

## **SDERC Lighting Display**

**Classroom Lighting:** Finelite Integrated Classroom Lighting System (ICLS) Series 10

Location: SDREO ERC Classroom

Technology Description: Two rows of direct / indirect fixtures on 14-foot centers suspended at 36 inches. ICLS delivers two distinct lighting modes making it ideal for classrooms and conference rooms including audiovisual presentations and other tasks. Switching allows either “general classroom lighting” or “lighting for A/V presentations”. In A/V mode, the outside lamps are off and the center lamps direct 97% of the light down (and are equipped with 0-10 V dimmable ballasts). The system is equipped with a dual technology occupancy sensor and a Teacher Control Center with a Teacher Control Switch and slide dimmer. The rocker switch allows either the middle lamp or outboard lamps to be on, but not all three, which saves wattage and is a substantial benefit in Title 24 calculations. The quiet time setting allows the teacher to override the occupancy sensors during testing or reading periods. The SDREO classroom fixtures are outfitted with Philips F32T8/ADV850/ALTO lamps (86 CRI, 5000 K and 3100 lumen). The uprights have Sylvania QT3X32T8/277-ILS-SC (0.77 BF) ballasts; each 3 lamp upright group consumes 75.9-Watts including ballast wattage. The downlights have Sylvania QTP3X32T8/277-DIM5-Q (0.88 BF with 100% to 3% dimming) ballasts. This system was funded by Finelite and the CEC (California Energy Commission) PIER (Public Interest Energy Research) Program.

Applications: General purpose classrooms, conference rooms, and multi-purpose rooms.

Energy Savings: The original SDREO classroom was outfitted with two 32W T8/741 lamps with a standard electronic ballast (0.87 BF) consuming 29-Watts per lamp (including ballast wattage) or 0.8 W/sq ft. Installing the Finelite ICLS fixtures with 32W T8/ADV850 lamps and 0.77 BF extra efficient instant start ballasts reduced energy consumption to 0.7 W/sq ft.

Costs: The estimated ICLS system installed costs is \$2.71/sq ft. The ICLS cost includes A/V switching and occupancy sensors. Adding dimming capabilities, the estimated cost is \$3.23/sq ft installed.

Donated Product: SDREO would like to formally thank Kim Shaffer at Finelite, Inc for donating the fixtures. For more information please contact Kim at (650) 961-0700 or [kshaffer@finelite.com](mailto:kshaffer@finelite.com).

Donated Installation: SDREO would like to formally thank Pacific Lighting for installing the fixtures. For more information please contact Amad Noruz at (714) 848-6163 or [PLM2@aol.com](mailto:PLM2@aol.com).

Discussion: Check out the lighting with these suspended direct/indirect lighting fixtures compared to the basket troffers and recessed cans in this room. Which do you like the best?

