

# Irradiation tests of LED diodes

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LED diodes, because of bigger sensitivity for neutrons than for gamma radiation, will be used to measure level of neutron radiation. Experiment will be performed in Linac II and maybe in Tesla tunnels.

Plan of tests:

1. Measure diodes to make characteristics of each.
2. Irradiate diodes in accelerator tunnel.
3. Measure diodes to take characteristics and detect destruction of each diode.
4. Summary of neutrons level in accelerator tunnel.

Measurements will be taken using simple photometer, power supply, multimeter and thermometer. There is special aluminium photometer cup needed to make possible measuring of LED brightness with photometer. Appended picture (??) shows project of this cup.

Figure 1: Aluminium photometer cup