Raleigh Orthopaedic Clinic & Surgery Center
Raleigh, NC

Raleigh Orthopaedic Clinic – Raleigh's premier orthopaedic destination and the area's largest and oldest orthopaedic practice – chooses Cree® LED lighting as the primary lighting source for their new clinic and surgery center.

- Lighting energy usage expected to decrease at least 54 percent
- Anticipated lifetime savings of $280,368
- Estimated payback of 3.2 years
- Virtually maintenance-free for over 10 years
OPPORTUNITY

Raleigh Orthopaedic Clinic may be the oldest orthopaedic practice in the area, but with the opening of their new 98,000-square-foot, state-of-the-art practice headquarters and surgery center in northwest Raleigh, they’ve stepped into the 21st century in a big way.

The practice can trace its roots all the way back to 1919, when one of the founding physicians hung out a shingle in a quaint Victorian house in the center of town. Since that time, Raleigh Orthopaedic Clinic, affectionately known as the ROC, has grown to include 19 board-certified orthopaedic surgeons and an extensive support staff, making it the largest orthopaedic practice in Wake County.

With all this growth came the need to upgrade facilities. Since 1977, the main clinic had been housed in a building not far from the new location. While attending a retreat about 10 years ago, the partners began laying plans for their new facility, which would provide enough space for the patient clinic, in-office pharmacy, diagnostics like MRI, physical therapy and their Orthopaedic Urgent Care. The crown jewel of the new clinic is the Raleigh Orthopaedic Surgery Center, a joint venture between Raleigh Orthopaedic and Rex Healthcare and an AAAHC-accredited outpatient facility featuring four orthopaedic operating rooms and two procedure rooms.

A few years ago, Dr. G. Hadley Callaway, President of Raleigh Orthopaedic, participated alongside Cree in a workshop to build an LED surgical lamp. He was so impressed with what Cree brought to the table that he reached out to the company as the practice sought to outfit the new clinic.

According to Dr. Callaway, in building the new clinic, it was important that the facility make a statement to patrons that the ROC is on the cutting edge. So who better to turn to when selecting a lighting solution than Cree, the technology and industry leader in LEDs and LED lighting. “Cree is a ‘class A’ light,” says Dr. Callaway.

SOLUTION

Cree understands that healthcare facilities have some of the most rigorous lighting requirements of any setting. Superior light quality with exceptional color rendering supports better patient outcomes by enabling staff to make more accurate skin and wound care assessment. Cree® LED troffers deliver clean, crisp light at an affordable cost, creating quiet ceilings that minimize eye strain and patient stress while providing a more comfortable environment for patients and staff.

Cree’s CR Series of LED troffers also offer dimming functionality, providing better visibility in diagnostic and clinical areas, enabling staff to perform more accurate evaluations and provide more efficient treatment.

BENEFITS

Raleigh Orthopaedic’s new facility includes a spacious physical therapy center spanning the length of the facility’s third floor. Using the CR troffers’ dimming capability, the staff is able to adjust the troffers to light levels that suit the use of the space. Higher light levels are used on the side of the therapy center with exercise bikes and weights, while lower levels work well on the other end of the center, where patients often lie on tables as they receive treatment.

Dr. Callaway said the two main factors in choosing Cree were the quality of light and the fact that it was an affordable lighting solution. After working in an environment lit with Cree LED luminaires, Dr. Callaway has also noticed a real difference compared to other buildings he visits. When asked about specific benefits, he replied: “I use the dimming capability every day in the clinic’s diagnostic exam rooms. I’m able to view the x-rays with patients as we discuss a course of treatment.

“The Cree lights are also quiet. There’s no buzz like what we had with the fixtures in our older facility. These lights are also better recessed so there’s no dust collecting in the fixture, which means reduced maintenance.”

And another added benefit with the Cree LED lighting solution: patients and staff have been commenting on how much brighter and cheerier the new clinic seems. With the help of Cree LED lighting, Raleigh Orthopaedic Clinic’s staff and patients can receive high-quality, personalized care in a pleasant, positive healing environment for many years to come.
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Dr. G. Hadley Callaway, President, Raleigh Orthopaedic Clinic
Cree TrueWhite® Technology begins with the highest performing commercially available LEDs. Cree TrueWhite® Technology mixes the light from red and unsaturated yellow LEDs to create beautiful, warm, white light. This patented approach enables color management to preserve high color consistency over the life of the product. Cree TrueWhite® Technology also enables a CRI of at least 90 while maintaining high luminous efficacy - a no compromise solution.

PARTICIPANTS
End User: Raleigh Orthopaedic Clinic
Cree Rep Agency: LiteSource LLC
Architect: GMK Associates
General Contractor: Brasfield & Gorrie

IN THIS CASE STUDY
CR Series TROFFERS
- Minimum 90 CRI
- CCT: 3000K, 3500K or 4000K
- 2000 to 5000 lumen options
- Utilizes Cree TrueWhite® Technology
- 0 - 10V dimming to 5%; step dimming to 50%
- Up to 75,000-hour lifetime with HE option
- 10-year limited warranty

Cree IS LED Lighting.
Learn more at: www.cree.com/lighting  |  info@cree.com  |  800.236.6800

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