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## Already LED grow light is superior to HPS

1. My name is James Chung. I am one of the equity stakeholders of Alkhemist. Alkhemist is a licensed cannabis cultivator in the City of Los Angeles. In fact, we are the very first legal cultivator to be approved by the city to commence indoor cultivation in 2019. Alkhemist Intro Clip on Vimeo

2. After 6 rounds of harvest using the state of art Octo LED (

https://vimeo.com/346978746) I can confidently aver that led grow light is comparable to legacy HPS lighting fixtures across the board in terms of Potency and Yield while affording tremendous energy savings. Cannabis has unique light spectrum and intensity requirements for optimal growth. LED can not only match HPS/HID in terms of ppfd/lumen but also dial in on specific spectrum requirements throughout the course of the flower cycle. With high specificity and sensitivity, customized led diodes ameliorate the full spectrum deficiencies evident in the legacy light platforms. Come Together Final on Vimeo

3. On average, per light fixture we yield over 1.7 lbs of flower. In addition because we can double deck the flowering stage plants, the actual canopy space yield is about 3.4 lbs per 4 x 4 square foot. This average is neck and neck with traditional systems. We have hard data to share upon request.

4. Due to low radiated heat signature, the HVAC reliance is less than a half of that required by traditional HPS systems. Our monthly utility bill grosses to about \$15,000 for full 280 LED systems. Comparably, we were spending over \$31,000 per month in utility when we were using the legacy HPS lights. Our LED uses 540 watts while HPS systems normally exceed 1000 watts per unit.

5. The intrinsic potency of the flower is entirely dependent upon the strain and its genetics. Whether the grow light system is LED or HPS has no bearing on the strain efficacy while the grow yield is heavily determined by a particular cultivator's skillset and expertise.

6. Thank you for the opportunity to submit my comment.

Additional submitted attachment is included below.









