**Supplementary Materials**

Chart

Description automatically generated

Figure S1. Estimated phytochrome photostationary state (PPS) of the following narrowband LED spectrum treatments: UVA (λpeak= 385 nm), B1 (λpeak= 404 nm), B2 (λpeak= 440 nm), B3 (λpeak= 453 nm), R (λpeak= 659 nm), and FR (λpeak= 729 nm) superimposed on the PPS spectrum, from monochromatic wavelengths, based on the data from Sager et al. (1988) [3]. The open circles represent the calculated PPS values based on the actual spectral distributions of the different spectrum treatments, rather than their peak wavelengths.

Diagram

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Figure S2. Germination percentages of mustard and arugula microgreens under narrowband lights with different peak wavelengths. R (λpeak= 660 nm), UVA (λpeak= 385 nm), B1 (λpeak= 405 nm), B2 (λpeak= 440 nm), B3 (λpeak= 455 nm), FR (λpeak= 730 nm), D is dark. Data are means ± SE (n = 3). Within the same species, means bearing the same letter are not significantly different at *P* ≤ 0.05 according to Duncan’s new multiple range test.

Diagram

Description automatically generated

Figure S3. Hypocotyl diameters of two species of mustard and arugula microgreens under narrowband lights with different peak wavelengths. R (λpeak= 660 nm), UVA (λpeak= 385 nm), B1 (λpeak= 405 nm), B2 (λpeak= 440 nm), B3 (λpeak= 455 nm), FR (λpeak= 730 nm), D is dark. Data are means ± SE (n = 3). Within the same species, means bearing the same letter are not significantly different at *P* ≤ 0.05 according to Duncan’s new multiple range test.