

Light is OSRAM

Light Recipe for Improving Red Coloration
Lettuce and Leafy Greens

With our proven light recipes, we want to provide you a starting point for your own research. We tested the recipe with PHYTOFY® RL in OSRAM's Smart Farming laboratory, a fully controllable climate chamber. Out of different light recipes tested in a controlled environment with a common red lettuce variety, we picked this as providing the best outcome for the highest anthocyanin accumulation in red lettuce.

Red Leaf Lettuce



Growth Recipe

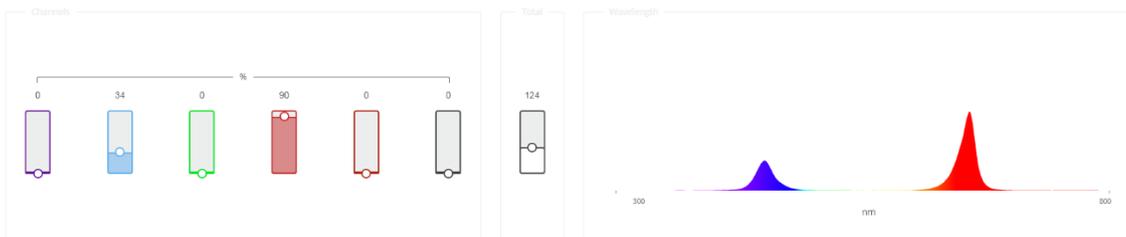
Crop	<i>Lactuca sativa</i> 'Diablotin'
Light intensity	~ 240 $\mu\text{mol m}^{-2} \text{s}^{-1}$ *
Photoperiod	16 day / 8 night
Temperature	20 °C day / 18 °C night
Humidity	60 - 70 %
Growth Cycle	~ 28 days

*At a distance from cultivation surface to fixture of 406 mm (16")

Spectrum

UV	0
Blue	34
Green	0
Hyper Red	90
Far Red	0
Warm White	0

Values are in %



For further details please find our research paper at <http://www.osram/phytofy>

Please note:

This information is based on our evaluations and can only be regarded as general guidance. While we have made every attempt to ensure that the information has been obtained right, please make sure that you check for your application if the data and information provided fits to your use case and provides the intended results.

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Smart Farming

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