



# Valoya



GRAFTING WITH LED LIGHT

SOLUTION GUIDE



# Spectra Optimized for Grafting

Valoya's spectra have been tested and optimized for all steps of the grafting process:

1. Cultivation of the scion and rootstock
2. Healing period
3. Seedling cultivation

## Uniform Seedlings

### Pre-growth

Rootstock and scion varieties have different growth rates, therefore the sowing must be well scheduled to achieve similar size seedlings at the time when grafting takes place.

Valoya's AP673L consistently produces uniform seedlings and in shorter time cycles than under fluorescent, HPS or neutral sunlight. Furthermore, Valoya creates comprehensive light plans for its customers with precise lamp positioning to ensure optimal light distribution.

### Stem diameter

Equal light distribution ensures same stem diameter development of rootstock and scion plants. This match in plants' vascularities enables efficient transport of water and nutrients and a more efficient healing process.





Top /

Valoya's T8 tubes with pre-installed end-caps (IP67 rated)

Bottom /

Retrofit use in enclosures



# Healing period

Healing is the most critical point in the grafting process and grafted seedlings require a humid and warm environment. Relative humidity needed could be 95% or higher while temperature should be up to 29°C. Most grow lights cannot withstand these conditions.

## Extreme humidity

Valoya's luminaires have high IP rating (up to IP67) meaning they can withstand conditions of extreme humidity, dust exposure and even submersion under water.

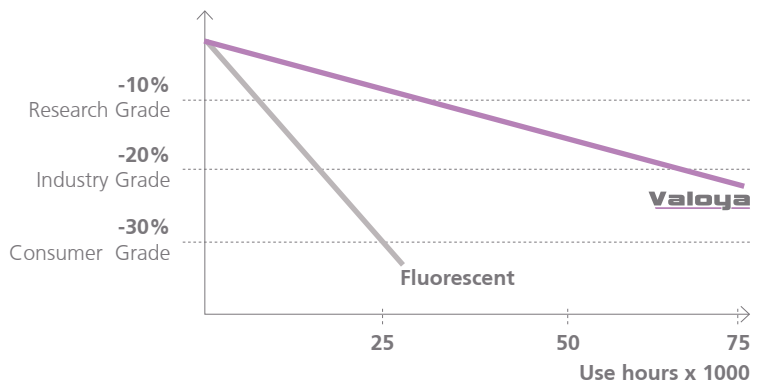
Therefore, all conditions needed for the seedlings can be created without any adverse effects to the light fixtures or the light output.

## Temperature control

Valoya lights are passively cooled with minimal heat radiation towards the plants.

In controlled environments this means minimal heat gradients thus a more uniform climate. In greenhouse environment it means better control of the heat as it is dissipated upwards rather than circulated in the room like when using HPS or MH lamps.

## Light Intensity Decay



## L Series (T8 Tubes)

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- Lengths (mm): 1200 and 1500
- Lengths (inches): 47.2 and 59
- Retrofit for fluorescent tube fixtures
- Comes with either clear or diffused cover
- Up to 2,1  $\mu\text{mol/W}$
- Up to IP67 (dust and humidity resistant)

## C Series

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- Lengths (mm): 1175, 1475 and 1756
- Lengths (inches): 46.3, 58 and 69.9
- Slim and lightweight with high light intensity
- Dimmable
- Up to 1,8  $\mu\text{mol/W}$
- IP66 (dust and humidity resistant)

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