$$\Psi_{214} = C_1 \left(|022d\rangle + i\,|02d2\rangle - |0d22\rangle - |202d\rangle - i\,|20d2\rangle + |220d\rangle - i\,|22d0\rangle - |2d02\rangle + |2d20\rangle + i\,|d022\rangle - i\,|d202\rangle + i\,|d220\rangle\right)$$

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