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Christopher Michael Wedrychowicz* (cwedrych@saintmarys.edu) and **Anna Savvopoulou** (annsavvo@iusb.edu). *On the weak-type $(1, 1)$ of the uncentered Hardy–Littlewood maximal operator associated with certain measures on the plane.*

Suppose μ is a positive measure on R^2 given by $\mu = \nu \times \lambda$, where ν and λ are Radon measures on S^1 and R^+ , respectively, which do not vanish on any open interval. We prove that if for either ν or λ there exists a set of positive measure A in its domain for which the upper and lower s –densities, $0 < s \leq 1$, are positive and finite for every $x \in A$ then the uncentered Hardy–Littlewood maximal operator M_μ is weak-type $(1, 1)$ if and only if ν is doubling and λ is doubling away from the origin. This generalizes results of Vargas concerning rotation-invariant measures on R^n when $n = 2$. (Received June 26, 2013)