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On b-weakly compact operators

A subset A of a vector lattice E is called b-bounded if A is bounded in $E^{\sim\sim}$, the order bidual of E. An operator $T\colon E \to X$, where E is a Banach lattice and X is a Banach space, is called b-weakly compact if for each b-bounded subset A in E, $T(A)$ is relatively weakly compact in X. We will give some recent results on b-weakly compact operators. In particular, we will give a dual characterization of b-weakly compact operators and investigate factorization properties of such operators.