

# ENERGY STAR® Qualifying Criteria for Compact Fluorescent Lamps Version 3.0 – October 2003

**Note:** Compact Flourescent Lamp (CFL) products must be registered with the United States ENERGY STAR program (<a href="www.energystar.gov">www.energystar.gov</a>) before being sold in either Canada or the United States as ENERGY STAR qualified. Canada's ENERGY STAR initiative does not qualify CFL products and asks that all organizations contact the U.S. program directly to register their product and complete a U.S. Partner Agreement (<a href="www.energystar.gov/index.cfm?c=product\_specs.pt\_product\_specs">www.energystar.gov/index.cfm?c=product\_specs.pt\_product\_specs</a>). Importers of CFL products into Canada must also follow these requirements. Manufacturers, distributors, and importers are also encouraged to sign an Administrative Arrangement with Natural Resources Canada (<a href="http://oee.nrcan.gc.ca/energystar/english/participants/index.cfm">http://oee.nrcan.gc.ca/energystar/english/participants/index.cfm</a>?). See Section 6 for further details on how to qualify CFL products.

# 1) Scope

This ENERGY STAR compact fluorescent lamp (CFL) criteria document covers the requirements for self-ballasted, medium screw-based CFLs and lamp systems, including:

- Medium-based, compact fluorescent lamps with integral electronic ballasts.
- Circline lamps with a maximum diameter of 230 mm (9 in.) and square lamps with a maximum side length of 200 mm (8 in.) with medium base and electronic ballast that are tested and packaged with the lamp.
- Medium-based compact fluorescent lamps with integral electronic ballasts, which have a translucent cover over the bare fluorescent tube. The cover may be globe, bullet, pear or torpedo shaped or be any other shape.
- Medium-based compact fluorescent lamps with integral electronic ballasts, which have a reflector that may be open or enclosed. The lamp shall be primarily intended to replace wide-beam incandescent reflector lamps.

The intent of the ENERGY STAR initiative in Canada in this product category is to move consumers from incandescent bulbs to energy-efficient compact fluorescent lighting. ENERGY STAR qualified compact fluorescent lamps are primarily intended for **residential** applications.

# 2) Definitions

#### A. Self-ballasted compact fluorescent lamp

A compact fluorescent lamp unit that incorporates all elements, permanently enclosed, that are necessary for the starting and stable operation of the lamp and that does not include any replaceable or interchangeable parts.

#### B. Rated voltage

The voltage marked on the lamp.

#### C. Rated wattage

The wattage marked on the lamp.

#### **D.** Rated supply frequency

The frequency marked on the lamp.

#### E. Initial performance values –

The photometric and electrical characteristics at the end of the 100-hour aging period.

#### F. Rated luminous flux or lumen output

Initial lumen rating (100 hours) declared by the manufacturer.

#### G. Lumen maintenance

The luminous flux or lumen output at a given time in the life of the lamp and expressed as a percentage of the initial luminous flux. The mean lumens are the value at 40 percent of rated life.

#### H. Average rated lamp life

The length of time declared by the manufacturer during which 50 percent of any large number of lamps reaches the end of their individual lives.

#### I. Lamp colour

The colour characteristics of a lamp as defined by the colour appearance and the colour rendition.

#### J. Colour appearance

The actual colour of the lamp and is defined in terms of the spectral tri-stimulus values (colour coordinates) according to the recommendations of the CIE Publication No. 13.3-1995. For colour coordinates near the black body loci, the correlated colour temperature (Kelvin) can be used to define colour appearance.

#### K. Colour rendition

The effect that the spectral characteristic of the light emitted by the lamp has on the colour appearance of the objects illuminated by it. The colour rendering index is defined in terms of a comparison of the spectral tri-stimulus values of the objects under test illumination and standard illumination according to the recommendations of CIE Publication No. 13.3-1995.

#### L. Starting time

The time needed, after being switched on, for the lamp to start fully and remain lighted.

#### M. Run-up time

The time needed, after being switched on, for the lamp to reach 80 percent of its stabilized luminous flux.

#### N. Starting temperature

The minimum and maximum temperatures at which the lamp will reliably start.

#### O. Power factor

The active power divided by the apparent power (i.e. product of the root mean square [rms] input voltage and rms input current of a ballast).

