

REPORT OF CALIBRATION

Manufacturer : Lighthouse Worldwide Solutions
Model : Handheld 3016IAQ
Serial Number : 230144007
Certificate No : 240802APC03

Calibration of the above stated instrument has been accomplished by and is fully compliant to the methods defined by ISO 21501-4. The accuracy of the standards and equipment used in the calibration are traceable to the National Institute of Standards and Technology or have been derived from acceptable values of natural physical constants. All records of work performed are maintained by Lighthouse Worldwide Solutions EMEA Operations.

All work performed is in accordance with Lighthouse Worldwide Solutions. Reproduction of this certificate and accompanying documentation is prohibited without the expressed written permission of Lighthouse Worldwide Solutions.

Test Equipment

Manufacturer	Instrument & Model	Serial Number	Calibration Date	Calibration Due
AMPTek	MCA8000D	01129	September 08, 2022	September 08, 2024
FLUKE	DMM179	20280165	September 08, 2022	September 08, 2024
Lighthouse	Solair Transfer Standard	190599001	December 13, 2023	December 13, 2024
TSI	4043E	40430951003	June 03, 2024	June 03, 2026

Calibration was performed under the following controlled conditions:

Temperature : 26.9 °C Relative Humidity : 41.8 %

This certifies the above named instrument conforms to the original specifications in effect at date of manufacture and test.

Threshold Voltage Settings

Channel	Size (µm)	Threshold (mV), As Found	Threshold (mV), As Left	Particle Size (nm)	Lot No.	Manufacturer	Exp. Date
1	0.30	99	94	303±6	257546	Thermo Scientific	August 31, 2025
2	0.50	660	656	510±7	255494	Thermo Scientific	June 30, 2025
3	1.00	1674	1650	1025±18	257321	Thermo Scientific	August 31, 2025
4	2.50	2674	2885	2514±27	258621	Thermo Scientific	September 30, 2025
5	5.00	5536	5517	4900±80	263147	Thermo Scientific	January 31, 2026
6	10.00	6557	6625	10000±200	265823	Thermo Scientific	April 30, 2026

Flow Rate:	Measured Flow:	2.83 LPM	(limit ±5% of nominal)	PASS
False Count:	Observed Cts:	0 p/m ³		
50% Counting Efficiency:	Size 0.303 µm:	48.29 %	(limit 30% - 70%)	PASS
100% Counting Efficiency:	Size 0.51 µm:	98.9 %	(limit 90% - 110%)	PASS
Size Resolution:	Size 0.401 µm:	8.96 %	(limit 15%)	PASS

A statement of conformity is given for Counting Efficiency (7.2), Size Resolution (7.3), False Count (7.4), Flow Rate Error (7.6.) Tests defined in the ISO 21501-4: 2018 calibration standard. The decision rule has been determined according to the ranges specified in the relevant clauses of the ISO 21501-4 standard.

Final Test Date : August 05, 2024

Signature:

Quality Assurance

Certification Date: August 05, 2024

Next calibration on this instrument is due: **August 05, 2025**

LIGHTHOUSE WORLDWIDE SOLUTIONS EMEA OPERATIONS

LF16/R04/17.10.2020

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