ADAPTIVE SOLUTIONS FOR OUTDOOR LIGHTING

Adaptive exterior lighting products are entering the marketplace at a rapid rate. By coupling features such as occupancy-based lighting controls with efficacious, dimmable sources, these solutions offer 30–75% energy savings over traditional systems.

The outdoor lighting products presented in this compendium utilize features that have been tested and verified through RD&D activities supported by the California Energy Commission. CLTC case studies demonstrated the commercial readiness of these technology features as they progressed from the lab to the marketplace. This collection focuses on the combination of occupancy-based lighting controls and dynamically tunable light sources. It is not intended as a comprehensive catalog, but offers a starting point for facility managers considering the implementation of adaptive lighting technologies today.

CASE STUDIES

- PARKING LOT Bi-level Street & Parking Area Luminaires, Cal Poly San Luis Obispo (05/10)
- PARKING STRUCTURE Bi-level Induction Parking Garage Luminaires, UC Davis (05/10)
- WALKWAY Bi-level LED Post Top Luminaires, Los Angeles Trade Technical College (05/12)
- WALL PACK Bi-level HID Wall Packs, CSU Chico (06/10)
 Adaptive LED Wall Packs, UC Davis (03/13)

PARKING LOT

LED

- CREE 304 Series SLM IP66
- EATON'S COOPER LIGHTING BUSINESS
 Galleon Navion Ventus
- KENALL TopDek
- KIM LIGHTING The Archetype Warp 9
- OSRAM SYLVANIA
 ProPoint Cobrahead ProPoint Shoebox

INDUCTION

• **NEPTUN LIGHT** Bi-level Dimming Shoebox

HID

• SPAULDING LIGHTING Cimmaron • Raven

PARKING STRUCTURE

I FD

- EATON'S COOPER LIGHTING BUSINESS

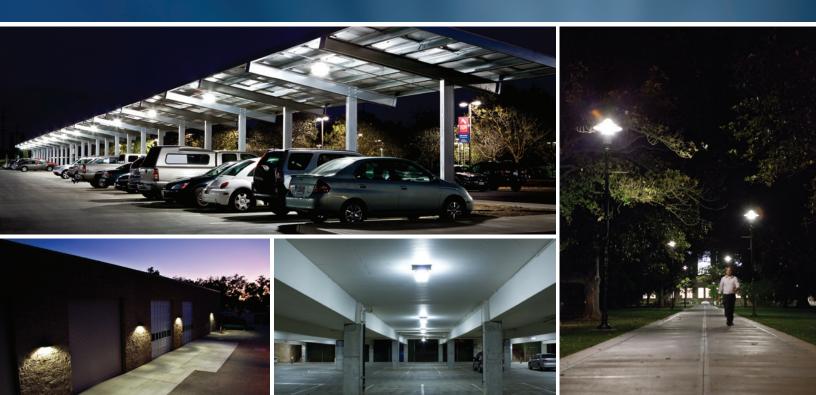
 Quadcast Valet
- CREE 304 Series Edge
- HYDREL Ratio Canopy 1.5
- KENALL TekDek
- KIM LIGHTING PGI 7
- LAMAR LIGHTING VOL Series LED with Occusmant
- LED ERA L Series
- LITHONIA LIGHTING Archway
- OSRAM SYLVANIA
 PermaLED Canopy ProPoint Medium Round Canopy
 ProPoint Medium Square Canopy
- PHILIPS GARDCO ELG with LimeLight VizorLED

INDUCTION

- **DECO LIGHTING** D511ib
- ENVIRO TECH LIGHTING Garage Light
- EVERLAST LIGHTING BioLume Classic Davenport

FLUORESCENT

- COLUMBIA LIGHTING Bi-level Luminaire
- **DECO LIGHTING DSBL-CP**
- ENVIRO TECH LIGHTING FLU-VT
- LAMAR LIGHTING VO Series with Occusmart
- PHILIPS DAY-BRITE Vaporlume



WALKWAY

LED

- CREE Edge
- HYDREL 3100Louver Bollard
- PHILIPS GARDCO 830 Series Bollard
- PHILIPS HADCO LumiLock LED GX2
- PHILIPS LUMEC Domus Series UrbanScape

INDUCTION

• EVERLAST LIGHTING Acorn Walkway

HID

EATON'S COOPER LIGHTING BUSINESS
 Generation Series

WALL PACK

LED

- CREE Edge XSP Series Wall Pack
- EATON'S COOPER LIGHTING BUSINESS Crosstour MAXX LED Wall Pack
- JUNO LIGHTING Finia LED LW Series Wall Mounted
- LITHONIA LIGHTING

 MRW LED WSQ LED WST LED
- LSI INDUSTRIES
 LED Greenbriar Wall Sconce
 LED Patriot Wall Sconce
- PHILIPS DAY-BRITE LED Medium Full Cutoff Wall Pack
- PHILIPS GARDCO 121 Line
- PHILIPS STONCO Large Full Cutoff Wall Pack
- STERNBERG LIGHTING Solana SL270

INDUCTION

- ENVIRO TECH LIGHTING Wall Pack
- EVERLAST LIGHTING Classic Wall Pack
- **NEPTUN LIGHT** Wall Pack



ABOUT THE CALIFORNIA LIGHTING TECHNOLOGY CENTER: The California Lighting Technology Center was created in 2003 by the California Energy Commission in collaboration with the U.S. Department of Energy and the National Electrical Manufacturers Association. Part of the Department of Design at the University of California, Davis, CLTC is dedicated to accelerating the development and deployment of energy-efficient lighting and daylighting technologies.