Supplementary Figure 2. Average fMRI responses for voxels with the same orientation preference, shown by visual area. Data from two subjects are shown for voxels that prefer 45° and 135° orientations. In each visual area, there were roughly equal numbers of voxels with preferences for each of the eight orientations. The sets of voxels show small response peaks around their preferred orientations in early visual areas (V1 and V2). However, the selectivity is much weaker than that obtained with a weighted sum of all voxels in a given visual area (Fig. 1b). Percent signal change in MRI intensity was calculated relative to the mean intensity across all orientation conditions for each run, and averaged across all voxels with the same orientation preference. Error bars indicate standard deviations.