

EMBRACE

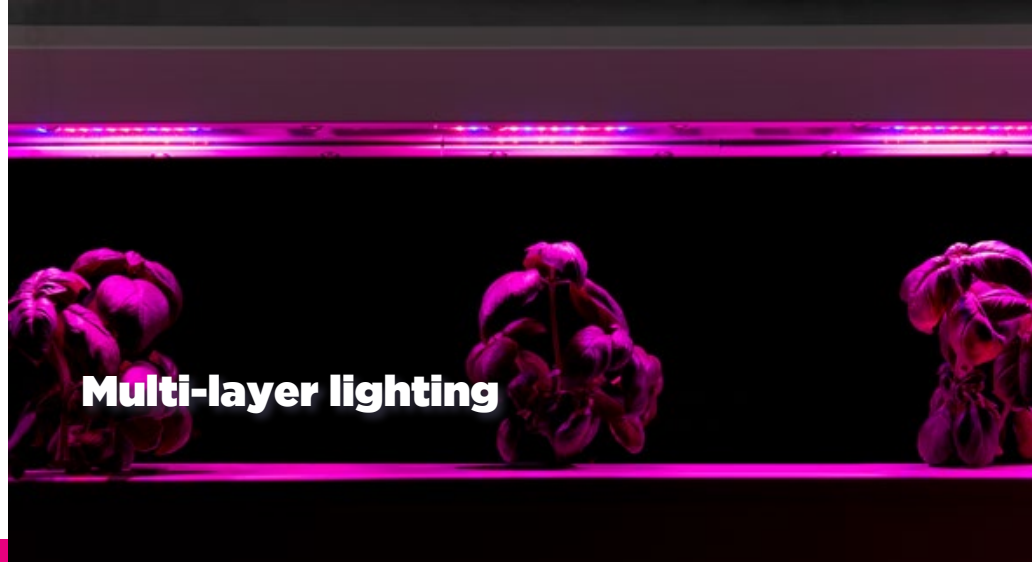
INSPIRATION MAGAZINE

CONTENT

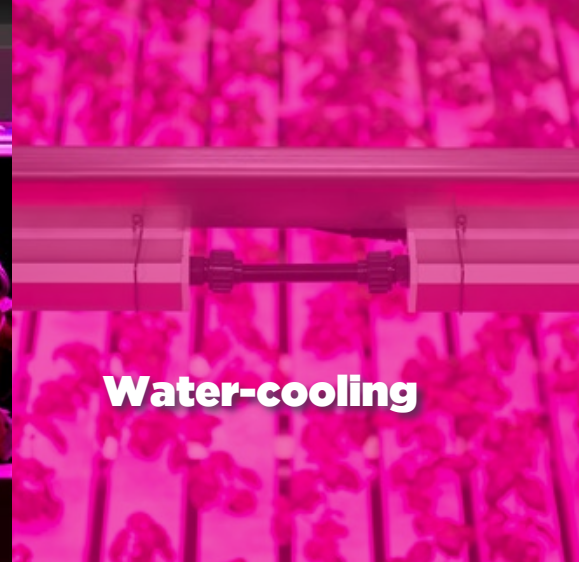
Early and full growth requires optimal conditions, maximum care and attention.

Embrace what matters most.

Meet Embrace, the new multi-layer LED fixture from Oreon, in this magazine.



Multi-layer lighting



Water-cooling



Adjustable Spectrum



Light Uniformity



Keep Close

KEEP CLOSE

WHAT YOU LOVE MOST

What matters to you, you'll cherish. Growers of multi-layer cultivation face several challenges: they want the light close to the crop, but don't want the heat.

The Embrace covers a large area with fewer fixtures. Excess heat is dissipated by the unique water-cooling: all conditions are optimally controlled.

Embrace our new Dutch Powerhouse, specially developed for multi-layer cultivation.



MULTI-LAYER LIGHTING

Oreon is known for its water cooled LED grow lights for greenhouses. The Dutch Powerhouse Embrace is specially designed for vertical and indoor farming. Like our top lights, the new multi-layer fixture is actively water cooled. This ensures a stable growing environment, especially in multi-layer cultivation where heat and humidity are extremely important.

The Embrace is equipped with all the qualities and characteristics that make Oreon's LED top lights so successful; the robust design, the glass LED cover, IP67, the low operating temperature and it is maintenance free. The Embrace operates on voltages from 230 to 480 VAC, making it suitable for all types of electrical installations.



Crops



WATER-COOLING

The multi-layer lighting market is evolving rapidly as more and more growers recognize the added value of this sustainable and efficient cultivation method. But the heat between the layers and the rising relative humidity (RH) form a major challenge to growers aiming for a stable climate.

