Figure S1. Spectral sensitivity of the camera and lens used in this study (Olympus PEN-EPL5 + 60mm macro lens). Data normalised so that the sum under all curves equals 1.
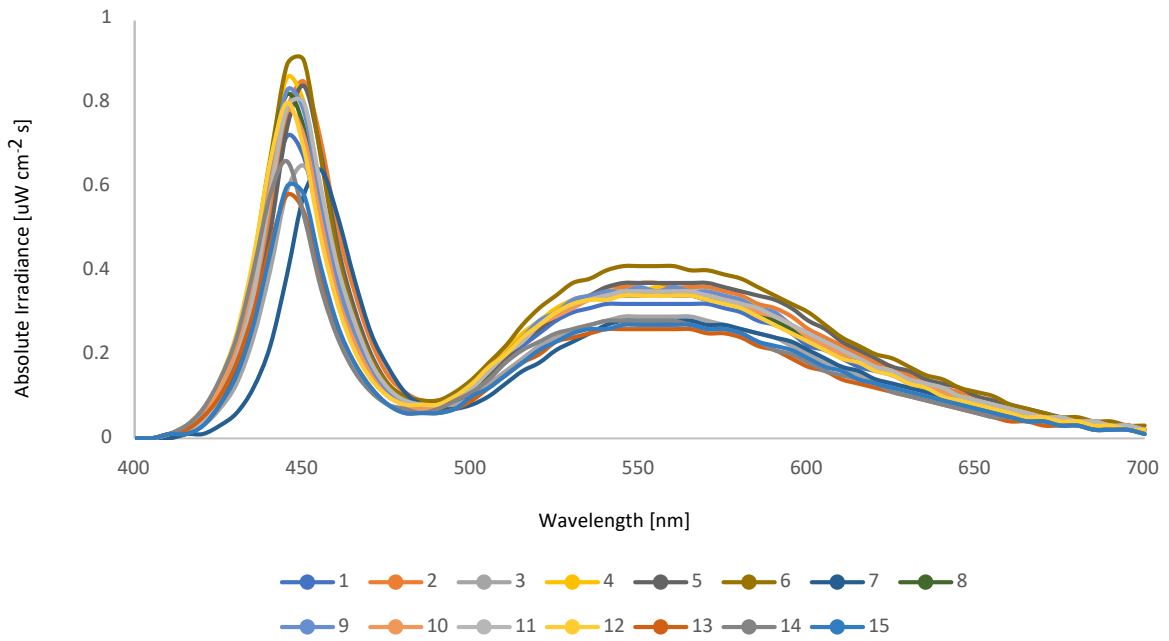
Figure S2. Absolute irradiance measurements of experimental lighting in all 15 tanks used in the study.
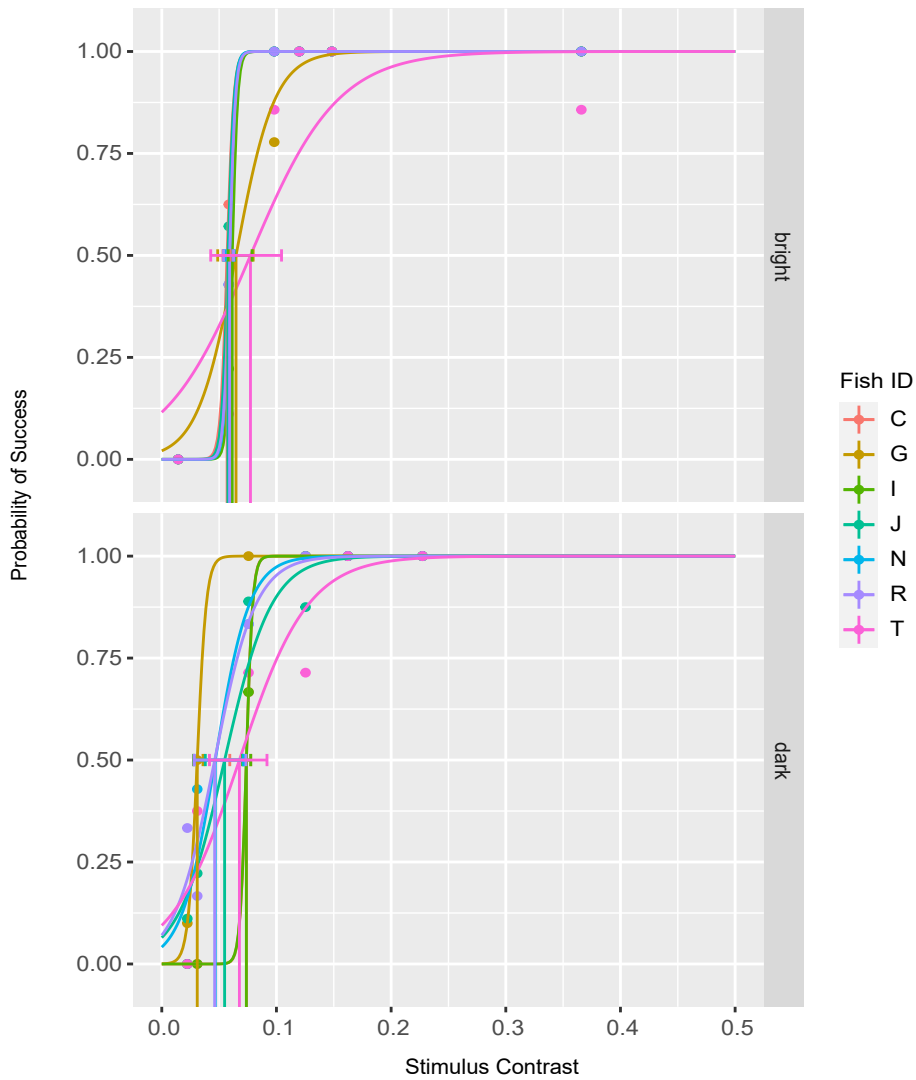
Figure S3. Detection thresholds for individual fish of group 1 (dark background). Individually estimated discrimination thresholds in Michelson contrast for each scenario. Error bars represent the 95% confidence intervals.
