On the correlation measures of subsets based on multiplicative and additive characters

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Abstract. Dartyge and Sárközy constructed pseudorandom subsets based on the argument of multiplicative characters χ and additive characters ψ, and gave good estimates for the case ψ being non-trivial. This paper further studies the pseudorandom properties of subsets based on χ and ψ, and proves sharp estimates of pseudorandom measures for all non-trivial characters χ of order w.

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