```
Options=[sansmath]
```

The boundedness of $\Phi_{0}$ then yields

$$
\int_{D}|\bar{\partial} u|^{2} e^{\alpha|z|^{2}} \geq c_{6} \alpha \int_{D}|u|^{2} e^{\alpha|z|^{2}}+c_{7} \delta^{-2} \int_{A}|u|^{2} e^{\alpha|z|^{2}}
$$

Let $B(X)$ be the set of blocks of $\Lambda_{X}$ and let $b(X):=|B(X)|$. If $\varphi \in Q_{X}$ then $\varphi$ is constant on the blocks of $\Lambda_{X}$.

$$
\begin{equation*}
P_{X}=\left\{\varphi \in M \mid \Lambda_{\varphi}=\Lambda_{X}\right\}, \quad Q_{X}=\left\{\varphi \in M \mid \Lambda_{\varphi} \geq \Lambda_{x}\right\} \tag{1}
\end{equation*}
$$

If $\Lambda_{\varphi} \geq \Lambda_{X}$ then $\Lambda_{\varphi}=\Lambda_{Y}$ for some $Y \geq X$ so that

$$
Q_{X}=\bigcup_{Y \geq X} P_{Y}
$$

Thus by Möbius inversion

$$
P_{Y}=\sum_{X \geq Y} \mu(Y, X) Q_{\hat{X}}
$$

Thus there is a bijection from $Q_{X}$ to $W^{B(X)}$. In particular $\left|Q_{X}\right|=w^{b(X)}$.