The water cooled Embrace from Oreon provides a welcome solution: less radiant heat means fewer temperature fluctuations, resulting in stable RH and CO₂ levels. The active water-cooling also keeps the fixture at a low operating temperature, which benefits both the light output and the lifespan of the electronics and LEDs.



Advantages

ADJUSTABLE SPECTRUM

The Embrace can be equipped with a control functionality which enables the spectrum and light intensity to be adjusted dynamically. The grower can change the spectrum and the amount of light on the crop at any time. This not only improves crop quality but also helps achieve efficient and sustainable growth in a controlled climate.

The Embrace is available in 4 hardware versions (R/W, R/B, R/B/FR, R/W/FR). Depending on the chosen spectrum, the light output is up to 700 $\mu\text{mol/s}$.



LIGHT UNIFORMITY

The Dutch Powerhouse Embrace ensures high light uniformity thanks to its wide beam optics and the unique position of the light sources. This delivers uniform light over a large surface area, and fewer fixtures are needed. The Embrace is suitable for lighting crops with an available height of as little as 35 cm.

2:1 reflector

Distance between lamps: 37.4" | 100 cm

Distance between lamp / crop: 19.7" | 50 cm

3:1 reflector - limited height (a)

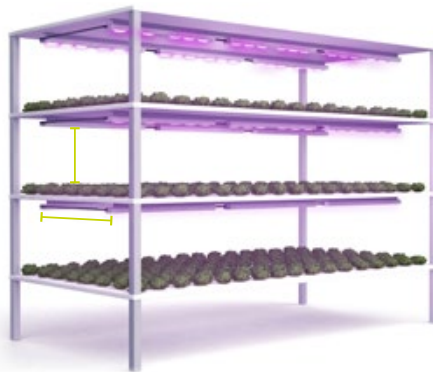
Distance between lamps: 37.4" | 100 cm

Distance between lamp / crop: 13.7" | 35 cm

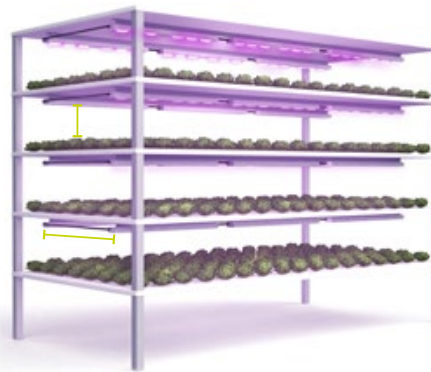
3:1 reflector - large surface (b)

Distance between lamps: 59" | 150 cm

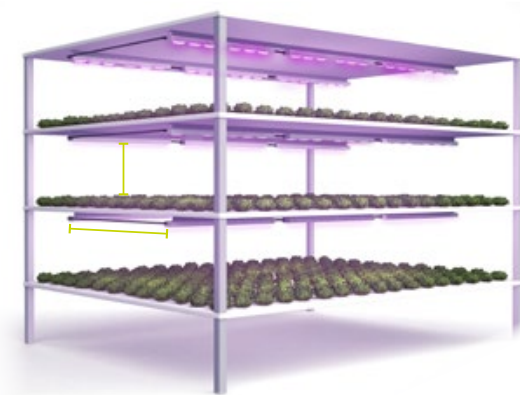
Distance between lamp / crop: 19.7" | 50 cm



2:1 reflector



3:1 reflector a



3:1 reflector b

CROPS

Oreon produces and develops highly efficient and sustainable LED grow lights, especially for greenhouse horticulture. Every crop has its own assimilation lighting needs. Thanks to years of knowledge and experience in this industry, we can develop the perfect light recipe with you.

Click on the crops to find out more about the benefits of LED lighting and the water-cooling solutions that Oreon can offer for each crop.



Leafy Vegetables



Floriculture



Soft Fruits



Cannabis

DOWNLOADS

[Advantages Flyer](#)

