerating and air-  
 10 conditioning engineers test method 117-2002, except that the back-  
 11 loading doors of pass-through and roll-through refrigerators and  
 12 freezers must remain closed throughout the test, and except that the  
 13 controls of all appliances must be adjusted to obtain the following  
 14 product temperatures.

Product or compartment type	Integrated average product temperature in degrees Fahrenheit
Refrigerator	38±2
Freezer	0±2

18 (3)(a) The lamp electrical power input of state-regulated  
 19 incandescent reflector lamps shall meet the minimum average lamp  
 20 efficacy requirements for federally regulated incandescent reflector  
 21 lamps specified in 42 U.S.C. Sec. 6295(i)(1)(A)-(B).

22 (b) The following types of incandescent lamps are exempt from these  
 23 requirements:

24 (i) Lamps rated at fifty watts or less of the following types: BR  
 25 30, ER 30, BR 40, and ER 40;

26 (ii) Lamps rated at sixty-five watts of the following types: BR  
 27 30, BR 40, and ER 40; and

28 (iii) R 20 lamps of forty-five watts or less.

29 (4)(a) Wine chillers designed and sold for use by an individual  
 30 must meet requirements specified in the California Code of Regulations,  
 31 Title 20, section 1605.3 in effect as of July 26, 2009.

32 (b) Wine chillers designed and sold for use by an individual shall  
 33 be tested in accordance with the method specified in the California

1 Code of Regulations, Title 20, section 1604 in effect as of July 26,  
2 2009.

3 (5)(a) The standby energy consumption of bottle-type water  
4 dispensers, and point-of-use water dispensers, dispensing both hot and  
5 cold water, manufactured on or after January 1, 2010, shall not exceed  
6 1.2 kWh/day.

7 (b) The test method for water dispensers shall be the environmental  
8 protection agency energy star program requirements for bottled water  
9 coolers version 1.1.

10 (6)(a) The standby energy consumption of hot water dispensers and  
11 mini-tank electric water heaters manufactured on or after January 1,  
12 2010, shall be not greater than 35 watts.

13 (b) This subsection does not apply to any water heater:

14 (i) That is within the scope of 42 U.S.C. Sec. 6292(a)(4) or  
15 6311(1);

16 (ii) That has a rated storage volume of less than 20 gallons; and

17 (iii) For which there is no federal test method applicable to that  
18 type of water heater.

19 (c) Hot water dispensers shall be tested in accordance with the  
20 method specified in the California Code of Regulations, Title 20,  
21 section 1604 in effect as of July 26, 2009.

22 (d) Mini-tank electric water heaters shall be tested in accordance  
23 with the method specified in the California Code of Regulations, Title  
24 20, section 1604 in effect as of July 26, 2009.

25 (7) The following standards are established for pool heaters,  
26 residential pool pumps, and portable electric spas:

27 (a) Natural gas pool heaters shall not be equipped with constant  
28 burning pilots.

29 (b) Residential pool pump motors manufactured on or after January  
30 1, 2010, must meet requirements specified in the California Code of  
31 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

32 (c) Portable electric spas manufactured on or after January 1,  
33 2010, must meet requirements specified in the California Code of  
34 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

35 (d) Portable electric spas must be tested in accordance with the  
36 method specified in the California Code of Regulations, Title 20,  
37 section 1604 in effect as of July 26, 2009.

1 (8)(a) The leakage rate of tub spout diverters shall be no greater  
2 than the applicable requirements shown in the following table:

Appliance	Testing Conditions	Maximum Leakage Rate Effective January 1, 2009
Tub spout diverters	When new After 15,000 cycles of diverting	0.01 gpm 0.05 gpm

7 (b) Showerhead tub spout diverter combinations shall meet both the  
8 federal standard for showerheads established pursuant to 42 U.S.C. Sec.  
9 6291 et seq. and the standard for tub spout diverters specified in this  
10 section.

11 (9)(a) The idle energy rate of commercial hot food holding cabinets  
12 manufactured on or after January 1, 2010, shall be no greater than 40  
13 watts per cubic foot of measured interior volume.

14 (b) The idle energy rate of commercial hot food holding cabinets  
15 shall be determined using ANSI/ASTM F2140-01 standard test method for  
16 the performance of hot food holding cabinets (test for idle energy rate  
17 dry test). Commercial hot food holding cabinet interior volume shall  
18 be calculated using straight line segments following the gross interior  
19 dimensions of the appliance and using the following equation: Interior  
20 height x interior width x interior depth. Interior volume shall not  
21 account for racks, air plenums, or other interior parts.

