National Lighting Partner Meeting
February 25-27, 2008

How to Qualify Residential Light Fixtures
Overview

• Version 4.1: Updates

• Review of ENERGY STAR submittal documents

• Documentation Sources

• Common Questions

• Further Resources
Version 4.1: Updates

• Version 4.1 of the ENERGY STAR specification for Residential Lighting Fixtures affects only products and fixtures using self-ballasted GU-24 lamps.

Key Dates
- 4/1/08: Deadline for new GU24 4.0 submissions and use of 4.0 forms
- 8/1/08: Version 4.1 becomes effective
Important Notes:

• All 4.0 previously qualified **fixtures** that do **NOT** use integrated GU-24 lamps will automatically qualify under 4.1

• All 4.0 previously qualified **fixtures** that use integrated GU-24 lamps will need to show documentation of label on fixture & product packaging showing mercury website info

• All **new** integrated GU-24 **lamps** must meet the requirements of 4.1 on April 1, 2008

• **All** integrated GU-24 **lamps** must meet the requirements of 4.1 on August 1, 2008

www.epa.gov/bulbrecycling
Version 4.1: Updates

- **Self-Ballasted GU-24 lamps** can now be qualified as ENERGY STAR replacement lamps. New requirements:
  - Accelerated, Cycling, Thermal and Voltage stress test (ACTV)
  - Maximum Mercury Content
  - Run-up Time
  - 1000-hour lumen maintenance for new qualifications
  - **Product Packaging and Lamp Labeling Requirements** for GU-24 based integrated lamps, fixtures and their packaging to promote consumer awareness of mercury content and proper lamp disposal.
  - **Testing Orientation Notification on platform letters**
  - **2-Year Warranty for Replacement Lamps**

Ballasts and lamps inside thermal chamber used in ACTV test
• ENERGY STAR Residential Light Fixture (RLF) Eligibility Criteria – Current Version 4.1

• Qualified Product Information (QPI) Forms
  – Indoor
  – Outdoor

• Supplemental Information Reporting Form (SIR)
Submittal Process Overview

- Review RLF eligibility criteria
  - Tables 1: Indoor Fixtures
  - Tables 2A & 2B: Outdoor Fixtures
  - Table 3: GU24 Integrated Lamps
- Complete QPI form in its entirety
- Insert required supplemental documentation into the appropriate tab within the SIR form
- Email submittal to ESRLF_Submit@icfi.com
When to Start a new QPI

• Submittals organized by lamp/ballast platform in fixture

• New QPI/SIR if yes to any of the following:
  – Fixtures use a different ballast
  – Fixtures use a different lamp (includes wattages)
  – Fixtures share Lamp & Ballast but in different numbers
    • Remember to adjust system efficacy to the # of lamps used!

• SIR Section 8 – list all fixture model numbers with this combination
Fixture Documentation Support

- **NEMA/ALA Matrices**
  (www.nema.org/lampballastmatrix/)
- **ENERGY STAR Platform Letters**

**Required Documentation**

Provide:
1. A test report from a laboratory accredited by NVLAP, one of its MRA signatories; or
2. An EPA approved Platform Letter of Qualification that lists the lamp/ballast combination used in the fixture and the test result for this performance characteristic; or
3. EPA-approved documentation from an industry association, such as the NEMA/ALA matrices; or
4. A test report from an ISO 9000 registered facility.

Sample size: ≥ 10 lamps must be tested.

*Version 4.1 Specification*
Common Questions

- **Conditional Qualification - check date!**
  - Visible on the Platform letter
  - Present in Version 4.0 for lumen maintenance and lamp life (in some cases)

- **Conditional GU-24 platform letters**
  - Integrated (one-piece) GU24 lamps: **ALL expire 8/1/2008** (without additional testing)
Common Questions

• **Outdoor products**
  – Table 2a – efficient sources
    • Integral photocell
  – Table 2b – reduced operating time
    • Integral photocell and motion sensor

• **Lamp Shipment**
  – Only exceptions: Recessed fixtures, linear fluorescent fixtures, outdoor fixtures
  – No special exemption for GU-24 at this time
Upcoming:

- Online Product Submittals (OPS)
  - Replaces electronic QPI & SIR form submittal
  - Partners will be able to submit product data online to ENERGY STAR
  - Partners can view or edit existing data
• ENERGY STAR Website: Lighting
  – Materials from this session
  – Specification documents
  – Sample QPI and SIR Forms (updated soon for 4.1)
  – Platform Letters

Questions? Contact Christina Morris at ICF International

RLF@icfi.com
(202) 862-1141
Questions?
NEMA/ALA Matrices

- Web site: www.nema.org/lampballastmatrix/
- Structure: Fixture manufacturer matches lamp matrix entry to ballast matrix entry
- Submittal requirements for fixture manufacturers:
  - Complete the NEMA/ALA Matrix Supplemental form (this form calculated efficacy and is what allows EPA to verify where the data is coming from and verify that the lamp and ballast combination selected meets the ENERGY STAR requirements.)
  - Use the data reported on matrix to complete the QPI form
  - Insert the NEMA-ALA Supplemental form into the SIR form (section 2c)
- EPA discussing inclusion of self-ballasted GU-24
• Web site: http://energystar.gov/index.cfm?c=manuf_res.pt_platform_ltrs

• History: EPA responding to requests from manufacturers that made both lamps and ballasts and were not NEMA or ALA members. Serves the same purpose as NEMA/ALA Matrices – allows fixture manufacturers to avoid testing and retesting lamps and ballasts that they do not manufacture.

• Submittal requirements:
  – Use the data reported on the letter to complete the QPI form
  – Insert the letter into the SIR form (section 2c)
## Supplemental Documentation Requirements

<table>
<thead>
<tr>
<th>Manufacturer Data (lamp, ballast or fixture)</th>
<th>Manufacturer Test Reports</th>
<th>NVLAP or ISO 9000 Facility</th>
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**EN ERGY STAR Platform Letters: Benefits**

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