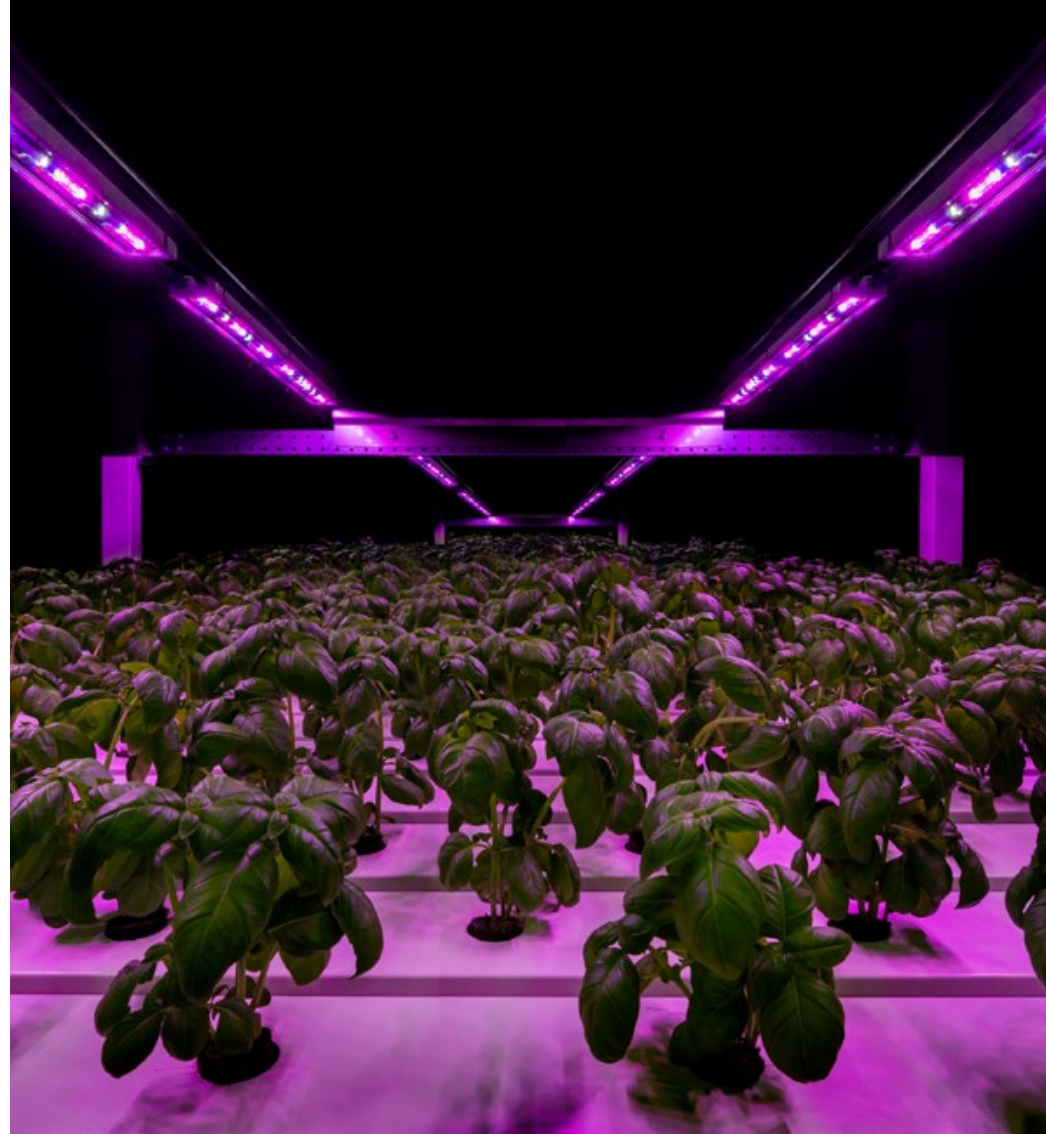
[Light Plan Form](#)

VIDEOS

[We are Oreon](#)

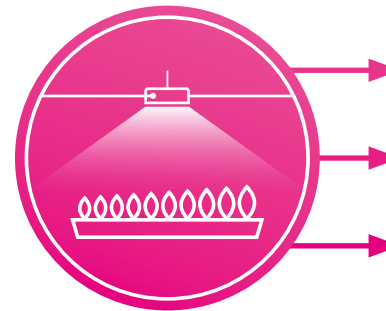
[Water-cooling explained](#) [Embrace Launch](#)

[Embrace Productvideo](#)



LED'S. STAY. CONNECTED.

Oreon, the Dutch innovative developer and manufacturer of high-end LED grow lights for greenhouse horticulture, is introducing the first water cooled multi-layer LED fixture: Embrace. The Dutch Powerhouse Embrace is specially designed for vertical and indoor farming. The biggest enemies in multi-layer cultivation are heat and humidity, but now Oreon has the solution: an actively water cooled LED fixture for a stable growing climate and perfect light distribution. With the introduction of the Embrace, Oreon is offering a sustainable and efficient LED lighting solution for multi-layer cultivation systems.



CLIMATE CONTROL
heat removal by water-cooling

ULTRA WIDE OPTICS
high uniformity in every situation

ADJUSTABLE SPECTRUM
dynamical for maximum flexibility

V210707

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