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Proof of a conjecture of Kenyon and Wilson on semicontiguous minors.

In their paper on circular planar electrical networks ([arXiv:1411.7425](https://arxiv.org/abs/1411.7425)), Kenyon and Wilson showed how to test if a network is well-connected by checking that $\binom{n}{2}$ minors of the response matrix are positive. In particular, they proved that any contiguous minor of a response matrix can be expressed as a Laurent polynomial in the central minors. Interestingly, the Laurent polynomial is the generating function of domino tilings of a weighted Aztec diamond. They conjectured that any semicontiguous minor can also be written in terms of domino tilings of a region on the square lattice. In this paper we present a proof of the conjecture. (Received July 02, 2015)