Abstract Submitted for the GEC06 Meeting of The American Physical Society

Study of UV efficiency of a plasma display panel in Ne/Xe/He mixtures HOYUL BAEK, TAESANG LEE, YONGSEOK JHO, Korea Advanced Institute of Science and Technology, CHOONGSEOCK CHANG, Korea Advanced Institute of Science and Technology & New York University — Plasma display panel is a mature technology with a substantial market. In this work, there is considerable interest in improving UV efficiency in PDP by optimizing gas mixture. For this, we develop 2D particle-in-cell/monte-carlo collsions(PIC/MCC) code. Using 2D PIC/MCC code, we carry out simulations of UV efficiency of a PDP in Ne/Xe/He mixtures, and find a gas mixture for high UV efficiency. Also, we study about mechanism of the striations, which occurs on the dielectric surface of the anode at simulations using PIC code.

HoYul Baek Korea Advanced Institute of Science and Technology

Date submitted: 15 Jun 2006

Electronic form version 1.4