Let $G$ be a simple, connected, algebraic group over $\mathbb{C}$, $B$ a Borel subgroup, and $T \subset B$ a maximal torus. Let $Q$ be the root lattice, $\Lambda$ the weight lattice, and $d$ the least common multiple of the coefficients of the highest root $\theta$ of $\mathfrak{g}$ written in terms of the simple roots. Consider the diagonal action of $G$ on the projective variety $X = G/B \times G/B \times G/B$. Then, for any triple $(\lambda, \mu, \nu)$ of dominant integral weights there is a $G$-linearized line bundle $\mathcal{L}$ on $X$. Such a line bundle is said to descend to the GIT quotient $\pi : X(\mathcal{L})^{ss} \to X(\mathcal{L})//G$ if there exists a line bundle $\hat{\mathcal{L}}$ on $X(\mathcal{L})//G$ such that $\mathcal{L}|_{X(\mathcal{L})^{ss}} \cong \pi^* \hat{\mathcal{L}}$. We show $\mathcal{L}$ descends if $\mu, \nu \in d\Lambda$ and $\lambda + \mu + \nu \in dQ$. These conditions are useful in describing how the tensor product multiplicity $\dim[V(\lambda) \otimes V(\mu) \otimes V(\nu)]^G$ varies with respect to the triple $(\lambda, \mu, \nu)$. (Received September 15, 2014)