



REALIZE RELIGHT



CASE STUDY:

Grant MacEwan University

CLIENT
Alberta, Canada

SCOPE
Covering 2.4 million sq. ft. campuses

ENERGY SAVINGS
60%



Grant MacEwan University Achieves 60% Energy Savings, Enhanced Lighting Quality with RT5 Relight Fixtures

THE SITUATION:

Grant MacEwan University, Alberta, Canada, is a vibrant, innovative educational institution focused on student learning. In addition to fostering student success, the university strives to exemplify the value of environmental stewardship throughout the 2.4 million square foot campuses.

Randy Shippit, Specialist, Project Delivery for EPCOR Technologies Inc, provided the design and consulting services, explained that EPCOR conducted an energy audit for MacEwan and identified one of the key focus to reducing energy consumption. “the existing deep cell luminaries where 15-20- year-old T12s were not energy efficient and provided inadequate lighting quality.”

Mr. Shippit worked with MacEwan for more than a year to identify the most effective and efficient lighting solution to achieve three specific goals: reduce energy consumption, enhance lighting quality and remain within the university’s budget to replace more than 6,500 T12 luminaries throughout the campus. Boyd England, project manager for the university estimated the energy savings to total between \$200,000-\$250,000 per year.

THE SOLUTION:

“Initially, MacEwan requested indirect lighting for classrooms,” said Mr. Shippit. “However, indirect lighting was expensive and not feasible because of the ceiling height. As a result, we looked at different options, including Lithonia Lighting RT5 Relight fixtures.” The existing T12s at MacEwan University were 20-inch wide fixtures compared to the standard of 24 inches, adding a special challenge to the retrofit project. Mr. Shippit asked Lithonia Lighting for a custom RT5 Relight fixture to present as an option. Within three weeks, Lithonia delivered the custom fixtures.



“Every day of the week I’m hearing sales pitches about products that will save us time, but with the RT5 I’m seeing it first-hand. We are extremely happy with the reduced labor and the RT5 performance. This product clearly was built with the contractor in mind.” said Blake Bunting, operations manager at Action Electrical.



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THE SOLUTION continued:

MacEwan agreed to place an initial order of 150 - RT5 Relight fixtures and install them on a test basis. Installing the 150 lighting fixtures proved to be a much faster and easier labor process than expected because “the RT5 Relight kits are manufactured to retrofit with minimum labour into the existing T12 lighting luminaries and re-use existing luminaries housings, rather than replace.” said Mr. Shippit. The test was deemed successful as it reduced consumption, improved light quality, and provided easy installation. In January 2010, MacEwan initiated the Project to begin replacing all 6,500 T12s luminaries with the RT5 Relight fixtures.

The electrical contractors involved in the lighting installation echoed Mr. Shippit’s experience with the labor reduction. “We had never used RT5 Relight fixtures before,” said Blake Bunting, operations manager at Action Electrical. “Typically, when you conduct a fixture replacement, it is a very labor intensive process. But the major advantage of the RT5 Relights is reduced labor.

In addition to the labor savings, MacEwan is very pleased with the lighting quality, illumination levels, two level of energy savings and general appearance as well as the new look of volumetric lighting systems. In addition the two-step ballast provides various illumination options integrating with their existing low voltage switching system. “The rooms look substantially improved with the RT5 Relight Kits because the volumetric effect distributes the light much more efficiently,” said Mr. Shippit. “There is also a 20 percent increase in the color rendering from the older T12 lamps to the T5 lamps. The new lighting with enhanced color rendering , makes the greens, blues and reds in the room much more vibrant.”

MacEwan will continue to reap the benefits of the energy savings for years to come. “If the University had decided to move forward with indirect lighting for the classroom, they could have used twice as much energy as the RT5s,” said Mr. Shippit. “Thanks to the RT5 retrofit, MacEwan is now experiencing energy savings between 47 and 60 percent, by using the two level switching options of the RT5.” Boyd England said, “The energy savings realized from this project will help offset the increased utility costs from campus expansion.”



About Lithonia Lighting

Lithonia Lighting, an Acuity Brands Company, is North America’s largest manufacturer of lighting equipment for commercial, industrial, outdoor and residential applications.