168^{th} Eigenvector

$\boldsymbol{N_e} \;=\; \mathbf{5} \qquad \boldsymbol{s = \frac{1}{2}} \qquad \boldsymbol{m_s = -\frac{1}{2}}$

Irred. Representation : $\boldsymbol{\Gamma_1}$

$$E_{168} \;=\; 2(U + 8W) - t$$

$$\begin{aligned} |\Psi_{168}\rangle \;&=\; |5, \frac{1}{2}, -\frac{1}{2}, \Gamma_1\rangle \\ &=\; \frac{1}{2\sqrt{3}} \left(|022d\rangle + |02d2\rangle + |0d22\rangle + |202d\rangle + |20d2\rangle + |220d\rangle \right. \\ &\qquad \left. + |22d0\rangle + |2d02\rangle + |2d20\rangle + |d022\rangle + |d202\rangle + |d220\rangle\right) \end{aligned}$$