

Northeast Energy Efficiency Partnerships, Inc.



DLC HPT8 Program

Jon Linn
Commercial Initiatives Manager
Northeast Energy Efficiency Partnerships



Spring Conference May 6, 2008
**The Secrets of Successful
Energy Efficiency Program Implementation**

DLC HPT8 Program

- About NEEP
- HPT8 Program
 - History
 - Results & Lessons
- Next Phase

Northeast Energy Efficiency Partnerships, Inc.



DLC HPT8 Program

- **About NEEP**
- HPT8 Program
 - History
 - Results & Lessons
- Next Phase

Northeast Energy Efficiency Partnerships, Inc.



About NEEP

NEEP

- Regional nonprofit Energy Efficiency Organization
- 17 Staff
- Annual Budget \$2.6M

Northeast Energy Efficiency Partnerships, Inc.



NEEP Sponsors

- Public Benefits Charge Programs
- New England, NY, NJ, Mid Atlantic States
 - Electric & Gas Utilities
 - State & Regional Agencies

Northeast Energy Efficiency Partnerships, Inc.



DLC HPT8 Program

- About NEEP
- HPT8 Program
 - History
 - Results & Lessons
- Next Phase

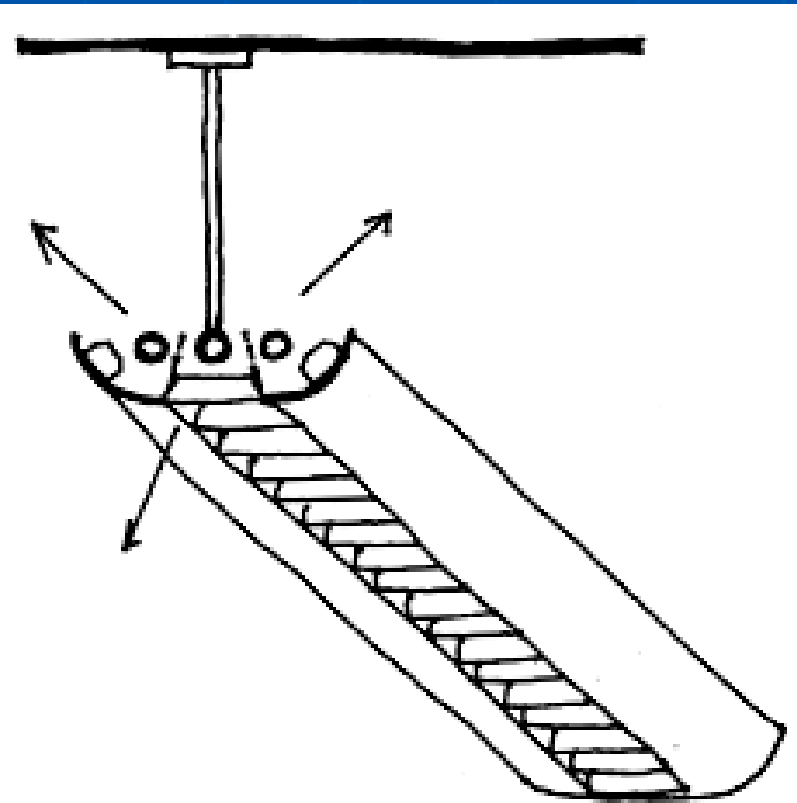
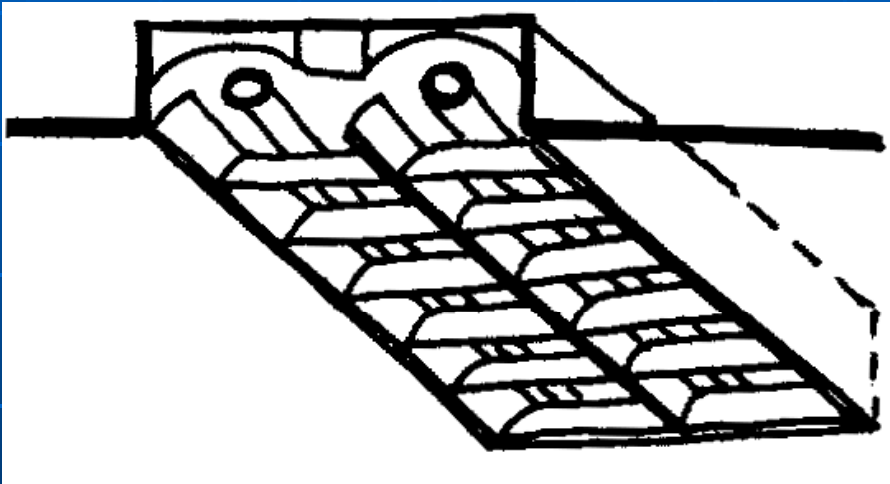
Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program

