Figure S1. Proportion of correct estimation as a function of the number of target circles fixated for human observers (red line) and ideal observer (black line). Each datum point is based on at least 30 trials. The ideal observer sampled N tilted angle per trial (N=1-6) from the same distributions of tilts used in the experiment. The response of the ideal observer on each simulated trial was equal to the value of the population mean that was closest to the mean of the samples, and the process was repeated 10,000 times for each value of N.
Figure S2. Dwell time as a function of saccade starting location, target or distractor, and landing position (HIT/MISS) in the estimation task for individual subject. The superimposed green lines represent the probability of hitting a target as a function of saccade starting location (green axis on the right hand side). Blue lines represent the dwells of saccades that hit a target and black lines represent the dwells of saccades that missed. The first saccade in the sequence was not included because the first saccade left from initial fixation.
Figure S3. Dwell time as a function of the ordinal position of primary saccades for three levels of selection difficulty for saccades leaving from a target (top) and saccades leaving from a distractor (bottom) in the estimation task. The starting location of the first saccade was also determined by the nearest neighbor criterion. Blue lines represent saccades going to a target (HIT) and red lines represent saccades going to a distractor (MISS). Bars show ± SE; otherwise, SE’s are smaller than the plotting symbols.
Figure S4. Dwell time as a function of the ordinal position of primary saccades for three levels of selection difficulty for saccades leaving from a target (top) and saccades leaving from a distractor (bottom) in the look-only task. The starting location of the first saccade was also determined by the nearest neighbor criterion. Blue lines represent saccades going to a target (HIT) and red lines represent saccades going to a distractor (MISS). Bars show ± SE; otherwise, SE’s are smaller than the plotting symbols.