



Accreditation Scope

**Federal Authority for Nuclear Regulation – Secondary Standards
Dosimetry Laboratory, NAL 131
Calibration Laboratory, (ISO/IEC 17025:2017)**

Al Zafranah, Abu Dhabi, UAE

Issue Date: 09-09-2022

Expiry Date: 08-11-2022

Issue No: 07

Calibration Field/ Quantity/ Property	Measurand / Equipment	Measuring Range	CMC (k=2)	Calibration Method (Standard/ Internal Procedure)	Permanent lab (P) / Client-site (S)
Ionizing Radiation	Air Kerma Rate / Dosimeter	(5.00 E-03 – 1.50 E+01) mGy/h	1.9 %	ISO 4037-1:2019 /3:2019 with Cs-137 source and Secondary standard ionization chamber	P
	Ambient Dose Equivalent Rate / Radioprotection Dosimeters	(5.00 E-06 – 2.0 E-2) Sv/h	5.3 %	ISO 4037-1:2019 /3:2019 with Cs-137 source and Secondary standard ionization chamber	P
	Personal Dose Equivalent Penetrating (in 10 mm depth) / Dosimeters	(0.5 to 10) mSv	6.3 %	ISO 4037-1:2019/3:2019 with Cs-137 source, ISO water slab phantom and Secondary standard ionization chamber	P
	Air Kerma Rate / Dosimeter	(7.2 E+01 – 1.5 E+04) mGy/h	2.5 %	IEC 61267:2005, IAEA Technical Reports Series No. 457 – Dosimetry in Diagnostic Radiology: An International Code of Practice, X-Ray RQR Qualities, 50 kV to 150 kV and Secondary Standard ionization chamber	P
	Air Kerma Rate / Diagnostic Ionization chamber	(1.08 E+01 – 7.9 E+02) mGy/h	2.5 %	IEC 61267:2005, IAEA Technical Reports Series No. 457 – Dosimetry in Diagnostic Radiology: An International Code of Practice, X-Ray RQA Qualities, 50 kV to 150 kV and Secondary Standard ionization chamber	P
	Air Kerma Rate / Dosimeter	(3.6 E-01 – 2.3 E+01) mGy/h	2.5 %	ISO 4037-1:2019 / 3:2019, X-ray N-Series, 40 kV to 300 kV with Secondary Standard ionization chamber	P
	Ambient Dose Equivalent Rate / Radioprotection Dosimeters	(4.25 E-04 to 3.1 E-02) Sv/h	5.0 %	ISO 4037-1:2019 / 3:2019, with X-ray N-Series and Secondary Standard ionization chamber	P



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Ionizing Radiation	Personal Dose Equivalent Penetrating (in 10 mm depth) / Dosimeters	(0.5 to 25) mSv	6.1 %	ISO 4037-1:2019 / 3:2019, X-ray N-Series with Secondary Standard ionization chamber and ISO water slab phantom	P
	Personal Dose Equivalent Penetrating (in 0.07 mm depth) / Dosimeters	(0.5 to 25) mSv	6.1 %	ISO 4037-1:2019 / 3:2019, X-ray N-Series with Secondary Standard ionization chamber and ISO pillar, rod and slab phantoms	P
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