Lighting Verification Testing

ENERGY STAR® Program Integrity
December 15, 2015
Overview

- Verification Testing Timeline for 2016
- Luminaires Testing
- Lamps Testing
- Other Updates
- Questions
Timeline

- **General** – EPA will provide nominations for verification testing by December 17, 2015
- **Luminaires**
  - Selections for 5% of luminaires in December for January-May 2016 Testing
    - Include only products certified to V1.x or both V1.x and V2
  - Selections for 5% of luminaires in May/June for June-December testing
    - Include only products certified to V2
- **Lamps**
  - 20% of CFLs and 10% of LEDs to be selected for 2016 verification testing
Luminaires Verification Testing – Product Selection

- For January – May 2016, testing will focus on V1.x luminaires as follows:
  - EPA will provide nominations spanning 2.5% of luminaires product families certified to Luminaires V1.x and notify CBs of their testing requirement
  - For random selections, CBs will exclude luminaires that do not ship with lamps (not covered under V2) and luminaires that ship with GU24 lamps (certified based on the CSD)

- For June – December 2016, testing will only be for V2 luminaires:
  - EPA will request unique counts of luminaires certified to V2 in early May;
  - Provide nominations spanning 2.5% of unique luminaires product families certified to V2, and;
  - Notify CBs of their additional testing requirement
Luminaires Verification Testing – Jan-May 2016

• Follow current Directive #2012-01 for testing conducted January through May 2016

• Provide partners the option to have verification testing conducted to allow for recertification to V2
  – If partners opt to verify per V2, testing will need to be conducted based on the Luminaires V2 spec; report failures per standard procedures
  – Recertification option not applicable if changing to shipped with ENERGY STAR lamp
Luminaires Verification Testing – Jun-Dec 2016

• Directive #2012-01 will be updated for testing conducted June-December 2016
  
  – Only one sample required except for lumen maintenance of fluorescent light sources
  
  – For luminaires certified with an ENERGY STAR certified lamp, upon receiving the sample, confirm the following:
    
    1. The bulb model number shipped with the luminaire matches the model number of the bulb currently associated with the ENERGY STAR luminaire certification
    
    2. The packaging for the bulb reports a minimum efficacy of 65 lm/W
    
    3. For enclosed fixtures, the in situ temperature test is required per section 8
Luminaires Verification Testing – Jun-Dec 2016 Continued

For luminaires certified with an ENERGY STAR lamp (continued):

• Report the luminaire to EPA as a failure if:
  − There is no bulb shipped with the luminaire
  − The shipped bulbs are currently associated with the luminaires certification, but the packaging reports an efficacy of less than 65 lm/W
  − The bulb(s) that shipped with the luminaire is/are associated with the certification but was disqualified
  − The bulbs are not associated with the luminaire certification and are not ENERGY STAR certified lamps

• If bulbs are not associated with the luminaire certification but are currently ENERGY STAR certified and at least 65 lm/W, update the certification to include the bulb and notify EPA of the administrative update via Enforcement@energystar.gov
Lamps Verification Testing

- 2016 testing will be conducted for lamps certified to V1.x
- Expectation is for testing to be continued to completion even if a model fails one performance criteria
- Directive #2015-01 revised to update process around marginal failures
  - CB does not need to automatically retest product if marginal failure occurs.
  - CB required to notify EPA of all failures for a given model and EPA will notify CB if more testing is required.
Product Failure Form

- CBs are required to report models that do not meet the requirements of the ENERGY STAR specification to Enforcement@energystar.gov using the Product Failure Form.
  - Certification errors:
    - Report products that were certified in error.
  - Lifetime failures:
    - Report lamps models that are certified using early certification and fail lifetime testing.
  - Verification testing failures, including marginal lamps failures:
    - Report failures within 2 business days of determining the failure.
    - If a CB determines a testing error after a failure has been reported, please notify Enforcement@energystar.gov immediately.
Other Luminaires Lighting Issues

• Luminaires
  – QPX Light min output set at 800 lumens. If lower lumens allowed, enter 800 for now and note actual lumens in notes field. Web service will be updated in Spring 2016 to allow lower lumens.

• Certified Subcomponent Database QPX
  – Continue to submit products using the existing web service and include specification version as 1.2.
Other Luminaires Lighting Issues - FAQs

• Warranty requirement is five years for any luminaire or retrofit kit without a replaceable driver per section 17.
  – **Q:** What is the warranty for a product that does not have a replaceable driver, but is listed in the exceptions for driver replaceability in section 12.2 such as an SSL downlight retrofit?

• Only inseparable “other” products are subject to the 50,000 hour lifetime, meaning products that meet the definition of inseparable in Luminaires V2 and are not already covered by an existing directional category, e.g., downlights.
  – **Q:** Which inseparable products are subject to the 50,000 hour lifetime?

• A directional product covered under the scope should not be considered inseparable for lifetime purposes and would be subject to a minimum lifetime of 25,000 hours for indoor products, or 35,000 hours for outdoor products.
  – **Q:** What lifetime is required for a directional product type in the scope of the Luminaires V2 specification?
Other Lamps Lighting Issues

• Lamps QPX – comments due by Dec 18\textsuperscript{th}
  – Lamps only available as part of an ENERGY STAR certified luminaire will not appear on the list of ENERGY STAR certified lamps until the luminaire is available in the market

• Lamps Data Quality
  – Ensure that equivalency claims follow the spec requirements and use the CBCP tool only as directed
General Resources

- Certification Body Resources page
  - Product Failure Form
  - Verification Testing Summary Report

- Frequently Asked Questions
  - What if a partner requests to withdraw certification for products nominated for VT?
  - When can CBs notify partners of VT failures?
  - Search by keyword

- Directives
  - General VT Directive #2011-06
  - Lamps VT Directive #2015-01
  - Luminaires VT Directive #2012-01 (To be updated on June 1, 2016 to reflect V2 requirements)

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