#### P. Private labelled CFL

An ENERGY STAR qualified CFL lamp purchased and marketed under the brand of an ENERGY STAR Participant other than the manufacturer of the product.

#### Q. Retired or discontinued product

A product that was properly qualified as ENERGY STAR, but is no longer manufactured (as of the date on the list), but may still be available in the market.

#### R. NVLAP

National Voluntary Laboratory Accreditation Program.

#### S. A2LA

American Association for Laboratory Accreditation.

# 3) Reference Standards

ENERGY STAR qualified compact fluorescent lamps and lamp systems shall comply with the relevant clauses of the following standards, unless the requirements of the ENERGY STAR specification are more restrictive:

#### **American National Standards Institute**

ANSI C78.901 – 2001: Single Base Fluorescent Lamps – Dimensional and Electrical Characteristics ANSI C78.5-1997: Specifications for Performance of Self-Ballasted Compacted Fluorescent Lamps ANSI C78.375-1997: Guide for Electrical Measurements of Fluorescent Lamps ANSI/IEEE C62.41-1991: Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits

#### **Canadian Standards Association**

CAN/CSA-C861-95: Performance of Compact Fluorescent Lamps and Ballasted Adapters

#### **Commission internationale de l'éclairage (International Commission on Illumination)**

CIE Publication No. 13.3-1995: Method of Measuring and Specifying Colour Rendering of Light Sources

#### **Illuminating Engineering Society of North America**

IESNA LM-9-1999: Electric & Photometric Measurement of Fluorescent Lamps
IESNA LM-40-2001: Approved Method for Life Performance Testing of Fluorescent Lamps
IESNA LM-65-2001: Life Testing of Single-ended Compact Fluorescent Lamps
IESNA LM-66-00-2000: Electrical and Photometric Measurements of Single-Compact Fluorescent Lamps

#### **Industry Canada**

ICES-005: Radio Frequency Lighting Device Regulation

#### Underwriters Laboratories Inc.

UL 1993-1993: Standard for Self-Ballasted Lamps and Lamp Adapters

# 4) Technical Requirements

Table 1. Photometric Performance Requirements				
Criteria Item	ENERGY STAR Requirement	Sample Size	Laboratory Require- ment	Submittal Time
Lamp Power (watts) and Configuration <sup>1</sup>	Minimum Efficacy <sup>2</sup> : Lumens/watt (based on initial lumen data)			
Bare Lamp Lamp power <15 Lamp power >=15  Covered Lamp (no reflector) Lamp power <15 15= <lamp 19="&lt;Lamp" lamp="" power="" power<19="" power<25="">= 25  With Reflector Lamp power &lt; 20 Lamp power &gt;= 20 1000-Hour Lumen Maintenance</lamp>	45.0 60.0  40.0 48.0 50.0 55.0  33.0 40.0  The average lumen output measurement of the 10 lamps tested must be greater than 90% of initial (100-hour) lumen output at 1000 hours of rated life.	10 units per model (5 base-up, 5 base-down) unless manufacturer labels the lamp as position-restricted. If position-restricted, test all	Must use a laboratory accredited by NVLAP <sup>3</sup>	Initial quali- fication
Colour Rendering (CRI)  Correlated Colour Temperature (CCT)	Average of 10 samples tested must be > 80.0  Between 2700 and 3000K. If not, packaging should clearly state temperature and colour of product (cool or warm).	samples in specified position.		
Lumen Maintenance	Average of 10 samples tested must be > 80% of initial (100- hour) rating at 40% of rated life (Per ANSI C78.5, clause 4.10)			

Take performance and electrical requirements at the end of the 100-hour aging period according to ANSI C78.5. The lamp efficacy shall be the average of the lesser of the lumens per watt measured in the base-up and/or other specified positions. Use wattages placed on packaging to select proper specification efficacy in this table, not measured wattage. Labelled wattages are for reference only.

<sup>&</sup>lt;sup>2</sup> Efficacies are based on measured values for lumens and wattages from pertinent test data. Wattages and lumens placed on packages may not be used in calculation and are not governed by this specification. For multi-level or dimmable systems, measurement shall be at the highest wattage setting listed for the model. Acceptable efficacy and 1000-hour and lumen maintenance at 40 percent of rated life average lumen output measurement error is –3 percent.