22 (10) The following standards are established for consumer audio and  
23 video equipment:

24 (a) The maximum power usage of compact audio products manufactured  
25 on or after January 1, 2012, may not exceed two watts in audio standby-  
26 passive mode for those products without a permanently illuminated clock  
27 display and four watts in audio standby-passive mode for those products  
28 with a permanently illuminated clock display.

29 (b) The maximum power usage of digital versatile disc players and  
30 digital versatile disc recorders manufactured on or after January 1,  
31 2012, may not exceed three watts in video standby-passive mode.

32 (c) Compact audio products, digital versatile disc players, and  
33 digital versatile disc recorders must be tested in accordance with the  
34 international electrotechnical commission (IEC) 62087:2002(E) -

1 "Methods of Measurement for the Power Consumption of Audio, Video, and  
2 Related Equipment."

3 (11)(a) State-regulated external power supplies manufactured on or  
4 after January 1, 2012, must meet the standards in the following table:

<u>Nameplate Output</u>	<u>Minimum Efficiency in Active Mode</u>
<u>&lt;1 Watt</u>	<u>0.5 * Nameplate Output</u>
<u>≥ 1 and ≤ 51 Watts</u>	<u>0.09 * Ln(Nameplate Output) + 0.5</u>
<u>&gt;51 Watts</u>	<u>0.85</u>

<u>Maximum Energy Consumption in No-Load Mode</u>	
<u>Any Output</u>	<u>0.5 Watts</u>

12 Where Ln(Nameplate Output)=Natural Logarithm of the nameplate output expressed in Watts;

13 (b) State-regulated external power supplies must be tested in  
14 accordance with the United States environmental protection agency's  
15 energy star program, "Test Method for Calculating the Energy Efficiency  
16 of Single-Voltage External AC-DC and AC-AC Power Supplies" as it  
17 existed on August 11, 2004, provided that the test voltage specified in  
18 section 4(d) of the test method must be only one hundred fifteen (115)  
19 volts, 60 Hz.

20 (12) Televisions manufactured on or after January 1, 2012, but  
21 before January 1, 2014, with a screen size less than or equal to one  
22 thousand four hundred square inches must:

23 (a) Enter television standby-passive mode or standby-active mode  
24 after a maximum of fifteen minutes without video and/or audio input on  
25 the selected input mode;

26 (b) Enter television standby-passive mode when turned off by a  
27 remote or integrated button/switch;

28 (c) Use no more than 0.20 times the viewable screen size plus  
29 thirty-two watts in on mode;

30 (d) Use no more than one watt in standby-passive mode;

31 (e) Have a peak luminance in the preset mode designed for typical  
32 home use and for the default mode as shipped that is no less than  
33 sixty-five percent of the peak luminance at the brightest setting; and

34 (f) Have a minimum power factor of 0.9 when power is greater than  
35 or equal to one hundred watts.

1 (13) Televisions manufactured on or after January 1, 2014, with a  
2 screen size less than or equal to one thousand four hundred square  
3 inches must:

4 (a) Enter television standby-passive mode or standby-active mode  
5 after a maximum of fifteen minutes without video and/or audio input on  
6 the selected input mode;

7 (b) Enter television standby-passive mode when turned off by a  
8 remote or integrated button/switch;

9 (c) Use no more than 0.12 times the viewable screen size plus  
10 twenty-five watts in on mode;

11 (d) Use no more than one watt in standby mode;

12 (e) Have a peak luminance in the preset mode designed for typical  
13 home use and for the default mode as shipped that is no less than  
14 sixty-five percent of the peak luminance at the brightest setting; and

15 (f) Have a minimum power factor of 0.9 when power is greater than  
16 or equal to one hundred watts.

17 (14) Televisions covered under subsection (12) or (13) of this  
18 section must be tested as follows:

19 (a) The test method for standby-passive mode is international  
20 electrotechnical commission (IEC) 62301:2005, edition 1.0 "Household  
21 Electrical Appliances - Measurement of Standby Power."

22 (b) The test method for on mode and power factor is the  
23 international electrotechnical commission (IEC) 62087:2008(E), edition  
24 2.0 - "Methods of Measurement for the Power Consumption of Audio,  
25 Video, and Related Equipment." Televisions must be tested using  
26 section 11.6.1: "on mode (average) testing with dynamic broadcast-  
27 content video signal."

28 (i) The power factor of the television must be measured during the  
29 on mode test and the reported value is the average of power factor  
30 measurements taken at one minute intervals simultaneous to  
31 international electrotechnical commission (IEC) 62087:2008(E), edition  
32 2.0 section 11.6.1 on mode wattage measurements. The measurement of  
33 power factor must be accurate to one-hundredth of one percent.

