

### Introduction

GreenSeal Cannabis Co., nestled in the heart of Stratford, Ontario, stands as a beacon of innovation in indoor cultivation. With a sprawling 30,000 sq. ft. facility, GreenSeal is more than just a cannabis producer; it's a hub of experimentation and research, constantly striving to redefine industry standards. In their pursuit of excellence, they encountered a pivotal challenge: how to optimize their cultivation environment, particularly lighting, for maximum quality and yield.

# **Project Overview**

#### The Facility

Since its inception in 2014, GreenSeal has cultivated a reputation for pushing boundaries and challenging norms. Boasting a team of 40 dedicated employees, they specialize in producing whole-dried flowers and pre-rolls of unparalleled quality. But it's not just about the products but the process. GreenSeal's indoor cultivation space serves as a living laboratory, where experimentation is not just encouraged but ingrained in its ethos.

### The Challenge

As Phil Niles, GreenSeal's Executive Vice President of Strategic Planning, aptly says, "Lights are your substitute for the sun." Understanding the critical role lighting plays in the cannabis lifecycle, GreenSeal sought to optimize this aspect of its operation. However, traditional electrical distribution systems posed significant challenges, from safety concerns to lack of adaptability. They needed a solution that could offer precision, safety, and flexibility.

#### The Solution

VoltServer's Digital Electricity technology provided GreenSeal with unprecedented control over their lighting environment, allowing them to optimize lighting and streamline their electrical infrastructure with ease. This was made possible by Digital Electricity's innovative approach, delivering power through low-voltage cables for a safer, more efficient alternative to conventional systems.

IMPLEMENTATION DETAILS

### **Distance Considerations**

One of the most significant advantages of VoltServer's solution was its impact on HVAC energy costs. By positioning transmitters outside cultivation rooms, GreenSeal minimized the need for power-intensive cooling systems. This reduced operational expenses and contributed to a more sustainable cultivation process, aligning with GreenSeal's commitment to

environmental stewardship.

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# Installation and Training

Transitioning to VoltServer's Digital Electricity technology was a collaborative effort. Under the guidance of VoltServer experts, GreenSeal's team seamlessly integrated the new system into their existing infrastructure. Through comprehensive training and support, they equipped themselves with the knowledge and skills to leverage the technology to its fullest potential.



# Results and Future Expansion

The partnership between GreenSeal and VoltServer yielded tangible results, as evidenced by a groundbreaking light-intensity study published in the Agronomy Journal. By leveraging VoltServer's software, GreenSeal optimized lighting parameters to enhance cannabinoid levels, terpene profiles, and overall yield. This success has solidified VoltServer as a trusted partner in GreenSeal's journey of innovation. Looking ahead, GreenSeal is poised for further expansion, with plans to leverage VoltServer's technology to drive continued growth and success.

### Conclusion

GreenSeal Cannabis Co. and VoltServer exemplify the power of collaboration and innovation in the cannabis industry. Through their partnership, they have optimized cultivation practices and set new standards for excellence. As GreenSeal continues to push the boundaries of what's possible in indoor cultivation, VoltServer remains a steadfast ally, providing the technology and support needed to thrive in an ever-evolving landscape. Together, they are shaping the future of cannabis cultivation, one harvest at a time.

