



Retrospective Case Study

Passenger Tunnel 2001 – 2010

Location | Detroit, Michigan, USA
Philips Lighting | Philips Color Kinetics LED Lighting

PHILIPS



As of April 2010, the LED fixtures in the passenger tunnel have been operating 24 hours a day for almost nine years — about 75,000 hours of uninterrupted use — and they're still going strong.



In 2001, Philips Color Kinetics delivered a programmable, full-color lighting solution that has lasted for over 9 years with no lamp or fixture replacements.



Fast Facts

Industry Sector

Architectural

Fixtures

iColor Cove, ColorBlast 12

Project Contractor

Northwest Airlines, Inc.

Lead Architect

SmithGroup

Installation

Hunt Construction Group, with Centerline Electric

Light Show Design

Mills James Productions

Photo Credit

Justin Maconochie Photography

In October 2001, Northwest Airlines, Inc. unveiled a one-of-a-kind multimedia experience in the Edward H. McNamara Terminal at Detroit Metropolitan Wayne County Airport (DTW) in Michigan. The terminal's 800-foot passenger tunnel uses intelligent LED lighting technology from Philips Color Kinetics to create a unique and pleasing experience for travelers moving between main Concourse A and Concourses B and C.

SmithGroup, a leading organization of architecture, engineering, interiors, and planning professionals, created a setting for the tunnel's ever-changing, mood-enhancing sound and light environment. The tunnel features sculpted art glass panels, translucent vinyl stretch ceilings, spacious 54-inch-wide automatic walkways, and advertising-free walls. A combination of 8,180 linear feet of iColor Cove and 230 ColorBlast 12 full-color, intelligent LED fixtures from Philips Color Kinetics displays three different light shows, each programmed and augmented with music specially scored and synchronized by Mills James Productions, a creative media company headquartered in Columbus, Ohio.

To create an immersive experience within the passenger tunnel, six rows of customized iColor Cove fixtures, each specially fitted with a narrow 30° lens, were installed behind custom hand-etched glass panel. Each row of fixtures was aimed to direct light at a different angle, while the ColorBlast 12 fixtures were aimed to highlight the arched ceilings. Besides emergency lighting, Philips Color Kinetics

fixtures produce the only lighting used in the tunnel, allowing passengers to enjoy a brief respite from the hurries and stresses of travel.

SmithGroup turned to Philips Color Kinetics for a low-maintenance, programmable lighting solution that would last for many years without the need for lamp or fixture replacements. Because passengers use DTW continuously, SmithGroup needed a lighting solution that would reliably operate round the clock. Philips Color Kinetics LED lighting proved to be the right choice: As of April 2010, the fixtures have been operational 24 hours a day for approximately eight and a half years, or about 75,000 hours of uninterrupted use—and they're still going strong. To put this in perspective, incandescent lamps have a typical rated life of 4,000 hours, while the best long-life fluorescent lamps have a maximum rated life of 35,000 hours.

Not only do Philips Color Kinetics LED lighting fixtures deliver effective light for a considerably longer period of time than either incandescents or fluorescents, they can be digitally controlled to project dynamic, color-changing light—something that conventional light sources simply cannot do. The fixtures' digital intelligence was a great advantage to Mills James Productions, who were able to use an external, third-party DMX lighting console to deliver the lighting effects and coordinate them with the musical scores.



While cost-effectiveness was not the most important consideration when selecting a lighting solution, Dennis Farmer, general manager of DTW, estimates operating and maintenance cost savings of approximately \$25,000 per year. Additionally, the lighting solution has garnered DTW a great deal of positive feedback and publicity—

including a feature on *Sunday Morning* news magazine on CBS. The Philips Color Kinetics installation was so successful in the passenger tunnel, in fact, that DTW replaced all the floodlighting and spotlighting fixtures in the passenger tunnel rotundas with 24 ColorBlaze LED fixtures in early 2006.



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