

Supplementary Material 2: Response biases

Response biases were examined with respect to correct and incorrect responses; these are presented in Figure A. Here data is arranged into three main rows corresponding to what stimulus class the observer was actually presented with and responded to - objects presented (top), non-objects presented (middle) and random patches presented (bottom). There are six main columns, separated by dashed grey vertical lines - the first three correspond to threshold presentations and the last three correspond to suprathreshold presentations. Within these threshold and suprathreshold subsections, the three contrast combinations are listed: luminance only, luminance combined with L-M, and the full contrast combination (luminance, L-M and S-(L+M)). Finally, within each of these contrast combinations the actual response proportion is colour coded: object responses are grey, non-object responses are green and random patch responses are purple. The trials in which observers did not respond or responded too late ("missed" trials) are also included for completeness (these are plotted as black bars). Missed responses were rare and typically only comprise ~3% and ~1% of all trials at threshold and suprathreshold, respectively.

Figure A indicates that at threshold when an object (top row) is presented and observers give an incorrect response they are most likely to be confusing an object stimulus with a non-object. At suprathreshold this confusion appears to be reduced. On the other hand, when a non-object (middle row) is presented and an incorrect response is given, the wrong response can either be an object or a random patch with approximately equal chance. This confusion rate is also reduced at suprathreshold. Finally, when an incorrect response is given to a random patch (bottom row) it will generally be confused with a non-object and rarely confused with an object, and this confusion does not appear to be affected very much by contrast level.

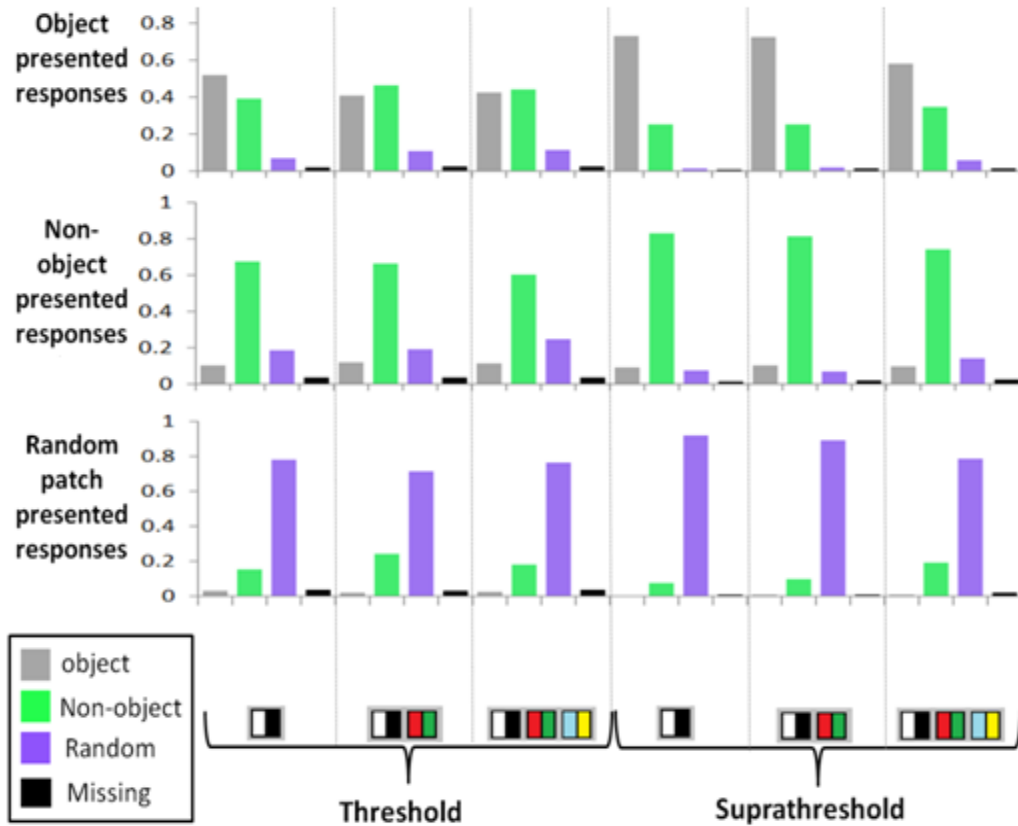


Figure A. For each chromoluminance condition, at both threshold and suprathreshold, the proportions of responses (correct and incorrect) are plotted for each stimulus type - objects (top row), non-objects (middle row) and random patches (bottom row). Object responses are depicted with grey bars, non-object responses with green bars, random patch responses with purple bars and missing responses with black bars.