

# INNOVATOR SPOTLIGHT

Fog City Farms | Santa Cruz, California



## PIONEERING ADVANCED VERTICAL FARMING STRATEGIES TO GROW CONSISTENT, HIGH-QUALITY CANNABIS IN CALIFORNIA

Fog City Farms has deep roots in California's cannabis community. With more than 15 years of cultivation experience, the innovative team was among the first to recognize the advantages of vertical farming techniques. Initially growing in a single tier under high-pressure sodium (HPS) lamps, Fog City Farms' CEO and cofounder, James Cunningham, knew he could push the limits beyond what legacy lighting could achieve. He looked to the latest LED solutions from Fluence to maximize production, improve crop quality and optimize operational efficiencies. By bringing together industry-leading horticulture technology suppliers including Pipp mobile racking systems and Vertical Air Solutions (VAS), Fog City has established one of the most advanced cultivation facilities in the state.

“Over the past 15 years the most significant change in cannabis cultivation was the advancement of LED lighting. We wanted to align with a partner that could support us every step of the way—not just in the horticultural space, but from an industrial level as well. After switching to LEDs, right off the bat we noticed very robust, lush growth in veg; we also saw much denser flower.”

JAMES CUNNINGHAM  
CEO AND CO-FOUNDER, FOG CITY FARMS

To learn more about Fog City Farms' innovative lighting strategies, visit: [fluence.science/fog-city-farms](https://fluence.science/fog-city-farms)



## MEETING RISING DEMAND WITH LIMITED SPACE

Fog City's mission is to produce the most consistent, high-quality cannabis products possible. Confronted with limited square footage, the team thought outside of the two-dimensional box and began designing a vertical farm that would double their canopy space in the same room by maximizing cubic real estate — something impossible to achieve under legacy lighting.

As early adopters of vertical farming techniques, Fog City also identified new environmental challenges that came with the application: specifically, heat load and transpiration from plants. This quickly led to the development of what is now the industry standard for airflow management in the vertical space: Vertical Air Solutions. The ventilation system was designed and brought to life by James Cunningham and the team at Fog City to help other vertical farmers mitigate microclimates in multi-tier farms and ensure cultivation success.

## GROWING VERTICAL

Fog City's facility retrofit transformed a single-tier, 800 sq. ft. grow room into a double-stacked farm with 1,200 sq. ft. of canopy leading to a significant increase in yield and more robust terpene profiles. By deploying Fluence SPYDR and VYPR broad-spectrum LEDs in Pipp mobile racks with Vertical Air Solutions, growers can move through aisles to inspect plants throughout every growth stage and monitor crop health under white light on a daily basis. By pioneering one of the first cannabis vertical farms in California, Fog City has exceeded their yield and quality goals — positioning them as a leader in an increasingly competitive west coast market. Their success has undoubtedly paved the way for the future of more efficient cultivation practices.

## UP NEXT FOR FOG CITY?

A new facility designed to showcase their innovative growing techniques and share the knowledge with visitors eager to learn more about the growers that serve their communities.



70% INCREASE  
IN YIELD

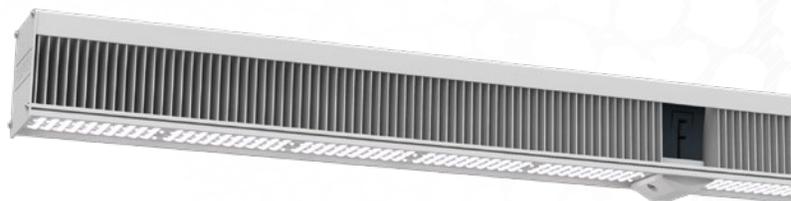


DOUBLED  
CANOPY SPACE



IMPROVED TERPENE  
PROFILES AND THC  
PRODUCTION

V VYPR



S SPYDR



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