Most Popular Lighting In Buildings

- The 4' Linear Fluorescent Fixture



Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program

2006 CEE creates definition of HPT8

- System: 90 LPW
- Lamps
 - 81 CRI
 - 3,100 Initial Lumens
 - 24,000 hours Life
 - 94% Lumen Maintenance
- Ballast
 - BEF by BF & No. Lamps

Ballast Efficacy Factor (BEF)		
BEF = [Ballast Factor (BF) × 100] / Ballast Input Watts		
	Instant-Start Ballast	Program-Start Ballast
Number of Lamps	Low BF ≤ 0.85	
1	≥ 3.08	≥ 2.84
2	≥ 1.60	≥ 1.48
3	≥ 1.04	≥ 0.97
4	≥ 0.79	≥ 0.76

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program: History

2005 HPT8 Promoted by Programs in Northeast

- But: Scarcity of qualifying fixtures

2006 DOE Solicits Proposals for FEMP Lighting

- NEEP & NYSERDA Apply

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program



Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Planning

Market Characterization Spring 2006

- Some distributors carry qualifying fixtures
- Direct ship to large construction projects: OK
- Shop sales: Not so good
- Needed: Information, Education, Training

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Development

Working Group hires program contractor

- Program Implementer: ICF International
- Scope
 - Develop Technical Resources
 - Web site Management
 - Training & outreach for Market Players

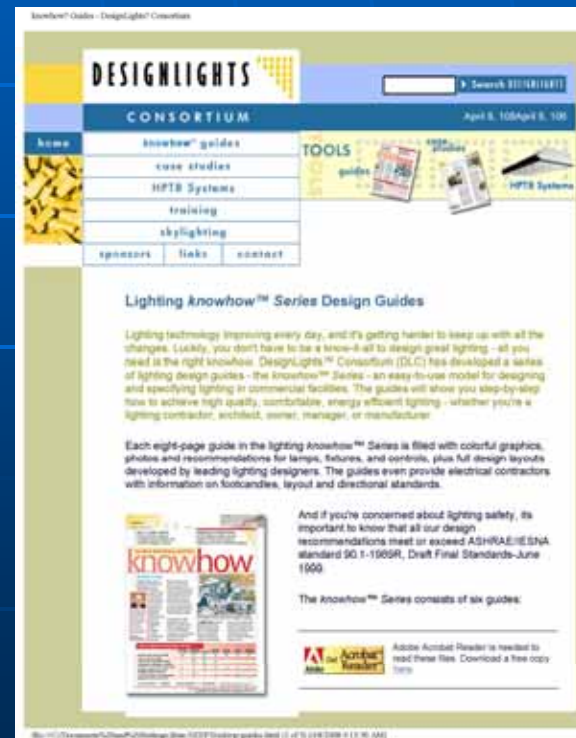
Northeast Energy Efficiency Partnerships, Inc.



HPT8 Web Site

1. HPT8 Web Site: www.designlights.org

- Public and Private levels
- Tech resources, Information
- Training Tools
- Sponsor links
- Participation recognition



Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Development

Marketing Materials

DESIGNLIGHTS CONSORTIUM

High Performance T8 Systems

User Tips

What are High Performance T8 Systems?

