

Supplementary Materials

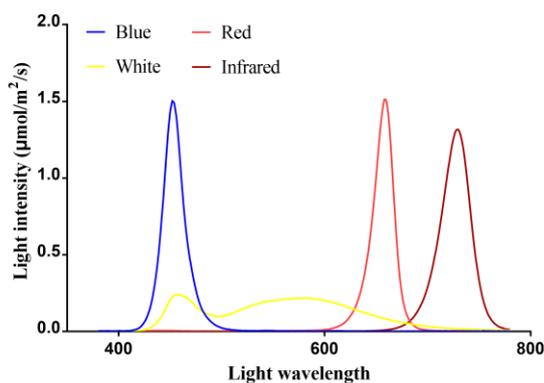


Figure S1. Blue, red, infrared and white light spectra used in this study (The blue and red light spectra presented here are mixed to obtain mixed blue/red lights).

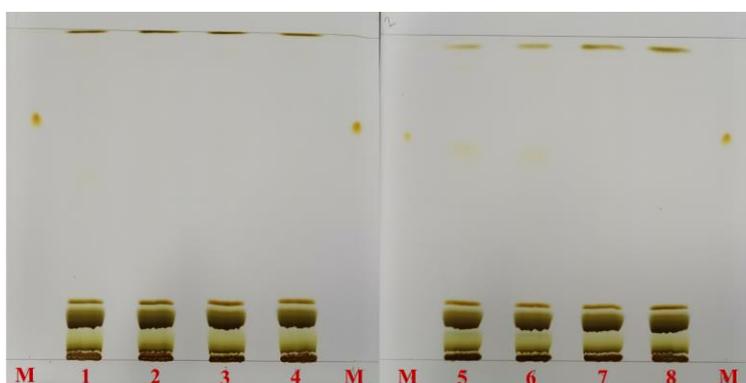


Figure S2. Thin layer chromatographic (TLC) analysis results of total lipids extracted from *H. pluvialis* green cells grown for 7 days under different light spectra. M: TAG standards used as marker; 1,2: Blue light group; 3,4: Blue/red 1/2 light group; 5,6: Red light group; 7,8: White light group. The spots scrapped off from TLC plates were analyzed by gas chromatography/mass spectrometry (GC/MS) after methyl esterification. Results showed that TAG accounted for $0.035\pm 0.003\%$, $0.032\pm 0.001\%$, $0.052\pm 0.012\%$ and $0.035\pm 0.003\%$ of the dry cell weights of *H. pluvialis* green cells grown under blue, blue/red 1/2, red and white lights, respectively.