

Construction and Magnetic Field Measurement of Quasi-Periodic Undulator, H. KOBAYASHI,
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Shin-Etsu Chemical Co., Ltd. - A test quasi-periodic undulator (QPU) which generates irrational harmonics radiation was constructed in order to evaluate the performance of this type of device. Pure permanent magnets of Nd-Fe-B and aluminium spacers were used for producing a quasiperiodic magnetic field along the undulator axis. There are two pole distances 25 mm and 55.9 mm in the undulator, and the total length is 1245 mm. Magnetic field was measured with a Hall-probe, and corrected by using shim, so that the peak fields agree with the design value. The first integral was smaller than 100 G-cm. This undulator was installed in NIJI-IV storage ring for exam experiment.