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Transmission Measurements in a Low Density Two –Dimensional Electron Gas in an Array of Antidots CHI ZHANG, JIAN MI, Peking University, LOREN PFEIFFER, KEN WEST, Princeton University — Under high magnetic fields, the microwave conductivity of a two-dimensional electron system containing an antidot array with factional Landau filling was discovered [1]. On the other hand, at low temperature T=0.3 K, we have measured the transmission in the low density (n=0.6x10^{11} cm^{-2}) , ultraclean GaAs/AlGaAs sample with an array of anitidots. In our measurements, we observed an interesting feature around the ν =1, 2, which may be related to the charged edge mode in the integer quantum Hall regime. [1] P. D. Ye, L. W. Engel, D. C. Tsui, J. A. Simmons, J. R. Wendt, G. A. Vawter, and J. L. Reno, Phys. Rev. B, 65, 121305 (2002).

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