<sup>&</sup>lt;sup>3</sup> For a list of NVLAP-accredited labs for energy-efficient lighting products, visit <u>www.ts.nist.gov.</u>

Table 2. Electrical Performance Requirements <sup>4</sup>				
Specification	ENERGY STAR	Sample Size	Laboratory	Submittal
Item	Requirement	_	Requirement	Time
Power Factor	Average of 10 samples tested must be greater than 0.50	10 units per model (5 base-up, 5 base- down) unless the		
Run-Up Time	Average of 10 samples tested must be less than 180 as per ANSI C78.5, clauses 3.11 and 4.8	manufacturer labels the lamp as position- restricted. If position-restricted,	Must use a lab accredited by NVLAP or	
Starting Time	Time after switching on until full start (and remain lighted) shall be less than 1.00 second.	test lamps in specified position.  Must be unique sample for this test only.	A2LA <sup>5</sup>	
Transient Protection	Per ANSI/IEEE C62.41, Category A, 7 strikes <b>Note:</b> One failure to meet 7 strikes will result in test failure and, therefore, failure to meet the criteria.	A minimum of 5 lamps tested in the base-up position unless the manufacturer labels the lamp as position-restricted. If position-restricted, test lamps in specified position.  Must be unique sample for this test only.	Self- certification <sup>6</sup>	Initial qualification
Operating Frequency Electromagnetic	>= 40 kHz ICES-005 and CAN/CSA	Determined by test lab	Lab accredited by A2LA <sup>7</sup> or NVLAP <sup>7</sup>	
Interference Base	C861, 3.1  Medium screw base – E26/24	Self-certifi	ication <sup>6</sup>	

<sup>&</sup>lt;sup>4</sup> Input voltage must be 120 V and frequency must be 60 Hz.
<sup>5</sup> For a list of NVLAP-accredited labs, visit www.nist.gov; for a list of A2LA-accredited labs, visit www.a2la2.net.

<sup>&</sup>lt;sup>6</sup> Self-certification is a declaration of conformance by the manufacturer to the requirement. For self-certification where data are required (sample size is specified in the requirement), the manufacturer may use data obtained directly from the manufacturer's own facilities that are neither NVLAP nor A2LA accredited.

<sup>&</sup>lt;sup>7</sup> Laboratory must also be listed at gullfoss2.fcc.gov/prod/oet/cf/eas/reports/TestFirmSearch.cfm.

Table 3. Lifetime Performance and Packaging Requirements				
Specification Item	ENERGY STAR Requirement	Sample Size	Laboratory Require- ment	Submittal Time
Rapid Cycle Stress Test	Per ANSI C78.5 and IESNA LM-65 (clauses 2, 3, 5 and 6) Exception: cycle times must be 5 minutes on and 5 minutes off. Lamp will be cycled once for every two hours of rated life. At least 5 out of 6 sample lamps must meet or exceed the minimum number of cycles.	6 units, base-up or base-down, as stated by manufacturer. Must be unique sample for this test only.	NVLAP, A2LA or ISO 9000 certified laboratories or facilities	Initial quali- fication
Interim Life Test  Average Rated Lamp Life	At 40% of rated life, report on lamp life:  One sample failure — acceptable  Two sample failures — requires submission of a self-certification product failure report to describe in detail the specific reasons for sample product failures  Three sample failures  Three sample failures — does not qualify  6000 hours as declared by the manufacturer on packaging and qualification form.  Participant must complete lifetime test to stated rated lamp life on packaging (i.e. CFL is marketed as a 10 000-hour CFL, it must complete the lifetime test to 10 000 hours).	10 units per model (5 base-up, 5 base-down) unless specific use or position appears on packaging. Interim and final average rated lifetime tests must use the same sample.		Initial qualification  Full qualification

