



# How to Navigate Lighting Certification

Tanya Hernandez, PE, LC

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Learn more at [energystar.gov](http://energystar.gov)

# What is Certification?

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- Certification that a lighting product performs to:
  - The ENERGY STAR specification requirements
- But the process has changed over the last few years...

# Program Improvements



- Labeling program being strengthened across all product categories and product review capacity increased
- **ENERGY STAR is now a third-party certification program based on national and international standards; not manufacturer self-declarations**
- Testing laboratories and certifications bodies must be EPA-recognized:
  - Laboratory accreditation bodies (ABs) must be ISO 17011 accredited
  - Testing laboratories must be ISO 17025 accredited
    - No longer limited to NVLAP as was the case prior to CBs
  - First party labs (in-house) may be EPA-recognized if witnessed (WMTL) or supervised (SMTL) through a recognized certification body (CB)
  - CBs must be accredited to ISO Guide 65
  - [www.energystar.gov/testingandverification](http://www.energystar.gov/testingandverification)

# Previous Qualification Process for Lighting products

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- **Step 1:** NVLAP accredited laboratory tests your product.
  - Only NVLAP accredited laboratory data was accepted
- **Step 2:** Laboratory or partner submits test data to EPA/DOE
  - EPA/DOE contractor reviews the data, makes ENERGY STAR qualification determination;
  - Small number of reviewers
- **Step 3:** EPA contractor advises EPA of qualification status
  - EPA maintains qualifying product list at [www.energystar.gov](http://www.energystar.gov)
- **Step 4:** EPA contractors administer verification testing (off-the-shelf testing) through a third party laboratory

# Certification Process 2011 - Present



- **Step 1:** EPA-recognized laboratory tests your product.
  - Third-party or in-house lab accredited to ISO 17025 with appropriate scope of accreditation, or WMTL or SMTL through a CB
- **Step 2:** Laboratory submits test data to EPA-recognized Certification Body
  - CB can be the same entity as lab (e.g. CSA, ITL, UL)
  - CB certifies whether the product meets the ENERGY STAR certification (10 lighting CBs recognized today)
- **Step 3:** CB advises EPA of certification status
  - EPA maintains qualifying product list at [www.energystar.gov](http://www.energystar.gov)
- **Step 4:** CB conducts verification testing (off-the-shelf testing)
  - 10-20% of each CB's qualifying product list to be tested annually at manufacturer expense



# Testing Infrastructure

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- 40+ EPA-recognized lighting laboratories worldwide:
  - Arizona, California, Colorado, Georgia, Massachusetts, North Carolina, New York, Ohio, Pennsylvania, Washington
  - Canada, China, Germany, Hong Kong, Japan, Malaysia, Singapore, South Korea, Taiwan
- Laboratory capacity is expanding
- EPA continuing to receive applications for recognition

# Expanded Testing Infrastructure

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- Manufacturer laboratories have options for submitting their test results
  - Accreditation by an EPA-recognized accreditation body
  - Participation in a CB's laboratory program
    - Supervised Manufacturer Testing Laboratory (SMTL)
    - Witnessed Manufacturer Testing Laboratory (WMTL)

# Certification Infrastructure

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- 10 EPA-recognized certification bodies for lighting products
  - Some certification bodies have their own recognized laboratories
  - Certification bodies are first resource for questions about:
    - Appropriate classification
    - Testing requirements
    - Product variations and family grouping



# Making the Most of Certification

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- Talk with multiple laboratories and CBs
  - Costs and capabilities vary
  - Relationships are important
- Review allowable variations and product families in the specifications
- Understand and use the Certified Lighting Subcomponent Database (CSD) where possible



# Questions and Panel Discussion



# Thank you!



Taylor Jantz-Sell  
ENERGY STAR Lighting Program Manager  
(202) 343-9042  
[jantz-sell.taylor@epa.gov](mailto:jantz-sell.taylor@epa.gov)

Tanya Hernandez  
ICF International  
(919) 294-9004  
[Tanya.Hernandez@icfi.com](mailto:Tanya.Hernandez@icfi.com)

