FINELITE
Better Lighting

Green Buildings
SUCCESS STORIES

The California Department of Motor Vehicles, Sacramento, CA

Work Green,
Drive Green,
Live Green

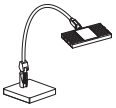
It's been two years since Arnold Schwarzenegger signed the most ambitious global warming bill into law proclaiming, "The truth is there is far more economic opportunity in fighting global warming than there is risk." He maintains that forcing California to cut emissions will promote innovation and save money.

If you had any doubts about the success of his plan you only need to look as far as the renovation of the Department of Motor Vehicles to see it in action.

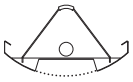
Lionakis Architects designed the 520,000 sq. ft. Department of Motor Vehicles headquarters with electrical engineering by Ken Rubitsky and Associates. The original lighting goal was to provide more uniform lighting and higher visual comfort. Using LED task lighting for workstations with individual controls at each workstation, they found that they could also lower the ambient lighting levels and save energy.

According to Ken Rubitsky, "We were doing layouts with troffers and we weren't getting the uniformity that we were looking for, we had a lot of light and dark spots.

PROJECT SNAPSHOT



6-watt & 9-watt
PLS Desk Lamp



Series 12-ID,
1 lamp T8

"Savings from one floor was 60,421 kilowatt-hours."

- Ken Rubitsky, P.E., Ken Rubitsky & Associates

" We didn't sacrifice comfort and design to achieve energy savings, and we were able to register for Demand Response."

- Frederick Fenton, Associate Construction Analyst, Department of Motor Vehicles

"At first I was concerned about designing at the lower ambient light levels using linear Indirect/Direct, but I knew that the task lighting was going to be productive and that would address the 30 footcandles that we were looking for at the task level.

"We had originally specified three and four foot fluorescent undercabinet fixtures in the space, but we switched to the 6 and 9-watt Finelite PLS LED fixtures to save energy. With over 60,000 square feet of office space it made a considerable difference.

"The savings from one floor was 60,421 kilowatt-hours with an additional 2,150 kilowatt-hours from the occupancy sensors. The DMV will save $5,566 each year from just the task lighting. The energy savings also qualified us for an incentive check from our local utility of $8,300."

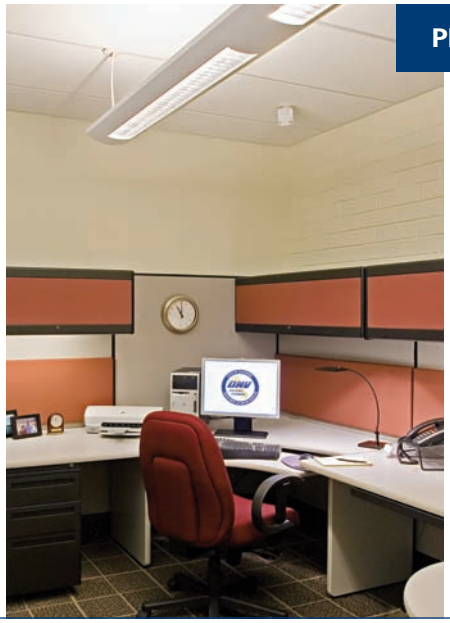
The renovation project at the DMV was also important for the originators of the IOLS (Integrated Office Lighting System) research project[1] because the DMV provided a test site for one of the initial field studies.

On the fifth floor is Finelite's curved Series 12 Indirect/Direct with one T8 lamp in cross section; designed in an angled pattern across the ceiling, the overall look is crisp and modern.

The LED task lighting is provided by Finelite's Personal Lighting System (PLS) 6-watt undercabinet lighting and PLS 6 and 9-watt desk lamps, all connected to individual, adjustable occupancy sensors in each workstation. Frederick Fenton, Associate Construction Analyst at the DMV said, "It was important that we didn't sacrifice comfort and design to achieve energy savings. We're pleased with the PLS task lighting and it allowed us to be able to register for a Demand Response electricity rate structure with our local utility."

The DMV is leading the state facilities in sustainable building with more LEED credentials than any other state agency. LEED Gold Certification is currently being sought for the Sacramento DMV headquarters under LEED for Existing Buildings.

[1] The IOLS (Integrated Office Lighting System) research project is a partnership with Finelite, Inc., the California Lighting Technology Center (CLTC), and the California Energy Commission, through PIER (Public Interest Energy Research Program). The complete report is available at www.finelite.com.



PROJECT DETAILS

Location:
Sacramento, CA

Architect:
Lionakis Architects

Mike Lee , AIA
Project Manager

Consulting Electrical Engineers:
Ken Rubitsky & Associates

Ken Rubitsky, P.E.
Project Engineer

Client:
Department of Motor Vehicles

Frederick Fenton
Associate Construction Analyst