Thermal fluctuations of bismuth based 1G tape M. Chrobak,¹ W.M. Woch,¹ R. Zalecki,¹ and A. Kołodziejczyk¹

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The thermal fluctuations of bismuth based commercial 1G tape were studied near the critical temperature Tc=110 K. The detailed analysis of the temperature dependence of resistivity measurements were made in the temperature region from the zero resistance critical temperature up to 200 K. From the results of these measurements, the thermal fluctuations of conductivity were analyzed using Aslamazov – Larkin microscopic approach and the critical exponents were calculated close to the transition temperature.