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Development of a direct-reading dosimeter for eye-lens dose estimation in medical radiology

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Interventional radiology procedures are becoming increasingly common in modern clinical practice, often replacing invasive surgical interventions, despite increasing exposure of medical personnel to X-rays.
New epidemiological data correlating occupational exposure of interventional radiologists to radiation induced cataracts led ICRP to reduce the occupational dose limit for workers from 150 mSv/year to 20 mSv/year.
The EYEDOS project aims at developing a direct-reading eye-lens dosemeter to improve operational radiation protection of interventional radiology operators.
The EYEDOS system is based on a solid-state detector, whose dosimetric performance is in line with relevant international recommendations.
This communication describes the EYEDOS system and the results of the dosimetry qualification tests.

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