



Press Release

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Signify helps AppHarvest to increase yields in 25-hectare greenhouse

AppHarvest improves efficiency through combining LED and conventional lighting

Eindhoven, the Netherlands – [Signify](#), (Euronext: LIGHT), the world leader in lighting, has partnered with AppHarvest to help the company increase efficiency and boost yields using significantly fewer resources in their 25 hectare greenhouse in Morehead, Ky., USA. The greenhouse will be fitted with a hybrid LED lighting system, utilizing Signify's [Philips GreenPower LED toplighting compact](#) and Agrolux high pressure sodium lighting. AppHarvest will grow tomatoes and cucumbers in its facility, which will be completed in the second half of 2020.

“This LED installation reinforces how we use proven technology to grow more fresh food with fewer resources,” said Jonathan Webb, Founder and CEO of AppHarvest. “With this cutting-edge hybrid system, we will dramatically reduce energy usage in the greenhouse. Working with Signify has given us the benefit of leveraging on a decade of growing knowledge and expertise.”

The facility uses a unique LED and High-pressure sodium (HPS) hybrid lighting system, to significantly reduce energy while increasing yield over the year. The LED lighting system is 40 percent more energy efficient than traditional greenhouse lighting, while it disseminates less radiant heat. During fall and spring, LED lighting will be used to grow more produce. HPS lamps will be used during colder months, in addition to the LED system. The heat from the HPS system will help warm the greenhouse and reduce natural gas usage.

AppHarvest is partnering with Equilibrium, a leading greenhouse investment firm. The LEDs will be installed by Dalsem Complete Greenhouse Projects, which is overseeing construction of the greenhouse.

“We’re very excited about our collaboration with AppHarvest and Equilibrium,” said Bill Bien, CEO of Signify Agriculture Lighting. “It’s great to work with partners just as committed to sustainable horticulture as we are, and we’re looking forward to helping them increase growth predictability, crop quality and yields, while improving their energy efficiency.”

The LED toplighting compact delivers high light output of 1,800 $\mu\text{mol/s}$ and an efficacy of up to 3.0 $\mu\text{mol/J}$ and helps growers effectively optimize crop growth, enhance crop quality and cut operational costs. Compared to a 1,000 W HPS fixture, the Philips GreenPower LED toplighting compact produces the same amount of light, has a similar light distribution, while consuming 40% less power and emitting considerably less radiant heat. By separating heat and light, this product gives growers independent control over their greenhouse climate.



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About Signify

[Signify](#) (Euronext: LIGHT) is the world leader in lighting for professionals and consumers and lighting for the Internet of Things. Our [Philips](#) products, [Interact](#) connected lighting systems and data-enabled services, deliver business value and transform life in homes, buildings and public spaces. With 2018 sales of EUR 6.4 billion, we have approximately 28,000 employees and are present in over 70 countries. We unlock the extraordinary potential of light for brighter lives and a better world. We have been named [Industry Leader](#) in the Dow Jones Sustainability Index for two years in a row. News from Signify is located at the [Newsroom](#), [Twitter](#), [LinkedIn](#) and [Instagram](#). Information for investors can be found on the [Investor Relations](#) page.