



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



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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.
- Criteria divided into Category A: Near-term applications, and Category B: Future Performance Targets.
- 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.

Contacts



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