

Supplementary Materials

Table S1. Summary of the spectrum resemblance with respect to the photosynthetic action spectrum (PAS), SR_{PAS} , for a high pressure sodium (HPS) lamp, an incandescent bulb, a fluorescent lamp, and a plant factory light emitting diode (PF-LED).

Light Sources	SR_{PAS} (%)
High pressure sodium lamps (HPS)	38
Incandescent bulb	50
Fluorescent tube	60
Plant factory light emitting diode (PF-LED)	58

Table S2. Summary of model number, CCT, and CRI for a high pressure sodium (HPS) lamp, an incandescent bulb, a fluorescent lamp, a plant factory light emitting diode (PF-LED), and a typical LED.

Light Sources	Model No.	CCT	CRI
HPS	Street lamp	1760 K	16
Incandescent bulb	(TOA)E27/40W	2300 K	99
CFL	TL5HE35W	5500 K	85
PF-LED	adopted from LumiGrow ES330 LED Grow Light Spectrum (LumiGrow, Novato, CA, USA)		
Typical LED	PH520102	6200 K	77