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In the early 2000's, Everitt, Littlejohn and Wellman developed a general left-definite theory for certain self-adjoint operators which explicitly determined their domains. However, the description of these domains do not contain boundary conditions. We present characterizations of these domains given by the left-definite theory for all operators which possess a complete system of orthogonal eigenvectors, in terms of classical boundary conditions. (Received September 20, 2016)