$$\Psi_{209} = C_1 \left(|2ddu\rangle + |2dud\rangle + |2udd\rangle - i\,|d2du\rangle - i\,|d2ud\rangle - |dd2u\rangle + i\,|ddu2\rangle - |du2d\rangle + i\,|dud2\rangle - i\,|u2dd\rangle - |ud2d\rangle + i\,|udd2\rangle\right)$$

$$C_1 = \frac{\frac{i}{2}}{\sqrt{3}}$$