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## README file

Data Set Title: **Data from the article “Supplemental LED Lighting Improves Fruit Growth and Yield of Tomato Grown under the Sub-Optimal Lighting Condition of a Building Integrated Rooftop Greenhouse (i-RTG)”**

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## Data set Contents

The data set consists of:

- 1 excel file in .xlsx format “Vegetative\_Physiological\_Data\_Appolloni et al. Rooftop tomato\_FoodE.xlsx”
- 1 README file “READMEfile\_Vegetative\_Physiological\_Data\_Appolloni et al. Rooftop tomato\_FoodE.pdf”

## Data set Documentation

### Abstract

The dataset contains the vegetative and physiological data of greenhouse truss-tomato cultivated in a rooftop greenhouse environment with supplemental LED light. The lighting factors consisted



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of an artificial LED lighting treatment with red and blue light in a ratio of 3 for 16 h d<sup>-1</sup> (h 8-00) with an intensity of 180  $\mu\text{mol s}^{-1} \text{m}^{-2}$  (RB); red and blue light in a ratio of 3 for 16 h d<sup>-1</sup> (h 8-00) with an intensity of 180  $\mu\text{mol s}^{-1} \text{m}^{-2}$  + 40  $\mu\text{mol s}^{-1} \text{m}^{-2}$  of far-red light for the whole photoperiod (FR); red and blue light in a ratio of 3 for 16 h d<sup>-1</sup> (h 8-00) with an intensity of 180  $\mu\text{mol s}^{-1} \text{m}^{-2}$  + 40  $\mu\text{mol s}^{-1} \text{m}^{-2}$  of far-red light for 30 min at the end of photoperiod (EOD); a control cultivated under natural light only (CK).

Content of the files:

- file **Vegetative\_Physiological\_Data\_Appolloni et al. Rooftop tomato\_FoodE.xlsx** contains the vegetative and physiological data collected on tomato cultivated with LED light. The Legend of the data is reported in the excel file.

#### *File specifics*

The file is divided into 2 excel sheets, the first one is a legenda of the data reported, the second one reports the vegetative and physiological data collected.

The 4 treatments applied are reported as RB = LED light treatment with Red and Blue light; FR = LED light treatment with Red and Blue light + Far-Red for the whole day; EOD = LED light treatment with Red and Blue light + Far-Red for 30 min at the end of the day; CK = natural light only.