



Annex (1)

Updated on: 07-02-2022

To the Accreditation Certificate No. JAS Cal. - 008 Dated 2020- 02-18

Jordan Atomic Energy Commission (JAEC) Secondary Standards

Dosimetry Laboratory

Scope of Accreditation

Calibration of Secondary Standard Dosimetry Systems (SSDs)

Measured	Measuring Range	Calibration and measurement Capability (CMC) ^a	Calibration Methods/ Standards/ Remarks
Air Kerma free in air (Nk) rate ($\mu\text{Gy}/\text{minute}$)	Air Kerma : (Mini. : $12 \cdot 10^{-2} \text{ mGy}/\text{h}$, Max.: $3 \text{ mGy}/\text{h}$)	1.99%	▪ For gamma Radiation Cs-137 : RID-SOP-016 based on ISO 4037 ▪ For narrow spectrum series X-Ray beam: RID-SOP-020 based on ISO 4037
		2.31%	
Ambient dose equivalent rate ($H^*(10)$) .	Ambient dose rate : (Mini. : $15 \cdot 10^{-2} \text{ mSv}/\text{h}$, Max.: $4 \text{ mSv}/\text{h}$)	1.99%	▪ For gamma Radiation Cs-137 : RID-SOP-016 based on ISO 4037 ▪ For narrow spectrum series X-Ray beam: RID-SOP-020 based on ISO 4037
		2.31%	
Personal Dose equivalent rate (Penetrating in 10 mm depth) .	Personal Dose rate : (Mini. : $15 \cdot 10^{-2} \text{ mSv}/\text{h}$, Max.: $4 \text{ mSv}/\text{h}$)	1.99%	▪ For gamma Radiation Cs-137 : RID-SOP-016 based on ISO 4037 ▪ For narrow spectrum series X-Ray beam: RID-SOP-020 based on ISO 4037
		2.31%	

a) The reported CMCs are expressed at approximately the 95 % level of confidence, using a coverage factor of $k = 2$.

The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

List of employees in the laboratory who are technically responsible for issuing the calibration certificates in the scope of accreditation:

- Zeyad Alqudah: Director of Research Laboratories and Information
- Alaa Aladwan : Head of SSD lab.