

Radcard



EYE-D™

Eye lens TLD dosemeter - the best solution for monitoring of $H_p(3)$ doses.



Fields of application:

- Interventional radiology
- Nuclear medicine
- Medical diagnostics
- Nuclear Industry

Simple, precise, reliable, tailored to your needs

EYE-D™ – the best solution for eye lens dosimetry



There is evidence that eye lens doses are high in interventional radiology and cases of cataracts have been reported in recent years. Individual dosimeters carried on the trunk are unable to correctly measure the eye lens doses. EYE-D™ allows for precise measurements of radiation doses to eye lens, also in case when protective glasses are used.

In EYE-D™ the proven and reliable high-sensitive thermoluminescence detectors MCP-N (LiF:Mg,Cu,P) are applied, which assure the good energy – response and broad dose range between at least 10 μ Sv and 10 Sv.

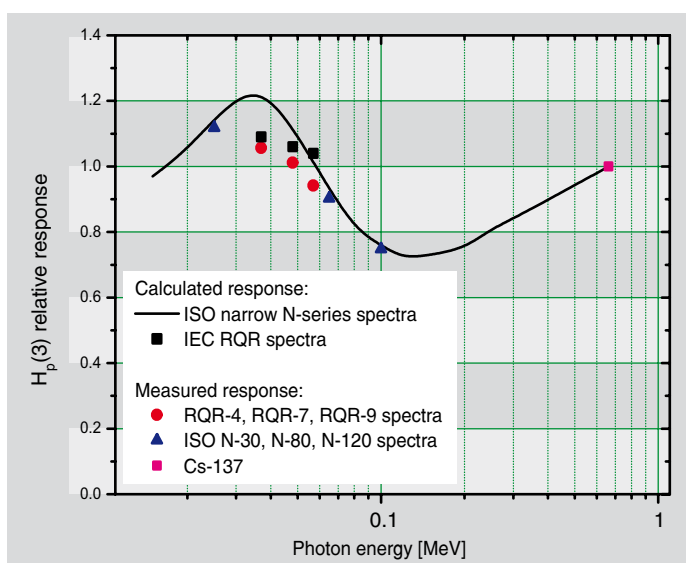
Calibration and testing of dosimeters were performed on cylindrical water phantom 20 cm diameter, 20 cm height with 0.5 cm PMMA walls.

The EYE-D™ dosimeter was developed, optimized and tested within the ORAMED (Optimization of Radiation protection for MEDical staff) project funded by EU-EURATOM within the 7th Framework Programme <http://oramed-fp7.eu/>

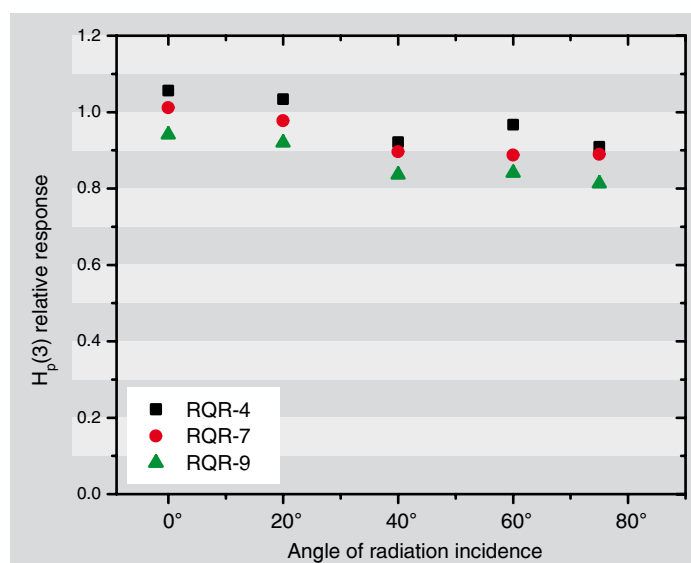


Main features of EYE-D™ dosimeters

TLD detector	MCP-N (LiF:Mg,Cu,P)
Size of TL detector	4.5 mm diameter or 3.2 mm x 3.2 mm, 0.9 mm thick
Dose range	10 μ Sv – 10 Sv
Photon energy dependence 30 keV - 1.3 MeV	< 20%
Light effect on signal and zero reading	negligible
Waterproof	yes
Sterilization	chemical (gas or liquid)



Energy response of EYE-D™ for photon radiation



Angular response of EYE-D™ for broad RQR X-rays spectra

Contact

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