

CALIBRATION STANDARDS

Recommended Calibration Frequency



The frequency of calibration depends on the considered artefact. The scope of calibrations provided by Bentham including sources, detectors, filter radiometers and reflectance standards, for each of which different advice is presented below.

Sources

(Principally comprising, but not limited to the following models: CL2, CL3, CL6-H, CL7-H, SRS8, SRS12, ULS300, CL2-RI, TSRF series and TLF series)

All sources are under-run with respect to manufacturer's recommendations to extend lifetime, the lifetime of deuterium lamps being 500 hours and quartz halogen lamps 1000 hours.

On this basis, Bentham recommends re-calibration every 100 hours of use/ every 1 year whichever comes first to account for use of the lamp.

Where a lamp has not been used in this period, no re-calibration is required.

Detectors and Filter Radiometers

(Principally comprising, but not limited to the following models: DH-Si, DH-Ge, DH-IGA, DH-Py, DH400_VL)

The spectral responsivity calibration of these detectors is not expected to vary with time, provided that they are not contaminated with dust or dirt (including finger grease), have been handled with care and have been stored in an appropriate location. We however recommend a three-yearly calibration, which re-calibration can be provided by Bentham.

Reflectance Standards

(Principally comprising, but not limited to the following models: DRS reflectance standard).

The spectral reflectance of this reflectance standard is not expected to vary with time, provided that they are not contaminated with dust or dirt (including finger grease), have been handled with care and have been stored in an appropriate location. We however recommend a three-yearly calibration, which re-calibration can be provided by Bentham.