$$
\begin{aligned}
\Psi_{150} &= C_1 \left(|02dd\rangle + i\,|0dd2\rangle + |20dd\rangle + i\,|2dd0\rangle + i\,|d02d\rangle + i\,|d20d\rangle - |dd02\rangle - |dd20\rangle \right) \\
&\quad + C_2 \left(-i\,|uddd\rangle - |dudd\rangle + i\,|ddud\rangle + |dddu\rangle \right)
\end{aligned}
$$

$$
C_1 = \frac{\left(\frac{1}{16} - \frac{i}{16}\right)\,\left(U + \sqrt{16\,t^2 + U^2}\right)}{t}
$$

$$
C_2 = \frac{-i}{2}
$$