How to Qualify Products – CFLs

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On Behalf of the U.S. Department of Energy
2008 ENERGY STAR Lighting Partner Meeting
Agenda

• Original Lamp Manufacturer Product Qualifications
  – Initial Qualification
  – Full Qualification
  – Upgrading Lifetimes

• Privately Labeled Product Qualifications

• Packaging
Original Manufacturer Lamps

• Three Required Components of Submission:
  1. Qualification Form
  2. Test Report from NVLAP-accredited laboratory
  3. Product Packaging

• Accurate Qualification Form speeds processing time
  – Match Test Report
  – Match Packaging Claims

• Test report must be submitted directly from Test Laboratory. Other components may be submitted by Partner.
Step 1: Initial Qualification

- Initial Qualification is allowed after product has completed 40% of rated life testing. Test report must include:
  - Efficacy at 100 hours
  - 1000-hour lumen maintenance (LM)
  - Color Rendering
  - CCT
  - LM at 40% of rated life
  - Power Factor
  - Run-up Time
  - Starting Time
  - Transient Protection
  - Operating Frequency
  - Electromagnetic Interference
  - Rapid Cycle Stress Test
  - Interim Life Test

- Initial Qualification Submission must also include Initial Qualification Form and Product Packaging.
Step 2: Full Qualification

• After a product has been initially qualified, testing must continue until full lifetime is complete.
• Submission of results of Average Rate Lamp Life (ARL) test must be submitted within 45 days of test completion.

Upgrading Product Lifetimes
• A Partner may only upgrade a product after completion of ARL at the lifetime they are upgrading the product to.
• Also requires compliance with Interim Life Test, Lumen Maintenance at 40% of rated life, and Rapid Cycle Stress test at upgraded lifetime.
Private Labeled Lamps

• Two Required Components of Submission:
  1. Qualification Form
  2. Product Packaging

• Accurate Qualification Form speeds processing time
  – Match Specs of Original Manufacturer Product
  – Match Packaging Claims

• Private label submission may be submitted either by the private labeler or the original lamp manufacturer.
Packaging

• Biggest delay in qualification of products is the submission of incorrect packaging.

• **All** packaging for products carrying the ENERGY STAR logo, or marketed as ENERGY STAR qualified, must be reviewed and approved.

• Submission of packaging early in Partners’ internal process can avoid having to redesign packaging later in the process.
Packaging

Packaging requirements include:

- Light Output (lumens)*
- Energy Used (watts)*
- Life (hours)*
- Number of lamps (if other than 1)*
- FTC Statement*
- Model Number
- CCT (if outside 2700-3000K range)
- Known Incompatibility with controls (i.e. Not for use with dimmer switches, etc.)
- Starting temperature
- Warranty (≥ 2 years residential applications, ≥ 1 year commercial applications)
- Instructions for warranty fulfillment (800 number, Web site, or mailing address)
- Electromagnetic Interference caution
- Equivalency to incandescent claims
- Lifetime claims in years
- ENERGY STAR Certification Mark
- Position Restriction if products tested in one position only.

* Indicates requirement of FTC
How to Qualify Products – SSL

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- Review of Program Status
- Before Qualifying a Product
- Anticipated Product Submission Process
- Contacts
Review of Program Status

- Final ENERGY STAR Criteria for Solid-State Lighting Luminaires was released on September 12, 2007; takes effect September 30, 2008.

- Targets white-light SSL products in general illumination applications.


- Products will be tested in accordance with recently-developed industry standards and test procedures.
Before Qualifying a Product

• To market a product as ENERGY STAR qualified and use the ENERGY STAR brand marks, a manufacturer must PARTNER with the ENERGY STAR program.

• Program Requirements and Partner Commitment Forms are under development. Anticipate companies will be able to join ENERGY STAR as an SSL Partner beginning in June 2008.

• Please contact D&R if you would like to be on the mailing list for SSL program announcements.
Anticipated Qualification Process

• DOE anticipates increasing efficacy requirements and expanding Category A applications frequently as technology develops.

• To expedite product qualification, an electronic submittal process is under development.

• Partners and/or test labs will upload test data, packaging images, warranty statements, and information regarding product families for review by program staff.
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