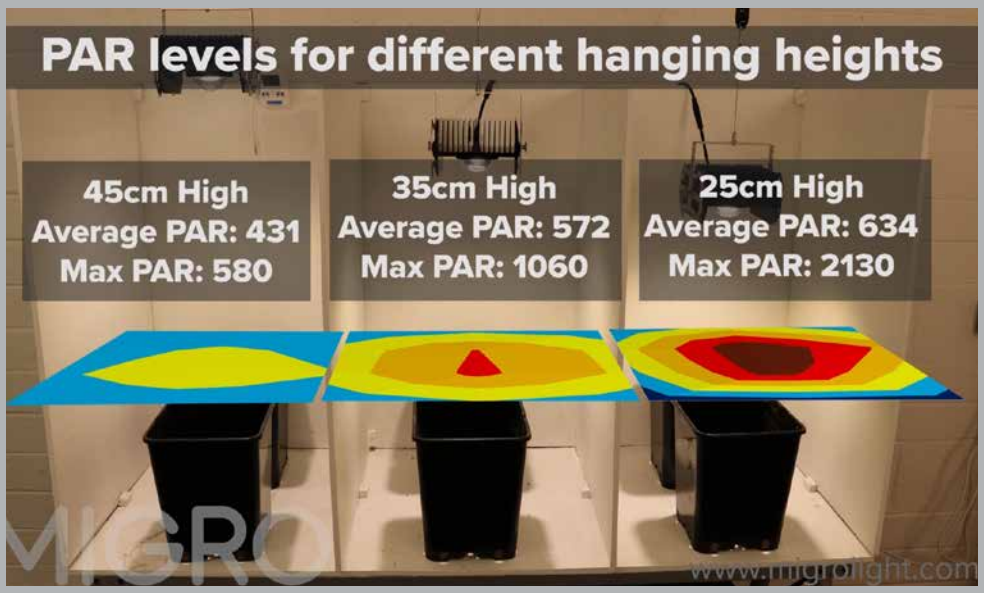
Apogee Instruments SQ-500 Full-spectrum Quantum

Determining Grow Light Position Using PAR

Determining the best position for your grow light isn't always a simple task. Each light source distributes light differently on the grow area making it difficult to know where the light should be positioned to produce maximum yield. To help growers determine the right position for their light, lighting manufactures provide a recommended hanging height for the light, the area the light will cover at the recommended height, and the photosynthetically active radiation (PAR) value for the light. Although this information can be a great starting point, it doesn't tell growers the amount or distribution of usable light throughout the grow space.

To give growers a better understanding of usable light in a grow space, MIGRO, a developer of advanced grow lights, purchased an Apogee Instruments Full-spectrum Quantum Sensor. MIGRO uses the quantum sensor to create PAR intensity maps to grow spaces in numerous light and grow space experiments. The PAR maps created in the experiments show the amount of PAR available in each experiment setup.



Application Summary

Summary
Apogee Instruments' Full-spectrum Quantum Sensor is used to measure the PPFD output of grow lights to create PAR intensity maps of a grow area. The PAR intensity map is then used to determine how far the grow lights should be positioned from the crop for maximum yield.

Apogee Sensors Used
SQ-500 Full-spectrum Quantum Sensor

Organization
MIGRO

Location
Dublin, Ireland