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Alexei Yu. Karlovich* (oleksiy@math.uminho.pt), Universidade do Minho, Depart. de Matematica, Escola de Ciencias, Campus de Gualtar, 4710-057 Braga, Portugal. *Asymptotics of determinants and traces of Toeplitz matrices with symbols in weighted Wiener algebras.*

We prove asymptotic formulas for determinants and traces of finite block Toeplitz matrices with symbols belonging to Wiener algebras with weights satisfying natural submultiplicativity, monotonicity, and regularity conditions. The remainders in these formulas depend on the weights and can go to zero very rapidly for very smooth symbols. These formulas refine or extend some previous results by Szegő, Widom, Böttcher, and Silbermann. (Received September 28, 2005)