

EMISSION KINETICS
OF A HgBr DISCHARGE EXCILAMP

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S u m m a r y

A kinetic model of the working medium of a discharge excilamp on the B–X transition of mercury bromide, HgBr, excimer molecules has been proposed. The model explains the non-monotonic dependence of the excilamp radiation intensity on the partial pressure of mercury dibromide molecules by the attachment of electrons to these molecules. HgBr(X) molecules were found to transit into the HgBr(B) excited state due to their collisions with high-energy electrons, thereby improving the excilamp characteristics.