$$\Psi_{208} = C_1 \left(|2ddu\rangle + |2dud\rangle + |2udd\rangle - |d2du\rangle - |d2ud\rangle + |dd2u\rangle - |ddu2\rangle + |du2d\rangle - |dud2\rangle - |u2dd\rangle + |ud2d\rangle - |udd2\rangle\right)$$

$$C_1 = \frac{-1}{2\sqrt{3}}$$