

Nominal State Label	Calculated Admixture $ J, F_1, F\rangle$	r_{JJ-3}	r_{JJ-2}	r_{JJ-1}	r_{JJ}	r_{JJ+1}	r_{JJ+2}	r_{JJ+3}
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 0\rangle$	$ 1, \frac{1}{2}, 0\rangle$			0.667	1	0.333		
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 1\rangle$	$+0.9996 1, \frac{1}{2}, 1\rangle + 0.0203 1, \frac{3}{2}, 1\rangle + 0.0180 2, \frac{3}{2}, 1\rangle$			0.6665	0.9999	0.3335	0.0001	
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 1\rangle$	$+0.0267 1, \frac{1}{2}, 1\rangle - 0.8519 1, \frac{3}{2}, 1\rangle - 0.5231 2, \frac{3}{2}, 1\rangle$			0.4843	0.8906	0.5158	0.1094	
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 1\rangle$	$-0.0047 1, \frac{1}{2}, 1\rangle - 0.5234 1, \frac{3}{2}, 1\rangle + 0.8521 2, \frac{3}{2}, 1\rangle$		0.1826	0.7096	0.8174	0.2904		
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 2\rangle$	$+0.8483 1, \frac{3}{2}, 2\rangle + 0.5293 2, \frac{3}{2}, 2\rangle + 0.0138 2, \frac{5}{2}, 2\rangle + 0.0064 3, \frac{5}{2}, 2\rangle$			0.4797	0.8878	0.5203	0.1122	0.00002
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 2\rangle$	$+0.0103 1, \frac{3}{2}, 2\rangle + 0.0120 2, \frac{3}{2}, 2\rangle - 0.9353 2, \frac{5}{2}, 2\rangle - 0.3534 3, \frac{5}{2}, 2\rangle$		0.00007	0.5251	0.9464	0.4749	0.0535	
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 2\rangle$	$+0.5294 1, \frac{3}{2}, 2\rangle - 0.8483 2, \frac{3}{2}, 2\rangle - 0.0011 2, \frac{5}{2}, 2\rangle - 0.0103 3, \frac{5}{2}, 2\rangle$			0.1869	0.7121	0.8131	0.2880	0.00005
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 2\rangle$	$-0.0040 1, \frac{3}{2}, 2\rangle + 0.0085 2, \frac{3}{2}, 2\rangle + 0.3535 2, \frac{5}{2}, 2\rangle - 0.9354 3, \frac{5}{2}, 2\rangle$	0.00001	0.0750	0.6250	0.9250	0.3750		
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 3\rangle$	$+0.9342 2, \frac{5}{2}, 3\rangle + 0.3567 3, \frac{5}{2}, 3\rangle + 0.0100 3, \frac{7}{2}, 3\rangle + 0.0032 4, \frac{7}{2}, 3\rangle$			0.5236	0.9454	0.4764	0.0546	
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 3\rangle$	$+0.0084 2, \frac{5}{2}, 3\rangle + 0.0074 3, \frac{5}{2}, 3\rangle - 0.9638 3, \frac{7}{2}, 3\rangle - 0.2665 4, \frac{7}{2}, 3\rangle$		0.00004	0.5309	0.9684	0.4691	0.0316	
$ \tilde{J} = 3, F_1 = \frac{7}{2}, F = 3\rangle$	$+0.3567 2, \frac{5}{2}, 3\rangle - 0.9342 3, \frac{5}{2}, 3\rangle - 0.0017 3, \frac{7}{2}, 3\rangle - 0.0084 4, \frac{7}{2}, 3\rangle$		0.0764	0.6259	0.9236	0.3741	0.00003	
$ \tilde{J} = 4, F_1 = \frac{7}{2}, F = 3\rangle$	$+0.0023 2, \frac{5}{2}, 3\rangle - 0.0073 3, \frac{5}{2}, 3\rangle - 0.2665 3, \frac{7}{2}, 3\rangle + 0.9638 4, \frac{7}{2}, 3\rangle$		0.0406	0.5872	0.9594	0.4129		

