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## Performance of silicon photomultipliers from different manufacturers at low temperature

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### Abstract

Silicon photomultipliers (SiPMs) are one of the modern instruments for nuclear physics detectors. Due to their excellent parameters near room temperature, these devices are the best candidate to be used in the neutrino experiments such as nEXO, NEXT and DUNA, where the SiPMs should operate at sufficiently low temperature. This paper presents the results obtained with SiPMs from different manufacturers. The ambient temperature was varied from room environments up to liquid nitrogen. The influence of temperature variation on key parameters of SiPMs such as photon detection efficiency, gain, dark count rates was studied.

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