

## **SDERC Lighting Display**

**Wall Wash:** Lithonia Perceiva 3 foot

Location: Fixture #19

Technology Description: Energy efficient wall wash/accent lighting. A fluorescent wall wash can replace halogen track lighting or recessed can fixtures. The fluorescent lamp has a much higher efficacy (lumens/watt) than a halogen lamp. A 25W T8 lamp with ballast has 1950 initial lumens and an efficacy of about 56; a 60W PAR16 halogen lamp has 580 initial lumens and an efficacy of 10. The fluorescent lamp has a color rendering index (CRI) of 85 while the halogen has a CRI of 100. Also, the fluorescent fixture generates much more heat than a halogen which can be quite important for some applications. Display model has 1 FO25T8 and a KTronik KT232-I-P-MVP ballast. The system consumes 29W with a 1.05 BF; 92% of the light output lights the wall. The ballast is accessible from the room side. Fixture must be installed with a minimum 18 inch standoff distance from the wall.

Applications: Illumination of artwork, signs, merchandise, etc.

Energy Savings: One 25W T8 lamp may replace up to three 60W PAR16 halogen lamps. The 25W T8 with ballast consumes 29W and will save 312 kWh/yr and \$47/yr (based on 2080 hrs/yr and \$.15/kWh). The lamp life of a T8 is 20,000 hours versus 3,000 hours for the halogen lamps.

Costs: A fluorescent wall wash fixture with lamp and ballast is approximately equivalent in price to an equal length track fixture with lamps.

Donated Product: SDREO would like to formally thank Ed Musbach of the Lighting Association of San Diego for donating the fixture. He can be reached at (858) 505-1055 and [emusbach.sdl@lighting.net](mailto:emusbach.sdl@lighting.net). More information can be found at [www.lithonia.com](http://www.lithonia.com).

Discussion: For accent lighting that requires sparkle and focus, reflector lamps like MR16s, PAR20-38 halogens and ceramic MH (metal halide) are usually required. Some of these reflector lamps have significantly higher lumens/watt efficacy than 50W PAR16 halogens. For example a 50W PAR38H IR provides 850 lumens, which is 17 lumens/watt. A 39W CMH (ceramic metal halide) PAR30 lamp provides about 2400 lumens and has about a 53 lumens/watt efficacy including electronic ballast.