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# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## *Certificate of Accreditation*

*Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:*

***Japan Shield Technical Research Co., Ltd.  
Fukushima Calibration Center  
276 Motomiyaboyashiki Motomiya-shi, Fukushima 969-1113***

*(Hereinafter called the Organization) and hereby declares that Organization is accredited  
in accordance with the recognized International Standard:*

### **ISO/IEC 17025:2017**

This accreditation demonstrates technical competence for a defined scope and the  
operation of a laboratory quality management system  
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

***Calibration of air dosimeter, personal dosimeter, survey meter for surface  
contamination, and Simplified calibration of personal dosimeter  
(As detailed in the supplement)***

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen  
President

*Initial Accreditation Date:*

December 3, 2018

*Issue Date:*

February 15, 2021

*Expiration Date:*

February 28, 2023

*Revision Date:*

April 25, 2022

*Accreditation No.:*

98357

*Certificate No.:*

L21-101-R1

Perry Johnson Laboratory  
Accreditation, Inc. (PJLA)  
755 W. Big Beaver, Suite 1325  
Troy, Michigan 48084

*The validity of this certificate is maintained through ongoing assessments based on a  
continuous accreditation cycle. The validity of this certificate should be  
confirmed through the PJLA website: [www.pjlabs.com](http://www.pjlabs.com)*



## Certificate of Accreditation: Supplement

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### Japan Shield Technical Research Co., Ltd. Fukushima Calibration Center

276 Motomiyaboyashiki Motomiya-shi, Fukushima 969-1113

Contact Name: Takahiro Hirayama Phone: 0243-24-9355

*Accreditation is granted to the facility to perform the following calibrations:*

#### Electrical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Air dosimeter <sup>F</sup>	1 $\mu$ Sv/h to 50 $\mu$ Sv/h	0.10 $\mu$ Sv/h/ $\mu$ Sv/h + 4.2 $\mu$ Sv/h	"SOP for Standard Calibration" (NSG-6-2)  On the basis of: JIS Z 4511:2018, 9.4.2 Replacement method I (X and gamma reference radiation for calibrating dosimeters and dose rate meters and for determining their response as a function of photon energy)  Ionization chamber Gamma-ray irradiation equipment
Personal dosimeter <sup>F</sup>	5 $\mu$ Sv to 50 $\mu$ Sv	0.12 $\mu$ Sv/ $\mu$ Sv + 3.9 $\mu$ Sv	"SOP for Standard Calibration" (NSG-6-2)  On the basis of: JIS Z 4511:2018, 9.4.2 Replacement method I (X and gamma reference radiation for calibrating dosimeters and dose rate meters and for determining their response as a function of photon energy)  Ionization chamber Gamma-ray irradiation equipment





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Personal dosimeter <sup>F</sup>	5 $\mu$ Sv to 50 $\mu$ Sv	0.16 $\mu$ Sv/ $\mu$ Sv + 4.0 $\mu$ Sv	<p>"SOP for Standard Calibration" (NSG-6-2)</p> <p>On the basis of: JIS Z 4511:2018, 9.4.2 Replacement method I (X and gamma reference radiation for calibrating dosimeters and dose rate meters and for determining their response as a function of photon energy, and Simplified calibration method of personal dosimeter by panoramic (2<math>\pi</math>) Gamma-ray irradiation based on Annex JB)</p> <p>Ionization chamber Gamma-ray irradiation equipment</p>
Survey meter <sup>F</sup>	15.9 /s/cm <sup>2</sup> at 2 $\pi$ (955 cpm/cm <sup>2</sup> at 2 $\pi$ )	0.060 cpm/cpm + 1 200 cpm	<p>"SOP for Standard Calibration" (NSG-6-2)</p> <p>On the basis of: JIS Z 4329:2004, 5.2, 7.1.2, and 7.2.4 (instrument efficiency testing method)</p> <p><math>\beta</math> surface source</p>

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor  $k$  (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> would mean that the laboratory performs this calibration at its fixed location.