



**Figure 7.** The energy dependence of OH ( $v' = 0$ ) rotational distributions. The distribution at  $E_{\text{coll}} = 3.0$  kcal/mol is highlighted using thick lines. The mesh plotted is spline-interpolated to yield roughly twice the number of grid points as data in each direction. Rotational distributions from (a) HCl ( $v = 2, j = 1$ ), (b) HCl ( $v = 2, j = 6$ ), and (c) HCl ( $v = 2, j = 9$ ) are shown. The rotational distributions at 3.0 kcal/mol bear close qualitative similarities to the experimental results of Zhang *et al.* [21].