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## RELATIVE INTENSITIES IN THE HOLLOW-CATHODE DISCHARGE

E. H. WINGER

The effects of various cathodes of different internal dimensions on the relative intensities of PbII lines in the hollow-cathode discharge were investigated. The discharge was operated in Helium at a pressure of 1.5 mm. Hg and currents of 175 milliamperes. Results were obtained showing a definite variation in relative intensities with changing cathode dimensions. The differences were the most marked for the larger cathodes and actual intensities and temperatures were found to be greater in the larger cathodes. Except for a few exceptions, explainable in a qualitative manner by a consideration of the perturbations involved, the results proved to be quite consistent for all spectral lines considered.

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