34 (ii) A television must be tested as manufactured without any  
35 modifications to screen setting with the exception of televisions  
36 manufactured with a forced menu. Televisions manufactured with a  
37 forced menu must be adjusted and tested under the conditions listed in

1 (b)(ii)(A) or (B) of this subsection as applicable to the unit being  
2 tested.

3 (A) The on mode measurement of a television with a forced menu must  
4 be tested in the "home" mode or the manufacturer's recommended mode for  
5 home use. In addition, the on mode of a television must be measured in  
6 the most energy consumptive mode available in the forced menu.

7 (B) If neither a "home" mode nor a manufacturer's recommended mode  
8 for home use are available, the television must be tested in the most  
9 consumptive mode available in the forced menu to measure the on mode  
10 power.

11 (iii) The on mode power consumption for televisions with and  
12 without forced menus, and incorporating automatic brightness controls,  
13 must be calculated as follows:

14 
$$P_{\text{al broadcast}} = 0.55 * P_{\text{o broadcast}} + 0.45 * P_{\text{abc broadcasts}}$$

15 Where:

16  $P_{\text{o broadcast}}$  = on mode power test with 300 lux entering the light sensor.

17  $P_{\text{abc broadcast}}$  = on mode power test with 0 lux entering the light sensor.

18 (iv) All luminance testing must be performed in dark room  
19 conditions. The display screen illuminance measurement (E) in TV  
20 standby-passive mode must be less than or equal to 1.0 lux.  
21 Measurements must be taken perpendicular to the center of the display  
22 screen using a light measuring device.

23 (v) Measurements must be made using a reliable, accurate, and  
24 reproducible measurement procedure, which takes into account the  
25 generally recognized state-of-the-art measurement methods.  
26 Measurements must also be made with the automatic brightness control  
27 function, if such a function exists, disabled. If the automatic  
28 brightness control function exists and cannot be disabled, then  
29 measurements must be performed with light entering directly into the  
30 ambient light sensor at a level between 300 lux and 400 lux.  
31 Measurements must:

32 (A) Ensure the television is set to the home mode or the default  
33 mode as shipped;

34 (B) Immediately following the on mode power testing using the  
35 dynamic broadcast-content video signal as outlined in section  
36 1604(V)(3), display the three bar video signal provided in  
37 international electrotechnical commission (IEC) 62087 edition 2.0,

1 section 11.5.5, which displays three bars of white (one hundred  
2 percent) over black (zero percent) background;

3 (C) After the three bar video signal has been displayed for ten  
4 minutes, measure the luminance ( $L_{\text{home}}$ ). For television sets that are  
5 known to stabilize within ten minutes, this duration may be reduced if  
6 the resulting measurement can be shown to be within two percent of the  
7 result that would otherwise be achieved using the full ten-minute  
8 duration;

9 (D) Within one minute of measuring  $L_{\text{home}}$ , set the television to  
10 retail mode, or the brightest selectable preset mode, and display the  
11 three bar video signal;

12 (E) After the three bar video signal has been displayed for an  
13 additional ten minutes, measure the luminance ( $L_{\text{high}}$ ). When possible,  
14 measurements of luminance must be made without changing the light  
15 measuring device's measurement position on the display when switching  
16 between the home mode and retail mode. If this is not possible, the  
17 tester should replicate the measurement position of the light measuring  
18 device so that measurements in the home mode and retail mode are in the  
19 same position on the display;

20 (F) Calculate and report the luminance ratio by dividing  $L_{\text{home}}$  by  $L_{\text{high}}$ :  
21 Luminance ratio =  $L_{\text{home}}/L_{\text{high}}$ .

22 **Sec. 4.** RCW 19.260.050 and 2009 c 501 s 4 are each amended to read  
23 as follows:

24 (1) No new commercial refrigerator or freezer or state-regulated  
25 incandescent reflector lamp manufactured on or after January 1, 2007,  
26 may be sold or offered for sale in the state unless the efficiency of  
27 the new product meets or exceeds the efficiency standards set forth in  
28 RCW 19.260.040. No new automatic commercial ice cube machine  
29 manufactured on or after January 1, 2008, may be sold or offered for  
30 sale in the state unless the efficiency of the new product meets or  
31 exceeds the efficiency standards set forth in RCW 19.260.040.