Warmanter	Droduct modes sin a man-t	Must submit alastrania		
Warranty	Product packaging must state "Warranty" or	Must submit electronic draft or hard-copy draft		
	"Limited Warranty" and	of specific CFL model.		
	have a "1-800" number,	Packaging must include		
	mailing address or Web	the following information		
	site address (if	to be reviewed for		
	applicable) for consumer	qualification		
	complaint resolution.	requirements:		
		- Model number		
	For Residential	- Wattage		
	Application: Warranty	- Lumen output (must be		
	or limited warranty	100 hours average)		
	statement must cover at	- Average rated lifetime		
	least a minimum of 24	- Correlated colour	0.10	Initial
	months, or 2 years, from	temperature (if outside	Self-	quali-
	date of purchase based	2700–3000 K range)	certification	fication
	on no less than 3 hours	- Warranty (based on		
	per day of use (normal	application type and		
	household use –	standard average		
	Table 4).	hours/day)		
		- 1-800 number, address		
	For Commercial	or Web site		
	Application: Warranty	- Equivalency to		
	or limited warranty	incandescent (if		
	statement must cover at	applicable)		
	least a minimum of 12	- Starting temperature		
	months, or 1 year, from	- Electromagnetic		
	date of purchase.	interference		
		- Known incompatibility		
Product	In English and French <sup>8</sup>	with controls and		
Packaging		application exceptions		
Language				
Starting	Package must state the			
Temperature	minimum starting			
	temperatures or			
	geographical zone of use			
	and any other conditions			
	for reliable starting to			
	meet the starting time			
	requirements of ANSI			
	C78.5, clause 4.7.			

Incompatibility with Controls and Application Exceptions	Lamp package must clearly state any known incompatibility with photo controls, dimmers or timing devices. In addition, packaging should state specific applications exceptions (i.e. applications that the CFL should not be used in).			
CFL/ Incandescent Equivalency <sup>9</sup>	Participant must use Table 5 to declare an incandescent equivalency based on the initial average 100- hour lumen output measurement. If the luminous flux falls outside of the specified range, either do not display an incandescent equivalent or display the lower incandescent wattage equivalence.	Average of data used from 100-hour lumen output measurement	NVLAP only	

<sup>&</sup>lt;sup>8</sup> For information on additional requirements for labelling, see Attachment 1.

<sup>&</sup>lt;sup>9</sup> If displaying an incandescent equivalence for commonly used A-shaped lamps (for all bare-type models and covered-type models that replace an A-shaped incandescent lamp), the CFL's initial 100-hour luminous flux or lumen output must meet the levels shown in Table 5. Table 5 shows typical luminous flux for A-shaped, soft white, incandescent lamps. Based on research conducted by the U.S. National Lighting Product Information Program (NLPIP: <a href="www.lrc.rpi.edu/programs/NLPIP">www.lrc.rpi.edu/programs/NLPIP</a>), luminous flux varies considerably among lamps. Table 5 is intended to aid in consumer choice and in no way supersedes or replaces any requirement for product performance contained in this specification. If the luminous flux falls outside the range, either do not display an incandescent equivalent or display the lower incandescent wattage equivalence. If displaying an incandescent equivalent for globe, reflector or decorative-type lamps, the initial luminous flux for both the CFL and the appropriate globe, reflector or decorative incandescent lamp must be displayed side by side in a comparison panel, along with the wattage ratings for both the CFL and incandescent lamp.

Table 4. Warranty and Lifetime Statements for Residential Use of CFLs Chart

<b>ENERGY STAR Qualified CFL</b> –	Residential Use – Number of Years	
Rated Lifetime	Claims (based on 3 hours/day)	
6 000 hours	5 years	
8 000 hours	7 years	
10 000 hours	9 years	
12 000 hours	11 years	
15 000 hours	13 years	

**Table 5. CFL/Incandescent Equivalency Chart** 

	<b>Typical Luminous Flux (lumens)</b>	
A-Shaped Incandescent Bulb (watts)	Lumens must be 100-hour initial values for CFLs	
	Note: excludes globes, reflectors or decorative	
	CFLs	
40	Minimum of 450	
60 Minimum of 800		
75 Minimum of 1100		
100	Minimum of 1600	
150	Minimum of 2600	

Table 6. Referenced Standards/Procedures			
<b>Performance Characteristics</b>	Test Procedure		
	Compact Fluorescent	Circle Design	
	(see note below)		
Lumen Output and Efficacy	IESNA LM-66	IESNA LM-9	
Lumen Depreciation and Life	IESNA LM-65 and ANSI C78.5	IESNA LM-40	
Colour Rendering Index	CIE Publication No. 13.3		
Transient Protection	ANSI/IEEE C62.41 Category A, 7 strikes		
Electromagnetic Interference	ICES-005 and CAN/CSA-C861-95		

**Note**: Testing with a reference ballast shall not apply to integrally ballasted compact fluorescent lamps. These lamps shall be measured with their integral ballasts at 120 V and 60 Hz.

