

## **TTY (thick target yield) at 0 Degree by 250 and 350 MeV Protons at RCNP Cyclotron**

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Neutron energy spectra at 0 degree produced from stopping-length thick graphite, aluminum, iron and lead targets bombarded by 250 MeV and 350 MeV protons were measured at the neutron TOF course at RCNP of Osaka University. The experiments were performed by the time-of-flight technique and neutron energy spectra were obtained in the energy range from 10 MeV to incident proton energy. To compare the experimental data, Monte Carlo calculations by PHITS and MCNPX codes using JENDL-HE and LA150 evaluated files were performed. It was found that these calculation results at 0-degree generally underestimated the experimental data for all targets in the energy range above 20 MeV.