$$\Psi_{82} = C_1 \left(|0ddu\rangle + |0dud\rangle + |0udd\rangle - |d0du\rangle - |d0ud\rangle + |dd0u\rangle - |ddu0\rangle + |du0d\rangle - |dud0\rangle - |u0dd\rangle + |ud0d\rangle - |udd0\rangle\right)$$

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