## IPAC'24 - 15th International Particle Accelerator Conference



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# The X-ray imaging laboratory: a radiation test facility for validating industrial linacs

Thursday, 23 May 2024 16:00 (2 hours)

The X-ray Imaging Laboratory is a radiation test facility developed by Rapiscan systems at their facility in Stoke-On-Trent, UK. The X-ray Imaging Laboratory comprises two areas: the Test Facility and the Linac Development Area. The Test Facility is a state-of-the-art facility designed for subsystem and system level testing of x-ray imaging hardware utilizing normal conducting electron linacs with energies of up to 6MeV. The Test Facility is primarily focused on utilizing mature industrial linacs to produce x-rays for imaging validation. The Linac Development Area is a new facility focused on testing linear accelerator components and subsystems for a new generation of industrial electron linacs. The Linac Development Area includes a high voltage test area and a radiation test bunker. This allows for testing of critical components, such as modulators, in isolation in the high voltage test area and then as part of an industrial linac in the radiation test bunker.

### Footnotes

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