$$\Psi_{110} = C_1 \left(-|02uu\rangle + |0uu2\rangle + |20uu\rangle - |2uu0\rangle + |u02u\rangle - |u20u\rangle - |uu02\rangle + |uu20\rangle\right)$$

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