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## Multipliers and the Relative Completion in $L_w^p(G)$

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**Abstract:** Quek and Yap defined a relative completion $\tilde{A}$ for a linear subspace A of $L^p(G)$, $1 \leq p < \infty$; and proved that there is an isometric isomorphism, between $Hom_{L^1(G)}(L^1(G), A)$ and $\tilde{A}$, where $Hom_{L^1(G)}(L^1(G),A)$ is the space of the module homomorphisms (or multipliers) from $L^1(G)$ to A. In the present, we defined a relative completion $\tilde{A}$ for a linear subspace A of $L_w^p(G)$, where w is a Beurling's weighted function and $L_w^p(G)$ is the weighted $L^p(G)$ space, ([14]). Also, we proved that there is an algeabric isomorphism and homeomorphism, between $Hom_{L_w^1(G)}(L_w^1(G),A)$ and $\tilde{A}$. At the end of this work we gave some applications and examples.

**Key Words:** Module homomorphism (or multiplier), relative completion, essential module, weighted $L^p(G)$ space. 1991 AMS subject classification codes 43