



Tunable Natural Light
LightDNA®

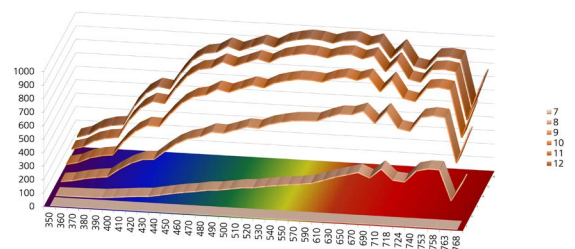
Replicate Outdoor Light Conditions

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**

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



LightDNA-2

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**

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



LightDNA-8

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

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 $\mu\text{mol}/\text{W}$
- 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 1,3 $\mu\text{mol}/\text{W}$
- IP20



For detailed product information, please see our Product Brochure.



Get in touch with Valoya

T +358 10 2350 300

E sales@valoya.com

W www.valoya.com

Head office

Melkonkatu 26,
00210 Helsinki,
Finland

Distributors

You can get Valoya products through one of 30 global distributors. The complete distributor list is available at:
www.valoya.com/contact