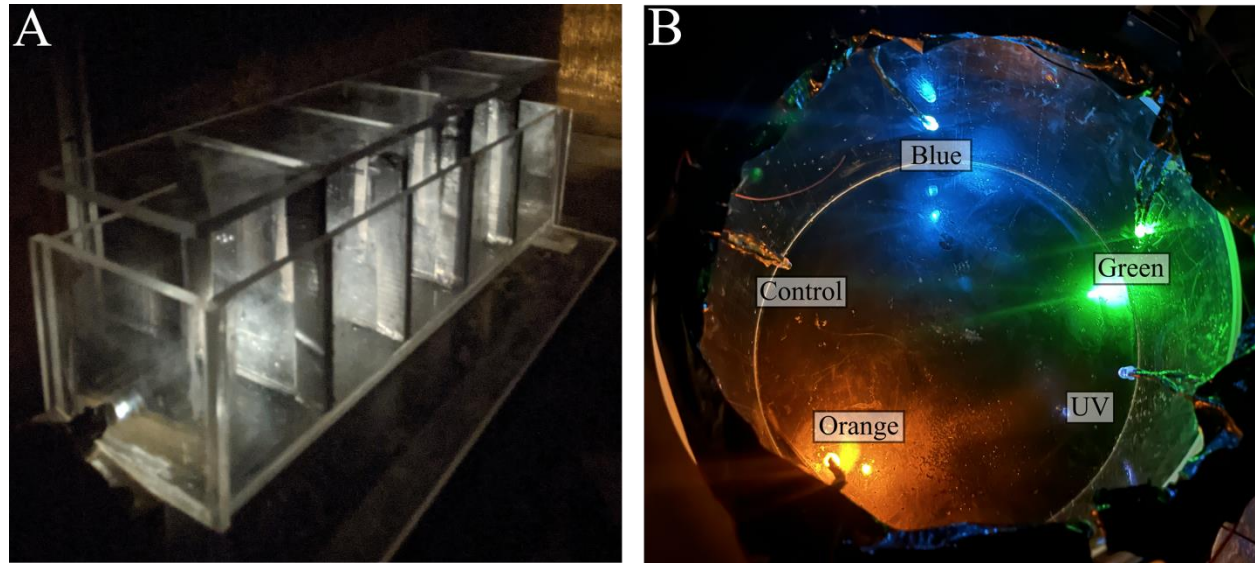
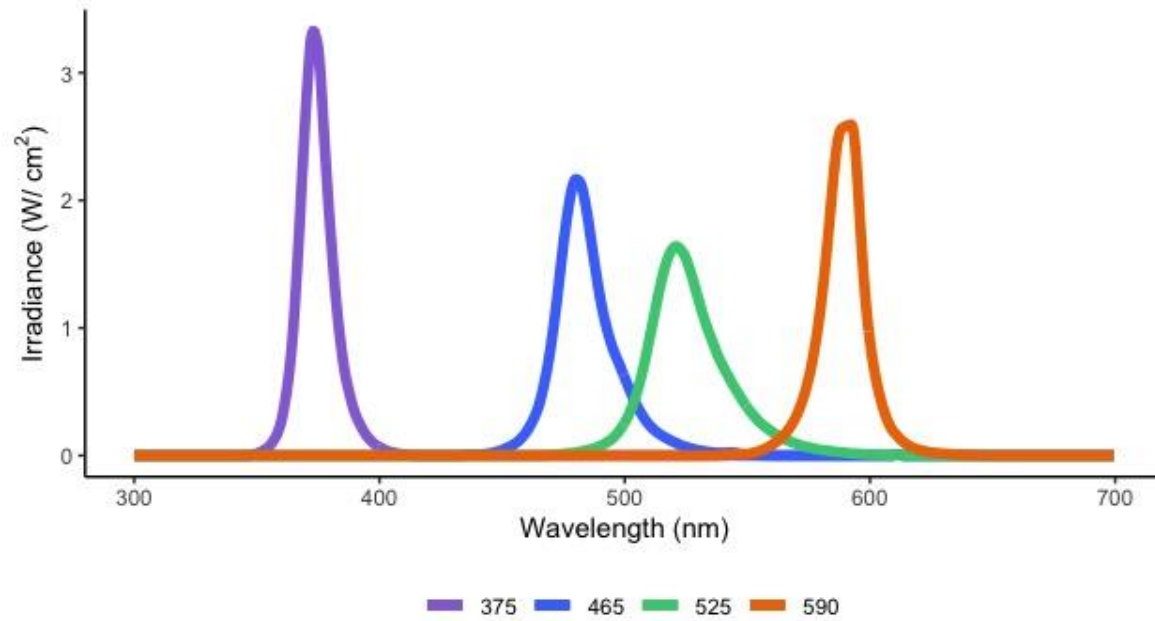


**Fig. S1.** Spectrum of the three adapting lights used during experimentation, plotted as the typical irradiance level used during adaptation.



**Fig. S2.** Images of the experimental arenas used for behavioral trials. (A) horizontal phototaxis arena, with a white light displaying the path of light illumination; (B) wavelength preference arena, consisting of a circular chamber with stimuli evenly spaced along the outer edges.



**Fig. S3.** Spectral output from the LED light array use in the wavelength preference trials, as measured by a handheld radiometer (StellarRad, Stellarnet). Four experimental colors were used as light stimuli: UV (LED375E, 10 nm FWHM, Thorlabs), blue (LED 465E, 25 nm FWHM, Thorlabs), green (LED525E, 25 nm FWHM, Thorlabs), and orange (LED591E, 20nm FWHM, Thorlabs). All lights were adjusted to an overall output of 50 W/m<sup>2</sup> from 300-700 nm.