Commercial Lighting: The 10 Year Outlook

Emerging Technologies Showcase
Levin Nock
June 24, 2015

Sponsored by BPA’s E3T Program
GoToWebinar Logistics

• Minimize or maximize control panel
• Phone lines are muted
• Please use question pane to ask questions at any time, or if you have any technical issues

NOTE: Today’s presentation is being recorded and will be available at http://e3tnw.org/Webinars
Commercial LIGHTING

The 10 Year Outlook
TELEPHONES DIDN’T STOP AT THE CORDLESS PHONE
LED LIGHTS WON’T STOP AT SAVING ENERGY

Now

Soon, Many Benefits

Energy Savings
FORK IN THE ROAD
THE LOW ROAD
THE LOW ROAD
THE HIGH ROAD
MANY NEW FEATURES ACROSS MANY APPLICATIONS & SECTORS…
STREET LIGHTS

- Parking Management
- Seismic Sensors
- Digital Signage
- Public Wireless Networks
- Concealed Speaker
- Wire Theft Detection
- Air Pollution Sensors
- Gunshot Detection
RETAIL

Way Finding like GPS

Smart Shopper Rewards

Public Wireless Networks
OFFICE

Wireless Networks
Power Over Ethernet
Public Address System
Remote Charging
Li-Fi
PLAIN LED’S = ICE CREAM
Open Standards for Interoperability

Proprietary Systems
NETWORKED DIGITAL DEVICES THRIVE ON OPEN STANDARDS
SMART LIGHTS WILL THRIVE ON OPEN STANDARDS
PERFORMANCE METERING

Present

Future
PERFORMANCE METERING

A clear answer to a complicated challenge
Energy Efficiency Emerging Technologies
INCENTIVE SUNSETS: WHEN & HOW?

![Graph showing lumens/watt comparison between different lighting technologies: Metal Halide, Linear Fluorescent, Compact Fluorescent, and LED. The graph indicates the development over time from 2015 to 2025.]
QUESTIONS FOR LIGHTING PROGRAMS

How to support open standards for multi-vendor interoperability?

How to use performance metering?

When & how to sunset?
Open Standards for Performance Metering

DesignLights Consortium (DLC) Commercial Advanced Lighting Controls (CALC) Project

• Develop Industry Standards, e.g. NEMA/ANSI c137 (National Electrical Manufacturers Association / American National Standards Institute)
• Program Guidelines for Performance Metering
• Qualified Product List
• Demonstration Projects
• Etc.
QUESTIONS?

Levin Nock, Ph.D.
Emerging Technology Project Manager
Aerotek Contractor for BPA Energy Efficiency
LFNock AT BPA.gov
Thank you for attending!

Information and registration for future webinars at www.e3tnw.org/webinars
Join our email list for notification at subscribe-e3tnw@listserv.energy.wsu.edu

More information about emerging technologies:
  - E3T database: www.e3tnw.org
  - E3T Program: www.bpa.gov/energy/n/emerging_technology/
  - Conduit: www.ConduitNW.org

Thank you for attending our E3T Showcase Webinar!