$\sigma_2(V_2) = \{\Lambda : \dim(\Lambda \cap \overline{V}_{4+i-c_i}) \geq i\}$
$= \{\Lambda : \dim(\Lambda \cap \overline{V}_3) \geq 1\} = \{\Lambda : \Lambda \cap V_2 \neq \phi\}.$

$\dim \sigma_2 = \dim \sigma_{1,1} = 8-2 = 6.$

$\#(\sigma_{2,1} \cdot \sigma_{2,1} \cdot \sigma_{1,1})_{G(2,6)}$ $K=2$, $n=6$.

Choose $\alpha=2$, $\beta=0$, $\gamma=0$ $\Rightarrow$ $a_2=1$ $b_0=4=c_0$

and $\alpha+\beta+\gamma = K = 2$. $\Rightarrow$ By the Reduction formula II,

$\#(\sigma_{2,1} \cdot \sigma_{2,1} \cdot \sigma_{1,1})_{G(2,6)}$

$= \#(\sigma_1 . \sigma_{2,1} \cdot \sigma_{1,1})_{G(2,5)}$

Choose $\alpha=0$, $\beta=2$, $\gamma=0$ $\Rightarrow$ $a_0=3$ $b_2=1$ $c_0=3$

and $\alpha+\beta+\gamma=2$. $\Rightarrow$ Again by the Reduction formula II, on P202

$\#(\sigma_1 \cdot \sigma_{2,1} \cdot \sigma_{1,1})_{G(2,5)}$

$= \#(\sigma_1 \cdot \sigma_1 \cdot \sigma_{1,1})_{G(2,4)}$

$= \#(\sigma_1 \cdot \sigma_1 \cdot \sigma_0)_{G(2,3)}$ by the Reduction formula II

$(\alpha=\beta=0 \quad \gamma=2)$

$= \#(\sigma_1 \cdot \sigma_1)_{G(2,3)}$ since $\sigma_0 = G(2,3)$

$= 1$ since $a_i + b_{2-i+1} = 1 \Leftrightarrow a_i + b_{3-i} = 1$

by the formula on P198.

$\#(\sigma_{2,1} \cdot \sigma_{2,1} \cdot \sigma_2)_{G(2,6)}$ (R.F II

$= \#(\sigma_{2,1} \cdot \sigma^1 \cdot \sigma_2)_{G(2,5)}$, $\alpha=\gamma=0$, $\beta=2$)

$= \#(\sigma_1 \cdot \sigma_1 \cdot \sigma_2)_{G(2,4)}$ by R.F II $\alpha=2$, $\beta=\gamma=0$

$= \#(\sigma_1 \cdot \sigma_0 \cdot \sigma_1)_{G(2,3)}$ (by choosing $\alpha=0$, $\beta=\gamma=1$
$a_0=2$ $b_1=1$ $C_1=2 \Rightarrow 5 \geq 2\cdot2+1$.

$= \#(\sigma_1 \cdot \sigma_1)_{G(2,3)} = 1$

Thus we can write