Best Dosimetry Services

BDS 8840 Whole Body Dosimeter



- A whole body dosimeter for occupationally exposed radiation workers based on well-established TLD technology
- Accurately determines deep, shallow and lens of the eye radiation dose over a broad range of photon energies



Specifications

Minimum Exposure Fluoro: High-sensitivity LiF: Mg, Cu, P

Badge Configuration: Holder containing 4-chip barcoded TLD

Card with strap clip

Holder:

 The holder covers each TL chip with its own unique filter, providing different radiation absorption thickness to allow estimation of Shallow, Deep and Lens of the Eye Doses.



Card Components:

 The TLD card consists of four LiF: Mg, Cu, P sintered pellets, 3.6 mm (.0142 in.) diameter, mounted between two PTFE sheets on an aluminum substrate with a six digit bar code.

- Three of the TL elements (chips) are fabricated from TLD-700H (⁷LiF: Mg, Cu, P); two are 0.38 mm (0.015 in.) thick, and one is 0.26 mm (0.010 in.) thick.
- One chip is made of TLD-600H (⁶LiF: Mg, Cu, P), 0.38 mm (0.015 in.) thick.

Fading: Negligible, over 6 months

Minimum Reportable Dose: 1 mrem

Radiations Detected: Photon, Beta, Neutron

Photon Energy Response:

From 20 keV to 1.25 MeV, LiF: Mg, Cu, P has a maximum deviation in the photon deep and shallow dose equivalent response of ± 22 and $\pm 21\%$, respectively.

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