

# MJardin Analysis of Thrive Agritech's T5 LED

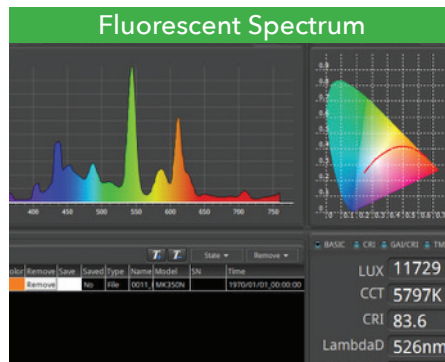
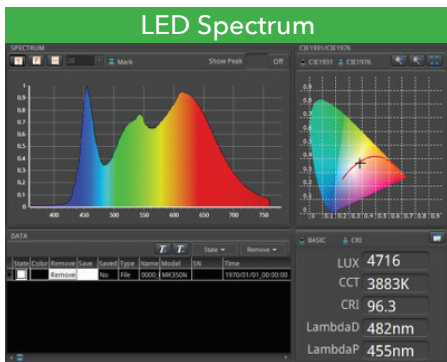
## Background

MJardin investigated the performance of Thrive Agritech's T5 LED lamp to determine suitability as a 1:1 replacement of high output fluorescent lamps for cannabis production. MJardin is a professional management company that provides select cannabis businesses across the U.S. with turnkey cultivation services.

## Experimental Setup

Thrive Agritech's 30W T5 LED tubes were installed in a 40-day controlled experiment alongside traditional 54W fluorescent T5 tubes in propagation areas in a medical cannabis cultivation facility located in Denver, CO. Plant performance and rooting rates were measured to quantify any differences between the lighting technologies.

Parameter	LED	Fluorescent	Units
Electrical Input	30	54	Watts
Light Intensity	100-120	80-100	umoles/m2/sec
Time to First Root	4-5	5-6	Days
Time to Full Root	Similar	Similar	Days
Root Structure	Similar	Similar	
Cutting Health	Similar	Similar	



*“Thrive’s LED T5 tube is an excellent option for several applications. It is a great solution for situations where there is very little mounting height for other lighting technologies to get proper spread and uniformity. Another great benefit is the ease of installation. Fixture removal, electrical work, and other infrastructure modifications are not necessary, which helps avoid many of the renovation costs typically associated with the installation of efficient lighting technologies.”*

**- Ben Franz**  
 Director of R&D, MJardin