

Supplemental Images

Page 2: Examples of the stimuli (images) used on our study of contour image enhancement. These examples are shown as displayed during the visual search task. All stimuli were originally 1600 by 1200 pixels. When presented on the 1920 by 1080 pixel display, the upper right corner of the image was placed at the upper right corner of the display. This resulted in a 320 pixel wide black band on the left and it meant that 120 pixels at the bottom of each image were not visible. The search target was displayed in the upper left corner on the black band. These targets varied in size and were never chosen from within the missing 120 pixels. There were three stimulus categories: “Faces”, “Indoors” and “Collections”. The first two rows show Faces stimuli, which include photographs of sports teams, family portraits and work groups. The Faces images included people of varied ages, genders and races, and are set on different backgrounds. Targets were always individual faces. “Indoors” images included a variety of indoor settings, such as bedrooms, offices and kitchens. Targets were objects or features within those settings. “Collections” images included groups of similar objects, such as fish, foods, candles and pins. Collections and Faces images were meant to reduce the subject’s ability to use top-down processing to determine object location (e.g., in an Indoors image, the subject could assume that a lamp would be located on a desk or surface, and cannot be floating midair), whereas targets in Collections and Faces images could appear anywhere on the screen.

On pages 3 to 8 are examples of the three enhancement levels that were tested in our study (Low, Medium and High), along with the Original image. Subjects performed visual search and preference tasks with either Original, Medium and High levels (Group 1) or Original, Low and Medium levels (Group 2).

Page 3: A relatively simple Faces image containing eight faces.

Page 4: A more complicated Faces image showing many people wearing similar uniforms and bright colors.

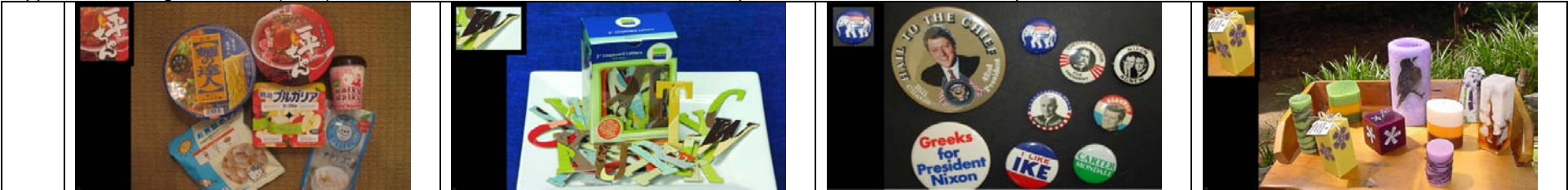
Page 5: Indoors image showing a simple bedroom with soft lighting. Most objects in the scene are on the same depth plane.

Page 6: Indoors image showing a busy home scene with many objects in the foreground and background.

Page 7: Collections image showing objects of a variety of sizes, all belonging to different categories of food.

Page 8: Collections image showing a large number of small objects (2 categories) with similar shapes and sizes.