## 5) Certification

Manufacturers shall certify that ENERGY STAR qualified compact fluorescent lamps sold using the ENERGY STAR symbol have

- 1) Been tested and third-party listed to the UL 1993 Standard for Self-Ballasted Lamps and Lamp Adapters by a Nationally Recognized Testing Laboratory (NRTL) that is accredited by the Occupational, Safety and Health Administration (OSHA)
- 2) Met the manufacturers' declared performance criteria that are found on the packaging
- 3) Met or exceeded the minimum performance criteria contained in this ENERGY STAR specification for the characteristics shown above

# 6) Qualification

Manufacturers submitting their CFL products to the U.S. ENERGY STAR program should follow the following two-step procedure:

#### **Step 1: Initial Qualification**

Manufacturers must submit a report that includes the following completed tests (see below) from either its properly accredited laboratories or properly accredited third-party testing facilities, which must certify to the authenticity and integrity of the test data. In addition, manufacturers must complete Page 1 and the accredited laboratories must complete Page 2 of the ENERGY STAR CFL Qualification Form (<a href="http://www.energystar.gov/ia/partners/product\_specs/qpi/FQ\_ES\_CFLQualification\_Form\_3\_04.pdf">http://www.energystar.gov/ia/partners/product\_specs/qpi/FQ\_ES\_CFLQualification\_Form\_3\_04.pdf</a>) and submit it with the packaging proofs. The test reports must indicate that the model meets all initial requirements. Incomplete test reports, product packaging or qualification form will not be accepted or processed for ENERGY STAR qualification. Manufacturers must complete the following tests before the model will be considered for initial ENERGY STAR qualification:

- Efficacy (includes 100-hour lumen output)
- Rapid Cycle Stress Test
- 1000-Hour Lumen Maintenance
- Colour Rendering (CRI)
- Correlated Colour Temperature (CCT)
- Power Factor
- Run-Up Time
- Starting-Up Time
- Transient Protection
- Operating Frequency
- Electromagnetic Interference
- Lumen Maintenance (at 40 percent of rated life)
- Interim Lifetime Test (at 40 percent of rated life)
- Submission of Product Packaging

A model meeting the above requirements will be considered initially qualified for ENERGY STAR, and the manufacturer will receive a letter stating that the model has met all necessary initial requirements and that it can begin to market this CFL model as ENERGY STAR qualified by using the symbol on the product packaging and identifying the product in marketing materials and on its Web site.

#### **Step 2: Full Qualification**

Manufacturers will be given a due date in their initial qualification letter to submit the final average rated lifetime test report to complete their ENERGY STAR CFL qualification process and fulfill the Full Qualification requirements. This due date will be based on the date the average rated lifetime test began and the rated lifetime of the CFL. Failure to submit this final test report within 45 days of completion of the test will result in an immediate disqualification of the model.

# 7) Private Labelling Products

Manufacturers, distributors, retailers and other ENERGY STAR Participants may purchase existing qualified CFL cross-list products and submit them for listing on the qualified product list by completing

and submitting a Private Labeller qualification form (available from your U.S. ENERGY STAR account manager) and product packaging draft for review and approval. After the Private Labeller form and product packaging have been reviewed and accepted, the private labelling Participant will receive a letter from ENERGY STAR stating that this model will be added to the CFL qualified product list and can begin to use the ENERGY STAR symbol on its packaging and be marketed as an ENERGY STAR product.

**Packaging for Private Labelled CFLs:** Participants must submit packaging proofs for each of their privately labelled CFLs with the exact information (wattage, lumen output, rated lifetime, equivalency, etc.) that their supplier has submitted to ENERGY STAR because the products are exactly the same. If packaging is submitted with incorrect information, the model will not be qualified as ENERGY STAR until the correct packaging has been submitted.

**Changing of Qualified CFL Supplier:** Participants are required to inform ENERGY STAR within 30 days of changing their supplier of one or more of their privately labelled CFLs. Participants must submit a new Private Labeller form and new product packaging for each product to reflect the updated information.

