

Figure S1. Descriptive scheme of LED lamp location.

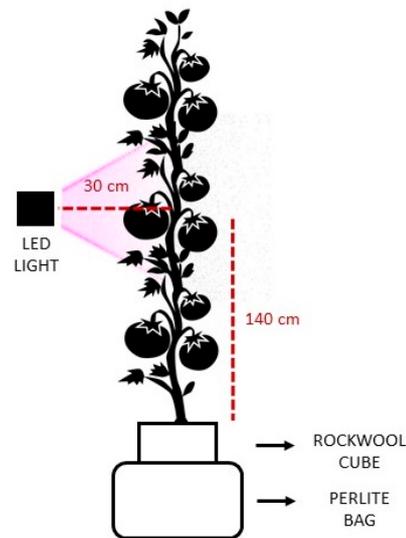


Table S1. Results of two-way ANOVA analysis.

| Evaluated parameters | LED | DEF | LED*DEF |
|--|-----|-----|---------|
| Collar diameter | *** | ns | ns |
| Internode length | ns | ns | ns |
| Total leaf area | ns | | |
| Leaf fresh weight | ns | | |
| Leaf dry weight | ns | | |
| LDMC | ns | | |
| Plant total fresh weight | ns | | |
| Plant total dry weight | ns | | |
| Stem length | ns | | |
| SLA | * | | |
| Chlorophyll content leaf under 3° truss | *** | ns | ns |
| Chlorophyll content leaf under 4° truss | *** | ns | ns |
| Stomatal conductance (GS) | ns | ns | ns |
| Under-leaf CO ₂ concentration (Ci) | ns | ns | ns |
| Leaf transpiration (E) | ns | ns | ns |
| Net photosynthesis (A) | * | ns | ns |
| Effective quantum yield efficiency of PSII (ΦPSII) | * | ** | ns |
| PSII maximum efficiency (Fv/Fm) | ns | ns | ns |
| Photochemical quenching of PSII (qP) | * | ** | ns |
| Proximal fruit volume Follow up 1 | ns | ** | ns |
| Proximal fruit volume Follow up 2 | * | ns | ns |
| Distal fruit volume Follow up 1 | *** | ns | ns |
| Distal fruit volume Follow up 2 | *** | ns | ns |
| Total number of fruits | *** | ns | ns |
| Total yield | *** | ns | ns |
| Yield green tomatoes | ns | ns | ns |
| Yield red tomatoes | *** | ns | ns |
| Ripening Proximal Fruit Follow up 1 | ns | ** | ** |

| | | | |
|-------------------------------------|-----|----|-----|
| Ripening Distal Fruit Follow up 1 | ns | ns | ns |
| Ripening Proximal Fruit Follow up 2 | *** | ns | ns |
| Ripening Distal Fruit Follow up 2 | ** | ns | ns |
| Fruit hardness | ns | ns | ns |
| L* | *** | ns | ns |
| HUE angle | *** | ns | ns |
| Chroma | ns | ns | ns |
| Pulp firmness | ns | ns | ns |
| Soluble solids | ns | * | ns |
| Titrateable acidity | * | ns | *** |
| FDMC | ns | ns | ns |
| Lycopene | ns | ns | ns |
| β -carotene | ns | ns | ns |

ns = $p > 0.05$; * = $p \leq 0.05$; ** = $p \leq 0.01$; *** = $p \leq 0.001$

LED = effect of supplemental LED light (RB or CK treatment)

DEF = effect of defoliation (R and NR treatment)

LED*DEF = interaction among factors