32 (2) On or after January 1, 2008, no new commercial refrigerator or  
33 freezer or state-regulated incandescent reflector lamp manufactured on  
34 or after January 1, 2007, may be installed for compensation in the  
35 state unless the efficiency of the new product meets or exceeds the  
36 efficiency standards set forth in RCW 19.260.040. On or after January  
37 1, 2009, no new automatic commercial ice cube machine manufactured on

1 or after January 1, 2008, may be installed for compensation in the  
2 state unless the efficiency of the new product meets or exceeds the  
3 efficiency standards set forth in RCW 19.260.040.

4 (3) Standards for state-regulated incandescent reflector lamps are  
5 effective on the dates specified in subsections (1) and (2) of this  
6 section.

7 (4) The following products, if manufactured on or after January 1,  
8 2010, may not be sold or offered in the state unless the efficiency of  
9 the new product meets or exceeds the efficiency standards set forth in  
10 RCW 19.260.040:

- 11 (a) Wine chillers designed and sold for use by an individual;
- 12 (b) Hot water dispensers and mini-tank electric water heaters;
- 13 (c) Bottle-type water dispensers and point-of-use water dispensers;
- 14 (d) Pool heaters, residential pool pumps, and portable electric  
15 spas;
- 16 (e) Tub spout diverters; and
- 17 (f) Commercial hot food holding cabinets.

18 (5) The following products, if manufactured on or after January 1,  
19 2010, may not be installed for compensation in the state on or after  
20 January 1, 2011, unless the efficiency of the new product meets or  
21 exceeds the efficiency standards set forth in RCW 19.260.040:

- 22 (a) Wine chillers designed and sold for use by an individual;
- 23 (b) Hot water dispensers and mini-tank electric water heaters;
- 24 (c) Bottle-type water dispensers and point-of-use water dispensers;
- 25 (d) Pool heaters, residential pool pumps, and portable electric  
26 spas;
- 27 (e) Tub spout diverters; and
- 28 (f) Commercial hot food holding cabinets.

29 (6)(a) No new compact audio products, televisions, digital  
30 versatile disc players, or digital versatile disc recorders, if  
31 manufactured on or after January 1, 2012, may be sold or offered for  
32 sale in the state unless the efficiency of the new product meets or  
33 exceeds the efficiency standards set forth in RCW 19.260.040.

34 (b) No new compact audio products, televisions, digital versatile  
35 disc players, or digital versatile disc recorders, if manufactured on  
36 or after January 1, 2012, may be installed for compensation in the  
37 state on or after January 1, 2013, unless the efficiency of the new



1 product meets or exceeds the efficiency standards set forth in RCW  
2 19.260.040.

3 (7)(a) No new state-regulated external power supply, if  
4 manufactured on or after January 1, 2012, may be sold or offered for  
5 sale in the state unless the efficiency of the new product meets or  
6 exceeds the efficiency standards set forth in RCW 19.260.040.

7 (b) No new state-regulated external power supply, if manufactured  
8 on or after January 1, 2012, may be installed for compensation in the  
9 state on or after January 1, 2013, unless the efficiency of the new  
10 product meets or exceeds the efficiency standards set forth in RCW  
11 19.260.040.

12 (8)(a) No new television with a screen size less than or equal to  
13 one thousand four hundred square inches, if manufactured on or after  
14 January 1, 2012, but before January 1, 2014, may be sold or offered in  
15 the state unless the efficiency of the new product meets or exceeds the  
16 efficiency standards set forth in RCW 19.260.040.

17 (b) No new television with a screen size less than or equal to one  
18 thousand four hundred square inches, if manufactured on or after  
19 January 1, 2012, but before January 1, 2014, may be installed for  
20 compensation in the state on or after January 1, 2013, unless the  
21 efficiency of the new product meets or exceeds the efficiency standards  
22 set forth in RCW 19.260.040.

23 (9)(a) No new television with a screen size less than or equal to  
24 one thousand four hundred square inches, if manufactured on or after  
25 January 1, 2014, may be sold or offered in the state unless the  
26 efficiency of the new product meets or exceeds the efficiency standards  
27 set forth in RCW 19.260.040.

28 (b) No new television with a screen size less than or equal to one  
29 thousand four hundred square inches, if manufactured on or after  
30 January 1, 2014, may be installed for compensation in the state on or  
31 after January 1, 2015, unless the efficiency of the new product meets  
32 or exceeds the efficiency standards set forth in RCW 19.260.040.

33 NEW SECTION. Sec. 5. If any provision of this act or its  
34 application to any person or circumstance is held invalid, the  
35 remainder of the act or the application of the provision to other

1 persons or circumstances is not affected.

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