**Note:** The private labelled products, or products with different model or product numbers, fall under the same quality assurance and de-listing protocol as the originally tested model. Therefore, if the original qualified model is removed from the ENERGY STAR qualified list, the corresponding privately labelled model(s) will be disqualified immediately on the ENERGY STAR CFL qualified product list.

### 8) Labelling and Product Packaging Review

All Participants who are qualifying a CFL must submit electronic or hard copy labelling and packaging samples for the specific CFL model. Packaging must meet all the requirements that are identified under the Lifetime Performance and Packaging Requirements (Table 3). Failure to meet the packaging requirements will delay the qualification process, and the CFL model in question will not be qualified until all packaging requirements are met. The specific qualified model must be distributed within this approved product packaging. If products are found being sold or distributed in alternative non-approved packaging, that model will be immediately disqualified from ENERGY STAR for failure to meet the criteria. If a Participant has multiple cases where products are being sold in unapproved packaging, then it may result in their ENERGY STAR Participant Arrangement and Partner Agreement being terminated.

Commercial Packaging of Products: Manufacturers of ENERGY STAR qualified CFL products that will be bulk packaged for commercial sales must submit a package proof for the container in which the qualified products will be shipped and which clearly displays all of the required criteria to fulfill the packaging requirements for ENERGY STAR.

**Note:** Those Participants found distributing qualified CFL products in unidentified packaging or white boxes will be contacted immediately and may immediately have that specific model disqualified from the program.

After all requirements have been met for packaging, ENERGY STAR will list the new qualified model. All labelling must be in accordance with *Full Guidelines For Reproducing, Applying, and Using The ENERGY STAR Symbol In Canada* and Attachment 1. Packaging and promotional materials using the

ENERGY STAR symbol should be submitted to your ENERGY STAR account manager for final review and approval.

# 9) Quality Assurance/Retirement and/or and Disqualification/De-Listing of CFL Products

Manufacturers, distributors and retailer Participants who are active members of the ENERGY STAR CFL program must participate in the ongoing, independent, third-party quality control verification and testing program, and they are encouraged to participate in ongoing, quality control programs traceable to NVLAP- or A2LA-accredited facilities. These third-party quality control programs are necessary to provide an active system to verify the quality of CFL products that are out in the marketplace as ENERGY STAR qualified and should include random off-the-shelf testing. The results of this testing will be provided to the Participant. Evidence of participation in a third-party quality control program by the manufacturer will result in expedited product qualification and benefit of the doubt in non-compliance negotiations.

Additional and/or separate off-the-shelf testing may be conducted on behalf of Natural Resources Canada by an accredited facility based on complaints or other suspicion of non-compliance, or as part of a random test program. If a model fails a requirement in the independent, third-party quality control verification and tests or off-the-shelf testing, ENERGY STAR may request further testing by the Participant or other actions to be taken by the manufacturer to demonstrate why the product should keep its qualification status and not be de-listed as an eligible product. Or if the data shows clear proof that the product in question has overwhelmingly failed to meet the criteria, ENERGY STAR will immediately disqualify and remove the CFL model from the qualified product list. Disqualification or de-listing of a model may also result from evidence of non-compliance with the ENERGY STAR Participant Arrangement and/or criteria.

If a product is disqualified, the manufacturer must retest that specific model and complete ALL criteria requirements before it will be reviewed for ENERGY STAR qualification status again. If a Participant submits a new CFL product under a previously qualified model number and has not completed the full qualification set of tests, the program will not accept the test information. In addition, de-listing of a model may result from evidence of non-compliance with the ENERGY STAR Participant Arrangement and/or specification. If a product is de-listed, the manufacturer must wait six months from the date of the de-listing to re-submit that model, qualify any other new or existing model, or private label an existing qualified model. A pattern of de-listings may result in termination of the Participant Arrangement and Partner Agreement.

**Product De-Listing/Disqualification Procedure:** If a qualified CFL does not meet the ENERGY STAR criteria for CFLs, ENERGY STAR will contact the Participant by e-mail to inform of the intent to disqualify the model(s) and provide 30 days for the Participant to respond to the notification. Should a CFL model be de-listed or disqualified, ENERGY STAR will send a letter to specify the following actions that the Participant must complete:

- 1. The manufacturer, distributor or retailer must immediately stop shipment on the specific model (and corresponding product or packaging configurations) so it inhibits the product from entering into the retail or distribution markets further.
- 2. In addition, the Participant must cease use of the ENERGY STAR symbol on the disqualified model's

packaging design, Web page and other marketing materials.