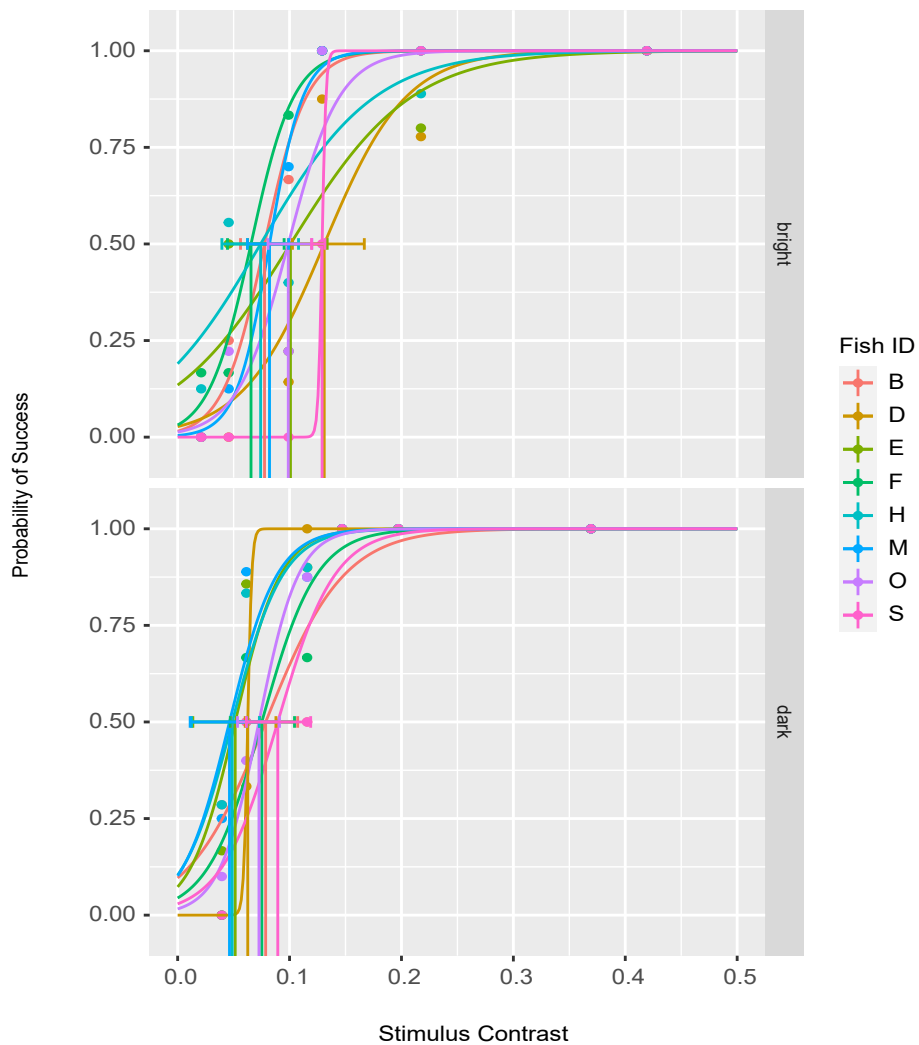
Figure S4. Detection thresholds for individual fish of group 2 (bright background). Individually estimated discrimination thresholds in Michelson contrast for each scenario. Error bars represent the 95% confidence intervals.