

EN ISO/IEC 17025
K-105**CALIBRATION CERTIFICATE Nr. 24C00153****Object:**Type
Serial No
Components
Range**Dosimeter**NOMEX
130826
Multimeter NOMEX S/N 101555
5 µGy/s - 500 mGy/s
50 - 150 kV
PTW - FREIBURG

Manufacturer

Customer:

ALARAD SRL

Address

mun. Chişinău, Codru, str. Drumul Schinoasei, 64

Date of calibration:

22/05/2024

Ambient conditions:T = 20.1 - 21.7 °C
W = 43 - 44 %RH
P = 1018.2 - 1018.7 hPa

Calibration record No

KAL 153/2405

Place of calibration

31 Miera str., Salaspils, LV-2169

Calibration procedure:

KM-SSDL.02:2023

Traceability:

The IAEA reference standard chamber Exradin A3 S/N XR071832 used to calibrate the instruments (SSDL reference standard) was calibrated at the PTB in October 2019.

The SSDL reference standard chamber Magna A650 S/N - D051881 used to calibrate the instruments was calibrated at the IAEA in June 2020, calibration certificate Nr. LAT/2020/1, 10.08.2020.

X-rays etalonsystem PANTAK PMC - 1000 HF 225, S/N 0008-5764.

Traceability to PTB.

Calibration results:

24C00153

Radiation quality	Etalonvalue	Measured value	Calibration factor $\pm U$
X - rays ¹⁾ , (kV, mm Al)	Air kerma rate, mGy/s		
RQR3 (50kV / 2.515)	0.602	0.604	$0.997 \pm 2.3\%$
RQR5 (70kV / 2.807)	0.567	0.569	$0.996 \pm 2.3\%$
RQR7 (90kV / 3.098)	0.850	0.847	$1.003 \pm 2.3\%$
RQR9 (120kV / 3.713)	0.646	0.644	$1.003 \pm 2.3\%$

¹⁾ Inherent filtration - 0.8 mm Be

Remarks:

Calibration factor is a number by which one should multiply the measurement in order to obtain a correct value.


The distance from the focus of the X-ray tube to the reference point of the detector, FCD, is 1 m.

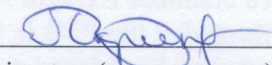
The reported expanded uncertainty of measurement is calculated in accordance with EA-4/02 M:2022 recommendations and is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for normal distribution corresponds to a coverage probability of $\approx 95\%$.

Setup: reference calibration coefficient $N_k = 1.088 \text{ E}+05 \text{ Gy/C}$

Date of issue:

22/05/2024

Operator:  (V.Kondrats)
signature (name, surname)

Metrology engineer:  (O.Skrypnik)
signature (name, surname)

Calibration certificate without signature is not valid.

This certificate may not be reproduced other than in full except with the prior written approval of the issuing laboratory.

Results of calibration are based exclusively on the object at the time of calibration.