- 3. Participants found with disqualified product out in the market still identified as ENERGY STAR (with an ENERGY STAR symbol) will receive an ENERGY STAR Symbol Use Violation letter and may face the possible termination of the Participant Arrangement.
- 4. To requalify a disqualified model, the Participant must submit all completed test reports (including final average rated lifetime test), qualification forms and corresponding packaging proofs to meet the requirements of the current ENERGY STAR criteria for CFLs.

Retailers, distributors or other consumer channels have 30 days to remove or sell off existing inventory or cover up the ENERGY STAR symbol on the product packaging so that it is not identified as an ENERGY STAR qualified product.

ENERGY STAR will alert utilities and retailers to this specific product's change in qualification by using the following communication avenues:

- E-mail announcement will be distributed on a monthly basis to alert Participants to status changes for ENERGY STAR qualified CFLs
- Posting as "disqualified" on the ENERGY STAR CFL qualified product list

**Retirement/Discontinuation of Products:** Participants who are retiring or discontinuing a model need to submit to their ENERGY STAR account representative a formal letter stating the specific date this model will be out of the marketplace so it can be identified on the qualified product list as "retired/discontinued" because it will no longer be available.

### 10) Effective Date

The effective date for the ENERGY STAR Program Requirements and Criteria for CFLs – Version 3.0 is January 1, 2004, and it replaces all previous versions. Those Participants who want to submit new products for qualification must comply with all criteria detailed in Version 3.0. Those Participants who have qualified products based on the 8/9/01 CFL criteria and have outstanding test data still due will be required to continue testing based on the issued due dates that they received in their initial qualification letter. Any Participant who fails to submit test data according to their due dates for specific model(s) will have their products immediately removed from the qualified product list for failure to complete the full qualification process.

In addition, all existing fully qualified models will be required to submit new product packaging by February 15, 2004, to show compliance with the Version 3.0 packaging criteria. Inventories of existing packaging may be used through June 30, 2004.

# 11) Future Criteria Specification Revisions

ENERGY STAR reserves the right to change the criteria specification should technological and/or market changes affect its usefulness to consumers, industry or the environment. Within one year of the effective date of this version of the specification, ENERGY STAR will review comments and suggestions for future revisions to the current criteria increasing efficacy and the scope of the CFL specification.

# Attachment 1 Canadian Labelling Requirements

#### **Background**

All compact fluorescent lamps (CFLs) sold in the United States must comply with the labelling requirements of the U.S. Federal Trade Commission (FTC) – 10 CFR 431. Canada does not have an equivalent legal requirement for labelling CFLs. To ensure a harmonized labelling regime for CFLs sold in both Canada and the United States, the labelling requirements of the FTC will prevail. For products sold uniquely in Canada, the manufacturer will abide by the following specifications, in both official languages (English and French).

#### **Specifications**

- 1. All required disclosures must be clear and conspicuous.
- 2. The words "light output" must appear first in order, followed by the lumens number.
- 3. The word "lumens" must be close to either "light output" or the lumens number.
- 4. The words "energy used" must appear second in order, followed by the wattage number. The word "watts" must be close to either "energy used" or the wattage number.
- 5. The word "life" must appear third in order, followed by the life in the number of hours. The word "hours" must be close to either "life" or the life in the number of hours.
- 6. The numbers for light output, energy used and life must be of equal size and in the same type style.
- 7. The words "light output," "energy used" and "life" must be of equal size and in the same type style.
- 8. The words "lumens," "watts" and "hours" must be of equal size and in the same type style but only approximately 50 percent of the size of the words "light output," "energy used" and "life."

#### Illustration

Note: This illustration shows the elements and relative sizes of the required disclosures.

**Light Output** Flux lumineux

1200 Lumens lumens

Energy Used Consommation énergétique

Watts watts

Life Durée de vie 7000 Hours heures

To save energy costs, find the bulb with the light output you need, and then choose the one with the lowest watts.

Afin de réduire les coûts énergétiques, trouvez les ampoules possédant le flux lumineux dont vous avez besoin puis choisissez celles ayant le nombre de watts le moins élevé.