Faces				
				
Indoors				
				
Collections				



Original



Low



Medium



High



Original



Low



Medium



High



Original



Low



Medium



High



Original



Low



Medium



High



Original



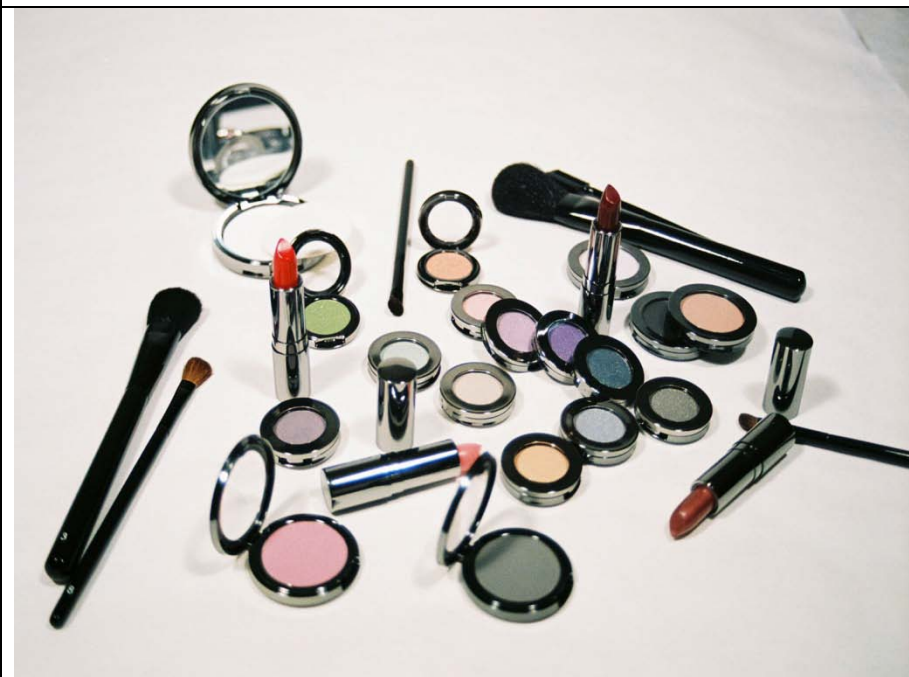
Low



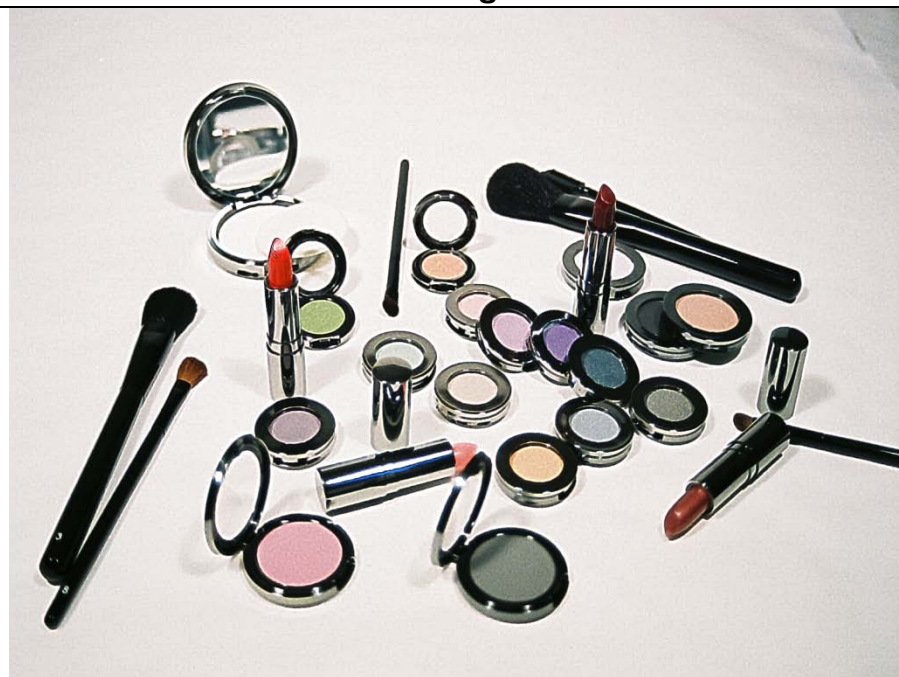
Medium



High



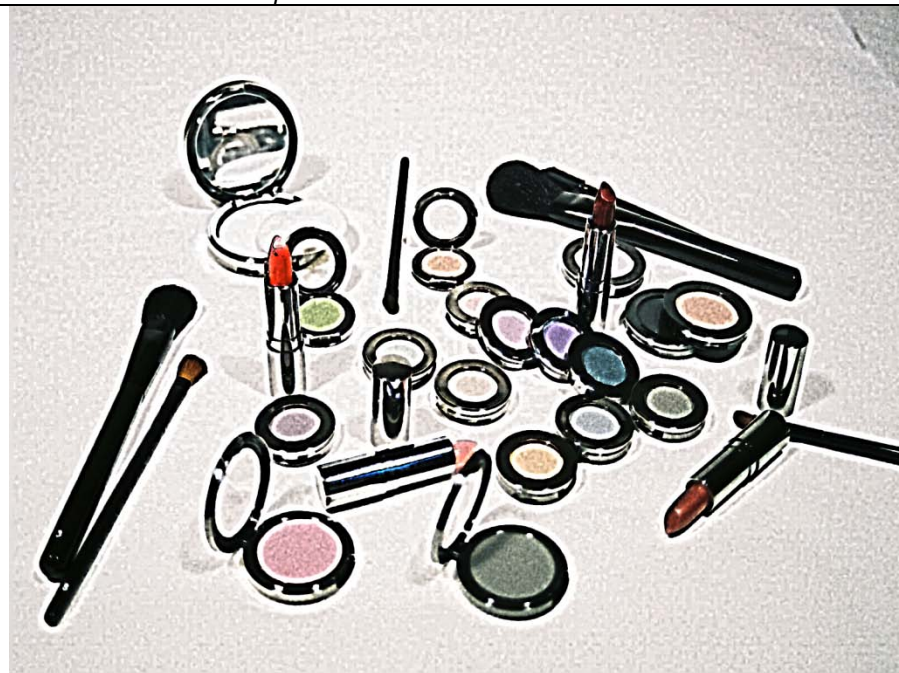
Original



Low



Medium



High