

REPORT OF CALIBRATION

Manufacturer : Lighthouse Worldwide Solutions
Model : Solair 3100
Serial Number : 190304023
Certificate No : 220905APC20

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	00833	November 10, 2020	November 10, 2022
FLUKE	DMM115	28571052WS	February 18, 2021	February 18, 2023
Lighthouse	Solair Transfer Standard	190599001	November 16, 2021	November 16, 2022
TSI	4043E	40430951003	June 10, 2022	June 10, 2024

Calibration was performed under the following controlled conditions:
Temperature : 27.0 °C Relative Humidity : 43.5 %

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	43	47	303±6	219211	Thermo Scientific	November 30, 2022
2	0.50	383	441	510±7	218477	Thermo Scientific	October 31, 2022
3	1.00	908	1005	1036±12	219284	Thermo Scientific	November 30, 2022
4	3.00	3039	3220	292±6	221853	Thermo Scientific	March 31, 2023
5	5.00	3549	3571	5020±8	220284	Thermo Scientific	December 31, 2022
6	10.00	4237	4292	9990±80	221642	Thermo Scientific	February 28, 2023

Flow Rate:	Measured Flow:	28.30 LPM	(limit ±5% of nominal)	PASS
False Count:	Observed Cts:	0 p/m³		
50% Counting Efficiency:	Size 0.303 µm:	52.46 %	(limit 30% - 70%)	PASS
100% Counting Efficiency:	Size 0.51 µm:	99.16 %	(limit 90% - 110%)	PASS
Size Resolution:	Size 0.401 µm:	9.19 %	(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 : September 06, 2022

Signature: _____
Quality Assurance

Certification Date: September 08, 2022

Next calibration on this instrument is due: **September 06, 2023**