The relationship between ϵ-Kronecker sets and Sidon sets

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Abstract. A subset E of a discrete abelian group is called ϵ-Kronecker if all E-functions of modulus one can be approximated to within ϵ by characters. E is called a Sidon set if all bounded E-functions can be interpolated by the Fourier transform of measures on the dual group. As ϵ-Kronecker sets with $\epsilon < 2$ possess the same arithmetic properties as Sidon sets, it is natural to ask if they are Sidon. We use the Pisier net characterization of Sidonicity to prove this is true.