(A) The spectral irradiance provided under the various background isolation conditions. Background conditions: Long wavelength isolation (LW, red), Control (green), Dim short wavelength (Dim SW, cyan), and Short wavelength isolation (SW, blue).

(B) The quantum catches of the six possible cone mechanisms under each condition. Cone pigment: SWS1 (black), SWS2b (violet), SWS2a (blue), RH2b (green), RH2a (orange), and LWS (red). Cone quantum catches were calculated while setting the A₂ % of cones to 50 for the design of the background conditions.