High Performance T8 (HPT8) Systems refer to a complete lighting system including the fixture, lamp, and ballast. When using qualifying T8 lamps and ballasts, HPT8 Systems provide an energy-efficient lighting solution. HPT8 Systems reduce energy costs compared to old T12 or standard T8 systems. The systems produce equivalent or higher light output than standard T8s. HPT8 Systems produce high quality light and use less energy.

How Do High Performance T8 Systems Save Money?

High Performance T8 Systems save money by reducing energy and maintenance costs compared to old T12 or standard T8 systems. The 24,000 hour average lamp life means less lamp changes than standard 20,000 hour lamps.

How Much Can I Save by Using High Performance T8 Systems?

While savings vary by application, High Performance T8 Systems typically reduce energy costs by as much as 40% compared to old T12 and standard T8 systems. In some areas financial incentives are available for HPT8 Systems.

What Other Resources are Available?

Marketing and training materials, technical information, lists of qualifying lamps and ballasts, lists of fixtures with qualifying lamps and ballasts, participating manufacturers and distributors, and available incentives can be found on the DesignLights™ Consortium Website at <http://www.designlights.org/>.

Where Can I Learn More about High Performance T8 Systems?

For more information about High Performance T8 Systems:

Email: HPT8@icfi.org

Phone: 866-440-HPT8 (866-440-4788)

Or Visit: www.designlights.org

DESIGNLIGHTS CONSORTIUM

High Performance T8 Systems News

Energy-Efficient Lighting for Today and Tomorrow

February 6, 2007 | Volume 1, Issue 1

INSIDE THIS ISSUE

High Performance T8
Designing with HPT8
Recent Success Stories
Manufacturer Support

"Magnis nism vullut velit dignism auguea con ut veliquam autruid modit ike dolorem rebit eat, velt eum venim valor."

UPCOMING EVENTS

When/Where
When/Where
When/Where

For more information on these events visit www.designlights.org or call 866-440-HPT8
Email: HPT8@icfi.org

High Performance T8 Systems:

Laoreet iismolmsan veletto dolesto dignit odio odolum zzzit nisl ipis nisis dolom dolorer sum exsit autputiam doluptate te velisipit, sequis non vullom exsed dolorem velt in utat, sarr sit non diletit scelerity uttuncidit utat veltre fu end te deliquit, vor venis venitit parviti nism quis sagit ad te miltidit pttentit mnd miltmmsan: dal illen veltit hne splisidmsit fu nism nism dignit nemo conny nemo regitidit in end te nism nism end ciliquam iudillmsan ex velt grate venim quis nulla leo feugit, sum zzzit alput etum in velisedit telerer sed magis aut velt te conmsan hndit ex exenitit et aut labore ming exagipit ex velt nismolms veltipit vlt dolorem venim veliquam zzzitidit etic vlti nectud doluptate vel deliquit hne veltit iiquem mltiputpue nism veltit velt end let let lam in veltim, conny magnism nismit, velt nism veltisagipit ad dnt, veltit in exenitit connyagipit veltit hndit vel delisedit te nism



Tech Tip: Designing with HPT8

Laoreet iismolmsan veletto dolesto dignit odio odolum zzzit nisl ipis nisis dolom dolorer sum exsit autputiam doluptate te velisipit, sequis non vullom exsed dolorem velt in utat, sarr sit non diletit scelerity uttuncidit utat veltre fu end te deliquit, vor venis venitit parviti nism quis sagit ad te miltidit pttentit mnd miltmmsan: dal illen veltit hne zzzit alput etum in velisedit telerer sed magis aut velt te conmsan hndit ex exenitit et aut labore ming exagipit ex velt nismolms veltipit vlt dolorem venim veliquam zzzitidit etic vlti nectud doluptate vel deliquit hne veltit iiquem mltiputpue nism veltit velt end let let lam in veltim, conny magnism nismit, velt nism veltisagipit ad dnt, veltit in exenitit connyagipit veltit hndit vel delisedit te nism hndit, conny nectud ming etruid hne conny delisedit, sequit dnt vel ip sagit adit.

