

Figure S1 The maximum canopy diameter, leaf area, fresh weight of above ground and underground, dry weight of above ground and underground of lettuce under different light intensities. L1, 180 $\mu\text{mol m}^{-2} \text{s}^{-1}$; L2, 210 $\mu\text{mol m}^{-2} \text{s}^{-1}$; L3, 240 $\mu\text{mol m}^{-2} \text{s}^{-1}$.

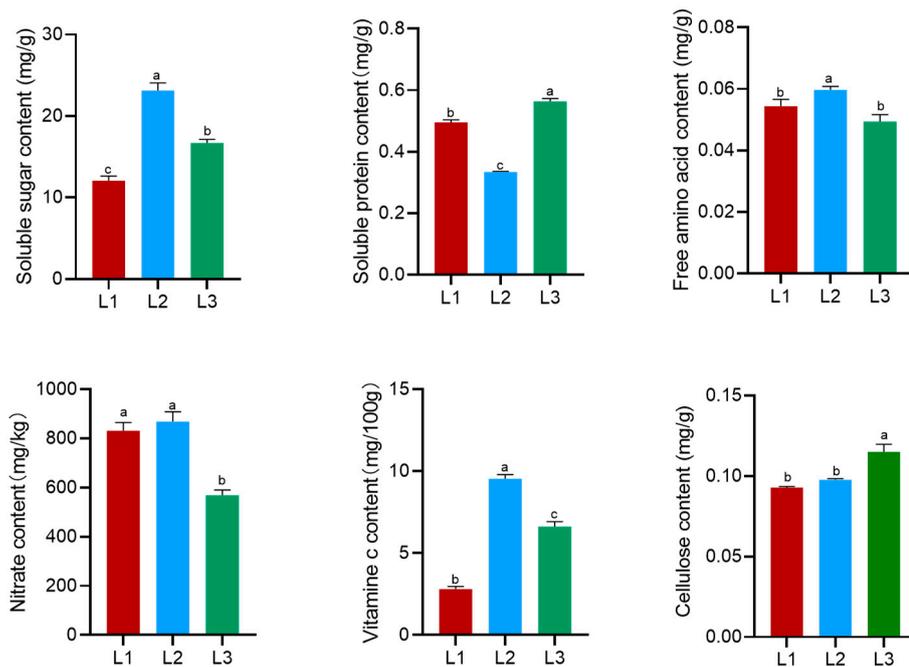
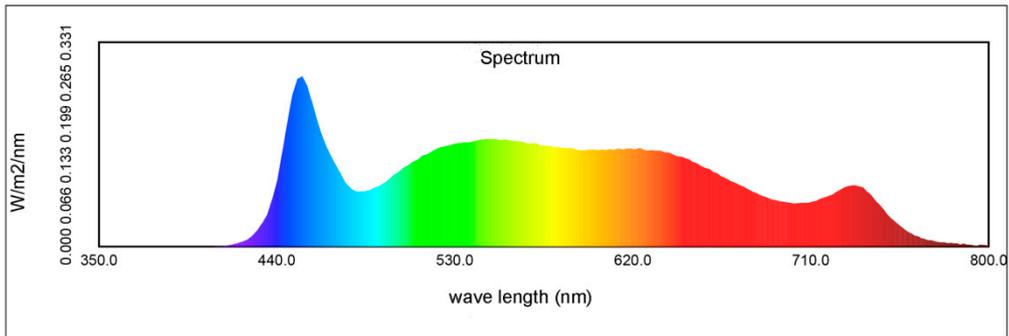


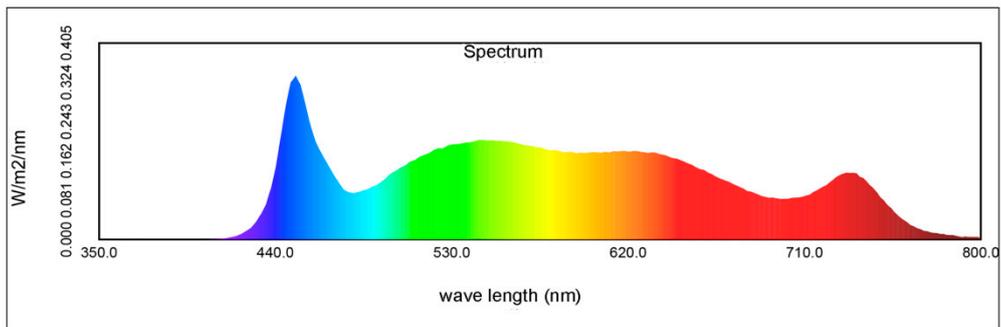
Figure S2 The contents of total soluble sugar, soluble protein, vitamin c, nitrate, cellulose and free amino acid of lettuce under different light intensities. L1, 180 $\mu\text{mol m}^{-2} \text{s}^{-1}$; L2, 210 $\mu\text{mol m}^{-2} \text{s}^{-1}$; L3, 240 $\mu\text{mol m}^{-2} \text{s}^{-1}$.

L1



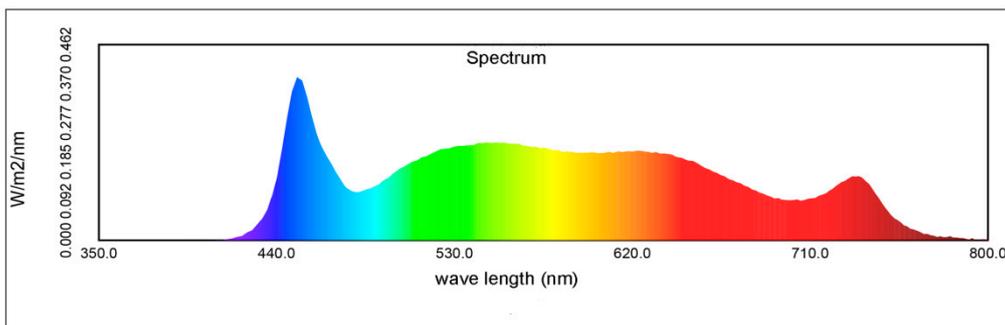
Items	value	Items	value	Items	value
PPFD($\mu\text{mol}/\text{m}^2/\text{s}$)	180.42	Ev(kx)	11568.98	Ee(W/m)	4.3317E1

L2



Items	value	Items	value	Items	value
PPFD($\mu\text{mol}/\text{m}^2/\text{s}$)	207.87	Ev(kx)	13385.64	Ee(W/m)	5.1254E1

L3



Items	value	Items	value	Items	value
PPFD($\mu\text{mol}/\text{m}^2/\text{s}$)	239.80	Ev(kx)	15331.19	Ee(W/m)	5.7974E1

Figure S3 The photon flux for three scenarios measured by PLA-30. The “value” in the table represents the light intensities. L1, $180 \mu\text{mol m}^{-2} \text{s}^{-1}$; L2, $210 \mu\text{mol m}^{-2} \text{s}^{-1}$; L3, $240 \mu\text{mol m}^{-2} \text{s}^{-1}$.