

Cannabis Lighting Guide



PHOTONE PRO GUIDE

Optimally lighting a cannabis plant is complex and dependent on a lot of factors. This summary provides an overview to properly set PAR / PPFD levels, lighting duration, and CO₂ levels for cannabis plants in indoor settings.

PLANT LIGHTING SCIENCE

Daily Light Integral

Daily light integral (DLI) is the one metric you want to optimize within the ranges of light duration and light intensity.

LIGHT DURATION

Photoperiod

It is crucial to maintain proper lighting times so that the plant can either be kept in the vegetative stage or flowering.

LIGHT INTENSITY

PAR Levels

Providing proper PAR / PPFD levels is crucial in order not to under-utilize or burn your plants.

PHOTOSYNTHETIC ACTIVITY

CO₂ Levels

Supplementing higher CO₂ levels greatly boosts photosynthetic activity and ultimately plant growth.

Seedling

10 - 15
mol/m²d

Vegetative

30 - 45
mol/m²d

Flowering

30 - 40
mol/m²d

16 - 24
hours / day

16 - 24
hours / day

10 - 14
hours / day

100 - 300
μmol/m²s

250 - 600
μmol/m²s

500 - 1050
μmol/m²s

400 - 600
ppm

400 - 800
ppm

800 - 1400
ppm