Nominal State Label	Calculated Admixture $ J, F_1, F\rangle$
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 0\rangle$	$ 1, \frac{1}{2}, 0\rangle$
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 1\rangle$	$+0.9996 1, \frac{1}{2}, 1\rangle + 0.0203 1, \frac{3}{2}, 1\rangle + 0.0180 2, \frac{3}{2}, 1\rangle$
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 1\rangle$	$+0.0267 1, \frac{1}{2}, 1\rangle - 0.8519 1, \frac{3}{2}, 1\rangle - 0.5231 2, \frac{3}{2}, 1\rangle$
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 1\rangle$	$-0.0047 1, \frac{1}{2}, 1\rangle - 0.5234 1, \frac{3}{2}, 1\rangle + 0.8521 2, \frac{3}{2}, 1\rangle$
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 2\rangle$	$+0.8483 1, \frac{3}{2}, 2\rangle + 0.5293 2, \frac{3}{2}, 2\rangle + 0.0138 2, \frac{5}{2}, 2\rangle + 0.0064 3, \frac{5}{2}, 2\rangle$
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 2\rangle$	$+0.0103 1, \frac{3}{2}, 2\rangle + 0.0120 2, \frac{3}{2}, 2\rangle - 0.9353 2, \frac{5}{2}, 2\rangle - 0.3534 3, \frac{5}{2}, 2\rangle$
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 2\rangle$	$+0.5294 1, \frac{3}{2}, 2\rangle - 0.8483 2, \frac{3}{2}, 2\rangle - 0.0011 2, \frac{5}{2}, 2\rangle - 0.0103 3, \frac{5}{2}, 2\rangle$
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 2\rangle$	$-0.0040 1, \frac{3}{2}, 2\rangle + 0.0085 2, \frac{3}{2}, 2\rangle + 0.3535 2, \frac{5}{2}, 2\rangle - 0.9354 3, \frac{5}{2}, 2\rangle$
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 3\rangle$	$+0.9342 2, \frac{5}{2}, 3\rangle + 0.3567 3, \frac{5}{2}, 3\rangle + 0.0100 3, \frac{7}{2}, 3\rangle + 0.0032 4, \frac{7}{2}, 3\rangle$
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 3\rangle$	$+0.0084 2, \frac{5}{2}, 3\rangle + 0.0074 3, \frac{5}{2}, 3\rangle - 0.9638 3, \frac{7}{2}, 3\rangle - 0.2665 4, \frac{7}{2}, 3\rangle$
$ \tilde{J} = 3, F_1 = \frac{7}{2}, F = 3\rangle$	$+0.3567 2, \frac{5}{2}, 3\rangle - 0.9342 3, \frac{5}{2}, 3\rangle - 0.0017 3, \frac{7}{2}, 3\rangle - 0.0084 4, \frac{7}{2}, 3\rangle$
$ \tilde{J} = 4, F_1 = \frac{7}{2}, F = 3\rangle$	$+0.0023 2, \frac{5}{2}, 3\rangle - 0.0073 3, \frac{5}{2}, 3\rangle - 0.2665 3, \frac{7}{2}, 3\rangle + 0.9638 4, \frac{7}{2}, 3\rangle$

Nominal State Label	r_{JJ-3}	r_{JJ-2}	r_{JJ-1}	r_{JJ}	r_{JJ+1}	r_{JJ+2}	r_{JJ+3}
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 0\rangle$			0.667	1	0.333		
$ \tilde{J} = 1, F_1 = \frac{1}{2}, F = 1\rangle$			0.6665	0.9999	0.3335	0.0001	
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 1\rangle$			0.4843	0.8906	0.5158	0.1094	
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 1\rangle$		0.1826	0.7096	0.8174	0.2904		
$ \tilde{J} = 1, F_1 = \frac{3}{2}, F = 2\rangle$			0.4797	0.8878	0.5203	0.1122	0.00002
$ \tilde{J} = 2, F_1 = \frac{3}{2}, F = 2\rangle$		0.00007	0.5251	0.9464	0.4749	0.0535	
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 2\rangle$			0.1869	0.7121	0.8131	0.2880	0.00005
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 2\rangle$	0.00001	0.0750	0.6250	0.9250	0.3750		
$ \tilde{J} = 2, F_1 = \frac{5}{2}, F = 3\rangle$			0.5236	0.9454	0.4764	0.0546	
$ \tilde{J} = 3, F_1 = \frac{5}{2}, F = 3\rangle$		0.00004	0.5309	0.9684	0.4691	0.0316	
$ \tilde{J} = 3, F_1 = \frac{7}{2}, F = 3\rangle$		0.0764	0.6259	0.9236	0.3741	0.00003	
$ \tilde{J} = 4, F_1 = \frac{7}{2}, F = 3\rangle$		0.0406	0.5872	0.9594	0.4129		

Nominal State Label	r_{JJ-3}	r_{JJ-2}	r_{JJ-1}	r_{JJ}	r_{JJ+1}	r_{JJ+2}	r_{JJ+3}
$ \bar{J} = 1, F_1 = \frac{1}{2}, F = 0\rangle$			0.667	1	0.333		
$ \bar{J} = 1, F_1 = \frac{1}{2}, F = 1\rangle$			0.6665	0.9999	0.3335	0.0001	
$ \bar{J} = 1, F_1 = \frac{3}{2}, F = 1\rangle$			0.4842	0.8905	0.5158	0.1095	
$ \bar{J} = 2, F_1 = \frac{3}{2}, F = 1\rangle$		0.1838	0.7102	0.8162	0.2897		
$ \bar{J} = 1, F_1 = \frac{3}{2}, F = 2\rangle$			0.4797	0.8878	0.5203	0.1122	0.00002
$ \bar{J} = 2, F_1 = \frac{5}{2}, F = 2\rangle$		0.00007	0.5251	0.9464	0.4749	0.0535	
$ \bar{J} = 2, F_1 = \frac{3}{2}, F = 2\rangle$		0.1869	0.7121	0.8130	0.2880	0.00005	
$ \bar{J} = 3, F_1 = \frac{5}{2}, F = 2\rangle$	0.00001	0.0751	0.6251	0.9249	0.3749		
$ \bar{J} = 2, F_1 = \frac{5}{2}, F = 3\rangle$			0.5309	0.9454	0.4691	0.0546	
$ \bar{J} = 3, F_1 = \frac{5}{2}, F = 3\rangle$		0.00004	0.5309	0.9684	0.4691	0.0316	
$ \bar{J} = 3, F_1 = \frac{5}{2}, F = 3\rangle$		0.0764	0.6260	0.9236	0.3741	0.00003	
$ \bar{J} = 4, F_1 = \frac{7}{2}, F = 3\rangle$		0.0407	0.5872	0.9594	0.4128		