$$\Psi_{88} = C_1 \left(-i\,|002d\rangle - |00d2\rangle + i\,|020d\rangle - |02d0\rangle - i\,|0d02\rangle + i\,|0d20\rangle - i\,|200d\rangle + |20d0\rangle + i\,|2d00\rangle + |d002\rangle - |d020\rangle + |d200\rangle\right)$$

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