Ish Bulb Part 2:
And This Time It’s Personal.

2016 Northeast Residential Lighting Workshop
Tuesday, September 20th
10:15am-11:15am
2015 Was a Year of Balancing

Cost

Quality
The Future of Ish?

2015

2016 and beyond (hopefully)
Speakers

• Taylor Janz-Sell
  – US EPA, ENERGY STAR Program
• Kiersten von Trapp
  – NMR Group
• Stan Mertz
  – CLEAResult
ENERGY STAR Lamps Version 2.0

- Final December 31, 2015 OPEN FOR BUSINESS Effective Jan 2017
- More than 2000 lamps have been certified to Version 2.0!
  - 630+ Omnidirectional
- Increased efficacy levels for all lamp types.
- Expanded scope: connected lamps, color tunable lamps, and self-ballasted induction-driven electrodeless lamps.
- Improved alignment with the Luminaires V2.0 specification.
- Allows for use of DOE test procedures
- Standby limits for connected lamps
- Careful and slight adjustments to omnidirectional lamp criteria to allow for cost reductions while maintaining high levels of quality: omnidirectionality, power factor, lifetime
- Learn more at energystar.gov/lamps. Check out the list.
MA Lighting Market Assessment

Kiersten von Trapp

www.nmrgroupinc.com
Study Sponsors:

• The Massachusetts Energy Efficiency Advisory Council

• The Massachusetts Electric Program

Administrators:

• Cape Lighting Compact
• Eversource Energy
• National Grid
• Unitil
A Rich Dataset

16 Years of market indicator data

2,153 On-site lighting inventories between 2009 and 2016 across MA and NY

1,435 Massachusetts on-site inventories

718 New York on-site inventories

3 Waves of panel visits in MA

Panel Study

Started in 2013
3 Waves in MA
1 Wave in NY

Revisit homes to observe changes

More information:

http://tinyurl.com/LightingPanel
http://tinyurl.com/MALighting2015-16
Why New York?

- 2011: LED Incentives introduced
- 2012: Standard CFLs dropped
- 2014: All upstream activities ceased

Graph showing trends in energy usage from 2009 to 2016 for different types of lighting:
- MA CFLs
- MA LEDs
- MA Incandescent + Halogen
- Upstate NY CFLs
- Upstate NY LEDs
- Upstate NY Incandescent + Halogen
Methodology

• Massachusetts n = 420
  • 150 new visits
  • 270 panel visits

• Upstate New York n = 150
  • 70 new visits
  • 80 panel visits

• LED model numbers
• ENERGY STAR®-qualified list
• Separated LED saturation into:
  • ENERGY STAR qualified
  • Non-ENERGY STAR qualified
  • Integrated LED fixtures
MA & NY LED Bulb Saturation and Penetration 2016 with ENERGY STAR LEDs

LED Bulb Saturation

- **MA**: 7% ENERGY STAR LEDs, 3% Non ENERGY STAR LEDs, 2% LED Fixtures
- **NY**: 2% ENERGY STAR LEDs, 3% Non ENERGY STAR LEDs, 2% LED Fixtures

*Significantly different from ES LEDs in MA at the 90% confidence level

LED Bulb Penetration

- **MA**: 49% No LED Installed, 15% Non ENERGY STAR LED Installed, 12% LED Fixtures
- **NY**: 70% No LED Installed, 18% Non ENERGY STAR LED Installed

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# Bulb Type Familiarity

<table>
<thead>
<tr>
<th>Familiarity of bulb type</th>
<th>MA</th>
<th>NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>478</td>
<td>398</td>
</tr>
<tr>
<td>LED Familiarity</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td>CFL Familiarity</td>
<td>78%</td>
<td>79%</td>
</tr>
<tr>
<td>Halogen Familiarity</td>
<td>57%</td>
<td>66%*</td>
</tr>
</tbody>
</table>

- Similar levels of LED and CFL familiarity
- Increased familiarity with halogen among NY households
NMR Lighting Reports & Presentations

• **2015-2016 Lighting Market Assessment Consumer Survey and On-site Saturation Study**

• **IEPEC 2015:**
  • [A Lighting Study to Stand the Test of Time: Exploring the Results of a Residential Lighting Study Designed to Produce Lasting Data](#)
  • [We Know What You Did Last Summer: Revelations of a Multi-Year Lighting Panel Study](#)

• **ACEEE 2016:**
  • [Back to the Future: Why Lighting Programs May Have Never Been More Important](#)
Mad Max New England

The Post V2.0 world as it exists

Stan Mertz
Value Line as a bridge

June 2015 – Construction began on the “ish Bridge” that would allow programs to claim savings on low cost LEDs outside of ENERGY STAR
Bridges being considered across the country
After ENERGY STAR V2.0 was released

January 2016 after the earthshaking release of V2.0
Stanley Mertz
Director of Retail Strategies
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We change the way people use energy™
So What Happened...

• ...to ENERGY STAR 2.0 Uptake?
ENERGY STAR Lamps Version 2.0: Click link for updated tables

Wattage equivalency & CCT

CCT and CRI
ENERGY STAR Lamps 2.0 Update Sept 2016

Dimmable A Lamps 87%

Lifetime

- 25000 (7%)
- 15000 (28%)
- 10000 (41%)
- 5000 (29%)
- 25000 (11%)

Dimmable: Not dimmable
Discussion

• What future do ish bulbs have
  – In programs?
  – For manufacturers?
  – On retail shelves?
• What impact may ish bulbs have on 2015/2016 evaluations?
• What impact do these bulbs have on the transforming market?