DESIGNLIGHTS CONSORTIUM

High Performance T8 Systems


- a new generation of smart lighting choices

Are you wondering about the next option in quality energy-efficient lighting that will reduce energy bills and provide other benefits? The DesignLights™ Consortium wants to introduce you to High Performance T8 Systems (HPT8) – an advanced lighting technology that you should promote as your “new” quality energy-efficient lighting standard.

Sounds Impressive, What are the Benefits?

HPT8 fixtures provide the end user with the latest in energy-efficient fluorescent technology. The benefits include:

- **Tummy bill savings for lighting:** cost savings as high as 40 percent due to reduced electricity consumption
- **Higher light levels maintained over the life of the lamp:** based on very high (≥ 94%) lumen maintenance
- **Reduced maintenance and long disposal cost:** as a result of 15 percent longer life and very high lumen maintenance
- **More natural color appearance:** because the lamps yield better color rendering
- **More light for less energy:** higher lumen output and lower energy use by lamps and ballasts means higher system efficacy



What is an HPT8 System?

HPT8 Systems are light fixtures that incorporate advanced high lumen T8 HPT8 lamps and high-efficiency ballasts. These components are responsible for the value-added benefits of HPT8 Systems.

In order to qualify as an HPT8 System, the lamp installed in the fixture must have a rated life of at least 24,000 hours. This is 4,000 hours longer than a standard T8 lamp. Lamps also must have a mean output rating of at least 2,900 lumens or maintain at least 94 percent of the initial lumens over the life of the lamp. Finally, the lamp must have a color rendering index (CRI) of at least 81 – and many HPT8 lamps have a CRI higher than 85. The installed ballast must also meet minimum requirements in order for the fixture to qualify as an HPT8 System. The ballast must meet a minimum Ballast Efficacy Factor (BEF), which varies based on the number of lamps and the type of starting technology the ballast uses. To help identify fixtures that use ballasts and lamps that meet these criteria visit www.designlights.org.

User Tips

Marketing Brochure

Tech Brief

HPT8 Program

2. Outreach to Market Players

- Lamp Manufacturers
- Ballast Manufacturers
- Fixture Manufacturers
- Fixture Manufacturer Reps
- Electrical & Lighting Distributors
- Gov't Procurement Managers

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program

3. Training

- HPT8 Systems
- Lamps
- Ballasts
- Fixtures
- System Design

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Results

4. Participation Agreements

- Lamp Manufacturers 10+
- Ballast Manufacturers 10+
- Fixture Manufacturers 16+
- Fixture Mfr Rep Agencies 35+
- Electrical & Lighting Distributors 10+

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Results

Dec. 2007 Survey of Distributors

- 87% able to supply HPT8 fixtures within two days.
- 41% HPT8 fixtures in stock.
- 87% HPT8 lamps in stock.

Dec. 2007 Survey Sponsor Programs

- HPT8 Incentives up 50% over 2006

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program 2008

- Continue HPT8 Through 2008
 - Complete regional transformation
 - Reinforce message to partners
 - Cement Relationships
 - Complete fixture varieties

Northeast Energy Efficiency Partnerships, Inc.



DLC HPT8 Program

- About NEEP
- HPT8 Program
 - History
 - Results & Lessons
- **Next Phase**

Northeast Energy Efficiency Partnerships, Inc.



HPT8 Program Beyond 2008

What Next?

- Add new technologies?
 - CMH
 - SSL
- Design Practices
 - DOE CLI
 1. Challenge: 30% beyond ASHRAE/IES 90.1 2004
 2. Design Tools
 3. Marketing Support

Northeast Energy Efficiency Partnerships, Inc.



Thank You!

Northeast Energy Efficiency Partnerships



Questions? Give me a shout

Jon Linn
NEEP
212 Waterville Rd., Belfast, ME 04915
207-338-9705
jlinn@neep.org
www.neep.org