

The Performances of a 8-pole Prototype Adjustable Phase Undulator, C.H. CHANG, L.H. CHANG, H.H. CHEN, T.C. FAN, C. S. HWANG, J.Y. HSU, F.Y. LIN, P.K. TSENG, CH. WANG, SHUTING YEH, SRRC, Hsinchu, Taiwan - A prototype of 8-pole antisymmetry undulator with period length 10 cm was used to survey the feasibility of the Adjustable Phase Undulator (APU). This APU will provide a much simpler mechanical apparatus than the Adjustable Gap Undulator (AGU). APU will couple with the vertical and longitudinal field when the energy is tuning. The performances of APU can support us to design the elliptically-polarizing undulator with phase adjustable energy. The reproducibility and reliability between the field and mechanical would be surveyed. At the same time, the performances of electron trajectory and photon spectrum will be presented. Finally, this APU will be installed on the storage ring to test the real performances.