Tunable Natural Light

LightDNA®

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VALOYA
RESEARCH DRIVEN

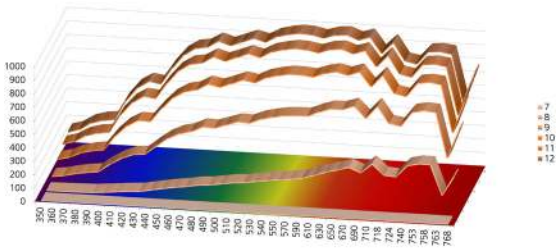
Replicate
Outdoor Light Conditions

LightDNA® is a line of LED grow lights that accurately delivers the natural outdoor light conditions to your growth room.

Outdoor light is by default changing all the time, with regards to light spectrum, intensity and photoperiod and these dynamic features are accurately captured with LightDNA®.

The Dynamic Nature of Outdoor Light

On a clear day, this is how sunlight looks from 7 o'clock until noon. The presence of clouds adds to the complexity of its spectra. With LightDNA® you can successfully replicate all these parameters in a controlled environment through an easy-to-use software interface.



Match the Clear Sky at Noon With **Up to 95% Accuracy**

Replicate sunlight from any part of the world

Control the lamp through an easy-to-use online interface*

The LightDNA® line of products was designed for high-end research applications.

** Model LightDNA-8*

LED for **Advanced Research**

LightDNA-2

Two light channels for replication of clear sky and dawn and dusk conditions.

The Valoya LightDNA-2 consists of the sunlight replicating and a complementary, far-red spectrum. The powerful sunlight spectrum is a close approximation to the clear sky light at noon and it covers the range of 380 to 830nm (exceeding PAR 400-700nm).

It is also a proven plant growth spectrum, with white appearance to humans and has become the spectrum of choice for the leading research institutes and universities globally.

The complementary spectrum is far red (730 nm), which not only enables replication of dawn and dusk conditions, but also gives control of the red/far red ratios which affect various plant development processes.

» **Replication of clear sky** light including **dawn and dusk**
» Adjustable **red/far red ratio**
» Suitable for **growth chambers and greenhouses**

LightDNA-8

Eight light channels for sophisticated research applications where complete control over the spectrum is needed.

The Valoya LightDNA-8 is the most advanced application of the LED technology in crop science research. With it you can generate theoretical outdoor light conditions from any part of the world as well as upload your own, recorded ones. All of this is controlled through an easy-to-use, online interface.

To make this possible, the luminaire has been carefully constructed with 8 light channels, some of which wide and some monochromatic. The wavelengths span the range of 380 nm to 780 nm. The match of the outdoor light conditions is with 90% or higher accuracy.

» **Replicate outdoor light conditions** from any part of the world
» Easy-to-use, **online software interface**

::: **Pictures:** Left: page - 8-channel light at the **Queen Mary University**, London

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LightDNA-2

- Lengths (mm): 1200 and 1800
- Lengths (inches): 47.2 and 59
- 2 channels of light, clear sky and dawn/dusk
- Up to 1,8 µmol/W
- IP67

LightDNA-8

- Dimension (mm): 340 x 180 x 175
- Lengths (inches): 13.4 x 7.0 x 6.9
- 8 channels of light
- Up to 1,8 µmol/W
- IP20

For detailed product information, please see our Product Brochure.

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