

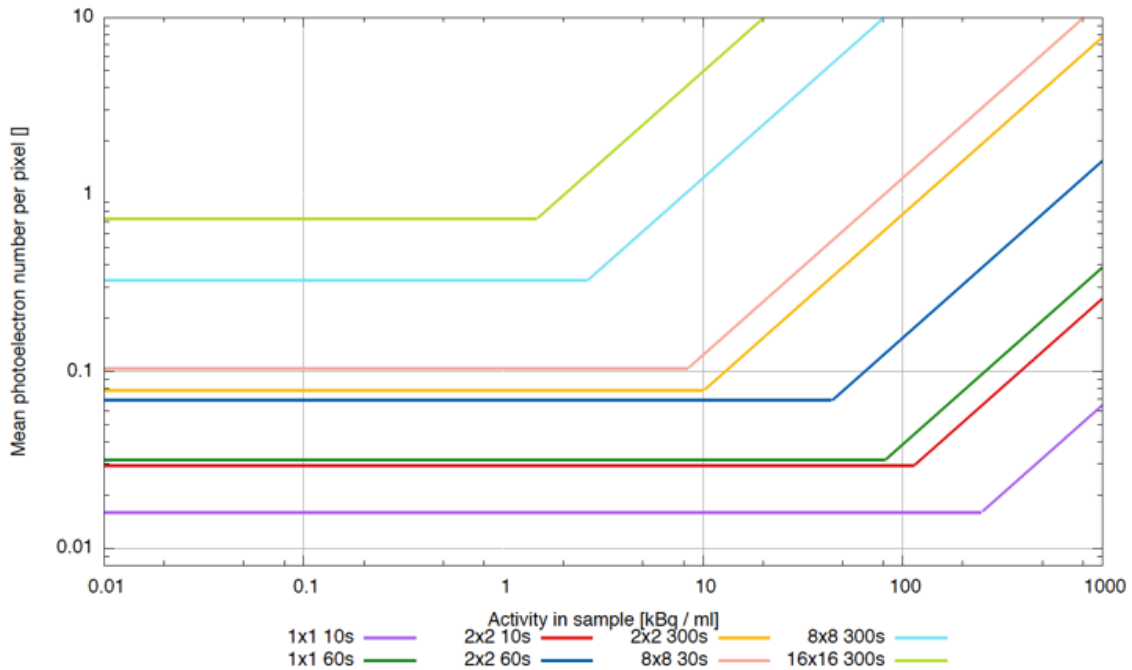
LightPath™ Imaging System

Technical Specifications

Product Description	The LightPath™ Imaging System is an in vitro diagnostic (IVD) device intended for medical purposes to image the distribution of positron-emitting radiopharmaceuticals within excised surgical specimens.
Device classification	CE Mark
Camera sensor	Tungsten-shielded, Peltier-cooled EMCCD (-80 °C)
EMCCD camera Field of View (FOV)	6 x 6 cm
EMCCD camera matrix and pixel size	512 x 512 pixels, 16 x 16 µm
Lens	f/0.95 with +2 diopter close-up
Intrinsic spatial resolution	117 µm
Effective spatial resolution	3.17 lp/mm; 158 µm
Reference camera	1600 x 1200 pixels, 4.4 x 4.4 µm
Activity sensitivity	2.64 kBq/ml for Fluorine-18 [300 sec, 8 x 8 binning]
Signal linearity	r=0.9998 up to 1.8 MBq/ml Fluorine-18
Mains supply	Factory set to EITHER: 230V ± 10%, 50/60Hz, 340W; or 115V ± 10%, 50/60Hz, 340W T6.3A H250V (115V rated models) (20mm, HBC, IEC 60127, UL, CSA)
System dimensions (W D H)	923 x 717 x 1533 mm
Packaged system dimensions (W D H)	1100 x 780 x 2054 mm
Imaging chamber weight	81.1 kg
Complete system weight	198.1 kg
Standards applied	ISO 14971 - Application of risk management to medical devices IEC 62304 - Medical device software IEC 61010 - Device safety requirements IEC 62366 - Usability IEC 61326 - Electromagnetic compatibility (EMC) ISO 18113 - IVD medical devices labelling requirements BS EN 591 - Instructions for use for IVD

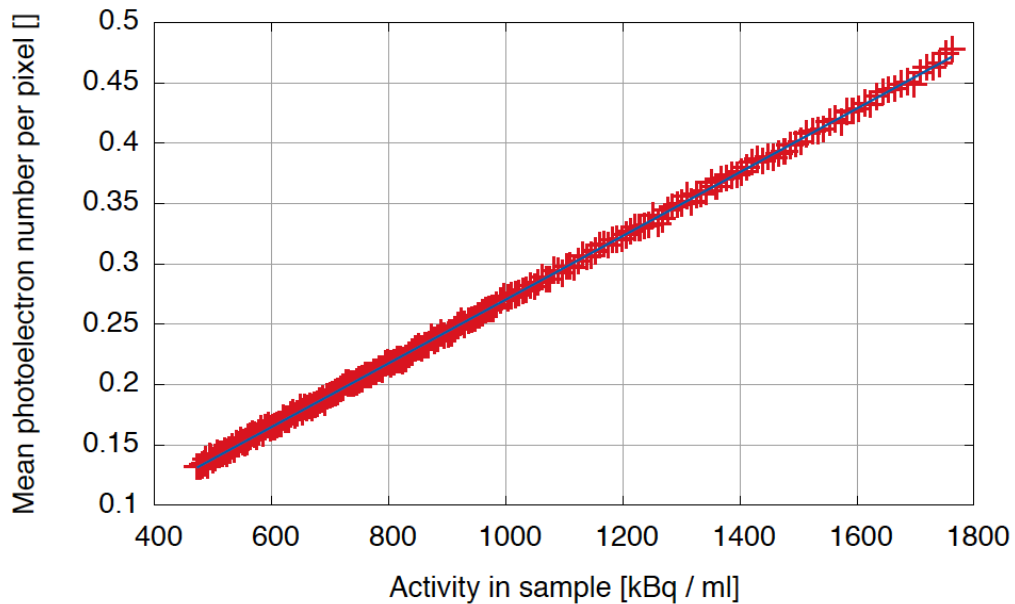
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Figure 1. Activity sensitivity for Fluorine-18 Cerenkov Luminescence Imaging



On-chip pixel binning and acquisition time

Figure 2. Signal linearity for Fluorine-18 Cerenkov Luminescence Imaging



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Figure 3. System dimensions

