LIMELIGHT VOL. 10

Dorothy Chandler Pavilion
Los Angeles, California

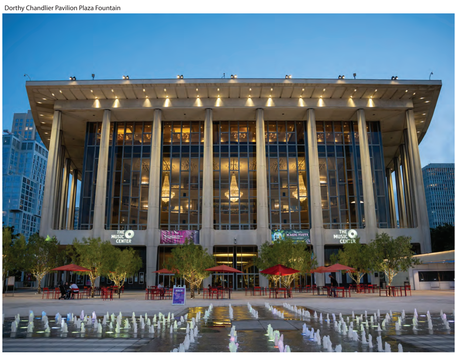
The Dorthy Chandlier Pavilion is one of the largest performing arts centers in the United Sates. The modern midcentury Performing Art Center opened in 1964 designed by Welton Becket, as the first of multiple venues that make up the Los Angels Music Center complex in downtown Los Angeles.

The Los Angels Music Center consists of the Mark Taper Forum, Ahmanson Theater, the Walt Disney Concert Hall and Dorthy Chandelier Pavilion.

The 3,156-seat Dorthy Chandlier Pavilion, with 4 levels of seating, has been using the same 200W PS22 incandescent lamps in all the recessed downlights in the theater for house light seating since 1964.

Home to LA Opera and hosting 20 Academy Awards shows from 1969 - 1999, the venue is an iconic architectural venue.

Dorthy Chandlier Pavilion Plaza Fountain



All legacy lamps are in the process of being phased out and eventually discontinued in the near future, making them harder to source. While at the same time, prices continue to increase, leading to the decision to upgrade all the high wattage recessed incandescent and halogen house lights with energy-efficient, long-life LED lighting.

The quality of dimming was a critical hurdle to clear with any new LED solution. Three tests were performed on an ETC D20 dimming system to review and approve Clarté Lighting's lighting upgrade solution, with .01% fade to off and glow to on 2 wire forward phase magnetic (MLV) dimming.

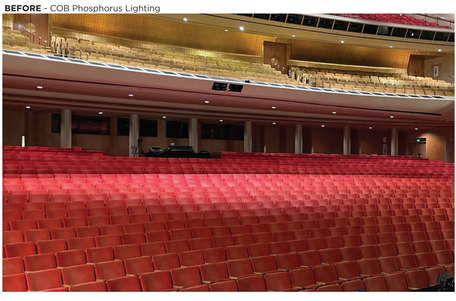
The first test was a 6 second fade to off, the second test was a 20 second fade to off and the last test was an instant black out of the lights to fade off instantly to dark.

Clarté Lighting's 2 wire forward phase MLV lighting was the only product tested to date that passed all 3 tests! Some of the LED solutions tested passed the first 2 test but failed the instant blackout test due to the solution being a COB based LED.

The COB phosphorus dome remains energized and illuminated for up to 10 seconds after the power is turned off, which was not acceptable.

Clarté Lighting provideded an architectural LED recessed solution that fit into the existing 1964 recessed fixture frame, without disrupting the ceiling. The upgrade features 38W, 4-inch PAR30 retrofit fixtures, delivering a refreshed appearance

BEFORE - COB Phosphorus Lighting

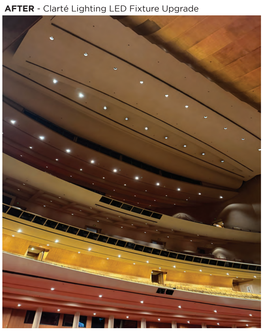


AFTER - Clarté Lighting LED Fixture Upgrade



80 feet above the front row seats, at the highest part of the ceiling, were 24 recessed 500W PAR56 fixtures. These have a short life, are hard to sourse, and provided suboptimal lighting. They were seemlessly upgraded to Clarté Lighting's 4½" PAR38 scale 12-degree narrow spot solution.

AFTER - Clarté Lighting LED Fixture Upgrade



A Clarté Lighting halogen lens was added to enhance the R9 color value and shift the color temperature -100K warmer, from 2700K to 2600K, while maintaining a 90 CRI. Bringing out the vibrancy of the red seats, making them visually pop.

The recessed house lights went from 200 watts to 38 watts creating a 81% energy cost savings. The high ceiling lights went from 500 watts to 51 watts creating a 90% reduction in energy cost.

Dorthy Chandelier Pavilion eliminated maintenance cost from changing lamps, achieved a 81% energy reduction while improving the quantity and quality of light in the theater.

The original incandescent lamps produced a hazy appearance throughout the theater. Following the upgrade, the lighting delivered noticeably greater clarity, depth, and dimension, bringing out richer, more vibrant colors and creating a more refined space.

The lighting upgrade was both an operational and aesthetic success!