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**Analysis of Temperature Measurement at Lead/LiF Interface Under Shock Wave Compression** CAMILLE CHAUVIN, PIERRE-LOUIS HEREIL, Centre d'Etudes de Gramat - French Ministry of Defense — The results of pyrometric measurements performed at the interface of a lead target with a LiF window material are presented for stresses about 12 GPa. The purpose of the study is to analyze the part of the interface in the temperature measurement by a multi-channel infrared pyrometric device. The results show that the use of a specific deposite layer at the measured surface increases the emissivity of this surface. This leads to a better knowledge of the real temperature in the target by reducing the temperature error. A maximum value of 510 K has been measured for interface temperature. This is consistent with the behavior of lead under shock wave compression. Furthermore, the whole profile of measured temperature at the lead/LiF interface is also consistent which numerical simulation.

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